Wetland Delineation Report

APN: 210-041-011

October 2019

Prepared For:

Credo RA, LLC

Permit Application No. 12215

Prepared By:



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1.0 Introduction

1.1 Purpose and Need

This document was prepared for Credo RA, LLC in response to a 6 May 2019 correspondence from the Humboldt County Cannabis Services Division requesting a wetland delineation for an area near a cultivation activity on the 160-acre property owned by Rados Milojkovic of Credo RA, LLC. The delineation was performed to evaluate the presence of jurisdictional wetlands and identify wetland boundaries within the study area. This report is based on the fieldwork performed on 16 October 2019.

1.2 Project Description

Credo RA, LLC currently holds an interim permit for 12,105 ft² of existing mixed light cultivation under Humboldt County's Commercial Medical Marijuana Land Use Ordinance (CMMLUO). Credo RA, LLC has also obtained a provisional cannabis cultivation license for a Medium Mixed-Light Tier 1 license type (License No. PAL18-0000269) under California Department of Food & Agriculture (CDFA). The applicant is seeking a Conditional Use Permit (CUP) (Case No.: PLN-12215-CUP) to move forward with the project, on which this wetland delineation report is contingent.

2.0 Environmental Setting

2.1 Project Location

The project is located approximately 2.46 miles south of a private drive south of State Hwy 36 in the Bridgeville area (Section 16, Township 1 North, Range 4 East) of Humboldt County, California (*Figure 1*). The project is located on a property at APN: 210-041-011 within the U.S. Geological Survey's (USGS) Larabee Valley 7.5-minute quadrangle map. The USDA Forest Service CALVEG ("Classification and Assessment with Landsat of Visible Ecological Groupings") system classifies the property and project area as Douglas fir (DFR). The parcel is zoned Timber Production Zone (TPZ) and classified as Timberland (T) under the current general plan.

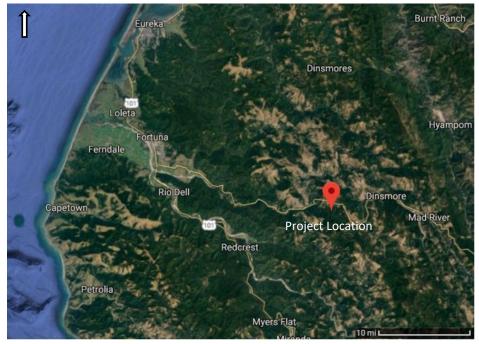


Figure 1. Project Location (accessed on Google Maps)



2.2 Soil, Topography, Hydrology

The soil complex of the project area is composed primarily of Hoagland-Chalkmountain-Pasturerock complex, 15 to 50 percent slopes (4412). These soils consist of very deep, well-drained soils formed in colluvium and residuum derived from sandstone and mudstone. The main component of this soil, the Hoagland series, is a gravelly loam typically found on southeast concave or convex positions on mountain slopes under Douglas-fir and Oregon white oak with a groundcover of western swordfern (*Figure 2*). The other geographically associated soils, the Chalkmountain and Pasturerock soil series, also consist of very deep, well drained soils formed in colluvium and residuum derived from sandstone and mudstone and found on similar landscape positions. The soil complex in the study area is not considered to be hydric.

These soils are thought to be located in areas which were previously grasslands and oak woodlands that have been invaded by Douglas-fir. Vegetation often associated with these soils include Douglas fir, tanoak, California black oak, Pacific madrone, California laurel, California huckleberry and western swordfern.

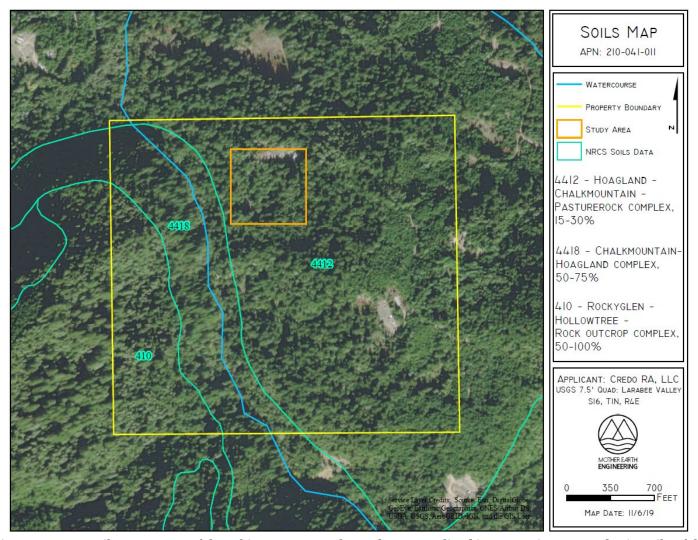


Figure 2. NRCS Soil Survey map of the subject property. The study area outlined in orange is composed primarily of the Hoagland-Chalkmountain-Pasturerock complex.



The study area is situated in a soft, open depression at the base of a hillside on a gently west facing aspect. The area is mapped as possessing high levels of instability in the Humboldt County GIS database. The study area is approximately 1,850 to 1,875 ft in elevation (*Figure 3*).

A perennial, non-fish bearing stream (Class II watercourse) runs approximately 600 ft west of the study area flowing north towards Little Larabee Creek. The area is in the Lower Van Duzen River watershed and the Hoagland Creek – Van Duzen River subwatershed¹.

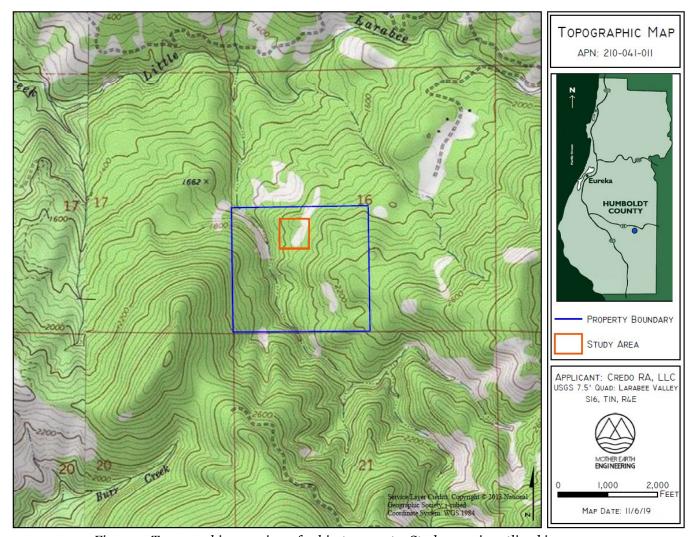


Figure 3. Topographic overview of subject property. Study area is outlined in orange.

3.0 Methods

Mother Earth Engineering staff conducted a site visit on 16 October 2019 to evaluate the presence of jurisdictional wetlands and identify wetland boundaries within the study area. Prior to the site visit, several sources of data were reviewed for any previously mapped wetlands in conjunction with soil type, weather records, and historic aerial photographs of the project area. The National Wetland Inventory (NWI) maps



¹ Caltrans Water Quality Planning Tool available at: http://svctenvims.dot.ca.gov/wqpt/wqpt.aspx.

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indicate a seasonally flooded, intermittent riverine wetland system along the Class II watercourse 600 ft west of the study area (*Figure 4*).

