Initial Wetlands and Waters Delineation

Pickett Road 2023

Prepared by J. Regan Consulting Eureka, CA. December 2023

For
MAD RIVER PROPERTIES, INC.
MCKINLEYVILLE, CA.

Contents

Summary of Findings	3
Recommendations	4
Introduction	5
Setting	5
Methods	5
Vegetation	6
Soils	8
Hydrology	9
Results/Recommendations	9
Wetlands and Waters Delineation	9
Recommendations	11
Conditions and Limitations	11
References	

Attachment A: General Location Map, Humboldt County Resource Map, Soils Report, USFWS Wetland Map,

Wetland Plot Map

Attachment B: ACOE Plot Forms

Summary of Findings

The approximately 2.5-acre study area contains no discernable jurisdictional (local, state, or federal) wetlands or waters at this time.

Any areas with any positive indicators of wetland setting (soils, hydrology, or vegetation) are considered wetlands under the local McKinleyville Community Plan. Areas with two positive parameters are often considered jurisdictional by the state of California (waters of the state) and areas with three positive parameters are often considered federally jurisdictional waters (waters of the U.S.).

Field work was completed in December of 2023 which is prior to the documented growing season for the region (although herbaceous plants were growing and developing, an indictor of an active growing period) and early in the wet season for the region which can last well into the spring and even summer months. This study was focused on the soils on site and utilized a seasonally appropriate botanical survey (completed in 2023) for further evaluation of the vegetation communities and individual species found within the study area.

As indicated in the botanical survey report and noted during this investigation, there are several individual species present that are positive indicators of hydric vegetation (wetland indicator status of FAC, FACW, or OBL), however, these species were not dominant in the vegetation community present and did not create any significant hydric vegetation communities within the study area. In addition, many of the species encountered were non-native, with many ornamental and some invasive species.

Soils within the study area did not show positive indicators of a wetland setting and were generally soils common to upland pasture and grazeland in the region. There is a layer of brighter colored sandy soil that underlies the site and is common to the McKinleyville plateau. This soil profile is composed of dark loam on the surface and below that a dense, compact layer of bright colored coarse sandy clay loam. This subtending layer was a mix of yellow and brightly orange colored material that may represent a native soil layer derived from similar sources as the coastal bluff or marine up-thrust soils exposed along the coastline. The soil profile was interesting and contains some hard, relict concretions but did not meet any of the criteria for indicators of contemporary wetland soils, this could potentially be a relic of past hydrogeomorphic processes.

No positive primary indicators of wetland hydrology were encountered within the study site. Using the United States Department of Agriculture (USDA) Agricultural Applied Climate Information System (AgCIS) and the Woodley Island weather station data, the average accumulation of rainfall for this area during the beginning of the wet season (October 15 to December 31) is 14.99 inches, 2023 totals for October 15-December 31 were 12.67 inches, slightly below average. No areas of the study site were inundated or saturated within 12 inches of the soil surface at the time of survey.

Any wetlands or watercourses located within the surveyed area may be considered jurisdictional by either California Department of Fish and Wildlife (CDFW), The United States Army Corps of Engineers (ACOE), the Community of McKinleyville or all three.

Any and all identified features are included on the included Wetlands and Waters Plot Map, if present.

2023 is a year with slightly below average rainfall.

Recommendations

This initial study did not reveal any areas with positive indicators of wetland vegetation, soils, or hydrology. However, due to the early timing of the field visit the site should be resurveyed at the established plots later in the hydrologic season when rainfall accumulation would likely have been sufficient to either fill the site from above with input from precipitation or when potential ground water sources are filled and active. McKinleyville wetland regulations indicate that a site will be considered a wetland with only seven consecutive days of inundation. I recommend re-survey in March-April immediately after a period of significant rainfall. The site should be visited just after the cessation of rain and if water levels reach the first 12 inches of the soil profile the site should be monitored until water levels recede. Areas that hold water in the upper portions of the soil profile for seven days after the cessation of rain may be considered one parameter wetlands by the McKinleyville Community Plan. If wetlands are detected, they will be mapped and reported to the appropriate agencies. I recommend avoiding impacts to all wetlands found on site (if any) by adhering to all Federal, State, County, and local ordinances for permitted developments. In general development projects should remain outside of setbacks for waters. Setback measurements should be done according to current guidelines enforced by the lead agency in any permitting situation.

Introduction

The study area was assessed and surveyed for the presence of jurisdictional waters of both the State of California and of the United States of America as required by the federal Clean Water Act (CWA) and California's Porter-Cologne Water Quality Control Act, methodologies used are described in full below. In addition, the site was evaluated for the presence of single parameter wetlands as required by the McKinleyville Community Plan.

This report is the result of an in-field survey, reviews of relevant scientific literature, and professional knowledge. This survey report is intended to satisfy any project needs for the identification, classification, and delineation of wetlands or waters for avoidance or mitigation during any development activities.

Setting

The approximately 2.5-acre study area is located in the community of McKinleyville, Humboldt County, California on the Arcata North USGS 7.5' quadrangle. The subject parcel is located east of Central Avenue and the city center (see General Location Map in Attachment A). Elevation on site ranges from 168-175 feet above mean sea level. Parcels included within the study area are listed below.

APN# 510-381-021

The subject parcels and all potential development occur outside of the California coastal zone.

