

### Wetland and Watercourse Delineation Report For

APN# 211-283-007 McCann, Humboldt Co., CA.

Prepared by:

James Regan Botanist/Wetland Delineator June 30 2019

For:

MAD RIVER PROPERTIES, INC. MCKINLEYVILLE, CA.

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#### 1.0 INTRODUCTION AND PURPOSE

On 1 and 20 June 2019 Mr. James Regan (botanist/ wetland delineator) conducted site review for potential wet areas and watercourses within an approximate 18 acre portion of the subject parcel (APN 211-283-007) located the community of McCann, CA. (see Humboldt County Parcel Map in Appendix A).

The study area consists of an open pasture located on a riverine terrace on the east bank of the Eel River upstream of the confluence with the South Fork Eel River. Upland areas north of the pasture consist of a mixed coniferous forest dominated by redwood and Douglas' fir. Several black oaks (*Quercus kelloggii*) are found on the boundary between the upland coniferous forest and the open pasture. A row of planted Pine trees including Monterrey (*Pinus radiata*) and Bishop pine (*Pinus muricata*) as well as several Douglas' fir (*Pseudotsuga menzeisii*) have been installed as a wind break between the pasture and the gravel bar on the Eel River. A similar installation exists along the parcel boundary on the southeast end of the pasture. Several maples (*Acer macrophyllum*) and cottonwood (*Populus trichocarpa*) trees as well as at least one *Robinia* tree exist within the planted windbreaks and on the edges of the pasture along a small perennial watercourse on the north end of the study area. Several apple trees (*Malus pumila*) can be found scattered on the parcel.

An approximate 5.2 acre area within the pasture has been fenced and excluded from grazing, the remainder of the pasture is grazed by cows and horses. Vegetation in the ungrazed area is generally tall and dominated by common rangeland grasses. Vegetation in the grazed portion is low and clumpy and composed of a mix of range grasses and low herbaceous vegetation.

Large clumps of Himalayan blackberry (*Rubus armeniacus*) can be found scattered throughout the pasture and existing as dense hedges, some have been mown down.

Several native soil ranch roads/Jeep trails cross the pasture (shown on attached plot map). A powerline corridor crosses the study area as well.

A small perennial watercourse exists within the study area, the upslope extent was not surveyed. Several small seasonal watercourses enter the study area from upslope and are intercepted by a man-made ditch that directs the seasonal flows to the perennial watercourse and on to the Eel River, the upslope extent of these waters was not surveyed. These seasonal watercourses likely ran through the pasture in the past. Aerial photography appears to show the construction of the ditch along with several logging skid trails between 2009 and 2010. This likely coincided with a timber harvest entry. Since that time seasonal flows have been excluded from the pasture area.

This assessment serves to provide a wetland determination/delineation conducted to investigate the environmental setting of the subject property for future development needs. This report is the result of surveys conducted on the dates above, reviews of relevant scientific literature, and professional knowledge. Mr. Regan holds a Bachelor's

degree in botany and has worked as a professional botanist in Northern California (Humboldt, Trinity, and Mendocino Counties) for the past 15 years and as a wetland delineator for the past 10 years.

#### 2.0 METHODS

#### 2.1 PROJECT AREA AND PROXIMITY TO KNOWN RESOURCES

An assessment of potential impacts to adjacent watercourses or wetlands within 500 feet of the subject property was conducted by interpretation of aerial photography and resource maps courtesy of Google Earth, the United States Geologic Survey (USGS) 7.5' Myers Flat quadrangle map, Humboldt County Web GIS, and United States Fish and Wildlife Service (USFWS) National Wetland Inventory. The subject parcel is approximately 160-200 feet above mean sea level. The Eel River, a large fish bearing stream is located directly adjacent to the subject parcel to the southwest USFWS wetland maps show a large area of riverine wetland on the gravel bars associated with the Eel River and several palustrine emergent wetlands located downstream of the subject parcel (too far to be shown on USFWS Map). Neither the USFWS wetland map nor the Humboldt County resource map show any previously identified wetlands within the selected study area.

In addition, historic aerial photos were reviewed for indicators of wetlands or watercourses on the subject parcels. With the exception of the apparent timber harvest and construction of the skid roads and ditches the parcel appears to have been in a similar state for at least the past 20 years.

Current USGS topo maps do not show any creeks or wetlands on the subject parcel, however, evidence of current watercourse channels was noted on the subject parcels during the time of this investigation and are included on the attached plot map.

Seasonal and perennial watercourses were identified using the ACOE "Guide to Ordinary High Water Mark (OHWM) Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States" (Mercel, Licvar 2014). All mapped watercourses in the subject area showed at least two of the three primary indicators of OHWM which include a break in slope, a change in sediment profile, or a change in vegetation. Creeks within the parcel are generally characterized by a small change in slope from upland to the seasonally active channel and often show a change in sediment from fines and organics outside the OHWM and loose gravels and small cobble within. Creeks defined as perennial showed more defined bank and channel morphology, more developed riparian vegetation, and were flowing at the time of survey.

#### 2.2 GENERAL INFORMATION

Plots for the wetland delineation were surveyed on 1 and 20 June 2019 by Mr. James Regan. The subject area was assessed using guidelines outlined in the U.S. Army Corps of Engineers (ACOE) Wetland Delineation Manual Technical Report Y-87-1 (referred to as the 1987 manual) and the Draft Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region. The 1987 manual provides technical guidelines for identifying wetlands, distinguishing them from non-wetlands, and provides methods for applying the technical guidelines. Three key provisions of the ACOE wetland definition include:

- i. Inundated or saturated soil conditions resulting from permanent or periodic inundation by ground or surface water.
- ii. A prevalence of vegetation typically adapted for life in saturated soil conditions (hydrophytic vegetation)
- iii. The presence of "normal circumstances"

Explicit in the ACOE definition is the consideration of three environmental parameters: Hydrology, Vegetation, and Soils. Positive wetland indicators of all three parameters are normally present in wetlands. The ACOE methodology requires one positive indicator from each parameter in order to make a positive wetland determination.

Plots were chosen using intuitive measures based on identification of obvious wetland features (i.e. vegetation, hydrology). Plots were placed in the areas most likely to contain wetland features and processes. A total of 8 representative sample plots were established within the subject property (Wetland Plot Map, Appendix A). ACOE Routine Wetland Determination Data Forms were used in the field to record site-specific soil, vegetation, and hydrologic information. A data form was completed for each sample observation point. Copies of these data forms are included as Appendix B.

#### 2.3 VEGETATION

The entire parcel was assessed first to determine the location of distinct plant community types.

Dominant plant species were recorded on ACOE data forms at each plot surveyed during this investigation. Where the plant community consisted of herbaceous species, a 1m<sup>2</sup> plot was used. Where there was woody overstory or woody shrub species a 10 meter diameter circular plot was used (in addition to the 1square meter herbaceous plot).

Dominant species were determined by estimating those having the greatest percentage of cover using the "50/20" rule. The "50/20" rule entails that for each sample point and associated plant community, dominant species are the most abundant species, when ranked in descending order of abundance and cumulatively totaled, that immediately

exceed 50% of the total dominance measure for the stratum, plus any additional species comprising 20% or more of the total dominance measure for each stratum. Absolute cover contribution was estimated for each sample plot, due to layering of species and strata percent cover values may exceed 100%. The ACOE Manual (1987) directs that presence of a single individual of hydrophytic species does not mean that hydrophytic vegetation is present. However, hydrophytic vegetation is considered to be present if 50% of the dominant species have indicator status of OBL, FACW or FAC.

The 2008 Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region includes the addition of a prevalence index for determination if hydrophytic vegetation is present. The prevalence index is a weighted-average wetland indicator status of all plant species in the sampling plot or other sampling unit, where each indicator status category is given a numeric code (OBL = 1, FACW = 2, FAC = 3, FACU = 4, and UPL = 5) and weighting is by abundance (absolute percent cover). It is a more comprehensive analysis of the hydrophytic status of the community than one based on just a few dominant species. It is particularly useful (1) in communities with only one or two dominants, (2) in highly diverse communities where many species may be present at roughly equal coverage, and (3) when strata differ greatly in total plant cover (e.g., total herb cover is 80 percent but sapling/shrub cover is only 10 percent). The prevalence index is used in this supplement to determine whether hydrophytic vegetation is present on sites where indicators of hydric soil and wetland hydrology are present but the vegetation initially fails the dominance test.

The following procedure is used to calculate a plot-based prevalence index. The method was described by Wentworth et al. (1988) and modified by Wakeley and Lichvar (1997). It uses the same field data (i.e., percent cover estimates for each plant species) that were used to select dominant species by the 50/20 rule, with the added constraint that at least 80 percent of the total vegetation cover on the plot must be of species that have been correctly identified and have an assigned indicator status (including UPL). For any species that occurs in more than one stratum, cover estimates are summed across strata. Steps for determining the prevalence index are as follows:

- 1. Identify and estimate the absolute percent cover of each species in each stratum of the community. Sum the cover estimates for any species that is present in more than one stratum.
- 2. Organize all species (across all strata) into groups according to their wetland indicator status (i.e., OBL, FACW, FAC, FACU, or UPL) and sum their cover values within groups. Do not include species that were not identified.
- 3. Calculate the prevalence index using the following formula:

$$PI = \frac{Aobl + 2Afacw + 3Afac + 4Afacu + 5Aupl}{Aobl + Afacw + Afac + Afacu + Aupl}$$

where:

PI = Prevalence index

AOBL = Summed percent cover values of obligate (OBL) plant species;

AFACW = Summed percent cover values of facultative wetland (FACW) plant species;

AFAC = Summed percent cover values of facultative (FAC) plant species;

AFACU = Summed percent cover values of facultative upland (FACU) plant species;

AUPL = Summed percent cover values of upland (UPL) plant species.

Indicator status for each species was obtained from the WESTERN MOUNTAINS, VALLEYS, AND COAST 2016 Regional Wetland Plant List developed with the ACOE.

#### 2.4 SOILS

Current USDA soils maps were obtained from the USDA Web Soil Survey and are included in Attachment A. The majority of the project area falls into a soil map unit labeled as: Shively Flat and Parkland-Garberville Complex. Soil unit descriptions for these two soils as well as Sproulish-Canoecreek-Redwohly, the dominant soil occurring in the uplands above the study area, are included in the attached soil report.

A total of 8 soil pits were dug during this examination. Pits were dug to a depth of at least 18 inches. Soil profiles were examined and profile descriptions were recorded on ACOE data sheets for soil characteristics throughout the soil profile (Appendix B). The Munsell color chart (Macbeth, 2000) was used to determine soil color, value, and chroma. Soil profile textures were determined using a standard soil texture by feel technique and ribbon test. All soil profiles were examined for secondary hydrology indicators including oxidized root channels and redoxomorphic concentrations.

#### 2.5 HYDROLOGY

Each observation point was examined for indicators of wetland hydrology, and observations were recorded on ACOE data forms (Appendix B).

Indicators of wetland hydrology include drainage patterns, drift lines, sediment deposits, watermarks, and visual observations of saturated soils and/or inundation. Visual observations of soil saturation were made in each pit to determine the level at which water (if any) stands in each pit after several minutes had elapsed. Drainage patterns were determined by observing any signs of surface flow into or through the subject parcel. Aerial imagery was used courtesy of Google Earth, 2019 (photo is dated 21 April 2019).

#### 3.0 RESULTS

#### 3.1 VEGETATION

Vegetation within the study area is composed of a mix of native and non-native grasses and herbaceous forbs as well as large patches of Himalayan blackberry. Plot locations were chosen to represent both vegetation patterns as well as topographic variation.

Plots 1, 2, 3, and 6 are located in the lowest portion of the pasture and all four were found to contain vegetation that was indicative of wetland settings. This area was a concave terrace dominated by several buttercup species (*Ranunculus*) with a strong component of the obligate plant *Mentha pulegium* (pennyroyal), and barley (*Hordeum marianum*). Plots 5 and 8 also had vegetation mixes that met the dominance indicator but at Plot 8 that mix failed the prevalence test indicating a mix of wetland and upland species and a tenuous indication of long term wetland setting. Plots 4 and 7 had vegetation communities that did not meet the standard for hydric vegetation and are located outside of the mapped wetland boundary. Plots 1, 2, 3, and 6 had the strongest indicators of wetland vegetation and were located in the lowest, most compact areas along the Jeep trail, powerline corridor, and cow paths leading down to the river bar.

#### 3.2 SOILS

Results of samples taken from the test pits were recorded on the data sheets attached to the end of this report. Soils from sample pits were generally loam or clay loam with plots closer to the Eel River with a high sand content.

Soils pits were dug to at least 18 inches. Soils in all plots were examined and tested for texture and color to determine if wetland indicators exist.

Plots 1, 2, 3, and 4 met the criteria for hydric soils by the F3 indicator for a Depleted Matrix while plot 6 met the criteria by the S5 indicator for Sandy Redox. Plots 1, 2, 3, and 6 fall within the wetland area delineated in this report, Plot 4 does not. Plots 7 and 8 both showed some indication that anaerobic processes do occur; they do not apparently endure long enough to meet hydric soil indicator thresholds.

#### 3.3 HYDROLOGY

The delineations were performed in June 2019, in a year with slightly above average rainfall. Any primary indicators or secondary indicators that were present at any of the test pits or on the surface of any part of the subject area were recorded on the delineation forms. Field observations of hydrology include surface water, saturated soils, or shallow water table at the time of the samples. All plots except Plot 8 contained positive indicators of wetland hydrology in the form of oxidized root pores along living roots. These features were present in the first 4 to 6 inches of the soil profile. All of these plots are located in areas with compact surfaces due to vehicle or foot traffic and likely past mowing and land-clearing activities. This appears to be an indication that rainwater both falls directly on the site as well as migrates from upslope areas. A large portion of the surface flow from upland areas (especially in seasonal channels) is likely caught in the ditch and transported around the site. No standing surface water, shallow water table, or saturated soil conditions were observed within the study area during either site visit but

topography and secondary indicators of wetland hydrology indicate that lower portions of the pasture may hold water for a significant portion of the year.

#### 4.0 CONCLUSIONS

Positive wetland indicators of all three parameters are normally present in jurisdictional wetlands. The ACOE methodology requires one positive indicator from each parameter (vegetation, soils, and hydrology). Plots were placed in the areas most likely to be considered wetlands.

The subject parcel contains areas that meet criteria for all three parameters for a jurisdictional wetland.

An approximate 1.70 Palustrine Emergent Wetland is located within the study area. The location of this feature is included on the Wetland Plot Map in Appendix A. Plots 1, 2, 3 and 6 showed positive primary indicators for jurisdictional wetlands in all three categories and serve to represent the wetland area delineated herein. The remainder of the study area, represented by Plots 5, 7, and 8 does contain some positive indicators of a wetland setting but does not meet the standard for a jurisdictional wetland.

It is possible that the study area did have a stronger wetland setting in the past and that the connections to historic inputs have been broken or altered enough during adjacent land use including timber harvest, mowing, grading, and land clearing activities on the subject parcel that the wetland setting is no longer present in some areas.

#### 5.0 TERMS AND CONDITIONS

This report is based on conditions observed and recorded in June 2019. This report has not been reviewed nor has concurrence with the conclusion been obtained. Verification by agencies may be necessary in the future. Land use practices and regulations can change thereby affecting current conditions and delineation results described herein.

This report and accompanying maps and data should be transmitted to the appropriate agents for review and included in any application for permits necessary for completion of any proposed development projects on the subject property.

Significance of wetlands and the necessity for mitigation during development is decided by regional agents of the appropriate federal, state, and local agencies if and when the site is reviewed for permitting purposes.

This report was prepared for exclusive use; consultants are not liable for any actions arising out of the reliance of any third party on the information contained in this report.

Please call with any questions or comments.