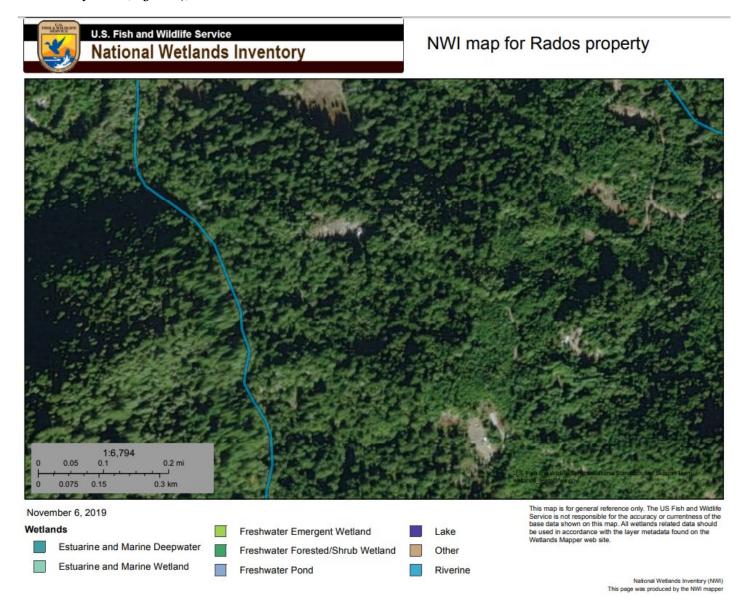


Figure 4. NWI map for Rados property. A seasonally flooded, intermittent Riverine wetland system is mapped along the Class II watercourse west of the study area. No other wetlands have been previously indicated.

The conditions on 16 October 2019 were overcast with partly cloudy skies. According to Oregon State University's PRISM Climate group², the last rain event in the area occurred on 30 September 2019 with 0.53 inches of precipitation. Approximately three (3) field hours were spent conducting routine on-site methods as described in the *Corps of Engineers Wetlands Delineation Manual* (1987 Manual), and the *Regional*

² Oregon State University's Northwest Alliance for Computational Science and Engineering (NACSE) PRISM Climate Group data accessed: http://www.prism.oregonstate.edu/

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Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0) (USACE 2010; Regional Supplement).

Environmental criteria for wetlands, as defined in the 1987 Manual include:

- The prevalent vegetation is hydrophytic;
- The soils present have been classified as hydric or possess reducing soil characteristics; and,
- The area is either permanently or periodically inundated at mean water depths less than or equal to 6.6 feet, or the soil is permanently or periodically saturated to the surface during the growing season.

The Routine Determination method outlined in the 1987 Manual was used in conjunction with procedures outlined in the Regional Supplement to identify and delineate wetlands within the project limits. Routine determinations involve simple, rapidly applied methods that result in sufficient qualitative data for identifying wetland and non-wetland areas.

The study area was walked and observed for evidence of potential wetland hydrology based on local topography and presence of hydrophytic vegetation. Data sample points were chosen based on site features for potential wetland areas and distinct upland areas to show contrast between wetland and upland field conditions.

The criterion for wetland vegetation is a dominance of hydrophytic species. Vegetation data at each sample point is identified by strata (tree, shrub, herbaceous and vine layer) and percent cover to determine dominant species. Each plant is identified to species level and classified as to whether or not they were wetland indicators in accordance to National Wetland Plant List (NWPL) 2016 Final Ratings.

Soils pits were examined at the sample points for evidence of redoximorphic features for hydric soil indications. The 1987 Manual's procedures were combined with the Natural Resources Conservation Service's (NRCS) definition of hydric soils presented in Changes in Hydric Soils of the United States and Field Indicators of Hydric Soils in the United States, Version 6.0 [United States Department of Agriculture (U.S.D.A.) 1995 and 2006, respectively]. Soil color was evaluated using *Munsell Soil Color Charts* (Munsell 2000).

The project was examined for field indicators of wetland hydrology. According to USACE (1987 and 2012), wetland hydrology consists of permanent or periodic inundation, or soil saturation to the surface during the growing season. If these indicators were present within the sample plots, the hydrology criterion was met.

Once the boundary of the wetland is determined from the data sampling effort, the edge of the wetland is flagged in the field and surveyed in order to produce a map of the wetland that occurs in the study area. Representative photographs of the sample points and wetland area were taken during the assessment (*Appendix A*).

A Garmin Rino 755t GPS was used for GPS points and tracking, and ArcMap 10.6.1 was used to create wetland maps and buffers.

4.0 Results

The study area can be described as an open depression area at the base of a hillside on a gently west facing Douglas Fir habitat type. One (1) jurisdictional wetland was identified within the study area, covering approximately 0.20 acres. The 0.20-acre wetland can be classified as a small, palustrine freshwater wetland (Cowardin *et al*, 1979) located in a depressional flat area (*Figure 5*).



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Upon investigation, the area appears to receive water from hillside sheet flow and an undersized 12-inch diameter corrugated plastic culvert on an intermittent (Class III) watercourse. A Timber Harvest Plan (THP 1-98-434 HUM) of this area reveals that the THP recommended installation of a new culvert (no specific diameter) to "divert watercourse into flat natural wet area". A CDFW Lake and Streambed Alteration Agreement notification provided by Timberland Resource Consultants recommended a culvert upgrade to a minimum 18-inch diameter culvert.

In the upland areas (SP-1 and SP-3), the dry soils supported an overstory of Douglas-fir (*Pseudotsuga menziesii*), tanoak (*Notholithocarpus densiflorus*) and California laurel (*Umbellaria californica*). The shrub and sapling layer consisted of western swordfern (*Polystichum munitum*) and saplings of big leaf maples (*Acer macrophyllum*), tanoaks and California laurels. The herb and vine layers were sparse and contained species such as redwood sorrel (*Oxalis oregana*), Pacific blackberry (*Rubus ursinus*), and poison oak (*Toxicodendron diversilobum*).

The transition line into the wet area was distinct with a noticeable shift in vegetation composition. The dominant plant species identified at both wet sample areas (SP-2 and SP-4) consisted of California laurel, slough sedge (*Carex obnupta*), poison oak, woodfern (*Dryopteris expansa*) and great horsetail (*Equisetum telmateia*).

The soil pits were analyzed for the presence of hydric soil indicators including the presence of redoximorphic features in soils with chromas of 2 or less and chromas of 1 or less that are not attributed to organic matter. Both soil pits at SP-2 and SP-4 had loamy clay textures, similar in color, and contained redox concentrations. Soil pits at SP-1 and SP-3 did not contain any redoximorphic features.

The hydrology of the area was based on evidence of sediment deposits and an observation of surface water present in a man-made ditch. No identifiable ordinary high water mark was found as an outlet of the area. The boundary of this wetland was identified and flagged due to presence of hydrophytic vegetation, hydric soils, and hydrology, in addition to topography of the landscape. Adjacent uplands were distinguished from the wetland by lack of hydric soils, lack of hydrology, lack of hydrophytic vegetation and/or the presence of upland plants.





Figure 5. Map of wetland extent and boundaries within the study area. A 50 ft buffer designated around the wetland is outside cultivation activities.