The study area is composed of a relatively flat open area of managed grassland with a single house and several outbuildings. The site is almost surrounded by developed subdivisions. The parcel is bounded by Pickett Road on the north and Gwin Road to the south. Vegetation on site is composed of low-lying grasses and forbs common to disturbed and managed sites in the region. The site is likely mown and has recently held several cattle. Ornamental plantings surround the house and grow on the parcel edges shared by neighbors.

There were no wetlands previously mapped by the either the County of Humboldt or the United States Fish and Wildlife Service (USFWS). See wetland and county resource maps, included in Attachment A, within the study area.

Project area base maps courtesy of Google Earth, Humboldt County Web GIS, USFWS Wetland Mapper, and USDA Web Soil Survey are included as attachments at the end of this report.

Methods

An assessment of potential impacts to adjacent watercourses or wetlands within 500 feet of the subject parcel was conducted by interpretation of aerial photography and resource maps courtesy of Google Earth, the United States Geologic Survey (USGS) 7.5' Arcata North quadrangle map, Humboldt County Web GIS, and USFWS National Wetland Inventory. This assessment was supplemented by an in-field survey of the subject areas. In field survey was conducted on 9

December 2023 by Mr. James Regan. Mr. Regan has a bachelor's degree in Botany and training and experience in wetland delineations and botanical survey and has conducted wetland surveys and delineations in Humboldt, Mendocino, and Trinity counties since 2008.

Any mapped watercourses were identified using the U.S. Army Corps of Engineers (ACOE) "Guide to Ordinary High Water Mark (OHWM) Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States" (Mercel, Licvar 2014).

Potential wetlands and wetland boundaries were assessed using guidelines outlined in the ACOE Wetland Delineation Manual Technical Report Y-87-1 (referred to as the 1987 manual) and the Draft Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region. The 1987 manual provides technical guidelines for identifying wetlands, distinguishing them from non-wetlands, and provides methods for applying the technical guidelines. Three key provisions of the ACOE wetland definition include:

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

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

This wetland and waters evaluation also utilized techniques from the technical manual A Hydrogeomorphic Classification of Wetlands (Brinson 1993) wherein wetlands are classified by land position and hydrologic regime.

Areas which were obvious wetlands and areas sampled with any positive indicators of wetland setting will be identified as wetlands (one, two, or three parameter) and will be included on the Wetland and Waters Plot Map in Attachment A. Watercourses and wetlands were classified as either Seasonal (Intermittent and Ephemeral) or Perennial. ACOE wetland delineation forms were completed for each samples plot. These forms are included as Attachment B.

Vegetation

The ACOE Manual (1987) directs that presence of a single individual of hydrophytic species does not mean that hydrophytic vegetation is present. However, hydrophytic vegetation is considered to be present if 50% of the dominant species have indicator status of OBL, FACW or FAC.

- Obligate (OBL)—usually occurs within a wetland (estimated probability 99%)
- Facultative-wet (FACW)—usually occurs in wetlands (estimated probability 67-99%)
- Facultative (FAC)—equally likely to occur in wetlands or non-wetlands (estimated probability 33-67%)
- Facultative-upland (FACU)—usually occurs in non-wetlands (estimated probability 1-33%)
- Upland (UPL)–occurs almost always in non-wetlands (estimated probability 99%)
- Non-Indicator (NI)-scored as an upland plant and calculated as such on wetland determination forms

Dominant species are determined by estimating those having the greatest percentage of cover using the "50/20" rule. The "50/20" rule entails that for each sample point and associated plant community, dominant species are the most abundant species, when ranked in descending order of abundance and cumulatively totaled, that immediately exceed 50% of the total dominance measure for the stratum, plus any additional species comprising 20% or more of the total dominance measure for each stratum. Absolute cover contribution was estimated for each sample plot, due to layering of species and strata percent cover values may exceed 100%. For marginal sites the FAC neutral test and the Prevalence Index were also utilized. These calculations (shown on attached forms) further analyze vegetation community using all species in the plot not just the dominant species.

Plants on site were largely non-native. Grass species were often mown/grazed and did not have seed heads or inflorescences generally necessary for identification. A list of species present from the recent botanical survey was used for further guidance. Table 1 contains the grass species present and their respective wetland indicator status, in vegetation plots the grasses were treated as a group (unless otherwise noted) and given a FACU rating based on the number of species with upland characteristics verses the species with hydric ratings. No dominant vegetation on site had a status of FACW or OBL, and few FAC species were dominant in plots, these were outweighed by the other dominant plants with upland or non-indicator status at each sample point.

