WETLAND DELINEATION

2750 BURNSIDE ROAD [APN 073-061-018] SONOMA COUNTY, CALIFORNIA

PREPARED FOR:

Madison Marker 2750 Burnside Road Sebastopol, CA 95472

PREPARED BY:

Pinecrest Research Corporation, Inc. 6425 Telegraph Ave. #8 Oakland, CA 94609

PROJECT № SONO21 Task 3



www.pinecrestenvironmental.org

AUGUST 10, 2023

TABLE OF CONTENTS

1.0 INTRODUCTION	2
1.1 SUMMARY	2
1.2 REGULATORY BACKGROUND	2
1.2.1 United States Army Corps of Engineers (USACE)	
1.2.2 California Department of Fish and Wildlife (CDFW)	5
1.2.3 Regional Water Quality Control Board (RWQCB)	
2.0 SITE DESCRIPTION	7
3.0 STUDY METHODS	7
3.1 VEGETATION	8
3.2 SOILS	8
3.3 HYRDROLOGY	8
4.0 RESULTS	9
4.1 VEGETATION COMPOSITION	9
4.2 SOIL CHARACTERISTICS	9
4.3 Hydrology	9
4.3 MIDRULUGI	
5.0 JURISDICTIONAL STATUS	
5.0 JURISDICTIONAL STATUS	10
5.0 JURISDICTIONAL STATUS	10 10 10
5.0 JURISDICTIONAL STATUS 5.1 VEGETATION	10
 5.0 JURISDICTIONAL STATUS 5.1 VEGETATION 5.2 SOILS 5.3 HYDROLOGY 	10
 5.0 JURISDICTIONAL STATUS 5.1 VEGETATION 5.2 SOILS 5.3 HYDROLOGY 5.4 CONCLUSIONS 	10 10 10 10 10 10 10 10 10
 5.0 JURISDICTIONAL STATUS 5.1 VEGETATION 5.2 SOILS 5.3 HYDROLOGY 5.4 CONCLUSIONS 6.0 REFERENCES	10 10 10 10 10 10 10 10 12
5.0 JURISDICTIONAL STATUS 5.1 VEGETATION 5.2 SOILS 5.3 HYDROLOGY 5.4 CONCLUSIONS 6.0 REFERENCES FIGURE 1: REGIONAL LOCATION	
 5.0 JURISDICTIONAL STATUS 5.1 VEGETATION 5.2 SOILS 5.3 HYDROLOGY 5.4 CONCLUSIONS 6.0 REFERENCES FIGURE 1: REGIONAL LOCATION FIGURE 2: 40-FOOT CONTOURS 	
 5.0 JURISDICTIONAL STATUS 5.1 VEGETATION 5.2 SOILS 5.3 HYDROLOGY 5.4 CONCLUSIONS 6.0 REFERENCES FIGURE 1: REGIONAL LOCATION FIGURE 2: 40-FOOT CONTOURS FIGURE 3: SITE MAP	
 5.0 JURISDICTIONAL STATUS 5.1 VEGETATION 5.2 SOILS 5.3 HYDROLOGY 5.4 CONCLUSIONS 6.0 REFERENCES FIGURE 1: REGIONAL LOCATION FIGURE 2: 40-FOOT CONTOURS FIGURE 3: SITE MAP FIGURE 4: WETLAND SAMPLE POINTS 	10 10 10 10 10 10 10 10 10 10 10 10 10 10
 5.0 JURISDICTIONAL STATUS 5.1 VEGETATION 5.2 SOILS 5.3 HYDROLOGY 5.4 CONCLUSIONS 6.0 REFERENCES FIGURE 1: REGIONAL LOCATION FIGURE 2: 40-FOOT CONTOURS FIGURE 3: SITE MAP FIGURE 4: WETLAND SAMPLE POINTS FIGURE 5: PHOTOGRAPH OF UPLAND SAMPLE POINT 2 	10 10 10 10 10 10 10 10 10 10 10 10 10 10

1.0 INTRODUCTION

1.1 SUMMARY

A wetland delineation (Delineation) was conducted at 2750 Burnside Road in unincorporated Sonoma County, 3.3 miles southwest of the town of Sebastopol (Figure 1). The property is comprised of a single parcel designated Assessor's Parcel Number (APN) 073-061-018, is deeded 10.88 acres, and is zoned Diverse Agricultural 10-acre minimum (DA10). The parcel is located in Section 8 in Township 6 North, Range 9 West, on the USGS Two Rock 7.5-minute quadrangle (Figure 2). The approximate latitude and longitude of the centroid of the parcel is 38.3718 (N), -122.8738 (W).

The parcel is under the jurisdiction of the North Coast Regional Water Quality Control Board (RWQCB), and the Northern Region (District 1) of the California Department of Fish & Wildlife (CDFW), and is not located in a medium- or high-priority groundwater basin as designated by the California Department of Water Resources (DWR). The parcel is not located in County-designated Biotic Habitat (BH) or Valley Oak Habitat (VOH) although it does overlap with County-designated Riparian Corridor (RC) zones.

A Biological Assessment (BA) was prepared for this project dated August 7, 2023. Background information on the habitats and natural resources present onsite is provided in this BA and will not be reiterated in this Delineation. This Delineation will provide the necessary information to determine the extent and character of the potential wetland feature identified in the BA.

1.2 REGULATORY BACKGROUND

There are three state and federal agencies that typically may claim jurisdiction over projects that may potentially affect water quality, streams or watercourses, or wetlands. A summary of the responsible agencies and permitting protocols for each agency are provided below.

1.2.1 United States Army Corps of Engineers (USACE)

The USACE regulates discharges of dredged or fill material into waters of the U.S. These waters include wetland and nonwetland bodies of water that meet specific criteria. USACE regulatory jurisdiction pursuant to Section 404 of the federal Clean Water Act (CWA) is founded on a connection, or nexus, between the water body in question and bodies of water of importance to interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in USACE regulations). The following definition of waters of the U.S. is taken from the discussion provided at 33 Code of Federal Regulations (CFR) 328.3: "The term waters of the United States means:

- (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce ...;
- (2) All interstate waters including interstate wetlands;

- (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams) ... the use, degradation or destruction of which could affect interstate or foreign commerce ...;
- (4) *All impoundments of waters otherwise defined as waters of the United States under the definition;*
- (5) Tributaries of waters defined in paragraphs (a) (1)–(4) of this section."

The USACE typically considers any body of water displaying an ordinary high water mark (OHWM) for designation as waters of the U.S., subject to guidance derived from Supreme Court decisions. USACE jurisdiction over nontidal waters of the U.S. extends laterally to the OHWM or beyond the OHWM to the limit of any adjacent wetlands, if present (33 CFR 328.4). The OHWM is defined as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area." (33 CFR 328.3) Jurisdiction typically extends upstream to the point where the OHWM is no longer perceptible.

Current guidance states that the USACE will continue to assert jurisdiction over traditional navigable waters, wetlands adjacent to traditional navigable waters, relatively permanent nonnavigable tributaries that have a continuous flow at least seasonally (typically three months), and wetlands that directly abut relatively permanent tributaries. The USACE will determine jurisdiction over waters that are nonnavigable tributaries that are not relatively permanent and wetlands adjacent to nonnavigable tributaries that are not relatively permanent only after making a significant nexus finding. According to the guidance, the USACE generally will not assert jurisdiction over the following features: swales or erosional features (e .g., gullies, small washes characterized by low volume, infrequent, or short duration flow); and ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

Furthermore, the preamble to USACE regulations (Preamble Section 328.3, Definitions) states that the USACE does not generally consider the following waters to be waters of the U.S. The USACE does, however, reserve the right to regulate these waters on a case-by-case basis.

- Nontidal drainage and irrigation ditches excavated on dry land.
- Artificially irrigated areas that would revert to upland if the irrigation ceased.
- Artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
- Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.
- Water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for purposes of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the U.S.

Waters found to be isolated and not subject to CWA regulation are often still regulated by the

RWQCB under the State Porter-Cologne Water Quality Control Act (Porter-Cologne Act), and as described in the Draft Implementation Guidance released in April 2020 for the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. Wetlands Wetland delineations for Section 404 purposes must be conducted according to the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coastal Region (Regional Supplement) (USACE 2008) and the Corps of Engineers 1987 Wetland Delineation Manual (1987 Manual) (Environmental Laboratory 1987). Where there are differences between the two documents, the Regional Supplement takes precedence over the 1987 Manual.

The USACE and United States Environmental Protection Agency (EPA) define wetlands as follows: "Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions." In order to be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met. Several indicators may be analyzed to determine whether the criteria are satisfied.

Hydrophytic vegetation and hydric soils indicators provide evidence that episodes of inundation have lasted more than a few days or have occurred repeatedly over a period of years, but do not confirm that an episode has occurred recently. Conversely, wetland hydrology indicators provide evidence that an episode of inundation or soil saturation occurred recently, but does not provide evidence that episodes have lasted more than a few days or have occurred repeatedly over a period of years. Because of this, if an area lacks one of the three characteristics under normal circumstances, it is considered nonwetland under most circumstances.

Hydrophytic vegetation is plant life that grows and is typically adapted for life in permanently or periodically saturated soils. The hydrophytic vegetation criterion is met if more than 50 percent of the dominant plant species from all strata (tree, shrub, herb, and woody vine layers) are considered hydrophytic. Hydrophytic species are those included in the National Wetland Plant List (ACOE 2019) and the State of California Wetland Plant List (Lichvar et al. 2016). Each species on the list is rated according to a wetland indicator category. To be considered hydrophytic, the species must have wetland indicator status (i.e., be rated as OBL, FACW, or FAC).

- Obligate Wetland (OBL): Almost always occur in wetlands (> 99 percent)
- Facultative Wetland (FACW): Usually occur in wetlands (67-99 percent)
- Facultative (FAC): Equally likely to occur in wetlands and nonwetlands (34-66 percent)
- Facultative Upland (FACU): Usually occur in nonwetlands (67-99 percent)
- Obligate Upland (UPL): Almost always occur in nonwetlands (> 99 percent)

The delineation of hydrophytic vegetation is typically based on the most dominant species from each vegetative stratum (strata are considered separately); when more than 50 percent of these dominant species are hydrophytic (i.e., FAC, FACW, or OBL), the vegetation is considered hydrophytic. In particular, the USACE recommends the use of the "50/20" rule (also known as the dominance test)

from the Regional Supplement for determining dominant species. Under this method, dominant species are the most abundant species that immediately exceed 50 percent of the total dominance measure for the stratum, plus any additional species comprising 20 percent or more of the total dominance measure for the stratum. In cases where indicators of hydric soil and wetland hydrology are present but the vegetation initially fails the dominance test, the prevalence index must be used. The prevalence index is a weighted average of all plant species within a sampling plot. The prevalence index is particularly useful when communities only have one or two dominants, where species are present at roughly equal coverage, or when strata differ greatly in total plant cover. In addition, USACE guidance provides that morphological adaptations may be considered when determining hydrophytic vegetation when indicators of hydric soil and wetland hydrology are present (USACE 2008). If the plant community passes either the dominance test or prevalence index after reconsidering the indicator status of any plant species that exhibit morphological adaptations for life in wetlands, then the vegetation is considered hydrophytic. Hydric Soils. Hydric soils are defined as soils that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part.

Hydric soils develop under conditions of saturation and inundation combined with microbial activity in the soil that causes a depletion of oxygen. While saturation may occur at any time of year, microbial activity is limited to the growing season, when soil temperature is above biologic zero (the soil temperature at a depth of 50 centimeters, below which the growth and function of locally adapted plants are negligible). Biogeochemical processes that occur under anaerobic conditions during the growing season result in the distinctive morphologic characteristics of hydric soils. Based on these criteria, a National List of Hydric Soils was created from the National Soil Information System (NASIS) database and is updated annually. The Regional Supplement has a number of field indicators that may be used to identify hydric soils. These indicators include hydrogen sulfide generation, accumulation of organic matter, and the reduction, translocation and/or accumulation of iron and other reducible elements. These processes result in soil characteristics that persist during both wet and dry periods. Separate indicators have been developed for sandy soils and for loamy and clayey soils.

Finally, under natural conditions, development of hydrophytic vegetation and hydric soils are dependent on a third characteristic: wetland hydrology. Areas with wetland hydrology are those where the presence of water has an overriding influence on vegetation and soil characteristics due to anaerobic and reducing conditions, respectively (Environmental Laboratory 1987). The wetland hydrology parameter is satisfied if the area is seasonally inundated or saturated to the surface for a minimum of 14 consecutive days during the growing season in most years (USACE 2008). Hydrology is often the most difficult criterion to measure in the field due to seasonal and annual variations in water availability. Some of the indicators that are commonly used to identify wetland hydrology include visual observation of inundation or saturation, watermarks, recent sediment deposits, surface scour, and oxidized root channels (rhizospheres) resulting from prolonged anaerobic conditions.

1.2.2 California Department of Fish and Wildlife (CDFW)

The CDFW, through provisions of the California Fish and Game Code (Sec. 1600 et seq.), is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. Streams (and rivers) are defined by the presence of a channel bed and banks and at least an intermittent flow of water. The CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by the CDFW. In obtaining CDFW agreements, the limits of wetlands are not typically determined. The reason for this is that CDFW generally includes, within the jurisdictional limits of streams and lakes, any riparian habitat present. Riparian habitat includes willows, mule fat, and other vegetation typically associated with the banks of a stream or lake shorelines and may not be consistent with USACE definitions. In most situations, wetlands associated with a stream or lake would fall within the limits of riparian habitat. Thus, defining the limits of CDFW jurisdiction based on riparian habitat will automatically include any wetland areas and may include additional areas that do not meet USACE criteria for soils and/or hydrology (e.g., where riparian woodland canopy extends beyond the banks of a stream away from frequently saturated soils).

1.2.3 Regional Water Quality Control Board (RWQCB)

The California RWQCB is responsible for the administration of Section 401 of the CWA. Typically, the areas subject to RWQCB jurisdiction coincide with those of the USACE (i.e., waters of the United States, including any wetlands). The RWQCB also asserts authority over "waters of the State" under waste discharge requirements pursuant to the Porter-Cologne Act, which establishes a regulatory program to protect water quality and to protect beneficial uses of State waters. The Porter-Cologne Act empowers the RWQCB to formulate and adopt, for all areas within the regions, a Water Quality Control Plan (Basin Plan) that designates beneficial uses and establishes such water quality objectives that in its judgment will ensure reasonable protection of beneficial uses. Each RWQCB establishes water quality objectives that will ensure the reasonable protection of beneficial uses and the prevention of water quality degradation. The Water Code provides flexibility for some change in water quality, provided that beneficial uses are not adversely affected. "Waters of the State" are presently defined by the Porter-Cologne Act as any surface or subsurface water or groundwater, including saline waters and isolated wetlands, within the boundaries of the State.

2.0 SITE DESCRIPTION

According to Sawyer et al. (2009) *Manual of California Vegetation 2nd Edition* (MCV), the onsite communities consist of the following vegetation types. The western and southern boundaries of the parcel are dominated by riparian corridor classified as *Umbellularia californica* Forest Alliance. The western and central portions of the site are dominated by herbaceous species and is classified as *Bromus (diandrus, hordeaceous)* Semi-Natural Herbaceous Stands. The eastern portion of the site is forested and composed of roughly equal parts *Pseudotsuga menziesii* Forest Alliance and *Eucalyptus (globulus, camaldulensis)* Semi-Natural Woodland Stands. The wetland seep identified in the previous BA is classified as *Salix lasiolepis* Shrubland Alliance and is the subject of this Delineation.

3.0 STUDY METHODS

Standard ACOE wetland delineation procedures (ACOE 1987) were used to determine the extent of jurisdictional wetlands present in the study areas. The Western Mountains, Valleys, and Coast Regional Supplement (ACOE 2008) was additionally used to determine the extent of wetlands present. A routine community composition quadrat based survey using the "relevé" method was used to determine vegetation cover. Each sample site also included a detailed evaluation of the soil profile and presence or absence of any anoxic soil indicators. Soil pits were also dug at each of the nine (9) wetland determination sample point locations. As described in ACOE (1987) the soil was examined at each site for evidence of reducing conditions such as gleying, mottling, and low chroma. A Munsell soil color chart (Munsell 2009) was used to determine soil color using hue, value, and chroma. Soil pits were dug up to 16" depth in most locations, or until visual evidence of groundwater saturation was visible. Visual examination of saturated or inundated soil, or indicators of inundation such as algal matting or oxidized rhizospheres were used as indicators of wetland hydrology.

