LSA

April 16, 2021

Katerina Galacatos South Branch Chief U.S. Army Corps of Engineers 450 Golden Gate Avenue, 4th Floor San Francisco, CA 94102

Subject:Request for Verification of Jurisdictional Delineation, Hayward Dermody Project Study
Site, 3636 Enterprise Avenue, City of Hayward, Alameda County, California

Dear Katerina:

On behalf of Dermody Properties, LSA is requesting verification of the extent of U.S. Army Corps of Engineers (Corps) jurisdiction under Section 404 of the Clean Water Act on the 3636 Enterprise Avenue, Hayward Dermody Project Study Site (study site), City of Hayward, Alameda County, California. This letter reports the results of a delineation performed by LSA of the potential extent of waters of the United States, including wetlands, on the study site.

This delineation is being conducted as part of planning for development of an industrial building on the study site.

SITE DESCRIPTION

The approximately 10.87-acre study site is located along the southern side of Enterprise Avenue, west of its intersection with Whitesell Street, and approximately 0.6 miles northwest of the Eden Landing Road/Clawiter Road exit from State Highway 92, east of the San Mateo Bridge toll station. The study site is accessed by driving north on Clawiter Road and turning west onto Enterprise Avenue.

The study site comprises Alameda County Assessor's Parcels 439-99-35 and 439-99-36-2. The site is situated within Township 3 South, Range 3 West in the NE ¼ of Section 36 and Range 2 West in the NW ¼ of Section 31 on the San Leandro, California 7.5-minute USGS quadrangle, and is centered at 37.6322° North Latitude and 122.1313° West Longitude. Figures 1 and 2 (attached) depict the regional location and study site location, respectively.

The site has elevations between 7 and 13 feet above mean sea level, with most of the site relatively flat and below the elevation of 11 feet. The study site is annually mowed grassland and occupied by a small building and four radio broadcast towers. The site is surrounded by a chain link fence, except for its western edge. Land uses surrounding the study site are filled vacant land to the east, a municipal wastewater treatment plant to the north, warehouse/trucking buildings to the west, and a railroad track, a drainage ditch, and a leveed former brackish marsh to the south.

Vegetation

Vegetation on the study site is predominantly ruderal grassland, except for horticultural plantings along the elevated western site boundary planted to screen the adjacent warehouse building. Plant species observed include ripgut brome (*Bromus diandrus*), hare barley (*Hordeum murinum*), creeping wild rye (*Elymus triticoides*), salt grass (*Distichlis spicata*), Italian rye (*Festuca perennis*), cutleaf geranium (*Geranium dissectum*), common groundsel (*Senecio vulgaris*), bur clover (*Medicago polymorpha*), filaree (*Erodium cicutarium*), bristly ox-tongue (*Helminthotheca echioides*), curly dock (*Rumex crispus*), pampas grass (*Cortaderia jubata*), coyote brush (*Baccharis pilularis*), fennel (*Foeniculum vulgaris*), wild radish (*Raphanus sativa*), and alkali heath (*Frankenia saligna*).

Soil

Soils on the entire study site are mapped as Reyes clay, 0 to 2 percent slopes (USDA WebSoil Survey, accessed March 6, 2021). Reyes clay is listed as completely hydric. The site has been tilled in the past for agricultural purposes and portions of the site appear to contain imported fill. There are indistinct low berms and apparent shallow fill areas in the western portion of the site. Much of the soil observed had a darker moist color of 10YR2/1 and 2/2 compared to the 10YR3/3 and 4/3 colors described for Reyes clay. These darker colors may indicate accumulation of additional organic matter since the termination of this soil's formative brackish marsh hydrology and anaerobic soil conditions.

Hydrology

The study site slopes very gently toward the southwest. A 2- to 3-foot-high fill slope at the adjacent warehouse prevents surface runoff from flowing westward. The elevated railroad bed prevents surface runoff from draining southward from that part of the site, and a low berm along the southern fence line somewhat restricts drainage to the south from that location. Four shallow topographic depressions are visible in the western portion of the site. Any surface drainage leaving the site would flow southwest to the adjacent leveed and ditched brackish marsh area. The areas southwest of the project site are leveed and appear cut off from full tidal action from the San Francisco Bay located approximately 1 mile west of the site, but may still have muted tidal influence. San Francisco Bay is a tidal Traditional Navigable Water of the United States.

REGULATORY BACKGROUND

Clean Water Act Jurisdiction

The Corps is responsible under Section 404 of the Clean Water Act (CWA) to regulate the discharge of fill material into waters of the United States. In general, a Corps permit must be obtained before placing such fill. The type of permit depends on the acreage involved and the purpose of the proposed fill.

This delineation was completed in accordance with the CWA definition of waters of the United States as revised on April 21, 2020 (33 CFR Part 328).

Per the revised definition, waters of the United States fall into four clear categories:

- Territorial seas and traditional navigable waters;
- Intermittent and perennial streams that are tributaries to navigable waters;
- Certain lakes, ponds, and impoundments; and
- Wetlands adjacent to any of the preceding three categories of jurisdictional waters.

These waters may be sorted into two broader categories of waters: wetlands and non-wetland waters. Non-wetland waters generally include un-vegetated waterbodies and watercourses such as rivers, streams, lakes, ponds, coastal waters, and estuaries. Wetlands generally include marshes, meadows, seep areas, springs, floodplains, basins, and other areas experiencing extended seasonal soil saturation and dominated by wetland plant cover.

The revised definition also details 12 specific categories of features that are not waters of the United States and thus not subject to CWA Section 404 regulation. Examples include features that only hold or convey water in direct response to rainfall (e.g., ephemeral features), groundwater, many ditches, and waste treatment systems.

Wetland delineations for Section 404 purposes must be conducted according to the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0) (Regional Supplement) (Corps 2008) and the 1987 *Corps of Engineers Wetland Delineation Manual* (1987 Manual) (Environmental Laboratory 1987). This methodology entails examination of specific sample points within potential wetlands for hydrophytic vegetation, hydric soils, and wetland hydrology. By the federal definition, all three parameters must be present for an area to be considered a wetland.

Hydrophytic plant species are listed by the National Wetland Plant List (2016). The National List identifies five categories of plants according to their frequency of occurrence in wetlands. The categories are:

- 1. Obligate wetland plants (OBL): Plants that occur almost always in wetlands
- 2. Facultative wetland plants (FACW): Plants that usually occur in wetlands
- 3. Facultative plants (FAC): Plants that are equally likely to occur in wetlands or non-wetlands
- 4. Facultative upland plants (FACU): Plants that usually occur in uplands
- 5. Obligate upland plants (UPL): Plants that occur almost always in non-wetlands

An area is generally considered to have hydrophytic vegetation when more than 50 percent of the dominant species in each stratum (tree, shrub, and herb) are in the obligate wetland, facultative wetland, or facultative categories.

Hydric soils are defined by criteria set forth by the National Technical Committee for Hydric Soils (NTCHS). These criteria are given in the Wetland Delineation Manual Supplement and are based on depth and duration of soil saturation. Hydric soils are commonly identified in the field by using indirect indicators of saturated soil, technically known as redoximorphic features. These features are caused by anaerobic, reduced soil conditions that are brought about by prolonged soil saturation. The most common redoximorphic features are distinguished by soil color, which is strongly influenced by the frequency and duration of soil saturation. Hydric soils tend to have dark (low chroma) colors that are often accompanied by reddish mottles (iron mottles), reddish stains on root channels (oxidized rhizospheres), or gray colors (gleying). The Arid West Supplement contains descriptions of numerous federally-recognized hydric soil indicators.

Under natural conditions, development of hydrophytic vegetation and hydric soils are dependent on a third characteristic, wetland hydrology. This criterion is met if the area experiences inundation or soil saturation to the surface for a period equal to at least five percent of the growing season (about 14 days in the region of the study site) in a year of median rainfall. In most cases, this criterion can only be measured directly by monitoring the site through an entire wet season. In practice, the hydrological status of a particular area is usually evaluated using indirect indicators. Some of the indicators that are commonly used to identify wetland hydrology include biotic crusts and oxidized rhizospheres around roots. The Arid West Supplement gives thorough descriptions of numerous federally-recognized indicators of wetland hydrology.

Porter-Cologne Water Quality Control Act Jurisdiction

In accordance with the Porter-Cologne Water Quality Control Act (Water Code, § 13000 et seq.), the State Water Resources Control Board and the Regional Water Quality Control Boards (Water Boards) are authorized to regulate discharges of waste, which includes discharges of dredged or fill material, that may affect the quality of waters of the state. Additionally, in accordance with CWA Section 401, Water Quality Certification must be obtained from the Water Boards for discharges into waters of the United States requiring federal CWA Section 404 permits.

The Water Code defines "waters of the state" broadly to include "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code § 13050 (e)). The Water Boards have determined that all waters of the United States are also waters of the state by regulation. In certain circumstances, such as in the case of waters that are not tributary to navigable waters, waters of the state encompass further waters that do not meet the federal definition of waters of the United States.

METHODS

The field investigations of potential jurisdictional wetlands were conducted using the routine determination method provided in the *Corps of Engineers Wetlands Delineation Manual*

(Environmental Laboratory 1987) and the revised procedures in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (Arid West Supplement; U.S. Army Corps of Engineers 2008).

FIELD METHODS

LSA senior soil scientist Chip Bouril and senior biologist Dan Sidle investigated the study site on March 11, 2021. Potential jurisdictional boundaries were mapped using a global positioning system (GPS) receiver with potential sub-meter accuracy. Wetland boundaries were determined by following a combination of the limits of hydrophytic vegetation, the limits of observed wetland hydrology, and topographic breaks. LSA established eight sample points on the study site; their locations are shown on Figure 3.

The study site had received approximately 0.76 inches of rainfall (San Jose International Airport) in the 30 days prior to the field investigation. According to the Newark, CA WETS Station, the average rainfall for this period would be approximately 2.6 inches and there is a 30 percent chance that this station will have approximately 1.2 inches or less of rainfall. Thus, the recent rainfall appears to be below the expected 40 percent probability.

Early season growth phenology (no grass inflorescences) and grazing by resident Canada geese that had cropped vegetation to a height of 2 to 3 inches both made grass identification difficult during the field investigation.

RESULTS

Potential jurisdictional features and sample point locations are shown on Figure 3.

CWA Jurisdiction - Wetlands

A search of historical Google Earth aerial images yields some images that appear to show vegetative differences at four shallow depressions compared to the remainder of the study site, but on-site vegetation observations do not necessarily back up these aerial images. The historical images also support the possibility of increased wetland hydrology and rarely at least ephemeral ponding in these same depressions.

The Reyes clay soil mapped on the study site is listed as completely hydric, although the entire site has been separated by extensive leveeing from the brackish marsh hydrology that formed this soil. The series description for Reyes soil includes at least 5 percent "irregular oxidized iron masses on the surface along pores" (i.e. redoximorphic mottling) extending from one inch to at least 37 inches in depth. With the exception of one location (i.e., Sample Points 1 and 2), no redoximorphic soil mottling was observed at the areas investigated. This suggests that the soil saturation and seasonally cycling anaerobic/aerobic soil conditions that create redoximorphic mottling no longer exist at the study site and that current site conditions have erased these features from the site soil.

Sample Points 1 and 2 were placed near the edge of a shallow depression in the northwestern portion of the study site. Sample Point 1, within the depression, contained vegetation cover meeting

hydrophytic vegetation criteria with few non-hydrophytes present and redoximorphic soil mottling sufficient to meet hydric soil criteria. There were no surface indicators of wetland hydrology, but with the concave landscape position, hydrophytic vegetation, and recent lower than average rainfall, wetland hydrology could be concluded. Sample Point 2, located on the side slope of the depression, contained a mix of hydrophytic and non-hydrophytic plant species that did not meet hydrophytic vegetation criteria. Its soil did contain some redoximorphic mottling, but not enough to meet any listed hydric soil indicators. Similar to Sample point 1, there were no wetland hydrology indicators observed. With the conclusion that this depression meets jurisdictional wetland criteria, the potential jurisdictional limit of this feature was mapped following its topographic bank slope and excluding higher elevation perimeter areas with significant cover of the non-hydrophytes common groundsel and bur clover. This feature is mapped as Seasonal Wetland 1, with a potential jurisdictional area of 4,085 square feet (0.094 acre).