Table 1. Grass Species Present

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Graminoid Species	Common Name	Wetland Indicator Status	Notes
Agrostis capillaris	colonial bentgrass	FAC	Non-native
Anthoxanthum odoratum	sweet vernal grass	FACU	Cal-IPC*: Limited
Avena barbata	slender oat	NI**	Cal-IPC: Moderate
Avena sativa	cultivated oat	UPL	Non-native
Bromus catharticus	rescue grass	NI	Non-native
Cynodon dactylon	Bermuda grass	FACU	Cal IPC: Moderate
Dactylis glomerata	orchard grass	FACU	Cal IPC: Limited
Festuca arundinacea	tall fescue	NI	Cal IPC: Moderate
Festuca myuros	rattail sixweeks grass	NI	Cal-IPC: Moderate

Graminoid Species	Common Name	Wetland Indicator Status	Notes
Holcus lanatus	velvet grass	FAC	Cal-IPC: Moderate
Poa annua	annual bluegrass	FAC	Non-native
Poa pratensis	Kentucky blue grass	FAC	Cal-IPC: Limited

^{*} Californica Invasive Plant Council ranking (an invasive species)

Soils

Current USDA soils maps were obtained from the USDA Web Soil Survey and are included in Attachment A. The project area falls into a soil map unit labeled as: **Arcata and Candymountain Soils 0-2% Slopes.** 10 soil pits were excavated during this investigation and are included on the attached Wetland Plot Map. Soils did not show significant indication of hydric conditions and were comparable to upland soil conditions in the region. The soil pits often had a deeper layer of brightly colored, sandy soils. This subtending layer was a mix of yellow and brightly orange colored material that may represent a native soil layer derived from coastal bluff or marine up-thrust. The soil profile was interesting and contains some hard, relict concretions but did not meet any of the criteria for indicators of contemporary wetland soils, this could potentially be a relic of past hydrogeomorphic processes. A representative image of the soils found in the Pickett Road study area is presented below along with an image of a hydric soil from a wetland site in Fortuna, CA (south of McKinleyville), note the greyed out "reduced" condition of the matrix of the known wetland soil and the redoxomorphic concentrations included there compared to the warm brown and bright colors of the Pickett Road sample.

Image 1. Pickett Road Soil



Image 2. Fortuna Wetland Soil



^{**}NI - Non Indicator treated as an upland (UPL) species

Hydrology

Each observation point for determination and delineation of watercourse and wetland boundaries was examined for indicators of wetland hydrology.

Indicators of wetland hydrology include surface water, drainage patterns, drift lines, sediment deposits, watermarks, and visual observations of saturated soils and/or inundation. Drainage patterns were determined by observing any signs of surface flow into or through the subject parcel. Aerial imagery was used courtesy of Google Earth and Humboldt County Web GIS.

This initial study was conducted in December of 2023, a period with slightly below average annual rainfall.

No obvious areas of surface water, saturation or inundation were noted. No primary indicators of wetland hydrology were noted.

Results/Recommendations

Wetlands and Waters Delineation

The approximately 2.5-acre study area contains no discernable jurisdictional (local, state, or federal) wetlands or waters at this time.

Any areas with any positive indicators of wetland setting (soils, hydrology, or vegetation) are considered wetlands under the local McKinleyville Community Plan. Areas with two positive parameters are often considered jurisdictional by the state of California (waters of the state) and areas with three positive parameters are often considered federally jurisdictional waters (waters of the U.S.).

Field work was completed in December of 2023 which is prior to the documented growing season for the region (although herbaceous plants were growing and developing, an indicator of an active growing period) and early in the wet season for the region which can last well into the spring and even summer months. This study was focused on the soils on site and utilized a seasonally appropriate botanical survey (completed in 2023) for further evaluation of the vegetation communities and individual species found within the study area.

As indicated in the botanical survey report and noted during this investigation, there are several individual species present that are positive indicators of hydric vegetation (wetland indicator status of FAC, FACW, or OBL), however, these species were not dominant in the vegetation community present and did not create any significant hydric vegetation communities within the study area. In addition, many of the species encountered were non-native, with many ornamental and some invasive species.

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this soil profile is composed of dark loam on the surface and below that a dense, compact layer of very light colored coarse sandy clay loam. This subtending layer was a mix of yellow and brightly orange colored material that may represent a native soil layer derived from similar sources as the coastal bluff or marine up-thrust soils exposed along the coastline. The soil profile was interesting and contains some hard, relict concretions but did not meet any of the criteria for indicators of contemporary wetland soils, this could potentially be a relic of past hydrogeomorphic processes.

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The table below contains a summary of the plot results from the December survey.

Table 2. Wetland Plot Summary

Plot Number	Vegetation	Hydrology	Soils	Notes
1	Negative	Negative	Negative	
2	Negative	Negative	Negative	
3	Negative	Negative	Negative	Possible burn pile site, deeper soils with relict features
4	Negative	Negative	Negative	Plot in swale from cow and travel between ends of parcel
5	Negative	Negative	Negative	
6	Negative	Negative	Negative	
7	Negative	Negative	Negative	Deeper soils with relict features
8	Negative	Negative	Negative	Deeper soils with relict features
9	Negative	Negative	Negative	Lowest point on parcel, likely cattle bedded here
10	Negative	Negative	Negative	

Any wetlands or watercourses located within the surveyed area may be considered jurisdictional by either California Department of Fish and Wildlife (CDFW), The United States Army Corps of Engineers (ACOE), the Community of McKinleyville or all three.

Any and all identified features, if present, are included on the included Wetlands and Waters Plot Map.

2023 is a year with slightly below average rainfall.