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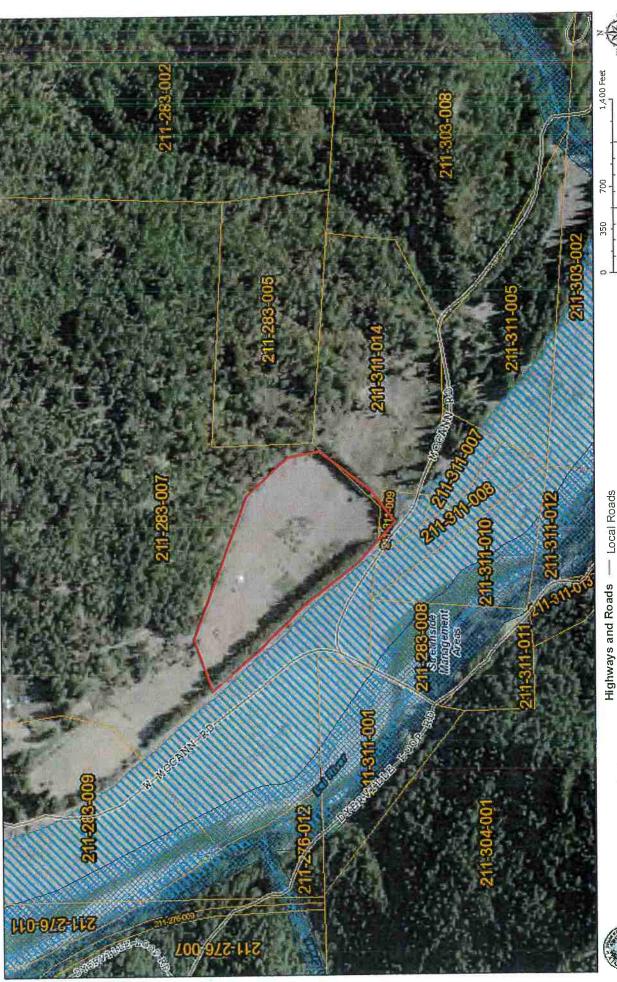
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#### Appendix A

Humboldt County Parcel Map USFWS Wetland Location Map USDA Soils Report Wetland Delineation Plot Map



Principal Arterials Minor Arterials

— Private or Unclassified

- Major River or Stream

Parcels

Major Collectors

Web AppBuilder 2.0 for ArcGIS

Printed: June 30, 2019

Humboldt County Planning and Building Department

McCann\_HumCoMap

Map Disclaimer: While area will have been made to assure the accuracy of this information, While every effect of the seep reflect of the will of a should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

1in = 752 ft 0.2 Miles RF= 1:9,028 0.05

Study Area

Sources: NRCS
Humbdid:County GIS
Furn Garnin, (c) OpenStreetMap contributors, and the GIS user community.
Source: Eari, PotialGlobe, GeoEye, Earthstar Geographics, CNES/Alfbus DS, USDA, USGS, AeroGRD, IGN, and the GIS User Community

- Minor Collectors

Streamside Management Areas



# McCann\_USFWSwetlandsMap R3USA National Wetlands Inventory 0.3 mi 1:11,464 0.075

June 30, 2019

### Wetlands

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

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



## MAP LEGEND

#### Very Stony Spot Stony Spot Spoil Area Wet Spot Other 8 9 1 Soil Map Unit Polygons Area of Interest (AOI) Soil Map Unit Points Soil Map Unit Lines Closed Depression Special Point Features **Gravelly Spot** Borrow Pit **Gravel Pit** Clay Spot Area of Interest (AOI) Blowout Soils

## Special Line Features **Nater Features**









Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot Sandy Spot

## Streams and Canals





Marsh or swamp

Lava Flow

Landfill

Mine or Quarry



# MAP INFORMATION

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

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

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

Please rely on the bar scale on each map sheet for map measurements. Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator distance and area. A projection that preserves area, such as the projection, which preserves direction and shape but distorts Albers equal-area conic projection, should be used if more This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

accurate calculations of distance or area are required.

Soil Survey Area: Humboldt County, South Part, California Survey Area Data: Version 7, Sep 13, 2018 Soil map units are labeled (as space allows) for map scales 1:50,000 or larger. Date(s) aerial images were photographed: Dec 31, 2009—Nov

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

Severely Eroded Spot

Slide or Slip

Sinkhole

Sodic Spot

#### Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
100	Water and Fluvents, 0 to 2 percent slopes	86.3	22.9%
143	Shivelyflat, 0 to 2 percent slopes	38.9	10.3%
151	Parkland-Garberville complex, 2 to 9 percent slopes	29.6	7.8%
179	Eelriver and Cottoneva soils, 0 to 2 percent slopes	16.1	4.3%
513	Redwoodhouse-Yagercreek- Mailridge complex, 30 to 50 percent slopes	13.9	3.7%
514	Redwoodhouse-Yagercreek- Mailridge complex, 50 to 75 percent slopes	21.0	5.6%
571	Sproulish-Canoecreek- Redwohly complex, 30 to 50 percent slopes	129.5	34.4%
572	Canoecreek-Sproulish- Redwohly complex, 50 to 75 percent slopes	41.1	10.9%
573	Sproulish-Carioecreek- Redwohly complex, 15 to 30 percent slopes, warm	0.5	0.1%
Totals for Area of Interest		376.8	100.0%

#### **Humboldt County, South Part, California**

#### 151—Parkland-Garberville complex, 2 to 9 percent slopes

#### **Map Unit Setting**

National map unit symbol: v79t Elevation: 60 to 460 feet

Mean annual precipitation: 49 to 90 inches Mean annual air temperature: 55 to 59 degrees F

Frost-free period: 240 to 280 days

Farmland classification: Prime farmland if irrigated

#### **Map Unit Composition**

Parkland and similar soils: 45 percent Garberville and similar soils: 40 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

#### Description of Parkland

#### Setting

Landform: Alluvial fans, stream terraces

Landform position (two-dimensional): Backslope, footslope

Landform position (three-dimensional): Tread

Down-slope shape: Concave, linear Across-slope shape: Linear, concave

Parent material: Alluvium derived from mixed sedimentary sources

#### Typical profile

Ap - 0 to 5 inches: loam
ABt - 5 to 7 inches: loam
Bt1 - 7 to 18 inches: silt loam
Bt2 - 18 to 29 inches: clay loam
Bt3 - 29 to 43 inches: clay loam
Bt4 - 43 to 61 inches: clay loam
Bt5 - 61 to 79 inches: clay loam

#### Properties and qualities

Slope: 2 to 9 percent

Depth to restrictive feature: More than 80 inches Natural drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: About 20 to 39 inches

Frequency of flooding: None Frequency of ponding: None

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0

to 2.0 mmhos/cm)

Available water storage in profile: High (about 10.8 inches)

#### Interpretive groups

Land capability classification (irrigated): 2e Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C Hydric soil rating: No

#### **Description of Garberville**

#### Setting

Landform: Alluvial fans, stream terraces

Landform position (two-dimensional): Backslope, footslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Alluvium derived from mixed sedimentary sources

#### Typical profile

Ap - 0 to 12 inches: gravelly loam
A - 12 to 19 inches: gravelly loam
Bt1 - 19 to 28 inches: gravelly clay loam
Bt2 - 28 to 39 inches: gravelly clay loam
Bt3 - 39 to 50 inches: gravelly sandy clay loam
BC - 50 to 59 inches: very gravelly sandy loam
C - 59 to 79 inches: very gravelly sandy loam

#### Properties and qualities

Slope: 2 to 9 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.20 to 2.00 in/hr) Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0

to 2.0 mmhos/cm)

Available water storage in profile: High (about 9.1 inches)

#### Interpretive groups

Land capability classification (irrigated): 2e Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C Hydric soil rating: No

#### **Minor Components**

#### Conklin

Percent of map unit: 5 percent Landform: Stream terraces

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Tread

Down-slope shape: Convex, linear Across-slope shape: Linear, convex

Hydric soil rating: No

#### Grannycreek

Percent of map unit: 5 percent

Landform: Stream terraces, alluvial fans

Landform position (two-dimensional): Backslope, footslope,

toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear, concave Across-slope shape: Linear, concave

Hydric soil rating: Yes

#### Frenchman

Percent of map unit: 3 percent Landform: Stream terraces

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear Hydric soil rating: No

#### Gschwend

Percent of map unit: 2 percent

Landform: Stream terraces

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear Hydric soil rating: No

#### **Data Source Information**

Soil Survey Area: Humboldt County, South Part, California

Survey Area Data: Version 7, Sep 13, 2018

#### **Humboldt County, South Part, California**

#### 143—Shivelyflat, 0 to 2 percent slopes

#### Map Unit Setting

National map unit symbol: v6gz

Elevation: 50 to 490 feet

Mean annual precipitation: 40 to 70 inches Mean annual air temperature: 54 to 57 degrees F

Frost-free period: 300 to 350 days

Farmland classification: Prime farmland if irrigated

#### Map Unit Composition

Shivelyflat and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

#### Description of Shivelyflat

#### Setting

Landform: Flood-plain steps

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Linear

Parent material: Alluvium derived from mixed sedimentary sources

#### Typical profile

Ap1 - 0 to 8 inches: silt loam Ap2 - 8 to 17 inches: silt loam Ap3 - 17 to 31 inches: silt loam C1 - 31 to 40 inches: silt loam C2 - 40 to 54 inches: silt loam C3 - 54 to 73 inches: silt loam C4 - 73 to 79 inches: silt loam

#### Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches Natural drainage class: Somewhat poorly drained Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.60 to 2.00 in/hr) Depth to water table: About 10 to 20 inches

Frequency of flooding: Rare Frequency of ponding: Frequent

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0

to 2.0 mmhos/cm)

Available water storage in profile: Very high (about 12.4 inches)

#### Interpretive groups

Land capability classification (irrigated): 2w



Land capability classification (nonirrigated): 2w Hydrologic Soil Group: B/D Hydric soil rating: No

#### **Minor Components**

#### **Eelriver**

Percent of map unit: 5 percent Landform: Flood-plain steps

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Tread

Down-slope shape: Convex Across-slope shape: Linear Hydric soil rating: No

#### Pepperwood

Percent of map unit: 5 percent Landform: Flood-plain steps

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Tread

Down-slope shape: Convex Across-slope shape: Linear Hydric soil rating: No

#### Cottoneva

Percent of map unit: 3 percent Landform: Flood-plain steps

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Tread

Down-slope shape: Convex Across-slope shape: Linear Hydric soil rating: No

#### Weott

Percent of map unit: 2 percent

Landform: Flood-plain steps, backswamps, depressions

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Tread

Down-slope shape: Convex Across-slope shape: Convex Hydric soil rating: Yes

#### **Data Source Information**

Soil Survey Area: Humboldt County, South Part, California

Survey Area Data: Version 7, Sep 13, 2018

#### **Humboldt County, South Part, California**

#### 571—Sproulish-Canoecreek-Redwohly complex, 30 to 50 percent slopes

#### Map Unit Setting

National map unit symbol: 1v5vx Elevation: 100 to 3,280 feet

Mean annual precipitation: 60 to 100 inches Mean annual air temperature: 48 to 57 degrees F

Frost-free period: 240 to 300 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Sproulish and similar soils: 50 percent Canoecreek and similar soils: 20 percent Redwohly and similar soils: 15 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

#### **Description of Sproulish**

#### Setting

Landform: Mountain slopes

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Mountainflank

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Colluvium derived from mudstone and/or colluvium derived from sandstone and/or residuum weathered from mudstone and/or residuum weathered from sandstone

#### Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material Oe - 1 to 2 inches: moderately decomposed plant material

A - 2 to 12 inches: gravelly loam Bt1 - 12 to 22 inches: loam Bt2 - 22 to 35 inches: clay loam

Bt3 - 35 to 47 inches: paragravelly silty clay loam BCt - 47 to 71 inches: very paragravelly clay loam

#### Properties and qualities

Slope: 30 to 50 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.20 to 2.00 in/hr) Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

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

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

#### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 6e Hydrologic Soil Group: C Hydric soil rating: No

#### **Description of Canoecreek**

#### Setting

Landform: Mountain slopes

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Mountainflank, mountaintop

Down-slope shape: Linear Across-slope shape: Convex

Parent material: Colluvium and residuum derived from sandstone

and mudstone

#### Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material

A - 2 to 12 inches: very gravelly loam Bt1 - 12 to 26 inches: very gravelly loam Bt2 - 26 to 43 inches: very gravelly loam Bt3 - 43 to 59 inches: very gravelly loam

BCt - 59 to 79 inches: extremely gravelly sandy loam

#### Properties and qualities

Slope: 30 to 50 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.60 to 2.00 in/hr) Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0

to 2.0 mmhos/cm)

Available water storage in profile: Low (about 5.7 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: B Hydric soil rating: No

#### **Description of Redwohly**

#### Setting

Landform: Mountain slopes

Landform position (two-dimensional): Shoulder, backslope Landform position (three-dimensional): Mountainflank

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Residuum weathered from sandstone and/or

residuum weathered from mudstone

#### Typical profile

A - 0 to 1 inches: loam AB - 1 to 4 inches: silt loam Bt1 - 4 to 16 inches: silt loam

Bt2 - 16 to 28 inches: paragravelly silt loam BC - 28 to 37 inches: extremely paragravelly loam

C - 37 to 63 inches: paragravel

#### Properties and qualities

Slope: 30 to 50 percent

Depth to restrictive feature: 20 to 39 inches to strongly contrasting

textural stratification

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 1.42 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0

to 2.0 mmhos/cm)

Available water storage in profile: Low (about 4.4 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: B Hydric soil rating: No

#### **Minor Components**

#### Redwoodhouse

Percent of map unit: 8 percent Landform: Mountain slopes

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Mountainflank

Down-slope shape: Linear Across-slope shape: Convex

Hydric soil rating: No

#### Briceland

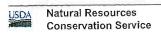
Percent of map unit: 5 percent Landform: Mountain slopes

Landform position (two-dimensional): Backslope

Down-slope shape: Concave Across-slope shape: Linear Hydric soil rating: No

#### Rock outcrop

Percent of map unit: 2 percent



Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Center third of
mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

#### **Data Source Information**

Soil Survey Area: Humboldt County, South Part, California

Survey Area Data: Version 7, Sep 13, 2018



#### Appendix B

**Wetland Data Sheets** 

WETLAND DETERMINATION DATA FORM — Western Mountains, Valleys, and Coast Region Project/Site: McCann AM# 211-283-007 city/County: Humbeldt Co. Applicant/Owner: Investigator(s): JAMES REGAN Section, Township, Range: Landform (hillstope, terrace, etc.): toe stope - terrac Local relief (concave, convex, none): flat- Cancave Stope (%): 0 Lat: 40.3284 Long: -123.8359 Datum: Soil Map Unit Name: Shively flat Y Yakland - GAR Bearing NWI classification: NONE No\_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No Are Vegetation \_\_\_\_, Soil \_\_\_\_, or Hydrology \_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Hydric Soil Present? Is the Sampled Area within a Wetland? Wetland Hydrology Present? Yes Remarks: Site is grazed/moun and has been for at least 20 years, likely longue.
Hydrology has been altered 1/5 sinc 2009/2010- Seasand cracks ditched acoust site. VEGETATION - Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 10m) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species = Total Cover Sapling/Shrub Stratum (Plot size: V) That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: OBL species \_\_\_\_\_ ×1=\_\_\_ FACW species \_\_\_\_\_ x 2= FAC species \_\_\_\_\_ x3 = \_\_\_ FACU species \_\_\_\_\_ = Total Cover Herb Stretum (Plot size: UPL species \_\_\_\_\_ x 5 = \_\_\_\_ Column Totals: (A) (B) Merrine Outeaun 302 OB Prevalence Index = B/A = Hordenm mohown Hydrophytic Vegetation Indicators: Tri- Falina Febens 102 \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation lunes befores 23% X 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.0<sup>†</sup> 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 103 = Total Cover Woody Vine Stratum (Plot size: Hydrophytic Vegetation Present? = Total Cover % Bare Ground in Herb Stratum Remarks: Powerline conder + jesp/ronch rows cross field. low, grazul regetation