The following resources were used to prepare for the field delineation, to analyze field indicators to determine wetland status, and to make conclusions on the wetland status and significant nexus in the delineation report:

- Current and historical aerial photography from Google Earth and ESRI
- USGS topographic maps (7.5-minute series and 1:100,000 scale)
- National Resources Conservation Service (NRCS) Soil Surveys
- National Oceanic and Atmospheric Administration (NOAA) precipitation data
- Sonoma County Geographic Information System (GIS) data

All areas of potential jurisdiction in the study area were delineated according to the current USACE and CDFW criteria as described above. The boundaries of the potential jurisdictional areas, if any, were observed in the field and mapped on aerial photographs. Limits of federal and state jurisdictional areas mapped during the course of the field investigation were determined by a combination of direct measurements taken in the field and measurements taken from aerial photographs. Representative site photos are located at the end of this report.

3.1 VEGETATION

Tests used to determine whether vegetation satisfy the hydrophytic vegetation criterion include the dominance and prevalence tests. The dominance test was conducted by calculating the number of unique minimum rank taxa were tallied in each 0.5 m² quadrat and their status as UPL, FACU, FAC, FACW, and WET looked up in the National Wetlands Plant List from the U.S. Army Corps of Engineers (USACE 2018). The prevalence test was conducted by calculating the percent cover of each dominant species and calculating as in ACOE (2009). Problematic vegetation includes areas where vegetation has been disturbed or removed or is otherwise not able to be judged based on the aforementioned tests.

Plant species were identified visually and using the Jepson Manual (Baldwin 2012) where necessary and their relative and absolute abundances quantified using percent cover ("relevé" method) and a 1 meter square quadrat. Wetland indicator status for each plant species was determined using the U.S. Department of Agriculture wetland plant indicator database (USDA 2014). A full set of transcribed Wetland Determination Data Forms (ACOE 2008) are presented in Appendix B. Unique identifiers on each sheet correspond with the numbers shown in Figure 4.

3.2 SOILS

Soils were determined to be hydric if any of the indicators described in *Field Indicators of Hydric Soils in the U.S.* (USDA 2017) were present in any soil horizon. Soil pits were typically dug to a depth of 16", each fraction separated and moistened, and the texture and color of each horizon recorded. The most common indicators in the types of soils found on the project parcel are reduced or gleyed (gray color) matrix, oxidized (reddish) rhizospheres, loamy gleyed matrix, depleted matrix, red parent material.

3.3 HYRDROLOGY

Hydrology is the third criterion and is determined by the presence or absence of certain indicators of inundation such as but not limited to surface water, saturated soil, water marks, fluvial deposits, biotic crusts including algal matting, presence of burrows of aquatic organisms, drift debris and river wrack, reduced iron particles and rhizospheres, hydrogen sulfide odor, salt crusts, and visible inundation on historical aerial imagery. For the present project site, hydrology was determined by visually inspecting the soil moisture at depth in each soil pit to determine whether there was evidence for subsurface seepage, high water table, saturated soil matrix, or other hydrology indicators. Other hydrological conditions including any surface inundation, saturated soils, and groundwater levels were also noted. The study area was also thoroughly inspected for the occurrence of any riparian habitat associated with any streambed, river, or lake that might be subject to CDFW jurisdiction.

4.0 RESULTS

The following community descriptions detail vegetation, soils, and hydrology parameters used for wetland determinations within the Study Area. Copies of the Western Mountains, Valleys, and Coast Region Wetland Determination Data Forms (ACOE 2008) are presented in Appendix A and summarized in Table 1. A map of the wetland and sample points is provided in Figure 4. Representative photographs of the soil characteristics and vegetation are provided in Figures 5 & 6.

4.1 VEGETATION COMPOSITION

For vegetation classification we used the descriptions provided in the *Manual of California Vegetation* (Sawyer et al. 2009). The vegetation description presented here covers only the vegetation in the wetland sample points shown in Figure 4. Specific species compositions for each of the nine sample points are provided in the data sheets included in Appendix A. Species in and around the isolated wetland/spring in the center of the parcel include a mix of hydrophytic and upland species. Native species found in the study area include Arroyo willow (*Salix lasiolepis*), bog rush (*Juncus patens*), green-sheathed sedge (*Carex feta*), dense sedge (*Carex densa*), California blackberry (*Rubus ursinus*), American bird's foot trefoil (*Acmispon americanus*), poison oak (*Toxicodendron diversilobum*), and pink honeysuckle (*Lonicera hispidula*). Non-native species found in the study area include velvet grass (*Holcus lanatus*), reed fescue (*Festuca arundinacea*), little rattlesnake grass (*Briza minor*), rattlesnake grass (*Briza maxima*), dogstail grass (*Cynosurus echinatus*), ribwort (*Plantago lanceolata*), hawkbit (*Leontodon saxatilis*), yellow glandweed (*Parentucellia viscosa*), Queen Anne's lace (*Daucus carota*), and sweet pea (*Lathyrus latifolius*).

4.2 SOIL CHARACTERISTICS

The parent materials on the project parcel are typical of central Sonoma County, with easily erodible sediments of the Franciscan Formation dissected by highly seasonal rivers (USGS 1985). The central two-thirds of the project parcel including the delineated wetland area is mapped as eroded Goldridge fine sandy loam, 15% to 30% slopes (GdE2). This soil type also has lesser proportions of Cotati (5%), Steinbeck (5%), and Sebastopol (5%) soil types, and is designated not prime farmland. This soil type is weathered from sandstone based parent materials, and there are no serpentine or other ultramafic rock types onsite and no serpentine-derived soils.

4.3 HYDROLOGY

Wetland hydrology at this location is generated by a below-ground seep that emerges in a circular formation (Figure 4). The delineated wetland is entirely vegetated but it is likely that during the wet season the water table reaches the surface. During this study, standing water was not observed in any spoil pits, but saturation was observed as close as 8" below the surface in several locations.

5.0 JURISDICTIONAL STATUS

Wetlands onsite were assessed based on the likelihood to satisfy the three-tier wetland delineation criteria used by the Army Corps of Engineers *Wetland Delineation Manual* (ACOE 1987) and Western Mountains, Valleys and Coast Region addendum (ACOE 2009), as described above. Transcribed copies of the sheets used during the delineation are provided in Appendix A and summarized in Table 1.

5.1 VEGETATION

Based on these criteria, 6 of the 9 sample points exhibit vegetation consistent with wetlands. No sample points had problematic vegetation and none were removed from the analysis (Appendix A). A full list of species encountered is provided above. The most common hydrophytic species encountered in order of decreasing abundance are common rush (*Juncus patens*; FACW), green sheathed sedge (*Carex feta*; FACW), and Arroyo willow (*Salix lasiolepis*; FACW). Positive wetland sample points were typically dominated by various sedges, rushes, and willow and thus met the wetland vegetation criteria. The sample points that did not meet wetland status were primarily dominated by non-native annual grasses including velvet grass (*Holcus lanatus*; FAC) and dogstail grass (*Cynosurus echinatus*; UPL) and thus did not meet the wetland vegetation criteria.

5.2 SOILS

Based on these criteria, 7 of the 9 sample points exhibit hydric soil indicators (Table 1). Field indicators of hydric soils are described based on terminology provided in USDA (2017). The most common hydric soil indicators were Loamy Gleyed Matrix (F2) beginning at or within 3 cm of the soil surface and extending down an unknown depth, but greater than the 12" dug for most of the pits. Small zones of reddish color iron-manganese mottles are also indicative of reduced iron (C4) conditions. Soils that did not meet wetland criteria generally did not contain these indicators and were clayey in texture.

5.3 HYDROLOGY

Based on these criteria, 7 of the 9 sample points exhibit hydrology consistent with wetlands (Table 1). The wetland feature was is emergent and fed by an underground seep. The sediment texture is clayey with matted vegetation, and is visibly not different than the surrounding matrix, although the presence of saturated soil and reduced iron indicates different hydrology. Water is expected to pond in the wetland annually.

5.4 CONCLUSIONS

We conclude that five (5) sample points meet the three criteria for jurisdictional wetlands, and four (4) do not. The locations and interpolated outline of the wetland based on field observations and aerial photographs is provided in Figure 4. The total area of the delineated wetland measures 0.04 acres (1,635 sqft). These findings and conclusions, including the location and extent of wetlands and other

waters subject to USACE and/or CDFW and/or SWRCB regulatory jurisdiction (or lack thereof), represent the professional opinion of PEC. These findings and conclusions should be considered preliminary until verified by the USACE, CDFW, and SWRCB.

sample point	vegetation	soil	hydrology	wetland
1	YES	YES	YES	YES
2	YES	NO	NO	NO
3	YES	YES	YES	YES
4	NO	YES	YES	NO
5	YES	YES	YES	YES
6	YES	YES	YES	YES
7	NO	YES	YES	NO
8	YES	YES	YES	YES
9	NO	NO	NO	NO

 TABLE 1: Sample points determination based on 3-parameter USACE criteria.

6.0 REFERENCES

- Baldwin, B.G., et al. 2012. *The Jepson Manual: Vascular Plants of California*. University of California Press, Berkeley, CA.
- California Department of Fish & Wildlife (CDFW). 2021. California Natural Diversity Database. CDFW Wildlife and Habitat Data Analysis Branch, Sacramento, CA. https://www.wildlife.ca.gov/data.
- California Department of Forestry & Fire Protection (CALFIRE). 2017. *California Forest Practice Rules*. California Natural Resources Agency, Sacramento, CA.
- California Native Plant Society (CNPS). 2018. Inventory of Rare and Endangered Plants. CNPS, Sacramento, CA.
- County of Sonoma. 2023. Geographical Information Systems (GIS) Databases. Santa Rosa, CA.
- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1. United States, Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Federal Interagency Committee for Wetland Delineation. 1989. Federal Manual for Identifying and Delineating Jurisdictional Wetlands. United States Army Corps of Engineers, United States Environmental Protection Agency, United States Fish and Wildlife Service, and United States Department of Agriculture Soil Conservation Service, Washington, D.C. Cooperative Technical publication. 76 pp. plus appendices.
- Lichvar, R.W, D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. *State of California Wetland Plant List*. Phytoneuron 2016-30:1-17.
- Munsell Color. 2000 (Rev. Ed.). *Munsell Soil Color Charts*. Macbeth Division of Kollmorgen Instruments Corporation, New Windsor, NY.
- Natural Resources Conservation Service (NRCS). 20201 *SoilWeb*. University of California, Agricultural and Natural Resources, Davis, CA. http://casoilresource.lawr.ucdavis.edu/gmap//.
- Sawyer, J.O., T. Keeler-Wolf, J. Evens. 2009. *Manual of California Vegetation*. California Native Plant Society Press, Sacramento, CA.
- U.S. Department of Agriculture (USDA). 1983. Soil Survey of Sonoma County, California. Soil Conservation Service, Washington D.C.
- U.S. Department of Agriculture (USDA). 2017. Field indicators of hydric soils in the United States (Version 8.1). Ed.
 G. W. Hurt and L. M. Vasilas. National Technical Committee for Hydric Soils, Natural Resources Conservation Service, Fort Worth, TX.
- U.S. Fish and Wildlife Service (USFWS). 2021. Environmental Conservation Online System. USFWS, Washington, DC. https://ecos.fws.gov/ecp/.
- U.S. Fish and Wildlife Service (USFWS). 2021. *National Wetlands Inventory*. USFWS, Washington, DC. https://www.fws.gov/wetlands/.
- U.S. National Weather Service (NWS). 2021. *National Climatic Data Center*. USNWS, Washington, DC. https://w2.weather.gov/climate/.

- United States Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, & Coast Region (Version 2.0), Ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. Vicksburg, MS: United States Army Engineer Research and Development Center.
- United States Army Corps of Engineers. 2019. *National Wetland Plant List*. United States Army Engineer Research and Development Center. http://wetland-plants.usace.army.mil/.
- Wetland Training Institute, Inc. 1995. Field Guide for Wetland Delineation; 1987 Corps of Engineers Manual, Glenwood, NM. WTI 02-1. 143pp.

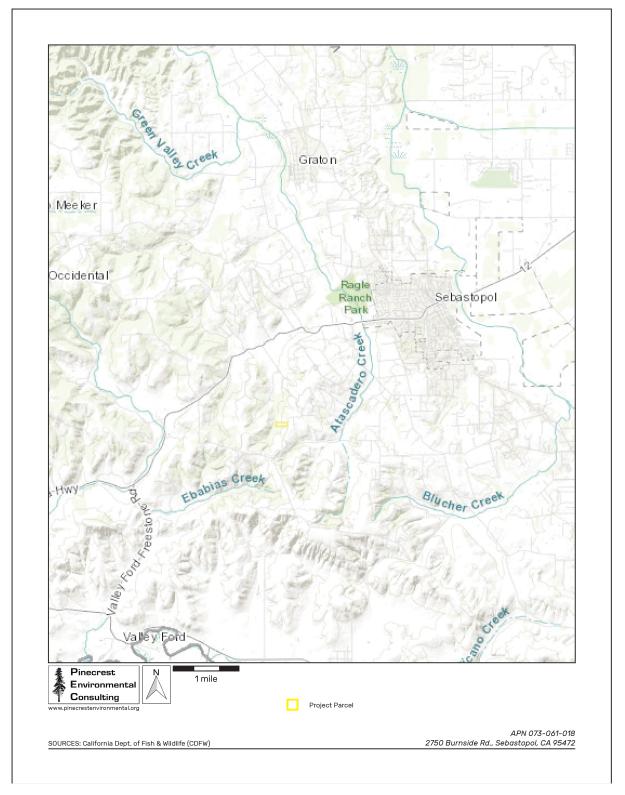
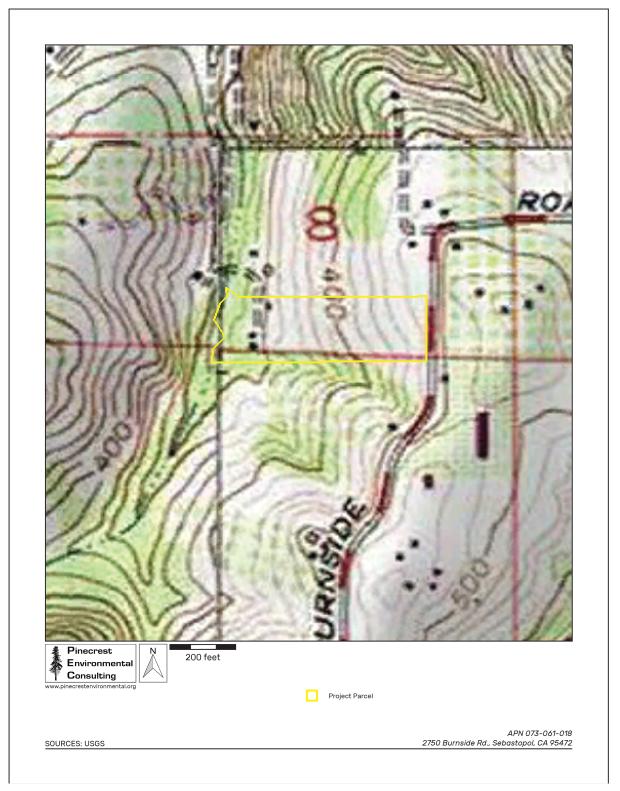


FIGURE 1: REGIONAL LOCATION

FIGURE 2: 40-FOOT CONTOURS





<u>ا</u>0

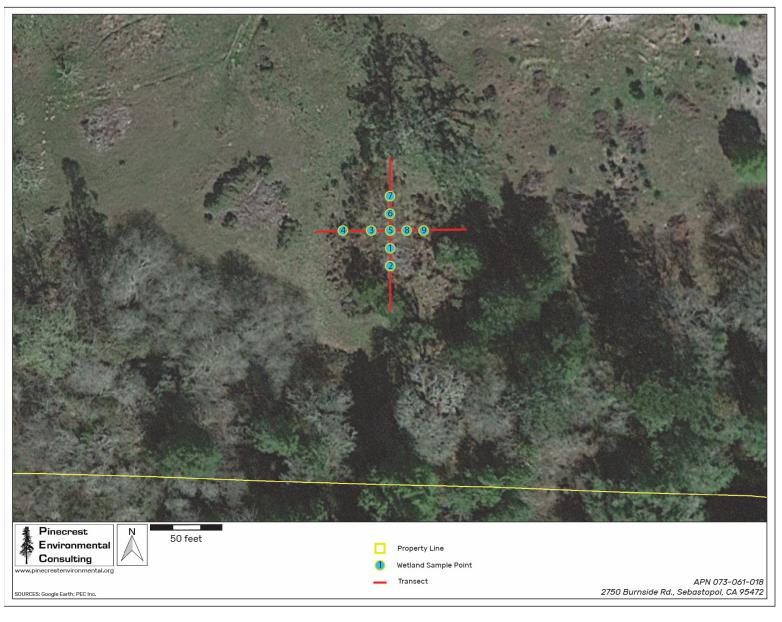


FIGURE 4: WETLAND SAMPLE POINTS

17

FIGURE 5: PHOTOGRAPH OF UPLAND SAMPLE POINT 2



FIGURE 6: PHOTOGRAPH OF WETLAND SAMPLE POINT 8



APPENDIX A: WETLAND DATA SHEETS

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

Project/Site: SONOZI - 2750 Burnside	City/County: Sonoma	Co. Samplin	g Date: 7/14/23
Applicant/Owner: Madissen Marken		State: <u>CA</u> Samplin	1
Investigator(s): C. D.V.Hard	Section, Township, Range:	Sec8, TEN, RG	W
Landform (hillslope, terrace, etc.):	Local relief (concave, conve	ex, none):	Slope (%):
Subregion (LRR): Lat: 3	8° 22' 17.98' Lon	19: 122° 52' 26.15"	Datum: <u>MITD</u>
Soil Map Unit Name:GDEZ		NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes 📉 No	(If no, explain in Remarks.)	~
		al Circumstances" present?	Yes No
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If needed	, explain any answers in Rem	arks.)