Recommendations

This initial study did not reveal any areas with positive indicators of wetland vegetation, soils, or hydrology. However, due to the early timing of the field visit the site should be resurveyed at the established plots later in the hydrologic season when rainfall accumulation would likely have been sufficient to either fill the site from above with input from precipitation or when potential ground water sources are filled and active. McKinleyville wetland regulations indicate that a site will be considered a wetland with only seven consecutive days of inundation. I recommend re-survey in March-April immediately after a period of significant rainfall. The site should be visited just after the cessation of rain and if water levels reach the first 12 inches of the soil profile the site should be monitored until water levels recede. Areas that hold water in the upper portions of the soil profile for seven days after the cessation of rain may be considered one parameter wetlands by the McKinleyville Community Plan. If wetlands are detected, they will be mapped and reported to the appropriate agencies. I recommend avoiding impacts to all wetlands found on site (if any) by adhering to all Federal, State, County, and local ordinances for permitted developments. In general development projects should remain outside of setbacks for waters. Setback measurements should be done according to current guidelines enforced by the lead agency in any permitting situation.

Conditions and Limitations

This report is based on conditions observed and recorded during field visits in December of 2023. This report has not been reviewed nor has concurrence with the conclusions been obtained. Verification by agencies may be necessary in the future. Land use practices and regulations can change, thereby affecting conditions and delineation results described herein.

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

The location and extent of mapped features is approximate. Maps are not to scale. In field survey and monumentation of pertinent features for buffering or mitigation planning may be required prior to the initiation of permitted activities.

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

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

Please feel free to call with any questions.

James Regan

Botanist/Wetland Delineator

707-845-0821

References

Allen, G. and J. Antos. 1988. Morphological And Ecological Variation Across A Hybrid Zone Between *Erythronium oregonum* and *E. revolutum* (Liliaceae). Madroño, Vol. 35, No. 1, pp. 32-38.

Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken, editors. 2012. The Jepson Manual: Vascular Plants of California, second edition. University of California Press, Berkeley.

Brinson, M.M. 1993. A Hydrogeomorphic Classification for Wetlands. U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, MS, USA. <u>Technical Report WRP-DE-4</u>, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

[CDFG] California Department of Fish and Game. 2018. "Protocol for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities" State of California.

California Department of Fish and Wildlife, Natural Diversity Database. April 2018. Special Vascular Plants, Bryophytes, and Lichens List. Quarterly publication. 73 pp.

CNPS (California Native Plants Society). 2018. *Inventory of Rare and Endangered Plants*. (on-line edition, v8-01a). California Native Plant Society. Sacramento, CA. Accessed March 2018.

CNPS. [2021]. A Manual of California Vegetation, Online Edition. http://www.cnps.org/cnps/vegetation/; searched on [9, August, 2021]. California Native Plant Society, Sacramento, CA.

Cal-IPC. 2006. California Invasive Plant Inventory. Cal-IPC Publication 2006-02 California Invasive Plant Council: Berkeley, CA. Available: www.cal-ipc.org.

Circuit Rider Productions, Inc. (CRP). October 2003. *CALIFORNIA SALMONID STREAM HABITAT RESTORATION MANUAL, PART XI RIPARIAN HABITAT RESTORATION*, under a grant agreement with the California Department of Fish and Game.

Coleman, Ronald A. 1995. The Wild Orchids of California. Comstock Publishing Associates a division of Cornell University Press. Ithaca, New York

Hitchcock, C.L. and A. Cronquist. 1973. *Flora of the Pacific Northwest: An Illustrated Manual.* Seattle, Wash.: University of Washington Press. xix + 730 pp.

Hickman, J.C., ed. 1993. *The Jepson Manual: Higher Plants of California*. University of California Press. Berkeley, CA

Humboldt County General Plan, Streamside and Wetland Management Area Ordinance §314-61

Humboldt County General Plan, Community Plan Areas, McKinlyeville Community Plan. December 2002 (Amended October 2017).

Humboldt County Weed Management Area. 2010. Invasive Weeds of Humboldt County: A Guide for Concerned Citizens (2nd Edition). Arcata, California.

Jepson Flora Project (eds.) 2020. Jepson eFlora, https://ucjeps.berkeley.edu/eflora/ [accessed in 2021].

List of Vegetation Alliances and Associations. Vegetation Classification and Mapping Program, California Department of Fish and Game. Sacramento, CA. September 2010.

Mercel, M.K. and R.W. Lichvar. 2014. *Guide to Ordinary High Water Mark (OHWM)*Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States. US Army Corps of Engineers (ACOE), August 2014.

Munz, P. A. and D. D. Keck. 1970. *A California Flora*. University of California Press. Berkeley, CA.

Sawyer, J.O., T.Keeler-Wolf, and, J.M. Evens. 2009. *A Manual of California Vegetation*, 2nd edition. California Native Plant Society, Sacramento, CA.

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed [8/2021].

US Army Corps of Engineers (ACOE). 1987. Corps of Engineers Wetland Delineation Manual. Wetlands Research Program Technical Report Y-87-1.

