Reference: 016209

Preliminary Jurisdictional Wetland Delineation

Jim Mabe Parcel Loleta, California

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QA/QC: BB/CG

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Abbreviations and Acronyms

ACOE United States Army Corps of Engineers

APN Assessor's parcel number

CDEC California Data Exchange Center

CFR Code of Federal Regulations

CP control point

CWA Clean Water Act

EPA United States Environmental Protection Agency

ERDC/CRREL United States Army Engineer Research and Development Center/Cold Regions

Research and Engineering Laboratory

FAC facultative wetland plant species

FACU facultative-upland plant species

FACW facultative-wet wetland plant species

GPS global positioning system

NCDC National Climatic Data Center

NL not listed plant species

NOAA National Oceanic & Atmospheric Administration

NR no reference

NRCS Natural Resources Conservation Service

NWI National Wetlands Inventory

OBL obligate wetland plant species

OHWM ordinary high water mark

PF01C freshwater forested/shrub wetland

R3UBF Riverine Wetland

RWQCB California Regional Water Quality Control Board

SHN Engineers & Geologists, Inc.

SWRCB State Water Resources Control Board

TP test pit

UPL upland plant species
USC United States Code

USDA United States Department of Agriculture

USFWS United States Fish & Wildlife Service

USGS United States Geological Survey

WDRs waste discharge requirements

WETS NRCS Climate Analysis for Wetlands

WFO weather forecast office

WoS waters of the State

WoUS waters of the United States

1.0 Introduction

SHN Engineers & Geologists, Inc. has prepared this preliminary jurisdictional wetland delineation for Jim Mabe in Loleta, California. On behalf of jurisdictional agencies over the study area, Mr. Mabe has requested a wetland delineation and botanical assessment for an open space consisting of one parcel divided into two portions by Rasmussen (Hawk's Hill) Road, near Loleta, CA.

1.1 Purpose

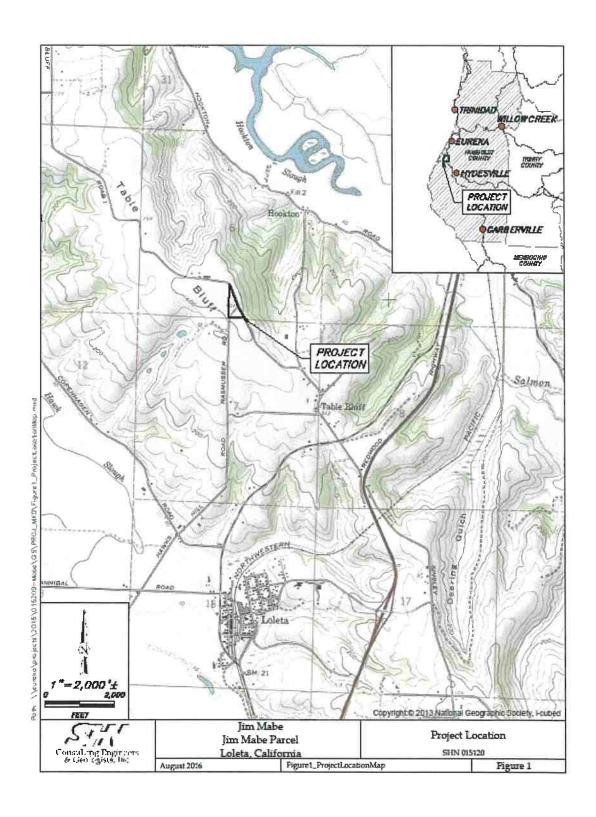
The purpose of this report is to identify potential wetlands and other waters of the U.S. within the study area, as defined by the United States Army Corps of Engineers (ACOE) methodology. The wetland delineation will help guide design, planning and permitting of a residential development within the study area. In conjunction with this delineation, a botanical assessment has been performed due to the site's habitat suitability for the western lily, *Lilium occidentale*, as well as a known population of this species three miles west of the parcel.

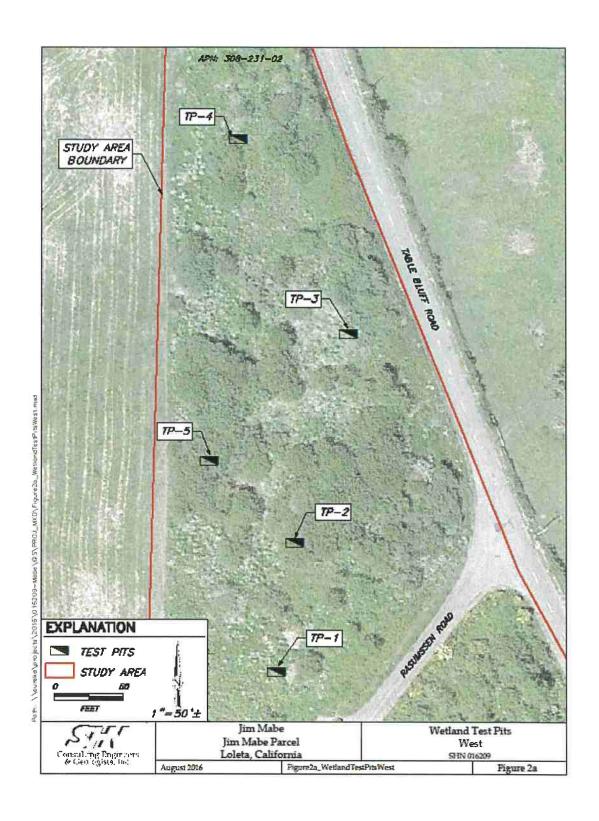
1.2 Project Location

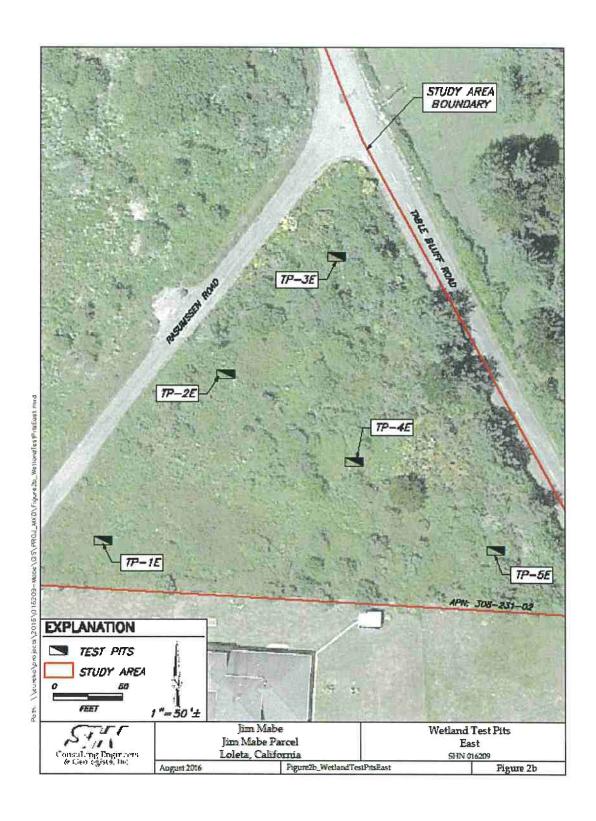
The project is located near Loleta, an un-incorporated community in Humboldt County (Figure 1; United States Geological Survey [USGS] Fields Landing 7.5-minute Quadrangle, Township 3 North, Range 1 West, Section 6, Humboldt Meridian). The property designated APN 308-231-002 straddles the north end of Hawk's Hill Road, at its junction with Table Bluff Road, 1.7 miles northeast of Loleta. The parcel lies 1.15 miles west of Highway 101 and 0.7 miles south of Hookton Slough, with a centerpoint latitude and longitude of 40.66536°/-124.22574°.

2.0 Project Description

The proposed project is a new single-family residential development. The site, surrounded by open pastureland that is grazed heavily, has been fenced long enough to allow shrubs and small broadleafed trees to emerge throughout the site. Before designing the development, a wetland delineation was required to determine setbacks and potential mitigation for the new construction. The United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) does not have wetlands mapped within the project area. This wetland study was performed to investigate the presence or absence of wetlands on-site, and (if present) to determine the size and an accurate boundary of wetlands found throughout the study area.







3.0 Environmental Setting

Elevation throughout the project area averages approximately 418 feet above mean sea level. Topography is mostly flat, with a gentle slope (0-3%) from the central portion of the property sloping toward the south and north (See Figure 2 and Appendix B, photo B1 and B2). Zoned Agriculture exclusive on the County of Humboldt GIS zoning map, 4.68 acres comprise the parcel examined in this report. Lying on a coastal terrace north of the town of Loleta, the site overlooks the Loleta Bottoms to the southwest. As with the majority of coastal bluff habitats around Loleta and Humboldt Bay, the land area has been manipulated for nearly 100 years with agricultural practices such as wheat cropping and heavy grazing regimes (McLaughlin & Harradine 1965). This heavy impact has led to a loss of the native loam topsoil and native plant communities in the pasture areas. With relatively high clay content, wet season grazing has led to soil compaction and slope erosion on surrounding parcels (Photo 1, Appendix 2). Due to the perimeter fence on this parcel, livestock grazing and compaction have been prevented, maintaining soil development and health.

The average annual precipitation for this area from October 1 through March 31 is 40.33 inches (WeatherDB, 2016). Rainfall for the period from October 1, 2015, through March 31, 2016, was 43.87 inches (CDEC, 2016), indicating that the 2015-2016 rain season is in an above-normal category.

4.0 Geologic Setting

The site is set upon an uplifted marine terrace between Humboldt Bay and the Eel River Delta. Soils within the project area have the United States Department of Agriculture (USDA) classification of Rohnerville Series, and are mapped in the *Soils of Western Humboldt County California* soil survey (McLaughlin, 1965). This series is a brunizem soil formed from sedimentary rock alluvium. The rock alluvium is predominantly greywacke and sandstone, providing a medium acid reaction.

5.0 Regulatory Setting

5.1 Federal Laws

5.1.1 Section 401 and 404 of the Clean Water Act

Under Section 404 (33 U.S. Code [USC] 1344) of the Clean Water Act (CWA), as amended, the ACOE and the Environmental Protection Agency (EPA) retain primary responsibility for permits to discharge dredged or fill material into "navigable waters of the United States." All

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

In summary, the definition of WoUS as defined by 33 Code of Federal Regulations (CFR) Section 328.3 includes:

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

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

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

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

Section 401 of the CWA (33 USC 1341) requires applicants that need a federal license or permit to obtain a certification from the state in which the discharge originates or would originate, or if appropriate, from the interstate water pollution control agency having jurisdiction over the affected waters at the point where the discharge originates or would originate, that the discharge will comply with the applicable effluent limitations and water quality standards. The responsibility for the protection of water quality in California rests with the State Water Resources Control Board (SWRCB) and it's nine Regional Water Quality Control Boards (RWQCBs).

5.1.2 Rivers and Harbors Appropriation Act of 1899

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

5.2 State Laws - Porter-Cologne Water Quality Act

The state maintains independent regulatory authority over the placement of waste, including fill, into Waters of the State (WoS) under the Porter-Cologne Water Quality Act. WoS are defined by the Porter-Cologne Water Quality Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." The SWRCB protects all waters in its regulatory scope, but has special responsibility for isolated wetlands and headwaters. WoS are regulated by the RWQCBs under the State Water Quality Certification Program, which regulates discharges of dredged and fill material under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act.

Projects that require an ACOE permit, or fall under other federal jurisdiction, and have the potential to impact WoS are required to comply with the terms of the Water Quality Certification Program. If a proposed project does not require a federal license or permit, but does involve activities that may result in a discharge to WoS, then the local RWQCB has the option to regulate such activities under its state authority in the form of waste discharge requirements (WDRs) or certification of WDRs. Water Quality Order No. 2004-0004-DWQ specifies general WDRs for dredged or fill discharges to waters deemed by the ACOE to be outside of federal jurisdiction under Section 404 of the CWA.