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes 📉	No
Remarks:					

VEGETATION – Use scientific names of plants.

•	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species Z
1				That Are OBL, FACW, or FAC: (A)
2				- 11
				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)		= Total Co	over	That Are OBL, FACW, or FAC: (A/B)
				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				OBL species x 1 = FACW species 100 x 2 =
4				FAC species x 3 = 3
5		<u> </u>		FACU species 5 x 4 = 20
		= Total Co	over	
Herb Stratum (Plot size:)	115	~	(1.1.1.)	UPL species $x = 5$ Column Totals: 106 (A) 223 (B)
1. Junan paters	40	X	FACW	Column Totals: $(A) = U G$ (B)
2. Dubro unsurvo	5		<u>cycn</u>	Prevalence Index = B/A =
3. Carly Leta	60	X	Chev	Hydrophytic Vegetation Indicators:
4. Holeus Canatus	1 .		Che	1 - Rapid Test for Hydrophytic Vegetation
5	(-k)		0	2 - Dominance Test is >50%
6				X 3 - Prevalence Index is $\leq 3.0^1$
7				4 - Morphological Adaptations ¹ (Provide supporting
8				data in Remarks or on a separate sheet)
				5 - Wetland Non-Vascular Plants ¹
9			1.00	Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must
11				be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)		_= Total Co	ver	
1				Hydrophytic Vegetation
2				Present? Yes No No
% Bare Ground in Herb Stratum		_= Total Co	ver	
Remarks:				
Nomarko.				

US Army Corps of Engineers

Profile Description: (D		to the dep	th needed to docu	ment the	indicator	or confirm	n the absence	e of indicators.)
(inches) Color (Matrix	0/		ox Feature				
0		102	Color (moist)	%		Loc ²	Texture	Remarks
D-12 DYR	2/5	10.0	SYR6/8		C	\mathbb{N}		
				- ·			· · · ·	A second s
				_				
T			-					
Type: C=Concentratior Hydric Soil Indicators:						ed Sand Gr		cation: PL=Pore Lining, M=Matrix.
	(Applica				ea.)			ors for Problematic Hydric Soils ³ :
Histosol (A1) Histic Epipedon (A2	`		Sandy Redox					m Muck (A ;€)
Black Histic (A3))		Stripped Matrix		4) (Parent Material (TF2)
Hydrogen Sulfide (AS)	4)		Loamy Mucky			(MLRA 1)		y Shallow Dark Surface (TF12)
Depleted Below Dar	,	(Δ11)	Loamy Gleyed Depleted Matri		.)		Oth	er (Explain in Remarks)
Thick Dark Surface			Redox Dark Su	. ,			³ Indicate	ors of hydrophytic vegetation and
Sandy Mucky Miner			Depleted Dark	. ,				ind hydrology must be present,
Sandy Gleyed Matri			Redox Depres		• • •			as disturbed or problematic.
Restrictive Layer (if pro	esent):			(/			1	
Type:								
Depth (inches):							Undrie Cell	Present? Yes X
Remarks:					-		Hydric Soil	
YDROLOGY	icators:	~						
YDROLOGY Wetland Hydrology Ind Primary Indicators (minir		e required	; check all that app	V)				ndary Indicators (2 or more required)
YDROLOGY Vetland Hydrology Ind		e required	<u>; check all that app</u>		es (B9) (e:	xcept	<u>Seco</u> r	ndary Indicators (2 or more required)
YDROLOGY Vetland Hydrology Ind Primary Indicators (minir	num of or	e required	Water-Sta	ined Leav		xcept	<u>Seco</u> r	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2
YDROLOGY Vetland Hydrology Ind Primary Indicators (minir Surface Water (A1) High Water Table (A	num of or	e required	Water-Sta MLRA	ined Leav 1, 2, 4A, a		xcept	<u>Seco</u> r	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
YDROLOGY Vetland Hydrology Ind Primary Indicators (minir Surface Water (A1) High Water Table (A	num of or	ne required	Water-Sta MLRA Salt Crust	ined Leave 1, 2, 4A, a (B11)	and 4B)	xcept	<u>Secor</u> W W	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10)
YDROLOGY Vetland Hydrology Ind Primary Indicators (minir Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1)	num of or 2)	ne required	Water-Sta MLRA Salt Crust Aquatic In	ined Leave 1, 2, 4A, a (B11) vertebrate	and 4B) s (B13)	xcept	<u>Secor</u> W D D	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2)
YDROLOGY Vetland Hydrology Ind Primary Indicators (minir Surface Water (A1) High Water Table (A Saturation (A3)	num of or 2)	ne required	Water-Sta MLRA Salt Crust Aquatic In Hydrogen	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc	and 4B) s (B13) dor (C1)		<u>Secor</u> W D D S	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C
YDROLOGY Vetland Hydrology Ind 2rimary Indicators (minir Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (num of or 2) B2)	ne required	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphe	and 4B) s (B13) dor (C1) res along l	Living Root	<u>Secor</u> W D D S S (C3) G	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2)
YDROLOGY Netland Hydrology Ind Primary Indicators (minir Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3)	num of or 2) B2)	e required	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizospher of Reduce	and 4B) s (B13) dor (C1) res along l d Iron (C4	Living Root	<u>Secor</u> W D D S is (C3) G	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3)
YDROLOGY Vetland Hydrology Ind Primary Indicators (minir Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5)	num of or 2) B2) 34)	e required	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Yeresence Recent Inc	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizospher of Reduce in Reduction	s (B13) dor (C1) res along l d Iron (C4 on in Tilleo	Living Root	<u>Secor</u> W D D S (C3) G S S	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5)
YDROLOGY Netland Hydrology Ind Primary Indicators (minir Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Drift Deposits (B3) Algal Mat or Crust (B5) Surface Soil Cracks	num of or 2) B2) 34) (B6)		Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Y Presence Recent Inc Stunted or	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizospher of Reduce on Reduction Stressed	nd 4B) s (B13) dor (C1) res along l d Iron (C4 on in Tilleo Plants (D	Living Root	<u>Secor</u> W D S (C3) G S 0 F/ R	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
YDROLOGY Netland Hydrology Ind Primary Indicators (minir Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5)	num of or 2) B2) 34) (B6) 5 Aerial In	nagery (B7	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Y Presence Recent Iro Stunted or) Other (Exp	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizospher of Reduce on Reduction Stressed	nd 4B) s (B13) dor (C1) res along l d Iron (C4 on in Tilleo Plants (D	Living Root	<u>Secor</u> W D S (C3) G S 0 F/ R	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5)
YDROLOGY Wetland Hydrology Ind Primary Indicators (minir Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Drift Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible or	num of or 2) B2) 34) (B6) 5 Aerial In	nagery (B7	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Y Presence Recent Iro Stunted or) Other (Exp	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizospher of Reduce on Reduction Stressed	nd 4B) s (B13) dor (C1) res along l d Iron (C4 on in Tilleo Plants (D	Living Root	<u>Secor</u> W D S (C3) G S 0 F/ R	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
YDROLOGY Vetland Hydrology Ind Primary Indicators (minir Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (E Iron Deposits (B3) Surface Soil Cracks Inundation Visible or Sparsely Vegetated	num of or 2) B2) 34) (B6) 5 Aerial In	nagery (B7 Surface (B	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Yersence Recent Irc Stunted or) Other (Exp 8)	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphel of Reduce in Reduction Stressed plain in Re	nd 4B) s (B13) dor (C1) res along l d Iron (C4 on in Tilleo Plants (D	Living Root	<u>Secor</u> W D S (C3) G S 0 F/ R	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
YDROLOGY Vetland Hydrology Ind Primary Indicators (minir Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated Vegetated Surface Water Present?	num of or 2) B2) 34) (B6) o Aerial In Concave Ye	nagery (B7 Surface (B s N	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Yersence Recent Irc Stunted or Other (Exp 8)	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizospher of Reduce in Reduction • Stressed plain in Re ches):	nd 4B) s (B13) dor (C1) res along l d Iron (C4 on in Tilleo Plants (D	Living Root	<u>Secor</u> W D S (C3) G S 0 F/ R	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
YDROLOGY Vetland Hydrology Ind Primary Indicators (minir Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated Vegetated Surface Water Present? Vater Table Present?	num of or 2) B2) 34) (B6) 1 Aerial In Concave	nagery (B7 Surface (B s N s N	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Yeresence Recent Irc Stunted or) Other (Exp 8)	ined Leavi 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizospher of Reduce n Reduction Stressed plain in Re ches): ches):	and 4B) s (B13) dor (C1) res along I d Iron (C4 on in Tilleo Plants (D marks)	Living Root) 1 Soils (C6) 1) (LRR A)	<u>Secor</u> W D D S S S S F R F	hdary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
YDROLOGY Netland Hydrology Ind Primary Indicators (minir Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Orift Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated Field Observations: Surface Water Present? Saturation Present? Saturation Present?	num of or 2) B2) 34) (B6) n Aerial In Concave Ye Ye Ye	nagery (B7 Surface (B s N s N s N	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Yeresence Recent Irc Stunted or) Other (Exp 8) Depth (in Depth (in Depth (in	ined Leavi 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphei of Reduce of Reduce of Reduce stressed blain in Re ches): ches): ches):	s (B13) dor (C1) res along I d Iron (C4 on in Tillec Plants (D marks)	Living Root) 1 Soils (C6) 1) (LRR A) Wetla	<u>Secor</u> W D D S S S S S S R Fr Fr	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
YDROLOGY Netland Hydrology Ind Primary Indicators (minin Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated ield Observations: Surface Water Present? Saturation Present?	num of or 2) B2) 34) (B6) n Aerial In Concave Ye Ye Ye	nagery (B7 Surface (B s N s N s N	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Yeresence Recent Irc Stunted or) Other (Exp 8) Depth (in Depth (in Depth (in	ined Leavi 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphei of Reduce of Reduce of Reduce stressed blain in Re ches): ches): ches):	s (B13) dor (C1) res along I d Iron (C4 on in Tillec Plants (D marks)	Living Root) 1 Soils (C6) 1) (LRR A) Wetla	<u>Secor</u> W D D S S S S S S R Fr Fr	hdary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
YDROLOGY Netland Hydrology Ind Primary Indicators (minir Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Orift Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated Field Observations: Surface Water Present? Saturation Present? Saturation Present? Saturation Present? Saturation Present?	num of or 2) B2) 34) (B6) n Aerial In Concave Ye Ye Ye	nagery (B7 Surface (B s N s N s N	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Yeresence Recent Irc Stunted or) Other (Exp 8) Depth (in Depth (in Depth (in	ined Leavi 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphei of Reduce of Reduce of Reduce stressed blain in Re ches): ches): ches):	s (B13) dor (C1) res along I d Iron (C4 on in Tillec Plants (D marks)	Living Root) 1 Soils (C6) 1) (LRR A) Wetla	<u>Secor</u> W D D S S S S S S R Fr Fr	hdary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
YDROLOGY Netland Hydrology Ind Primary Indicators (minir Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Orift Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated Field Observations: Surface Water Present? Saturation Present? Saturation Present?	num of or 2) B2) 34) (B6) n Aerial In Concave Ye Ye Ye	nagery (B7 Surface (B s N s N s N	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Yeresence Recent Irc Stunted or) Other (Exp 8) Depth (in Depth (in Depth (in	ined Leavi 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphei of Reduce of Reduce of Reduce stressed blain in Re ches): ches): ches):	s (B13) dor (C1) res along I d Iron (C4 on in Tillec Plants (D marks)	Living Root) 1 Soils (C6) 1) (LRR A) Wetla	<u>Secor</u> W D D S S S S S S R Fr Fr	hdary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
YDROLOGY Netland Hydrology Ind Primary Indicators (minir Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Orift Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated Field Observations: Surface Water Present? Saturation Present? Saturation Present? Saturation Present? Saturation Present?	num of or 2) B2) 34) (B6) n Aerial In Concave Ye Ye Ye	nagery (B7 Surface (B s N s N s N	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Yeresence Recent Irc Stunted or) Other (Exp 8) Depth (in Depth (in Depth (in	ined Leavi 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphei of Reduce of Reduce of Reduce stressed blain in Re ches): ches): ches):	s (B13) dor (C1) res along I d Iron (C4 on in Tillec Plants (D marks)	Living Root) 1 Soils (C6) 1) (LRR A) Wetla	<u>Secor</u> W D D S S S S S S R Fr Fr	hdary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
YDROLOGY Vetland Hydrology Ind Primary Indicators (minir Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Drift Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated Vater Cable Present? Vater Table Present?	num of or 2) B2) 34) (B6) n Aerial In Concave Ye Ye Ye	nagery (B7 Surface (B s N s N s N	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Yeresence Recent Irc Stunted or) Other (Exp 8) Depth (in Depth (in Depth (in	ined Leavi 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphei of Reduce of Reduce of Reduce stressed blain in Re ches): ches): ches):	s (B13) dor (C1) res along I d Iron (C4 on in Tillec Plants (D marks)	Living Root) 1 Soils (C6) 1) (LRR A) Wetla	<u>Secor</u> W D D S S S S S S R Fr Fr	hdary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)

Project/Site:				2	14/23
					2
pplicant/Owner:			State:		6
			ange:		
andform (hillslope, terrace, etc.):					
Subregion (LRR):					
Soil Map Unit Name:			NWI classifi		
are climatic / hydrologic conditions on the site typica			(If no, explain in F "Normal Circumstances"	Remarks.)	
re Vegetation, Soil, or Hydrology					No
Are Vegetation, Soil, or Hydrology	naturally probler	natic? (If no	eeded, explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site	map showing sa	mpling point l	locations, transects	s, important fea	tures, etc.
Hydrophytic Vegetation Present? Yes 🕅	No	Is the Sampled	d Area		
Hydric Soil Present? Yes Wetland Hydrology Present? Yes	No∕ No∕	within a Wetla	nd? Yes	No	
Remarks:					
					1
/EGETATION – Use scientific names of	f plants.				
		ominant Indicator	Dominance Test wor	ksheet:	
Tree Stratum (Plot size:)		becies? Status	Number of Dominant S That Are OBL, FACW,		(A)
1					(A)
3			Total Number of Domi Species Across All Str		(B)
4			Percent of Dominant S		()
Serling/Charle Otesture / Distaire	= 7	otal Cover	That Are OBL, FACW,		(A/B)
Sapling/Shrub Stratum (Plot size:1	_)		Prevalence Index wo	rksheet:	
2.			Total % Cover of:		oy:
3			OBL species	x 1 =	
4			FACW species	$\begin{array}{c} x^2 = \frac{1}{27} \\ x^3 = \frac{27}{27} \end{array}$	D
5			FACU species	A 0	
Herb Stratum (Plot size:)	=	Total Cover		x 5 =	
1. Holcus Canathy	90	X FAC	Column Totals: 93	(A) 27	(B)
2. Ridens warmin	1	CACU	Prevalence Inde	x = B/A = 230	2.9
3. Juning pating	5	(Acw	Hydrophytic Vegetat		
4. Carene feta		Chan	1 - Rapid Test for	Hydrophytic Vegetat	ion
5			2 - Dominance Te		
67			3 - Prevalence Inc		
7				Adaptations ¹ (Provid ks or on a separate s	
9			5 - Wetland Non-V	/ascular Plants ¹	
10			Problematic Hydro	ophytic Vegetation ¹ (Explain)
11			¹ Indicators of hydric so be present, unless dis		
Woody Vine Stratum (Plot size:)	= T	otal Cover	be present, unless dis	to be of problemation	
1.			Hudrophytic		
2			Hydrophytic Vegetation	\sim	
	= T	otal Cover	Present? Y	es 📉 No 🔜	
% Bare Ground in Herb Stratum Remarks:					
nemans:					
JS Army Corps of Engineers			Western Mountains,	Valleys, and Coast -	Version 2.0