Sample Points 3 and 4 were placed at the northern end of a shallow depression in the western portion of the study site. Sample Point 3, within the floor of the depression, contained predominantly hydrophytic vegetation cover that meets hydrophytic vegetation criteria. The soil at this sample point did not display any redoximorphic soil mottling or other hydric soil indicators. No wetland hydrology indicators were observed. Sample Point 4, placed on a small adjacent berm elevated from the depression, contained vegetation cover meeting hydrophytic vegetation criteria but also contained several non-hydrophytes not observed at Sample Point 3. Like Sample Point 3, Sample point 4 did not display any redoximorphic soil mottling or other hydric soil indicators.

Sample Points 5 and 6 were placed at another shallow depression in the western portion of the study site. Sample Point 5, within the floor of the depression, contained hydrophytic vegetation cover that meets hydrophytic vegetation criteria. The soil at this sample point did not display any redoximorphic soil mottling or other hydric soil indicators. No wetland hydrology indicators were observed. Sample Point 6, placed on the other end of the same small adjacent berm as Sample Point 4 and elevated from the depression, contained vegetation cover with a mix of hydrophytic and non-hydrophytic vegetation cover that did not meet hydrophytic vegetation criteria. Like Sample Point 5, Sample Point 6 did not display any redoximorphic soil mottling or other hydric soil indicators. Like Sample Point 5, no wetland hydrology indicators were observed.

Both basins investigated by Sample Points 3 through 6 fail to show evidence of current hydric soil indicators and failing to show evidence of wetland hydrology. Therefore, we conclude that neither basin meets jurisdictional wetland criteria.

Sample Points 7 and 8 were placed at a small, shallow depression along the southern edge of the study site. Sample Point 7, within the floor of the depression and within an even smaller patch of brass buttons (*Cotula coronopifolia*, OBL), contained hydrophytic vegetation cover that meets hydrophytic vegetation criteria. The soil at this sample point did not display any redoximorphic soil mottling or other hydric soil indicators and no wetland hydrology indicators were observed. Sample Point 8, nearby and at an only slightly higher elevation, contained sufficient cover of identifiable ripgut grass to fail to meet hydrophytic vegetation criteria, even though it still supported a low percentage cover of brass buttons. Similar to Sample Point 7, Sample Point 8 did not display any

redoximorphic soil mottling or other hydric soil indicators and no wetland hydrology indicators were observed.

The presence of obligate wetland indicator status brass buttons at Sample Points 7 and 8 suggest a wetland hydrology, but the presence of non-hydrophytic grasses suggests a non-wetland hydrology. (Brass buttons can be somewhat invasive, occupying disturbed areas with sufficient soil moisture to complete their seed production.) The lack of hydric soil indicators and wetland hydrology indicators suggests a non-wetland hydrology, although recent low rainfall years may have suppressed wetland hydrology indicators that would otherwise be present in more normal rainfall years. But the redoximorphic soil mottling expected from wetland hydrology would remain visible after several dry years. In balance, we conclude that the observed evidence for this basin fails to meet jurisdictional wetland criteria.

No discernable or potential surface connection was observed between Seasonal Wetland 1 and downslope off-site areas to the south, therefore Seasonal Wetland 1 is non-jurisdictional under the 2020 definition of waters of the United States. Similarly, none of the other shallow depressions investigated show any discernable surface connection to downslope off-site areas to the south.

CWA Jurisdiction - Other Waters

No evidence of Other Waters was observed at the study site.

Other Observations

The remainder of the study site did not contain any observed depressions and its vegetation appeared predominantly non-hydrophytic.

No other evidence of potential waters of the United States was observed on the study site.

Porter-Cologne Water Quality Control Act (RWQCB) Jurisdiction

Even though Seasonal Wetland 1 is not tributary to navigable waters, under the RWQCB definition of "waters of the state," Seasonal Wetland 1 would likely be jurisdictional under the Porter-Cologne Water Quality Control Act.

CONCLUSIONS

No potential Clean Water Act Section 404 jurisdictional features are identified on the Hayward Dermody Project Study Site. One potential non-jurisdictional feature and study site boundaries are mapped on Figure 3.

The findings and conclusions presented in this report, including the location and extent of other waters subject to regulatory jurisdiction, represent the professional opinion of LSA. These findings and conclusions should be considered preliminary until verified by the Corps.

Please contact George Molnar at (510) 236-6810 to schedule a verification visit.

Sincerely,

LSA Associates, Inc.

CHIP BOURN

Chip Bouril Senior Soil Scientist

Attachments: Figure 1: Regional Location Map Figure 2: Site Location Map Figure 3: Potential Waters of the United States Map Data Sheets 1 through 8

cc: George Condon, Dermody Properties

LSA

REFERENCES

- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical report Y-87-1, U.S. Army Engineers Waterways Experiment Station, Vicksburg, Mississippi.
- Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X. Available at: http://wetlandplants.usace.army.mil/nwpl_static/data/DOC/lists_2016/Regions/pdf/reg_AW_2016v1.pdf
- U. S. Army Corps of Engineers (Corps). 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), ed. J. S. Wakeley R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U. S. Army Engineer Research and Development Center.

ATTACHMENTS



SOURCE: Esri World Street Map (2021).

I:\DYP2101\GIS\Maps\Delineation\Figure 1_Regional Location.mxd (3/29/2021)



SOURCE: USGS 7.5-minute Topo Quads - San Leandro, Calif. (1993), Hayward, Calif. (1980), Redwood Point, Calif., and Neward, Calif. (1993).

I:\DYP2101\GIS\Maps\Delineation\Figure 2_Study Area Location.mxd (3/29/2021)



LSA



LEGEND

Delineation Study Area

- Wetland Sample Point
- о Non-wetland Sample Point

POTENTIAL WATERS OF THE STATE only Seasonal Wetland - 4,085 sq.ft. (0.094 ac.)

> Whitesell St & Enterprise Ave Hayward, Alameda County, California Potential Waters of the United States and Waters of the State

SOURCE: Aerial Imagery from Google Maps.

I:\DYP2101\GIS\Maps\Delineation\Figure 3_Potential Waters of the US and State.mxd (4/8/2021)

WETLAND DETERM	MINATI	ON DA'I	TA FORM	M — Arid West Region
Project Site: TATOOND DERWEDT	City/Cou	nty: Has	TURK	AGWEDA Sampling Date: 11 WKFO
Applicant/Owner:				State: <u>CA</u> Sampling Point:
Investigator(s): <u>C. Bouril</u>			_ Section,	Township, Range:
Landform (hillslope, terrace, etc.):		_ Local re	elief (concar	ve, convex, none): Slope (%):
Subregion (LRR): LRR C La	at:	~		Long: Datum:
Soil Map Unit Name: (ETE) CLOP,	0-2	20 50	OPE	MWI classification:
Are climatic / hydrologic conditions on the site typical for this time	e of year?	Yes]	No $\chi \not\succeq$ (If no, explain in Remarks.)
Are Vegetation Soil or Hydrology	Significa	ntly disturb	bed? Are	"Normal Circumstances" present? Yes No
Are Vegetation Soil or Hydrology	Naturally	y problemat	tic? (If r	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS — Attach site map showing	g samplin	g point lo	cations, t	ransects, important features, etc.
Hydrophytic Vegetation Present? Yes <u>X</u> No_ Hydric Soil Present? Yes <u>No</u>		-		Is the Sampled Area
Wetland Hydrology Present? Yes <u>No</u> No		-		within a Wetland? Yes No
Remarks:				(-P-7)
* RAINFALL	V			X L N
HOS BEEN LOUD	~	P_1		
FARTWO TEAS.				
VEGETATION	Absolute	Dominant	Indicator	Dominance Test worksheat:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	Status	Dominance rest worksheet.
1.				Number of Dominant Species
2.				
3.				Total Number of Dominant Species Across All Strata:
4.				
Total Cover:				That Are OBL, FACW, or FAC:
Sapling/Shrub Stratum (Plot size:)		-	T	
1.				Prevalence Index worksheet:
2.				Total % Cover of: Multiply by:
3.				OBL species x1 =
4.				FACW species $x 2 = $
5.				FACU species $x 3 - $ FACU species $x 4 =$
Total Cover:		_		UPL species $x 5 = $
Herb Stratum (Plot size:)	_			
1. FRANKEANS SALIGNIS	20	X	FSCW	$Prevalence Index = B/A = \$
2. KULLEX CRISPUS	5		Fac	nyuropnytic vegetation Indicators:
3. FESTUGA PERENNIS	50	X	FOC	— Dominance Test is >50%
4. DISTICHUS SPICATA	5		#AC	- Morphological Adaptations 1 (Provide supporting data in
5. GERANIUM DISSECTUM	l		UPL	Remarks or on a separate sheet)
6. SERECIO VULGARIS	(FACU	reoremate riverophytic vegetation (Explain)
7.				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
8.				
Total Cover:	82			
Woody Vine Stratum (Plot size:)				Hydrophytic Versteting
1.				Present? Yes No
2.			l	
Total Cover:				
% Bare Ground in Herb Stratum % Cover of Bioti Remarks: % Cover of Bioti	c Crust	•		· · · · · · · · · · · · · · · · · · ·

SOIL

Sampling Point: _

Profile Descrip	ption: (Describe to t	he depth ne	eded to document th	e indicator	or confirm t	he absence of indi	cators.)	8
Depth	Matrix			Redox Fea	atures			
(inches)	Color (moist)	<u>%</u>	Color (moist)		Iype [*]	Loc	<u>l exture</u>	Remarks
0-2	101142		<u> </u>					
2-7	10tra/2		759Kgle	1 5	C	PL		DRT-ISH
7-12	10-PRZ/1						C	IN-O-(S(
			~					
		-				×		
¹ Type: C=Con	centration, D=Deplet	tion, RM=Re	educed Matrix, CS=C	overed or Co	ated Sand G	rains. ² Location	: PL=Pore Lini	ng, M=Matrix.
Hydric Soil In	idicators: (Applicab	le to all LR	Rs, unless otherwise	noted.)	8		Indicators f	or Problematic Hydric Soils ³ :
Histoso	ol (Al)			Sandy Redox	x (S5)		1 cm M	fuck (A9) (LRR C)
Histic E	Epipedon (A2)			Stripped Mat	trix (S6)		2 cm N	fuck (AlO) (LRR B)
Black H	Histic (A3)			Loamy Muck	cy Mineral (I	F1)	Reduce	ed Vertic (F18)
Hydrog	gen Sulfide (A4)	()	A	Loamy Gleye	ed Matrix F2)	Red Pa	Explain in Remarks)
Straume	tuck (A9) (LRR D)	.C)		Redox Dark	unx (F5) Surface (F6)			Explain in Kenlarks)
Deplete	ed Below Dark Surfac	ce (All)		Depleted Dar	rk Surface (F	7)		
Thick I	Dark Surface (A12)	, í	X	Redox Depre	essions (F8)		³ Indicators of	of hydrophytic vegetation and
Sandy 1	Mucky Mineral (SI)			Vernal Pools	(F9)		disturbed or	problematic.
Sandy G	Gleyed Matrix (S4)							F
Restrictive La	ayer (if present):	i.			n"			
	Туре:			6				
Depth	(inches):				Hydr	ic Soil Present?	Yes	No
Demerker								
Remarks:		RE	LENT RE	DOX				
								38
	с.							
HYDROLO	GY							
Wetland Hyd	rology Indicators:						Secondary In	ndicators (2 or more required)
Primary Indica	ators (any one indicat	or is sufficie	<u>nt)</u>					
Surface	e Water (AI)		Salt C	Crust (BII)			Wai	iment Denosits (B2) (Riverine)
Fiight w	tion (A3)		Biotro Aqua	tic Invertebra	ates (B13)		Seu Drit	t Deposits (B3) (Riverine)
Water	Marks (B1) (Nonrive	erine)	Hydro	ogen Sulfide	Odor (Cl)		Dra	inage Patterns (B10)
Sedime	ent Deposits (B2) (No	onriverine)	Oxidi	zed Rhizospi	heres along I	Living Roots (C3)	Dry	-Season Water Table (C2)
Drift D	Deposits (B3) (Nonriv	verine)	Prese	nce of Reduc	ced Iron (C4)		Cra	yfish Burrows (C8)
Surface	e Soil Cracks (B6)	1 I	Recei	nt Iron Reduc	ction in Plow $(C7)$	ed Soils (CS)	Sati	uration Visible on Aerial Imagery (C9)
Water-	stained Leaves (B9)	I Imagery (E	(7) Inin	Muck Surfac	Remarks)		Sha	C-Neutral Test (D5)
//	Stanieu Deures (D3)		0	(2				()
Field Observa	ations:		\r \r					
Surface Water	r Present? Yes	N	lo <u> </u>	h (inches):				
Water Table P	Present? Yes	N	lo <u>X</u> Deptl	h (inches):				
Saturation Pre	esent? Yes	N	lo <u>X</u> Deptl	h (inches):		Wetland Hydrolo	gy Present?	Yes No
Describe Reco	nary tringe) orded Data (stream ga	auge, monito	ring well, aerial photo	os, previous i	inspections).	if available:		
	(ou can be		,		,			
Remarks:				I K.		DODO		
			NO SFI		BICA	IORS	~	
			USERE	DOX	DS IN	1DICATOR	~	
	1						6	