5.0 Regulatory Background

5.1 U.S. Army Corps of Engineers (USACE)

The USACE Regulatory Branch regulates activities that may discharge dredged or fill materials into "waters of the U.S." under Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. This permitting authority applies to all "waters of the U.S." where the material (1) replaces any portion of a "waters of the U.S." with dry land or (2) changes the bottom elevation of any portion of any "waters of the U.S.". These fill materials include sand, rock, clay, construction debris, wood chips, and materials used to create any structure or infrastructure in these waters. The selection of disposal sites for dredged or fill material is done in accordance with guidelines specified in Section 404(b)(1) of the CWA, which were developed by the U.S. Environmental Protection Agency (USEPA).



5.2 Regional Water Quality Control Board (RWQCB)

The RWQCB is the primary agency responsible for protecting water quality in California through the regulation of discharges to surface waters under the CWA and the California Porter-Cologne Water Quality Control Act (Porter-Cologne Act). The RWQCB's jurisdiction extends to all "waters of the State" and to all "waters of the U.S.," including wetlands (isolated and non-isolated).

Section 401 of the CWA provides the RWQCB with the authority to regulate, through a Water Quality Certification, any proposed, federally permitted activity that may affect water quality. Among such activities are discharges of dredged or fill material permitted by the USACE pursuant to Section 404 of the CWA. Section 401 requires the RWQCB to provide certification that there is reasonable assurance an activity with the potential for discharge into navigable waters will not violate water quality standards. Water Quality Certification must be based on findings that the proposed discharge will comply with water quality standards, which contain numeric and narrative objectives found in each of the nine RWQCBs' Basin Plans.

5.3 California Department of Fish and Wildlife

The CDFW has jurisdictional authority over wetland resources associated with rivers, streams, and lakes pursuant to the California Fish and Game Code (§§1600–1616). Activities of state and local agencies, as well as public utilities that are project proponents, are regulated by the CDFW under Section 1602 of the California Fish and Game Code.

Because the CDFW includes streamside habitats under its jurisdiction that, under the federal definition, may not qualify as wetlands on a project site, its jurisdiction may be broader than that of the USACE. Riparian forests in California often lie outside the plain of ordinary high water regulated under Section 404 of the CWA, and often do not have all three parameters (wetland hydrology, hydrophytic vegetation, and hydric soils) sufficiently present to be regulated as a wetland.

However, riparian forests are frequently included within CDFW regulatory jurisdiction under Section 1602 of the California Fish and Game Code.

The CDFW jurisdictional limits are not as clearly defined by regulation as those of the USACE. While they closely resemble the limits described by USACE regulations, they include riparian habitat supported by a river, stream, or lake regardless of the presence or absence of hydric and saturated soils conditions. In general, the CDFW extends jurisdiction from the top of a stream bank or to the outer limits of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place within or near a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish and other aquatic plant and/or wildlife species. It also includes watercourses that have a surface or subsurface flow that support or have supported riparian vegetation.

5.4 Humboldt County-Streamside Management Area

"Streamside Management Areas" (SMAs) [Section 3432(5) of the Humboldt County 1984 General Plan] are defined in the Humboldt County General Plan (Page G-8) and include a natural resource area along both sides



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of streams containing the channel and adjacent land. Updates to the SMA guidance for cannabis activities are defined in the Environmental Impact Assessment Biological Resources Section³.

Project applicants proposing development activities within a SMA or wetland areas are required to include a site-specific biological report prepared consistent with these regulations. The written report prepared by a qualified biologist is subsequently referred to CDFW for review and comment. If required, after agency review of the preliminary habitat assessment, protocol level surveys will be completed per recommendations by the Final Environmental Impact Report (FEIR) amendments to the Humboldt County Code Regulating Commercial Cannabis Activities⁴.

5.5 Additional Laws and Policies

In addition to the above-mentioned policies, numerous other policies exist to protect wetlands, waters and biological resources including the California Environmental Quality Act (CEQA), California Endangered Species Act (CESA) and the Z'berg-Nejedly Forest Practice Act.

6.0 Conclusion and Discussion

Mother Earth Engineering staff conducted a site visit on 16 October 2019 to evaluate the presence of jurisdictional wetlands and identify wetland boundaries within the study area. This report is in response to a 6 May 2019 correspondence from the Humboldt County Cannabis Services Division requesting a wetland delineation for an area adjacent to cultivation activity on the 160-acre property owned by Rados Milojkovic of Credo RA, LLC.

Field observations were made in accordance with the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement: Western Mountains, Valleys, and Coast Region (Version 2.0). Upon site inspection, one (1) small 0.20-acre jurisdictional Palustrine Emergent wetland was identified within the study area. Palustrine Emergent Wetlands include all tidal and non-tidal wetlands dominated by persistent emergent vascular plants, emergent mosses or lichens, and all such wetlands that occur in tidal areas in which salinity due to ocean-derived salts is below 0.5 percent. The boundaries of the wetland were identified and flagged by the presence of hydrophytic vegetation, hydric soils, and hydrology, in addition to topography of the landscape. Adjacent uplands were distinguished from the wetland by lack of hydric soils, lack of hydrology, lack of hydrophytic vegetation and/or the presence of upland plants.

The subject wetland is designated with a 50 ft buffer around the delineation. It appears that all cultivation related activities are outside designated setbacks and buffers. All field pictures and data sheets for the wetland delineation area are included in *Appendix A* and *B* of this report. Additional consultation with agency staff including the California Department of Fish and Wildlife (CDFW), U.S. Army Corps of Engineers (USACE), Humboldt County and US Fish and Wildlife Service (USFW) will continue throughout the project application.

³ https://humboldtgov.org/DocumentCenter/View/58840/Section-311-Biological-Resources-Revised-DEIRPDF

⁴ Final Environmental Impact Report: Amendments to the Humboldt County Code Regulating Commercial Cannabis Activities. Prepared by Ascent Environmental. Accessed via https://humboldtgov.org/DocumentCenter/View/62689/Humboldt-County-Cannabis-Program-Final-EIR60mb-PDF. Accessed [September 2019]

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Appendix A



Field Pictures

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Picture No. 1

October 16, 2019

Description:

Upland sample point SP-1 looking west.



Picture No. 2

October 16, 2019

Description:

North edge of wetland looking south.





Picture No. 3

October 16, 2019

Description:

View of wet area sample point SP-2 marked by red flag looking south.



Picture No. 4

October 16, 2019

Description:

View of upland area sample point SP-3 looking south with eastern edge of wetland on the right side.





Picture No. 5

October 16, 2019

Description:

View of wetland area sample point SP-4 looking west. Area dominated by slough sedge, poison oak and willows.



Picture No. 6

October 16, 2019

Description:

Another view of the subject wetland on the eastern edge looking southwest.