OIL		Sampling Point:
Profile Description: (Describe to the d	epth needed to document the indicator or confirm	
Depth Matrix	Redox Features	
(inches) Color (moist) %	<u>Color (moist)</u> <u>%</u> <u>Type¹</u> Loc ²	Texture Remarks
0-16 10/R.4/3 100		Cargo and
	1 · · · · · · · · · · · · · · · · · · ·	
Type: C=Concentration, D=Depletion, R	M=Reduced Matrix, CS=Covered or Coated Sand G	rains. ² Location: PL=Pore Lining, M=Matrix.
lydric Soil Indicators: (Applicable to a	all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)
_ Black Histic (A3) _ Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1) (except MLRA 1)	
Depleted Below Dark Surface (A11)	Loamy Gleyed Matrix (F2) Depleted Matrix (F3)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Redox Dark Surface (F6)	³ 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.
testrictive Layer (if present):		
Type:		
Depth (inches):		Hydric Soil Present? Yes No
Ginarks,		
YDROLOGY		
YDROLOGY Vetland Hydrology Indicators:		
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one required)		Secondary Indicators (2 or more required)
PROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one require Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1,
/DROLOGY /etland Hydrology Indicators: <u>rimary Indicators (minimum of one requin</u> Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B)
/DROLOGY /etland Hydrology Indicators: 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, 4A, and 4B) Drainage Patterns (B10)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one requir 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, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
/DROLOGY /etland Hydrology Indicators: Surface Water (A1) High Water Table (A2) Saturation (A3)	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, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C
/DROLOGY /etland Hydrology Indicators: 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)	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Costs (C3) Geomorphic Position (D2)
/DROLOGY /etland Hydrology 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 Roc	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)
/DROLOGY //etland Hydrology 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 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, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Casta (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
/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) 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 Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solis (C6 Stunted or Stressed Plants (D1) (LRR 4) B7) Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Saturation Visible on Aerial Imagery
/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) 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 Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solis (C6 Stunted or Stressed Plants (D1) (LRR 4) B7) Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 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)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one requir 	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) B7) Other (Explain in Remarks) (B8)	Water-Stained Leaves (B9) (MLRA 1, 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)
YDROLOGY Vetland 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) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface ield Observations: urface 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 Roc 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):	Water-Stained Leaves (B9) (MLRA 1, 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)
YDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of one requir 	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) B7) Other (Explain in Remarks) (B8) No Depth (inches): No Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Saturation Visible on Aer
YDROLOGY Vetland 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) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface ield Observations: urface Water Present? Yes /ater 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 Roc 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):	Water-Stained Leaves (B9) (MLRA 1, 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)
YDROLOGY Vetland 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) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface ield Observations: urface Water Present? Yes Ater Table Present? Yes aturation 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 Roc 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):	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (0 Saturation Visible on Aerial Imagery
High Water Table (A2) Saturation (A3) 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 Saturation Present? Yes Saturati	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 Solis (C6 Stunted or Stressed Plants (D1) (LRR A B7) Other (Explain in Remarks) (B8) No Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (0 Saturation Visible on Aerial Imagery
YDROLOGY Vetland 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) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface ield Observations: urface Water Present? Yes Ater Table Present? Yes aturation 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 Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solis (C6 Stunted or Stressed Plants (D1) (LRR A B7) Other (Explain in Remarks) (B8) No Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (0 Saturation Visible on Aerial Imagery
YDROLOGY Vetland Hydrology Indicators: r/mary Indicators (minimum of one requir	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 Solis (C6 Stunted or Stressed Plants (D1) (LRR A B7) Other (Explain in Remarks) (B8) No Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (0 Saturation Visible on Aerial Imagery
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one requir 	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 Solis (C6 Stunted or Stressed Plants (D1) (LRR A B7) Other (Explain in Remarks) (B8) No Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (0 Saturation Visible on Aerial Imagery

١.

US Army Corps of Engineers

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

Project/Site: Gunsdu		City/County:		Sampling Date: 7/M)23
Applicant/Owner:			State:	_ Sampling Point:3
Investigator(s):	10	Section, Township, Ra	nge:	1. 18 19 19 19 19 19 19 19 19 19 19 19 19 19
Landform (hillslope, terrace, etc.):				Slope (%):
Subregion (LRR):	Lat:		Long:	Datum:
Soil Map Unit Name:			NWI classi	fication:
Are climatic / hydrologic conditions on the site typical for	this time of v	ear? Yes 🗙 No	(If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrology			Normal Circumstances	present? Yes No
Are Vegetation, Soil, or Hydrology			eded, explain any answ	
SUMMARY OF FINDINGS – Attach site ma				
	No			•
Hydric Soil Present? Yes 🔀	No	Is the Sampled	Area	<no< td=""></no<>
Wetland Hydrology Present? Yes K	No	within a Wetlar	nd? Yes	No
VEGETATION – Use scientific names of p	lants.			
		Dominant Indicator	Dominance Test wo	rksheet:
Tree Stratum (Plot size:)		Species? Status	Number of Dominant That Are OBL, FACW	
12				
3			Total Number of Dom Species Across All St	
4.				()
		= Total Cover	Percent of Dominant That Are OBL, FACW	
Sapling/Shrub Stratum (Plot size:)			Prevalence Index w	
1				: Multiply by:
2			OBL species	x 1 =
3				x2= 200
4			FAC species	x3=_30
5		= Total Cover		x 4 = 20
Herb Stratum (Plot size:)				x 5 =
1. Cany Feta	65	× froch	Column Totals:	(A) <u>ZJO</u> (B)
2. Austres women	5	EACU	Prevalence Inde	ex = B/A = 2
3. Holans Unatry	40		Hydrophytic Vegeta	tion Indicators:
4. Swan paters	10	X EVCM		r Hydrophytic Vegetation
5			2 - Dominance T	
6			X 3 - Prevalence Ir	
7				I Adaptations ¹ (Provide supporting rks or on a separate sheet)
9			5 - Wetland Non-	
10				rophytic Vegetation ¹ (Explain)
11				coil and wetland hydrology must
		= Total Cover	be present, unless di	sturbed or problematic.
Woody Vine Stratum (Plot size:)				
			Hydrophytic Vegetation	
2		= Total Cover	Present?	(es No
% Bare Ground in Herb Stratum				
Remarks:				

US Army Corps of Engineers

Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	Sampling Point:
Depth Matrix Redox Features Inches) Color (moist) % Type' Loc' Q/2	he absence of indicators.)
ON2 DYRS/3 DO DYRS/6 T Maintain and the second of	15
Image: Second	Texture Remarks
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
	ns. ² Location: PL=Pore Lining, M=Matrix.
	Indicators for Problematic Hydric Soils ³ :
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) Restrictive Layer (if present): Type: Type:	2 cm Muck (A10)
	Red Parent Material (TF2)
	Very Shallow Dark Surface (TF12)
	Other (Explain in Remarks)
	3
	³ Indicators of hydrophytic vegetation and
Restrictive Layer (if present): Type:	wetland hydrology must be present,
Type:	unless disturbed or problematic.
Depth (inches):	
Remarks: IVDROLOGY 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) Diff Deposits (B3) Oxidized Rhizospheres along Living Roots (A) 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) Field Observations: Surface Water Present? Yes No Depth (inches): Wetland Water Table Present? Yes No Depth (inches): Wetland Depscribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	Hydric Soil Present? Yes <u>No</u> No
Primary Indicators (minimum of one required; check all that apply)	
	Secondary Indicators (2 or more required)
	Water-Stained Leaves (B9) (MLRA 1, 2,
	4A, and 4B)
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots I 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) Field Observations: Surface Water Present? Surface Water Present? Yes No Saturation Present? Yes No Saturation Present? Yes No Depth (inches): Ø Wetland Baccorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	Drainage Patterns (B10)
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Argan Matter Status Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) 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): Iron Depth (Iron Depth (Iro	Dry-Season Water Table (C2)
	Saturation Visible on Aerial Imagery (C9)
Iron Deposits (B5)	(C3) Geomorphic Position (D2)
	Shallow Aquitard (D3)
	FAC-Neutral Test (D5)
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): Wetland includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	Raised Ant Mounds (D6) (LRR A)
Field Observations: Surface Water Present? Yes No Depth (inches): Surface Water Present? Yes No Depth (inches): Wetland Water Table Present? Yes No Depth (inches): Wetland Saturation Present? Yes No Depth (inches): Wetland Saturation Present? Yes No Depth (inches): Wetland Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	Frost-Heave Hummocks (D7)
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): Includes capillary fringe) Yes No Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches): 8 Wetland includes capillary fringe) Yes No Depth (inches): 8 Wetland Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	
(includes capillary fringe) reason of the second seco	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	l Hydrology Present? Yes 🔀 No 🔜
	vailable
Remarke:	fandsio.
inormania.	

	WETLAND DETERMINATION	N DATA FORM – Western Mountains,	Valleys, and Coast Region
itor	Burne	City/County	Sampling Date: 3/1

	Bunside			Sampling Date: 7/4)23
Applicant/Owner:	40			State: Sampling Point:
nvestigator(s):		17. 		
				e, convex, none): Slope (%):
Subregion (LRR):		Lat:		Long: Datum:
				NWI classification:
Are climatic / hydrolo	gic conditions on the sit	e typical for this time of ye		(If no, explain in Remarks.)
Are Vegetation	, Soil, or Hydr	ology significantly	disturbed? Are	e "Normal Circumstances" present? Yes 📉 No
Are Vegetation	, Soil, or Hydr	ology naturally pro	oblematic? (If	needed, explain any answers in Remarks.)
SUMMARY OF	FINDINGS – Attac	h site map showing	sampling point	locations, transects, important features, etc
Hydrophytic Vegeta	ation Present? Y	/es No		
Hydric Soil Present	t? Y	′es <u>×</u> No	Is the Sample	X
Wetland Hydrology	Present? Y	'es No	within a Wetl	and? Yes No
Remarks:				
	- Use scientific na	mas of plants		
VEGETATION -	Use scientific fia	•	Dominant Indicator	Dominance Test worksheet:
	ot size:)	% Cover	Species? Status	 Number of Dominant Species
1				_ That Are OBL, FACW, or FAC: (A)
				Total Number of Dominant
3				_ Species Across All Strata: (B)
4			= Total Cover	Percent of Dominant Species
Sapling/Shrub Stra	tum (Plot size:)		That Are OBL, FACW, or FAC: (A/B)
1				Prevalence Index worksheet:
2				- OBL species x1 =
3				FACW species x 2 =
4				FAC species $3S$ x 3 = $1DS$
5				FACU species 55 x 4 = 220
Herb Stratum (Plo	ot size:		= Total Cover	UPL species 15 x 5 = -25
1. Aston Le	contodou said	alis 30	X FACM	Column Totals: 105 (A) 400 (B)
2. Holino	anotro.	30	X FAC	Prevalence Index = B/A =3, 8
	> Concepterta		Cran	Hydrophytic Vegetation Indicators:
	arentuestian		FAC	1 - Rapid Test for Hydrophytic Vegetation
	son waxim		<u>(</u>	2 - Dominance Test is >50%
	m american		- WPL	3 - Prevalence Index is ≤3.0 ¹
	mus echinatin		VWC	 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
8				5 - Wetland Non-Vascular Plants ¹
				Problematic Hydrophytic Vegetation ¹ (Explain)
10				¹ Indicators of hydric soil and wetland hydrology must
5. S. S.			= Total Cover	be present, unless disturbed or problematic.
Woody Vine Stratu	ım (Plot size:)		
				_ Hydrophytic
1				
1 2				─ Vegetation
2	Herb Stratum		= Total Cover	Vegetation Present? Yes No X

Profile Description: (Describe Depth Matrix	to the dep					the absent	ce of malcators.)
(inches) Color (moist)	%	Color (moist)	ox Feature %	Type ¹	Loc ²	Texture	Remarks
2-12 7.5×13	100	578-6/8	3	C	W	Texture	Remarks
							,
Type: C=Concentration, D=De	oletion, RM=	Reduced Matrix, CS	S=Covered	d or Coate	ed Sand Gra		ocation: PL=Pore Lining, M=Matrix.
ydric Soil Indicators: (Applie Histosol (A1)	able to all	Sandy Redox (ed.)			ators for Problematic Hydric Soils ³ : cm Muck (A10)
Histic Epipedon (A2)		Stripped Matrix					ed Parent Material (TF2)
Black Histic (A3)		Loamy Mucky M		1) (excent			ery Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)		Loamy Gleyed					ther (Explain in Remarks)
Depleted Below Dark Surface	æ (A11)	Depleted Matrix					
 Thick Dark Surface (A12) Sandy Mucky Mineral (S1) 		Redox Dark Su Depleted Dark Su	. ,				ators of hydrophytic vegetation and
_ Sandy Gleyed Matrix (S4)		Redox Depress		()			tland hydrology must be present, less disturbed or problematic.
estrictive Layer (if present):						uni	less disturbed of problematic.
Туре:							
Depth (inches):							
Boptil (illolloo).						Hydric So	oil Present? Yes 📉 No
emarks:						Hydric So	oil Present? Yes <u> </u>
						Hydric So	oil Present? Yes <u> </u>
emarks: /DROLOGY		; check all that apply	v)				
emarks: /DROLOGY /etland Hydrology Indicators		<u>; check all that apph</u>		es (B9) (e :	xcept	<u>Sec</u>	pil Present? Yes <u>No</u> <u>No</u> <u>condary Indicators (2 or more required)</u> Water-Stained Leaves (B9) (MLRA 1, 2 ,
emarks: /DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of d Surface Water (A1) High Water Table (A2)		Water-Stai			xcept	<u>Sec</u>	condary Indicators (2 or more required)
emarks: /DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of e Surface Water (A1) High Water Table (A2) Saturation (A3)		Water-Stai MLRA Salt Crust	ined Leave 1, 2, 4A, a (B11)	and 4B)		<u>Sec</u>	<u>condary Indicators (2 or more required)</u> Water-Stained Leaves (B9) (MLRA 1, 2 , 4A, and 4B) Drainage Patterns (B10)
emarks: /DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of d 		Water-Stai MLRA Salt Crust Aquatic Inv	ined Leave 1, 2, 4A, a (B11) vertebrates	and 4B) s (B13)	36)	<u>Sec</u>	xondary 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 /etland Hydrology Indicators: rimary Indicators (minimum of d 		Water-Stain MLRA Salt Crust Aquatic Inv Hydrogen	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Oc	and 4B) s (B13) dor (C1)	39) Uğ	Sec 	condary 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
emarks: //DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of (Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Oc Rhizospher	and 4B) s (B13) dor (C1) res along	(c) Uç Livínġ Roots	<u>Sec</u> 	condary 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)
emarks: //DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of (Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Oc Rhizospher of Reduce	and 4B) s (B13) dor (C1) res along d Iron (C4	ີ່ ເງິດ ບູດ Living Roots)	<u>Sec</u> 	xondary 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)
emarks: //DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of (Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen : Oxidized R Presence of Recent Iron	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Oc Rhizospher of Reduce n Reductio	and 4B) s (B13) dor (C1) res along b d Iron (C4 on in Tilleo	Living Roots) 1 Soils (C6)	s (C3)	condary 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)
emarks: /DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of d Surface Water (A1) High Water Table (A2) Saturation (A3) 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	me required	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen I Oxidized R Presence o Recent Iroo Stunted or) Other (Exp	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Oc Rhizospher of Reduce n Reductio Stressed	and 4B) s (B13) dor (C1) res along d d Iron (C4 on in Tilleo Plants (D	Living Roots) 1 Soils (C6)	s (C3)	xondary 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)
emarks: //DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of (me required	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen I Oxidized R Presence o Recent Iroo Stunted or) Other (Exp	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Oc Rhizospher of Reduce n Reductio Stressed	and 4B) s (B13) dor (C1) res along d d Iron (C4 on in Tilleo Plants (D	Living Roots) 1 Soils (C6)	s (C3)	condary 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) Raised Ant Mounds (D6) (LRR A)
emarks: //DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of d 	me required	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen I Oxidized R Presence o Recent Iroo Stunted or) Other (Exp 18)	ined Leave 1, 2, 4A, a (B11) vertebrate: Sulfide Oc Rhizospher of Reduce n Reductio Stressed olain in Rei	and 4B) s (B13) dor (C1) res along 1 d Iron (C4 on in Tilleo Plants (D marks)	Living Roots) d Soils (C6) 1) (LRR A)	s (C3)	condary 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) Raised Ant Mounds (D6) (LRR A)
emarks: //DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of d 	Imagery (B7 e Surface (E es N	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R V Presence c Recent Irou Stunted or Other (Exp 18)	ined Leave 1, 2, 4A, a (B11) vertebrate: Sulfide Oc Rhizospher of Reduce n Reductio Stressed plain in Rei ches):	and 4B) s (B13) dor (C1) res along 1 d Iron (C4 on in Tilleo Plants (D marks)	Living Roots) d Soils (C6) 1) (LRR A)	s (C3)	xondary 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)
emarks: //DROLOGY /etland Hydrology Indicators: rimary 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) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Sparsely Vegetated Concav eld Observations: urface Water Present? Y vaturation Present? Y aturation Present? Y	magery (B7 9 Surface (E ies N ies N	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen I Oxidized R Presence o Recent Iro Stunted or) Other (Exp 18)	ined Leave 1, 2, 4A, a (B11) vertebrate: Sulfide Oc Rhizospher of Reduce n Reduction Stressed plain in Rel ches): ches): ches):	s (B13) dor (C1) res along d d Iron (C4 on in Tillec Plants (D marks)	Living Roots) 1 Soils (C6) 1) (LRR A)	s (C3)	condary 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) Raised Ant Mounds (D6) (LRR A)
emarks: //DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of (magery (B7 9 Surface (E ies N ies N	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen I Oxidized R Presence o Recent Iro Stunted or) Other (Exp 18)	ined Leave 1, 2, 4A, a (B11) vertebrate: Sulfide Oc Rhizospher of Reduce n Reduction Stressed plain in Rel ches): ches): ches):	s (B13) dor (C1) res along d d Iron (C4 on in Tillec Plants (D marks)	Living Roots) 1 Soils (C6) 1) (LRR A)	s (C3)	xondary 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)
emarks: //DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of d Surface Water (A1) High Water Table (A2) Saturation (A3) 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 Concav eld Observations: urface Water Present? Y vaturation Present? Y aturation Present? Y	magery (B7 a Surface (E ies N ies N	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen I Oxidized R Presence o Recent Iro Stunted or) Other (Exp 18)	ined Leave 1, 2, 4A, a (B11) vertebrate: Sulfide Oc Rhizospher of Reduce n Reduction Stressed plain in Rel ches): ches): ches):	s (B13) dor (C1) res along d d Iron (C4 on in Tillec Plants (D marks)	Living Roots) 1 Soils (C6) 1) (LRR A)	s (C3)	xondary 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)
emarks: //DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of d Surface Water (A1) High Water Table (A2) Saturation (A3) 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 Concav eld Observations: urface Water Present? Y aturation Present? Y aturation Present? Y aturation Present? Y aturation Present? Y aturation Present? Y	magery (B7 a Surface (E ies N ies N	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen I Oxidized R Presence o Recent Iro Stunted or) Other (Exp 18)	ined Leave 1, 2, 4A, a (B11) vertebrate: Sulfide Oc Rhizospher of Reduce n Reduction Stressed plain in Rel ches): ches): ches):	s (B13) dor (C1) res along d d Iron (C4 on in Tillec Plants (D marks)	Living Roots) 1 Soils (C6) 1) (LRR A)	s (C3)	xondary 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)