WETLAND DETER	MINATI	ON DAT	FA FOR	M — Arid West Region
Project Site: DERMODY HAYWERD	City/Cou	nty:		Sampling Date: 11 WER 2
Applicant/Owner:	5			State: Sampling Point:
Investigator(s): C. Bouril			Section,	Township, Range:
Landform (hillslope, terrace, etc.):		Local re	elief (concav	ve, convex, none): Slope (%):
Subregion (LRR): LRR C	at:			Long: Datum:
Soil Map Unit Name:				NWI classification:
Are climatic / hydrologic conditions on the site typical for this tin	ne of year?	Yes _]	No (If no, explain in Remarks.)
Are Vegetation Soil or Hydrology	_ Signific	antly distur	bed? Are	"Normal Circumstances" present? Yes No
Are Vegetation Soil or Hydrology	Naturall	y problema	tic? (If r	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS — Attach site map showin	ıg samplir	ng point lo	ocations, t	ransects, important features, etc.
Hydrophytic Vegetation Present? Yes No	X	_		Is the Sampled Area
Hydric Son Present? Fes No Wetland Hydrology Present? Yes No	X	_		within a Wetland? Yes No
Remarks:	<i>ν</i> ,			
LOW FASINISOUL				
				· · · ·
				-
VEGETATION	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	
1.				That Are OBL, FACW, or FAC: (A)
2.				Total Number of Dominant
3.				Species Across All Strata:
4.				Percent of Dominant Species
Total Cover:				That Are OBL, FACW, or FAC:(A/B)
Sapling/Shrub Stratum (Plot size:)		1	1	Prevalence Index worksheet:
1.				
2.				<u>I total % Cover or:</u> <u>Multiply by:</u>
3.				OBL species $$ $x l = $ FACW species $x 2 =$
4.				FAC species 40 $x_3 = 120$
<u>).</u>				FACU species \underline{FO} $x 4 = 200$ UPL species \underline{r} $x 5 = 100$
Herb Stratum (Plot size:)		-		Column Totals: <u>90</u> .(A) <u>320</u> .(B)
1. SENECIO VULLABRIS	20	X	FROU	Prevalence Index = $B/A = 3$, Ce .
2. FESTUGA PEREMINIS	30	X	FBC	Hydrophytic Vegetation Indicators:
3. MEDICACED POLYMORPHA	30	X	FLEW	— Dominance Test is >50%
4. DISTICHILIS SPICATA	10		FAC	- Prevalence Index is $\leq 3.0^1$ - Morphological Adaptations 1 (Provide supporting data in
5.				Remarks or on a separate sheet)
6.				— Problematic Hydrophytic Vegetation ¹ (Explain)
7		-		¹ Indicators of hydric soil and wetland hydrology must be
8				
Total Cover:	90	L	.	
Woody Vine Stratum (Plot size:)		-		Hydrophytic
1.				Vegetation Present? Yes No .
2.			I	
Total Cover:		-		
% Bare Ground in Herb Stratum % Cover of Bio Remarks: %	tic Crust	· .		
				~

SOIL

Sampling	Point:	2
----------	--------	---

Depth	Matrix	-	Redox Fe	atures			
inches)	Color (moist) %	Color (moist)	%	_Type ¹	Loc ²	Texture	Remarks
)-2	104142/2		·				MOIST
2-9	104P4/2	7,STR4/0	03	C	PL		DRY 1541
1-12	104R2/1						WORT
	('	E.					
	3						
		\	-				
	z				·		
Tuma: C=Cor					ains ² Location	. DI =Dore Lin	ng M=Matrix
Type. C-Col	disators (Applicable to all	LDDa unless otherwi	-Covered of C	Joaleu Saliu Oli		Indicators	ing, Mi-Mailix.
Iyuric Soli II	idicators: (Applicable to all	LKKS, unless otherwi	Sandy Dada	w (85)		Indicators	(volt (AQ) (LPR C)
Histoso	DI (AI) Eninedon (A2)		_ Sandy Redd	(S5)		1 cm 1 2 cm 1	Auck (AIO) (LRR B)
Black H	Histic (A3)		Loamy Muc	ky Mineral (Fl	1)	Reduc	ed Vertic (F18)
Hydrog	gen Sulfide (A4)		Loamy Gle	yed Matrix F2)		Red P	arent Material (TF2)
Stratifi	ed Layers (A5) (LRR C)		_ Depleted M	atrix (F3)		Other	(Explain in Remarks)
1 cm N	fuck (A9) (LRR D)		Redox Dark	Surface (F6)	-		
Deplete	ed Below Dark Surface (All)		_ Depleted D	ark Surface (F7	1)	³ Indicators	of hydrophytic vegetation and
Inick I Sandy	Dark Surface (A12) Mucky Mineral (SI)		Vernal Pool	s (F9)		wetland hyc	rology must be present, unless
Sandy	Gleved Matrix (S4)					disturbed or	problematic.
Depth	Type:			Hydrid	c Soil Present?	Yes	No
Depth Remarks:	Type:(inches):			Hydric	c Soil Present?	Yes	NoX
Depth Remarks:	Type:			Hydrio	c Soil Present?	Yes	No
Depth Remarks: HYDROLO Wetland Hyd	Type:	ficient)		Hydrid	c Soil Present?	Yes	No
Depth Remarks: HYDROLO Wetland Hyd Primary Indic: Surface	Type:	ficient)	It Crust (B11)	Hydric	c Soil Present?	Yes Secondary I	No
Depth Remarks: HYDROLO Vetland Hyd Primary Indica Surface High V	Type:	<u>ficient)</u> Sal Bio	lt Crust (B11) Ditic Crust (B12)	2)	c Soil Present?	Yes Secondary I	No ndicators (2 or more required) ter Marks (Bl) (Riverine) liment Deposits (B2) (Riverine)
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat	Type:	ficient) Sal Bio Aq	lt Crust (B11) otic Crust (B12) uatic Inverteb	2) rates (B13)	c Soil Present?	Yes Secondary I Wa Sec Dri	No ndicators (2 or more required) ter Marks (Bl) (Riverine) liment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine)
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Water	Type:	<u>ficient)</u> Sal Bio Aq Hy	lt Crust (B11) otic Crust (B12 uatic Inverteb drogen Sulfide	2) rates (B13) e Odor (Cl)	c Soil Present?	Yes Secondary I Wa Sec Dri Dra	No ndicators (2 or more required) ter Marks (Bl) (Riverine) liment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) inage Patterns (B10)
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Water Sedima	Type:	<u>ficient)</u> Sal Bio Aq Hy ne) Ox	lt Crust (B11) otic Crust (B12) uatic Inverteb drogen Sulfid idized Rhizos	2) rates (B13) e Odor (Cl) pheres along Li	c Soil Present?	Yes Secondary I Wa Sec Dri Dri Dri	No ndicators (2 or more required) ter Marks (Bl) (Riverine) liment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2)
Depth Remarks: HYDROLO Wetland Hyd Primary Indic: Surface High V Saturat Water Sedime Drift E Surface	Type:	ficient) Sal Bio Aq Hy ne) Ox Pre	It Crust (B11) otic Crust (B12) uatic Inverteb drogen Sulfide idized Rhizos essence of Redu cent Iron Redu	2) rates (B13) e Odor (Cl) pheres along Li toced Iron (C4)	c Soil Present?	Yes Secondary I Wa Sec Dri Dra Drg Cra Set	No ndicators (2 or more required) ter Marks (Bl) (Riverine) liment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) inage Patterns (B10) r-Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9)
Depth Remarks: HYDROLO Vetland Hyd Primary Indica Gamma Surface High V Saturat Water Sedimo Drift D Surface Drift D Surface Inunda	Type:	ficient) Sal Bio Aq Hy ne) Ox Pro Re Re Th	It Crust (B11) otic Crust (B12) uatic Inverteb drogen Sulfide idized Rhizosp esence of Redu cent Iron Redu in Muck Surfa	2) rates (B13) e Odor (Cl) pheres along Li uced Iron (C4) uction in Plowe uce (C7)	c Soil Present?	Yes Secondary I Wa Wa Dri Dri Dri Cra Sat Sat	No ndicators (2 or more required) ter Marks (Bl) (Riverine) liment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 illow Aquitard (D3)
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Water Sedimo Drift D Surface Drift D Surface Mater-	Type:	ficient)	It Crust (B11) otic Crust (B12) uatic Inverteb drogen Sulfid idized Rhizos esence of Redu cent Iron Redu in Muck Surfa her (Explain ir	2) rates (B13) e Odor (Cl) pheres along Li icced Iron (C4) iccion in Plowe icce (C7) n Remarks)	c Soil Present?	Yes Secondary I Wa Sec Dri Dra Dra Cra Sat Sha FA	<u>No</u> <u>No</u> <u>ndicators (2 or more required)</u> ter Marks (Bl) (Riverine) liment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) inage Patterns (B10) '-Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) illow Aquitard (D3) C-Neutral Test (D5)
Depth Remarks: HYDROLO Wetland Hyd Primary Indic: Surface High V Saturat Water Sedime Drift D Surface Inunda Water-	Type:	ficient)	It Crust (B11) otic Crust (B12) uatic Inverteb drogen Sulfide idized Rhizos esence of Redu cent Iron Redu in Muck Surfa her (Explain ir	2) rates (B13) e Odor (Cl) pheres along Li aced Iron (C4) action in Plowe ace (C7) a Remarks)	c Soil Present?	Yes Secondary I Wa Sec Dri Dri Cra Sat Sha FA	No ndicators (2 or more required) ter Marks (Bl) (Riverine) liment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) inage Patterns (B10) v-Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) illow Aquitard (D3) C-Neutral Test (D5)
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Water Sedimo Drift D Surface Inunda Water- Field Observ	Type:	ficient)	It Crust (B11) otic Crust (B12) uatic Inverteb drogen Sulfide idized Rhizosp esence of Redu cent Iron Redu in Muck Surfa her (Explain ir	2) rates (B13) e Odor (Cl) pheres along Li iced Iron (C4) iction in Plowe ice (C7) n Remarks)	c Soil Present?	Yes Secondary I Wa Wa Dri Dri Dri Cra Sat Sat Sha FA	No ndicators (2 or more required) ter Marks (Bl) (Riverine) liment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) illow Aquitard (D3) C-Neutral Test (D5)
Depth Remarks: HYDROLO Wetland Hyd Primary Indic: Surface High V Saturat Water Sedima Drift D Surface Inunda Water- Field Observ Surface Water	Type:	ficient)	It Crust (B11) otic Crust (B12) uatic Inverteb drogen Sulfid- idized Rhizos esence of Redu cent Iron Redu in Muck Surfa her (Explain ir pth (inches):	2) rates (B13) e Odor (Cl) pheres along Li icced Iron (C4) iccion in Plowe icce (C7) n Remarks)	c Soil Present?	Yes Secondary I Wa Sec Dri Dry Cra Sat Sha FA	No ndicators (2 or more required) ter Marks (Bl) (Riverine) liment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9, illow Aquitard (D3) C-Neutral Test (D5)
Depth Remarks: HYDROLO Wetland Hyd Primary Indic: Surface High V Saturat Water Sedime Drift D Surface Inunda Water- Field Observa Surface Water	Type:	ficient) Sal	It Crust (B11) otic Crust (B12) uatic Inverteb drogen Sulfide idized Rhizosp esence of Redu cent Iron Redu in Muck Surfa her (Explain ir pth (inches): pth (inches):	2) rates (B13) e Odor (Cl) pheres along Li aced Iron (C4) action in Plowe ace (C7) a Remarks)	c Soil Present?	Yes Secondary I Wa Sec Dri Dri Cra Sat Sha FA	No
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Sedima Drift D Surface Unift D Surface Field Observ Surface Water Water Table F Saturation Pre (includes capi	Type:	ficient)	It Crust (B11) otic Crust (B12) uatic Inverteb drogen Sulfide idized Rhizosp esence of Redu cent Iron Redu in Muck Surfa her (Explain ir pth (inches): pth (inches):	2) rates (B13) e Odor (Cl) pheres along Li iced Iron (C4) iction in Plowe ice (C7) n Remarks)	c Soil Present? iving Roots (C3) ed Soils (CS)	Yes Secondary 1 Wa Wa Dry Cra Dry Cra Sat Sta Sha FA	No
Depth Remarks: HYDROLO Wetland Hyd Primary Indic: Surface High V Saturat Water Sedima Sedima Drift D Surface Inunda Water- Field Observ Surface Water Water Table F Saturation Pre (includes capi Describe Reco	Type:	ficient) Sal	It Crust (B11) otic Crust (B12) uatic Inverteb drogen Sulfid- idized Rhizos esence of Redu cent Iron Redu in Muck Surfa her (Explain ir pth (inches): pth (inches): pth (inches):	2) rates (B13) e Odor (Cl) pheres along Li iced Iron (C4) iction in Plowe ice (C7) in Remarks)	c Soil Present? iving Roots (C3) ed Soils (CS) Wetland Hydrolo	Yes Secondary I Wa Sec Dri Dri Cra Sat Sha FA gy Present?	No
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Sedime Drift D Surface Inunda Water Field Observa Surface Water Field Observa Surface Water Surface Water	Type:	ficient)	It Crust (B11) otic Crust (B12) uatic Inverteb drogen Sulfide idized Rhizosp esence of Redu cent Iron Redu in Muck Surfa her (Explain ir pth (inches): pth (inches): pth (inches):	2) rates (B13) e Odor (Cl) pheres along Li aced Iron (C4) action in Plowe (ce (C7) n Remarks)	c Soil Present? iving Roots (C3) ed Soils (CS) Wetland Hydrolo f available:	Yes Secondary I Wa Sec Dri Dri Cra Sat Sha FA gy Present?	No
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Water Sedime Drift D Surface Unift D Surface Surface Water Field Observ Surface Water Water Table F Saturation Pre (includes capi Describe Reco	Type:	ficient)	It Crust (B11) otic Crust (B12) uatic Inverteb drogen Sulfide idized Rhizosp esence of Redu cent Iron Redu in Muck Surfa her (Explain ir pth (inches): pth (inches): pth (inches): otos, previous	P) P) P) P) P) P) P) P) P) P)	c Soil Present? iving Roots (C3) ed Soils (CS) Wetland Hydrolo f available:	Yes Secondary 1 Wa Wa Sec Dry Cra Sat Sat Sha FA gy Present?	No
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Water Sedima Drift D Sedima Drift D Surface Water Field Observ Surface Water Water Table F Saturation Pre (includes capi Describe Reco	Type:	ficient) Sal	It Crust (B11) otic Crust (B12) uatic Inverteb drogen Sulfid- idized Rhizos esence of Redu cent Iron Redu in Muck Surfa her (Explain ir pth (inches): pth (inches): pth (inches): otos, previous	Pydrid Pydrid 2) rates (B13) e Odor (Cl) pheres along Li iced Iron (C4) iction in Plowe ice (C7) in Remarks)	c Soil Present? iving Roots (C3) ed Soils (CS) Wetland Hydrolo f available:	Yes Secondary I Wa Sec Dri Dri Cra Sat Sha FA gy Present? SiDESL	No