Sampling Point: 591

Depth (inches)	Matrix Color (moist)	%	Redo	x Features			n the absence of inc	1=
7)-6	10 ya 4/2	92	Color (moist)	90/	Type <sup>1</sup>	Loc	Texture	Remarks
1-70+		-	10 ye 416	8%	<u>_</u>	PL	Clay-loan	
1-00	104a 4/1	681	10 yr 4/6	73	<u>_C_</u>	M	Clay-loam-sil	4
	1042 5/3	302	******		-	-	N.	
			¥1					
1	o <del></del>							
							Office and the same	
	****							
Type: C≐C	oncentration, D=Dep	oletian, RM=	Reduced Matrix, CS	=Covered	or Coate	d Sand G		PL=Pore Lining, M=Matrix,
_ Histosol	Indicators: (Applic	able to all			d.)		Indicators for	Problematic Hydric Soils3:
	pipedon (A2)		Sandy Redox (8				2 cm Mucl	
	istic (A3)	2	Stripped Matrix			2000 E	Red Paren	t Material (TF2)
	en Sulfide (A4)	,	Loamy Mucky M	uneral (F1)	(except	MLRA 1)		ow Dark Surface (TF12)
	d Below Dark Surfac	e (A11)	X Depleted Matrix	viaurix (F2)		\$	Other (Exp	lain in Remarks)
_ Thick Da	ark Surface (A12)	- 1004	Redox Dark Sur	face /EEI			Strange and the	
_ Sandy N	fucky Mineral (S1)		Depleted Dark S		7		"Indicators of h	ydrophytic vegetation and
	Bleyed Matrix (S4)	á	Redox Depressi	ons /FRI	J		wetland hyd	rology must be present.
	Layer (if present):			ona (FD)	-		uniess distu	rbed or problematic.
Туре:								
Depth (inc							Hydric Soil Prese	nt? Yes X No
marks:							Trydric Soli Frese	nt? Yes No
	irology Indicators: ators (minimum of o							
	Water (A†)	ne required:			37		Secondary in	ndicators (2 or more required)
	ter Table (A2)		Water-Stain			cept		tained Leaves (B9) (MLRA 1, 2
Saturatio				, 2, 4A, an	d 4B)		4A, a	nd 4B)
Water Ma			Salt Çrust (I				Drainage	Patterns (B10)
			Aquatic Inve				Dry-Sea	son Water Table (C2)
Deginen	t Deposits (B2)		Hydrogen S	ulfide Odo	r (C1)		Saturatio	on Visible on Aerial Imagery (CS
	osits (B3)		X Oxidized Ri	nizospheres	s along L	iving Roo	ts (C3) Geomor	ohic Position (D2)
	t or Crust (B4)		Présence of				Shallow	Aquitard (D3)
Iron Depo			Recent Iron				FAC-Net	utral Test (D5)
	Soil Cracks (B6)		Stunted or S			) (LRR A)		ant Mounds (D6) (LRR A)
	n Visible on Aerial In			ain in Rema	arks)			ave Hummocks (D7)
	Vegetated Concave	Surface (B8	3)					(2.1)
ld Observ						T		
rface Wate	r Present? Ye	s No	Depth (inch	nes):		:		
iter Table F	resenty Ye	s No	Depth (inch	nes):				
turation Pre cludes capi	HOLA MINIORI		Depth (inch				nd Hydrology Prese	ent? Yes X No
scribe Reci	orded Data (stream o	jauge, moni	toring well, aerial ph	iolas, previ	lous insp	ections), i	f available:	
marks:								
1900								

WEILAND DETERMINATION	DATA FORM - Western Me	ountains, Valleys, and Coast Region
Project/Site: McCann AN# 211-283-00	07 City/County: Hun	bald Co. Sampling Date: 6/1/9
Applicant/Owner:		State: CA. Sampling Point: 5/2
Investigator(s): JAMES REGAN	Section, Township, I	Painte: Sampling Point: JP &
Landform (hillslope, terrace, etc.): Toe stalk - te	flace Inceltation (concert	e, convex, none): flat - Concove Slope (%): 0-3
Subregion (LRR):	Lat AD 2184	Long: -123. 8359 Datum:
Soil Map Unit Name: Shively flat When	al - Papageonina	Long 100.0331 Datum:
Are climatic / hydrologic conditions on the site typical for	this time of year? Ver X No	NVVI classification; WONE
Are Vegetation, Soil, or Hydrology		
Are Vegetation, Soil, or Hydrology		e "Normal Circumstances" present? Yes No
		needed, explain any answers in Remarks.) i locations, transects, important féatures, etc.
Hydrophytic Vegetation Present? Yes X	No	nocations, transects, important features, etc.
Hydric Soil Present? Yes X Wetland Hydrology Present? Yes X	No Is the Sample within a Wetl	and? Yes X No
Remarks: Site is a Azal Majura and Vis	IS Been Combile	Mar Maria I Kik I
Unit day has been alle	2 4 Cl (03)	to years, meny longer.
HANGED LIES HERE CALES	Leaf 1/2 Jing 7089 201	20 years, likely longer. e-Jeasonal Grades diffehal around ste.
VEGETATION - Use scientific names of pla	ints.	
Trée Stratum (Plot size: 10m)	Absolute Dominant Indicator	
1	% Cover Species? Status	Number of Dominant Species
2		That Are OBL, FACW, or FAC:(A)
3		Total Number of Dominant Species Across All Strata:  (B)
4		
Sapling/Shrub Stratum (Plot size: 10 m	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/8)
1		Prevalence Index worksheet
2		Total % Cover of:Multiply by:
3		OBL species x 1 =
4		FACW species x 2 =
5		FAC species x 3 =
Herb Stratum (Plot size:	= Total Cover	FACU species x 4 =
1. Romales cal/more./Rp.	30 Y Falso	UPL species x 5 =
2. Hardeum marianum	30 Y FAC	
3. Mentha Ouleasum	30 Y 08L	Prevalence Index = B/A=
4. Rumax contamination	65	Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation
5. Totalium abteraneum	< F	2 - Dominance Test is >50%
6		3-Prevalence index is <3.07
7		4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
9		5 - Wetland Non-Vascular Plants¹
10		Problematic Hydrophytic Vegetation <sup>†</sup> (Explain)
11		Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 10m	100 = Total Cover	be present, unless disturbed or problematic.
1		
2		Hydrophytic Vegetation
	= Total Cover	Present? Yes X No
% Bare Ground in Herb Stratum	***************************************	
		122