6.0 Methodology

Wetland delineation methods described in the U.S. Army Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, 1987) and The Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0) (ACOE, 2010) were used to identify potential wetlands and other waters. The routine method for wetland delineation described in the ACOE 1987 manual was used to identify potential wetlands within the study area. The ACOE method relies on a three-parameter approach, in which criteria for hydrophytic vegetation, hydric soils, and wetland hydrology must each be met (present at the point of field investigation) to conclude that an area qualifies as a jurisdictional wetland. Since this site lies within the Coastal Zone, 1-parameter wetlands were also sought.

Hydrophytic vegetation refers to plant species known to be adapted to wetland sites. To classify the hydrophytic plants onsite, the most recent *Western Mountains, Valleys, and Coast 2016 Regional Wetland Plant List* was used (ACOE, 2016). Hydric soils are soils that are formed under saturated conditions, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile (USDA, 2010). Wetland hydrology is demonstrated through direct evidence (primary indicators) or indirect evidence (secondary indicators) of flooding, ponding, or saturation for a significant portion of the growing season (ACOE, 2010).

At each investigation point, one test pit (TP) was excavated to determine if any wetland parameters were present or developing. When indicators of a wetland parameter are located, a pit is typically excavated within the apparent upland area, with a paired pit excavated in the apparent wetland area to determine the wetland boundary. No indications of wetland parameters were found onsite, so only individual pits were dug to document site conditions.

Prior to conducting the field investigation, SHN staff reviewed the 1979 USGS topographic quadrangle map (Figure 1), Soils of Western Humboldt County California, and NWI map (USFWS, 2016) (Appendix A). During the field investigation, sample points were characterized at the site for the aforementioned botanical, hydrological, and soil parameters.

Point locations were selected to:

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

A preliminary scoping assessment was performed on May 25, followed by thorough field investigations on July 27 and August 1, 2016. A total of 11 test pits were excavated to characterize the area and record information for soils, vegetation, and hydrology on ACOE Wetland Determination Data Forms (Appendix C). None of the pits displayed wetland parameters so further investigation was not required. Locations of TPs are shown on Figure 2. Photos of the study area are included in Appendix B.

All field mapping was completed by marking pit locations in proximity to surrounding roads, fence lines and trees or tree clusters on an aerial image. Since soils were generally homogeneous throughout the site, it was determined that use of the global positioning system was not necessary. Pit locations were delineated by circling the pit with marking paint, along with installation of a numbered pin flag at each pit.

6.1 Vegetation Methodology

While the period considered ideal for botanical surveys is typically April through June, this site lies within the area known for the occurrence of the rare Western Lily, *Lilium occidentale*. Late July is the prime blooming time for this species. With normal winter and spring rains, all other species still contained seed heads, making identification easy. Streamline staff performed a preliminary wetland & botanical assessment on May 25 and found no trace of *Lilium, Sidalcea*, or other rare species at that time. During the May assessment, there was no indication of wetlands. While Streamline staff is well versed in spotting early basal leaves and late season seed stalks of plants such as checkerbloom and lilies, the final fieldwork was done during the prime lily blooming period to ensure maximum confidence in the survey.

Prior to the field investigation, a review of plant species reported from the project area was performed by querying the "Consortium of California Herbaria" database records and "Calflora" observations. Absolute percent cover of each plant species was visually estimated within the sample point and within each vegetation stratum. The herbaceous stratum was inspected at a 5-foot radius centered on the sample point. Botanical nomenclature follows *The Jepson Manual, Vascular Plants of California* (Baldwin *et al.*, 2012) in addition to the online Jepson Interchange (U. C. Berkeley, 2016) for verification of species whose taxonomy may have changed since its publication.

The wetland indicator status of plant species for this investigation was based on the *Western Mountains, Valleys, and Coast 2016 Regional Wetland Plant List* (Lichvar et al., 2016). Plant species were classified as:

- Obligate (OBL)-occurs almost always within a wetland (estimated probability 99%).
- Facultative-wet (FACW)-usually occurs in wetlands (estimated probability 67-99%).
- Facultative (FAC)-equally likely to occur in wetlands or non-wetlands (estimated probability 33-67%).
- Facultative-upland (FACU)-usually occurs in non-wetlands (estimated probability 1-33%).
- Upland (UPL)-occurs almost always in non-wetlands (estimated probability 99%).
- Not listed (NL)-is scored as an upland plant and is calculated as such on wetland determination forms.

The 50/20 method¹ was applied to each stratum to determine the dominant plant species and to satisfy the hydrophytic vegetation criteria. Since neither hydric soils nor wetland hydrology were present, the prevalence index² was not applied. The occurrence and type of plant cover determine whether jurisdictional areas are identified as satisfying the vegetation criteria of a wetland or other waters.

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



6.2 Soils Methodology

Soils were field-verified for the presence or absence of hydric conditions. All TPs were dug to the maximum depth that would incorporate hydric soil indicators. The thickness of each soil horizon was measured. The Munsell Soil Color Chart (Kollmorgen Instruments Corporation, 1998) was referenced to determine the redoximorphic features and moist soil matrix colors (if present). Soils were closely inspected for hydric soil indicators, as defined by the NRCS "Field Indicators of Hydric Soils in the United States" (Version 7.0; USDA, 2010).

6.3 Hydrology Methodology

The presence of wetland hydrology indicators was determined by direct observation (or lack thereof) of surface water, groundwater, or shallow soil saturation during the field investigation. Since direct observation gave negative results, hydrology determinations were sought based on hydrology indicators (for example, drainage patterns, geomorphic position, and dry season water table) rather than actual direct evidence from saturation or inundation. Additionally, observations were made that would indicate whether or not the site is subject to flooding or standing water. Potential indicators would include water marks, drift deposits, sediment deposits, and similar features. Indicators of extended period saturation would include oxidized rhizospheres surrounding living roots or the presence of reduced iron or hydrogen sulfide in the soil profile.

7.0 Results

The preliminary field investigation was conducted on May 25, with the final field work performed on July 27 and August 1, 2016. Test pits (TP) were dug to characterize the area and record information on soils, vegetation, and hydrology. Locations of TPs are shown on Figure 2; completed "Wetland Determination Data Forms" are presented in Appendix C. Photos of the study area are shown in Appendix B.

7.1.1 Vegetation

The study area consists of relatively flat pasture habitat that has allowed shrubs and small broadleaf trees to emerge since the fence has prevented livestock grazing. Non-native grass species comprised the majority of plant cover and biomass, with other non-native ruderal herbaceous species composing the remainder. The vegetation was relatively similar throughout the site, consisting primarily of *Rubus ursinus* mixed with non-native grasses (Photo B2).

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

Scattered randomly around the site were *Frangula purshiana* and *Baccharis pilularis*. Although several facultative species such as *Frangula purshiana*, *Holcus lanatus* and *Conium maculatum* were common on the parcel, these plants were balanced out by the dominance of upland species such as *Rubus ursinus*, *Raphanus sativa* and *Anthoxanthum odoratum*. None of the test pit sites were dominated by hydrophytic vegetation.

A complete plant list is compiled in Table D-1 in Appendix D.

7.2 Soils

The wetland delineation study area, zoned Agriculture exclusive on the County of Humboldt GIS zoning map, contains 4.68 acres at latitude 40.6654 and longitude -124.2257. Lying on a coastal terrace north of the town of Loleta, the site overlooks the Loleta Bottoms to the southwest. While the surrounding soils showed evidence of overgrazing, including compaction and erosion, the parcel examined in this delineation had deep, friable soils showing evidence of healthy soil building processes and excellent infiltration (Photo B3). Although evidence of disturbance included the presence of ruderal species such as *Digitalis*, *Hieracleum* and *Raphanus*, along with the remains of a homestead, the volume of plant growth on the uncompacted soil has allowed organic matter, root mass and soil structure to develop, unlike the conditions found on the adjacent overgrazed parcels (Photo B4). Evidence of a former residence included a cement pad and stripped electrical hookups.

This site lies exclusively within the Rhonerville Soil Series described in the 1965 McLaughlin and Harradine Soil Survey, with the Rhonerville 2 map unit covering the entire site (Photo 2, Attachment 2). All of these are Silty Clay Loam-textured soils with deep, dark topsoil down to about 24 inches. This series is classified as a fine silty, mixed, isomesic Humic Normudult. With a moderate local climate and 40 inches of average annual rainfall, the local soils often support a dominance of facultative (hydrophytic) vegetation. However, the deep, well drained soils on this site appear to preclude development of wetland characteristics, including hydrophytic vegetation dominance (Photo 3, Attachment 2). The entire parcel was flat.

The Rohnerville soils qualify as Storie Rating 1 soils.

The Rohnerville Series consists of deep, moderately well drained, medium to fine textured alluvial soils on high river or marine terraces. Parent materials are mixed and the profile is medium in reaction. Slopes are flat or very gently undulating. Mean annual precipitation is between 1,016 to 1,270 millimeters. Mean annual temperature is about 11 degrees C.

The typical profile: A horizons: Hue: 10YR Value: 5 dry, 2 moist

Chroma: 2 (changing to 3 in A3 dry), moist or dry

Texture: silty clay loam Clay content: 32 to 34 percent Rock fragments: 0 percent gravel

Reaction: medium acid

B horizon:

Hue: 10YR dry, 7.5YR moist

Value: 6 dry, 5 moist Chroma: 4, moist or dry Texture: silty clay loam Clay content: 34 to 40 percent Rock fragments: 0 percent gravel

Reaction: medium acid

C horizon: (when present) Hue: 10YR dry, 7.5YR moist Value: 6 dry, 5 moist Chroma: 4, moist or dry Texture: silty clay loam

Clay content: 32 percent

Rock fragments: 0 percent gravel Reaction: moderately acid

(McClaughlin & Harradine, 1965).

Eleven test pits were excavated in the wetland study area representing 11 study locations: all pits were excavated as individual sites since no significant changes in vegetation or geomorphic position were evident (Figure 2). No pits contained hydric soils.

7.3 Hydrology

No wetland hydrology was present at any of the test pits. Pits were excavated to a depth of 24 inches to check for dry season water table, but all pits displayed a negative test for this indicator as well as all other hydrology indicators.

7.4 Ordinary High Water Mark (OHWM)

No OHWM features were observed at any location within or near the parcel.

8.0 Conclusions

The USFWS NWI website (Appendix A) did not show any wetlands within the boundary of the survey area. This survey was conducted in order to investigate definitively the presence or absence of wetlands on site, and the boundaries of any potential wetlands, for both 3-parameter Army Corps jurisdictional classification, as well as 1-parameter California Coastal Act classification. SHN conducted a study to investigate and define any boundaries. The site investigation occurred during a season with above-normal rainfall through the winter and spring season of 2015-2016. Following the ACOE 3-parameter guidelines, no portion of this parcel displayed any wetland parameters.

9.0 Limitations

The conclusions in this report represent a "snapshot in time" and it is possible that some species were not present at the time of the fieldwork.

This report documents the

Table 1				
Wetland Delin	eation Results			
Jim Mabe Delineation, Loleta, CA				
Upland Area	Area (acres)			
1 (entire site)	4.68			
Total	4.68			

investigation by, and best professional judgment of, SHN's botanist and soil scientist. The conclusions should be verified by the ACOE through receipt of a jurisdictional determination letter.

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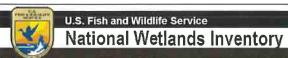
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National Wetlands Inventory

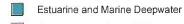




Mabe Wetlands Inventory







Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Lake

Freshwater Pond

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.

National Wetlands Inventory (NWI) This page was produced by the NWI mapper





Photo B1: West Edge of Site Overlooking Heavily Grazed Pasturelands.