Appendix B



Data Forms

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

Project/Site: Pados Site		City/County: \$	Bridge	Ville, Humboldtsampling Date: 5P=1 10/16/19
Applicant/Owner: Radas Hilpik ovic			J	ville, Humbold Sampling Date: SP=1 10/16/19 State: CA Sampling Point: 5P-1
Investigator(s): R. Okuyama		Section Town	shin Rai	nge Slb, TIV, RHE
				convex, none): Concave Slope (%): <10
				Long: -123.73611 Datum: WGS 84
				NWI classification:
A.		174		
Are climatic / hydrologic conditions on the site typical for the				
Are Vegetation, Soil, or Hydrology				"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology				eded, explain any answers in Remarks.)
		sampling	point lo	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes		Is the S	Sampled	Area
Hydric Soil Present? Yes Wetland Hydrology Present? Yes		within	a Wetlan	nd? Yes No
Wetland Hydrology Present? Yes	NO			
Remarks.				
VEGETATION – Use scientific names of pla	nts.			
Tree Stratum (Plot size: 5 4	Absolute	Dominant In		Dominance Test worksheet:
1. Pseudotsuga menzies i	30	Species? S	Fac U	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Notholithocopus densiflores		1/2	-	
3. Um bellaria californica	8	No 1	FAC	Total Number of Dominant Species Across All Strata: (B)
4.				
Sapling/Shrub Stratum (Plot size: 10 C+	50	= Total Cover	•	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
1. Poly stichum munitum	36	V 1	7. a ()	Prevalence Index worksheet:
2. Umbullaria californica	15	-/	Fac	Total % Cover of: Multiply by:
3			1000	OBL species x 1 =
4.				FACW species x 2 =
5				FAC species x 3 = FACU species x 4 =
50	50	= Total Cover	•	UPL species x 5 =
Herb Stratum (Plot size: 5 (1) 1. Oxalis oregana	30	V 5	Pacu	Column Totals: (A) (B)
2. Texicodendron diversilabum	15	7.	Fac	
3. Rubus wising				Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 ¹
7.				4 - Morphological Adaptations¹ (Provide supporting
8				data in Remarks or on a separate sheet)
9			1	5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain)
10		67 8536		Indicators of hydric soil and wetland hydrology must
11.		= Total Cover		be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 5 F4)	22	= Total Cover		
1				Hydrophytic
2				Vegetation Present? Yes No
3.0	-	= Total Cover		Present? Yes No V
% Bare Ground in Herb Stratum 30		7.15.5		
incinaria.				
1				l l

C	0	ı	
J	v	ı	_

Sampling Point: SP-1

Profile Description: (Describe to the d	Redox Fe	atures			
(inches) Color (moist) %		% Type ¹	_Loc ²	Texture	Remarks
0-10" 104R 212 100	2		_		Parameter 1
10-20" 104R 2/2 100		_ =	_	Fine los	had
				TIME ICU	
`					
				** (•)	<u> </u>
Type: C=Concentration, D=Depletion, RI	M=Reduced Matrix, CS=Co	vered or Coate	d Sand Gra		cation: PL=Pore Lining, M=Matrix.
lydric Soil Indicators: (Applicable to a		e noted.)			rs for Problematic Hydric Soils ³ :
Histosol (A1) Histic Epipedon (A2)	Sandy Redox (S5)				Muck (A10)
Black Histic (A3)	Stripped Matrix (S6)		MI DA 4V		Parent Material (TF2)
Hydrogen Sulfide (A4)	Loamy Mucky Miner Loamy Gleyed Matri		MLRA 1)		Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)			Othe	er (Explain in Remarks)
_ Thick Dark Surface (A12)	Redox Dark Surface			3Indicato	rs of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surfa	, ,			nd hydrology must be present,
_ Sandy Gleyed Matrix (S4)	Redox Depressions	7000000000 • 1000 100 000			s disturbed or problematic.
estrictive Layer (if present):				- Constant Constant	The second secon
Type:					estimate the state of the
				Hydric Soil	Present? Yes No _V
emarks:				Hydric Soil	Present? Yes No _V
emarks: /DROLOGY /etland Hydrology Indicators:				Hydric Soil	
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emarks: 'DROLOGY 'etland Hydrology Indicators:	ed; check all that apply) Water-Stained L	eaves (B9) (ex	cept	Second	
emarks: 'DROLOGY etland Hydrology Indicators: rimary Indicators (minimum of one require		2 2 2	cept	Second	dary Indicators (2 or more required)
POROLOGY Setland Hydrology Indicators: Surface Water (A1)	Water-Stained L	4A, and 4B)	cept	Second Wa	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2
PERPORT PROPERTY OF THE PROPER	Water-Stained L MLRA 1, 2, 4	4A, and 4B)	cept	<u>Second</u> Wi	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
POROLOGY Setland Hydrology Indicators: Surface Water (A1) High Water Table (A2) Saturation (A3)	Water-Stained L MLRA 1, 2, 4 Salt Crust (B11)	1A, and 4B) prates (B13)	cept	<u>Second</u> Write Drr	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2)
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emarks: /DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one require _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3) _ Water Marks (B1) _ Sediment Deposits (B2)	Water-Stained L MLRA 1, 2, 4 Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfid	orates (B13) e Odor (C1) pheres along L	iving Roots	Second Ware Dr Dr Sa (C3) Ge	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C
rimary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Water-Stained L MLRA 1, 2, 4 Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos	orates (B13) e Odor (C1) epheres along L duced Iron (C4)	iving Roots	Second Wide Dr Dr Sa (C3) Ge Sh	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) ituration Visible on Aerial Imagery (Commorphic Position (D2)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one require _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3) _ Water Marks (B1) _ Sediment Deposits (B2) _ Drift Deposits (B3) _ Algal Mat or Crust (B4) _ Iron Deposits (B5) _ Surface Soil Cracks (B6)	Water-Stained L MLRA 1, 2, 4 Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Rec Stunted or Stres	AA, and 4B) orates (B13) e Odor (C1) opheres along L duced Iron (C4) luction in Tilled	iving Roots Soils (C6)	Second Wi Dr Dr Sa (C3) Ge Sh FA	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) tturation Visible on Aerial Imagery (Catomorphic Position (D2) allow Aquitard (D3)
Property (Paragraph of the Property of the Pro	Water-Stained L MLRA 1, 2, 4 Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Rec Stunted or Stres Tother (Explain in	arates (B13) e Odor (C1) epheres along L duced Iron (C4) fluction in Tilled sed Plants (D1)	iving Roots Soils (C6)	Second Wi Dr Dr Sa (C3) Ge Sh FA Ra	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) (C-Neutral Test (D5)
Property (Particular Sparsely Vegetated Concave Surface Soil Cracks (B6) Irinary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B6) Sparsely Vegetated Concave Surface	Water-Stained L MLRA 1, 2, 4 Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Rec Stunted or Stres Tother (Explain in	arates (B13) e Odor (C1) epheres along L duced Iron (C4) fluction in Tilled sed Plants (D1)	iving Roots Soils (C6)	Second Wi Dr Dr Sa (C3) Ge Sh FA Ra	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (Coemorphic Position (D2) allow Aquitard (D3) allow Aquitard (D3) ac-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
rimary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B2) Sparsely Vegetated Concave Surface and Observations:	Water-Stained L MLRA 1, 2, 4 Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Rec Stunted or Stres 37) Other (Explain in	orates (B13) e Odor (C1) epheres along L duced Iron (C4) fuction in Tilled sed Plants (D1) n Remarks)	iving Roots Soils (C6) (LRR A)	Second Wi Dr Dr Sa (C3) Ge Sh FA Ra	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (Coemorphic Position (D2) allow Aquitard (D3) allow Aquitard (D3) ac-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
rimary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B4) Sparsely Vegetated Concave Surface and Observations:	Water-Stained L MLRA 1, 2, 4 Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Rec Stunted or Stres Other (Explain in (B8) No	orates (B13) e Odor (C1) spheres along L duced Iron (C4) fuction in Tilled sed Plants (D1) n Remarks)	iving Roots Soils (C6) (LRR A)	Second Wi Dr Dr Sa (C3) Ge Sh FA Ra	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (Coemorphic Position (D2) allow Aquitard (D3) allow Aquitard (D3) ac-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Sparsely Vegetated Concave Surface and Observations: Inface Water Present? Yes	Water-Stained L MLRA 1, 2, 4 Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Rec Stunted or Stres 37) Other (Explain in	orates (B13) e Odor (C1) spheres along L duced Iron (C4) fuction in Tilled sed Plants (D1) n Remarks)	iving Roots Soils (C6) (LRR A)	Second Wi Dr Dr Sa (C3) Ge Sh FA Ra	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (Coemorphic Position (D2) allow Aquitard (D3) allow Aquitard (D3) ac-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Based of Concave Surface (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Based of Concave Surface (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Based of Concave Surface (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Based of Concave Surface (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Based of Concave Surface (B4) Inundation Visible on Aerial Imagery (B4)	Water-Stained L MLRA 1, 2, 4 Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Rec Stunted or Stres Other (Explain in (B8) No	arates (B13) e Odor (C1) epheres along L duced Iron (C4) luction in Tilled sed Plants (D1) n Remarks)	Soils (C6)	Second Wi Dr Sa (C3) Ge Sh FA Ra Fro	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (Coemorphic Position (D2) allow Aquitard (D3) allow Aquitard (D3) ac-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one require _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3) _ Water Marks (B1) _ Sediment Deposits (B2) _ Drift Deposits (B3) _ Algal Mat or Crust (B4) _ Iron Deposits (B5) _ Surface Soil Cracks (B6) _ Inundation Visible on Aerial Imagery (B _ Sparsely Vegetated Concave Surface (BI) _ Sparsely Vegetated Concave Surface (BI) _ Surface Water Present? Yes ater Table Present? Yes	Water-Stained L MLRA 1, 2, 4 Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Rec Stunted or Stres 37) Other (Explain in (B8) No X Depth (inches): No X Depth (inches):	prates (B13) e Odor (C1) epheres along L duced Iron (C4) fuction in Tilled sed Plants (D1) n Remarks)	Soils (C6) (LRR A) Wetland	Second Windows Dr Dr Sa (C3) Ge Sh FA Fro	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Based of Concave Surface (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Based of Concave Surface (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Based of Concave Surface (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Based of Concave Surface (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Based of Concave Surface (B4) Inundation Visible on Aerial Imagery (B4)	Water-Stained L MLRA 1, 2, 4 Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Rec Stunted or Stres 37) Other (Explain in (B8) No X Depth (inches): No X Depth (inches):	prates (B13) e Odor (C1) epheres along L duced Iron (C4) fuction in Tilled sed Plants (D1) n Remarks)	Soils (C6) (LRR A) Wetland	Second Windows Dr Dr Sa (C3) Ge Sh FA Fro	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Sparsely Vegetated Concave Surface and Observations: urface Water Present? Atter Table Present? Atter Table Present? Atter Table Recorded Data (stream gauge, meaning the secretal recorded page) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Sparsely Vegetated Concave Surface and Observations: Arter Table Present? Atter Table Present? Atter Table Present? Atter Table Recorded Data (stream gauge, meaning the secretal recorded Data (stream gauge)	Water-Stained L MLRA 1, 2, 4 Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Rec Stunted or Stres 37) Other (Explain in (B8) No X Depth (inches): No X Depth (inches):	prates (B13) e Odor (C1) epheres along L duced Iron (C4) fuction in Tilled sed Plants (D1) n Remarks)	Soils (C6) (LRR A) Wetland	Second Windows Dr Dr Sa (C3) Ge Sh FA Fro	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one require _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3) _ Water Marks (B1) _ Sediment Deposits (B2) _ Drift Deposits (B3) _ Algal Mat or Crust (B4) _ Iron Deposits (B5) _ Surface Soil Cracks (B6) _ Inundation Visible on Aerial Imagery (Bacterial Concave Surface (Beld Observations: Inface Water Present? Yes	Water-Stained L MLRA 1, 2, 4 Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Rec Stunted or Stres 37) Other (Explain in (B8) No X Depth (inches): No X Depth (inches):	prates (B13) e Odor (C1) epheres along L duced Iron (C4) fuction in Tilled sed Plants (D1) n Remarks)	Soils (C6) (LRR A) Wetland	Second Windows Dr Dr Sa (C3) Ge Sh FA Fro	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)