2

WETLAND DETERMINATION DATA FORM — Arid West Region

Project Site:	City/Cou	nty:		Sampling Date: 11 WARCH 21
Applicant/Owner:				State: Sampling Point: 3
Investigator(s):C. Bouril			Section,	Township, Range:
Landform (hillslope, terrace, etc.):		Local re	elief (conca	ve, convex, none): Slope (%):
Subregion (LRR): LRR C L	at:			Long: Datum:
Soil Map Unit Name:			5. 	NWI classification:
Are climatic / hydrologic conditions on the site typical for this tim	e of year?	Yes		No (If no, explain in Remarks.)
Are Vegetation Soil or Hydrology	Significa	ntly distur	bed? Are	"Normal Circumstances" present? Yes No
Are Vegetation Soil or Hydrology	Naturally	y problema	tic? (If	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS — Attach site map showin	g samplin	g point lo	ocations, t	ransects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	× ×	- - -		Is the Sampled Area within a Wetland? Yes No
Remarks:				ω
E	- Marine	ALCE	1	SP-4 522
	tE	ALCO		X
VEGETATION				
	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>I ree Stratum</u> (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1.				That Are OBL, FACW, or FAC: (A)
2.				Total Number of Dominant
3.				Species Across All Strata: (B)
4.	_L	I		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)		-		$\begin{array}{c} \text{Inat Are OBL, FACW, of FAC:} \\ \hline \end{array} \qquad (A/B) \\ \hline \end{array}$
1.				Prevalence Index worksheet:
2.				Total % Cover of: Multiply by:
3.				OBL species $x_1 =$
4.				FACW species
5.				FAC species x 3 - . FACU species x 4 = .
Total Cover:		_		UPL species $x 5 =$ Column Totals (A)
Herb Stratum (Plot size:)	1			(2)
1. FRACINENIA SAUGNA	25	X	FACO	Prevalence index = B/A =
2. DISICAUS SPICALA	10	X	TAC	Design of the second se
3. FESIOCA PERENNIS	40	X	TEC	- Dominance Test is $>50\%$ - Prevalence Index is $\leq 3.0^{1}$
4. 0 1 4 4 4 4 5 5	19		ī.	— Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet)
5.				— Problematic Hydrophytic Vegetation ¹ (Explain)
6.				¹ Indicators of hydric soil and wetland hydrology must be
7.				present, unless disturbed or problematic.
8.				-
Woody Vine Stratum (Plot size:)	(00)			Hydrophytic
1.				Vegetation
2.				
Total Cover:				
% Bare Ground in Herb Stratum % Cover of Biot Remarks:	ic Crust	<u> </u>		

C	0	T	r
Э	υ		L

2

Profile Description: (Describe to the	depth needed to	document the indicat	tor or confirm	the absence of ind	licators.)		
Depth Matrix		Redox	Features				
(inches) Color (moist)	% Color	(moist) %	Type ¹	Loc ²	Texture .	Rem	larks
0-12 101R2/1						MOIC	St.
							1
				4			12
				-			
	······						•
			(
¹ Type: C=Concentration, D=Depletio	n. RM=Reduced N	fatrix. CS=Covered or	Coated Sand C	 Brains. ² Locatio	on: PL=Pore Lini	ng. M=Matrix.	
Hydric Soil Indicators: (Applicable	to all LRRs, unle	s otherwise noted.)			Indicators fo	or Problematic Hy	dric Soils ³ :
Historol (Al)	to an Errics, units	Sandy Re	dox (\$5)		1 cm M	luck (AQ) (I RR C)	
Histic Enjinedon (A2)		Strinned	Matrix (S6)		1 cm M	luck (A9) (LRR C)	
Black Histic (A3)		Supped I	lucky Mineral (F1)	2 cm w	d Vertic (F18))
Hydrogen Sulfide (A4)		Loamy G	leved Matrix F	2)	Red Pa	rent Material (TF2)	
Stratified Lavers (A5) (LPR C		Loanly O	Matrix (E3)	-)	Ktulia	Explain in Remarks	c) ·
1 cm Muck (A9) (LRR C)	Depicted	ark Surface (E6))
Depleted Palow Dark Surface	(A11)	Redux Da	Dark Surface (10)	(57)			
Thick Dark Surface (A12)	(AII)	Depieteu	Dark Surface ((1)	³ Indicators of	f hydronhytic yege	tation and
Sandy Muelzy Minoral (S1)		Kedox De	cole (EQ)		wetland hydr	ology must be pres	ent, unless
Sandy Mucky Mineral (SI)			JOIS (F9)		disturbed or	problematic.	
Sandy Gleyed Matrix (34)							
Restrictive Layer (if present):							
Туре:		1					
Depth (inches):			Hydi	ic Soil Present?	Yes	N	o _ X
			•				
Remarks:		× - 1×11		R			
		NO	VIGAIO	1CS			
Watland Hydrology Indiastors					Secondary Ir	dicators (2 or more	required)
Primary Indicators (any one indicators	is sufficient)				Secondary II		(Tequied)
Surface Water (A1)	is sumerency	Salt Cruct (B1)	D.		Wat	er Marks (Bl) (Div	arina
High Water Table (A2)		Biotic Crust (B1	(12)		Wat	ment Denosite (B2)	(Riverine)
Seturation (A2)		Biolic Clust (E	(\mathbf{P}_1^2)		Stu	Then Deposits (B2)	(Kiverine)
Water Marks (P1) (Nonvivori		Aquatic Invert	ida Odor (Cl)		Dm	noge Detterns (D1)	verme)
Sediment Denesite (P2) (Nem	ne)	Hydrogen Sun	lue Ouor (CI)	Living Poots (C2)	Dial	Sasson Water Tabl)
Drift Denosits (B2) (Non	ine)	Dragonag of Ba	duced Iron (C4	N N N N N N N N N N N N N N N N N N N	Diy	figh Durrows (C2)	e (C2)
Diffit Deposits (B3) (Nonriver	ine)	Presence of Re	ductor in Play) wed Seile (CS)	Clay	ration Visible on A	arial Imagary (CO
Surface Soft Cracks (B6)		Recent from Re	face (C7)	ved Solis (CS)	Sau	low A quitord (D2)	erial imagery (C9
Woton Stained Leaving (D0)	nagery (B7)	I nin Muck Su	in Domorto)			Novtrol Test (D5)	,
water-statlied Leaves (B9)			III Kelliaiks)		FAC	-Neutral Test (D3)	
Field Observations:					18 ¹¹		
Surface Water Present? Yes	No	X Depth (inches)	:				
Water Table Present? Yes	No	< Depth (inches)	:				
Saturation Present? Ves	No	A Denth (inches)		Watland Hydrol	om Present?	Vac	No X
(includes capillary fringe)	INU	Depui (inches)	·	wenand Hydron	ogy riesent:	105	
Describe Recorded Data (stream gaug	ge, monitoring well	, aerial photos, previo	us inspections),	if available:			
	-						
Remarks:	110 1	T- (KING	1 the	s s			
	NOS	que l'Able	-p1 010	5			

WETLAND DETERMINATION DATA FORM — Arid West Region

Project Site: DERUCOY	City/Cou	nty:		Sampling Date: 11 UL&RGH ZI
Applicant/Owner:				State: <u>CA</u> Sampling Point:
Investigator(s): C. Bouril			Section, 7	Township, Range:
Landform (hillslope, terrace, etc.):		Local rel	lief (concav	ve, convex, none): BERM Slope (%): (3
Subregion (LRR): LRR C L	at:			Long: Datum:
Soil Map Unit Name:				NWI classification:
Are climatic / hydrologic conditions on the site typical for this time	e of year?	Yes	1	No (If no, explain in Remarks.)
Are Vegetation Soil or Hydrology	_ Significa	antly disturb	ed? Are	"Normal Circumstances" present? Yes No
Are Vegetation Soil or Hydrology	Naturally	y problemati	ic? (If n	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS — Attach site map showin	g samplin	g point lo	cations, tr	ransects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	X			Is the Sampled Area within a Wetland? Yes No
Remarks:				
		2		
VEGETATION	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	<u>Status</u>	
1.				Number of Dominant Species That Are OBL, FACW, or FAC:
2.				Total Number of Dominant
3.				Species Across All Strata: (B)
4.				Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)		-		That Are OBL, FACW, or FAC: $(\bigcirc \bigcirc \bigcirc \bigcirc$ (A/B)
1.				Prevalence Index worksheet:
2.				Total % Cover of: Multiply by:
3.				OBI species v I =
4.				FACW species x 2 =
5.				FAC species x 3 = FACU species x 4 =
Total Cover:		_		UPL species $x 5 =$ Column Totals: (A)
Herb Stratum (Plot size:)	1	-		
1. DISTICHUS SPICATA	7		FBC 1	$Prevalence Index = B/A = \$
2. FRANKENIX SALIENA	50	<u> </u>	Focus	Hydrophytic vegetation indicators:
3. SENECIO VULGARIS	2		FACO	— Dominance Test is >50% — Prevalence Index is <3.0 ¹
4. RUULEX ERISPUS	5		FOC	- Morphological Adaptations1 (Provide supporting data in
5. FESTOCA PERENNIS	10		FOC	- Problematic Hydrophytic Vegetation ¹ (Explain)
6. UK Q19855	10			¹ Indicators of hydric soil and wetland hydrology must be
7. EERANIUM DISSECTUM	10		UPL	present, unless disturbed or problematic.
8. ERODIUM CICUTARIUM	5		UPL	
Weedy Vine Stretum (Diet size)		-	54. 1	Hydrophytic
woody vine Stratum (Piot size:)				Vegetation
2.				Present? Yes <u>No</u> .
Total Cover:		-		
% Bare Ground in Herb Stratum % Cover of Bio	tic Crust			
Remarks:				
				3