Photo B2: Typical Site Vegetation Showing Frangula, Baccharis, Anthoxanthum and Iris.





Photo B3: Soil Pit Showing Dry, Friable Nature.

Photo B4: Soil Ped Showing Excellent Structure and Many Fine Roots.

Wetland Determination Data Forms

C

		1 (ntains, valleys, and Coast Region
	City/	County: Hy	mbold+ Sampling Date: 7/27/16
Applicant/Owner: Tim Mase			State: A Sampling Point:
Investigator(s): 55, 5P	Sect	ion, Township, Rai	nge: Sw/4, SE/4 Sec 6, T3N, RIW
Landform (hillslope, terrace, etc.): +erroce	Loca	al relief (concave, o	convex, none): Non Slope (%):
Subregion (LRR): A , MLRA	_ Lat: 40 · 6	654	Long: -124,2257 Datum: W658
Soil Map Unit Name: RoZ, Rhonerville	silty cli	ay loan, 0-	Slipe NWI classification: None
Are climatic / hydrologic conditions on the site typical for this			
Are Vegetation, Soil, or Hydrologys	ignificantly distu	rbed? Are "	Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology n	naturally problem	atic? (If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	1	npling point lo	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes N			
Hydric Soil Present? Yes N		Is the Sampled within a Wetlan	X Y
Wetland Hydrology Present? Yes N	0	The state of the s	163NOZ
Remarks:			
ROZ= Fine Silty, mixed, ison	nesiz t	Lymic No	orn udult
VEGETATION – Use scientific names of plan			
		minant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		ecies? Status	Number of Dominant Species
1.1			That Are OBL, FACW, or FAC:(A)
2			Total Number of Dominant
3			Species Across All Strata: (B)
4		atal Causa	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)	= To	nai Cover	That Are OBL, FACW, or FAC: (A/B)
1	·		Prevalence Index worksheet:
2			Total % Cover of:Multiply by:
3			OBL species x 1 = FACW species x 2 =
4			FAC species x 3 =
5			FACU species x 4 =
Herb Stratum (Plot size:)	= To	otal Cover	UPL species x 5 =
1. Rubus Wishus	79 V	FACIL	Column Totals: (A) (B)
2. Rubus armeniacus	10	FAC	
3. Conjum maculatum	1	FAC	Prevalence Index = B/A =
4. Backers pilularis	1	TAIL	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
5. Polistichum Muitum	_5	HACU	2 - Dominance Test is >50%
6. trangula pustiana	_1	FAC	3 - Prevalence Index is ≤3.0 ¹
7. Cirsium Vulgare	_5	FACU	4 - Morphological Adaptations (Provide supporting
8			data in Remarks or on a separate sheet)
9			5 - Wetland Non-Vascular Plants ¹
10			Problematic Hydrophytic Vegetation ¹ (Explain)
11	TAO -	 _	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	= Tot	al Cover	problematic.
1		, ,	Hydrophytic
2.			Vegetation
	= Tot	al Cover	Present? Yes No
% Bare Ground in Herb Stratum			
Remarks:	20		

~	~	

Sampling Point:

Profile Description: (Describ	e to the depth n	eeded to docui	ment the I	ndicator o	r confir	m the abse	ence of indica	tors.)	
Depth <u>Matrix</u>			x Features		Loc²	÷ 1	55	D1-	
(inches) Color (moist)		Color (moist)	%	Type ¹	Loc-	Textu	re	Remarks	
0-13 1046212	100 _								
15-19 JUYR3/2	100		- —						
19-26 10YR 4/4	70					L		w	
10 VE 317	-30					1	10	tound	
				—				TOVINO	
						0/2			
Type: C=Concentration, D=D	epletion, RM=Re	duced Matrix, C	S=Covered	d or Coated	Sand G	erains.	² Location: PL	=Pore Lining,	M=Matrix.
Hydric Soil Indicators: (App								blematic Hyd	
Histosol (A1)		Sandy Redox (2 cm Muck (A	10)	
Histic Epipedon (A2)	=	Stripped Matrix	(S6)			5-3	Red Parent M	aterial (TF2)	
Black Histic (A3)	12	Loamy Mucky	Mineral (F1	1) (except	MLRA 1)	Very Shallow	Dark Surface (TF12)
Hydrogen Sulfide (A4)	_	Loamy Gleyed)		-	Other (Explain	n in Remarks)	
Depleted Below Dark Surf	ace (A11)	Depleted Matri				4			
Thick Dark Surface (A12)	· -	Redox Dark Su					•	ophytic vegeta	
Sandy Mucky Mineral (S1)		Depleted Dark		·7)			1,00	ogy must be pr	
Sandy Gleyed Matrix (S4)		Redox Depres	Sions (F8)			_	uniess disturbe	d or problema	tic.
Restrictive Layer (if present)	•								~ 1
Туре:		-				714	0 - 11 D	. V	X
Depth (inches):						Hydric	Soil Present	Yes	_ No
						÷.			
HYDROLOGY									
Wetland Hydrology Indicato									2
Primary Indicators (minimum o	of one required; cl	heck all that app	oly)				Secondary Ind	icators (2 or me	ore required)
Surface Water (A1)		Water-Sta	ained Leav	es (B9) (e)	xcept	11	Water-Sta	ned Leaves (B	9) (MLRA 1, 2,
High Water Table (A2)		MLRA	1, 2, 4A,	and 4B)			4A, and	d 4B)	
Saturation (A3)		Salt Crus	t (B11)					Patterns (B10)	
Water Marks (B1)		Aquatic II	nvertebrate	es (B13)			Dry-Seaso	n Water Table	(C2)
Sediment Deposits (B2)			Sulfide O						ial Imagery (C9)
Drift Deposits (B3)		Oxidized	Rhizosphe	eres along I	Living Ro	oots (C3)		ic Position (D2	2)
Algal Mat or Crust (B4)		_		ed Iron (C4			Shallow A		
Iron Deposits (B5)				ion in Tilled			FAC-Neut	, ,	
Surface Soil Cracks (B6)		Stunted of	or Stressed	Plants (D	1) (LRR	A)		t Mounds (D6)	
Inundation Visible on Aeri			oplain in Re	emarks)			Frost-Hea	ve Hummocks	(D7)
Sparsely Vegetated Conc	ave Surface (B8)								
Field Observations:		V							v.
Surface Water Present?	Yes No								1
Water Table Present?	Yes No	1/							
Saturation Present?	Yes No	Depth (i	nches):		_ We	etland Hyd	rology Preser	t? Yes	_ No /
(includes capillary fringe) Describe Recorded Data (stre	am gauge, monito	oring well, aeria	l photos, p	revious ins	pections	s), if availat	ole:		
Describe Necorded Bata (one	ani gaago, mome	orning from, doring	, bilotoo, b		podione	,, avana.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Remarks:									
I tomario									
1									
1									

	TIA FORIVI – Western Wol	untains, valleys, and Coast Region
	City/County: Hun	bold+ Sampling Date: 7/27/16
Applicant/Owner: Jim Mabe		State: CA Sampling Point: 2
	Section, Township, Ra	ange:
Landform (hillslope, terrace, etc.):		convex, none): Slope (%): 2
Subregion (LRR):	Lat:	Long: Datum:
Soil Map Unit Name:	3/	NWI classification:
Are climatic / hydrologic conditions on the site typical for thi	4 44	
Are Vegetation, Soil, or Hydrology s		"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology r		eeded, explain any answers in Remarks.)
	7.7	locations, transects, important features, etc.
Hydrophytic Vegetation Present? YesN		d Area
Hydric Soil Present? Yes N Wetland Hydrology Present? Yes N	, , , , , , , , , , , , , , , , , , ,	^
Remarks:	0	
Tremains.		
0		
VEGETATION – Use scientific names of plan	ite .	
VEGETATION - 03e scientific frames of plan	Absolute Dominant Indicator	Deminera Test we debest
Tree Stratum (Plot size:)	% Cover Species? Status	Dominance Test worksheet: Number of Dominant Species
	95% YAC	That Are OBL, FACW, or FAC:(A)
2		Total Number of Dominant
3		Species Across All Strata: (B)
4	75.	20
	95% = Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 53 (A/B)
Sapling/Shrub Stratum (Plot size:)		Prevalence Index worksheet:
1 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:)	TO / CV	UPL species x 5 =
1. Rubus ursinus	SZ V TACY	Column Totals: (A) (B)
2. Conjum Maculatium	15 - FAC	Prevalence Index = B/A =
3. Raphanus satrua	5 FACU	Hydrophytic Vegetation Indicators:
4. Polystichum Muntuan		1 - Rapid Test for Hydrophytic Vegetation
5. Stachus ajugoides	2 06	2 - Dominance Test is >50%
6. Hera Cleum phaximum	- TAC	3 - Prevalence Index is ≤3.01
7		4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
8		5 - Wetland Non-Vascular Plants (
10		Problematic Hydrophytic Vegetation ¹ (Explain)
11		Indicators of hydric soil and wetland hydrology must
71. ·	109 = Total Cover 54	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	70-1 Total Cover 20.8	
1		Hydrophytic
2		Vegetation
W.B. Q. Strikelinia Olympia	= Total Cover	Present? Yes No No
% Bare Ground in Herb Stratum		
ivellars.		

-	-	
c	<i>5</i> 7	

ampling Point:

Depth (inches) Color (moist) % Color (moist) % Type' Loc² Texture Remarks O-IO 10 YR 2/2 100 Lown Same Compaction IO YR 3/2 100 Lown Same Compaction IO YR 3/2 100 Lown Same Compaction IO YR 3/2 35 Location: PL=Pore Lining, M=Mat Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Sandy Redox (S5) Loamy Mucky Mineral (F1) (except MLRA 1) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Hydric Soil Present? Yes Note that the surface of the problematic in the problemat	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Location: PL=Pore Lining, M=Mat Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soil Histosoil (A1) Sandy Redox (S5) 2 cm Muck (A10) Red Parent Material (TF2) 2 m Muck (A10) Red Parent Material (TF2) 2 m Muck (A10) Red Parent Material (TF2) 2 m Muck (A10) Red Parent Material (TF2) 3 m Mucky Mineral (F1) (except MLRA 1) 2 m Mucky Mineral (F1) (except MLRA 1) 3 m Mucky Mineral (F1) (except MLRA 1) 4 m Mucky Mineral (F1) (except MLRA 1) 5 m Mucky Mineral (F1) (except MLRA 1) 5 m Mucky Mineral (F1) (except MLRA 1) 4 m Mucky Mineral (F1) (except MLRA 1) 5 m Mucky Mineral (F1) (except MLRA 1) 6 m Mucky Mineral (F1) (except MLRA 1) 7 m Mucky Mineral (F1) (except	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Location: PL=Pore Lining, M=Matrix (Soli Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soli Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soli Indicators of Hydrophytic vegetation and wetland hydrology must be present, wetland hydrology must be present, unless disturbed or problematic. Type:	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Natrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, D=Depl	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, RM=Reduced Natrix, CS=Covered or Coated Sand Grains. Tupe: C=Concentration, D=Depletion, D=Depl	
¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Sandy Redox (S5) Histic Epipedon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (F3) Redox Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No	
¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Sandy Redox (S5) Histic Epipedon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (F3) Redox Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No	
Histosol (A1) Sandy Redox (S5) Stripped Matrix (S6) Black Histic (A3) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (F3) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No	ils³:
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Restrictive Layer (if present): Type: Depth (inches): Stripped Matrix (S6) Loamy Mucky Mineral (F1) (except MLRA 1) Depleted Matrix (F2) Other (Explain in Remarks) John Carry Shallow Dark Surface (F12) Wetland hydrology must be present, unless disturbed or problematic.	
Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, and Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if present): Type:	
Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No.	
Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No.	
Thick Dark Surface (A12) Redox Dark Surface (F6) Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No.	
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No.	٦
Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if present): Type:	u
Restrictive Layer (if present): Type: Depth (inches):	
Type:	
Depth (inches): No	\/
	X_{-}
Remarks:	1.0410.0
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required)	uired)
Surface Water (A1) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (ML	RA 1, 2,
High Water Table (A2) MLRA 1, 2, 4A, and 4B) 4A, and 4B)	
Saturation (A3) Salt Crust (B11) Drainage Patterns (B10)	
Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2)	
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Ima	gery (C9)
Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2)	
Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3)	
Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5)	
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR	A)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7)	
Sparsely Vegetated Concave Surface (B8)	
Field Observations:	
Surface Water Present? Yes No X Depth (inches):	
Water Table Present? Yes No Depth (inches):	1
	×.
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No N	×
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes N	<u>.X</u>
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No	<u>×</u>
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No No Depth (inches): No	<u></u>
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No No Depth (inches): No _	