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

Project/Site: Rados site		City/Co	ounty: Bridge	eville, Humboldt Sampling Date: 10/16/
Applicant/Owner: Rados Wilejkavic				State: CA Sampling Point: SP-2
Investigator(s): 2.616mgama		Section	n, Township, Ra	ange: SIb, TIV, RHE
Landform (hillslope, terrace, etc.): hillslope - toe		Local	relief (concave,	, convex, none): Slope (%):
Subregion (LRR):	Lat: <u>40</u>	2.46	191	Long: _123. 73617 Datum: WG3
Soil Map Unit Name: Hougland - Chark mount	ain-Pas	stre	rack con	γίεχ NWI classification:
Are climatic / hydrologic conditions on the site typical for the			/	
Are Vegetation, Soil, or Hydrology				"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology				eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map				locations, transects, important features, e
Hydrophytic Vegetation Present? Yes	No			
\$1.50 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	No		Is the Sample within a Wetla	. /
	No		within a wetta	ilu? Tes No
Remarks:				
VEGETATION – Use scientific names of pla	nte			
VEGETATION - Use scientific flames of plan	Absolute	Domi	nant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 15 CL)			ies? Status	Number of Dominant Species
1. limbellaria californicus		<u>y</u> _	_ Fac	That Are OBL, FACW, or FAC: (A)
2. Pseudotsuga menzie sii	S	_10	Fac U	
3				Species Across All Strata: (B)
4	20			Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 10 C+)	_6	_ = 10ta	al Cover	That Are OBL, FACW, or FAC: 75% (A/E
1. Pryopteris oxpoursa.	18_	_ 4	<u>Pacw</u>	Prevalence Index worksheet:
2. Equiserum telmateia	30		/ Facu	
3. Pubus ursinus		<u></u>	1 Pac	FACW species x 2 =
4. topico de la directitolocare				FAC species x 3 =
5	58		I Cover	FACU species x 4 =
Herb Stratum (Plot size: 5 C)		_ = 10ta	ii Cover	UPL species x 5 =
1. Toxicodendron diversilobum	_25_	4	Fac	Column Totals: (A) (B
2. oxalis angana	10	_ N	_ Facu	Prevalence Index = B/A =
3. carex obnupta	20	- 4	- Bb	Hydrophytic Vegetation Indicators:
4				✓ 1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0¹
7 8				4 - Morphological Adaptations ¹ (Provide supportin data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants ¹
10				Problematic Hydrophytic Vegetation ¹ (Explain)
11				¹Indicators of hydric soil and wetland hydrology must
	55	= Total	Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 5	15		1 Fac	
1. Toxteodendnen diversilabum 2.		7	- juc	Hydrophytic Vegetation
	15	= Total	Cover	Present? Yes No No
% Bare Ground in Herb Stratum	-1-3		and the second	The state of the s
Remarks:				
		22		