U.S. Army Corps of Engineers. 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)*, ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-3. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Army Corps of Engineers 2020. National Wetland Plant List, version 3.5 http://wetland-plants.usace.army.mil/ U.S. Army Corps of Engineers Engineer Research and Development Center Cold Regions Research and Engineering Laboratory, Hanover, NH

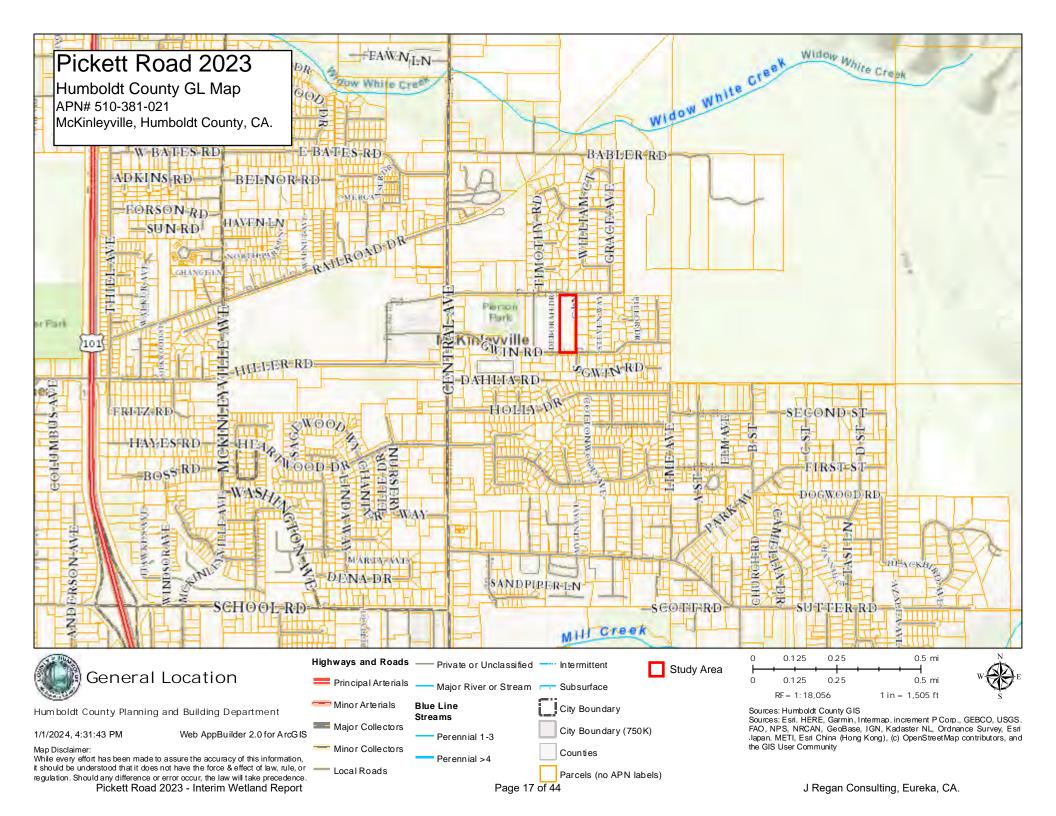
United States Dept. of Agriculture 2016. Agricultural Applied Climate Information System (AgCIS). Accessed December 2023.

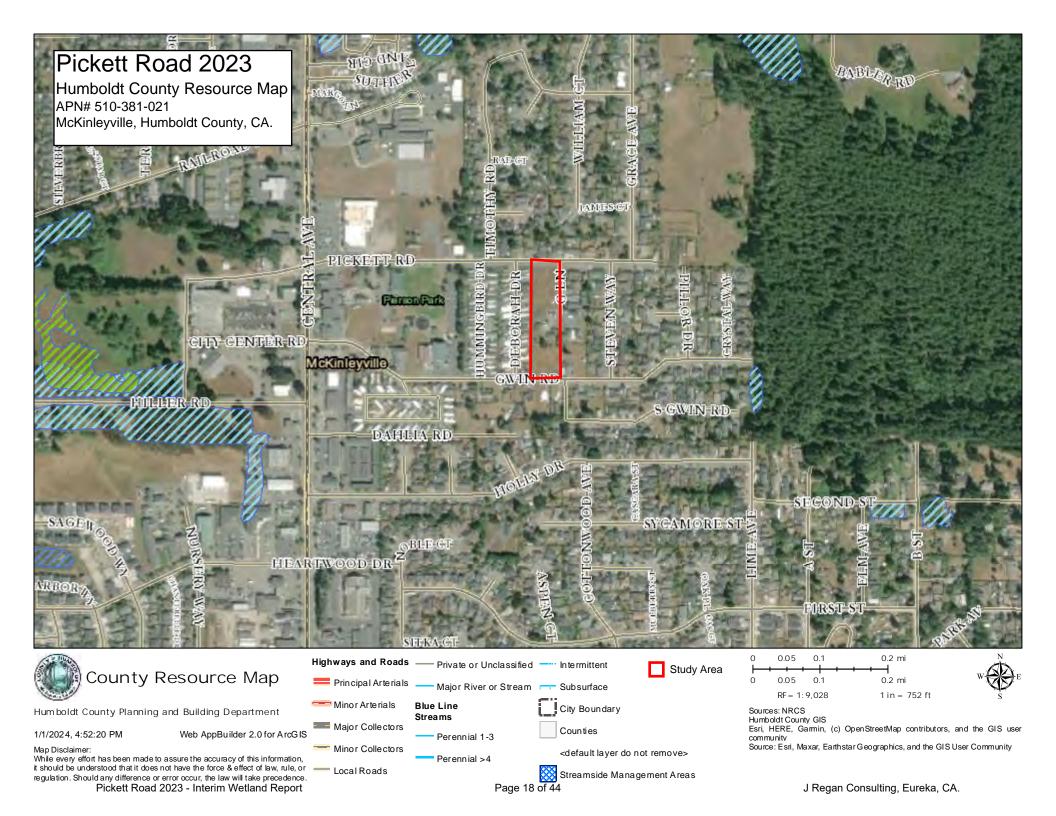
U. S. Fish and Wildlife Service. February 2019. National Wetlands Inventory website. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. http://www.fws.gov/wetlands/

U.S.D.I – F.W.S. (United States Department of the Interior, Fish and Wildlife Service). 1996. *National List of Vascular Plant Species that Occur in Wetlands*: 1996 *National Summary*. Ecology Section, National Wetlands Inventory, FWS, report dated March 3, 1997. 209 pp.