WETLAND DETERMINATION DA	ATA FORM	I – Western Mou	ntains, Valleys, and Coast Region
Project/Site: Mabe, Table bluff Rd	c	ity/County: Hvw	Sampling Date: 7/27/16
Applicant/Owner: Tim Mabe			State: Sampling Point:
Investigator(s): Joseph Saler, San Poly	S	ection, Township, Rar	nge:
Landform (hillslope, terrace, etc.):	L	ocal relief (concave, o	convex, none): Nene Slope (%): 2
Subregion (LRR):			
Soil Map Unit Name:			NWI classification:
Are climatic / hydrologic conditions on the site typical for th	is time of year	r2 Vac X No	(If no explain in Domesks)
			Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology			A
Are Vegetation, Soil, or Hydrology			eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map		sampling point lo	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes N Hydric Soil Present? Yes N		Is the Sampled	Area
Wetland Hydrology Present? Yes N	No X	within a Wetlan	
Remarks:			
VEGETATION - Use scientific names of plan	nts.		
To Charles (Blateins)		Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
1			
3			Total Number of Dominant Species Across All Strata: (B)
4			
		= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:
Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
1			Total % Cover of: Multiply by:
2			OBL species x 1 =
3			FACW species x 2 =
4			FAC species x 3 =
5		Total Cover	FACU species x 4 =
Herb Stratum (Plot size:)		- Total Cover	UPL species x 5 =
1. Digitalis aravea	21	+fcu	Column Totals: (A) (B)
2. Holdes longtus	40	FAC	Prevalence Index = B/A =
3. Baccharis pilylans	20	UPL	Hydrophytic Vegetation Indicators:
4. Ptardium aquifinum	10-	FACU	1 - Rapid Test for Hydrophytic Vegetation
5. Ruhus Umsights	26	+ ACU	2 - Dominance Test is >50%
6. Conjun Macylotim	- 2 -	THO 1	3 - Prevalence Index is ≤3.01
8. Francula outshing	}	THU.	 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
9. Roghands Still	- 10	110	5 - Wetland Non-Vascular Plants 1
		MPh.	Problematic Hydrophytic Vegetation ¹ (Explain)
10 11	-,		Indicators of hydric soil and wetland hydrology must
11)	179	Total Cover 89.5	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)		35.8	
1			Hydrophytic
2			Vegetation Present? Yes No
9/ Flore Cround in Hoth Stratum		Total Cover	riesenti les No
% Bare Ground in Herb Stratum			
,			

0	-	11	
-	()	11	

Sampling Point: 3

Profile Description: (Describe to the de	epth needed to document the indicator or c	onfirm the abse	nce of indicators.)
Depth (inches)	Redox Features Color (moist) % Type ¹ L	oc² Texture	e Remarks
18-24+ 10 VR 3/4 RO 7.5 YR 3/2 20			Crotovina
¹ Type: C=Concentration, D=Depletion, R Hydric Soil Indicators: (Applicable to a	M=Reduced Matrix, CS=Covered or Coated Sall LRRs, unless otherwise noted.)		² Location: PL=Pore Lining, M=Matrix. cators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Redox (S5)		2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)	_	Red Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except ML		Very Shallow Dark Surface (TF12)
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)	3Ind	icators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)		vetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)		unless disturbed or problematic.
Restrictive Layer (if present):			KC 27
Туре:		- 1	×
Depth (inches):		Hydric	Soil Present? Yes No
HYDROLOGY Wetland Hydrology Indicators:			
Primary Indicators (minimum of one requi	ired: check all that anoly)	S	Secondary Indicators (2 or more required)
Surface Water (A1)	Water-Stained Leaves (89) (exce		Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	-	4A, and 4B)
Saturation (A3)	Salt Crust (B11)		Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrates (B13)	_	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	_	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Oxidized Rhizospheres along Living	ing Roots (C3)	Geomorphic Position (D2)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	_	Shallow Aquitard (D3)
Iron Deposits (85)	Recent Iron Reduction in Tilled S		FAC-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery		-	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surfac	e (88)		
Field Observations: Surface Water Present? Yes	No Depth (inches):		
Surface Water Present? Yes Water Table Present? Yes			\ /
Saturation Present? Yes (includes capillary fringe)		Wetland Hydr	rology Present? Yes No
Describe Recorded Data (stream gauge,	monitoring well, aerial photos, previous inspec	ctions), if availabl	le:
Remarks:			
1			
1			

WETLAND DETERMINATION	DATA FORM -	Western Mo	untains, Vallevs, an	nd Coast Region
Project/Site: Mabe, lable Bluff Rd	City	County: Ho	uboldt	Sampling Date: 7/27/
Applicant/Owner: Jim Mabe			State: CA	Sampling Point:
Investigator(s): 55, 56	Sec	tion Township R	ange:	
Landform (hillslope, terrace, etc.): #	Loc	al relief (concave	convex none). Non e	2 2
Subregion (LRR):	Lat-	ar remor (correave,	Long:	Slope (%):
	Lui.			
Are climatic / hydrologic conditions on the site typical fo	r this time of		NWI classifi	cation:KION C
Are Vegetation Soil or Hydrology	uns une or year?			
Are Vegetation, Soil, or Hydrology Are Vegetation, Soil, or Hydrology			"Normal Circumstances" eeded, explain any answe	present? Yes No No
SUMMARY OF FINDING\$ - Attach site many Hydrophytic Vegetation Present? Yes		ubing boint	ocations, transects	s, important features, etc.
Hydric Soil Present? Yes		Is the Sample	d Area	
Wetland Hydrology Present? Yes	1	within a Wetla		No X
Remarks:	7			
				3 .
VEGETATION – Use scientific names of pl	ants.			
Tree Stratum (Plot size:)	Absolute Dor	minant Indicator	Dominance Test work	sheet:
	% Cover Spe	cies? Status	Number of Dominant S	pecies 1
1 2			That Are OBL, FACW,	or FAC: (A)
3			Total Number of Domin	ant 1
3 4			Species Across All Stra	ta: (B)
Caulia (Charles and Charles an	= To	tal Cover	Percent of Dominant Sp That Are OBL, FACW, 6	
Sapling/Shrub Stratum (Plot size:)			Prevalence Index wor	
1			Total % Cover of:	
2				Multiply by: x 1 =
34				x2=
4 5.				x 3 =
AXE	= To	tal Cover		x 4 =
Herb Stratum (Plot-size:)	00	1 -	UPL species	x 5 =
1. Ruhus winus	_ <u>8</u>	FACU	Column Totals:	(A) (B)
2. Stacks a jugoides	_6	<u>Obl</u>	Prevalence Index	= R/Δ =
3. Holcus longitus	$-\frac{23}{6}$	- FAC	Hydrophytic Vegetatio	
4. Comum Maculatin 5. Digitalis involupa	- 12			ydrophytic Vegetation
6. Sonchw Oleraceus	- 14	- them	2 - Dominance Test	is >50%
7. Kachanus sativa		- 4Ph	3 - Prevalence Inde	x is ≤3.0 ¹
8. Epilobium Ciliatum		- OCH	4 - Morphological A	daptations ¹ (Provide supporting
0		FACW		or on a separate sheet)
9			5 - Wetland Non-Va	
11				hytic Vegetation¹ (Explain) and wetland hydrology must
	= Tota	I Cover	be present, unless distur	rbed or problematic.
Woody Vine Stratum (Plot size:)		I Cover 288		
1.			Hydrophytic	2 16
2			Vegetation	Y
% Bare Ground in Herb Stratum	= Tota	l Cover	Present? Yes	No <u>X</u>
Remarks:				

SOIL		Sampling Point:
Profile Description: (Describe to the d	lepth needed to document the indicator or conf	irm the absence of indicators.)
Depth Matrix	Redox Features	n E
(inches) Color (moist) %	Color (moist) % Type' Loc²	Texture Remarks
0-12 10YR. 2/2 100		
12-16 OYR 2/2 100		L Compacted
16-24+ JOYR 3/4 10M		
10/0 1/2		
10YN2/2 30		(sotovena
:		
***************************************		* * · · · · · · · · · · · · · · · · · ·
		Out 2 aution Dispose Links McMatrix
'Type: C=Concentration, D=Depletion, F Hydric Soil Indicators: (Applicable to	RM=Reduced Matrix, CS=Covered or Coated Sand	Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
		2 cm Muck (A10)
Histosol (A1) Histic Epipedon (A2)	Sandy Redox (S5) Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA	
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted_Below_Dark_Surface.(A1.1).		
Thick Dark Surface (A12)	Redox Dark Surface (F6)	Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		No.
Туре:		
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one requ	ired; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		Roots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils	
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LR	R A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
 Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface 		Plost-Heave Hullilliocks (DI)
Field Observations:	Ce (Bb)	
Surface Water Present? Yes	No Depth (inches):	E83
Water Table Present? Yes	No Depth (inches):	\
Saturation Present? Yes		Vetland Hydrology Present? Yes No
(includes capillary fringe)		
Describe Recorded Data (stream gauge	, monitoring well, aerial photos, previous inspectio	ns), if available:
Remarks:		
I .		

WETLAND DETERMINATION	N DATA FORM - Western	Mountains, Valleys, and Coast Region
Project/Site: Mabe, lable Blut Ro	City/County:	Pumbold Sampling Date: 7/27/1
Applicant/Owner: UM Mabe	8	
Investigator(s): Sam Pall, Jasoph Sale	Section Townsh	in Daniel
Landform (hillslope, terrace, etc.):	Local relief (con-	cave, convex, none): Nove Slope (%): 1
Subregion (LRR):	Lat:	Long: Datum:
Soil Map Unit Name:		Datum:
Soil Map Unit Name: Are climatic / hydrologic conditions on the site typical	for this time of year? Yes	NWI classification:
Are Vegetation, Soil, or Hydrology		No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? naturally problematic?	Are "Normal Circumstances" present? Yes No No (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site	nap showing sampling po	int locations, transects, important features, etc
Hydrophytic Vegetation Present? Yes	via V	int locations, transects, important features, etc
Hydric Soil Present? Yes		npled Area
Wetland Hydrology Present? Yes		
Remarks:		
		18
VEGETATION – Use scientific names of	plants.	
	Absolute Dominant Indica	ator Dominance Test worksheet:
Tree Stratum (Plot size: 1. Frangula Oucshand	% Cover Species? State	Number of Dominant Species
	92 / FA	That Are OBL, FACW, or FAC:
2		Total Number of Dominant
3.		Species Across All Strata: (B)
4.	02	Percent of Dominant Species 33
Sapling/Shrub Stratum (Plot size:)	= Total Cover	That Are OBL, FACW, or FAC:
1		Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
3		OBL species x 1 =
4		FACW species x 2 =
5		FAC species x 3 =
	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size:	0 50	UPL species x 5 =
1. Hieracleun maximum		Column Totals: (A) (B)
2. (Mium Marylatum 3. Cirsium Vulgare	- II - FAC	Prevalence Index = B/A =
4. Rubus ursinus	- FAC	Hydrophytic Vegetation Indicators:
5. Rophanus Sativa	- 32 V +AC	1 - Rapid Test for Hydrophytic Vegetation
6. Stochus ajy goides	- 30 V UPL	2 - Dominance Test is >50%
7.		3 - Prevalence Index is ≤3.0¹
		4 - Morphological Adaptations (Provide supporting
9.		data in Remarks or on a separate sheet)
9		5 - Wetland Non-Vascular Plants¹
11		Problematic Hydrophytic Vegetation¹ (Explain)
		Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Noody Vine Stratum (Plot size:)	= Total Cover	in the state of the properties.
		Hydronhydia
2		Hydrophytic Vegetation
	= Total Cover	Present? Yes No
% Bare Ground in Herb Stratum		
tornains.		