Profile Desci	ription: (Describe.t	o the dep	oth needed to docu	ment the i	ndicator	or confirm	the absence of indicators.)
Depth	Matrix			ox Features			· · · · · · · · · · · · · · · · · · ·
(inches)	Color (moist)	%	Color (moist)	_ <u> </u>	Type ¹	_Loc ² _	Texture ' Remarks
0-14	1048 3/1	. 80	7.5YR 5/8	20_		PL	toany clay
	1 7010	2					N. C. Barrier
1,000	1.14	Year .	DC Y		3		
			3				
				2 7 1 1			2.4 (34.5) (1) (2) (1) (2) (4) (4) (4) (6) (6)
	•						
¹ Type: C=Coi	ncentration, D=Deple	etion, RM	Reduced Matrix, C	S=Covered	or Coate	d Sand Gra	ains. ² Location: PL=Pore Lining, M=Matrix.
	ndicators: (Applica						Indicators for Problematic Hydric Soils ³ :
Histosol (Sandy Redox (S5)			2 cm Muck (A10)
	pedon (A2)		Stripped Matrix				' Red Parent Material (TF2)
Black His			Loamy Mucky I			MLRA 1)	Very Shallow Dark Surface (TF12)
	Sulfide (A4) Below Dark Surface	(Δ11)	Loamy Gleyed	180 95)		Other (Explain in Remarks)
	k Surface (A12)	(A11)	Depleted Matrix Redox Dark Su				3Indicators of hydrophytic vegetation and
	icky Mineral (S1)		Depleted Dark	, ,	7)		³ Indicators of hydrophytic vegetation and wetland hydrology must be present,
	eyed Matrix (S4)		Redox Depress		.,		unless disturbed or problematic.
	ayer (if present):						- Problemation
Туре:	1		?				Contraction of the production
Depth (inch	nes):				;	100	Hydric Soil Present? Yes No
Remarks:							
					٠,		
					ń.		
VDDOL OC	·V		• • • • • • • • • • • • • • • • • • • •				
YDROLOG							
	ology Indicators:		•	4		•	247, 1.1 144 (
	tors (minimum of one	e required					Secondary Indicators (2 or more required)
Surface W	0 0		₩ Water-Sta			cept	√ Water-Stained Leaves (B9) (MLRA 1, 2,
	er Table (A2)		MLRA	1, 2, 4A, ar	nd 4B)		4A, and 4B)
Saturation			Salt Crust		•		Drainage Patterns (B10)
Water Mar			Aquatic lin	and the second second			Dry-Season Water Table (C2)
	Deposits (B2)		Hydrogen				Saturation Visible on Aerial Imagery (C9
_ Drift Depos	7070 370						s (C3) Geomorphic Position (D2)
	or Crust (B4)		Presence				Shallow Aquitard (D3)
_ Iron Depos			Recent Iro				
	oil Cracks (B6) Visible on Aerial Ima	ngomi (D7	Stunted or			(LRR A)	Raised Ant Mounds (D6) (LRR A)
	egetated Concave S	TO 8 18 1		iain in Kerr	narks)		Frost-Heave Hummocks (D7)
_ Sparsely v ield Observa		ouriace (B				-	
		- 1	lo V D " "	.h V			
urface Water			lo Depth (inc		-	-	
/ater Table Pr	esent? Yes	N	lo x Depth (inc			- 1	
aturation Pres		E 1	lo Depth (inc				nd Hydrology Present? Yes No

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

Remarks: Surface vaitor observed in pit ~ 3' away from sample ps.mt SP-2.

(includes capillary fringe)

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

Project/Site: Rades Site		City/County: Bridge	eville, Humbold Fampling Date: 10/16/19
Applicant/Owner: Yados Milnikovic			State: Sampling Point: _>\(\mathcal{V} -
Investigator(s): R. Okuyama		Section, Township, Rai	nge: SIE, TIN, RUE
Landform (hillstone terrace etc.): ISI staye = - 124		Local relief (concave o	convex, none): <u>convave</u> Slope (%): <u>L10</u>
			Long: - 123, 73 588 Datum: WGS84
Soil Map Unit Name: Hoagland - Chalkmant			
1		,	
Are climatic / hydrologic conditions on the site typical for t			
Are Vegetation, Soil, or Hydrology			Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology	_ naturally pro	blematic? (If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	sampling point le	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No		• 60000
Hydric Soil Present? Yes	No	Is the Sampled	Area
Wetland Hydrology Present? Yes	No	within a wetian	id? fesNo
Remarks:			
VEGETATION – Use scientific names of pla	ints.		
Tree Stratum (Plot size: 15 ft)	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
1. Pseudotsuga wenziesii		/ -	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
1. Frencoising wennes!	10	V FACU	That Are OBE, I AGVV, OF I AG. (A)
2. Acer meenophyllum 3. Umbellaria ralifornica		V Fac	Total Number of Dominant Species Across All Strata: (B)
4. Notholithocarpus densiflans		V NL	Species Across All Strata: (B)
4. DOING IMM DEWING ACTION		= Total Cover	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 10 ft-)		_ Total Gover	That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet:
1. Polystichum munitum	10		Total % Cover of: Multiply by:
2. Hornest Acer macrophyllum	3		OBL species x 1 =
3. Notholithocarpus densiftans		NO NL	FACW species x 2 =
4			FAC species x 3 =
5			FACU species x4 =
	_15	= Total Cover	UPL species x 5 =
Herb Stratum (Plot size: 5 C+)			Column Totals: (A) (B)
1			
2			Prevalence Index = B/A =
3			Hydrophytic Vegetation Indicators:
4		7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
5 6			3 - Prevalence Index is ≤3.0¹
7			4 - Morphological Adaptations ¹ (Provide supporting
8.			data in Remarks or on a separate sheet)
9			5 - Wetland Non-Vascular Plants ¹
10			Problematic Hydrophytic Vegetation ¹ (Explain)
11			¹ Indicators of hydric soil and wetland hydrology must
		= Total Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)			52 3 10
1.			Hydrophytic
2			Vegetation Present? Yes No _w
0/ Page Cround in black Stratum		= Total Cover	Тоб
% Bare Ground in Herb Stratum			
T. C.			