SOIL

Sampling Point:

(inches)	Color (moist) 0/	Color (oist) 0/	Tunal	Los2	Touture	n	amarka
(inches)			<u>0151) 70</u>	Type	Loc	Texture	K	emarks
0-12	104122/1-					C	PET	ISH
	n							
			(
		c	5)				
	т — п		и. 			~		
¹ Type: C=Cor	centration, D=Depletion, RM		rix. CS=Covered or C	Coated Sand Gra	ains. ² Location	n: PL=Pore Lin	ing. M=Matrix.	
Hudula Call L	diastaras (Applicable to all	I DDa umlara	thempies noted)			Indicators	for Ducklamatic	Induia Calla ³ .
Hyuric Soli II	idicators: (Applicable to al	I LKKS, unless	otherwise noted.)			Indicators	for Problematic	Hydric Solis":
Histoso	ol (Al)		Sandy Redo	ox (S5)		1 cm]	Muck (A9) (LRR	C)
Histic	Epipedon (A2)		Stripped Ma	atrix (S6)	,	2 cm	Muck (AlO) (LRF	с В)
Black I	Histic (A3)		Loamy Muc	ky Mineral (FI)	Reduc	ed Vertic (F18)	
Hydrog	gen Sulfide (A4)		Loamy Gley	yed Matrix F2)		Red P	arent Material (T)	:' <i>2)</i>
Stratifi	eu Layers (A5) (LRR C)		Depleted M	atrix (F3)		Other	(Explain in Rema	irks)
	IUCK (A9) (LKK D)		Redox Dark	Surface (F6)	×.			
Deplet	ou below Dark Surface (All)		Depleted Da	ark Surface (F/)	³ Indicators	of hydronbytic ve	octation and
I nick I	Jark Surface (A12) Mucha Minoral (S1)	8	Kedox Depi	ressions (F8)		wetland hvo	lrology must be p	resent, unless
Sandy	Gleved Matrix (S4)	n (3	vernai Pool	5 (ГУ)		disturbed or	problematic.	,
					·	~		
Depth	Type:			Hydric	Soil Present?	Yes		No
Depth Remarks:	Type:(inches):			Hydric	Soil Present?	Yes		No
Depth Remarks:	Type:	SAA	IE SOU	Hydric	Soil Present?	Yes	EPRESS	No X
Depth Remarks:	Type:(inches):	SAN	UE SOIL	Hydric	Soil Present?	Yes	EPRESS	NO X
Depth Remarks:	Type:(inches):	SAN	UE SOIL	Hydric	Soil Present? M SISKI	Yes	EPRESS	NO X
Depth Remarks: HYDROLO	Type:	SDA	UE SOIL	Hydric	Soil Present?	Yes	EPRESS	NO X
Depth Remarks: HYDROLO Wetland Hyd	Type:	SAA	UE SOIL	Hydric	Soil Present?	Yes	EPRESS	No X
Depth Remarks: HYDROLO Wetland Hyd Primary Indic:	Type:	S DA	UE SOIL	Hydric	Soil Present?	Yes	EPRESS	No X
Depth Remarks: HYDROLO Wetland Hyd Primary Indic: Surfac:	Type:	S DA	Salt Crust (B11)	Hydric	N SS&	Yes	EPRESS	No X
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surfact High V	Type:	S DA	Salt Crust (B11) Biotic Crust (B12)	Hydric - DS ()	Soil Present?	Yes (LOCL) D Secondary	Indicators (2 or m tter Marks (Bl) (R liment Deposits ()	No X CON (ore required) iverine) 32) (Riverine)
Depth Remarks: HYDROLO Wetland Hyd Primary Indic: Surface High V Saturat	Type:	5 DA	Salt Crust (B11) Biotic Crust (B12)	- DS (1) - DS (1) - DS (1) - DS (1)	Soil Present?	Yes (Joc) D Secondary	Indicators (2 or m ter Marks (Bl) (R timent Deposits (ft Deposits (B3) (No X
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Water	Type:	S DA	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebu	$Hydric$ $- \sum S (1)$ $2)$ rates (B13) $C(1)$	Soil Present?	Yes D	Indicators (2 or m ter Marks (Bl) (R liment Deposits (I ft Deposits (B3) (ainage Patterns (P	No
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Saturat Sedimo	Type:	5 DM fficient)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebu Hydrogen Sulfide Oxidized Rhizosi	Pydric Hydric (1) (1) (2) (2) (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	ving Roots (C3)	Yes Dri Dri Dri	Indicators (2 or m ter Marks (Bl) (R liment Deposits (B ft Deposits (B3) (ainage Patterns (B y-Season Water T	No COT ore required) iverine) 32) (Riverine) Riverine) 10) able (C2)
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Water Sedime Drift D	Type:	S DA fficient) ine)	Salt Crust (B11) Biotic Crust (B12 Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosj Presence of Redu	Hydric Hydric (1) (2) rates (B13) e Odor (Cl) pheres along Li uced Iron (C4)	Soil Present?	Yes Secondary Wa Wa Dri Dri Dri Dri Dri	Indicators (2 or m ter Marks (Bl) (R liment Deposits (ft Deposits (B3) (ainage Patterns (B y-Season Water T ayfish Burrows (C	No core required) iverine) 32) (Riverine) Riverine) 10) able (C2) 8)
Depth Remarks: HYDROLO Wetland Hyd Primary Indic: Surfact High V Saturat Water Sedime Drift D Surfact	Type:	S DA	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosj Presence of Redu Recent Iron Redu	Pydric Hydric - 25 (1) - 25 (1	ving Roots (C3)	Yes Secondary Secondary Wa Secondary Dri Dri Dri Cra Sat	Indicators (2 or m ter Marks (Bl) (R liment Deposits (I ft Deposits (B3) (ainage Patterns (B y-Season Water T ayfish Burrows (C uration Visible or	No core required) iverine) 32) (Riverine) Riverine) 10) able (C2) 8) A Aerial Imagery
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Satural Water Sedime Drift E Surface Log Surface Surface	Type:	S DA	Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Thin Muck Surfa	P) rates (B13) e Odor (Cl) pheres along Lir aced Iron (C4) action in Plowed ce (C7)	ving Roots (C3)	Yes Corr D Secondary Wa Wa Wa Dri Dri Dri Cra Sat Sat	Indicators (2 or m ter Marks (Bl) (R liment Deposits (I ft Deposits (B3) (ainage Patterns (B y-Season Water T ayfish Burrows (C uration Visible or allow Aquitard (D	No core required) iverine) 32) (Riverine) Riverine) 10) able (C2) 8) n Aerial Imagery 3)
Depth Remarks: HYDROLO Wetland Hyd Primary Indic: Surface High V Saturat Water Sedime Drift D Surface Inunda Water-	Type:	S DA	Salt Crust (B11) Biotic Crust (B11) Biotic Crust (B12 Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizosj Presence of Redu Recent Iron Redu Thin Muck Surfa Other (Explain in	P) Hydric Hydric () () () () () () () () () ()	ving Roots (C3)	Yes Secondary Wa Wa Dri Dri Dri Cra Sat Shi FA	Indicators (2 or m Indicators (2 or m Iter Marks (Bl) (R Iter Marks (Bl) (R) (R) (R) (R) (R) (R) (R) (R) (R) (R	No core required) iverine) 32) (Riverine) Riverine) 10) able (C2) 8) n Aerial Imagery 3) 25)
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Water Sedimo Drift D Surface Inunda Water-	Type:	S DA	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebu Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Thin Muck Surfa Other (Explain in	Hydric Hydric (2) rates (B13) e Odor (Cl) pheres along Lit iccel Iron (C4) iccel Iron (C4) iccel (C7) in Remarks)	ving Roots (C3)	Yes Secondary Secondary Wa Secondary Wa Secondary Cra Secondary Cra Sat Sha FA	Indicators (2 or m Indicators (2 or m Indicators (B) (R Imment Deposits (B) (Imment Dep	No COT ore required) iverine) 32) (Riverine) Riverine) 10) able (C2) 8) A Aerial Imagery 3) 25)
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Water Sedime Drift D Surface Drift D Surface Inunda Water-	Type:	S DA	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebu Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Thin Muck Surfa Other (Explain in	Hydric Hydric 2 > 1/2 Point (C1) Pheres along Lin (C1) Pheres along Lin (C2) (C1) Pheres along Lin (C2) (C1) Pheres along Lin (C2) (C1) Pheres along Lin (C2) (C1) Pheres along Lin (C2) (C1) (C2) (C2) (C2) (C2) (C2) (C2) (C2) (C2	ving Roots (C3)	Yes (Jack Constant)	Indicators (2 or m ter Marks (Bl) (R liment Deposits (B ft Deposits (B3) (ainage Patterns (B y-Season Water T ayfish Burrows (C uration Visible or allow Aquitard (D C-Neutral Test (I	No COT ore required) iverine) B2) (Riverine) Riverine) 10) able (C2) 8) n Aerial Imagery 3) 55)
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Water Sedima Drift D Surface Inunda Water- Field Observa Surface Water	Type:	S DA	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Thin Muck Surfa Other (Explain in	Hydric Hydric (1) (2) rates (B13) e Odor (Cl) pheres along Li aced Iron (C4) action in Plowed ce (C7) a Remarks)	ving Roots (C3)	Yes Secondary Secondary Wa Secondary Wa Secondary Cra Sat Sha FA	Indicators (2 or m Indicators (2 or m Iter Marks (Bl) (R Iiment Deposits (B3) (Anage Patterns (B y-Season Water T ayfish Burrows (C uration Visible or allow Aquitard (D C-Neutral Test (I	No core required) iverine) 32) (Riverine) Riverine) 10) able (C2) 8) A Aerial Imagery 3) 55)
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Water Sedima Drift E Surface Inunda Water- Field Observa Surface Water Water Table F	Type:	S DA	Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteba Hydrogen Sulfide Oxidized Rhizosj Presence of Redu Recent Iron Redu Thin Muck Surfa Other (Explain in Depth (inches): Depth (inches):	Hydric Hydric (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2	Soil Present?	Yes Secondary Secondary Wa Sec Dri Dri Cra Sai Shi FA	Indicators (2 or m Indicators (2 or m Iter Marks (Bl) (R Iter Marks (Bl) (R) (R) (R) (R) (R) (R) (R) (R) (R) (R	No core required) iverine) 32) (Riverine) Riverine) 10) able (C2) 8) 1 Aerial Imagery 3) 55)
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Water Sedime Drift E Surface Ununda Water- Field Observa Surface Water Water Table F Saturation Pre	Type:	S DA	Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Thin Muck Surfa Other (Explain in Depth (inches): Depth (inches):	Hydric Hydric (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2	Soil Present?	Yes Secondary [Wa Wa Wa Dri Dri Dri Cra Sat Sat Shi FA	Indicators (2 or m Indicators (2 or m Iter Marks (Bl) (R Iter Marks (Bl) (C Iter Marks (Bl) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	No core required) iverine) 32) (Riverine) Riverine) 10) able (C2) 8) a Aerial Imagery 3) 55)
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Water Sedime Drift D Surface Unift D Surface Field Observa Surface Water Water Table F Saturation Pre (includes capi	Type:	S DA	Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Thin Muck Surfa Other (Explain in Depth (inches): Depth (inches):	Hydric Hydric Hydric (1) (2) (2) rates (B13) e Odor (C1) pheres along Lit iced Iron (C4) iction in Plowed ice (C7) in Remarks) (2) (2) (3) (4) (4) (4) (4) (5) (4) (4) (4) (4) (4) (4) (4) (4	Soil Present?	Yes Secondary Wa Wa Wa Dri Dri Dri Cra Sat Shi FA	Indicators (2 or m Indicators (2 or m Iter Marks (Bl) (R Iter Marks (Bl) (R) (R) (R) (R) (R) (R) (R) (R) (R) (R	No core required) iverine) 32) (Riverine) Riverine) 10) able (C2) 8) n Aerial Imagery 3) 25)
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Water Saturat Orift D Surface Unift D Surface Surface Water- Field Observa Surface Water Water Table F Saturation Pre (includes capi Describe Reco	Type:	SBA fficient) ine) ry (B7) No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebu Hydrogen Sulfide Oxidized Rhizosy Presence of Redu Recent Iron Redu Thin Muck Surfa Other (Explain in Depth (inches): Depth (inches): Depth (inches):	Hydric Hydric Hydric (1) (1) (2) (2) (2) (3) (4) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (5) (4) (5) (5) (5) (5) (5) (5) (5) (5	Soil Present?	Yes Secondary 1 Wa Wa Wa Dri Dri Dri Cra Sat Shi FA	Indicators (2 or m Indicators (2 or m Iter Marks (Bl) (R Iiment Deposits (B3) (Ainage Patterns (B y-Season Water T ayfish Burrows (C uration Visible or allow Aquitard (D C-Neutral Test (I Yes	No
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Water Sedime Orift D Surface Inunda Water- Field Observe Surface Water Water Table F Saturation Pre (includes capi Describe Reco	Type:	SDM fficient) ine) ry (B7) No No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebu Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Thin Muck Surfa Other (Explain in Depth (inches): Depth (inches): Depth (inches): erial photos, previous	Hydric Hydric - $\geq \leq 1/2$ - $\geq 1/2$ -	Soil Present?	Yes Secondary T Wa Sec Dri Dri Dri Cra Sat Sat Shi FA	Indicators (2 or m Indicators (2 or m Indicators (2 or m Iter Marks (Bl) (R Iiment Deposits (B3) (Aninage Patterns (B Junage Patterns (B V-Season Water T ayfish Burrows (C uration Visible or allow Aquitard (D C-Neutral Test (I Yes	No
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Water Saturat Unift D Surface Junuda Water- Field Observa Surface Water Water Table F Saturation Pre (includes capi Describe Reco	Type:	fficient) ine) ry (B7) No No No No Xo	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Thin Muck Surfa Other (Explain in Depth (inches): Depth (inches): Depth (inches):	Hydric Hydric Hydric (1) (2) (2) rates (B13) e Odor (Cl) pheres along Lin aced Iron (C4) inction in Plowed (C7) in Remarks) (V) inspections), if	ving Roots (C3) d Soils (CS) Vetland Hydrolo	Yes Secondary [Wa Wa Wa Dri Dri Dri Dri Cra Sat Sat Shi FA	Indicators (2 or m Indicators (2 or m Indicators (2 or m Iter Marks (Bl) (R Iiment Deposits (B Iiment Deposi	No COT iverine) 32) (Riverine) Riverine) 10) able (C2) 8) 1 Aerial Imagery 3) 55) No
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Saturat Water Sedima Drift D Surface Ununda Water- Field Observa Surface Water Water Table F Saturation Pre (includes capi Describe Reco	Type:	SDA fficient) ine) ry (B7) No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebo Hydrogen Sulfide Oxidized Rhizosj Presence of Redu Recent Iron Redu Thin Muck Surfa Other (Explain in Depth (inches): Depth (inches): Depth (inches): erial photos, previous	Hydric Hydric Hydric Hydric (1) (2) rates (B13) e Odor (Cl) pheres along Lin inced Iron (C4) inction in Plower (C7) in Remarks) (V) inspections), if	Soil Present?	Yes Secondary [Wa Wa Wa Dri Dri Dri Dri Cra Sai Sai Shi FA	Indicators (2 or m Indicators (2 or m Iter Marks (Bl) (R Iter Marks (Bl) (R) (R) (R) (R) (R) (R) (R) (R) (R) (R	No core required) iverine) 32) (Riverine) Riverine) 10) able (C2) 8) 1 Aerial Imagery 3) 55) No FCZEUL
Depth Remarks: HYDROLO Wetland Hyd Primary Indica Surface High V Satural Water Sedima Drift E Surface Inunda Water- Field Observa Surface Water Water Table F Saturation Pre (includes capi Describe Reco	Type:	SDA fficient) ine) ry (B7) No No No No No No SER	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosj Presence of Redu Recent Iron Redu Thin Muck Surfa Other (Explain in Depth (inches): Depth (inches): Depth (inches): erial photos, previous	Hydric Hydric Hydric Hydric Hydric (2) (2) rates (B13) e Odor (Cl) pheres along Li inced Iron (C4) inction in Plower ce (C7) in Remarks) (V) inspections), if (C) (V) (C) (V) (C) (C) (C) (C) (C) (C) (C) (C	Soil Present?	Yes Secondary [Wa Wa Wa Dri Dri Dri Cra Sai Sai FA Sai 	Indicators (2 or m Indicators (2 or m Iter Marks (Bl) (R Iter Marks (Bl) (R) (R) (R) (R) (R) (R) (R) (R) (R) (R	No core required) iverine) 32) (Riverine) Riverine) 10) able (C2) 8) A Aerial Imagery 3) 55) No