Sampling Point:)

Profile Description: (Describe to the d	lepth needed to document the indicator or confirm	the absen	ce of indicators.)
Depth Matrix	Redox Features		
(inches) Color (moist) %	Color (moist) % Type¹ Loc²	Texture	Remarks
0-10 JUYR 2/2 100			
10-22 1048 3/12 100		6	
22-32+ 1048 3/3 97		1	
10/197/2 17		7	Catovina
10YR3/2 13	-	-	<u>Usloviila</u>
IT and Co-Composition Deposition 5	RM=Reduced Matrix, CS=Covered or Coated Sand Gr	raine ² l	
Hydric Soil Indicators: (Applicable to		Indica	ators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Redox (S5)	2	cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)		ed Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA 1)	-	ery Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted_Matrix_(E3)		
Thick Dark Surface (A12)	Redox Dark Surface (F6)		ators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)		tland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	un	less disturbed or problematic.
Restrictive Layer (if present):			\ /
Type:			-U.D42 V N- X
Depth (inches):		Hydric S	oll Present? Yes No _/_
HYDROLOGY			
Wetland Hydrology Indicators:	the decrete all these applied	50	condany Indicators (2 or more required)
Primary Indicators (minimum of one requ		Se	econdary Indicators (2 or more required)
Surface Water (A1)	Water-Stained Leaves (B9) (except		Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)		4A, and 4B)
Saturation (A3)	Salt Crust (B11)	_	_ Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrates (B13)	_	_ Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	-1- (00)	Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
Drift Deposits (B3)	Oxidized Rhizospheres along Living Roo	ois (C3)	
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)		Shallow Aquitard (D3) FAC-Neutral Test (D5)
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils (CI	-	Raised Ant Mounds (D6) (LRR A)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRR A (B7) Other (Explain in Remarks)	~ <u> </u>	Frost-Heave Hummocks (D7)
Inundation Visible on Aerial Imagery			_ 1103t-11cave Frankhooks (DT)
Sparsely Vegetated Concave Surface			
	35 (55)		
Field Observations:	/		-20
Field Observations: Surface Water Present? Yes	No Depth (inches):		V
Field Observations: Surface Water Present? Water Table Present? Yes	No Depth (inches): No Depth (inches):	tland Hydro	logy Present? Yes No
Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes (includes capillary fringe)	No Depth (inches): No Depth (inches): No Depth (inches): Wet		
Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes (includes capillary fringe)	No Depth (inches): No Depth (inches):		
Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes (includes capillary fringe)	No Depth (inches): No Depth (inches): No Depth (inches): Wet		
Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge	No Depth (inches): No Depth (inches): No Depth (inches): Wet		
Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge	No Depth (inches): No Depth (inches): No Depth (inches): Wet		
Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge	No Depth (inches): No Depth (inches): No Depth (inches): Wet		

WETLAND DETERMINATION	DATA FORM	- Western Mo	ountains, Valleys, and Coast Region
Project/Cite:		ty/County:	1 - 1
Applicant/Owner: Jim Mabe			State: CA Sampling Point:
Investigator(s): 55,59	94	action Township F	State: Sampling Point:
Landform (hillslope, terrace, etc.):	88	cal relief (see see	e, convex, none): None Slope (%): 3
Subregion (LRR):	Lat	ocarreller (concave	
Soil Map Unit Name:	cat		Datum:
Are climatic / hydrologic conditions on the site typical for	this time of year		
Are Vegetation, Soil, or Hydrology			(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology			e "Normal Circumstances" present? Yes No
		•	needed, explain any answers in Remarks.) locations, transects, important features, etc
Hydrophytic Vegetation Present? Yes		The Branch	reduction, transcots, important reatures, etc
Hydric Soil Present? Yes		is the Sample	
Wetland Hydrology Present? Yes	No X	within a Wetla	and? YesNo
Remarks:			4
VECETATION			
VEGETATION – Use scientific names of pl			
Tree Stratum (Plot size:	Absolute D	ominant Indicator pecies? Status	
1. Castara franquila pursiana	35	becies status	Number of Dominant Species
2			That Are OBL, FACW, or FAC: (A)
3			Total Number of Dominant Species Across All Strata: (B)
4			
Sanling/Chruh Clarkum (Dlata)	35 =	Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
1	-		Total % Cover of: Multiply by:
23			OBL species x 1 =
4			FACW species x 2 =
5			FAC species x 3 =
		otal Cover	FACU species x 4 =
Herb Stratum (Plot size:) 1 Rusus いたかいな	20	1 000	UPL species x 5 =
2. Hegracolum makinum	_ 80	- tacu	Column Totals: (A) (B)
3. Trila dioeca	- 6 -	- ++C	Prevalence Index = B/A =
4. Solonum mericanum	$-\frac{\Delta}{2}$		Hydrophytic Vegetation Indicators:
5. Cenum moculation	75	+ ACVI	1 - Rapid Test for Hydrophytic Vegetation
6. Vicitalis purpurea	10	FACIL	2 - Dominance Test is >50%
7. actium vulgare	- 2	FACU	3 - Prevalence Index is ≤3.0¹
8. Vicia Usutal	2	FAZU	4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
o Lysimachia arverse Pimpernel	2.	FAC	5 - Wetland Non-Vascular Plants 1
10. Galium aparine	3	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
11			Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum / Plat aira	$136 = T_0$	tal Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:) 1.		de la fin	
2.			Hydrophytic
नार ।		tol Cover	Vegetation Present? Yes No
% Bare Ground in Herb Stratum	= 10	tal Cover	
Remarks:			

S	O	Ì	1
v	v	4	_

sampling Point:

rofile Description: (Describe to the de	epth needed to document the indicator or confi	rm the absence of	of indicators.)
DepthMatrix	Redox Features		-
inches) Color (moist) %	Color (moist)	<u>Texture</u>	Remarks
0-15 10YR 2/2 100			
5-20 10 YR3/2 42		L	
10 YP 5/8 8		- <u> </u>	-
0-24+10xR3/4 92			
1-110 2 10			C 14110
10 YR 3/2 8			Cotovena
*/-			
Type: C=Concentration D=Depletion Pi	M=Reduced Matrix, CS=Covered or Coated Sand	Grains 21 oc	ation: PL=Pore Lining, M=Matrix.
lydric Soil Indicators: (Applicable to a			rs for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Redox (S5)	2 cm	Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)		Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA	-	Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Othe	r (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Matrix (E3)		
Thick Dark Surface (A12)	Redox Dark Surface (F6)		rs of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)		nd hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unles	s disturbed or problematic.
Restrictive Layer (if present):	8		ω.
Type:			
Depth (inches):		Hydric Soil	Present? Yes No
demarks:			
YDROLOGY			
Permarks: YDROLOGY Vetland Hydrology Indicators:	radu aba ak all that apply)	Sacar	adany Indicators (2 or more required)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requi			ndary Indicators (2 or more required)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requi	Water-Stained Leaves (B9) (except		/ater-Stained Leaves (B9) (MLRA 1, 2,
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	W	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	w	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)	w	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	 Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) 	W D S	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living F	W D D S S Roots (C3) G	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) teomorphic Position (D2)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Feresence of Reduced Iron (C4)	W D S Roots (C3) G	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) teomorphic Position (D2) hallow Aquitard (D3)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living F Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils	W D S Roots (C3) G S (C6) F	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) decomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LRF	W D S S Roots (C3) G S (C6) F	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) becomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) taised Ant Mounds (D6) (LRR A)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living F Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Stunted or Stressed Plants (D1) (LRF) Other (Explain in Remarks)	W D S S Roots (C3) G S (C6) F	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) decomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living F Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Stunted or Stressed Plants (D1) (LRF) Other (Explain in Remarks)	W D S S Roots (C3) G S (C6) F	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) teomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) taised Ant Mounds (D6) (LRR A)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living F Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Stunted or Stressed Plants (D1) (LRF (B7) Other (Explain in Remarks)	W D S S Roots (C3) G S (C6) F	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) teomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) taised Ant Mounds (D6) (LRR A)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Surface Water Present? Yes	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living F Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Stunted or Stressed Plants (D1) (LRF (B7) Other (Explain in Remarks) (B8) Depth (inches):	W D S S Roots (C3) G S (C6) F	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) teomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) taised Ant Mounds (D6) (LRR A)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requit Surface Water (A1) High Water Table (A2) Saturation (A3) 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 Vater Table Present? Yes Vater Table Present? Yes Vater Table Present? Vegetated Concave Surface	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living F Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Stunted or Stressed Plants (D1) (LRF) (B7) Other (Explain in Remarks) (B8) No Depth (inches): Depth (inches):	W D S Roots (C3) G S (C6) F R A) R	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) rry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) becomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) taised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface (Sield Observations: Surface Water Present? Ves	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living F Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Stunted or Stressed Plants (D1) (LRF) (B7) Other (Explain in Remarks) (B8) No Depth (inches): Depth (inches):	W D S Roots (C3) G S (C6) F R A) R	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) teomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) taised Ant Mounds (D6) (LRR A)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Vield Observations: Surface Water Present? Yes Vater Table Present? Yes Saturation Present? Yes Includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living F Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Stunted or Stressed Plants (D1) (LRF) (B7) Other (Explain in Remarks) (B8) No Depth (inches): Depth (inches):	W D S Roots (C3) G S (C6) F R A) R F	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) rry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) becomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) taised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes Saturation Present? Yes includes capillary fringe) Describe Recorded Data (stream gauge,	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living F Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Stunted or Stressed Plants (D1) (LRF Other (Explain in Remarks) (B7) Depth (inches): No Depth (inches):	W D S Roots (C3) G S (C6) F R A) R F	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) rry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) becomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) taised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Vield Observations: Surface Water Present? Yes Vater Table Present? Yes Saturation Present? Yes Includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living F Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Stunted or Stressed Plants (D1) (LRF Other (Explain in Remarks) (B7) Depth (inches): No Depth (inches):	W D S Roots (C3) G S (C6) F R A) R F	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) rry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) becomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) taised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)

WETLAND DETERMINATION E	DATA FORM – Western Mo	untains, Valleys, and Coast Region
Project/Site: Make, Table but Road	City/County: HW	nboldt Sampling Date: 81116
Applicant/Owner: VIAA Mahp.		1 A
Investigator(s): Torch Sales, Sam Po	Section, Township, F	Range:
Landform (hillslope, terrace, etc.): Trace	Local relief (concave	e, convex, none): Nave Slope (%): 1
		Long: Datum:
Soil Map Unit Name:		NIM/L classification:
Are climatic / hydrologic conditions on the site typical for t	his time of year? Yes X No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are	"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology	_ naturally problematic? (If	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site may	showing sampling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes		
Hydric Soil Present? Yes Wetland Hydrology Present? Yes		X
Remarks:		
VEGETATION – Use scientific names of pla	nts.	
Trop Stratum (Diet size)	Absolute Dominant Indicator	
Tree Stratum (Plot size:) 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,		-6
Sapling/Shrub Stratum (Plot size:)	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
1		Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
3.		OBL species x 1 =
4		FACW species x 2 =
5		FAC species x 3 =
Harb Stratum (Diet sixe)	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size:) 1. RINDUS (XSINUS)	42. / FA(1)	UPL species x 5 = Column Totals: (A) (B)
2. Conjum Maculatim	5 FAC	
3. Digitalis pyrpurea	T2 FACU	Prevalence Index = B/A =
4. Folds matils.	21 / FAG	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
5. Heracleum Maxima	FAC	2 - Dominance Test is >50%
6. loa protesis	- 5 - the	3 - Prevalence Index is ≤3.0¹
7. Seredo MINIMANS 8. Achillea Milletolium	- 2 - FROM	4 - Morphological Adaptations (Provide supporting
	TACU	data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants 1
910	·	Problematic Hydrophytic Vegetation¹ (Explain)
11.		¹Indicators of hydric soil and wetland hydrology must
5000 8	Total Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	19.6	
1		Hydrophytic
2	= Total Cover	Vegetation Present? Yes No
% Bare Ground in Herb Stratum	= Total Cover	
Remarks:	30	