Depth	Matrix			x Features	1		the absence of indicators.)
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	
0-12."	104R4/2	100	-	-	_	_	Fine logistry
							The road many
	-						
				· 			
			* 25	. ——			
	192 - 19 19 19 19 19 19 19 19 19 19 19 19 19						
1T 0-0							2
			educed Matrix, CS			Sand Gra	
			Rs, unless other		a.)		Indicators for Problematic Hydric Soils ³ :
Histosol (A1		-	_ Sandy Redox (S				2 cm Muck (A10)
Histic Epipe			_ Stripped Matrix				Red Parent Material (TF2)
Black Histic	13 5	-	Loamy Mucky N			MLRA 1)	Very Shallow Dark Surface (TF12)
Hydrogen S		(011)	Loamy Gleyed N				Other (Explain in Remarks)
	elow Dark Surface Surface (A12)	(411)	Depleted Matrix				3 Indicators of hadron to a construction of the state of
Sandy Muck	8 5	-	Redox Dark Sur Depleted Dark S		7)		³ Indicators of hydrophytic vegetation and
Sandy Much			Redox Depressi)		wetland hydrology must be present,
Restrictive Lay			_ Redux Depressi	0115 (F6)			unless disturbed or problematic.
			-				,
Depth (inches	s):	_	_				Hydric Soil Present? Yes No
YDROLOGY							· · · · · · · · · · · · · · · · · · ·
9.7	logy Indicators:						
		e requirea; c	heck all that apply	60.63			Secondary Indicators (2 or more required)
Surface Wat	10.00		Water-Stair			cept	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water				, 2, 4A, an	id 4B)		4A, and 4B)
Saturation (A			Salt Crust (SOUTH STATE			Drainage Patterns (B10)
Water Marks			Aquatic Inve	ertebrates	(B13)		Dry-Season Water Table (C2)
Sediment De	eposits (B2)		Hydrogen S	Sulfide Odo	or (C1)		Saturation Visible on Aerial Imagery (C9
Drift Deposit	ts (B3)		Oxidized RI	nizosphere	s along Li	ving Roots	
Alasi Mat ar	Crust (B4)			f Reduced			
Algai Mat or					11011 (C4)		Shallow Aquitard (D3)
Algai Mat or Iron Deposits	s (B5)		Recent Iron	Reduction		Soils (C6)	Shallow Aquitard (D3) FAC-Neutral Test (D5)
	500 01 step 20 M		Recent Iron		n in Tilled		FAC-Neutral Test (D5)
Iron Deposits Surface Soil	500 01 step 20 M	agery (B7)	Recent Iron Stunted or S	Stressed P	n in Tilled S lants (D1)		FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Iron Deposits Surface Soil Inundation V	Cracks (B6)	. , , ,	Recent Iron	Stressed P	n in Tilled S lants (D1)		FAC-Neutral Test (D5)
Iron Deposite Surface Soil Inundation V Sparsely Ve	Cracks (B6) /isible on Aerial Im getated Concave	. , , ,	Recent Iron Stunted or S	Stressed P	n in Tilled S lants (D1)		FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Iron Deposits Surface Soil Inundation V Sparsely Vegicial Observation	Cracks (B6) (isible on Aerial Imgetated Concave Sons:	Surface (B8)	Recent Iron Stunted or 8 Other (Expl.	Stressed P ain in Rem	n in Tilled (lants (D1) parks)	(LRR A)	FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Iron Deposite Surface Soil Inundation V Sparsely Vegicield Observation	Cracks (B6) (isible on Aerial Imgetated Concave Sons: resent? Yes	Surface (B8)	Recent Iron Stunted or S Other (Expl	Stressed Plain in Rem	n in Tilled (lants (D1) larks)	(LRR A)	FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Iron Deposite Surface Soil Inundation V Sparsely Vegrield Observation Surface Water Presented Pr	Cracks (B6) (isible on Aerial Imgetated Concave sons: resent? Yes Yes	Surface (B8) No No _	Recent Iron Stunted or S Other (Expl.	Stressed Pain in Rem	n in Tilled S lants (D1) larks)	(LRR A)	FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Iron Deposits Surface Soil Inundation V Sparsely Vegiceld Observation Surface Water Provater Table Presenturation Presentules capillary	Cracks (B6) //isible on Aerial Imgetated Concave sons: resent? Yes ont? Yes y fringe)	Surface (B8) S No _ S No _ No _	Recent Iron Stunted or S Other (Expl.	Stressed Prain in Rem hes): hes):	n in Tilled (lants (D1) larks)	(LRR A)	FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) ad Hydrology Present? Yes No
Iron Deposite Surface Soil Inundation V Sparsely Veg Geld Observation Surface Water Presented Pr	Cracks (B6) //isible on Aerial Imgetated Concave sons: resent? Yes ont? Yes y fringe)	Surface (B8) S No _ S No _ No _	Recent Iron Stunted or S Other (Expl.	Stressed Prain in Rem hes): hes):	n in Tilled (lants (D1) larks)	(LRR A)	FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) ad Hydrology Present? Yes No
Iron Deposite Surface Soil Inundation V Sparsely Vegrield Observation Surface Water Provater Table Presenctudes capillance Records	Cracks (B6) //isible on Aerial Imgetated Concave sons: resent? Yes ont? Yes y fringe)	Surface (B8) S No _ S No _ No _	Recent Iron Stunted or S Other (Expl.	Stressed Prain in Rem hes): hes):	n in Tilled (lants (D1) larks)	(LRR A)	FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) ad Hydrology Present? Yes No
Iron Deposite Surface Soil Inundation V Sparsely Veg Geld Observation Surface Water Presented Pr	Cracks (B6) //isible on Aerial Imgetated Concave sons: resent? Yes ont? Yes y fringe)	Surface (B8) S No _ S No _ No _	Recent Iron Stunted or S Other (Expl.	Stressed Prain in Rem hes): hes):	n in Tilled (lants (D1) larks)	(LRR A)	FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) ad Hydrology Present? Yes No
Iron Deposite Surface Soil Inundation V Sparsely Vegrield Observation Surface Water Provater Table Presenctudes capillance Records	Cracks (B6) //isible on Aerial Imgetated Concave sons: resent? Yes ont? Yes y fringe)	Surface (B8) S No _ S No _ No _	Recent Iron Stunted or S Other (Expl.	Stressed Prain in Rem hes): hes):	n in Tilled (lants (D1) larks)	(LRR A)	FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) ad Hydrology Present? Yes No

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

Project/Site: Rados Site		Citv/Cou	ntv: Bridger	ille, Humboldt Sampling Date: 10/16/19
Applicant/Owner: Rades Milakovic	1000		0	State: CA Sampling Point: 5P-4
Investigator(s): R. Okujama		Section	Township, Ra	nge: SIG. TIN RYE
				convex, none): concave Slope (%): Lto
				Long: -123.736/1 Datum: UGS&
Soil Map Unit Name: Hoagland -Chalkmanta	in Poch	10101	et comple	NWI classification:
Are climatic / hydrologic conditions on the site typical for the				
3000 (1 10 10 10 10 10 10 10 10 10 10 10 10 10				
Are Vegetation, Soil, or Hydrology				'Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology				eeded, explain any answers in Remarks.) ocations, transects, important features, etc.
		Jumpi	mig point i	
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes		Is	the Sampled	Area /
Wetland Hydrology Present? Yes✓		w	ithin a Wetlar	nd? Yes No
Remarks:				
VEGETATION – Use scientific names of plan	nts.			•
15.51	Absolute		ant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 15 ft)			Status Pac	Number of Dominant Species
1. limbellage californicus 2. Salix Scouleriana	10			That Are OBL, FACW, or FAC: (A)
3				Total Number of Dominant Species Across All Strata: (B)
4	_	·	_	
	30	= Total	Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size: 10 Pt)			_	Prevalence Index worksheet:
1. Toxico dendran diversilabaren		-	- fac	Total % Cover of: Multiply by:
2. <u>Onjopteris expansa</u>			<u>faew</u>	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: 5 ft)	-	_ rotar	OOVCI	UPL species x 5 =
1. Carex obnunta	_ 50_		061	Column Totals: (A) (B)
2. Toxico dendron diverilabum	3D		Pac	Prevalence Index = B/A =
3				Hydrophytic Vegetation Indicators:
4				▲ 1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 ¹
7				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8				5 - Wetland Non-Vascular Plants ¹
10				Problematic Hydrophytic Vegetation¹ (Explain)
Na				¹ Indicators of hydric soil and wetland hydrology must
11	80	= Total C	Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	Ti.	• 100.75-0794900 000		
1				Hydrophytic
2				Vegetation Present? Yes No
% Bare Ground in Herb Stratum		= Total C	over	
Remarks:	1-11-11			
		~(