Color motes	Transfer.		to me del	hut udana				or confirm	the absence of Indicators.)
Part   Content   Part	Depth (inches)	Matrix Color (moist)	11/4	Color	Redo (molet)			1 - 2	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Coverad or Costed Sand Graine.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Coverad or Costed Sand Graine.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Coverad or Costed Sand Graine.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Coverad or Costed Sand Graine.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Coverad or Costed Sand Graine.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Coverad or Costed Sand Graine.  Indicators for Problematic Hydric Soils*  Loamy Reloy Redox (S5)  Loamy Mucky Mineral (F1) (except MLRA 1)  Loamy Gleyed Matrix, (S2)  Hydrogen Sulfide (A4)  Loamy Gleyed Matrix, (F2)  Depletid Redox Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Redox Depressions (F3)  Type:  Depletid Redox Depressions (F3)  Type:  Depletid Redox Depressions (F3)  Type:  Depletid Redox General Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Type:  Depletid Redox Depressions (F3)  Welland Hydrology Indicators:  Water-Stalined Leaves (B9) (except Murky Mineral (S1)  Water Stalined Leaves (B9) (except Mucky Mineral (S1)  Water-Stalined Leaves (B9) (except Mucky Mineral (S1)  Water-Stalined Leaves (B9) (MIneral (S1)  Water-Stalined Leaves (B9) (MIneral (S1)  Algal Mat or Crust (B4)  Iron Deposits (B3)  Suffice Water Table (A2)  Suffice Water				7		19	Type		
Type: C=Consentration, D=Decletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains.  Type: C=Consentration, D=Decletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains.  Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histos Dipedori (A2) Simped Metrix, (SS) Red Problematic Hydric Soils?  Black Histo (A3) Losmy Mucky Mineral (F1) (except MLRA 1)  Hydrogen Sulface (A1) Losmy Mucky Mineral (F2) Very Shallow Dark Surface (F12)  Depleted Below Dark Surface (A11) Red No Decleted Matrix (F2) Other (Explain in Remarks)  Thick Dark Surface (A12) Red No Dark Surface (F5)  Sandy Blogyed Matrix (S4) Depleted Matrix (F2) Pepted Matrix (F2) Pepted Matrix (F2)  Depleted Dark Surface (F5) Sindy Mucky Mineral (S1) Red No Dark Surface (F7)  Sandy Blogyed Matrix (S4) Depleted Dark Surface (F7)  Pepter (Inches): Percent): Pepter (Inches): Pepter (Inches): Pepter (Inches): Percent): Pepter (Inches):			-		-/-	7/		PLIO	Sitty-Gloy Islan
Type: C=Cancentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Graine.   *Location: PL=Pore Lining, MeMatrix, Phydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)   Indicators for Problematic Hydric Soils*:   Lining MeMatrix, Phydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)   Lining Mematrix, (SS)   Lining Matrix, (SS)   Linin	4-10			10the	76	26	C	M	Clay loan
Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.) Histos (A1) Histos Epipedon (A2) Histos Epipedon (A2) Siripped Matrix (S3) Black Histic (A3) Losmy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Depleted Dark Surface (A12) Redox Depressions (F3) Perpleted Matrix (F2) Other (Explain in Remarks)  Thick Dank Surface (A12) Redox Depressions (F3)  Perpleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type: Depth (Inches); Remarks:  What is in Quark Control of the standard of the stand	***	2.5 VR 5/2	38%						
Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.) Histo Epipedon (A2) Histo Epipedon (A2) Siripped Matrix (S3) Black Histic (A3) Losmy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Depleted Dark Surface (A12) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Wettand Hydrology must be present: Type: Depth (inchea); Remarks:  Water Stained Leaves (B9) (except MLRA 1) Hydric Soil Present?  Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Surface Water (A1) Water Marks (B1) Sediment Deposits (B2) Diff Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Recent fron Reduction in Tilled Soile (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegatated Concave Surface (B8) Field Observations: Vest and Hydrology Indicators: Primary Indicators (Dark High Water Table (A2) MIRA 1, 2, 4A, and 4B) Secondary Indicators (2 or more recutred) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Water Marks (B1) Drainage Patterns (B10) Surface Soil Cracks (B6) Recent fron Reduction in Tilled Soile (C6) Sparsely Vegatated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): Wettand Hydrology Present? Yes No Depth (inches): Includes capillary fringe) Wettand Hydrology Present? Yes No Depth (inches): Includes capillary fringe) Wettand Hydrology Present? Yes No Depth (inches): Includes capillary fringe) Wettand Hydrology Present? Yes No Depth (inches): Includes capillary fringe)									
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Histos (Ap) (Ar) Sandy Redox (S5)   Indicators (Applicable to all LRRs, unless otherwise noted.)  Histo Epipedon (A2) Stripped Martix (FS)   2 cm Muck (A10)   Red Parent Material (TF2)   Very Shallow Dark Surface (TF12)   Very							-	-	
Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.) Histos (A1) Histos Epipedon (A2) Histos Epipedon (A2) Siripped Matrix (S3) Black Histic (A3) Losmy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Depleted Dark Surface (A12) Redox Depressions (F3) Perpleted Matrix (F2) Other (Explain in Remarks)  Thick Dank Surface (A12) Redox Depressions (F3)  Perpleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type: Depth (Inches); Remarks:  What is in Quark Control of the standard of the stand		-	-	_					
Histos (Ap) (Ar) Sandy Redox (S5)   Indicators (Applicable to all LRRs, unless otherwise noted.)  Histo Epipedon (A2) Stripped Martix (FS)   2 cm Muck (A10)   Red Parent Material (TF2)   Very Shallow Dark Surface (TF12)   Very		· <del></del>			-	-			
Histosol (A1)  Histo Epipedon (A2)  Shripped Matrix (S5)  Black Histic (A3)  Hydrogen Sutified (A4)  Depleted Below Dark Surface (A11)  Semarks Surface (A11)  Semarks Surface (A11)  Semarks Surface (A11)  Pepleted Below Dark Surface (A11)  Sendy Mucky Mineral (S1)  Sendy Gleyed Matrix (S4)  Redox Depressions (F6)  Pepleted Dark Surface (F7)  Sendy Gleyed Matrix (S4)  Redox Depressions (F8)  Water Stained Leaves (B9)  Water Stained Leaves (B9) (except Matrix (F2)  Deplit (Inches):  Water Marks (B1)  Water Marks (B1)  Sediment Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B3)  Surface Soil Cracks (B6)  Inudation Visible on Aerial Imagery (B7)  Sparsely Vegatated Concave Surfaces (B8)  Presence of Reduced Iron (C4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inudation Visible on Aerial Imagery (B7)  Sparsely Vegatated Concave Surfaces (B8)  Depth (Inches):  Water Table Present?  Yes No Depth (Inches):  Wettand Hydrology Present? Yes No Depth (Inches):  Water Table Present?  Yes No Depth (Inches):  Wettand Hydrology Present? Yes No Depth (Inches):  Water Table Present?  Yes No Depth (Inches):  Wettand Hydrology Present? Yes No Depth (Inches):  Water Table Present?  Yes No Depth (Inches):  Water Table Present?  Yes No Depth (Inches):  Wettand Hydrology Present? Yes No Depth (Inches):  Water Table Present?  Yes No Depth (Inches):  Wettand Hydrology Present? Yes No Depth (Inches):  Water Table Present?  Yes No Depth (Inches):  Wettand Hydrology Present? Yes No Depth (Inches):  Wettand Hydrology Present? Yes No Depth (Inches):  Wettand Hydrology Present? Yes No Depth (Inches):  Wettand Hydrology Present? Yes No Depth (Inches):  Wettand Hydrology Present? Yes No Depth (Inches):  Wettand Hydrology Present? Yes No Depth (Inches):  Wettand Hydrology Present? Yes No Depth (Inches):			-						
Histosol (A1) Histo Epipedon (A2) Stripped Matrix (S5) Black Histor (A3) Loarny Gleyed Matrix (S5) Stripped Matrix (S5) Stripped Matrix (S5) Hydrogen Sutified (A4) Loarny Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (F3) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Derpressions (F8)  Thick Dark Surface (A12) Sandy Gleyed Matrix (S4) Redox Derpressions (F8)  Wetland Hydrology must be present, unless disturbed or problematic.  Water Stained Leaves (B1) Secondary Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Water Stained Leaves (B1) Water Aufre (A1) High Water Table (A2) Saturation (A3) Vater Marks (B1) Aquetic Invertebrates (B13) Flydrogen Sulfide Odor (C1) Drift Deposits (B2) Drift Deposits (B2) Flydrogen Sulfide Odor (C1) Sparsely Vegetated Concave Surface (B8) Facent Iron Reduction in Tilled Solis (C8) Frost-Heave Hummocks (D7) Field Observations:  Water Table Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wateration Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wateration Present? Yes No Depth (	Type: C=C	Concentration, D=Der	letion, RM	=Reduced	Mătrix, CS	=Covered	or Coate	d Sand Gra	
Histic Epigedon (A2) Stripped Metrix (S9) Red Parent Material (TF2)  Black Histic (A3) Loarny Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12)  Hydrogen Sulfide (A4) Loarny Mucky Mineral (F1)  Depleted Below Dark Surface (A11) Depleted Matrix (F2)  Sandy Mucky Mineral (S1) Surface (F5)  Sandy Mucky Mineral (S1) Pepleted Dark Surface (F7)  Redox Dark Surface (F7)  Redox Dark Surface (F7)  Redox Depressions (F8) Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Water Stalned Leaves (B9) (except Minery Indicators (F2) Person (F3)  Water Marke (B1) Self Crust (B11) Water Stalned Leaves (B9) (except MIRA 1, 2, 4A, and 4B)  Water Marke (B1) Self Crust (B11) Drainage Patterns (B10)  Water Marke (B1) Aquetic Invertebrates (B13) Drainage Patterns (B10)  Drainage Patterns (B10) Dry-Season Water Table (C2)  Drift Deposits (B3) Wording Modern (C4) Surfaces (C3) Genomial Presents (B10)  Surface Soil Cracks (B6) Incorposits (B3) Recent fron Reduction in Tilled Soils (C6) Shallow Aquitard (D3)  Frost-Heave Hummocks (D7)  Field Observations:  Water Table Present? Yes No Depth (inches):  Vater Table Present? Yes No Depth (inches):  Vateration Present? Yes No Depth (inches):  Vateration Present? Yes No Depth (inches):  Vesturation Present?			able to all				ed.)	7	Indicators for Problematic Hydric Solls <sup>3</sup> :
Black Histic (A3)									
Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (F3) Sandy Gleyed Matrix (S4) Redox Dark Surface (F5) Sandy Gleyed Matrix (S4) Redox Dark Surface (F5) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Redox Dark Surface (F8)  Wetland Hydrology Indicators: Primary Indicators (Dark Surface (F8))  Wetland Hydrology Indicators: Primary Indicators (Dark Surface (F8))  Surface Water (A1) Water Table (A2) Mark 1, 2, 4A, and 4B) Salt Crust (B11) Sediment Deposits (B3) Sediment Deposits (B3) Surface Soll Crack (B4) Iron Deposits (B6) Recent Iron Reduction in Tilled Solis (C6) Surface Soll Crack (B6) Irundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B3)  Prost-Heave Hurnmocks (D7)  Prost-Heave Hurnmocks (D7)  Prost-Heave Hurnmocks (D7)  Wetland Hydrology Present? Yes No Depth (inches):	Flack H	ipipedon (AZ)	7/						
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Type: Deplit (Inches);  Remarks:  Water Stained Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface Water (A12) Water Table (A2) Mira A1, 2, 4A, and 4B) Saturation (A3) Saturation (A4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Frace-Neutral Test (D5) Surface Soil Cracks (B6) Su								MLRA 1)	
Thick Dark Surface (A12) Redox Dark Surface (F5) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Mairk (S4) Redox Depressions (F8)  Well and Hydrology must be present, unless disturbed or problematic.  Well is in pure of the present of the pres			e (A11)	X Denle	y Gleyed I tad Metric	namx (FZ	)	114-21	Other (Explain in Remarks)
Sandy Mucky Mineral (\$1) Depleted Dark Surface (F7) weitland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type: Depth (inches);  Remarks:  What is in purchase of Redox Depressions (F8)  Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Saturation (A3) Saft Crust (B11) Dirit Deposits (B1)  Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Dirit Deposits (B3) Water Marks (B1) Agualto Invertebrates (B1) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Saturation (Validation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)  Water Table (C2) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)  Water Table (C2) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B8) Su			o prizing .						Indignature of hydrigans, strange at the
Sandy Cleyed Marin (S4) Redox Depressions (F8) unless disturbed or problematic.  Restrictive Layer (if present): Type: Depth (inches); Remarks:  Wettand Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface Water (A1) Water-Stained Leaves (B9) (except Marks (B1) Drainage Patterns (B10) Drainage Patterns (B10) Dray-Season Water Table (C2) Saturation (A3) Saturation (A3) Saturation Present? Water (B5) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C2) Drift Deposits (B3) Algal Mar or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Tilled Soits (C6) FAC-Neutral Test (D5) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Surface Vater Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches):				Deple	ted Dark 8	Surface (F	7)		
Restrictive Layer (if present):  Type:  Depth (inches);  Remarks:  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required: check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Frost-Heave Hummocks (D7)  Sparsely Vegetated Concave Surface (B8)  Frost-Heave Hummocks (D7)  Saturation Present?  Yes  No  Depth (inches):  Wetland Hydrology Present? Yes  No  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Sandy (	Gleyed Matrix (S4)					.,		
Depth (Inches);  Remarks:    Compart Surface   C	Restrictive	Layer (if present):							Since digital and of problematics
Wetland Hydrology Indicators:	Type:								
PUROLOGY  Netland Hydrology Indicators:  Primary Indicators (minimum of one required: check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Drift Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Water Present?  Pres No  Depoth (inches):  Water Norw Surface  Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Water-Stained Leaves (B9) (except  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Sparlage Patterns (B10)  Drihange Patterns (B10)  Driv-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C2)  Saturation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Frost-Heave Hummocks (D7)  Wetland Hydrology Present? Yes No  Mater Table Present?  Ves No  Depth (inches):  Wetland Hydrology Present? Yes No  Metland Hydrology Present? Yes No  Metland Hydrology Present? Yes No  Wetland Hydrology Present? Yes No  Metland Hydrology Present? Yes No  Metland Hydrology Present? Yes No  Wetland Hydrology Present? Yes No  Metland Hydrology Present? Yes No	Depth (in	rches):							Hudris Soil Beacont 2 No. X
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required: check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Iron Deposits (B6)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Vater Present?  Water No X Depth (inches):  Wetland Hydrology Present? Yes No X Depth (inches):  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Remarks:	***		7,700					Tryanc don Fresent: Tes 71 No
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required: check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Stained Leaves (B9) (except  MLRA 1, 2, 4A, and 4B)  Saturation (A3)  Water Marks (B1)  Self Crust (B11)  Aquatic Invertebrates (B13)  Dirainage Patterns (B10)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Flydrogen Sulfide Odor (C1)  Saturation Visible on Aerial Imagery (C3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Algal Mat or Crust (B4)  Presence of Reduced Iron (C4)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Surface Soil Cracks (B6)  Jundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present?  Yes  No  Depth (inches):  Wetland Hydrology Present? Yes  No  Depth (inches):  Wetland Hydrology Present? Yes  No  Depth (inches):  Wetland Hydrology Present? Yes  No  Depth (inches):  Wetland Hydrology Present? Yes  No  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	-	- water	puee!	inc a	rivbor	)cop	teil	. Con	pat surface.
Primary Indicators (minimum of one required: check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water (A1)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  MIRA 1, 2, 4A, and 4B)  Aquatic Invertebrates (B13)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C)  Saturation (C4)  Saturation Visible on Aerial Imagery (B7)  Stunted or Stressed Plants (D1) (LRR A)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Depth (inches):  Wetland Hydrology Present? Yes No Depth (inches):  Saturation Includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	YDROLO	)GY			20				
Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B6)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water (A1)  Water Stained Leaves (B9) (MLRA 1, 1)  MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Recent Iron Reduction in Tilled Soils (C6)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present?  Yes  No  Depth (inches):  Wetland Hydrology Present? Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation previous inspections), if available:	Wetland Hy	drology Indicators:				-			- Wallet - W
Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present?  Water-Stained Leaves (B9) (MLRA 1, 1)  MLRA 1, 2, 4A, and 4B)  Satt Crust (B11)  Aquatic Invertebrates (B13)  Aquatic Invertebrates (B13)  Aquatic Invertebrates (B13)  Aquatic Invertebrates (B13)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C3)  Stunted or Stressed Plants (D4)  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)  Frost-Heave Hummocks (D7)  Saturation Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches	Primary Indi	cators (minimum of o	në require	d: check al	that apply	Λ			Secondary Indicators (2 or more required)
High Water Table (A2)  Saturation (A3)  Sati Crust (B11)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  No  Depth (inches):  Saturation (AB)  Aquatic Invertebrates (B13)  Aquatic Invertebrates (B13)  Aquatic Invertebrates (B13)  Aquatic Invertebrates (B13)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C2)  Saturation Visible on Aerial Imagery (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Stunted or Stressed Plants (D1) (LRR A)  Frost-Heave Hummocks (D7)  Field Observations:  Surface Water Present?  Wetland Hydrology Present? Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation previous inspections), if available:	Surface	Water (A1)		1	Nater-Stai	ned Leave	es (B9) (e	xcent	
Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  No  Depth (inches):  Saturation (A3)  Aquatic Invertebrates (B13)  Aquatic Invertebrates (B13)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Stunted or Stressed Plants (D1) (LRR A)  Frost-Heave Hummocks (D7)  Frost-Heave Hummocks (D7)  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Secribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	High Wa	ater Table (A2)		·					
Water Marks (B1) SedIment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)  Field Observations: Surface Water Present?  Water Table Present?  Yes No Depth (inches): Saturation Versible (C2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (D2) Saturation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)  Depth (inches): Water Table Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		on (AS)		5					
Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present?  Ves No X Depth (inches):  Saturation Present?  Yes No X Depth (inches):  Depth (inches):  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Saturati	MIT (UA)							Orginson Dellarne (046)
Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present?  Water Table Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches):					Aduatic Inv	reriehrate	(B13)		
Algal Mat or Crust (B4)	Water N	Marks (B1)		/					Dry-Season Water Table (C2)
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)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present?  Water Table Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches):  Secribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water N Sedime	flarks (B1) nt Deposits (B2)			Hydrogen S	Sulfide Oc	lor (C1)	I bilas Mass	Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Cs
Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present?  Ves No Depth (inches):  Saturation Present? Yes No Depth (inches):  Saturation Present? Yes No Depth (inches):  Solution Present? Yes No No Depth (inches):  Solution Present? Yes No	Water N Sedime Drift De	Marks (B1) nt Deposits (B2) posits (B3)		<u>x</u>	Hydrogen S Dxidized R	Sulfide Od hizospher	lor (C1) es along	Living Root	Dry-Season Water Table (C2) Saturation Visible on Asrial Imagery (C9 is (C3) Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Saturation Present? Yes No Depth (inches):  Saturation Present? Yes No Depth (inches):  Security fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water N Sedime Drift De Algal M	Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4)		<u>x</u>	Hydrogen S Dxidized R Presence o	Sulfide Oc hizospher of Reduce	lor (C1) es along d Iron (Ca	1)	Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Ct is (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
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): Uncludes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water N Sedime Drift De Algal M Iron De	Marks (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int or Crust (B5)		<u>x</u>	Hydrogen S Dxidized R Presence c Recent Iron	Sulfide Och hizospher of Reduce n Reduction	lor (C1) res along d Iron (Ca on in Tille	l) d Solls (C6)	Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Uncludes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water N Sedime Drift De Algal Mi Iron De Surface	Marks (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int or Crust (B5) Int or Crust (B6)	madery /R	<b>X</b>	Hydrogen S Oxidized R Presence c Recent Iron Stunted or	Sulfide Och hizospher of Reduce or Reduction Stressed	ior (C1) res along d Iron (C4 on in Tille Plants (D	l) d Solls (C6)	Dry-Season Water Table (C2) Saturation Visible on Asrial Imagery (C9 (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Surface Water Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Saturation Present? Yes No Depth (inches):  Uncludes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water N Sedime Drift De Algal Mi Iron De Surface Inundati	Marks (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int or Crust (B4) Int or Crust (B5) Int or Crust (B6) Int or Crust (B6) Int or Crust (B6) Int or Crust (B6)		<b>X</b> (	Hydrogen S Oxidized R Presence c Recent Iron Stunted or	Sulfide Och hizospher of Reduce or Reduction Stressed	ior (C1) res along d Iron (C4 on in Tille Plants (D	l) d Solls (C6)	Dry-Season Water Table (C2) Saturation Visible on Asrial Imagery (C9 (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Water Table Present? Yes No Depth (inches):	Water M Sedime Drift De Algal M Iron De Surface Inundati Sparsel	Marks (B1) Int Deposits (B2) Int Deposits (B2) Int Deposits (B3) Int Or Crust (B4) Int Or Crust (B4) Int Or Crust (B6) I		<b>X</b> (	Hydrogen S Oxidized R Presence c Recent Iron Stunted or	Sulfide Och hizospher of Reduce or Reduction Stressed	ior (C1) res along d Iron (C4 on in Tille Plants (D	l) d Solls (C6)	Dry-Season Water Table (C2) Saturation Visible on Asrial Imagery (C9 (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water M Sedime Sedime Drift De Algal M Iron De Surface Inundati Sparsel	Marks (B1) Int Deposits (B2) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int or Crust (B4) Int or Crust (B6) Int Oracks (B6) Int Ora	Surface (	<b>X</b> (7) = (88)	Hydrogen S Dxidized R Presence of Recent Iron Stunted or Other (Exp	Sulfide Oc hizospher of Reduce o Reductio Stressed lain in Re	ior (C1) res along d Iron (C4 on in Tille Plants (D	l) d Solls (C6)	Dry-Season Water Table (C2) Saturation Visible on Asrial Imagery (C9 (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water M Sedime Drift De Algal M: Iron De Surface Inundati Sparsel Surface Wat	Marks (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int or Crust (B4) Int or Crust (B5) Int or Crust (B6) I	Surface (	7)	Hydrogen S Dxidized R Presence of Recent from Stunted or Other (Exp	Sulfide Ochizospher of Reduce of Reduction Stressed lain in Reduction shes):	tor (C1) res along d Iron (C4 on in Tille Plants (D marks)	) d Soils (C6) 1) (LRR A)	Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Second C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water M Sedime Drift De Algal M Iron De Surface Inundati Sparsel Field Obser Surface Water Table	Marks (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int or Crust (B4) Int or Crust (B5) Int or Crust (B6) I	• Surface ( es es	7)	Hydrogen S Dxidized R Presence c Recent Iron Stunted or Other (Exp Depth (inc	Sulfide Ochizospher of Reduce of Reduction Stressed lain in Reduction shes):	ior (C1) res along d Iron (C4 on in Tille Plants (D marks)	(1) d Soils (C6) 1) (LRR A)	Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Ct Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
	Water M Sedime Drift De Algal M Iron De Surface Inundati Sparsel Sirface Water Table Saturation P Includes ca	Marks (B1) Int Deposits (B2) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int Oracks (B6) Int Oracks	e Surface ( es es es	7) 888) No X No X No X	Hydrogen S Dxidized R Presence of Recent Iron Stunted or Other (Exp Depth (inc Depth (inc	Sulfide Ochizospher of Reduce of Reduction Stressed lain in Reduction thes): thes):	ior (C1) res along d Iron (C4 on in Tille Plants (D marks)	i) d Soils (C6) 1) (LRR A)  Wetla	Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Sec. (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Remarks;	Water M Sedime Drift De Algal M Iron De Surface Inundati Sparsel Surface Wai Vater Table Saturation P Includes cal	Marks (B1) Int Deposits (B2) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int Oracks (B6) Int Oracks	e Surface ( es es es	7) 888) No X No X No X	Hydrogen S Dxidized R Presence of Recent Iron Stunted or Other (Exp Depth (inc Depth (inc	Sulfide Ochizospher of Reduce of Reduction Stressed lain in Reduction thes): thes):	ior (C1) res along d Iron (C4 on in Tille Plants (D marks)	i) d Soils (C6) 1) (LRR A)  Wetla	Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Sec. (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
	Water M Sedime Drift De Algal M Iron De Surface Inundati Sparsel Surface Wai Vater Table Saturation P Includes cal	Marks (B1) Int Deposits (B2) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int Oracks (B6) Int Oracks	e Surface ( es es es	7) 888) No X No X No X	Hydrogen S Dxidized R Presence of Recent Iron Stunted or Other (Exp Depth (inc Depth (inc	Sulfide Ochizospher of Reduce of Reduction Stressed lain in Reduction thes): thes):	ior (C1) res along d Iron (C4 on in Tille Plants (D marks)	i) d Soils (C6) 1) (LRR A)  Wetla	Dry-Season Water Table (CZ) Saturation Visible on Aerial Imagery (Cds (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
	Water M Sedime Drift De Algal M Iron De Surface Inundati Sparsel Sirface Water Table Saturation P Includes ca	Marks (B1) Int Deposits (B2) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Int Oracks (B6) Int Oracks	e Surface ( es es es	7) 888) No X No X No X	Hydrogen S Dxidized R Presence of Recent Iron Stunted or Other (Exp Depth (inc Depth (inc	Sulfide Ochizospher of Reduce of Reduction Stressed lain in Reduction thes): thes):	ior (C1) res along d Iron (C4 on in Tille Plants (D marks)	i) d Soils (C6) 1) (LRR A)  Wetla	Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Cits (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