WETLAND DETER	MINATI	ON DAT	TA FOR	M — Arid West Region
Project Site: DERMODY	_ City/Cou	nty:		Sampling Date: 11 WERCH Z
Applicant/Owner:			-	State: <u>CA</u> Sampling Point:
Investigator(s): <u>CLBOURIC</u>			_ Section,	Township, Range:
Landform (hillslope, terrace, etc.):		Local re	elief (conca	we, convex, none): Slope (%): <a>
Subregion (LRR): LRR C L	at:			Long: Datum:
Soil Map Unit Name: RETES CLSY				NWI classification:
Are climatic / hydrologic conditions on the site typical for this tim	ne of year?	Yes		No (If no, explain in Remarks.)
Are Vegetation Soil or Hydrology	Significa	antly distur	bed? Are	e "Normal Circumstances" present? Yes No
Are Vegetation Soil or Hydrology	Naturall	y problema	tic? (If a	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS — Attach site map showin	ig samplin	ıg point lo	ocations, t	ransects, important features, etc.
Hydrophytic Vegetation Present? Yes Veg No	×			Is the Sampled Area
Hydric Son Present? Yes No Wetland Hydrology Present? Yes No	X			within a Wetland? Yes No
Remarks:	/ `			(.)
E			SP-1	5
			X	X
				57-6
VEGETATION	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	Status	Dominance Test worksneet.
1.				Number of Dominant Species
2.				
3.				Total Number of Dominant Species Across All Strata: 3 (B)
4.				
Total Cover:				That Are OBL, FACW, or FAC:($\Theta \Theta$ (A/B)
Sapling/Shrub Stratum (Plot size:)		-	1	
1.				Prevalence Index worksheet:
2.	-			Total % Cover of: Multiply by:
3.				FACW species $x 2 =$
4.			0	FAC species x 3 =
5.			Ð	$\begin{array}{c} \text{PACO species} \\ \text{UPL species} \\ \text{VPL species} \\ \text{X 5} = \end{array}$
Total Cover:		-		Column Totals (A) (B)
Herb Stratum (Plot size:)		1		Prevalence Index = B/A =
1. FRANKENIA ZUENA	40	X	FACE	Hydrophytic Vegetation Indicators:
2. DISILCHUS SPICAIA	20	8	tac	Tydrophytic vegetation indicators.
3. HORDESH WERENOW?	40	X	FAC	- Dominance Test is >50% $- Prevalence Index is <3.01$
4.				- Morphological Adaptations1 (Provide supporting data in
5.				Problematic Hydrophytic Vegetation ¹ (Explain)
6.				Indicators of hydria soil and water discussion to
7.				present, unless disturbed or problematic.
8.				
Total Cover:		-		
Woody Vine Stratum (Plot size:)	1		[Hydrophytic Vegetation
2.				Present? Yes No
Total Cover	L		I	
% Bare Ground in Herb Stratum % Cover of Biot	ic Crust			
Remarks:	EUE	2		
NO MORE P V SI				

C	0	Ť	r
3	υ		L

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Profile Description: (I	escribe to	the depth i	needed to docume	nt the indicator	or confirm	the absence of in	dicators.)	
Depth	Matrix			Redox Fe	atures	x 2	T	D 1
(inches) Color	moist)	_%	Color (moist)	%	Type	Loc	Texture	Remarks
0-1 07	K242						DUFF	WOISI
1-12 107	R2/1						C	WOIST
	l							
			đ	а 				
¹ Type: C=Concentratio	n, D=Deple	tion, RM=	Reduced Matrix, C	S=Covered or C	oated Sand (Grains. ² Locati	ion: PL=Pore Lin	ing, M=Matrix.
Hydric Soil Indicators	(Applical	ole to all L	RRs. unless other	wise noted.)			Indicators	for Problematic Hydric Soils ³ :
Histosol (Al)			,	Sandy Redo	x (S5)		1 cm 1	Muck (A9) (LRR C)
Histic Epipedon	(A2)			Stripped Ma	atrix (S6)		2 cm l	Muck (AlO) (LRR B)
Black Histic (A)			Loamy Muc	ky Mineral	(FI)	Reduc	ced Vertic (F18)
Hydrogen Sulfic	e (A4)			Loamy Gley	ed Matrix F	2)	Red P	arent Material (TF2)
Stratified Layer	(A5) (LRF	R C)		Depleted M	atrix (F3)		Other	(Explain in Remarks)
1 cm Muck (A9	(LRR D)			Redox Dark	Surface (F6)		
Depleted Below	Dark Surfa	ce (All)		Depleted Da	ark Surface (F7)	3 1- 4:	of hydron bytic vagatation and
Thick Dark Sur	ace (A12)			Redox Depr	ressions (F8)		wetland hvo	drology must be present. unless
Sandy Mucky N	ineral (SI)			Vernal Pool	s (F9)		disturbed or	r problematic.
Sandy Gleyed N	atrix (84)							
Restrictive Layer (if p	resent):					NEW YORK CONTRACTOR OF THE OWNER		5- 5-
Type:								
Denth (inches):					Hvd	ric Soil Present?	Ves	No
- · F · · (· · · · · ·).					1			
HYDROLOGY Wetland Hydrology I	dicators:						Secondary	Indicators (2 or more required)
Primary Indicators (any	one indica	tor is suffic	vient)					
Surface Water (AI)		5	Salt Crust (B11)			Wa	ater Marks (Bl) (Riverine)
High Water Tal	le (A2)		1	Biotic Crust (B12	2)		See	diment Deposits (B2) (Riverine)
Saturation (A3)				Aquatic Inverteb	rates (B13)		Dr	ift Deposits (B3) (Riverine)
Water Marks (E	1) (Nonriv	erine)	1	Hydrogen Sulfid	e Odor (Cl)		Dra	ainage Patterns (B10)
Sediment Depo	its (B2) (N	onriverine)0	Oxidized Rhizos	pheres along	Living Roots (C3) Dr	y-Season Water Table (C2)
Drift Deposits (33) (Nonri	verine)	l	Presence of Redu	iced Iron (C4	+)	Cra	ayfish Burrows (C8)
Surface Soil Cr	icks (B6)	-1 Income	(D7)	Recent Iron Redu	C(C7)	wed Solis (CS)	Sa	allow Aguitard (D3)
Inundation Visi	on Aeria	al Imagery	(B/)	Thin Muck Surfa	(C/)		SI	C-Neutral Test (D5)
water-Stained	caves (D9)		`		i itemaiks)		I'A	
Field Observations:								
Surface Water Present	Yes		No <u>X</u>	Depth (inches):				
Water Table Present?	Yes		No <u>X</u>	Depth (inches):				
Saturation Present?	Yes		No X	Depth (inches):		Wetland Hydro	ology Present?	Yes No X
(includes capillary frin	ge)			/		•		
Describe Recorded Da	a (stream g	auge, moni	toring well, aerial	photos, previous	inspections)	, if available:		
Remarks:			NO ST	E. IND	XATE	RS		
						-		