~ ~	

Sampling Point: 1 E

Profile Description: (Describe to the dep	th needed to document the indicator or con	firm the absence of indicators.)	
Depth <u>Matrix</u>	Redox Features	======================================	
(inches) Color (moist) %	Color (moist) % Type Loc		Remarks
0-10 10 x c3/2 100			
10-24+ 10YR3/2 100		L	
			*
Y			
, :			
Y			
¹ Type: C=Concentration, D=Depletion, RMs	Reduced Matrix, CS=Covered or Coated San	Grains. ² Location: PL=Por	e Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all		Indicators for Problem	
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)	
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Materia	al (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLR.		
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in F	
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)		
Thick Dark Surface (A12)	Redox Dark Surface (F6)	Indicators of hydrophy	tic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology n	
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or	problematic.
Restrictive Layer (if present):			
Туре:		ľ	
Depth (inches):		Hydric Soil Present? Y	es No
Remarks:			
HYDROLOGY			
Wetland Hydrology Indicators:			
Primary Indicators (minimum of one require	d; check all that apply)	Secondary Indicator	s (2 or more required)
Surface Water (A1)	Water-Stained Leaves (B9) (except		_eaves (B9) (MLRA 1, 2,
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)	
Saturation (A3)	Salt Crust (B11)	Drainage Patter	
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Wa	, .
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)		le on Aerial Imagery (C9)
Drift Deposits (B3)	Oxidized Rhizospheres along Living		
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitar	
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soil		
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LF	_	inds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B		Frost-Heave Hu	IMMOCKS (D7)
Sparsely Vegetated Concave Surface (88)		
Field Observations:	V		*
Surface Water Present? Yes	No X Depth (inches):		
Water Table Present? Yes	No _X Depth (inches):		
Saturation Present? Yes	No Depth (inches):	Wetland Hydrology Present?	Yes No 🔼
(includes capillary fringe)			
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, previous inspection	ns), if available:	
Remarks:			

WEILAND DETERMINATION L	JATA FORI	VI – Western Moi	intains, Valleys, and Coast Region
Project/Site: Mabe, Table Bluf Rd.		City/County: _ Hum	Sampling Date: 8/1/16
Applicant/Owner: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			State: A Sampling Point: OF
Investigator(s): Joseph Saler, Sam Polly		Section, Township, Ra	ange:
Landform (hillslope, terrace, etc.): Terrace		Local relief (concave,	convex, none): None Slope (%):
			Long: Datum:
Soil Map Unit Name:			NWI classification:
Are climatic / hydrologic conditions on the site typical for	this time of yea	r? Yes 🔀 No_	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	_ significantly o	fisturbed? Are	"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology	_ naturally prot	olematic? (If n	eeded, explain any answers in Remarks.)
		sampling point l	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	CONTRACTOR OF THE PARTY OF THE	lo the Samula	\
Hydric Soil Present? Yes Wetland Hydrology Present? Yes		Is the Sampled within a Wetla	~
Remarks:	NO		103
VEGETATION Her activities are a finite			r.
VEGETATION – Use scientific names of pla			
Tree Stratum (Plot size:)		Dominant Indicator Species? Status	Dominance Test worksheet:
1			Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			Species Across All Strata:(B)
4			Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)	70.75	= Total Cover	That Are OBL, FACW, or FAC: (A/B)
1. Boccharis pilulans	_15	V UP	Prevalence Index worksheet:
2			Total % Cover of: Multiply by:
3			OBL species x1 =
4			FACW species x 2 = FAC species x 3 =
5	- 15		FACU species x 4 =
Herb Stratum (Plot size:)	12_	Total Cover	UPL species x 5 =
1. Ruby WITHUS	_ 70	1ACU	Column Totals: (A) (B)
2. Ptaridium agui, Inum	5	+ACU"	Prevalence Index = B/A =
3. Can'un Makulotum		TAC	Hydrophytic Vegetation Indicators:
4. Heracleum Maxima 5. Dissacus Fillenum	- 5 -	+1/0	1 - Rapid Test for Hydrophytic Vegetation
6. Digitalis Durourea	- 13 -	TAC	2 - Dominance Test is >50%
7. Hole of lander	- 50	THE	3 - Prevalence Index is ≤3.01
8		110	4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
9.		a	5 - Wetland Non-Vascular Plants ¹
10		*	Problematic Hydrophytic Vegetation ¹ (Explain)
11		-15	Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:)	41	Total Cover	be present, unless disturbed or problematic.
4			X.
2			Hydrophytic Vegetation
		Total Cover	Present? Yes No
% Bare Ground in Herb Stratum			
Remarks:			

Sampling Point: 2 E

Profile Description: (Describe to the dep	th needed to document the indicator or co	nfirm the absence of indicators.)
Depth <u>Matrix</u>	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Loc	
0-11 1048212 100		Lonn
111-24 LOYR212, 100		
74+ 10483/4 (DD		
E1 . 10 11 (3) . 100		
.3		V

	But IMIL 00 0	10 2
Hydric Soil Indicators: (Applicable to all	Reduced Matrix, CS=Covered or Coated Sar	3111 11141111
•		Indicators for Problematic Hydric Soils ³ :
Histosol (A1) Histic Epipedon (A2)	Sandy Redox (S5)	2 cm Muck (A10)
Black Histic (A3)	Stripped Matrix (S6) Loamy Mucky Mineral (F1) (except MLR	Red Parent Material (TF2) A 1) Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Redox Dark Surface (F6)	Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		
Туре:		
Depth (inches):		Hydric Soil Present? Yes No X
Remarks:		
25		
HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required	; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Water-Stained Leaves (B9) (except	t Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrales (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		Roots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soil	
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LI	
Inundation Visible on Aerial Imagery (B7		Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (E		
Field Observations:		
Surface Water Present? Yes	No Depth (inches):	
	~	
	No Depth (inches):	×
Saturation Present? Yes I (includes capillary fringe)	No Depth (inches):	Wetland Hydrology Present? Yes No
	nitoring well, aerial photos, previous inspection	ons), if available:
, , , , ,		
Remarks:		

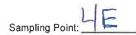
WETLAND DETERMINATION	DATA FORM -	Western Mo	untains, Valleys, and Coast Region
Project/Site: Mabe, labe but Rd.	City/		
Applicant/Owner: Nabe		1.	State: (A Sampling Deints 3)
Investigator(s): SAM Polly Joseph Sal	RT Sect	ion, Township, R	ange:
Landform (hillslope, terrace, etc.):	Loca	al relief (concave,	convex, none): Slope (%): 2
Subregion (LRR):	Lat:		
Soil Map Unit Name:			NWI classification:
Are climatic / hydrologic conditions on the site typical for			(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly distu	rbed? Are	"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology		atic? (if n	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	p showing san		locations, transects, important features, etc
Hydrophytic Vegetation Present? Yes			
Hydric Soil Present? Yes		Is the Sample	X
Wetland Hydrology Present? Yes	No	within a Wetla	nd? YesNo
Remarks:			
VEG. 27. 21.0.1.			
VEGETATION – Use scientific names of pla			
Tree Stratum (Plot size:	Absolute Don <u>% Cover Spe</u>	ninant Indicator	Dominance Test worksheet:
1. Frangula Purshana	15 V	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2			
3			Total Number of Dominant Species Across All Strata: (B)
4			
Spoling/Shruh Steatum / Dlot sing.	= To	tal Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
1			Total % Cover of: Multiply by:
3.			OBL species x 1 =
4			FACW species x 2 =
5			FAC species x 3 =
	= Tol	al Cover	FACU species x 4 =
Herb Stratum (Rlot size:) 1. RUBY UCSINU (50 ×	ENCIL	UPL species x 5 =
2. Alastichum Muntum	- Ta -	14/64	Column Totals: (A) (B)
3. Peridium arullaum	-13	TACIL	Prevalence Index = B/A =
4. Heradeur Maxima	- 18	TACU.	Hydrophytic Vegetation Indicators:
5. Holcus langus	70	FAC	1 - Rapid Test for Hydrophytic Vegetation
6. Corex leiotilo da	3	FAC	2 - Dominance Test is >50%
7. Digitalis nurnurea	C	FACU	3 - Prevalence Index is ≤3.01
8. Stockys a lagoides	2	061	4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
9/			5 - Wetland Non-Vascular Plants
10			Problematic Hydrophytic Vegetation ¹ (Explain)
11	- 110		Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:)	= Tota	l Cover	be present, unless disturbed or problematic.
1		2417	¥6
2			Hydrophytic Vegetation
	= Tota	I Cover	Present? Yes No
% Bare Ground in Herb Stratum		00461	
Remarks:			

Sampling Point: 3E

Profile Description: (Describe to the dep	h needed to document the indicator or confirm	m the absence of indicators.)
Depth <u>Matrix</u>	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Loc ²	
0-10 104K2/2 100		100m
20-24+ 10 V R 4/3 62		
NYR 2/2 38		Mixed from Uper honizon
		- Inises it art appa patizors
		· · · · · · · · · · · · · · · · · · ·
		· · · · · · · · · · · · · · · · · · ·
S		
	Reduced Matrix, CS=Covered or Coated Sand G	, vi
Hydric Soil Indicators: (Applicable to all	·	Indicators for Problematic Hydric Soils ³ :
— Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2) Black Histic (A3)	Stripped Matrix (S6)	Red Parent Material (TF2)
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1) (except MLRA 1) Loamy Gleyed Matrix (F2)) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Redox Dark Surface (F6)	Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		
Туре:		
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required	; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Oxidized Rhizospheres along Living Ro	ots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils (C	
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRR A	
Inundation Visible on Aerial Imagery (B7		Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (E		
Field Observations:		
Surface Water Present? Yes I	No Depth (inches):	
Water Table Present? Yes		\ 1
Saturation Present? Yes		tland Hydrology Present? Yes No
(includes capillary fringe)	vvet	liand hydrology Present? Yes No _/ \
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous inspections)	, if available:
Remarks:		
1		