WEILAMD DEIERMINATION	DATA FO	RM - 1	Western No	untains, Valleys, and Coast Region
Project/Site: McCann AM# 211-283-0	07	City/C	County: Humb	saldt G. Sampling Date: 6/1/19
Applicant/Owner:				State: CA. Sampling Point 5P 3
Investigator(s): James Regan		Section	on, Township, R	
Landform (hillslope, terrace, etc.): toe sale -te	Mac	Local	Litaliat (canacua	, convex, none): <del>flat - concave</del> Slope (%): 0 -:
Subregion (LRR):	Lat A	1 2	7:44	
Soil Map Unit Name: Thirdy Ad When	10106	N - Q -		
Are climatic / hydrologic conditions on the site typical for				NWI classification:NONE
Are Vegetation, Soil, or Hydrology			1000	(If no, explain in Remarks.)
Aré Vegetation, Soil, or Hydrology				"Normal Circumstances" present? Yes No No
				eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site ma	p showin	g sam	pling point	locations, transects, important features, etc
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes	No No		Is the Sample within a Wetla	d Area
Hydralogy has been alter VEGETATION - Use scientific names of pla	is Been ced th	for Since	at last 2009/2010	To years, likely longer. S- Jeasanl Crades ditchel around site.
	Absolute	Daw	tames to division.	
Tree Stratum (Plot size: 10m)			inant Indicator	Dominance Test worksheet:  Number of Dominant Species 1
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4			<del></del>	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 10m		_= Tota	al Cover	That Are OBL, FACW, or FAC: (A/B)
1				Prevalence Index worksheet:
2				Total % Cover of:Multiply by:
3		-		OBL species 10 x1= 10
4		•		FACW species
0-				FACU species 35 x4= 140
Herb Stretum (Plot size: m )		_= Tota	al Cover	UPL species 10 x5= 30
1. pordeum manimum	_30	y	FAC	Column Totals: 110 (A) 365 (B)
2. Barres hardenceas	30	V	SACU	73
3. TESTERA MUJERS	8	•	NI	Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
4. Menthe pulagion	10	-	061	1 - Rapid Test for Hydrophytic Vegetation
5. Plantago loncelata	-5_	-	FAGU	X 2 - Dominance Test is >50%
6. Complitudes orders 5	_ = 2_	-	14	3 - Prevalence Index is ≤3.0 <sup>1</sup>
7. Fastier porennis	_ 5		FAC	4 - Morphological Adaptations (Provide supporting
	-	-		data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants
11				Problematic Hydrophytic Vegetation* (Explain)
	90	- Tate!	Coview	Indicators of hydric soil and wetlend hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 10 ^		_= Total	l (mail)	T. L. ab serverius
1. Rubis ormeneces	108	_4	FAC	Hydrophytic
2				Vegetation
% Bare Ground in Herb Stratum 10 Z Remarks:	tot	_= Total	Cover	Present? Yes X No
Parce domina to	st 1.3	Cal	e Oresonla	nea test - Marginally bydric
director. Consultaneous La		Acads .		The Diversity Marie

nches) Color (moist)	% Cold	Redox Feat or (moist) %		Loc2	Texture	Remarks
4 104e4/2	95 1042	5/6 5		PL	Silty loan	
		VI-S		-	7	<b>X</b>
-207 Dye 4/1+4/2	100				loan	
					St. Till Control	
				A		
pe: C=Concentration, D=Deple	etica DM-Dadus	ditata on o	and the Australia	10:10	21	
fric Soil Indicators: (Applica				ed Sand Gi		ocation: PL=Pore Lining, M=Matrix. tors for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)		ndy Redox (S5)	*******			cm Muck (A10)
Histic Epipedon (A2)		ipped Matrix (S6)				ad Parent Material (TF2)
Black Histic (A3)		amy Mucky Minera	(F1) (excep	MLRA 1)		ery Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)		arny Gleyed Matrix	(F2)	2		ther (Explain in Remarks)
Depleted Below Dark Surface		pleted Matrix (F3)			- 21	
Thick Dark Surface (A12)		dox Dark Surface (				itors of hydrophylic vegetation and
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)		pleted Dark Surfac				dand hydrology must be present.
strictive Layer (if present):		dox Depressions (	F6)		Uni	ess disturbed or problematic.
					1	
					1	
Туре:		97			Harter 6	Y
Type: Depth (inches): marks:		fic for a	ittle ga	es.	Hydric Sc	oil Present? Yes X No
Type: Depth (inches): marks:  DROLOGY		fac for G	ittle ga	es.	Hydric Sc	oil Present? Yes X No
Type: Depth (inches): marks:  DROLOGY etland Hydrology Indicators:	Comput Sur	*	ittle fa	es.		
Type:  Depth (inches):  marks:  DROLOGY  etland Hydrology Indicators: mary Indicators (minimum of or	Comput Sur	all that apply)			Sec	condary Indicators (2 or more required)
Type: Depth (inches): marks:  DROLOGY  atland Hydrology Indicators: mary Indicators (minimum of or). Surface Water (A1)	Comput Sur	all that apply) Water-Stained L	.eaves (B9) (		Sec	condary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2
Type:	Comput Sur	all that appiv) Water-Stained L MLRA 1, 2, 4	.eaves (B9) ( IA, and 4B)		Sec	condary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2
Type:	Comput Sur	all that apply) Water-Stained L MLRA 1, 2, 4 Salt Crust (B11)	.eaves (B9) ( IA, and 4B)		Sec	condary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10)
Type:	Comput Sur	all that apply)  Water-Stained L  MLRA 1, 2, 4  Salt Crust (B11)  Aquatic Inverteb	eaves (B9) ( IA, and 4B) trates (B13)		Sec	condary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Pattems (B10) Dry-Season Water Table (C2)
Type:	Comput Sur	all that appiv)  Water-Stained L  MLRA 1, 2, 4  Salt Crust (B11)  Aquatic Inverteb  Hydrogen Sulfid	eaves (B9) (r IA, and 4B) rrates (B13) e Odor (C1)	except	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 (C
Type:	Comput Sur	all that apply)  Water-Stained L  MLRA 1, 2, 4  Salt Crust (B11)  Aquatic Inverteb  Hydrogen Sulfid  Oxidized Rhizos	eaves (B9) (classificates (B13) e Odor (C1) spheres along	except Living Ro	Sec	condary Indicators (2 or more required) Water-Stained Leaves (89) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2)
Type:	Comput Sur	t all that apply)  Water-Stained L  MLRA 1, 2, 4  Salt Crust (B11)  Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec	eaves (B9) (classes (B13) e Odor (C1) pheres along duced fron (C	except Living Ro		condary Indicators (2 or more required) Water-Stained Leaves (89) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3)
Type:	Comput Sur	all that apply)  Water-Stained L  MLRA 1, 2, 4  Salt Crust (B11)  Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec	eaves (B9) (classes (B13) e Odor (C1) epheres along duced Iron (Cluston in Tille	except Living Ro 4) d Soils (C	Sec	condary Indicators (2 or more required) Water-Stained Leaves (89) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type:	Comput Sur	wall that apply)  Water-Stained L  MLRA 1, 2, 4  Salt Crust (B11)  Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Rec Stunted or Sires	eaves (B9) (r IA, and 4B) trates (B13) e Odor (C1) spheres along duced fron (C duction in Title ased Plants (I	except Living Ro 4) d Soils (C	Sec	condary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Pattems (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)
Type:	Comput Sur	all that apply)  Water-Stained L  MLRA 1, 2, 4  Salt Crust (B11)  Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec	eaves (B9) (r IA, and 4B) trates (B13) e Odor (C1) spheres along duced fron (C duction in Title ased Plants (I	except Living Ro 4) d Soils (C	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 (C Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type:	Compact Surface (BB)	water-Stained L MLRA 1, 2, 4 Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Rec Stunted or Stres Other (Explain in	eaves (B9) (r IA, and 4B) trates (B13) e Odor (C1) spheres along duced fron (C duction in Title ased Plants (I	except Living Ro 4) d Soils (C	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 (C Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type:	Comput Sur	water-Stained L MLRA 1, 2, 4 Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Rec Stunted or Stres Other (Explain in	eaves (B9) (n IA, and 4B) trates (B13) e Odor (C1) pheres along duced fron (C duction in Tille ssed Plants (I in Remarks)	Except Living Ro 4) 2d Soils (C	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 (C Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type:	Compact Surface (B8)	water-Stained L MLRA 1, 2, 4 Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Rec Stunted or Stres Other (Explain in	eaves (B9) (content of the content o	Except Living Ro 4) 2d Soils (C	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 (C Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type:	Compact Surface (BB)	all that apply)  Water-Stained L  MLRA 1, 2, 4  Salt Crust (B11)  Aquatic Inverteb  Hydrogen Sulfid  Oxidized Rhizos  Presence of Rec  Recent Iron Rec  Stunted or Stres  Other (Explain in	eaves (B9) (classes (B13) e Odor (C1) epheres along duced fron (Classed Plants (En Remarks)	except Living Ro 4) ed Soils (C	ots (C3)	condary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B1D) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type:	magery (B7) Surface (B8)  Surface (B8)	t all that apply)  Water-Stained L  MLRA 1, 2, 4  Salt Crust (B11)  Aquatic Inverteb  Hydrogen Sulfid  Oxidized Rhizos  Presence of Rec  Recent Iron Rec  Stunted or Stres  Other (Explain in	eaves (B9) (n IA, and 4B) trates (B13) e Odor (C1) pheres along duced fron (C duction in Tille ssed Plants (I In Remarks)	Except  Living Ro  4)  2d Soils (C  01) (LRR #	ots (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 (C 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 Mou	
Project/Site: McCanon AN# 211-283-007 City/County: Humb	Sampling Date: 6//19
Applicant/Owner:	State: CA. Sampling Point: 504
Investigator(s): AMES REGAN Section, Township, Ra	nge:
Landform (hillslope, terrace, etc.): toe sale - Terrace Local relief (concave,	convex none: Plat - Con cove Slope 1%: 0-3
Subregion (LRR): A Lat: 40.3284	
	NWI classification: NWI
	(If no, explain in Remarks.)
	*Normal Circumstances" present? Yes X No
and the second s	seded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sampling point I	ocations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes No Is the Sampled within a Wetlan	nd? YesNo_X_
Remarks: Site is grazal/moun and has been for at last.  Hydralogy has been altered +/- since 2009/2010	20 years, likely longer Seasonal scales distribute around ste.
VEGETATION - Use scientific names of plants.	
Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: Um ) % Cover Species? Status  1	Number of Dominant Species That Are OBL, FACW, or FAC. (A)
2	Total Number of Dominant
3. PINUS registra 70: Y NI	Species Across All Strata: (B)
5.	Percent of Dominant Species That Are ORL FACW or FAC
Sapling/Shrub Stratum (Plot size: Um = Total Cover	That the ODE, I HOW, OI THO (PVD)
1	Prevalence Index worksheet
2	Total % Cover of: Multiply by:
3	OBL species x1=
4	FACW species x 2 =
5	FAC species x 3 =
Total Cover	FACU species x 4 =
Herb Stratum (Plot size:	UPL species x 5 =
1. Romalus parustons Y FACU	Column Totals: (A) (B)
2 Bellis perennis Y NI	Prevalence Index = B/A=
3. Isa annia y the	Hydrophytic Vegetation Indicators:
4. Rumer Conglameration Y FACW	1 - Rapid Test for Hydrophytic Vegetation
5. Plantago lancerolatar Y Flew	2 - Dominance Test is >50%
6. Festica aundinesa y HI	3 - Prevalence Index is ≤3.0 <sup>T</sup>
7. Mertha polegion y OBL	4 - Morphological Adaptations¹ (Provide supporting
8. Cordus primocophilis <3 4 HI	data in Remarks or on a separate sheet)
9	5 - Wetland Non-Vascular Plants <sup>1</sup>
10	Problematic Hydrophytic Vegetation¹ (Explain)
11,	Indicators of hydric soil and watland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 10-	ne present uniess unuiped of problematic.
1	in an an an
2	Hydrophytic Vegetation
Total Cavar	Present? Yes_ No_X
% Bare Ground in Herb Stratum 60	
Remarks:	
Spesse Voydedian on Roch and below fenced orem	. Compact. Plotted Pines.