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

Project/Site:	_ City/County:		Sampling Date: 7/14/23
Applicant/Owner:		State:	Sampling Point:
Investigator(s): CTO	_ Section, Township, Range: _	la t	
Landform (hillslope, terrace, etc.):	Local relief (concave, convex	k, none):	Slope (%):
Subregion (LRR): Lat:	Long	g:	Datum:
Soil Map Unit Name:		NWI classific	
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes 🔀 No	(If no, explain in R	lemarks.)
Are Vegetation, Soil, or Hydrology significan	tly disturbed? Are "Norma	al Circumstances" p	present? Yes <u>~</u> No
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed,	explain any answe	rs in Remarks.)

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>V</u> No Yes <u>V</u> No Yes <u>≺</u> No	>	Is the Sampled Area within a Wetland?	Yes	No	
Remarks:		1				

VEGETATION – Use scientific names of plants.

-	Abaabata	Densis ant las	- Northan	Dominance Test worksheet:
Tree Stratum (Plot size:)	Absolute %	Dominant Inc Species? S		
				Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4			I	
T				Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)		= Total Cover	r	That Are OBL, FACW, or FAC: (A/B)
			[Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species $95 \times 2 = 190$
4				
				FAC species x 3 =
5				FACU species $5 \times 4 = 20$
		= Total Cover	r	UPL species x 5 =
Herb Stratum (Plot size:)	0.	\sim 0	Neu	Column Totals: $1DS$ (A) $22S$ (B)
1. Juneus paters	90	X	ma	Column Totals: (A) (A) (B)
2. Toricolordize diversibilition	5		AC	Prevalence Index = B/A =
3. OLNSING MANNIN	5	EA .	AČU	Hydrophytic Vegetation Indicators:
4. Cares feta	2		Yew	1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				∑ 3 - Prevalence Index is ≤3.0 ¹
7				 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
8				5 - Wetland Non-Vascular Plants ¹
9				
10				Problematic Hydrophytic Vegetation ¹ (Explain)
11				¹ Indicators of hydric soil and wetland hydrology must
		= Total Cover	r	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)				
1				Hydrophytic
2				Vegetation
2				Present? Yes No
% Base Crown die Harb Stratum		= Total Cover	r	
% Bare Ground in Herb Stratum				
Remarks:				

US Army Corps of Engineers

Profile Des	cription: (Describe	to the dept	h needed to docum	ent the ind	dicator	or confirm	the absence	of indicators)
Depth	Matrix			Features				of malcators.)
(inches)	Color (moist)	%	Color (moist)		Type ¹	Loc ²	Texture	Remarks
0-12	7.5/2.5/3	100	7.5785/6	2	Ċ	$\sqrt{2}$		ş 20
Type: C=C	oncentration, D=Dep	bletion, RM=	Reduced Matrix, CS	=Covered o	or Coate	ed Sand Gra		cation: PL=Pore Lining, M=Matrix.
Histosol Histic E Black H Hydroge	l (A1) pipedon (A2) istic (A3) en Sulfide (A4)	2	Sandy Redox (S Stripped Matrix (Loamy Mucky M Loamy Gleyed M	5) S6) ineral (F1) (latrix (F2)		MLRA 1)	2 cm Red Very	rrs for Problematic Hydric Soils ³ : n Muck (A10) Parent Material (TF2) / Shallow Dark Surface (TF12) er (Explain in Remarks)
Thick Da Sandy M Sandy C	d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Layer (if present):	e (A11) - -	Depleted Matrix Redox Dark Surf Depleted Dark S Redox Depressio	ace (F6) urface (F7)		•	wetla	rs of hydrophytic vegetation and nd hydrology must be present, s disturbed or problematic.
Type:								
Depth (in	ches):							
Remarks:	217						Hydric Soil	Present? Yes <u>No</u> No
Remarks:	211+						Hydric Soil	Present? Yes <u>No</u> No
Remarks: YDROLO Vetland Hy Primary India Surface High Wa	GY drology Indicators: cators (minimum of o Water (A1) ater Table (A2)	ne required;		ed Leaves 2, 4A, and		xcept	<u>Secon</u>	Present? Yes <u>No</u> No <u>idary Indicators (2 or more required)</u> (ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Remarks: YDROLO Vetland Hyd Primary India Saturatia High Wa Saturatia Water M Sedimer	GY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2)	ne required;	Water-Stain MLRA 1, Salt Crust (E Aquatic Inve	ed Leaves (2, 4A, and 311) ertebrates (E ulfide Odor	B13) (C1)	4	<u>Secon</u> W D D	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9
Primary India Primary India Primary India Primary India Primary India Primary India Saturatio Saturatio Saturatio Saturatio Drift Dep Algal Ma Iron Dep	GY drology Indicators: cators (minimum of c Water (A1) ater Table (A2) on (A3) larks (B1)	ne required;	Water-Stain MLRA 1, Salt Crust (E Aquatic Inve	ed Leaves (2, 4A, and 311) ertebrates (E ulfide Odor izospheres Reduced Ir Reducet in	B13) (C1) along I ron (C4 in Tilled	Living Roots) I Soils (C6)	<u>Secon</u> W Di Di Si s (C3) G Si F/	Idary Indicators (2 or more required) (ater-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) hallow Aquitard (D3) AC-Neutral Test (D5)
Permarks: YDROLO Vetland Hy Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Deg Algal Ma Iron Deg Surface Inundatio	GY drology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) larks (B1) th Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial I	magery (B7)	Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	ed Leaves (2, 4A, and 311) ertebrates (E ulfide Odor izospheres Reduced In Reduced In Reduction i Stressed Pla	B13) (C1) along I ron (C4 in Tilled ants (D1	Living Roots) I Soils (C6)	<u>Secon</u> W D S s (C3) G S! S! F/ Ra	idary Indicators (2 or more required) ater-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) hallow Aquitard (D3)
Permarks: YDROLO Vetland Hy Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Deg Algal Ma Iron Deg Surface Inundatio	GY drology Indicators: cators (minimum of 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 I v Vegetated Concave	magery (B7)	Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	ed Leaves (2, 4A, and 311) ertebrates (E ulfide Odor izospheres Reduced In Reduced In Reduction i Stressed Pla	B13) (C1) along I ron (C4 in Tilled ants (D1	Living Roots) I Soils (C6)	<u>Secon</u> W D S s (C3) G S! S! F/ Ra	idary Indicators (2 or more required) fater-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) aised Ant Mounds (D6) (LRR A)
Permarks: YDROLO Vetland Hy Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Iron Dep Iron Dep Iron Dep Inundati Sparsely ield Obsern Surface Wate	GY drology Indicators: cators (minimum of 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 I / Vegetated Concave vations: er Present? Y	magery (B7) 9 Surface (Bł es No	Water-Stain MLRA 1, Salt Crust (6 Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla 8)	ed Leaves (2, 4A, and 311) ertebrates (E ulfide Odor izospheres Reduced Ir Reduction i tressed Pla ain in Rema	B13) (C1) along I ron (C4 in Tilled ants (D1	Living Roots) I Soils (C6)	<u>Secon</u> W D S s (C3) G S! S! F/ Ra	idary Indicators (2 or more required) fater-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) aised Ant Mounds (D6) (LRR A)
Permarks: YDROLO Vetland Hy Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Der Iron Dep Iron Dep Inundatio Sparsely ield Obsern Surface Wate Vater Table Saturation Prinoludes cas	GY drology Indicators: cators (minimum of 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 I / Vegetated Concave vations: er Present? Y Present? Y resent? Y	magery (B7) 9 Surface (Bi es N es N es N	Water-Stain MLRA 1, Salt Crust (6 Aquatic Inve Hydrogen Ś Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla 8) Depth (inch Depth (inch Depth (inch Depth (inch	ed Leaves I 2, 4A, and 311) rtebrates (E ulfide Odor izospheres Reduction in Reduction in Ressed Pile ain in Rema	H 4B) B13) (C1) along I ron (C4 in Tilled ants (D1 arks)	Living Roots) I Soils (C6) I) (LRR A)	<u>Secon</u> W Di Si Si Si Fi Fr Fr	idary Indicators (2 or more required) fater-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) aised Ant Mounds (D6) (LRR A)
Permarks: YDROLO Vetland Hy Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Der Iron Dep Iron Dep Inundatio Sparsely ield Obsern Surface Wate Vater Table Saturation Prinoludes cas	GY drology Indicators: cators (minimum of 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 I / Vegetated Concave vations: er Present? Y Present? Y resent? Y	magery (B7) 9 Surface (Bi es N es N es N	Water-Stain MLRA 1, Salt Crust (f Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla 8) Depth (inch Depth (inch	ed Leaves I 2, 4A, and 311) rtebrates (E ulfide Odor izospheres Reduction in Reduction in Ressed Pile ain in Rema	H 4B) B13) (C1) along I ron (C4 in Tilled ants (D1 arks)	Living Roots) I Soils (C6) I) (LRR A)	<u>Secon</u> W Di Si Si Si Fi Fr Fr	Idary Indicators (2 or more required) (ater-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) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
Permarks: YDROLO Vetland Hy Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Der Iron Dep Iron Dep Inundatio Sparsely ield Obsern Surface Wate Vater Table Saturation Prinoludes cas	GY drology Indicators: cators (minimum of 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 I / Vegetated Concave vations: er Present? Y Present? Y resent? Y	magery (B7) 9 Surface (Bi es N es N es N	Water-Stain MLRA 1, Salt Crust (6 Aquatic Inve Hydrogen Ś Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla 8) Depth (inch Depth (inch Depth (inch Depth (inch	ed Leaves I 2, 4A, and 311) rtebrates (E ulfide Odor izospheres Reduction in Reduction in Ressed Pile ain in Rema	H 4B) B13) (C1) along I ron (C4 in Tilled ants (D1 arks)	Living Roots) I Soils (C6) I) (LRR A)	<u>Secon</u> W Di Si Si Si Fi Fr Fr	Idary Indicators (2 or more required) (ater-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) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
Pemarks: YDROLO Vetland Hy Primary Indic Surface High Wa Saturatio High Wa Saturatio Water M Sedimer Drift Deg Algal Ma Iron Dep Surface Surface Surface Wate Vater Table Baturation Princibules cage Describe Reco	GY drology Indicators: cators (minimum of 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 I / Vegetated Concave vations: er Present? Y Present? Y resent? Y	magery (B7) 9 Surface (Bi es N es N es N	Water-Stain MLRA 1, Salt Crust (6 Aquatic Inve Hydrogen Ś Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla 8) Depth (inch Depth (inch Depth (inch Depth (inch	ed Leaves I 2, 4A, and 311) rtebrates (E ulfide Odor izospheres Reduction in Reduction in Ressed Pile ain in Rema	H 4B) B13) (C1) along I ron (C4 in Tilled ants (D1 arks)	Living Roots) I Soils (C6) I) (LRR A)	<u>Secon</u> W Di Si Si Si Fi Fr Fr	Idary Indicators (2 or more required) (ater-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) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)

Project/Site:	N	City/County:			_ Sampling D	ate: 7/14/22
Applicant/Owner:			Sta	ate:	Sampling P	oint: <u>6</u>
Investigator(s):	1.11	_ Section, Towns	hip, Range:			14 A.
Landform (hillslope, terrace, etc.):		_ Local relief (cor	ncave, convex, no	one):		Slope (%):
Subregion (LRR):	Lat:		Long:			Datum:
Soil Map Unit Name:				_ NWI classifi	cation:	
Soil Map Unit Name: Are climatic / hydrologic conditions on the site typ			_ No (If	no, explain in f	Remarks.)	
	pical for this time of	year?Yes 🔀	_ No (If	no, explain in f	Remarks.)	s <u>~</u> No
Are climatic / hydrologic conditions on the site typ Are Vegetation, Soil, or Hydrolog	pical for this time of y significant	year? Yes <u>×</u> ly disturbed?	_ No (If	no, explain in f ircumstances"	Remarks.) present? Ye	s <u>~</u> No
Are climatic / hydrologic conditions on the site typ	pical for this time of y y significant y naturally p	year? Yes <u>></u> ly disturbed? problematic?	No (If Are "Normal Ci (If needed, exp	no, explain in f ircumstances" vlain any answe	Remarks.) present? Ye ers in Remark	s <u>~</u> No s.)
Are climatic / hydrologic conditions on the site ty Are Vegetation, Soil, or Hydrolog Are Vegetation, Soil, or Hydrolog SUMMARY OF FINDINGS – Attach s	pical for this time of y y significant y naturally p	year? Yes <u>\</u> ly disturbed? problematic? ng sampling p	No (If Are "Normal Ci (If needed, exp oint locations	no, explain in f ircumstances" plain any answe s, transects	Remarks.) present? Ye ers in Remark s, importa i	s <u>~</u> No s.)
Are climatic / hydrologic conditions on the site typ Are Vegetation, Soil, or Hydrolog Are Vegetation, Soil, or Hydrolog SUMMARY OF FINDINGS – Attach s Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes	pical for this time of y y significant y naturally p ite map showin	year? Yes X ly disturbed? problematic? ng sampling p	No (If Are "Normal Ci (If needed, exp	no, explain in f ircumstances" vlain any answe	Remarks.) present? Ye ers in Remark s, importa i	s <u> </u>

VEGETATION – Use scientific names of plants.

	Absolute		Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 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 Co		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species $9975 \times 2 = 190$
4				FAC species 12 x 3 = 33
5			1	FACU species 5 $x = 20$
		= Total Co	over	
Herb Stratum (Plot size:)	00	_	Could	UPL species x 5 =
1. Juneus pater	90	X	GACW	Column Totals: (10 (A) 240 (B)
2. Thomas working	2		GACY	Prevalence Index = B/A =
3. Torico dendrar alth Slabin	2		Cic	Hydrophytic Vegetation Indicators:
4. Holens lanatus,	S		FLC	1 - Rapid Test for Hydrophytic Vegetation
5. Carex Feta	2		FACW	2 - Dominance Test is >50%
			÷	
6				X 3 - Prevalence Index is ≤3.0 ¹
7 8				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants ¹
10				Problematic Hydrophytic Vegetation ¹ (Explain)
11				¹ Indicators of hydric soil and wetland hydrology must
· · · ·		= Total Co		be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)		_ Total Co	VEI	
1				Hydrophytic
				Vegetation
2				Present? Yes <u>No</u> No
% Bare Ground in Herb Stratum		_= Total Co	ver	
Remarks:				
i tomano.				