Attachment A

General Location Map, Humboldt County Resource Map, USFWS Wetland Map, USGS Soil Report, Wetland Plot Map





U.S. Fish and Wildlife Service National Wetlands Inventory

Pickett Road 2023

APN# 510-381-021 McKinleyville, Humboldt County, CA.



January 2, 2024

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Other

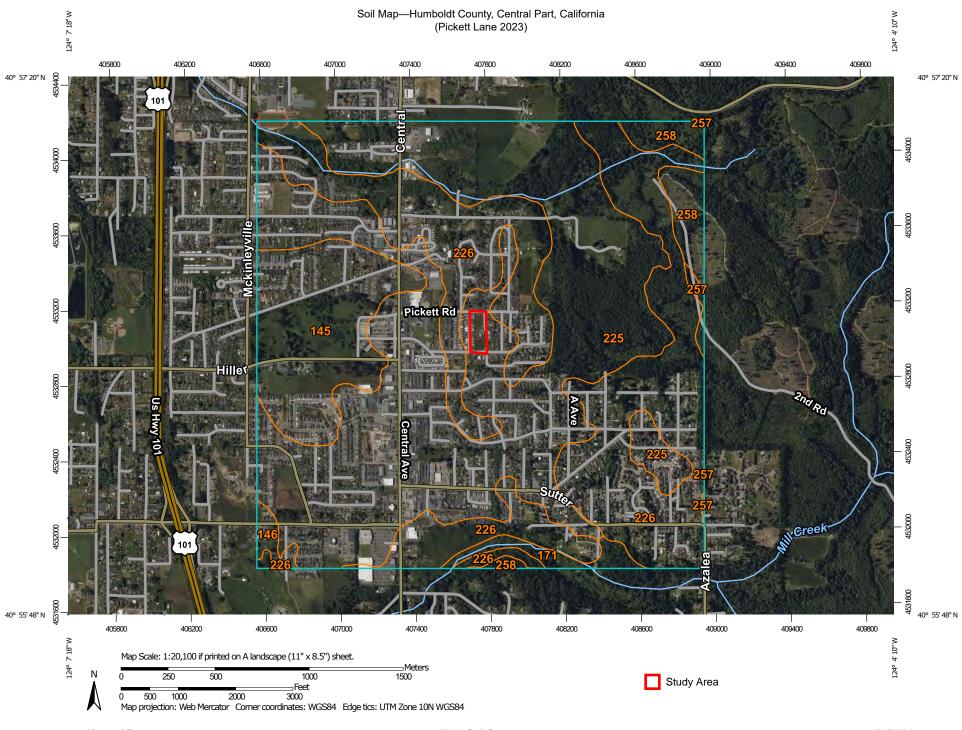
Riverine

Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

This map is for general reference only. The US Fish and Wildlife

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Study Area



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Lines



Soil Map Unit Points

Special Point Features

Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot

Spoil Area



Stony Spot



Very Stony Spot



Wet Spot Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24.000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Humboldt County, Central Part, California

Survey Area Data: Version 10, Aug 28, 2023

Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

Date(s) aerial images were photographed: Jun 1, 2022—Jun 19, 2022

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI			
145	Halfbluff-Tepona-Urban Land, 0 to 2 percent slopes	155.7	11.1%			
146	Halfbluff-Tepona-Urban Land, 2 to 9 percent slopes	7.4	0.5%			
171	Worswick-Arlynda complex 0 to 2 percent slopes	18.7	1.3%			
225	Arcata and Candymountain soils, 0 to 2 percent slopes	708.3	50.5%			
226	Arcata and Candymountain soils, 2 to 9 percent slopes	466.8	33.3%			
257	Lepoil-Candymountain complex, 2 to 15 percent slopes	4.8	0.3%			
258	Lepoil-Espa-Candymountain complex, 15 to 50 percent slopes	42.0	3.0%			
Totals for Area of Interest		1,403.8	100.0%			