Depth	ription: (Describe Matrix	to the de	pth needed to door	ment the	Indicator	or confin	m the absence of Ind	Sampling Point: 564 leators.)
(inches)	Color (moist)	%	Color (moist)	ox Feature %	Type <sup>1</sup>	_Loc2	Ť	22A
0-4	10424/2	05	104R 5/6	5	C			Remarks
5-70+	1042 4/1+4/2	100	TUYIN JIE			PL	Sonly loan	Jeep-tail
			-					
¹Type: C=Co	ncentration, D=Dept	etion, RM	=Reduced Matrix, C	S=Covere	d or Coate	d Sand Gi	fairis. <sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
nyane son n	ndicators: (Applica	ible to all	LRRs, unless other	rwise not	ed.)	121		Problematic Hydric Soils <sup>3</sup> :
Histosol (	(A1) ipedon (A2)		Sandy Redox				2 cm Muck	(A10)
Black His			Stripped Matrix	(S6)	43.7	ii.		Material (TF2)
	i Sulīīde (A4)		Loamy Mucky: Loamy Gleyed	Matrix (F)	1) (except	MLRA 1)		w Dark Surface (TF12)
Depleted	Below Dark Surface	(A11) -	X Depleted Matri	x (F3)	.,		Other (Exp	ain in Remarks)
Thick Dai	k Surface (A12)		Redox Dark Su	inface (F6)			Indicators of hy	drophytic vegetation and
	ucky Mineral (S1)		Depleted Dark		7)		wetland hydr	ology must be present,
	eyed Matrix (S4) ayer (if present):		Redox Depress	sions (F8)			unless distur	bed or problematic.
VESUICHAR P	ayer (n present):							
Type								
Type:	nacl·							V
Type: Depth (incl Remarks:	nes):						Hydric Soil Preser	nt? Yes X No
Depth (Incl Remarks:	Cemp	ust )	esptail				Hydric Soil Preser	nt? Yes X No
Depth (Incl Remarks: YDROLOG	Comp	ust ).	eaptail				Hydric Soil Preser	nt? Yes X No
Depth (Incl Remarks: YDROLOG Wetland Hydi	Cenp GY rology Indicators:				3111/2			
Depth (Incl Remarks: YDROLOG Wetland Hydr Primary Indica	Corporations: relegy Indicators; tors (minimum of on		; check all that appl		200		Secondary in	dicators (2 or more required)
Depth (Incl Remarks: YDROLOG Wetland Hydr Primary Indica Surface W	Corporations:  clogy Indicators:  tors (minimum of one		l: check all that appl	Ined Leave		cept	Secondary In  Water-St	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2
Depth (Incl Remarks:  YDROLOG Wetland Hydr Primary Indica Surface W High Wate	ology Indicators: lors (minimum of on- later (A1) er Table (A2)		i; check all that appl Water-Sta MLRA	lned Leave 1, 2, 4A, a		cept	Secondary in  Water-St 4A, at	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2 nd 4B)
Depth (Incl Remarks:  YDROLOG Wetland Hydr Primary Indica Surface W High Wate Saturation	rology Indicators: lors (minimum of on- /ater (A1) er Table (A2)		: check all that appl Water-Sta MLRA Salt Crust	Ined Leave 1, 2, 4A, a (B11)	nd 4B)	cept	Secondary in  Water-St 4A, at	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2 nd 4B) Patterns (B10)
Depth (Incl Remarks:  YDROLOG  Netland Hydr  Primary Indica  Surface W  High Wate  Saturation  Water Mai	rology Indicators: lors (minimum of on- /ater (A1) er Table (A2)		: check all that appl Water-Sta MLRA Salt Crust Aquatic In	Ined Leave 1, 2, 4A, a (B11) vertebrates	nd 4B)	cept	Secondary in  Water-St 4A, at Drainage Dry-Seas	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2 nd 4B) Patterns (B10) on Water Table (C2)
Depth (Incl Remarks:  YDROLOG  Netland Hydr  Primary Indica  Surface W  High Wate  Saturation  Water Mai	rology Indicators; itors (minimum of on- /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2)		: check all that appl Water-Sta MLRA Salt Crust Aquatic Intelligence	Ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od	nd 4B) s (B13) lor (C1)		Secondary in  Water-St  4A, at  Drainage  Dry-Seas  Saturatio	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2 nd 4B) Patterns (B10) on Water Table (C2) n Visible on Aerial Imagery (CS
Pipph (incl Remarks: YDROLOG Wetland Hydr Primary Indica Surface W High Wate Saturation Water Mar Sediment Orift Depo	rology Indicators; tors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4)		: check all that appl Water-Sta MLRA Salt Crust Aquatic In	Ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher	nd 4B) s (B13) lor (C1) res along L	iving Roo	Secondary in  Water-St  4A, at  Drainage  Dry-Seas  Saturatio  ts (C3)  Geomorp	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2 nd 4B) Patterns (B10) ron Water Table (C2) n Visible on Aerial Imagery (CS hic Position (D2)
Primary Indica Surface W High Wate Saturation Water Mai Sediment Drift Depo	rology Indicators; tors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5)		: check all that appl  Water-Stal  MLRA  Salt Crust  Aquatic In  Hydrogen  X Oxidized F  Presence of Recent Iro	Ined-Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduceto n Reduction	nd 4B) s (B13) for (C1) res along L d Iron (C4) on in Tilled	iving Roo	Secondary in  Water-St  4A, at  Drainage  Dry-Seas  Saturatio  ts (C3)  Shallow //  FAC-Neu	dicators (2 or more required) alined Leaves (B9) (MLRA 1, 2 nd 4B) Patterns (B10) con Wafer Table (C2) n Visible on Aerlal Imagery (CS hic Position (D2)
Primary Indica Surface W High Wate Saturation Water Mai Sediment Drift Depo Algal Mat Iron Depo: Surface S	cology Indicators: tors (minimum of one) /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6)	e'rsoulred	: check all that appl  Water-Sta  MLRA  Salt Crust  Aquatic Int  Hydrogen  X Oxidized F  Presence of  Recent Iro  Stunted or	Ined-Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reducei n Reductio Stressed I	ind 4B) s (B13) for (C1) res along L d Iron (C4) on in Tilled Plants (D1	iving Roo	Secondary in  Water-St  4A, an  Drainage  Dry-Seas  Saturatio  ts (C3) Geomorp  Shallow /  ) FAC-Neu	dicators (2 or more required) alined Leaves (B9) (MLRA 1, 2 nd 4B) Patterns (B10) ron Water Table (C2) n Visible on Aerial Imagery (Cs hic Position (D2) Aquitard (D3)
Pipph (inclements:  YDROLOG  Wetland Hydromany Indica Surface W High Water Mare Sediment Drift Depo Algal Mat Iron Depo: Surface Seliments	cology Indicators: tors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) (Visible on Aerial Im	e required	: check all that appl  Water-Stal  MLRA  Salt Crust  Aquatic In  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or  Other (Exp	Ined-Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reducei n Reductio Stressed I	ind 4B) s (B13) for (C1) res along L d Iron (C4) on in Tilled Plants (D1	iving Roo	Secondary in  Water-St 4A, at  Drainage  Dry-Seas  Saturatio  ts (C3) Geomorp  Shallow A  Raised A	dicators (2 or more required) alined Leaves (B9) (MLRA 1, 2 nd 4B) Patterns (B10) con Wafer Table (C2) n Visible on Aerlal Imagery (CS hic Position (D2)
Depth (Incl Remarks:  YDROLOG  Netland Hydr Primary Indica Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depor	rology Indicators:  lors (minimum of one /ater (A1) er Table (A2)  (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6)  I Visible on Aerial Im/ /egetated Conoave S	e required	: check all that appl  Water-Stal  MLRA  Salt Crust  Aquatic In  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or  Other (Exp	Ined-Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reducei n Reductio Stressed I	ind 4B) s (B13) for (C1) res along L d Iron (C4) on in Tilled Plants (D1	iving Roo	Secondary in  Water-St 4A, at  Drainage  Dry-Seas  Saturatio  ts (C3) Geomorp  Shallow A  Raised A	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2 aid 4B) Patterns (B10) con Water Table (C2) n Visible on Aerial Imagery (Cs hic Position (D2) Aquitard (D3) tral Test (D5) nt Mounds (D6) (LRR A)
Pepih (inclements:  YDROLOG  Wetland Hydromary Indication Surface Work High Water Mare Saturation Water Mare Sediment Drift Deporation Deporation Deporation Deporation Deporation Sparsely Villed Observal	rology Indicators; iters (minimum of on- /ater (A1) ar Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) i Visible on Aerial Im /egetated Concave S	e required agery (B7 Surface (B	Check all that appl Water-Sta MLRA Salt Crust Aquatic Int Hydrogen X Oxidized F Presence of Recent Iro Stunted or Other (Exp.	Ined-Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reducet n Reduction Stressed I blain In Rer	ond 4B) s (B13) dor (C1) res along L d Iron (C4) on in Tilled Plants (D1 marks)	iVing Roo Solls (C6 ) (LRR A)	Secondary in  Water-St 4A, at  Drainage  Dry-Seas  Saturatio  ts (C3) Geomorp  Shallow A  Raised A	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2 aid 4B) Patterns (B10) con Water Table (C2) n Visible on Aerial Imagery (Cs hic Position (D2) Aquitard (D3) tral Test (D5) nt Mounds (D6) (LRR A)
Primary Indica Surface W High Water Mai Sediment Drift Depo Algal Mat Iron Depo Surface Si Inundation Sparsely V ield Observa	rology Indicators: iters (minimum of on- /ater (A1) ir Table (A2) ir (A3) irks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) i Visible on Aerial Im /egetated Concave S fitons: Present? Yes	e reoulred agery (B7 Surface (B	Check all that appl Water-Sta MLRA Salt Crust Aquatic Int Hydrogen X Oxidized F Presence of Recent Iro Stunted or Other (Exp.	Ined-Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduction Reduction Stressed I olain In Rer	ond 4B) s (B13) dor (C1) res along L d Iron (C4) on in Tilled Plants (D1 marks)	Soils (C6 ) (LRR A)	Secondary in  Water-St 4A, at  Drainage  Dry-Seas  Saturatio  ts (C3) Geomorp  Shallow A  Raised A	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2 aid 4B) Patterns (B10) con Water Table (C2) n Visible on Aerial Imagery (Cs hic Position (D2) Aquitard (D3) tral Test (D5) nt Mounds (D6) (LRR A)
Depth (Incl Remarks:  YDROLOG  Netland Hydr Primary Indica Surface W High Water Saturation Water Mai Sediment Drift Depo Algal Mat Iron Depo: Surface Si Inundation Sparsely V ield Observa	rology Indicators: tors (minimum of one) /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) Visible on Aerial Im/egetated Concave stors: Present? Yes resent? Yes	agery (B7 Surface (B	Check all that apple Water-State MLRA  Saft Crust Aquatic In Hydrogen Oxidized For Presence of Recent Iro Stunted or Other (Exp. 18)  Depth (inc. 20)	Ined-Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduceion Reduction Stressed I Olain In Rer ches):	e (B13) for (C1) res along L d Iron (C4) on in Tilled Plants (D1 marks)	Soils (C6 ) (LRR A)	Secondary in  Water-St  4A, at  Drainage  'Dry-Seas  Saturatio  ts (C3) Geomorp  Shallow /  FAC-Neu  Raised A  Frost-Hea	dicators (2 or more required) alined Leaves (B9) (MLRA 1, 2 and 4B) Patterns (B10) Fon Water Table (C2) In Visible on Aerial Imagery (Cs chic Position (D2) Aquitard (D3) Itral Test (D5) Int Mounds (D6) (LRR A) ave Hummocks (D7)
Pepih (Incl Remarks:  YDROLOG  Netland Hydr Primary Indica Surface W High Water Saturation Water Mai Sediment Drift Depo Algal Mat Iron Depo: Surface S Inundation Sparsely V ield Observa Surface Water Vater Table Princludes capill	rology Indicators: tors (minimum of one) /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) (Visible on Aerial Im/ /egetated Concave stors: Present? Yes resent? Yes resent? Yes	agery (B7 Surface (B	Check all that apple Water-Star MLRA  Salt Crust Aquatic Interpretation of the Presence of the County of the Carpeter (Exp. 18)  Depth (inc. 19)  Depth (inc. 19)	Ined-Leave 1, 2, 4A, a (B11) verfebrates Sulfide Od Rhizospher of Reduction Reduction Stressed I plain in Rer ches):	ond 4B) s (B13) dor (C1) res along L d Iron (C4) on in Tilled Plants (D1 marks)	Soils (C6 ) (LRR A)	Secondary in  Water-St  4A, at  Drainage  Dry-Seas  Saturatio  ts (C3) Geomorp  Shallow /  FAC-Neu  Raised A  Frost-Hea	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2 nd 4B) Patterns (B10) on Water Table (C2) n Visible on Aerial Imagery (CS hic Position (D2) Aquitard (D3) htral Test (D5) nt Mounds (D6) (LRR A) ave Hummocks (D7)

AACITAMO DEICKMINATION F	JAIAFOR	IIVI — VVI	estern Mot	untains, Valleys, and Coast Region
Project/Site: McCana AWH 211-283-00	)7	City/Cou	mr. Hunb	Ald Co. Sampling Date: 6/20/19
Applicant/Owner:		City/ Cdc	Mily.	State: CA. Sampling Point: SP 5
Investigator(s): James Recan		Section		ange: Sampling Point: 37 3
Landform (hillstope, terrace etc.) toe sale - te	Wat w	Local ro	liof (annous	convex, none): Plat - Concave Slope (%): 0-3
Subregion (LRR):	AJ	5 275	alei (concave,	Slope (%): 0-3
Soil Map Unit Name: Shively Act When	Lat: St	-74		Long: -123.8359 Datum:
				NWI classification: _ NoN€
Are climatic / hydrologic conditions on the site typical for I	inis time of ye	ear? Yes		· ·
Are Vegetation Soil or Hydrology				"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology				eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site may	p showing	sampl	ling point l	ocations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Welland Hydrology Present?  Yes  Yes	No X	ls w	the Sample ithin a Wetla	d Area nd? Yes NoX
Hydralogy has been alter VEGETATION - Use scientific names of pla	is Dean.	for a line 2	os a lsore	Ze years, likely longer.  - Jeasual Craiks diffehed around the.
	Absolute	Domina	ant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 16-)	% Cover		s? Status	Number of Dominant Species 7
1				That Are OBL, FACW, or FAC: (A)
3		_	-3:	Total Number of Dominant
4.				Species Across All Strata: (B)
Sapling/Shrub Stratum (Plot size: 0m		= Total (	Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
1				Prevalence Index worksheet:
2				Total % Cover of: Multiply by:
3				OBL species x1=
4				FACW species x2=
5				FAC species x3=
1.2		= Total (	Cover	FACU species x4=
Herb Stratum (Plot size: M	70	12	601	UPL species x5=
1. Cleans pulagion	-77	4_	OBL	Column Totals: (A) (B)
3. Carding overscephilis				Prevalence Index = B/A=
3. Cordina pyenocepholis 4. Bomus hadeau as		-		Hydrophytic Vegetation Indicators:
5. Convolutes avensis	5			1 - Rapid Test for Hydrophytic Vegetation
6. Plantage Joncesolation	10			2 - Dominance Test is >50%
7. Festive (Lolium) acception	5			3 - Prevalence Index is ≤3.0 <sup>1</sup> 4 - Morphological Adaptations¹ (Provide supporting
8. Sesta muras	43			data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants
10				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11				<sup>1</sup> Indicators of hydric soil and welland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 10h.		= Total C	over	the state of the s
1. Rubs ameninas	776	Y	FAC	Hydrophytic
2		•		Vegetation
P/ Dara Cround in Hash Charles		= Total C	over	Present? Yes No
% Bare Ground in Herb Stratum Remarks:				
				-