Profile Description: (Description)	cribe to the der	oth needed to document the indica	tor or confirm	Sampling Point: SV- 4
	trix	Redox Features	tor or commi	the absence of indicators.)
(inches) Color (moi		Color (moist) % Typ	e ¹ Loc ²	Texture Remarks
0-18 104R 3/1	80	7.54R/5/8 20 C	PL	losing day:
* * *				
				1. Ast 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
		=Reduced Matrix, CS=Covered or Co	oated Sand Gra	
	pplicable to all	LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Redox (S5)		2 cm Muck (A10)
Histic Epipedon (A2)Black Histic (A3)		Stripped Matrix (S6)Loamy Mucky Mineral (F1) (exc	ont MI DA 1\	Red Parent Material (TF2)
Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)	ept MLKA 1)	Very Shallow Dark Surface (TF12)Other (Explain in Remarks)
Depleted Below Dark S	urface (A11)	Depleted Matrix (F3)		carer (Explain in Fernance)
Thick Dark Surface (A1:	2)	Redox Dark Surface (F6)		³ Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S		Depleted Dark Surface (F7)		wetland hydrology must be present,
Sandy Gleyed Matrix (S Restrictive Layer (if present		Redox Depressions (F8)		unless disturbed or problematic.
	nt):	2		and the second second
Type: Depth (inches):				
Remarks:		·		Hydric Soil Present? Yes V No No
				Alterial War William & St.
YDROLOGY		e de la companya de l		Markey to establish to the
Wetland Hydrology Indicat				
Wrimani Indicatore (minimum				0
	rorone required	CANADA SE MENTE ESC MOS MOS MILLERS	/2002-0-16	Secondary Indicators (2 or more required)
Surface Water (A1)	TOT ONE TEQUIFEC	Water-Stained Leaves (B9)		✓ Water-Stained Leaves (B9) (MLRA 1, 2
Surface Water (A1) High Water Table (A2)	ror one required	Water-Stained Leaves (B9) MLRA 1, 2, 4A, and 4B		✓ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Surface Water (A1) High Water Table (A2) Saturation (A3)	or orie required	Water-Stained Leaves (B9) MLRA 1, 2, 4A, and 4B Salt Crust (B11)	,	✓ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	of one required	Water-Stained Leaves (B9)MLRA 1, 2, 4A, and 4BSalt Crust (B11)Aquatic Invertebrates (B13)	•	✓ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Surface Water (A1) High Water Table (A2) Saturation (A3)	of one required	 Water-Stained Leaves (B9) MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) , , ·	✓ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	of one required	 Water-Stained Leaves (B9) MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)) ng Living Roots	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 (C3))
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	of one required	 Water-Stained Leaves (B9) MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor)))) ng Living Roots (C4)	✓ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
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) MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron () . ng Living Roots (C4) Illed Soils (C6)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae) rial Imagery (B7	Water-Stained Leaves (B9) MLRA 1, 2, 4A, and 4B, Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron (Recent Iron Reduction in Ti Stunted or Stressed Plants Other (Explain in Remarks)) . ng Living Roots (C4) Illed Soils (C6)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) ✓ FAC-Neutral Test (D5)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Con) rial Imagery (B7	Water-Stained Leaves (B9) MLRA 1, 2, 4A, and 4B, Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron (Recent Iron Reduction in Ti Stunted or Stressed Plants Other (Explain in Remarks)) . ng Living Roots (C4) Illed Soils (C6)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 (C3)) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Con Field Observations:	rial Imagery (B7 cave Surface (E	Water-Stained Leaves (B9) MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor 'Presence of Reduced Iron (Recent Iron Reduction in Ti Stunted or Stressed Plants ') Other (Explain in Remarks) '88)) . ng Living Roots (C4) Illed Soils (C6) (D1) (LRR A)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 (C3)) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Con Field Observations: Surface Water Present?	rial Imagery (B7 cave Surface (B Yes N	Water-Stained Leaves (B9) MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron (Recent Iron Reduction in Ti Stunted or Stressed Plants Other (Explain in Remarks) No Depth (inches):	ng Living Roots C4) Illed Soils (C6) (D1) (LRR A)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 (C3)) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Con Field Observations: Surface Water Present? Nater Table Present?	rial Imagery (B7 cave Surface (E Yes N Yes N	Water-Stained Leaves (B9) MLRA 1, 2, 4A, and 4B; Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron (Recent Iron Reduction in Ti Stunted or Stressed Plants Other (Explain in Remarks) O Depth (inches): Depth (inches):	ng Living Roots (C4) Illed Soils (C6) (D1) (LRR A)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Con Field Observations: Surface Water Present? Water Table Present?	rial Imagery (B7 cave Surface (E Yes N Yes N	Water-Stained Leaves (B9) MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron (Recent Iron Reduction in Ti Stunted or Stressed Plants Other (Explain in Remarks) No Depth (inches):	ng Living Roots (C4) Illed Soils (C6) (D1) (LRR A)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 (C3)) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Con Field Observations: Surface Water Present? Water Table Present? Saturation Present? Saturation Present?	rial Imagery (B7 cave Surface (E Yes N Yes N	Water-Stained Leaves (B9) MLRA 1, 2, 4A, and 4B; Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron (Recent Iron Reduction in Ti Stunted or Stressed Plants Other (Explain in Remarks) O Depth (inches): Depth (inches):	ng Living Roots (C4) Illed Soils (C6) (D1) (LRR A)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Con Field Observations: Surface Water Present? Water Table Present? Saturation Present? Saturation Present? Includes capillary fringe) Describe Recorded Data (street	rial Imagery (B7 cave Surface (E Yes N Yes N	Water-Stained Leaves (B9) MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron (Recent Iron Reduction in Ti Stunted or Stressed Plants Other (Explain in Remarks) Obo Depth (inches): Depth (inches):	ng Living Roots (C4) Illed Soils (C6) (D1) (LRR A)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) ✓ Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Con Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (street	rial Imagery (B7 cave Surface (E Yes N Yes N	Water-Stained Leaves (B9) MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron (Recent Iron Reduction in Ti Stunted or Stressed Plants Other (Explain in Remarks) Obo Depth (inches): Depth (inches):	ng Living Roots (C4) Illed Soils (C6) (D1) (LRR A)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) ✓ Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Con Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (street	rial Imagery (B7 cave Surface (E Yes N Yes N	Water-Stained Leaves (B9) MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron (Recent Iron Reduction in Ti Stunted or Stressed Plants Other (Explain in Remarks) Obo Depth (inches): Depth (inches):	ng Living Roots (C4) Illed Soils (C6) (D1) (LRR A)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Con Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	rial Imagery (B7 cave Surface (E Yes N Yes N	Water-Stained Leaves (B9) MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron (Recent Iron Reduction in Ti Stunted or Stressed Plants Other (Explain in Remarks) Obo Depth (inches): Depth (inches):	ng Living Roots (C4) Illed Soils (C6) (D1) (LRR A)	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)