US Army Corps of Engineers

		to the dep	oth needed to docum			or confirm	the absenc	e of indicators.)
Depth (inches)	Matrix Color (moist)	%	Redox	x Features		1 2	-	
D-VZ	ID XRS/3	7.00	Color (moist)		Type ¹	_Loc ²	Texture	Remarks
210	10/10/2	100	772512	0	C	\sim		
T								
Type: C=CC	ndicators: (Appli	pletion, RM	Reduced Matrix, CS LRRs, unless other	=Covered	l or Coate	ed Sand Gra		ocation: PL=Pore Lining, M=Matrix.
		able to all			ea.)			ors for Problematic Hydric Soils ³ :
Histosol Histic Er	(A1) bipedon (A2)		Sandy Redox (S					m Muck (A10)
Black His	,		Stripped Matrix	. ,				d Parent Material (TF2)
	n Sulfide (A4)		Loamy Mucky M	-		(MLRA 1)		ry Shallow Dark Surface (TF12)
	Below Dark Surfac	e (A11)	Loamy Gleyed N Depleted Matrix	. ,	,		Oth	ner (Explain in Remarks)
	rk Surface (A12)	~ (~ 1)	Redox Dark Sur	. ,			³ Indicat	ors of hydrophytic vegetation and
	lucky Mineral (S1)		Depleted Dark S	• •	7)			and hydrology must be present,
	leyed Matrix (S4)		Redox Depressi		• •			ss disturbed or problematic.
	ayer (if present):			()				
Type:								
Depth (inc	hes):							
Remarks:							Hvdric Soi	
cemarks.							Hydric Soi	I Present? Yes <u>No</u> No
	GY						Hydric Soi	rresent? Tes <u>No</u> No
YDROLO	GY Irology Indicators:						Hydric Soi	i Fresent? Tes <u>No</u> No
YDROLO(Wetland Hyd	Irology Indicators:		d; check all that apply)				ndary Indicators (2 or more required)
YDROLO Wetland Hyd	Irology Indicators:		<u>t; check all that apply</u> Water-Stair		es (B9) (e	xcept	Seco	ndary Indicators (2 or more required)
YDROLOO Vetland Hyd Primary Indic Surface \	Irology Indicators: ators (minimum of c		Water-Stair			xcept	Seco	Indary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2,
YDROLOO Vetland Hyd Primary Indic Surface \	Irology Indicators: ators (minimum of c Water (A1) ter Table (A2)		Water-Stair	ned Leave , 2, 4A, a i		xcept	<u>Seco</u>	ndary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
YDROLOO Vetland Hyd Primary Indic Surface N High Wat	Irology Indicators: ators (minimum of o Nater (A1) ter Table (A2) n (A3)		Water-Stair MLRA 1	ned Leave , 2, 4A, a i B11)	nd 4B)	xcept	<u>Seco</u>	Indary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
YDROLOO Vetland Hyd Primary Indic Surface N High Wal Saturatio Water Ma	Irology Indicators: ators (minimum of o Nater (A1) ter Table (A2) n (A3)		Water-Stair MLRA 1 Salt Crust (Aquatic Inve	ned Leave , 2, 4A, a B11) ertebrates	nd 4B)	xcept	<u>Seco</u> V [Indary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
YDROLOO Vetland Hyd Primary Indic Surface N High Wal Saturatio Water Ma	Irology Indicators: ators (minimum of o Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2)		Water-Stair MLRA 1 Salt Crust (Aquatic Invo Hydrogen S	ned Leave , 2, 4A, a B11) ertebrates Sulfide Od	nd 4B) s (B13) or (C1)	1	<u>Seco</u> V [[Indary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
YDROLOO Vetland Hyd Primary Indic Saturatio High Wal Saturatio Saturatio Saturatio Saturatio Drift Dep	Irology Indicators: ators (minimum of o Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2)		Water-Stair MLRA 1 Salt Crust (Aquatic Inve	ned Leave , 2, 4A, a B11) ertebrates Sulfide Od hizosphere	nd 4B) s (B13) or (C1) es along	Living Root	<u>Seco</u> \ [[[[[[[[[] []]	Indary 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)
YDROLOO Primary Indic Primary Indic Saturatio Water Ma Saturatio Water Ma Sedimen Drift Dep Algal Ma	Irology Indicators: ators (minimum of c Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)		Water-Stair MLRA 1 Salt Crust (Aquatic Invo Hydrogen S Oxidized Ri Presence o	ned Leave , 2, 4A, a B11) ertebrates Sulfide Od hizosphere f Reduced	nd 4B) s (B13) for (C1) es along d Iron (C4	Living Root	<u>Seco</u> V [[s (C3) S	Indary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Org-Season Water Table (C2) Staturation Visible on Aerial Imagery (C9 Seomorphic Position (D2) Shallow Aquitard (D3)
YDROLOO Vetland Hyd Primary Indic Surface N High Wal Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depu	Irology Indicators: ators (minimum of c Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)		Water-Stair MLRA 1 Salt Crust (Aquatic Invo Hydrogen S Oxidized Ri Presence o Recent Iron	ned Leave , 2, 4A, a B11) ertebrates Sulfide Od hizosphere f Reduced Reductio	nd 4B) s (B13) lor (C1) es along d Iron (C4 on in Tilled	Living Root	<u>Seco</u> [[[s (C3) [[[Indary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
YDROLOO Primary Indic Surface V High Wal Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depo Surface S	Irology Indicators: ators (minimum of of Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6)	ne required	Water-Stair MLRA 1 Salt Crust (Aquatic Invi Hydrogen S Oxidized Ri Presence o Recent Iron Stunted or S	ned Leave , 2, 4A, a B11) ertebrates Sulfide Od hizosphere f Reduced Reductio Stressed F	nd 4B) or (C1) es along d Iron (C4 on in Tilleo Plants (D	Living Root	<u>Seco</u> V C C s (C3) C F F	ndary 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 Secomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLOO Vetland Hyd Primary Indic Surface V High Wal Saturatio Water Ma Sedimen Drift Dep Algal Mai Iron Dep Surface S Inundatio	Inclogy Indicators: ators (minimum of c Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5)	magery (B	Water-Stair MLRA 1 Salt Crust (Aquatic Inve Hydrogen S Oxidized Ri Presence o Recent Iron Stunted or S 7) Other (Expl	ned Leave , 2, 4A, a B11) ertebrates Sulfide Od hizosphere f Reduced Reductio Stressed F	nd 4B) or (C1) es along d Iron (C4 on in Tilleo Plants (D	Living Root	<u>Seco</u> V C C s (C3) C F F	Indary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
YDROLOO Vetland Hyd Primary Indic Surface V High Wal Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depu Surface S Inundatio Sparsely	Irology Indicators: ators (minimum of of Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial I Vegetated Concave	magery (B	Water-Stair MLRA 1 Salt Crust (Aquatic Inve Hydrogen S Oxidized Ri Presence o Recent Iron Stunted or S 7) Other (Expl	ned Leave , 2, 4A, a B11) ertebrates Sulfide Od hizosphere f Reduced Reductio Stressed F	nd 4B) or (C1) es along d Iron (C4 on in Tilleo Plants (D	Living Root	<u>Seco</u> V C C s (C3) C F F	ndary 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 Secomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLOO Primary Indic Surface V High Wal Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depu Surface S Inundatio Sparsely Seld Observer	Inclogy Indicators: ators (minimum of of Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial I Vegetated Concave ations:	magery (B) 9 Surface (f	Water-Stair MLRA 1 Salt Crust (Aquatic Inve Hydrogen S Oxidized Ri Presence o Recent Iron Stunted or S 7) Other (Expl	ned Leave , 2, 4A, ar B11) ertebrates Sulfide Od hizosphere f Reduced Reductio Stressed F ain in Ren	nd 4B) or (C1) es along d Iron (C4 on in Tilleo Plants (D	Living Root	<u>Seco</u> V C C s (C3) C F F	ndary 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 Secomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLOO Primary Indic Surface V High Wal Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dept Iron Dept Surface S Inundatio Sparsely Surface Wate	rology Indicators: ators (minimum of of Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial i Vegetated Concave ations: r Present? Y	imagery (B) e Surface (f	Water-Stair MLRA 1 Salt Crust (Aquatic Inve Hydrogen S Oxidized Ri Presence o Recent Iron Stunted or 5 7) Other (Expl 38)	hed Leave , 2, 4A, ar B11) ertebrates Sulfide Od hizosphere f Reduced Reductio Stressed F ain in Ren	nd 4B) or (C1) es along d Iron (C4 on in Tilleo Plants (D	Living Root	<u>Seco</u> V C C s (C3) C F F	ndary 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 Secomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLOO Primary Indic Primary Indic Surface M High Wal Saturatio Water Ma Sedimen Drift Dep Algal Mai Iron Depi Algal Mai Iron Depi Surface S Inundatio Sparsely Field Observ Surface Wate Vater Table F Saturation Priv	Irology Indicators: ators (minimum of of Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial i Vegetated Concave ations: r Present? Y seent? Y	magery (B) e Surface (f es 1 es 1	Water-Stair MLRA 1 Salt Crust (Aquatic Inve Hydrogen S Oxidized Ri Presence o Recent Iron Stunted or S Other (Expl S8) No C Depth (incl No Depth (incl	hed Leave , 2 , 4A , an B11) ertebrates Sulfide Od hizosphere f Reduced Reductio Stressed F ain in Ren hes): hes):	nd 4B) or (C1) es along d Iron (C4 on in Tilleo Plants (D	Living Root) d Soils (C6) 1) (LRR A)	s (C3) F	Indary 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 Seomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) rrost-Heave Hummocks (D7)
YDROLOO Primary Indic Surface V High Wal Saturatio Water Ma Sedimen Drift Dep Algal Mal Iron Depu Surface S Inundatio Sparsely Surface Water Vater Table R Saturation Pre- includes capi	Irology Indicators: ators (minimum of of Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial I Vegetated Concave ations: r Present? Y Present? Y essent? Y	magery (B) a Surface (I les I les I es I	Water-Stair MLRA 1 MLRA 1 Salt Crust (Aquatic Inve Hydrogen S Oxidized Ri Presence or Recent Iron Stunted or S Other (Expl 38)	hed Leave , 2 , 4A , a r B11) ertebrates Sulfide Od hizosphere f Reduced Reductio Stressed F ain in Ren hes): hes):	nd 4B) s (B13) or (C1) es along d Iron (C4 on in Tiller Plants (D marks)	Living Root) J Soils (C6) 1) (LRR A)	<u>Seco</u> U U S S S S F F	Indary 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 Seomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLOO Primary Indic Surface V High Wal Saturatio Water Ma Sedimen Drift Dep Algal Mal Iron Depu Surface S Inundatio Sparsely Surface Water Vater Table R Saturation Pre- includes capi	Irology Indicators: ators (minimum of of Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial I Vegetated Concave ations: r Present? Y Present? Y essent? Y	magery (B) a Surface (I les I les I es I	Water-Stair MLRA 1 Salt Crust (Aquatic Inve Hydrogen S Oxidized Ri Presence o Recent Iron Stunted or S Other (Expl S8) No C Depth (incl No Depth (incl	hed Leave , 2 , 4A , a r B11) ertebrates Sulfide Od hizosphere f Reduced Reductio Stressed F ain in Ren hes): hes):	nd 4B) s (B13) or (C1) es along d Iron (C4 on in Tiller Plants (D marks)	Living Root) J Soils (C6) 1) (LRR A)	<u>Seco</u> U U S S S S F F	Indary 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 Seomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) rrost-Heave Hummocks (D7)
YDROLOO Primary Indic Surface V High Wal Saturatio Water Ma Sedimen Drift Dep Algal Mal Iron Depu Surface S Inundatio Sparsely Surface Water Surface Water Surface Water Surface Castron Pre- Saturation Pre- Saturation Pre- Surface Castroner Saturation Pre- Saturation Pre- Surface Castroner Saturation Pre- Surface Castroner Saturation Pre- Surface Castroner Saturation Pre- Surface Castroner Saturation Pre- Saturation Pre- Saturationer Pre- Saturationer Pre- Saturationer Pre- Saturationer Pre- Saturationer Pre- Saturationer Pre- Pre- Pre- Pre- Pre- Pre- Pre- Pre- Pre- Pre- Pre- Pre- Pre- Pre- Pre- Pre- Pre- Pre- Pre- Pre	Irology Indicators: ators (minimum of of Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial I Vegetated Concave ations: r Present? Y Present? Y essent? Y	magery (B) a Surface (I les I les I es I	Water-Stair MLRA 1 MLRA 1 Salt Crust (Aquatic Inve Hydrogen S Oxidized Ri Presence or Recent Iron Stunted or S Other (Expl 38)	hed Leave , 2 , 4A , a r B11) ertebrates Sulfide Od hizosphere f Reduced Reductio Stressed F ain in Ren hes): hes):	nd 4B) s (B13) or (C1) es along d Iron (C4 on in Tiller Plants (D marks)	Living Root) J Soils (C6) 1) (LRR A)	<u>Seco</u> U U S S S S F F	Indary 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 Seomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) rrost-Heave Hummocks (D7)
YDROLOO Primary Indic Surface V High Wal Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depu Surface S Inundatio Sparsely Surface Water Naturation Prin Surface Water Saturation Prin Describe Rec	Irology Indicators: ators (minimum of of Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial I Vegetated Concave ations: r Present? Y Present? Y essent? Y	magery (B) a Surface (I les I les I es I	Water-Stair MLRA 1 Salt Crust (Aquatic Inve Hydrogen S Oxidized Ri Presence o Recent Iron Stunted or S Other (Expl 38) No Depth (incl No Depth (incl No Depth (incl	hed Leave , 2 , 4A , a r B11) ertebrates Sulfide Od hizosphere f Reduced Reductio Stressed F ain in Ren hes): hes):	nd 4B) s (B13) or (C1) es along d Iron (C4 on in Tiller Plants (D marks)	Living Root) J Soils (C6) 1) (LRR A)	<u>Seco</u> U U S S S S F F	Indary 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 Seomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) rrost-Heave Hummocks (D7)
YDROLOO Primary Indic Surface V High Wal Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depu Surface S Inundatio Sparsely ield Observ Surface Water Vater Table F Saturation Prin Describe Rec	Irology Indicators: ators (minimum of of Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial I Vegetated Concave ations: r Present? Y Present? Y essent? Y	magery (B) a Surface (I les I les I es I	Water-Stair MLRA 1 Salt Crust (Aquatic Inve Hydrogen S Oxidized Ri Presence o Recent Iron Stunted or S Other (Expl 38) No Depth (incl No Depth (incl No Depth (incl	hed Leave , 2 , 4A , a r B11) ertebrates Sulfide Od hizosphere f Reduced Reductio Stressed F ain in Ren hes): hes):	nd 4B) s (B13) or (C1) es along d Iron (C4 on in Tiller Plants (D marks)	Living Root) J Soils (C6) 1) (LRR A)	<u>Seco</u> U U S S S S F F	Indary 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 Seomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) rrost-Heave Hummocks (D7)
YDROLOO Yetland Hyd Yimary Indic Surface V High Wal Saturatio Water Ma Sedimen Drift Dep Algal Mal Iron Depu Surface S Inundatio Sparsely ield Observ varface Water Vater Table F saturation Pre- teaturation Pre-	Irology Indicators: ators (minimum of of Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial I Vegetated Concave ations: r Present? Y Present? Y essent? Y	magery (B) a Surface (I les I les I es I	Water-Stair MLRA 1 Salt Crust (Aquatic Inve Hydrogen S Oxidized Ri Presence o Recent Iron Stunted or S Other (Expl 38) No Depth (incl No Depth (incl No Depth (incl	hed Leave , 2 , 4A , a r B11) ertebrates Sulfide Od hizosphere f Reduced Reductio Stressed F ain in Ren hes): hes):	nd 4B) s (B13) or (C1) es along d Iron (C4 on in Tiller Plants (D marks)	Living Root) J Soils (C6) 1) (LRR A)	<u>Seco</u> U U S S S S F F	Indary 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 Seomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) rrost-Heave Hummocks (D7)

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

Project/Site:	City/County:	Samp	ling Date: <u>7/14)23</u>
Applicant/Owner:		State: Samp	ling Point:
Investigator(s):	_ Section, Township, Range: _	the state of the	transmin and the
Landform (hillslope, terrace, etc.):	_ Local relief (concave, convex	a, 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 <u>~</u> No	(If no, explain in Remarks	i.)
Are Vegetation, Soil, or Hydrology significant	ly disturbed? Are "Norma	al Circumstances" present	? Yes <u>X</u> No
Are Vegetation, Soil, or Hydrology naturally p	problematic? (If needed,	explain any answers in Re	emarks.)

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

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

VEGETATION - Use scientific names of plants.