Profile Description: Depth	Matrice	ra nie nel	an neenea to goc	ament me	maicator	or confirm	n the absence of inc	licators.)
(inches) Colo	Matrix r (moist)	0/2	Color (moist)	dox Feature	S1	-		
A 40 11	23/2	OT.		%	Type <sup>1</sup>	Loc	Texture	Remarks
70° 1040	-72	73	10 yr 5/6	- 4		PL	sily loam	
12-18° 10 yp	3/2	981	10 ya 3/4	2				
ype: C≓Concentrati	on, D≕Depl	etion, RM	=Reduced Matrix, (	CS=Covere	d or Coate	d Sand Gr	ains, <sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
yanc Son Indicator	s: (Applica	ible to all	LRRs, unless oth	erwise not	ed.)		Indicators for	Problematic Hydric Soils <sup>2</sup> :
Histosol (A1) Histic Epipedon (A			Sandy Redox				2 cm Mucl	
Black Histic (A3)	12)		Stripped Matri			Tell 4		nt Material (TF2)
_ Hydrogen Sulfide			Loamy Mucky Loamy Gleyer	Mineral (F: Matrix (F2	l) (except )	MLRA 1)		ow Dark Surface (TF12) plain in Remarks)
Depleted Below D	ark Surface	(A11)	Depleted Mati	ix (F3)	,		- Carrie	- And the training
_ Thick Dark Surface			Redox Dark S	urface (F6)			alndicators of h	ydrophytic vegetation and
<ul><li>Sandy Mucky Min</li><li>Sandy Gleyed Ma</li></ul>			Depleted Dark		7)		wetland hyd	frology must be present,
estrictive Layer (if p		-	Redox Depres	sions (F8)		_	unless distu	rbed or problematic.
Type:	neserit).							
1 1 1 2 2								
Denth (inchee)								
Depth (inches); temarks:	Doe	s not	men criter	nie for	<b>F</b> 3	, <del>5</del> 6	Hydric Soil Prese	nt? Yes No_X
emarks:		s not	ment cites	ii. G	<b>£</b> 3	, <del>5</del> 6	Hydric Soil Prese	ent? Yes No X
lemarks: YDROLOGY Vetland Hydrology Ir	ndicators:				<b>f</b> 3	, <del>5</del> 6		
emarks:  /DROLOGY  /etland Hydrology in rimary Indicators (mir	ndicators:		i; check all that app	oly)			Secondary li	ndicators (2 or more required)
emarks:  'DROLOGY  'etland Hydrology Ir  rimary Indicators (mir  _ Surface Water (A1	ndicators: nimum of on		i; check all that and Water-St	ily) àined Leave	es (B9) (e)		Secondary I	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2
emarks:  'DROLOGY  'etland Hydrology Ir  rimary Indicators (mir	ndicators: nimum of on		i: check all that app Water-St: MLRA	aly) alned Leave	es (B9) (e)		Secondary II Water-S	ndicators (2 or more required) stained Leaves (B9) (MLRA 1, 2 and 4B)
CMARKS:  'DROLOGY  'etland Hydrology Ir  imary Indicators (mir  _ Surface Water (A1  _ High Water Table	ndicators: nimum of on		i: check all that app Water-St: MLRA Sali Crus	aly) alned Leave 11, 2, 4A, a t (B11)	es (B9) (e) nd 4B)		Secondary II Water-S 4A, a	ndicators (2 or more required) stained Leaves (B9) (MLRA 1, 2 and 4B) e Pattems (B10)
DROLOGY    etland Hydrology Ir   imary Indicators (mir   Surface Water (A1   High Water Table     Saturation (A3)	adicators: nimum of or ) (A2)		i; check all that apr — Water-St MLRA — Salf Crus — Aquatic Ir	aliy) alined Leave 1, 2, 4A, a t (B11) overtebrates	es (B9) (ex nd 4B) s (B13)		Secondary I.  Water-S 4A, a Drainage Dry-Sea	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2 and 4B) e Pattems (B10) Ison Water Table (C2)
emarks:  DROLOGY  etland Hydrology Ir imary Indicators (mir Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3)	idicators: himum of or ) (A2) s (B2)		i; check all that apr — Water-St: MLRA — Salt Crus — Aquatic Ir — Hydroger	ained Leave 1, 2, 4A, a t (B11) overtebrates	es (B9) (ex nd 4B) s (B13) for (C1)	ccept	Secondary II  Water-S  4A, a  Drainago  Dry-Sea  Saturation	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2 and 4B) e Pattems (B10) Ison Water Table (C2) on Visible on Aerial Imagery (C9
emarks:  'DROLOGY  etland Hydrology Ir imary Indicators (mir _ Surface Water (A1 _ High Water Table _ Saturation (A3) _ Water Marks (B1) _ Sediment Deposits _ Drift Deposits (B3) _ Algal Mat or Crust	idicators: himum of or ) (A2) s (B2)		i; check all that apo Water-Sh MLRA Sali Crus Aquatic Ir Hydroger X Oxidized	ained Leave 1, 2, 4A, a t (B11) overtebrates	es (B9) (e) nd 4B) s (B13) for (C1) res along t	ccept	Secondary II  Water-S  4A, a  Drainage Dry-Sea  Saturate ts (C3)  Geomor	ndicators (2 or more required) stained Leaves (B9) (MLRA 1, 2 and 4B) e Pattems (B10) son Water Table (C2) on Visible on Aerial Imagery (C1 philc Position (D2)
PROLOGY  Vetland Hydrology Ir  Surface Water (A1  High Water Table  Saturation (A3)  Water Marks (B1)  Sediment Deposits  Drift Deposits (B3)  Algal Mat or Crust  Iron Deposits (B5)	adicators: nimum of or ) (A2) s (B2)		i; check all that apo Water-Sh MLRA Sali Crus Aquatic Ir Hydroger X Oxidized	aily) ained Leave a 1, 2, 4A, a t (B11) overlebrates a Sulfide Od Rhīzospher of Reduce	es (B9) (ex nd 4B) s (B13) for (C1) res along t d fron (C4	ccept Living Roo	Secondary II  Water-S  4A, a  Drainage Dry-Sea  Saturate ts (C3) Geomor Shallow	ndicators (2 or more required) stained Leaves (89) (MLRA 1, 2 and 4B) e Pattems (810) son Water Table (C2) on Visible on Aerial Imagery (C1 phic Position (D2) Aquitard (D3)
PROLOGY  Petland Hydrology Ir  Surface Water (A1  High Water Table  Saturation (A3)  Water Marks (B1)  Sediment Deposits  Drift Deposits (B3)  Algal Mat or Crust  Iron Deposits (B5)  Surface Soil Crack	adicators: nimum of or ) (A2) s (B2) (B4) s (B6)	e required	i; check all that and Water-Sti MLRA Sali Crus Aquatic Ir Hlydroger X Oxidized Presence Recent In Stunted of	ained Leave 1, 2, 4A, a t (B11) nvertebrates I Sulfide Od Rhīzospher of Reducei on Reducei or Stressed	es (B9) (e) nd 4B) s (B13) for (C1) res along t d fron (C4 on in Tilled Ptants (D1	ccept Living Roo ) Soils (C6	Secondary II  Water-S  4A, a  Drainage Dry-Sea  Saturate ts (C3) Geomor Shallow FAC-Ne	ndicators (2 or more required) stained Leaves (89) (MLRA 1, 2 and 48) e Patterns (810) sson Water Table (C2) on Visible on Aerial Imagery (C1 phic Position (D2) Aquitard (D3)
emarks:  **DROLOGY**  **Total And The Company Indicators (minument)  **Surface Water (A1	adicators: himum of or ) (A2) s (B2) (B4) s (B6) on Aerial in	e required	d; check all that and Water-Sti MLRA Sali Crus Aquatic Ir Hlydroger X Oxidized Presence Recent In Stunted c	ained Leave 1, 2, 4A, a t (B11) nvertebrates I Sulfide Od Rhīzospher of Reducei on Reducei or Stressed	es (B9) (e) nd 4B) s (B13) for (C1) res along t d fron (C4 on in Tilled Ptants (D1	ccept Living Roo ) Soils (C6	Secondary II  Water-S  4A, a  Drainage Dry-Sea  Saturation Shallow FAC-Ne Raised A	ndicators (2 or more required) stained Leaves (89) (MLRA 1, 2 and 4B) e Pattems (810) son Water Table (C2) on Visible on Aerial Imagery (C1 phic Position (D2) Aquitard (D3)
PROLOGY  Petland Hydrology Irrimary Indicators (mirror Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Surface Soil Crack Inundation Visible Sparsely Vegetate	adicators: himum of or ) (A2) s (B2) (B4) s (B6) on Aerial in	e required nagery (87 Surface (E	i: check all that applications of the control of th	ained Leave 1, 2, 4A, a t (B11) nvertebrates I Sulfide Od Rhīzospher of Reducei on Reducei or Stressed	es (B9) (e) nd 4B) s (B13) for (C1) res along t d fron (C4 on in Tilled Ptants (D1	ccept Living Roo ) Soils (C6	Secondary II  Water-S  4A, a  Drainage Dry-Sea  Saturation Shallow FAC-Ne Raised A	ndicators (2 or more required) stained Leaves (89) (MLRA 1, 2 and 48) e Pattems (810) sson Water Table (C2) on Visible on Aerial Imagery (Ct phic Position (D2) Aquitard (D3) sutral Test (D5) Ant Mounds (D6) (LRR A)
/DROLOGY /etland Hydrology Ir rimary Indicators (mir Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Surface Soil Crack Inundation Visible Sparsely Vegetate eld Observations:	tdicators: aimum of or ) (A2) s (B2) (B4) s (B6) on Aerial in d Concave	e required nagery (87 Surface (E	i; check all that app — Water-St: MLRA — Salt Crus — Aquatic In — Hydroger X Oxidized — Presence — Recent In — Stunted co	ained Leave 1, 2, 4A, a t (B11) nvertebrates Sulfide Od Rhizospher of Reduces on Reduction Stressed	es (B9) (e) nd 4B) s (B13) for (C1) res along t d fron (C4 on in Tilled Ptants (D1	ccept Living Roo ) Soils (C6	Secondary II  Water-S  4A, a  Drainage Dry-Sea  Saturation Shallow FAC-Ne Raised A	ndicators (2 or more required) stained Leaves (89) (MLRA 1, 2 and 48) e Pattems (810) sson Water Table (C2) on Visible on Aerial Imagery (Ct phic Position (D2) Aquitard (D3) sutral Test (D5) Ant Mounds (D6) (LRR A)
PROLOGY Vetland Hydrology Informary Indicators (minumer) Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Surface Soil Crack Inundation Visible Sparsely Vegetate (eld Observations: unface Water Present)	tdicators: himum of or ) (A2) s (B2) (B4) s (B6) on Aerial in d Concave	e required nagery (B7 Surface (E	i; check all that app — Water-St: MLRA — Salf Crus — Aquatic In — Hydroger X Oxidized — Presence — Recent In — Stunted co Other (Ex	alty) alined Leave 1, 2, 4A, a t (B11) evertebrates Sulfide Od Rhizospher of Reduce on Reduction r Stressed splain in Reductes	es (B9) (ex nd 4B) s (B13) for (C1) es along t d fron (C4 on in Tilled Ptants (D1 marks)	ccept Living Roo ) Soils (C6 ) (LRR A)	Secondary II  Water-S  4A, a  Drainage Dry-Sea  Saturation Shallow FAC-Ne Raised A	ndicators (2 or more required) stained Leaves (89) (MLRA 1, 2 and 48) e Pattems (810) sson Water Table (C2) on Visible on Aerial Imagery (Ct phic Position (D2) Aquitard (D3) sutral Test (D5) Ant Mounds (D6) (LRR A)
/DROLOGY /etland Hydrology Ir rimary Indicators (mir Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Surface Soil Crack Inundation Visible Sparsely Vegetate eld Observations: urface Water Present? aturation Present? aturation Present?	tdicators: aimum of or ) (A2) s (B2) (B4) s (B6) on Aerial Ind Concave ? Yey	nagery (B7 Surface (B S N	i; check all that applications of the control of th	ained Leave 1, 2, 4A, a t (B11) nvertebrates Sulfide Od Rhizospher of Reduces on Reduction r Stressed splain in Res arches);	es (B9) (ex nd 4B) s (B13) for (C1) res along t d Iron (C4 on in Tilled Ptants (D1 marks)	Living Roo ) Soils (C6 I) (LRR A)	Secondary II  Water-S  4A, a  Drainage Dry-Sea  Saturation Shallow FAC-Ne Raised A  Frost-He	ndicators (2 or more required) stained Leaves (B9) (MLRA 1, 2 and 4B) e Patterns (B10) son Water Table (C2) on Visible on Aerial Imagery (C1 phic Position (D2) Aquitard (D3) sutral Test (D5) Ant Mounds (D6) (LRR A) eave Hummocks (D7)
YDROLOGY Vetland Hydrology Ir rimary Indicators (mir Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Surface Soil Crack Inundation Visible	tdicators: aimum of or ) (A2) s (B2) (B4) s (B6) on Aerial Ind Concave ? Yey	nagery (B7 Surface (B S N	i; check all that applications of the control of th	ained Leave 1, 2, 4A, a t (B11) nvertebrates Sulfide Od Rhizospher of Reduces on Reduction r Stressed splain in Res arches);	es (B9) (ex nd 4B) s (B13) for (C1) res along t d Iron (C4 on in Tilled Ptants (D1 marks)	Living Roo ) Soils (C6 I) (LRR A)	Secondary II  Water-S  4A, a  Drainage Dry-Sea  Saturation Shallow FAC-Ne Raised A  Frost-He	ndicators (2 or more required) stained Leaves (89) (MLRA 1, 2 and 48) e Patterns (810) sson Water Table (C2) on Visible on Aerial Imagery (C1 phic Position (D2) Aquitard (D3) sutral Test (D5) Ant Mounds (D6) (LRR A) save Hummocks (D7)
YDROLOGY Vetland Hydrology Ir rimary Indicators (mir Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Surface Soil Crack Inundation Visible Sparsely Vegetate ield Observations: urface Water Present? aturation Present?	tdicators: aimum of or ) (A2) s (B2) (B4) s (B6) on Aerial Ind Concave ? Yey	nagery (B7 Surface (B S N	i; check all that applications of the control of th	ained Leave 1, 2, 4A, a t (B11) nvertebrates Sulfide Od Rhizospher of Reduces on Reduction r Stressed splain in Res arches);	es (B9) (ex nd 4B) s (B13) for (C1) res along t d Iron (C4 on in Tilled Ptants (D1 marks)	Living Roo ) Soils (C6 I) (LRR A)	Secondary II  Water-S  4A, a  Drainage Dry-Sea  Saturation Shallow FAC-Ne Raised A  Frost-He	ndicators (2 or more required) stained Leaves (89) (MLRA 1, 2 and 48) e Patterns (810) sson Water Table (C2) on Visible on Aerial Imagery (C1 phic Position (D2) Aquitard (D3) sutral Test (D5) Ant Mounds (D6) (LRR A) save Hummocks (D7)
/DROLOGY /etland Hydrology Ir rimery Indicators (mir Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Surface Soil Crack Inundation Visible Sparsely Vegetate eld Observations: urface Water Present? ater Table Present? ater Table Present? ater Table Recorded Date escribe Recorded Date	tdicators: aimum of or ) (A2) s (B2) (B4) s (B6) on Aerial Ind Concave ? Yey	nagery (B7 Surface (B S N	i; check all that applications of the control of th	ained Leave 1, 2, 4A, a t (B11) nvertebrates Sulfide Od Rhizospher of Reduces on Reduction r Stressed splain in Res arches);	es (B9) (ex nd 4B) s (B13) for (C1) res along t d Iron (C4 on in Tilled Ptants (D1 marks)	Living Roo ) Soils (C6 I) (LRR A)	Secondary II  Water-S  4A, a  Drainage Dry-Sea  Saturation Shallow FAC-Ne Raised A Frost-He	ndicators (2 or more required) stained Leaves (89) (MLRA 1, 2 and 48) e Patterns (810) sson Water Table (C2) on Visible on Aerial Imagery (C1 phic Position (D2) Aquitard (D3) sutral Test (D5) Ant Mounds (D6) (LRR A) save Hummocks (D7)

M C AGAIN THE TAGE	AIA FOR	M – Western Mo	xuntains, Valleys, ar	nd Coast Region
Project/Site: McCann AN# 211-283-00	H	City/County: Tum	buldt Co.	_ Sampling Date: 6/20/19
Applicant/Owner.				Sampling Point; 566
Investigator(s): JAMES REGAN		Section, Township, I	Danger	ř.
Landform (hillslope, terrace, etc.): toe sloke - terrace	race	Local relief (concave	e, convex, none): Aat-	Concave Slope 1961-1-3
Subregion (LRR):	Lat: At	2.3284	Long: -123.83	<b>59</b> Datum:
Soil Map Unit Name: Shively flat Priexi	and -GA	25 A	NWI classif	
Are climatic / hydrologic conditions on the site typical for ti			(If no explain in	Ramarke 1
Are Vegetation, Soil, or Hydrology	significantly			present? Yes X No
Are Vegetation, Soil, or Hydrology		112	needed, explain any answ	
SUMMARY OF FINDINGS - Attach site map				
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes X  Yes X	No No No	is the Sample within a Wetl	ed Area land? Yes)	
Remarks: Site is gazal moun at ha Hydralogy has been after	ed this	tinc 2009/201	Ze years, like 10-Jeasanl Glob	or longer. es ditchel around stie.
VEGETATION - Use scientific names of pla				
Tree Stratum (Plot size: 10 m	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test work     Number of Dominant S     That Are OBL, FACW,	Species 7
2			Total Number of Domi	And And
3,			Species Across All Str	
4,			Percent of Dominant S	Charles (Ch.)
Sapling/Shrub Stratum (Plot size: 10m	1000	= Total Cover	That Are OBL, FACW,	or FAC: (A/B)
1			Prevalence Index wo	rksheet:
2			Total % Cover of:	
3				×1=
4				x2=
5				x3=
Herb Stratum (Plot size: 102		= Total Cover	1 1994	x4= x5=
1. Conserva echinates	9	NI	The second secon	(A) (B)
2 Cordus Dyenocephalus		NI		The second secon
3. Roobanes Satisas	25	_ NI		<=B/A=
4. Hordown montinum	10	Y FAC	Hydrophytic Vegetation	on Indicators: Hydrophytic Vegetation
5. Bellis peranis	22		2 - Dominance Tes	
6. Festica (Lolim) parenne	_ 8	- Ac	3 - Prevalence Ind	
7. Rumex Engas	43	- <u>ac</u>	4 - Morphological A	Adaptations 1 (Provide supporting
8. In Elium dubium	42	- MCN	data in Remark	s or on a separate sheet)
9. Bams hadracess	<u>&lt;5</u>	- MEU	5 - Wetland Non-V	
10. Neothe Polegium	40	1, 08r		phytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: 10m)	88	= Total Cover	'Indicators of hydric soi be present, unless dist	il and wetland hydrology must urbed or problematic.
1			Hydrophytic	
2			3.F	s_XNo
% Bare Ground in Herb Stratum 15 &		= Total Cover	Present? Ye	s_/No
low spot at e	nd of	Jesp trail		

-	-	1	•	

Sampling Point: 5P 6

Depth Matrix	Redox Features	
inches) Color (moist) %	Color (moist) % Type¹ Loc	
1-2 1048 3/2 97	10 ya 4 6 3 C PL	
-6 10423/ 98	1048 416 2 C M	Sal
2-20 10 yr 3/1 100		Sand
	-	
The second secon		
Type: C=Concentration, D=Depletion, F	M=Reduced Matrix, CS=Covered or Coated San	d Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
lydric Soil Indicators: (Applicable to	all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	X Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2) ·	Stripped Matrix (S6)	Red Parent Material (TF2)
_ Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLR/	
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Depleted Matrix (F3)     Redox Dark Surface (F6)	36 37
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	Indicators of hydrophytic vegetation and
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	wetland hydrology must be present, unless disturbed or problematic.
Testrictive Layer (if present):		unless disidibed of proplematic.
Type:		
Depth (inches):	*	Hydric Soil Present? Yes X No
Depth (Inches):Remarks;	<del></del>	Hydric Soil Present? Yes X No
Remarks;  Poor rot golff &	-557	Hydric Soil Present? Yes X No
YDROLOGY	-557	Hydric Soil Present? Yes X No
YDROLOGY Wetland Hydrology Indicators:	ired, check all that apply)	
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one requ		Secondary Indicators (2 or more required)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one redu	Water-Stained Leaves (B9) (except	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2,
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requ  Surface Water (A1)  High Water Table (A2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	Secondary Indicators (2 or more required)  Water-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B)
YDROLOGY Vetland Hydrology indicators: Primary Indicators (minimum of one requ  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	Secondary Indicators (2 or more required)  Water-Stained Leaves (89) (MLRA 1, 2,  4A, and 4B)  Porainage Patterns (810)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requestrated Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2,  4A, and 4B)  Torainage Patterns (B10)  Dry-Season Water Table (C2)
YDROLOGY Vetland Hydrology indicators: Primary Indicators (minimum of one requ  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)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one redu  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) X Oxidized Rhizospheres along Living	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3) — Geomorphic Position (D2)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requestrated Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) X Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3) — Geomorphic Position (D2)  Shallow Aquillard (D3)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestrates Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) X Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquillard (D3)  (C6)  FAC-Neutral Test (D5)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestrates Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) XOxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  R A)  Raised Ant Mounds (D6) (LRR A)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestion (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  XOxidized Rhizospheres along Living Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR (B7)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3) — Geomorphic Position (D2)  Shallow Aquillard (D3)  (C6) — FAC-Neutral Test (D5)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requirement indicators (Minimum of one requirement indicators)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  XOxidized Rhizospheres along Living Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR (B7)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  R A)  Raised Ant Mounds (D6) (LRR A)
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one requestrated Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface  Field Observations:	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  XOxidized Rhizospheres along Living Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR (B7)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  R A)  Raised Ant Mounds (D6) (LRR A)
YDROLOGY  Wetland Hydrology Indicators: Primary Indicators (minimum of one requestion of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave SurfaceField Observations: Surface Water Present? Yes	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  XOxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR  Ofher (Explain in Remarks)  te (B8)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  R A)  Raised Ant Mounds (D6) (LRR A)
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one requestion (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface  Field Observations:  Surface Water Present?  Ves  Saturation Present?  Yes  Saturation Present?	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  X Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR (B7)  Other (Explain in Remarks)  (B8)  No X Depth (inches):	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3) — Geomorphic Position (D2)  Shallow Aquilard (D3)  (C6) — FAC-Neutral Test (D5)  R A) — Raised Ant Mounds (D6) (LRR A)
YDROLOGY  Wetland Hydrology indicators:  Primary Indicators (minimum of one requestions)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface  Field Observations:  Surface Water Present?  Water Table Present?  Yes  Saturation Present?  Yes  Includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  X Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR  (B7)  Other (Explain in Remarks)  (B8)  No X Depth (inches):  No X Depth (inches):	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3) — Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6) — FAC-Neutral Test (D5)  R A) — Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)  Wetland Hydrology Present? Yes X No
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestion of the requesti	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  X Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR (B7)  Other (Explain in Remarks)  (B8)  No X Depth (inches):	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3) — Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6) — FAC-Neutral Test (D5)  R A) — Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)  Wetland Hydrology Present? Yes X No