Attachment B ACOE Wetland Plot Forms

oject/Site: PICKETT LANE	C		Sampling Date: 12 9 23
pheatil Owner.	Am. 210-	321-021	State: CA Sampling Point:
vestigator(s): J. REGAN		lection, Township, Ran	nge:
Indform (hillslope, terrace, etc.): TERRACE		_ocal relief (concave, c	convex, none): Slope (%): OZ
bregion (LRR): A	Lat: _ 4 @). 9435	Long: -174.0758 Datum: W65 84
il Map Unit Name: ARCATA and CANDYM	O WATRUY	-2° Slopes	NWI classification: NONE
e climatic / hydrologic conditions on the site typical for	this time of year	r? Yes 🗶 No _	(If no, explain in Remarks.)
e Vegetation, Soil, or Hydrology	significantly d	listurbed? Are "l	Normal Circumstances" present? Yes X No
e Vegetation, Soil, or Hydrology	naturally prob	olematic? (If ne	eded, explain any answers in Remarks.)
UMMARY OF FINDINGS – Attach site ma	ap showing	sampling point lo	ocations, transects, important features, etc.
And the second s	No_K_		
-lydric Soil Present? Yes		is the Sampled	
Netland Hydrology Present? Yes		within a Wetlan	nd? Yes No
EGETATION – Use scientific names of p	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:) 1.	% Cover	Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2.			
3.			Total Number of Dominant Species Across All Strata: (B)
1,			Percent of Dominant Species
a structure (District Mark)	****	= Total Cover	That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size: 1) md) 1 Cotons stee 56. (Seedlings)	17	Yes NI	Prevalence Index worksheet:
5. (common 16. (common 17)			Total % Cover of: Multiply by:
			OBL species x1 =
, <u> </u>			FACW species x 2 = FAC species x 3 =
*			ratished the
			1
5	17	= Total Cover	FACU species x 4 =
elerb Stratum (Plot size:			FACU species x 4 = UPL species x 5 =
Herb Stratum (Plot size: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	17	YOU FACU	FACU species x 4 = UPL species x 5 = Column Totals: (A) (B)
Herb Stratum (Plot size: Int Lynan acctoscila Lynachans (addicate Totalium (RAMS			FACU species x 4 = UPL species x 5 = Column Totals: (A) (B) Prevalence index = B/A =
Herb Stratum (Plot size: 1 1 2) Lynn actoscila Lyncholis (Adicata Lyncholis (Lynns Eagure Childrensis	10	YES FACU	FACU species x 4 = UPL species x 5 = Column Totals: (A) (B)
Herb Stratum (Plot size: Int Lynca acctoscila Hypachais (adicata Tatalium (Roms	10	YES FACT	FACU species x 4 = UPL species x 5 = Column Totals: (A) (B) Prevalence index = B/A = Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: Int Lynn actoscla Lynchols adicata Lyn	10 15 8 50	YES FACU YES FACU YES FACU YES FACU	FACU species x 4 =
Herb Stratum (Plot size:) L. Rypachais addicate B. Tatelium (Epans 4. Eagure abildensis 5. Granses	10 15 8 50	YES FACU YES FACU YES FACU YES THE	FACU species x 4 =
Herb Stratum (Plot size:) 1.	10 15 8 50	Yes FACU Yes FACU Yes ACU	FACU species x 4 =
Herb Stratum (Plot size: Int.) 1. Ruma acctoscila 2. Hypachais adicata 3. Tablium (epans 4. Eaguic abildensis 5. Cranses 7.	10 15 8 50	Yes Facu Yes Facu Yes Facu	FACU species x 4 =
Herb Stratum (Plot size:) 1.	10 15 8 50	Yes Facu Yes Facu Yes Facu	FACU species x 4 =
Herb Stratum (Plot size: 1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	10 15 8 50	Yes Facu Yes Facu Yes Facu	FACU species x 4 =
Herb Stratum (Plot size:) 1.	10 17 8 50	Yes Facu Yes Facu Yes Facu Yes Facu Yes Facu	FACU species x 4 =
Herb Stratum (Plot size:) 1.	10 15 8 50	Yes Facu Yes Facu Yes Facu Yes Facu Total Cover	FACU species x 4 =
Herb Stratum (Plot size:) 1.	10 15 8 50	Yes Facu Yes Facu Yes Facu Yes Facu Total Cover	FACU species x 4 =