· · · · · · · · · · · · · · · · · · ·			1. P. 1	De la Tratación de la contra
Tree Stratum (Plot size:)	Absolute %	Dominant Species?	Indicator	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				
		= Total Co		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:)				
1				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species $s_{x2} = 10$
4				FAC species 25 x 3 = 75
5		-		15 10
		= Total Co	over	66 230
Herb Stratum (Plot size:)	-	-		
1-mart toggrass Festner and were	50	X	NPL	Column Totals: 100 (A) 360 420(B)
2. Hours Canaty	25	×	Che	Prevalence Index = $B/A = 4.2$
3. guze way making	10	-	Chan	Hydrophytic Vegetation Indicators:
4. Cover fita	5		FACW	1 - Rapid Test for Hydrophytic Vegetation
5. were prover Dances canota	5		CACh	2 - Dominance Test is >50%
6. Brossimm edinatus	5		NPL	3 - Prevalence Index is ≤3.0 ¹
7				4 - Morphological Adaptations ¹ (Provide supporting
8		-		data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants ¹
10				Problematic Hydrophytic Vegetation ¹ (Explain)
11				¹ Indicators of hydric soil and wetland hydrology must
		= Total Co	ver	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)		-		
1				Hydrophytic
2				Vegetation Present? Yes No
		= Total Co	ver	Present? Yes No
% Bare Ground in Herb Stratum		-		
Remarks:				-

US Army Corps of Engineers

	cription: (Describe	to the day	with many day days					
		to the de	pth needed to docum			or confirm	the absence	e of indicators.)
Depth (inches)	Matrix Color (moist)	0/	Color (moist)	K Feature	s Type ¹	1.0.02	Tauture	
712	IDXX4/3	NOD	2.57R516	%		Loc ²	Texture	Remarks
FIC	10000013	PV-	4.2 100210	5	C	\sim		Zanating
								an a
				$\underline{\sim}$				and the second
Type: C=C	oncentration, D=De	oletion, RM	Reduced Matrix, CS	=Covered	d or Coate	d Sand Gra	ains. ² Lo	cation: PL=Pore Lining, M=Matrix.
lydric Soil	Indicators: (Applie	able to al	LRRs, unless other	wise not	ed.)			ors for Problematic Hydric Soils ³ :
Histoso	l (A1)		Sandy Redox (S	5)			2 cr	m Muck (A10)
Histic E	pipedon (A2)		Stripped Matrix	(S6)				d Parent Material (TF2)
Black H	istic (A3)		Loamy Mucky M	lineral (F	1) (except	MLRA 1)		y Shallow Dark Surface (TF12)
Hydroge	en Sulfide (A4)		Loamy Gleyed M	Aatrix (F2	2)			er (Explain in Remarks)
Deplete	d Below Dark Surfac	æ (A11)	Depleted Matrix	(F3)				
Thick D	ark Surface (A12)		Redox Dark Sur	face (F6)			³ Indicato	ors of hydrophytic vegetation and
Sandy M	Mucky Mineral (S1)		Depleted Dark S	Surface (F	7)			and hydrology must be present,
_ Sandy C	Gleyed Matrix (S4)		Redox Depressi	ons (F8)			unles	as disturbed or problematic.
Restrictive	Layer (if present):							
Type:								
Depth (in	ches):						1	X
							Hvdric Soil	Present? Yes No
Remarks:							Hydric Soil	Present? Yes <u>//</u> No
YDROLO	2						Hydric Soil	Present? Yes <u>V</u> No
YDROLO Vetland Hy	drology Indicators							
YDROLO Vetland Hy Primary India	drology Indicators		d; check all that apply				<u>Seco</u> r	ndary Indicators (2 or more required)
YDROLO Vetland Hy Primary India Surface	drology Indicators cators (minimum of o Water (A1)		Water-Stair	ned Leave		kcept	<u>Seco</u> r	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2,
YDROLO Vetland Hy Primary India Surface High Wa	drology Indicators cators (minimum of o Water (A1) ater Table (A2)		Water-Stair MLRA 1	ned Leave , 2, 4A, a		kcept	<u>Seco</u> r	ndary Indicators (2 or more required)
YDROLO Vetland Hy Irimary India Surface High Wa Saturatio	drology Indicators cators (minimum of o Water (A1) ater Table (A2) on (A3)		Water-Stain MLRA 1 Salt Crust (ned Leave , 2, 4A, a B11)	and 4B)		<u>Seco</u> r W	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Irainage Patterns (B10)
YDROLO Vetland Hy Irimary India Surface High Wa Saturatio	drology Indicators cators (minimum of o Water (A1) ater Table (A2)		Water-Stair MLRA 1	ned Leave , 2, 4A, a B11)	and 4B)	ccept २८१	<u>Seco</u> r W	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
YDROLO Vetland Hy Irimary Indid Surface High Wa Saturatid Water M	drology Indicators cators (minimum of o Water (A1) ater Table (A2) on (A3)		Water-Stain MLRA 1 Salt Crust (ned Leave , 2, 4A, a B11) ertebrate:	and 4B) s (B13)		<u>Seco</u> r W D	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Irainage Patterns (B10)
YDROLO Vetland Hy Irimary India Surface High Wa Saturatia Saturatia Saturatia Saturatia Saturatia Saturatia	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1)		Water-Stain MLRA 1 Salt Crust (Aquatic Inv	ned Leave , 2, 4A, a B11) ertebrate: Sulfide Oc	and 4B) s (B13) dor (C1)	205	<u>Seco</u> r W D D S	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) brainage Patterns (B10) try-Season Water Table (C2)
YDROLO Vetland Hy trimary India Surface High Wa Saturatia Water M Sedimer Drift Deg	drology Indicators: cators (minimum of c Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2)		Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen 5	ned Leave , 2, 4A, a B11) ertebrate: Sulfide Oc hizospher	and 4B) s (B13) dor (C1) res along I	Living Root	<u>Seco</u> r W D D S s (C3) G	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) iaturation Visible on Aerial Imagery (C9
YDROLO Vetland Hy Primary India Sufface High Wa Saturation Saturation Sedime Drift Dep Algal Ma	drology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3)		Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen S	ned Leave , 2, 4A, a B11) ertebrate Sulfide Oc hizospher f Reduce	and 4B) s (B13) dor (C1) res along I ed Iron (C4	Living Root	<u>Secor</u> W D D S s (C3) G S	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Irrainage Patterns (B10) Iry-Season Water Table (C2) Auturation Visible on Aeriai Imagery (C9 Geomorphic Position (D2) ihallow Aquitard (D3)
YDROLO Vetland Hy Irimary India Surface High Wa Saturatie Sedime Sedime Drift Dep Algal Ma Iron Dep	drology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		Water-Stair MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence o	ned Leave , 2 , 4A , a B11) ertebrate Sulfide Oc hizospher f Reduce (Reduction	and 4B) s (B13) dor (C1) res along I ad Iron (C4 on in Tilled	Living Root	<u>Secor</u> W D D S (C3) G S S	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Irrainage Patterns (B10) Irry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 Geomorphic Position (D2)
YDROLO Vetland Hy Primary India Surface High Wa Saturatie Saturatie Saturatie Satimer Sedimer Drift Dep Drift Dep Algal Ma Iron Dep Surface	drology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	one require	Water-Stair MLRA 1 Salt Crust Aquatic Inv Hydrogen S Oxidized R ∑ Presence o Recent Iror Stunted or	ned Leave , 2 , 4A , a B11) ertebrates Sulfide Oc hizospher f Reduce (Reduction Stressed	and 4B) s (B13) dor (C1) res along I ed Iron (C4 on in Tilled Plants (D1	Living Root	<u>Secor</u> W D D S S s (C3) S S F, R	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) brainage Patterns (B10) hry-Season Water Table (C2) aturation Visible on Aeriai Imagery (C9 seomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5)
YDROLO Vetland Hy Primary India Surface High Wa Saturatii Water M Sedimer Drift Dep Drift Dep Algal Ma Iron Dep Surface Inundatii	drology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)	magery (B	Water-Stair MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Stunted or 3 7) Other (Expl	ned Leave , 2 , 4A , a B11) ertebrates Sulfide Oc hizospher f Reduce (Reduction Stressed	and 4B) s (B13) dor (C1) res along I ed Iron (C4 on in Tilled Plants (D1	Living Root	<u>Secor</u> W D D S S s (C3) S S F, R	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) brainage Patterns (B10) bry-Season Water Table (C2) laturation Visible on Aerial Imagery (C9 seomorphic Position (D2) ihallow Aquitard (D3) AC-Neutral Test (D5) laised Ant Mounds (D6) (LRR A)
YDROLO Vetland Hy Primary India Surface High Wa Saturatii Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundatii Sparsely	drology Indicators: cators (minimum of 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 y Vegetated Concav	magery (B	Water-Stair MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence or Recent Iror Stunted or 1 7) Other (Expl	ned Leave , 2 , 4A , a B11) ertebrates Sulfide Oc hizospher f Reduce (Reduction Stressed	and 4B) s (B13) dor (C1) res along I ed Iron (C4 on in Tilled Plants (D1	Living Root	<u>Secor</u> W D D S S s (C3) S S F, R	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) brainage Patterns (B10) bry-Season Water Table (C2) laturation Visible on Aerial Imagery (C9 seomorphic Position (D2) ihallow Aquitard (D3) AC-Neutral Test (D5) laised Ant Mounds (D6) (LRR A)
YDROLO Vetland Hy Primary India Surface High Wa Saturatii Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatii Sparsely ield Obser	drology Indicators: cators (minimum of 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 y Vegetated Concav vations:	magery (B e Surface (Water-Stair MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Stunted or 7) Other (Expl B8)	ned Leave , 2 , 4A , a B11) ertebrate: Sulfide Oc hizospher f Reduce (Reduction Stressed ain in Re	and 4B) s (B13) dor (C1) res along I ed Iron (C4 on in Tilled Plants (D1	Living Root	<u>Secor</u> W D D S S s (C3) S S F, R	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) brainage Patterns (B10) bry-Season Water Table (C2) laturation Visible on Aerial Imagery (C9 seomorphic Position (D2) ihallow Aquitard (D3) AC-Neutral Test (D5) laised Ant Mounds (D6) (LRR A)
YDROLO Vetland Hy Primary India Surface High Wa Saturati Saturati Sedimer Drift Dep Algal Ma Iron Dep Surface Sparsely ield Obser Surface Wats	drology Indicators: cators (minimum of 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 y Vegetated Concav vations: er Present?	magery (B e Surface (Water-Stain MLRA 1 	ertebrate: B11) ertebrate: Sulfide Oc hizospher f Reducetic Stressed ain in Re	and 4B) s (B13) dor (C1) res along I ed Iron (C4 on in Tilled Plants (D1	Living Root	<u>Secor</u> W D D S S s (C3) S S F, R	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) brainage Patterns (B10) bry-Season Water Table (C2) laturation Visible on Aerial Imagery (C9 seomorphic Position (D2) ihallow Aquitard (D3) AC-Neutral Test (D5) laised Ant Mounds (D6) (LRR A)
YDROLO Yetland Hy Primary Indie Surface High Wa Saturati Water M Sedimer Drift Deg Algal Ma Iron Deg Iron Deg Iron Deg Iron Deg Surface Surface Sparsely rield Obser Surface Wat Vater Table	drology Indicators: cators (minimum of 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 y Vegetated Concav vations: er Present? Y	magery (B a Surface (es es	Water-Stain MLRA Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Stunted or i T) Other (Expl B8) No Depth (inc Depth (inc	hed Leave , 2, 4A, a B11) ertebrate: Sulfide Oc hizospher f Reduce (Reduction Stressed ain in Re hes):	and 4B) s (B13) dor (C1) res along I ed Iron (C4 on in Tilled Plants (D1	Living Root) Colls (C6))) (LRR A)	Secon W D D D S S S S F, R F	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) bry-Season Water Table (C2) iaturation Visible on Aerial Imagery (C9 ieomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) iaised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
YDROLO Vetland Hy Primary India Surface High Wa Saturati Water M Sedimer Drift Deg Algal Ma Iron Deg Surface Inundati Sparsely isurface Wat Vater Table Saturation Pi	drology Indicators: cators (minimum of 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 y Vegetated Concav vations: er Present? Y Present? Y	magery (B a Surface (es es	Water-Stain MLRA 1 	hed Leave , 2, 4A, a B11) ertebrate: Sulfide Oc hizospher f Reduce (Reduction Stressed ain in Re hes):	and 4B) s (B13) dor (C1) res along I ed Iron (C4 on in Tilled Plants (D1	Living Root) Colls (C6))) (LRR A)	Secon W D D D S S S S F, R F	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Irrainage Patterns (B10) Irry-Season Water Table (C2) Iaturation Visible on Aerial Imagery (C9 Jeomorphic Position (D2) Inallow Aquitard (D3) AC-Neutral Test (D5) Iaised Ant Mounds (D6) (LRR A)
YDROLO Vetland Hy Primary India Surface High Wa Saturatia Saturatia Sedimer Drift Dep Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Tield Obser Surface Watt Vater Table Saturation Pin noludes cag	drology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) boosits (B3) at or Crust (B4) boosits (B5) Soil Cracks (B6) on Visible on Aerial y Vegetated Concav vations: er Present? Y Present? Y present? Y pilary frige)	magery (B a Surface (es es es	Water-Stain MLRA Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Stunted or i T) Other (Expl B8) No Depth (inc Depth (inc	hed Leave , 2 , 4A , a B11) ertebrate: Sulfide Oc hizospher f Reduce (Reducti Stressed ain in Re hes): hes):	and 4B) s (B13) dor (C1) res along I d Iron (C4 on in Tillec Plants (D ⁻ marks)	Wetla	<u>Secor</u> W D D S S S S F F F	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) bry-Season Water Table (C2) iaturation Visible on Aerial Imagery (C9 ieomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) iaised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Primary India Surface High Wa Saturatio Saturatio Saturatio Water M Sedimer Drift Deg Algal Ma Iron Deg Surface Inundati Sparsely Field Obser Surface Wate Vater Table Saturation Princicules cag Describe Rec	drology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) boosits (B3) at or Crust (B4) boosits (B5) Soil Cracks (B6) on Visible on Aerial y Vegetated Concav vations: er Present? Y Present? Y present? Y pilary frige)	magery (B a Surface (es es es	Water-Stair MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Stunted or 1 7) Other (Expl B8) No Depth (inc No Depth (inc	hed Leave , 2 , 4A , a B11) ertebrate: Sulfide Oc hizospher f Reduce (Reducti Stressed ain in Re hes): hes):	and 4B) s (B13) dor (C1) res along I d Iron (C4 on in Tillec Plants (D ⁻ marks)	Wetla	<u>Secor</u> W D D S S S S F F F	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) bry-Season Water Table (C2) iaturation Visible on Aerial Imagery (C9 ieomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) iaised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
YDROLO Netland Hy Primary India Primary India Surface High Wa Saturation Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Tield Obser Surface Watt Vater Table Saturation Princiludes cag	drology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) boosits (B3) at or Crust (B4) boosits (B5) Soil Cracks (B6) on Visible on Aerial y Vegetated Concav vations: er Present? Y Present? Y present? Y pilary frige)	magery (B a Surface (es es es	Water-Stair MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Stunted or 1 7) Other (Expl B8) No Depth (inc No Depth (inc	hed Leave , 2 , 4A , a B11) ertebrate: Sulfide Oc hizospher f Reduce (Reducti Stressed ain in Re hes): hes):	and 4B) s (B13) dor (C1) res along I d Iron (C4 on in Tillec Plants (D ⁻ marks)	Wetla	<u>Secor</u> W D D S S S S F F F	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) bry-Season Water Table (C2) iaturation Visible on Aerial Imagery (C9 ieomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) iaised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
YDROLO Vetland Hy Primary India Surfacea High Wa Saturatia Water M Sedimer Drift Der Algal Ma Iron Der Surface Surface Vate Vater Table Saturation Princibudes case Saturation	drology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) boosits (B3) at or Crust (B4) boosits (B5) Soil Cracks (B6) on Visible on Aerial y Vegetated Concav vations: er Present? Y Present? Y present? Y pilary frige)	magery (B a Surface (es es es	Water-Stair MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Stunted or 1 7) Other (Expl B8) No Depth (inc No Depth (inc	hed Leave , 2 , 4A , a B11) ertebrate: Sulfide Oc hizospher f Reduce (Reducti Stressed ain in Re hes): hes):	and 4B) s (B13) dor (C1) res along I d Iron (C4 on in Tillec Plants (D' marks)	Wetla	<u>Secor</u> W D D S S S S F F F	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) bry-Season Water Table (C2) iaturation Visible on Aerial Imagery (C9 ieomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) iaised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
YDROLO Vetland Hy rimary India Surface High Wa Saturatia Water M Saturatia Water M Saturatia Magnetic Iron Dep Surface Surface Inundatia Sparsely ield Obser urface Wate vater Table iaturation Pin cicludes cage iescribe Rei	drology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) boosits (B3) at or Crust (B4) boosits (B5) Soil Cracks (B6) on Visible on Aerial y Vegetated Concav vations: er Present? Y Present? Y present? Y pilary frige)	magery (B a Surface (es es es	Water-Stair MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Stunted or 1 7) Other (Expl B8) No Depth (inc No Depth (inc	hed Leave , 2 , 4A , a B11) ertebrate: Sulfide Oc hizospher f Reduce (Reducti Stressed ain in Re hes): hes):	and 4B) s (B13) dor (C1) res along I d Iron (C4 on in Tillec Plants (D' marks)	Wetla	<u>Secor</u> W D D S S S S F F F	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) bry-Season Water Table (C2) iaturation Visible on Aerial Imagery (C9 ieomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) iaised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
/DROLO /etland Hy rimary India Surface High Wa Saturatia Water M Sedimer Net Met Iron Der Surface Iron Der Surface Surface Surface Inundatia Sparsely ield Obser urface Wate /ater Table aturation Pin ciudes cag escribe Reference	drology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) boosits (B3) at or Crust (B4) boosits (B5) Soil Cracks (B6) on Visible on Aerial y Vegetated Concav vations: er Present? Y Present? Y present? Y pilary frige)	magery (B a Surface (es es es	Water-Stair MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Stunted or 1 7) Other (Expl B8) No Depth (inc No Depth (inc	hed Leave , 2 , 4A , a B11) ertebrate: Sulfide Oc hizospher f Reduce (Reducti Stressed ain in Re hes): hes):	and 4B) s (B13) dor (C1) res along I d Iron (C4 on in Tillec Plants (D' marks)	Wetla	<u>Secor</u> W D D S S S S F F F	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) bry-Season Water Table (C2) iaturation Visible on Aerial Imagery (C9 ieomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) iaised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)

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

Project/Site:	City/County:		Sampling Date: 7/14/23	
Applicant/Owner:			Sampling Point:	
Investigator(s):	Section, Township, Range: _		in the second se	
Landform (hillslope, terrace, etc.):	_ Local relief (concave, convex	, none):	Slope (%):	
Subregion (LRR): Lat:	Long	:	Datum:	
Soil Map Unit Name:		NWI classifica	ation:	
Are climatic / hydrologic conditions on the site typical for this time of ye		(If no, explain in Re		
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Norma	I Circumstances" pr	resent? Yes <u>×</u> No	_
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If needed,	explain any answer	s in Remarks.)	