AV - AND BELEVINALION D				
Project/Site: McCann ADN# 211-283-00	<b>7</b> city/0	County: Humb	JH G.	Sampling Date: 6/20/19
Applicant/Owner;				Sampling Point: 59 7
Investigator(s): James Ready	Secti	on, Township, R		_ sometimes and
Landform (hillslope, terrace, etc.) - toe slage - ten	GC Loss	d rollef (námecus	convey paral Ad-	Concorde Com ton De-2
				59 Datum:
Soil Map Unit Name: Shively flat Mark	- Late De De	aring	Long: - 163.83	Datum:
Are climatic / hydrologic conditions on the site typical for the		esNo_	(If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrology           Are Vegetation, Soil, or Hydrology				"present? Yes X No
SUMMARY OF FINDINGS - Attach site map			eeded, explain any ansv	
		ipinig point	oodiions, nanscei	.s, important reacures, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes  Yes  Yes	Vo X	Is the Sample within a Wetla		No X
Remarks: 8 L	, b. C			
Remarks: Site is grazal/mown and has Hydralogy has been after	nam Jar	Trees To	To years, like	ongto.
Hydralogy has been alter	ed the since	2009 2010	- Jeasand Clay	es diffiched around stre.
VEGETATION - Use scientific names of plan				
		ninant Indicator	Dominance Test wor	rksheet:
Tree Stratum (Plot size: 10 m	% Cover Spe		Number of Dominant	ALCOHOL: STATE OF THE PARTY OF
1			That Are OBL, FACW	
2		<del></del>	Total Number of Dom	Inant 7
3			Species Across All St	rata:
4	-		Percent of Dominant 8	Species 477
Sabling/Shrub Stratum (Plot size: 10~ )	= 10	tal Cover	That Are OBL, FACW	
1			Prevalence Index wo	
2			The state of the s	Multiply by:
3				x1=
4			a a	x2=
5			12-27-1-2	×3= ×4=
Herb Stratum (Plot size: M2	= To	tal Cover		x4= x5=
1. Marine Alajiva	10 V	OBL		(A) (B)
2. Bellis peremis	23	NI		70 70
3. Raphons Jotius	10 Y	NI		x = B/A =
4. Cardins premoaphles	10 4	NI	Hydrophytic Vegetat	
5. Hordina marionin	8 1	HIC	2 - Dominance Te	Hydrophytic Vegetation
6. Brooms Nordnaccous	5	FRED	3 - Prevalence Inc	
7. Silybur Mandrum	10 4			Adaptations <sup>1</sup> (Provide supporting
8. Cynatics echinalis	8 '4	NI	data in Remark	ks or on a separate sheet)
9. Hypichias palication	5		5 - Wetland Non-	Vascular Plants <sup>1</sup>
10. Plantigo lonculation	7	FACU	Problematic Hydro	ophytic Vegetation¹ (Explain)
11. Torxicum officiente	<u> </u>			oil and welland hydrology must
Whoda Vina Steeling (Blat to 1/4 to	= Tot	al Cover	be present, unless dis	rained of problematic.
Woody Vine Stratum (Plot size: 10md )	15	/ 57.		
2.	1	HAC	Hydrophytic Vegetation	~
	= Tat	al Cover	Present? Y	esNo_X
% Bare Ground in Herb Stratum	= 100	as Cuver		
Remarks: + Rumax acutasella <52		can all	bunton graze p	active Service
+ Trifliam Subternation <2	Z	INIX OF C	minima diesert	miloto Aperica.

M C AGAIL AT A C	aia furm - -	- Western Mou	intains, Valleys, a	nd Coast Region
Project/Sile: McCann ARN# 211-283-00	City	County: Humb	ald G.	_ Sampling Date; 6/20/19
Applicant/Owner:			State: CA.	_ Sampling Point: 59 8
Investigator(s): James Regan	Sec	tion, Township, Ra	ange:	
Landform (hillslope, terrace, etc.): toe dok - ter	race Lor	al relief (concave,	convex, none): flat-	Concave Slope (%): 0-3
Subregion (LRR);	Lat: 40 .3	3284	Long: -123.83	59 Datum:
Soil Map Unit Name: Shively Act + Where	and-GARB	Eaville	NWI classi	fication: DANE
Are climatic / hydrologic conditions on the site typical for ti	nis time of year?	Yes X No	(lf no. explain in	Remarks.)
Are Vegetation, Soil, or Hydrology				present? Yes X No
Are Vegetation, Soil, or Hydrology			eeded, explain any ansv	
SUMMARY OF FINDINGS - Attach site map				
Hydric Soil Present? Yes Wetland Hydrology Present? Yes	No X No X	Is the Sampler within a Wetla	nd? Yes	No X
Remarks: Site is gazal/mown and Ma Hydralogy has been alter VEGETATION - Use scientific names of pla	s Brew For al W Sinc nts.	- 2007/2010	20 years, like - Jeasanl Craw	ly longer. es diffehed around site.
	Absolute Do	minant Indicator	Dominance Test wor	rksheet:
Tree Stratum (Plot size: 10 m	% Cover Sp	ecies? Status	Number of Dominant	
2			That Are OBL, FACW	or FAC: (A)
3.			Total Number of Domi	
4			Species Across All Str	rafa: (B)
La succession de la Companya de la C		otal Cover	Percent of Dominant 8 That Are OBL, FACW	Species , or FAC: 667 (A/B)
Sapling/Shrub Stratum (Plot size: 10 16			Prevalence Index wo	- Projection - Projection
9			Total % Cover of:	
3			OBL species	x1=
4			FACW species	×2=
5,			FAC species 5	
102		otal Cover	FACU species 5	
Herb Stratum (Plot size: M	10	( G.,	UPL species	
1. Roma hadenceaes 2. Festica (Islian) December	30 1	y men	Column Totals: 17	0.30.000a
3. Platago laccolata	30 Y	C	Prevalence Inde	x = B/A = 3.5
4. Raphons Satives	8	NI	Hydrophytic Vegetat	
5. Horden Mononin	3	FAC	X 2 - Dominance Te	Hydrophytic Vegetation
6,			3 - Prevalence Inc	
7	<del>-</del>		4 - Morphological	Adaptations (Provide supporting
8			data in Remark	ks or on a separate sheet)
9	-		5 - Wetland Non-\	70
10				ophytic Vegetation (Explain)
1,000	93 = To	tal Cover	be present, unless dist	oil and wetland hydrology must turbed or problematic.
Woody Vine Stratum (Plot size: 10 m	= 10			
1. Rubis commissions	28	FAC	Hydrophytic	, 0
2			Vegetation	γ
% Bare Ground in Herb Stratum	)=To	tal Cover	Present? Ye	es_/\No
Remarks:	_		Pass	ies dominance .
Ungrazal portion of field	1 (fenced	) - thuck	gasses fails	Promilence - MARKINA

\* 1

(inches) Color (mois	st) %	Color (moist)	x Features  "Type"	Loc <sup>2</sup>	-	***
0-6 1042 A/1		10 ye 4 4			Texture	:Remarks
- 16 1 1		in Alst LLA	10	In	Sody day	learn
7-16 10 ye 3/	2 100	·		-		
				-		
<sup>1</sup> Type: C=Concentration, D=	Penletion PM-	Poduced Matrix Co			-	
Hydric Soil Indicators: (Ap	plicable to all	LRRs. unless other	=Covered or Coate	d Sand Gra		ion: PL=Pore Lining, M=Ma
Histosol (A1)		Sandy Redox (S				for Problematic Hydric So
Histic Epipedon (A2)		Stripped Matrix			2 cm N	лиск (А10) arent Material (ТF2)
Black Histic (A3)			/lineral (F1) (except	MLRA 1)		arent Material (1F2) Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)		Loamy Gleyed I				(Explain in Remarks)
Depleted Below Dark Su		Depleted Matrix	(F3)		00101	Ameni at Leinervel
Thick Dark Surface (A12		Redox Dark Sur			a Indicators	of hydrophytic vegetation ar
Sandy Mucky Mineral (S		Depleted Dark S			wetland	hydrology must be present,
Sandy Gleyed Matrix (Se Réstrictive Layer (if presen	4)	Redox Depress	ions (F8)		unless	disturbed or problematic.
-						
A Section of the sect			20			
Depth (inches):					Hydric Soil Pr	resent? Yes No
B		55, F3,	er f6 or f	7		odenty tesNo
Remarks: Does no		55,F3,	or F6 or F	7		No.
Remarks:  Does not	t meet	55,F3,	er f6 or f	7		NO.
Remarks:  Does not  HYDROLOGY  Wetland Hydrology Indicate	ors:			7		
Remarks:  Does re  HYDROLOGY  Wetland Hydrology Indicate  Primary Indicators (minimum	ors:	check all that apply	· ().		Seconda	ary Indicators (2 or more req
HYDROLOGY Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1)	ors:	check all that apply	r) . ned Leaves (B9) (e:		Seconda	
HYDROLOGY  Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2)	ors:	check all that apply  Water-Stain MLRA	/) . ned Leaves (B9) (e: 1, 2, 4A, and 4B)		Seconda Wat	ary Indicators (2 or more req er-Stained Leaves (B9) (ML IA, and 4B)
HYDROLOGY  Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3)	ors:	check all that apply Water-Stail MLRA	/). ned Leaves (B9) (e: 1, 2, 4A, and 4B) (B11)		Seconda Wat P Drai	erv Indicators (2 or more req er-Stained Leaves (B9) (ML IA, and 4B) nage Pattems (B10)
HYDROLOGY  Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	ors:	check all that apply Water-Stail MLRA 1 Salt Crust (	/). ned Leaves (B9) (e: 1, 2, 4A, and 4B) (B11) reriebrates (B13)		Seconda Wat Drai	erv Indicators (2 or more requer-Stained Leaves (B9) (ML-A, and 4B) nage Patterns (B10) Season Weter Table (C2)
HYDROLOGY  Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	ors:	check all that apply Water-Stail MLRA Salt Crust ( Aquatic Inv	/). ned Leaves (B9) (e: 1, 2, 4A, and 4B) (B11) reriebrates (B13) Sulfide Odor (C1)	xcepţ	Seconda Wat Wat Drai Dry- Satu	arv Indicators (2 or more req er-Stained Leaves (B9) (ML IA, and 4B) nage Patterns (B10) Season Water Table (C2) tration Visible on Aerial Imag
HYDROLOGY  Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	ors:	check all that apply Water-Stail MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R	ned Leaves (B9) (e: 1, 2, 4A, and 4B) (B11) rertebrates (B13) Sulfide Odor (C1) hizospheres along	xcept Living Roots	Seconda Wat 4 — Dral — Dry- — Satu s (C3) — Geo	ary Indicators (2 or more ren er-Stained Leaves (B9) (ML IA, and 4B) nage Pattems (B10) Season Water Table (C2) Iration Visible on Aerial Imag
HYDROLOGY  Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	ors:	Check all that apply Water-Stail MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R	ned Leaves (B9) (e: 1, 2, 4A, and 4B) (B11) rertebrates (B13) Sulfide Odor (C1) hizospheres along of Reduced Iron (C4	xcept Living Roots	Seconda  Wat  Drai  Dry  Satu  (C3)  Sha	ary Indicators (2 or more ren er-Stained Leaves (B9) (ML IA, and 4B) nage Patterns (B10) Season Water Table (C2) Iration Visible on Aerial Imag proorphic Position (D2)
HYDROLOGY  Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	ors: of one required	check all that apply Water-Stail MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence c	ned Leaves (B9) (e. 1, 2, 4A, and 4B) (B11) rertebrates (B13) Sulfide Odor (C1) hizospheres along of Reduced Iron (C4) Reduction in Tilled	xcept Living Roots (1) d Soils (C6)	Seconda — Wat 4 — Dral — Dry- — Satu — Sha — FAC	ery Indicators (2 or more requer-Stained Leaves (B9) (ML-A, and 4B) Inage Patterns (B10) Season Water Table (C2) Iration Visible on Aerial Imaginorphic Position (D2) Illow Aquitard (D3) S-Neutral Test (D5)
HYDROLOGY  Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	ors:	check all that apply Water-Stail MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iron	ned Leaves (B9) (et 1, 2, 4A, and 4B) (B11) rertebrates (B13) Sulfide Odor (C1) hizospheres along of Reduced Iron (C4 1) Reduction in Tilled Stressed Plants (D	xcept Living Roots (1) d Soils (C6)	Seconda  — Wat  4  — Dral  — Dry- — Satu — Sha — FAC — Rais	erv Indicators (2 or more requer-Stained Leaves (B9) (MLIA, and 4B) Inage Patterns (B10) Season Water Table (C2) Ination Visible on Aerial Imaginorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) Sed Ant Mounds (D6) (LRR A
HYDROLOGY  Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aer	ors: of one required	Check all that apply Water-Stail MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or Other (Exp	ned Leaves (B9) (e. 1, 2, 4A, and 4B) (B11) rertebrates (B13) Sulfide Odor (C1) hizospheres along of Reduced Iron (C4) Reduction in Tilled	xcept Living Roots (1) d Soils (C6)	Seconda  — Wat  4  — Dral  — Dry- — Satu — Sha — FAC — Rais	ery Indicators (2 or more requer-Stained Leaves (B9) (ML-A, and 4B) Inage Patterns (B10) Season Water Table (C2) Iration Visible on Aerial Imaginorphic Position (D2) Illow Aquitard (D3) S-Neutral Test (D5)
HYDROLOGY  Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aer Sparsely Vegetated Cone	ors: of one required	Check all that apply Water-Stail MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or Other (Exp	ned Leaves (B9) (et 1, 2, 4A, and 4B) (B11) rertebrates (B13) Sulfide Odor (C1) hizospheres along of Reduced Iron (C4 1) Reduction in Tilled Stressed Plants (D	xcept Living Roots  () d Soils (C6)	Seconda  — Wat  4  — Dral  — Dry- — Satu — Sha — FAC — Rais	erv Indicators (2 or more requer-Stained Leaves (B9) (MLIA, and 4B) Inage Patterns (B10) Season Water Table (C2) Ination Visible on Aerial Imaginorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) Sed Ant Mounds (D6) (LRR A
HYDROLOGY  Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aer	ors: of one required rial Imagery (B7) cave Surface (B	check all that apply Water-Stail MLRA Salt Crust ( Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iron Stunted or Other (Exp	ned Leaves (B9) (e. 1, 2, 4A, and 4B) (B11) rertebrates (B13) Sulfide Odor (C1) thizospheres along of Reduced Iron (C4) Reduction in Tiller Stressed Plants (Dain in Remarks)	xcept Living Roots  I) J Soils (C6) 1) (LRR A)	Seconda  — Wat  4  — Dral  — Dry- — Satu — Sha — FAC — Rais	erv Indicators (2 or more requer-Stained Leaves (B9) (MLIA, and 4B) Inage Patterns (B10) Season Water Table (C2) Ination Visible on Aerial Imaginorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) Sed Ant Mounds (D6) (LRR A
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