WETLAND DETER	MINATI	ION DAT	A FORM	M — Arid Wes	t Region	
Project Site:	City/Cou	nty:			Sampling Date:	ILWBRCH 21
Applicant/Owner:				State: CA	Sampling Point:	6
Investigator(s): CI BOURIC			Section,	Township, Range:		
Landform (hillslope, terrace, etc.):		Local re	lief (conca	ve, convex, none):	BOPUL	_ Slope (%):
Subregion (LRR): LRR C L	at:			Long:		Datum:
Soil Map Unit Name:				NWI classific	ation:	
Are climatic / hydrologic conditions on the site typical for this time	e of year?	Yes	1	No <u>X</u>	(If no, explain in Re	marks.)
Are Vegetation Soil or Hydrology	_ Signific	antly disturb	ed? Are	"Normal Circumsta	ances" present? Yes	No
Are Vegetation Soil or Hydrology	_ Naturall	y problemat	ic? (If r	needed, explain any	answers in Remarks.)	
SUMMARY OF FINDINGS — Attach site map showin	g samplin	ng point lo	cations, t	ransects, importa	ant features, etc.	
Hydrophytic Vegetation Present? Yes <u>No</u> Hydric Soil Present? Yes No	-×	_		Is the Sampled	Area	
Wetland Hydrology Present? Yes No	X	_		within a Wetlan	nd? Yes	No
Remarks:						
VEGETATION						
	Absolute	Dominant	Indicator	Dominance Test	worksheet:	
<u>Tree Stratum</u> (Plot size:)	<u>% Cover</u>	Species?	Status	Number of Domin	nant Species	
1.		8		That Are OBL, F.	ACW, or FAC:	(A)
2.				Total Number of	Dominant	2
3.				Species Across A	Il Strata:	(B)
4.				Percent of Domin	ant Species	0
Sapling/Shrub Stratum (Plot size:)		-		That Are OBL, FA	ACW, or FAC:	(A/B)
1.				Prevalence Index	k worksheet:	
2.				Total % Cover of		Multiply by:
3.				OBL species	x1 =	
4.				FAC species	x 2 = x 3 =	
5.				FACU species	x 4 =	
Total Cover:	-1		L	Column Totals	(A)	(B)
Herb Stratum (Plot size:)		-		Prevalence Inde	x = B/A = 2	>3
1. GERGNUM DISSECTUM	30	×	UPL			
2. FESTUCA PERENNIS	5		FSC	Hydrophytic Veg	getation Indicators:	
3. DISTICHUS SPICATA	2		F&C	— Dominance Te	st is $>50\%$	
4. RUMEX CRISPUS	5		FAC	— Morphological	Adaptations1 (Provid	e supporting data in
5. MEDICAGO POLYMORPHA	10		FRCU	Remarks or o	n a separate sheet)	¹ (Explain)
6. BROWISS DIKNDRUS	20	X	UPL			
7. HORDERW MURINUM	10		FACU	findicators of hydropresent, unless dis	ric soil and wetland hy turbed or problematic	drology must be
8. HORDEOM WARMUM	10		FBC		•	
Total Cover:		_				
Woody Vine Stratum (Plot size:)	6		1101	Hydrophytic Vegetation		
2. SENIECIO VUI GLAIC	2		EN/1)	Present?	Yes]	No <u>×</u> .
Total Cover		I	LAU			
% Bare Ground in Herb Stratum % Cover of Biot	ic Crust	-				
Remarks:		:		L		

C	0	T	r
3	U	Ш	L

Depth Matrix		Redox Features			
(inches) Color (moist) %	Color (moist)	% Type ¹	Loc ²	Texture	Remarks
0-12 1041221				C	
,					
				7	
		4 E			
¹ Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, CS=C	overed or Coated Sand	Grains. ² Location	n: PL=Pore Lining,	M=Matrix.
Hydric Soil Indicators: (Applicable to all L	RRs, unless otherwise	noted.)		Indicators for 1	Problematic Hydric Soils ³ :
Histosol (Al)		Sandy Redox (S5)		1 cm Muc	k (A9) (LRR C)
Histic Epipedon (A2)		Stripped Matrix (S6)		2 cm Muc	k (AlO) (LRR B)
Black Histic (A3)		Loamy Mucky Mineral	(Fl)	Reduced V	Vertic (F18)
Hydrogen Sulfide (A4)	1	Loamy Gleyed Matrix	F2)	Red Paren	t Material (TF2)
Stratified Layers (A5) (LRR C)		Depleted Matrix (F3)		Other (Ex	plain in Remarks)
1 cm Muck (A9) (LRR D)		Redox Dark Surface (F	b)		
Depleted Below Dark Surface (All)	×	Depleted Dark Surface	(F7)	³ Indicators of h	vdronhytic vegetation and
Thick Dark Surface (A12)		Kedox Depressions (F8)	wetland hydrold	bgy must be present, unless
Sandy Mucky Mineral (SI)		vernal Pools (F9)		disturbed or pro	blematic.
Restrictive Layer (if present):					
Type:					
Depth (inches):		Hv	tric Soil Present?	Ves	No X
Deput (menes).			ine son resent.	105	
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Indi	cators (2 or more required)
Primary Indicators (any one indicator is suffi-	cient)				
Surface Water (Al)	Salt C	Crust (B11)		Water	Marks (Bl) (Riverine)
High Water Table (A2)	Biotic	c Crust (B12)		Sedime	ent Deposits (B2) (Riverine)
Saturation (A3)	Aqua	tic Invertebrates (B13)		Drift D	eposits (B3) (Riverine)
Water Marks (B1) (Nonriverine)	Hydro	ogen Sulfide Odor (Cl)		Draina	ge Patterns (B10)
Sediment Deposits (B2) (Nonriverine	e) Oxidi	ized Rhizospheres alon	g Living Roots (C3)	Dry-Se	ason Water Table (C2)
Drift Deposits (B3) (Nonriverine)	Prese	nce of Reduced Iron (C	4)	Crayfis	sh Burrows (C8)
Surface Soil Cracks (B6)	Recei	nt Iron Reduction in Plo	owed Soils (CS)	Saturat	ion Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery	(B7) Thin	Muck Surface (C7)		Shallow	w Aquitard (D3)
Water-Stained Leaves (B9)	Other	r (Explain in Remarks)		FAC-N	leutral Test (D5)
Field Observations:				*	
Surface Water Present? Ves	No X Denti	h (inches).			
		(inches).	1		
water Table Present? Yes	NO Depti	n (incnes):	1		C /
Saturation Present? Yes	No <u> </u>	h (inches):	Wetland Hydrolo	ogy Present? Y	Ves No
(includes capillary tringe)	itoring well serial phot	os previous inspections) if available		1
Deserve Recorded Data (Stream gauge, mon	normg wen, aeriai pilou	os, previous inspections	, ii uvunuolo.		
					AND DC
Remarks:	ONVEXT	3PO POSIT	1014, 40	GTO, INT.	ICSTOKS
			-		
	Martin artiga				

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

WETLAND DETER	MINATI	ON DAT	A FORM	M — Arid West Region
Project Site:	_ City/Cou	nty:		Sampling Date: 11 US & CH 21
Applicant/Owner:			~	State: Sampling Point:
Investigator(s): Bourle			Section,	Township, Range:
Landform (hillslope, terrace, etc.):		Local re	lief (concar	ve, convex, none): Slope (%):
Subregion (LRR): LRR C I	_at:		2	Long: Datum:
Soil Map Unit Name:				NWI classification:
Are climatic / hydrologic conditions on the site typical for this tim	ne of year?	Yes	1	No (If no, explain in Remarks.)
Are Vegetation Soil or Hydrology	Signific	antly disturb	ed? Are	"Normal Circumstances" present? Yes No
Are Vegetation Soil or Hydrology	Naturall	y problemat	ic? (If r	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS — Attach site map showin	ng samplir	ng point lo	cations, ti	ransects, important features, etc.
Hydrophytic Vegetation Present? Yes <u>Ves</u> No	~	_		Is the Sampled Area
Wetland Hydrology Present? Yes No	X	_		within a Wetland? Yes No
Remarks:				
				Stat
VECETATION			** *	X
VEGETATION	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number (During) (Sector
1.				That Are OBL, FACW, or FAC: (A)
2.				Total Number of Dominant
3.				Species Across All Strata: (B)
4.				Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)		-		That Are OBL, FACW, or FAC:(600(A/B)
1.				Prevalence Index worksheet:
2.				Total % Cover of: Multiply by:
3				OBL species x 1 =
4				FACW species $x_2 =$ FAC species $x_3 =$
5.				FACU species x 4 =
Total Cover:		-	L	Of L species X 3 - Column Totals (A)
Herb Stratum (Plot size:)		-		Prevalence Index = R/A =
1. DISTICHUS SPICATA	20	X	FOC	
2. FRANKENIA SALIGNA	15		FOCW	Hydrophytic Vegetation Indicators:
3. FESTUCA PERENNIS	10		FAC	- Dominance Test is >50%
4. COTULA CORONOPIFOLIA	25	X	OBL	- Prevalence index is $\leq 3.0^{\circ}$ - Morphological Adaptations1 (Provide supporting data in
5. ? HORDECTU WARINOW ? /	30	X	FAC	Remarks or on a separate sheet)
6. ?BROWLOS DIAKIDRUS?	?.			- Hobemate Hydrophytic Vegetation (Explain)
7.				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8.				
Total Cover:	100	l		
Woody Vine Stratum (Plot size:)	1	-		Hydrophytic Vegetation
1.				Present? Yes No
Z. Tatal Carar				
% Bare Ground in Herb Stratum	tic Crust	-		· · · · · ·
Remarks:	$) \leq 110$	XII P	AICH	
LOCO ANTICE (C	Jue	~~~ ·····	1 1 oft	
		10 ₁		

C	0	T	T
5	U		L
\sim	~	-	-

Depth	Matrix			Redox Fe	atures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	Texture	Remarks
0-12	10YRZ/1						\subset	MOIST
			-					
	<u></u>							
								,
¹ Type: C=Co	oncentration, D=Deple	etion, RM=R	educed Matrix, CS=	Covered or C	oated Sand G	rains. ² Locatio	on: PL=Pore Lin	ing, M=Matrix.
Hydric Soil I	ndicators: (Applical	ble to all LR	Rs. unless otherwi	se noted.)			Indicators	for Problematic Hydric Soils ³ :
	-1 (Al)	one to an Enc	as, uniess other wi	Sender Deder	(85)		1	Aught (AQ) (LBB C)
Histos	OI (AI)			Sandy Redo	x (55)			Muck (A9) (LKK C)
Histic	Epipedon (A2)			Stripped Ma	trix (S6)		2 cm 1	Muck (AIO) (LRR B)
Black	Histic (A3)			Loamy Muc	ky Mineral (F	(1)	Reduc	ed Vertic (F18)
Hydro	gen Sulfide (A4)			Loamy Gley	ed Matrix F2)	Red P	arent Material (TF2)
Stratif	ied Layers (A5) (LRF	R C)		Depleted Ma	atrix (F3)		Other	(Explain in Remarks)
1 cm M	Muck (A9) (LRR D)			Redox Dark	Surface (F6)			
Deple	ted Below Dark Surfa	ice (All)		Depleted Da	irk Surface (F	7)		
Thick	Dark Surface (A12)			Redox Depr	essions (F8)		³ Indicators	of hydrophytic vegetation and
Sandy	Mucky Mineral (SI)			Vernal Pool	s (F9)		disturbed or	problematic
Sandy	Gleyed Matrix (S4)						distuibed of	problematic.
Restrictive L	layer (if present):							
	Туре:							
Denth	(inches)				Hydr	ic Soil Present?	Ves	No
Depu	(inches).				IIJui	ie Son Presenti	105	
Remarks:	P						2	
	OCV							
HIDKOL	JGI	<u>\</u>					0 1	
Wetland Hy	drology Indicators:						Secondary	Indicators (2 or more required)
Primary India	cators (any one indica	tor is sufficie	<u>nt)</u>					
Surfac	ce Water (Al)		Sal	t Crust (B11)			Wa	ter Marks (Bl) (Riverine)
High	Water Table (A2)		Bic	otic Crust (B12	2)		See	diment Deposits (B2) (Riverine)
Satura	ation (A3)		Aq	uatic Invertebr	ates (B13)		Dr	ft Deposits (B3) (Riverine)
Water	Marks (B1) (Nonriv	erine)	Hy	drogen Sulfide	Odor (Cl)		Dr	ainage Patterns (B10)
Sedin	nent Deposits (B2) (N	onriverine)	Ox	idized Rhizosp	oheres along I	Living Roots (C3)	Dr	y-Season Water Table (C2)
Drift	Deposits (B3) (Nonri	verine)	Pre	sence of Redu	ced Iron (C4)		Cra	ayfish Burrows (C8)
Surfa	ce Soil Cracks (B6)	,	Ree	cent Iron Redu	ction in Plow	ed Soils (CS)	Sat	uration Visible on Aerial Imagery (C9)
V Inund	ation Visible on Aeri	al Imagery (F	(7) Thi	in Muck Surfa	ce (C7)		Sh	allow Aquitard (D3)
Water	-Stained Leaves (B9)	ui iniugery (r	Oth	ner (Explain in	Remarks)		FA	C-Neutral Test (D5)
water	Sumou Leaves (D9)		01	(Explain III				
Field Observ	vations:							1
Surface Wet	ar Present? Vac	N		nth (inches)				
Surface walk	in resent. Tes	I		pui (menes).		-12 S		
Water Table	Present? Yes	1	lo <u>(</u> De	pth (inches):		and the second		
Saturation Pr	esent? Yes	١	lo 🗸 De	pth (inches):		Wetland Hvdrol	ogy Present?	Yes No X
(includes car	oillary fringe)	·		(
Describe Rec	corded Data (stream g	auge, monito	ring well, aerial ph	otos, previous	inspections),	if available:		
					- //			
Doment	1							
Remarks:			NO	SFC.	INDI	GATOR	>	
			•			·		
5								ž 3