	ATA FORIVI - V	Aezretti MOF	untains, valleys, and Coast Region	
Project/Site: Make Make Blut Rd.	City/Co	ounty: Hum	Sampling Date:	16
Applicant/Owner: Sim Make			State: A Sampling Point: 4 E	
Investigator(s): San Polly Toseph Jal	Cr Section	n, Township, Ra	ange:	
Landform (hillslope, terrace, etc.):	Local	relief (concave,	convex, none): None Slope (%):	1_
Subregion (LRR):	Lat:		Long: Datum:	
Soil Map Unit Name:			NWI classification:	
Are climatic / hydrologic conditions on the site typical for the		es Ҳ No _	(If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology			"Normal Circumstances" present? Yes No	
Are Vegetation, Soil, or Hydrology	naturally problemat	tic? (If ne	eeded, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map	showing sam	pling point l	locations, transects, important features,	, etc.
Hydrophytic Vegetation Present? Yes1	\			
Hydric Soil Present? Yes I	-	Is the Sampled within a Wetlan		
Wetland Hydrology Present? Yes Remarks:	No _	Within a Fronce	nor resNo	
Remarks.				
VEGETATION – Use scientific names of plar				
VEGETATION - OSE SCIENTING Hames of plan		- and Indiana	T =	
Tree Stratum (Plot size:)	% Cover Speci	nant Indicator ies? Status	Dominance Test worksheet: Number of Dominant Species	
1			That Are OBL, FACW, or FAC:	(A)
2			Total Number of Dominant	Chore
3	-			(B)
4			Percent of Dominant Species /3 1/	
Sapling/Shrub Stratum (Plot size:)	= Tota	l Cover	That Are OBL, FACW, or FAC:	(A/B)
1. Baccharis pillularis	15 1	uol	Prevalence Index worksheet:	
2		y	Total % Cover of:Multiply by:	
3			OBL species x 1 =	
4			FACW species x 2 = FAC species x 3 =	
5	- 12		FACU species x 4 =	
Herb Stratum (Plot size:)	= 1 otal	l Cover	UPL species x 5 =	
1. Serecio Minimus	<u> </u>	FACU	Column Totals:(A)	(B)
2. It's douglasiona	20 /	MPL	Prevalence Index = B/A =	
3. Rubu untinus	45	- FACU	Hydrophytic Vegetation Indicators:	
4. Diartalis purpurea 5. Sanchis blesaceus	- 10	- FACU	1 - Rapid Test for Hydrophytic Vegetation	
5. Sarche bletakens 6. AChillea miletalium		- UPL	2 - Dominance Test is >50%	
7. Cirsium Julgare	- +	- CACU	3 - Prevalence Index is ≤3.0 ¹	
8. Franquia Outstiana	- +	FAC	4 - Morphological Adaptations (Provide suppor data in Remarks or on a separate sheet)	rting
9. Lysimachia arvensis scortet	1	FAC	5 - Wetland Non-Vascular Plants ¹	
10.			Problematic Hydrophytic Vegetation ¹ (Explain)	
11	-00-		Indicators of hydric soil and wetland hydrology mus	
West-Aller Obstance (Distriction	= Total	Cover	be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size:)		38083		
1	#19		Hydrophytic Vegetation	
	= Total	Cover	Present? Yes No	
% Bare Ground in Herb Stratum		Cover	· · · · · · · · · · · · · · · · · · ·	
Remarks:				

-	~	0.1	
	r		



Depth Mattix Color (moist)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Location: PL=Pare Lining, M=Matrix, Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils
Type: C-Concentration, D-Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Location: PL=Pore Lining, M=Matrix.
"Type: C-Concentration, D-Deptetion, RM-Reduced Matrix, CS=Covered or Coated Sand Grains. "Type: C-Concentration, D-Deptetion, RM-Reduced Matrix, CS=Covered or Coated Sand Grains. "Histosol (A1)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion Interview Sandy Muck (A10) Histosol (A1) Sandy Muck (A10) Histosol (A2) Histosol (A2) Histosol (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Depleted Betwo Dark Surface (A11) Depleted Betwo Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type: Depleted Dark Surface (F7) Redox Depressions (F8) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Surface Water (A1) Hydric Soil Present? Yes No Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Saluminous (A3) Saluminous (A3) Water Marks (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Drift Deposits (B3) Aquatic Invertebrates (B13)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion Sand Sand Sand Sand Sand Sand Sand San
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Primary Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): Primary Indicators (minimum of one required: check all that apply) Surface Water (A1) Hydric Soil Present? Yes No Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Saturation (A3) Water Marks (B1) Saturation (A3) Water Marks (B1) Aquatic Invertebrates (B13) Aquatic Invertebrates (B13) Aquatic Invertebrates (B13) Agal Mat or Crust (B4) Presence of Reduced fron (C4) Algal Mat or Crust (B4) Presence of Reduced fron (C4) Saturation (D2) Saturation (D2) Agal Mat or Crust (B4) Presence of Reduced fron (C4) Shallow Aquitard (D3) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Field Observations: Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Primary Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Deplit (inches): Hydric Soil Present? Yes No Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Drainage Patterns (B1) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Aquatic Invertebrates (B13) Hydropen Sulfide Odor (C1) Agal Mat or Crust (B4) Presence of Reduced fron (C4) Saturation (Visible on Aerial Imagery (C9) Surface Soil Cracks (B6) Surface (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Indicators from Material (TF2) Communications (A1) Indicators from Material (TF2) Very Shallow Dark Surface (F1) Red Parent Material (TF2) Other (Explain in Remarks) Primary Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No 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) Frost-Heave Hummocks (C7) Sparsely Vegetated Concave Surface (B8) Field Observations: Water Table Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches): Saturation Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches):
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Primary Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Deplit (inches): Hydric Soil Present? Yes No Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Drainage Patterns (B1) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Aquatic Invertebrates (B13) Hydropen Sulfide Odor (C1) Agal Mat or Crust (B4) Presence of Reduced fron (C4) Saturation (Visible on Aerial Imagery (C9) Surface Soil Cracks (B6) Surface (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Indicators from Material (TF2) Communications (A1) Indicators from Material (TF2) Very Shallow Dark Surface (F1) Red Parent Material (TF2) Other (Explain in Remarks) Primary Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No 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) Frost-Heave Hummocks (C7) Sparsely Vegetated Concave Surface (B8) Field Observations: Water Table Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches): Saturation Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches):
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Primary Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Deplit (inches): Hydric Soil Present? Yes No Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Drainage Patterns (B1) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Aquatic Invertebrates (B13) Hydropen Sulfide Odor (C1) Agal Mat or Crust (B4) Presence of Reduced fron (C4) Saturation (Visible on Aerial Imagery (C9) Surface Soil Cracks (B6) Surface (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Indicators from Material (TF2) Communications (A1) Indicators from Material (TF2) Very Shallow Dark Surface (F1) Red Parent Material (TF2) Other (Explain in Remarks) Primary Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No 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) Frost-Heave Hummocks (C7) Sparsely Vegetated Concave Surface (B8) Field Observations: Water Table Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches): Saturation Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches):
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Primary Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Deplit (inches): Hydric Soil Present? Yes No Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Drainage Patterns (B1) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Aquatic Invertebrates (B13) Hydropen Sulfide Odor (C1) Agal Mat or Crust (B4) Presence of Reduced fron (C4) Saturation (Visible on Aerial Imagery (C9) Surface Soil Cracks (B6) Surface (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Indicators from Material (TF2) Communications (A1) Indicators from Material (TF2) Very Shallow Dark Surface (F1) Red Parent Material (TF2) Other (Explain in Remarks) Primary Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No 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) Frost-Heave Hummocks (C7) Sparsely Vegetated Concave Surface (B8) Field Observations: Water Table Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches): Saturation Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches):
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Primary Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Deplit (inches): Hydric Soil Present? Yes No Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Drainage Patterns (B1) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Aquatic Invertebrates (B13) Hydropen Sulfide Odor (C1) Agal Mat or Crust (B4) Presence of Reduced fron (C4) Saturation (Visible on Aerial Imagery (C9) Surface Soil Cracks (B6) Surface (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Indicators from Material (TF2) Communications (A1) Indicators from Material (TF2) Very Shallow Dark Surface (F1) Red Parent Material (TF2) Other (Explain in Remarks) Primary Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No 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) Frost-Heave Hummocks (C7) Sparsely Vegetated Concave Surface (B8) Field Observations: Water Table Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches): Saturation Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches):
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Primary Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Deplit (inches): Hydric Soil Present? Yes No Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Drainage Patterns (B1) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Aquatic Invertebrates (B13) Hydropen Sulfide Odor (C1) Agal Mat or Crust (B4) Presence of Reduced fron (C4) Saturation (Visible on Aerial Imagery (C9) Surface Soil Cracks (B6) Surface (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Indicators from Material (TF2) Communications (A1) Indicators from Material (TF2) Very Shallow Dark Surface (F1) Red Parent Material (TF2) Other (Explain in Remarks) Primary Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No 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) Frost-Heave Hummocks (C7) Sparsely Vegetated Concave Surface (B8) Field Observations: Water Table Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches): Saturation Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches):
Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Red Parent Malerial (TF2) Histic Epipedon (A2) Stripped Matrix (S6) Redox (S5) 2 cm Muck (A10) Red Parent Malerial (TF2) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Other (Explain in Remarks) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) And wetland hydrology must be present, Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No Maler (A12) Surface (A12) Surface (A12) Secondary Indicators (A12) Secondary Indi
Histic Epipedon (A2) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Coamy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Dark Surface (F6) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Restrictive Layer (if present): Type: Depleted Dark Surface (F8) 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) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Saturation (A3) Water Marks (B1) Aquatic Invertebrates (B13) Dory-Season Water Table (C2) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Sediment Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Redox Depth (inches): Surface Soil Cracks (B6) Surface Oxide Area (B4) Presence of Reduced Iron (C4) Redox Depth (inches): Water Table Present? Yes No Depth (inches): Water Abland Hydrology Present? Yes No Depth (inches): Water Abland Hydrology Present? Yes No Depth (inches): Water Abland Hydrology Present? Yes No Depth (inches): Water Abland Hydrology Present? Yes No Depth (inches): Water Abland Hydrology Present? Yes No Depth (inches): Water Abland Hydrology Present? Yes No Depth (inches): Water Abland Hydrology Present? Yes No Depth (inches): Water Abland Hydrology Present? Yes No Depth (inches): Water Abland Hydrology Present? Yes No No Depth (inches): Water Abland Hydrology Present? Yes No No Depth (inches): Water Abland Hydrology Present? Yes No No No No No
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Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Restrictive Layer (if present): Type: Depth (inches): Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) Saturation (A3) Saturation (A4) Saturation (A5) Saturation (
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Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No Remarks: Hydric Soil Present? Yes No
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Type:
Depth (inches):
Remarks:
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Surface Water (A1) Water Marks (B1) Sediment Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquilard (D3) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Frost-Heave Hummocks (D7) Field Observations: Surface Water Present? Yes No Depth (inches): Sutration Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No
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Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) — Surface Water (A1) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) — High Water Table (A2) MLRA 1, 2, 4A, and 4B) 4A, and 4B) — Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) — Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) — Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) — Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) — Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) — Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5) — Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) — Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) — Sparsely Vegetated Concave Surface (B8) Depth (inches): Wetland Hydrology Present? Yes No — Water Table Present? Yes No Depth (inches): Wetland Hydrology Pr
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Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required)
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) 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 Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Water Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Ada and 4B) Drainage Patterns (B10) Ada (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Presence of Reduced Iron (C4) Shallow Aquitard (D3) FAC-Neutral Test (D5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Concave Surface (B8)
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High Water Table (A2) Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Sediment Deposits (B3) Orift 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? Water Table Present? Yes No Depth (inches): Depth (inches): Saturation (A3) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) FAC-Neutral Test (D5) Frost-Heave Hummocks (D6) (LRR A) Frost-Heave Hummocks (D7) Depth (inches): Depth (inches): Saturation Present? Yes No Depth (inches): Userland 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Saturation Visible on Aerial Imagery (D3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Saturation (D4) Saturation (D4) Shallow Aquitard (D3) Frost-Neutral Test (D5) Frost-Heave Hummocks (D7) Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Presen
Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inches): Depth (inches): Saturation (C1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Douby-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Douby-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Depth (inches): Depth (inches): Saturation Present? Yes No Depth (inches): Depth (inches): Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No No Wetland Hydrology Present? Yes No No Wetland Hydrology Present? Yes No No No Wetland Hydrology Present? Yes No No Wetland Hydrology Present? Yes No No No No No Saturation Present? Yes No No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No No Saturation Visible on Aerial Imagery (C9) Saturation
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Sediment Deposits (B2)
Drift Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) FAC-Neutral Test (D5) 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): Surface Soil Cracks (B3) Depth (inches): Surface Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Ves No Ves No Depth (inches): Wetland Hydrology Present? Yes No Ves No Ves No No Depth (inches): Ves No Depth (inches): Ves No Depth (inches): Ves No No Depth (inches): Ves No Depth (inches): Ves No Depth (inches): Ves No No No No No No No No No N
Algal Mat or Crust (B4)
Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present?
Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Water Table Present? Saturation Present? Yes No Depth (inches): Saturation Present? (includes capillary fringe) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) Depth (inches): Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No
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):
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):
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): (includes capillary fringe) Wetland Hydrology Present? Yes No
Field Observations: Surface Water Present? Water Table Present? Saturation Present? Yes No Depth (inches): Depth (inches): Depth (inches): Wetland Hydrology Present? Yes No Depth (inches):
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Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No (includes capillary fringe)
(includes capillary fringe)
Book and the second of the sec
Damarka:
Remarks:
1