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

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

VEGETATION – Use scientific names of plants.

I

	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				
		= Total Co		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:)		- Total Oo		
1				Prevalence Index worksheet:
2				Total % Cover of:Multiply by:
3				OBL species x 1 =
				FACW species $95 \times 2 = 190$
4				FAC species $10 \times 3 = 30$
5				FACU species $S_{x4} = 20$
Herb Stratum (Plot size:		= Total Co	ver	UPL species x 5 =
1. Satix Asideois	90	X	GACW	Column Totals: (A) (A) (B)
2 Holcus Landra	5		CAC	
3 tonoodudren d.	S		TAC	Prevalence Index = B/A =
4 Kinder working	~		ancu	Hydrophytic Vegetation Indicators:
- Daram Leba	5		ALCW	1 - Rapid Test for Hydrophytic Vegetation
			1.411-1.4	2 - Dominance Test is >50%
6				∑_ 3 - Prevalence Index is ≤3.0 ¹
7				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8				5 - Wetland Non-Vascular Plants ¹
9				Problematic Hydrophytic Vegetation ¹ (Explain)
10				¹ Indicators of hydric soil and wetland hydrology must
11				be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)		= Total Co	ver	
1				
				Hydrophytic Vegetation
2				Present? Yes <u>></u> No
% Bare Ground in Herb Stratum		_= Total Co	ver	
Remarks:				I

US Army Corps of Engineers

Depth Matrix Redox Features (inches) Color (moist) % Type¹ Loc² Q-12 Q.S.YRS/3 100 SYRG/8 2 C M	
Q-I2 Q.SYR5/3 100 SYR6/8 2 C M	d Grains. ² Location: PL=Pore Lining, M=Matrix.
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand tydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)	
lydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Sandy Redox (S5) Histic Epipedon (A2) Stripped Matrix (S6)	
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Sandy Redox (S5) Histic Epipedon (A2) Stripped Matrix (S6)	
lydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
lydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
Iydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
Iydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
Iydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
Iydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	
Histosol (A1) Sandy Redox (S5) Histic Epipedon (A2) Stripped Matrix (S6)	Indicators for Problematic Hydric Soils ³ :
Histic Epipedon (A2) Stripped Matrix (S6)	
	2 cm Muck (A10)
Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA	Red Parent Material (TF2)
_ Hydrogen Sulfide (A4) V Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Depleted Matrix (F3)	,
Thick Dark Surface (A12) Redox Dark Surface (F6)	³ 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:	Hydric Soli Present? Fes No
Vetland 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) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2) MLRA 1, 2, 4A, and 4B)	4A, and 4B)
	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 R	Roots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)	Shallow Aquitard (D3)
_ Iron Deposits (B5) Recent Iron Reduction in Tilled Soils ((C6) FAC-Neutral Test (D5)
_ Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR	R A) Raised Ant Mounds (D6) (LRR A)
_ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)	_
ield Observations:	
surface Water Present? Yes No X Depth (inches):	
	\checkmark
aturation Present? Yes X No Depth (inches): 12 We	/etland Hydrology Present? Yes No
	as) if available:
	io), il avallabio.
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections	
Includes capillary fringe)	
lescribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections	
escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections	
escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections	

36

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

Project/Site: BWW&	City/County: Sonana		Sampling Date: 7/14)23
Applicant/Owner:		State:	Sampling Point:
Investigator(s):	Section, Township, Range:		
Landform (hillslope, terrace, etc.):	Local relief (concave, convex	, none):	Slope (%):
Subregion (LRR): Lat:	Long	:	Datum:
Soil Map Unit Name:		NWI classific	ation:
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes <u>></u> No	(If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology significantly	/ disturbed? Are "Norma	I Circumstances" p	resent? Yes No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answer	rs in Remarks.)

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

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

VEGETATION – Use scientific names of plants.

•	Absolute	Dominan	t Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1)	% Cover			Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant Species Across All Strata: (B)
4		= Total C		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
1,				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species 51 x 3 = 153
5				FACU species x 4 = 80
		= Total C	over	UPL species 25 x 5 = 125
Herb Stratum (Plot size:) 1. Lathurm (At Briting	10	X	NOL	Column Totals: <u>76</u> (A) <u>358</u> (B)
2 Dico and in livesibolium	20	X	CAC	
	27	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	CAC	Prevalence Index = $B/A = 3.2$
3. Holans Lonatins	10	n	Acu	Hydrophytic Vegetation Indicators:
The second s	- 10		Chan	1 - Rapid Test for Hydrophytic Vegetation
5. Brile mano maxima sachtlis			3 (43)	2 - Dominance Test is >50%
6. Driza Minor.			EAC	3 - Prevalence Index is ≤3.0 ¹
7. Grossing echinistria 8. Honeysudde (Lonien hispidala)	5		GARCH	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants ¹
10				Problematic Hydrophytic Vegetation ¹ (Explain)
11				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)		_= Total C	over	
1				Hydrophytic Vegetation
2				Present? Yes No X
% Bare Ground in Herb Stratum		_= Total C	over	
Remarks:				

US Army Corps of Engineers

	Matrix		th needed to document the indicator o Redox Features	i comminue a	
Depth (inches)	Color (moist)	%	<u>Color (moist)</u> % Type ¹	Loc ² Te	xture Remarks
0-16	DYRU1/3	100			Remarks
	to: vo				A CONTRACTOR
				·	 A. S. S. S. S. S. S. Markellin, Phys. Rev. Lett. 10, 1000 (1996).
					and the second
¹ Type: C=C	oncentration D=D	anletion RM-	Reduced Matrix, CS=Covered or Coated	0	2
Hydric Soil	Indicators: (Appl	icable to all	LRRs, unless otherwise noted.)		² Location: PL=Pore Lining, M=Matrix.
Histosol					ndicators for Problematic Hydric Soils ³ :
	pipedon (A2)		Sandy Redox (S5) Stripped Matrix (S6)	<u>.</u>	2 cm Muck (A10)
Black H			Stripped Matrix (S6) Loamy Mucky Mineral (F1) (except N	-	Red Parent Material (TF2)
	en Sulfide (A4)		Loamy Mucky Mineral (F1) (except n Loamy Gleyed Matrix (F2)	LKA 1) _	Very Shallow Dark Surface (TF12)
	d Below Dark Surfa		Depleted Matrix (F3)	-	Other (Explain in Remarks)
	ark Surface (A12)		Redox Dark Surface (F6)	3	Indicators of hydrophytic vegetation and
	Aucky Mineral (S1)		Depleted Dark Surface (F7)		wetland hydrology must be present,
	Bleyed Matrix (S4)		Redox Depressions (F8)		unless disturbed or problematic.
	Layer (if present):				aness distarbed of problematic.
Type:					
Depth (in	ches):			Lind	
Remarks:				пуц	ric Soil Present? Yes No
	1. 1. 1611. 2. 1986				
Wetland Hyd	drology Indicators				
Wetland Hyd Primary India	drology Indicators cators (minimum of		; check all that apply)		Secondary Indicators (2 or more required)
Wetland Hye Primary India Surface	drology Indicators cators (minimum of Water (A1)		<u>; check all that apply)</u> Water-Stained Leaves (B9) (exc	ept	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Indic Surface High Wa	drology Indicators cators (minimum of Water (A1) tter Table (A2)			eept	
Wetland Hy Primary Indic Surface High Wa Saturatic	drology Indicators cators (minimum of Water (A1) tter Table (A2) on (A3)		Water-Stained Leaves (B9) (exc	ept	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hyd Primary Indic Surface High Wa Saturatic	drology Indicators cators (minimum of Water (A1) tter Table (A2)		Water-Stained Leaves (B9) (exc MLRA 1, 2, 4A, and 4B)	ept	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hy Primary Indio Surface High Wa Saturatio Water M	drology Indicators cators (minimum of Water (A1) tter Table (A2) on (A3)		Water-Stained Leaves (B9) (exc 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 Hyd Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep	drology Indicators actors (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) tt Deposits (B2) posits (B3)		Water-Stained Leaves (B9) (exc MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv		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 Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma	drology Indicators aators (minimum of Water (A1) titer Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) tit or Crust (B4)		Water-Stained Leaves (B9) (exc MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Lix Presence of Reduced Iron (C4)	ving Roots (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)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep	drology Indicators eators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) tt Deposits (B2) posits (B3) tt or Crust (B4) osits (B5)		Water-Stained Leaves (B9) (exc MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv	ving Roots (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)
Wetland Hyu Primary Indio Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	drology Indicators eators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) at Deposits (B2) toosits (B3) tt or Crust (B4) osits (B5) Soil Cracks (B6)	one required	Water-Stained Leaves (B9) (exc MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Lit Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Stunted or Stressed Plants (D1)	ving Roots (C3) 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) Geomorphic Position (D2) Shallow Aquitard (D3)
Wetland Hyu Primary Indio Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	drology Indicators eators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) tt Deposits (B2) posits (B3) tt or Crust (B4) osits (B5)	one required	Water-Stained Leaves (B9) (exc MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Lit Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Stunted or Stressed Plants (D1)	ving Roots (C3) 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) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	drology Indicators aators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) tt Deposits (B2) nosits (B3) tt or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial Vegetated Concar	one required	Water-Stained Leaves (B9) (exc MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Lit Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Stunted or Stressed Plants (D1) Other (Explain in Remarks)	ving Roots (C3) 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) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	drology Indicators aators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) tt Deposits (B2) nosits (B3) tt or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial Vegetated Concar	one required	Water-Stained Leaves (B9) (exc MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Lit Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Stunted or Stressed Plants (D1) Other (Explain in Remarks)	ving Roots (C3) 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) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	drology Indicators actors (minimum of Water (A1) ther Table (A2) on (A3) arks (B1) th Deposits (B2) orosits (B3) th or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aerial Vegetated Concar Vations:	one required	Water-Stained Leaves (B9) (exc MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Lit Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Stunted or Stressed Plants (D1) Other (Explain in Remarks)	ving Roots (C3) Soils (C6) (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) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Surface Wate	drology Indicators actors (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) tt Deposits (B2) nosits (B3) tt or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial Vegetated Concar vations: ar Present?	one required Imagery (B7) ve Surface (B Yes N	Water-Stained Leaves (B9) (exc MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Lik Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Stunted or Stressed Plants (D1) Other (Explain in Remarks) 8)	ving Roots (C3) Soils (C6) (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) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Observ Surface Water	drology Indicators actors (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) tt Deposits (B2) nosits (B3) tt or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aerial Vegetated Concar vations: ar Present?	Imagery (B7) ve Surface (B Yes N Yes N	Water-Stained Leaves (B9) (exc MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Lit Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Stunted or Stressed Plants (D1) Other (Explain in Remarks) 8) o Depth (inches): Depth (inches):	ving Roots (C3) Soils (C6) (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) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Deg Algal Ma Iron Dep Surface Inundatio Sparsely Sield Obsen Surface Wate Nater Table Saturation Pr	drology Indicators actors (minimum of Water (A1) ther Table (A2) on (A3) arks (B1) th Deposits (B2) orosits (B3) th or Crust (B4) orosits (B5) Soil Cracks (B6) on Visible on Aerial Vegetated Concar vations: ar Present? Present? esent?	Imagery (B7) ve Surface (B Yes N Yes N Yes N Yes N	Water-Stained Leaves (B9) (exc MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Lit Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Stunted or Stressed Plants (D1) Other (Explain in Remarks) 8) Depth (inches):	ving Roots (C3) Soils (C6) (LRR A) Wetland Hyd	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) drology Present? Yes No
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Deg Algal Ma Iron Dep Surface Inundatio Sparsely Sield Obsen Surface Wate Nater Table Saturation Pr	drology Indicators actors (minimum of Water (A1) ther Table (A2) on (A3) arks (B1) th Deposits (B2) orosits (B3) th or Crust (B4) orosits (B5) Soil Cracks (B6) on Visible on Aerial Vegetated Concar vations: ar Present? Present? esent?	Imagery (B7) ve Surface (B Yes N Yes N Yes N Yes N	Water-Stained Leaves (B9) (exc MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Lit Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Stunted or Stressed Plants (D1) Other (Explain in Remarks) 8) o Depth (inches): Depth (inches):	ving Roots (C3) Soils (C6) (LRR A) Wetland Hyd	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) drology Present? Yes No
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Deg Algal Ma Iron Dep Surface Inundatio Sparsely Field Obsern Surface Wate Nater Table Saturation Pr Includes cap	drology Indicators actors (minimum of Water (A1) ther Table (A2) on (A3) arks (B1) th Deposits (B2) orosits (B3) th or Crust (B4) orosits (B5) Soil Cracks (B6) on Visible on Aerial Vegetated Concar vations: ar Present? Present? esent?	Imagery (B7) ve Surface (B Yes N Yes N Yes N Yes N	Water-Stained Leaves (B9) (exc MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Lit Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Stunted or Stressed Plants (D1) Other (Explain in Remarks) 8) Depth (inches):	ving Roots (C3) Soils (C6) (LRR A) Wetland Hyd	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) drology Present? Yes No
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Deg Algal Ma Iron Dep Surface Inundatio Sparsely Field Obsern Surface Wate Nater Table Saturation Pr Includes cap	drology Indicators actors (minimum of Water (A1) ther Table (A2) on (A3) arks (B1) th Deposits (B2) orosits (B3) th or Crust (B4) orosits (B5) Soil Cracks (B6) on Visible on Aerial Vegetated Concar vations: ar Present? Present? esent?	Imagery (B7) ve Surface (B Yes N Yes N Yes N Yes N	Water-Stained Leaves (B9) (exc MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Lit Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Stunted or Stressed Plants (D1) Other (Explain in Remarks) 8) Depth (inches):	ving Roots (C3) Soils (C6) (LRR A) Wetland Hyd	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) drology Present? Yes No
Primary India Surface High Wa Saturatio Water M Sedimer Drift Deg Algal Ma Iron Dep Surface Inundatio Sparsely Field Obsen Surface Wate Nater Table Saturation Pr	drology Indicators actors (minimum of Water (A1) ther Table (A2) on (A3) arks (B1) th Deposits (B2) orosits (B3) th or Crust (B4) orosits (B5) Soil Cracks (B6) on Visible on Aerial Vegetated Concar vations: ar Present? Present? esent?	Imagery (B7) ve Surface (B Yes N Yes N Yes N Yes N	Water-Stained Leaves (B9) (exc MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Lit Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Stunted or Stressed Plants (D1) Other (Explain in Remarks) 8) Depth (inches):	ving Roots (C3) Soils (C6) (LRR A) Wetland Hyd	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) drology Present? Yes No