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

WETLAND DETER	MINATI	ION DAT	TA FOR	M — Arid West Region
Project Site:	City/Cou	nty: HD	YWAR	2)/&LAULEOX Sampling Date: 11 M&RCH 2
Applicant/Owner:				State: <u>CA</u> Sampling Point:
Investigator(s): <u>Cr Record</u>			Section,	Township, Range:
Landform (hillslope, terrace, etc.):		Local re	elief (conca	ve, convex, none): Slope (%):
Subregion (LRR): LRR C L	at:			Long: Datum:
Soil Map Unit Name:				NWI classification:
Are climatic / hydrologic conditions on the site typical for this tim	e of year?	Yes		No $(If no, explain in Remarks.)$
Are Vegetation Soil or Hydrology	_ Signific	antly disturb	oed? Are	"Normal Circumstances" present? Yes No
Are Vegetation Soil or Hydrology	Naturall	y problemat	tic? (If 1	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS — Attach site map showin	g samplir	ng point lo	cations, t	ransects, important features, etc.
Hydrophytic Vegetation Present? Yes <u>No</u>	×	_		Is the Sampled Area
Wetland Hydrology Present? Yes No	Ŷ	_		within a Wetland? Yes No
Remarks:			XI	
			$(\mathcal{L}$	58-8
				X
VEGETATION				
	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>I ree Stratum</u> (Plot size:)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1.				That Are OBL, FACW, or FAC: (A)
2.				Total Number of Dominant
3.			1	Species Across All Strata: (B)
4.				Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)		-		That Are OBL, FACW, or FAC: (A/B)
1.				Prevalence Index worksheet:
2.				Total % Cover of: Multiply by:
3.				OBL species $x_1 = $ FACW species $y_2 = $
4.				FAC species $25 \times 3 = 25$
5.				FACU species $x 4 =$ UPL species $4 =$
Total Cover:		_		Column Totals (D) (A) <u>203</u> (B)
Herb Stratum (Plot size:)			De	Prevalence Index = $B/A = 405$
1. DISTIGATS SPICATA	20	X	FOC	Hydrophytic Vegetation Indicators:
2. LUIUS COKNICULATUS	5		TOC.	
3. CERANIUM VISSECTUM	15		UPL	- Dominance 1 est is >50% Prevalence Index is $\leq 3.0^1$
4. DILLT DUM MERICANOU / CAPY	0		DEL	- Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet)
S. FRANKENLA SALIGHA	15		toca	— Problematic Hydrophytic Vegetation ¹ (Explain)
6. EROMOS DIAMIDRUS	25	X	UFC	¹ Indicators of hydric soil and wetland hydrology must be
7.				present, unless disturbed or problematic.
8.				
Woody Vine Stratum (Plot size:)	(00	-		Hydrophytic
1.			3	Vegetation
2.				rresent: Yes No
Total Cover:				•
% Bare Ground in Herb Stratum % Cover of Biot	c Crust	<u> </u>		
ixellarks.				

SOIL	S	0	IL	
------	---	---	----	--

Depth	Matrix			Re	dox Fea	atures				
(inches)	Color (moist)	%	Color (moi	st) %		Type ¹	_Loc ²	Texture		Remarks
5-12	104RZ/1			10	0		1	C	V	voist
									-	
							·		-	
								. <u> </u>		
							-			n
										2
			<u>.</u>						-	
	~									
¹ Type: C=Co	oncentration, D=Deple	tion, RM=R	educed Matri	x, CS=Covere	ed or Co	ated Sand Gr	ains. ² Locat	tion: PL=Pore	Lining, M=N	Aatrix.
Hydric Soil	Indicators: (Applicat	ole to all LR	Rs. unless of	herwise note	d.)			Indicate	ors for Prob	lematic Hydric Soils ³ :
Listor	al (A1)			Sanda	v Redov	(\$5)		1.0	m Muck (A	a) (IRR C)
Histos	Enjnedon $(A2)$			String	ed Mat	rix (S6)		20	m Muck (A)	(O) (LRR B)
Histo Black	Histic $(\Delta 3)$			Uoam	v Muck	v Mineral (F	n	2.	duced Verti	c (F18)
Black	$\frac{1}{2} \frac{1}{2} \frac{1}$			Loam	iy Muor	ed Matrix F2)	1)	Re	d Parent Ma	terial (TF2)
Stratit	fied Lavers (A5) (I RR	2 C)		Denle	eted Ma	trix (F3)		Ot	her (Explain	in Remarks)
Suati	Muck (A9) (LRR D))		Redo	x Dark	Surface (F6)		01		
Denle	ted Below Dark Surfa	ce (All)		Denle	eted Da	rk Surface (F	7)			
Thick	Dark Surface (A12)	()	_	Redo	x Depre	essions (F8)		³ Indicat	ors of hydro	phytic vegetation and
Sandy	Mucky Mineral (SI)			Verna	al Pools	(F9)		wetland	hydrology n	nust be present, unless
Sandy	Gleyed Matrix (S4)		_					disturbe	d or problem	latic.
Restrictive I	Layer (if present):									
	Туре:									
	(inchas);									. /
Deptl Remarks:	in (inclies).					Hydri	c Soil Present?	Yes _		No
Depti Remarks: HYDROL	0GY					Hydri	c Soil Present?	Yes _		No
Depti Remarks: HYDROL	OGY					Hydri	c Soil Present?	Yes _	ry Indicator	s (2 or more required)
Depti Remarks: HYDROL Wetland Hy Primary Indi	OGY drology Indicators: cators (any one indica	tor is suffici	ent)			Hydri	c Soil Present?	Yes	ry Indicator	s (2 or more required)
Depti Remarks: HYDROL Wetland Hy Primary Indi Surfa	OGY drology Indicators: cators (any one indica ce Water (Al)	tor is suffici	ent)	Salt Crust	(B11)	Hydri	c Soil Present?	Yes	rry Indicator Water Mark	s (2 or more required)
Depti Remarks: HYDROL Wetland Hy Primary Indi Surfa High	OGY drology Indicators: cators (any one indica ce Water (Al) Water Table (A2)	tor is suffici	ent)	_ Salt Crust Biotic Cru	(B11) st (B12	Hydri	c Soil Present?	YesSeconda	rry Indicator Water Mark Sediment D	s (2 or more required) (Riverine) eposits (B2) (Riverine)
Depti Remarks: HYDROLO Wetland Hy Primary Indi Surfa High Satur	OGY drology Indicators: cators (any one indica ce Water (Al) Water Table (A2) ation (A3)	tor is suffici	<u>ent)</u>	_ Salt Crust _ Biotic Cru Aquatic In	(B11) st (B12) vertebra	Hydri	c Soil Present?	Yes	ry Indicator Water Mark Sediment D Drift Depos	No
Deptil Remarks: HYDROLO Wetland Hy Primary Indi Surfa High Satur Wate	OGY drology Indicators: cators (any one indica ce Water (Al) Water Table (A2) ation (A3) r Marks (B1) (Nonriv	tor is suffici	ent)	_ Salt Crust _ Biotic Cru _ Aquatic In Hydrogen	(B11) st (B12) vertebra Sulfide	Hydri) ates (B13) Odor (Cl)	c Soil Present?	Yes	ry Indicator Water Mark Sediment D Drift Depos Drainage Pa	s (2 or more required) s (2 or more required) ss (B1) (Riverine) eposits (B2) (Riverine) its (B3) (Riverine) atterns (B10)
Depti Remarks: HYDROLO Wetland Hy Primary Indi Surfa High Satur Wate Sedir	OGY drology Indicators: cators (any one indica ce Water (Al) Water Table (A2) ation (A3) r Marks (B1) (Nonriv nent Deposits (B2) (N	tor is suffici erine) onriverine)	<u>ent)</u>	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F	(B11) st (B12) vertebra Sulfide Rhizosp	Hydri) ates (B13) Odor (Cl) heres along L	c Soil Present?	Yes	ry Indicator Water Mark Sediment D Drift Depos Drainage Pa Dry-Season	No
Depti Remarks: HYDROL Wetland Hy Primary Indi Surfa High Satur Wate Sedir Drift	OGY drology Indicators: cators (any one indica ce Water (Al) Water Table (A2) ation (A3) r Marks (B1) (Nonriv nent Deposits (B2) (N Deposits (B3) (Nonri	tor is suffici erine) onriverine) verine)	<u>ent)</u>	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence o	(B11) st (B12) vertebra Sulfide Rhizosp of Reduc	Hydri) ates (B13) Odor (Cl) heres along L ced Iron (C4)	c Soil Present?	Yes	wy Indicator Water Mark Sediment D Drift Depos Drainage Pa Dry-Season Crayfish Bu	s (2 or more required) s (Bl) (Riverine) eposits (B2) (Riverine) its (B3) (Riverine) atterns (B10) Water Table (C2) urrows (C8)
Depti Remarks: HYDROL Wetland Hy Primary Indi Surfa High Satur Wate Sedir Drift Surfa	OGY drology Indicators: cators (any one indica ce Water (Al) Water Table (A2) ation (A3) r Marks (B1) (Nonriv nent Deposits (B2) (N Deposits (B3) (Nonri ce Soil Cracks (B6)	tor is suffici erine) onriverine) verine)	ent)	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence o Recent Iro	(B11) st (B12) vertebra Sulfide Rhizosp of Reduc	Hydri) ates (B13) Odor (Cl) heres along L ced Iron (C4) ction in Plowe	c Soil Present?	Yes	wy Indicator Water Mark Sediment D Drift Depos Drainage Pa Dry-Season Crayfish Bu Saturation V	No
Remarks: HYDROL Wetland Hy Primary Indi Surfa High Satur Wate Sedir Drift Surfa Inund	OGY drology Indicators: cators (any one indica ce Water (Al) Water Table (A2) ation (A3) r Marks (B1) (Nonriv nent Deposits (B2) (N Deposits (B3) (Nonri Ice Soil Cracks (B6) dation Visible on Aeria	tor is suffici erine) onriverine) verine) al Imagery (1	ent) B7)	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F Presence o Recent Iro Thin Mucl	(B11) st (B12) vertebra Sulfide Rhizosp of Reduc n Reduc c Surfac	Hydri) ates (B13) Odor (Cl) heres along L ced Iron (C4) ction in Plow æ (C7)	c Soil Present?	Yes	ry Indicator Water Mark Sediment D Drift Depos Drainage Pa Dry-Season Crayfish Bu Saturation V Shallow Aq	No
Depti Remarks: HYDROLO Wetland Hy Primary Indi Surfa Satur Wate Sedir Drift Surfa Surfa Inuno Wate	OGY 'drology Indicators: cators (any one indicators: cators (any one indicators: ce Water (Al) Water Table (A2) ation (A3) r Marks (B1) (Nonriv nent Deposits (B2) (N Deposits (B3) (Nonri ice Soil Cracks (B6) dation Visible on Aeria r-Stained Leaves (B9)	tor is suffici erine) onriverine) verine) al Imagery ()	ent) B7)	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F Presence o Recent Iro Thin Mucl Other (Exp	(B11) st (B12) vertebra Sulfide Rhizosp of Reduc n Reduc c Surfac plain in	Hydri) ates (B13) Odor (Cl) heres along L ced Iron (C4) ction in Plowe ce (C7) Remarks)	c Soil Present?	Yes	water Mark Sediment D Drift Depos Drainage Pa Dry-Season Crayfish Bu Saturation V Shallow Aq FAC-Neutra	No
Depti Remarks: HYDROLO Wetland Hy Primary Indi Surfa Surfa Satur Wate Sedir Drift Surfa Z Inuno Wate	OGY drology Indicators: cators (any one indica ce Water (Al) Water Table (A2) ation (A3) r Marks (B1) (Nonriv nent Deposits (B2) (N Deposits (B3) (Nonri ce Soil Cracks (B6) dation Visible on Aeria dation Visible on Aeria	tor is suffici erine) onriverine) verine) al Imagery (1	ent) B7)	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence o Recent Iro Thin Mucl Other (Exp	(B11) st (B12) vertebra Sulfide Rhizosp of Reduc n Reduc c Surfac plain in	Hydri) ates (B13) Odor (Cl) heres along L ced Iron (C4) ction in Plowa ce (C7) Remarks)	c Soil Present?	Yes	ry Indicator Water Mark Sediment D Drift Depos Drainage Pa Dry-Season Crayfish Bu Saturation V Shallow Aq FAC-Neutra	No
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