WETLAND DETERMINATION	DATA FORM	1 - Western Mo	untains, Valleys, and Coast Region 🕡 👔
		City/County: HM	
Applicant/Owner: Tim Make			CV CV
Investigator(s): Joseph Saler, Sant	ON S	Section, Township, R	ange:
Landform (hillslope, terrace, etc.): Terrace		Local relief (concave,	convex, none): Nove Slope (%): 2
Subregion (LRR):	Lat:		Long: Datum:
Soil Map Unit Name:			NWI classification:
Are climatic / hydrologic conditions on the site typical fo	r this time of yea	r? Yes X No	(If no explain in Remarks)
Are Vegetation, Soil, or Hydrology			"Normal Circumstances" present? Yes
Are Vegetation, Soil, or Hydrology			eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site m	ap showing s		locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No 🔀		
Hydric Soil Present? Yes Wetland Hydrology Present? Yes		Is the Sample	d Area nd? Yes No
Wetland Hydrology Present? Yes	No 🔼	William a Wella	TesNo
VEGETATION – Use scientific names of p	lants.		£
		Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:	% Cover	Species? Status	Number of Dominant Species
1. Françula purstiana		+AC	That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3 4			Species Across All Strata: (B)
	20	Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
2			Total % Cover of: Multiply by:
3			OBL species x 1 =
4.			FACW species x 2 =
5			FAC species x 3 =
		Total Cover	FACU species x 4 =
Herb Stratum (Plot size:	15	/ EACH	UPL species x 5 =
1. Anthoxathun adoratum 2. Pteridium admilialum	<u> </u>	MU	Column Totals: (A) (B)
3. Rubu usikuli	- to -	FACU	Prevalence Index = B/A =
4. Solidop elorgata		TACIL	Hydrophytic Vegetation Indicators:
5. Digitalis purpurea	-3	FACU	1 - Rapid Test for Hydrophytic Vegetation
6. Polystichuh Munitum	7_	FACU	2 - Dominance Test is >50%
7. Collium aportae		FACU	3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting
8. Achillea Miletolium	_1	FACU	data in Remarks or on a separate sheet)
9			5 - Wetland Non-Vascular Plants ¹
10			Problematic Hydrophytic Vegetation¹ (Explain)
11,	<u> </u>		Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:)	<u> </u>	Total Cover 4.8	be present, unless disturbed or problematic.
1	—,, ,,,,,,,, ,,		Hydrophytic
2		V <u>4</u>	Vegetation
% Bare Ground in Herb Stratum	= = =	Total Cover	Present? Yes No
Remarks:	(9)		

~	-	

Sampling Point: 5E

Depth Matrix Redox Features (inches) Color (moist) % Color (moist) % Type¹ Loc² (inches) 10 / R 2 / 2 100 (inches) Color (moist) % Type¹ Loc² (inches) L Gopler (color) (moist) % Type¹ Loc² (inches) Color (moist) % Type¹ Loc² (inches) L Gopler (color) (moist) % Type¹ Loc² (inches) Color (moist) % Type¹ Loc² (inches) L Gopler (color) (moist) % Type² Loc² (inches) L Gopler (moist) % Type² Loc² (i	
	3
17 LU TO TE DI CO TEMBORIO	
20-24 10 YR 3/3 100 L	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining,	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydroxidal Indicators (Applicable to all LRRs, unless otherwise noted.)	dric Soils*:
Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10)	
Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2)	S
Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface	
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3)	
Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) January Surface (F6)	ation and
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be p	
Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problems	
Restrictive Layer (if present):	
Type:	\ /
Depth (inches): Hydric Soil Present? Yes	No X
Remarks:	
remarks.	
2	
HYDROLOGY	
HYDROLOGY Wetland Hydrology Indicators:	
Wetland Hydrology Indicators:	nore required)
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Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or m Surface Water (A1) High Water Table (A2) Water-Stained Leaves (B9) (except AA, and 4B)	B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or m _ Surface Water (A1) _ Water-Stained Leaves (B9) (except _ Water-Stained Leaves (B9) _ High Water Table (A2) MLRA 1, 2, 4A, and 4B) 4A, and 4B) _ Saturation (A3) _ Salt Crust (B11) _ Drainage Patterns (B10)	B9) (MLRA 1, 2,
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) Secondary Indicators (2 or m Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) 4A, and 4B) Drainage Patterns (B10) Aquatic Invertebrates (B13) Dry-Season Water Table	B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or m Surface Water (A1) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) High Water Table (A2) MLRA 1, 2, 4A, and 4B) 4A, and 4B) Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aer	99) (MLRA 1, 2, e (C2) rial Imagery (C9)
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Plant List

Table D-1 Observed Botanical Species List Table Bluff Rd Loleta, CA

Plants Observed 7/27/16 and 8/1/16

Scientific Name	Common Name	Native?	Wetland Status
Trees			
Abies grandis	grand fir	Y	FACU
Frangula purshiana	cascara	Y	FAC
Juniperus sp.	cultivated juniper	N	N/A
Picea sitchensis	Sitka spruce	Y	FAC
Pinus radiata	Monterrey pine	N	NL
Prunus ceras i fera	wild plum	N	UPL
Pseudotsuga menziesii	Douglas fir	Υ	FACU
Salix lasiandra	pacific willow	Y	FACW
Shrubs			
Baccharis pilularis	coyote brush	Υ	UPL
Corylus cornuta	hazelnut	Υ	FACU
Cytisus scoparius	scotchbroom	N	UPL
Erica lusitanica	Spanish heather	N	UPL
Gaultheria shallon	salal	Y	FACU
Genista monspessulana	French broom	N	UPL
llex aquifolium	English holly	N	FACU
Lonicera involucrata	twinberry	Υ	FAC
Oemleria cerasiformis	indian plum	Y	FACU
Ribes sanguineum	flowering currant	Y	FACU
Rosa californica	California rose	Υ	FAC
Rosa rubiginosa	sweetbriar	N	UPL
Rubus armeniacus	Himalayan blackberry	N	FAC
Rubus parviflorus	thimbleberry	Y	FACU
Rubus ursinus	California blackberry	Υ	FACU
Sambucus racemosa	red elderberry	Υ	FACU
Spirea douglasiana	Douglas spirea	Υ	FACW

Scientific Name Common Name		Native?	Wetland Status	
Symphoricarpos albus	common snowberry	Υ	FACU	
Vaccinium ovatum	evergreen huckleberry	Y	FACU	
Herbs				
Achillea millefolium	common yarrow	Υ	FACU	
Anaphalis margaritaceae	pearly everlasting	Y	FACU	
Aquilegia formosa	western columbine	Υ	FAC	
Brassica rapa	common mustard	N	FACU	
Carduus pycnocephalus	Italian thistle	N	UPL	
Cirsium arvense	Canada thistle	N	FAC	
Cirsium vulgare	bull thistle	N	FACU	
Conium maculatum	poison hemlock	N	FAC	
Crepis capillaris	smooth hawksbeard	N	FACU	
Daucus carota	Queen Anne's lace	N	FACU	
Digitalis purpurea	foxglove	N	FACU	
Dipsacus fullonum	wild teasel	N	FAC	
Epilobium ciliatum	Northern willowherb	Υ	FACW	
Erigeron canadensis	Canada horseweed	Y	FACU	
Fragaria vesca	California strawberry	Υ	FACU	
Galium aparine	cleaver plant	N	FACU	
Geranium dissectum	cutleaf geranium	N	UPL	
Heracleum maxima	cow parsley	Υ	FAC	
Horkelia californica	California horkelia	Υ	NL	
Hypochaeris radicata	hairy cats-ear	N	FACU	
Iris douglasiana	Douglas iris	Y	UPL	
Leucantheumum vulgare	oxeye daisy	N	UPL	
Linum bienne	flax	N	UPL	
Lotus corniculatus	bird's foot trefoil	N	FAC	
Lupinus rivularis	riverbank lupine	Y	FAC	
Lysimachia arvensis	scarlet pimpernel	N	FAC	
Maianthemum racemosum	false Solomon's seal	Y	FAC	
Mentha pulegium	pennyroyal	N	OBL	

Scientific Name	ific Name Common Name		Wetlar	
Navarretia squarrosa	skunkweed	Native?	FACU	
Parentucellia viscosa	yellow glandweed	N	FAC	
Plantago lanceolata	English plantain	N	FACU	
Prunella vulgaris	self heal	Y	FACU	
Pseudognaphalium ramosissimum	pink cudweed	Υ	UPL	
Ranunculus repens	creeping buttercup	N	FAC	
Rhaphanus sativa	wild radish	N	UPL	
Rumex acetosella	sheep sorrel	N	FACU	
Rumex crispus	curly dock	N	FAC	
Scrophularia californica	California bee plant	Υ	FAC	
Senecio minimus	coastal burnweed	N	FACU	
Silybum marianum	blessed milk thistle	N	UPL	
Solanum americanum	American nightshade	Υ	FACU	
Solanum aviculare	New Zealand nightshade	N	NL	
Solidago elongata	West coast Canada goldenrod	Y	FACU	
Sonchus olereacus	sow thistle	N	UPL	
Stachys ajugoides	bugle hedgenettle	Y	OBL	
Symphyotrichum chilense	California aster	Υ	FAC	
Taraxicum officinale	dandelion	N	FACU	
Tellima grandiflora	fringe cups	Y	FACU	
Trifolium pratense	red clover	N	FACU	
Trifolium repens	white clover	N	FAC	
Urtica dioica	stinging nettle	Y	FAC	
Vicia hirsuta	tiny vetch	N	UPL	
Vicia sativa	spring vetch	N	UPL	
Zeltnera venusta	charming centaury	Υ	NL	
Grasses	LIEUS LENGTH			
Aira caryophylla	silver hairgrass	N	FACU	
Anthoxanthum odoratum	sweet vernal grass	N	FACU	
Avena sativa	wild oat	N	UPL	

Scientific Name	Common Name	Native?	Wetland Status
Briza maxima	large quaking grass	N N	UPL
Briza minor	small quaking grass N		FAC
Bromus carinatus	California brome	Y	NL
Bromus diandrus	ripgut brome	N	UPL
Bromus hordeacus	soft chess	N	FACU
Dactylis glomerata	orchard grass	N	FACU
Elymus glaucus	blue wildrye	Y	FACU
Festuca arundinacea	tall fescue	N	FACU
Festuca microstachys	small fescue	Y	UPL
Festuca perenne	Italian wildrye	N	FAC
Festuca rubra	red fescue	Y	FAC
Holcus lanatus	velvet grass	N	FAC
Phalaris aquatica	harding grass	N	FACU
Poa pratensis	Kentucky bluegrass	N	FAC
Ferns and Allies			1.135.00
Polystichum munitum	sword fern	Y	FACU
Pteridium aquilinum	bracken fern	Y	FACU
Sedges and Rushes			380 6 7
Carex leptopoda	slender footed sedge	Y	FAC
1. (USDA 2012)	Total	47.5% Native	40.75% FAC or Wetter Species
Indicators are abbreviated as follows: OBL: Obligate FACW: Facultative FAC: Facultative FACU: Facultative upland UPL: Upland NL: Not listed			