	l l	
	1	
Sampling Point	*	

Profile Desc	cription: (Descrit	oe to the dept	th needed to docum	nent the	indicator	or confirm	the absenc	ce of indicators.)
Depth	Matrix			x Feature			T	Devende
(inches)	Color (moist)		Color (moist)	%	Type ¹	_Loc ² _	Texture	Remarks
<u>0-19</u>	10/R 3/3	1001					10m/	
20"+	10 ye 3/2	80%					CAM	
	10425/6	198					San drl	om Bright soil, Not reduced
	104R 6/6	12					11	
	70 112 018				*			
	escensional and the entire to the distance of							
¹Type: C=C	oncentration, D=D	epletion, RM=	Reduced Matrix, CS	=Covere	d or Coate	d Sand Gr	ains. ² L	ocation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (App	licable to all	LRRs, unless other	wise not	ted.)		Indica	tors for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Redox (S	S5)			2	cm Muck (A10)
Histic E _l	pipedon (A2)		Stripped Matrix	• •				ed Parent Material (TF2)
	istic (A3)		Loamy Mucky N			MLRA 1)		ery Shallow Dark Surface (TF12)
	en Sulfide (A4)		Loamy Gleyed I	•	2)		0	ther (Explain in Remarks)
	d Below Dark Surf	ace (A11)	Depleted Matrix Redox Dark Sur		`		3 Indias	ators of hydrophytic vegetation and
	ark Surface (A12) Mucky Mineral (S1)	١	Redox Dark Sur					tland hydrology must be present,
	Gleyed Matrix (S4)		Redox Depress					less disturbed or problematic.
	Layer (if present)			()			T	
Type:								* /
Depth (in	ches):						Hydric Sc	oil Present? Yes No
Remarks:	,							
	0 1-0	1,1 (1)	La - 14 Lies	ok.	San Ann		NL	alusil. ch
	DECOUNT CO	101 - 201	rather morries	(0,400)	211111 ARS	_ 6 Q/	A. 1404	inclair site.
	NOT C	educal by	29 vegyma myn	had (contrasti,	3 CONCU	chons	inlyville sites.
HYDROLO	GY							
Wetland Hy	drology Indicator	rs:						
Primary Indi	cators (minimum c	of one required	i; check all that appl	<u>y)</u>			<u>Sec</u>	condary Indicators (2 or more required)
Surface	Water (A1)		Water-Sta	ined Leav	res (B9) (e	xcept	**************************************	Water-Stained Leaves (B9) (MLRA 1, 2,
High Wa	ater Table (A2)		MLRA	1, 2, 4A,	and 4B)			4A, and 4B)
Saturati	on (A3)		Salt Crust	(B11)				Drainage Patterns (B10)
Water M	/larks (B1)		Aquatic In					Dry-Season Water Table (C2)
Sedime	nt Deposits (B2)		Hydrogen	Sulfide C	dor (C1)			Saturation Visible on Aerial Imagery (C9)
Drift De	posits (B3)			-	_	-		Geomorphic Position (D2)
Algal Ma	at or Crust (B4)		Presence	of Reduc	ed Iron (C	1)		Shallow Aquitard (D3)
Iron Dep	posits (B5)		Recent Iro			•		FAC-Neutral Test (D5)
Surface	Soil Cracks (B6)		Stunted or			1) (LRR A		Raised Ant Mounds (D6) (LRR A)
	ion Visible on Aeri		,	olain in R	emarks)			Frost-Heave Hummocks (D7)
	y Vegetated Conc	ave Surface (i	38)					
Field Obser			×					
Surface Wat	ter Present?		No Depth (in					
Water Table	Present?		No 🔼 Depth (in					N,
Saturation P		Yes	No 🔼 Depth (in	ches):		Weti	and Hydrolo	ogy Present? Yes No 🔍
(includes ca	pillary fringe) corded Data (stre	am daline mo	onitoring well, aerial	photos n	revious ins	nections)	if available:	
Describe IVe	scolued Data (Siles	am gauge, me	mitoring wen, acriai	priotos, p	icvious inc	pecuona,	n avanabic.	
Domarka		- mg			**************************************			
Remarks:								
	Extra A							

roject/Site: PickETT Lave	City/County: NcKal	CAVILLE Humbout Sampling Date: 12 9 23
pplicant/Owner: VALADÃO	AAN: 510-321-021	State: CA Sampling Point: 2
nvestigator(s): J. REGAN	Section, Township, Ra	nge:
andform (hillslope, terrace, etc.): TERRACE	Local relief (concave,	convex, none): Stope (%): 0%
ubregion (LRR):	Lat: 40.9435	Long: -124.0958 Datum: WGS 84
oil Map Unit Name: ARCATA and Caw	Dymountain 0-2 56pes	NWI classification: NOW
re climatic / hydrologic conditions on the site typi		
re Vegetation, Soil, or Hydrology		"Normal Circumstances" present? Yes X No
re Vegetation, Soil, or Hydrology		eeded, explain any answers in Remarks.)
		• •
		locations, transects, important features, etc.
	No No Is the Sample	d Area
	No No No within a Wetla	
Remarks: winter insit, vegetatil	IN TON & HOLLI / CUSSO	
/EGETATION – Use scientific names	of plants.	
	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Species? Status	Number of Dominant Species
1		That Are OBL, FACW, or FAC:(A)
2		Total Number of Dominant
3.		Species Across All Strata: (B)
4	T-t-l O	Percent of Dominant Species 337
Sapling/Shrub Stratum (Plot size: Wmd	= Total Cover	Tilat Are Obl., PACVV, of PAC. (AVD)
1. Cetanustar 30.		Prevalence Index worksheet:
2		Total % Cover of: Multiply by: OBL species
3		FACW species x2 = 0
4		FAC species 20 x3 = 60
5	1 17	FACU species 80 x4=320
Herb Stratum (Plot size: _\M^2)	= Total Cover	UPL species x5 =
1. Puner acoperation	15 FACU	Column Totals: 101 (A) 385 (B)
2. Augustus Podicata	10 FACU	Prevalence Index = B/A = 3, 8
3. Totalium Goans	20 Yes Fac	Hydrophytic Vegetation Indicators:
4. TOROXICU CARCIANAL	5 FACU	1 - Rapid Test for Hydrophytic Vegetation
5. Gasses *	50+ YES FACU	2 - Dominance Test is >50%
6.		3 - Prevalence Index is ≤3.0¹
7		4 - Morphological Adaptations (Provide supporting
8		data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹
9		Problematic Hydrophytic Vegetation ¹ (Explain)
10		Indicators of hydric soil and wetland hydrology must
11.	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:		
1.		- Hydrophytic
2.		Venetation
	Total Cover	Present? Yes No
	-	1
% Bare Ground in Herb Stratum		

概

Profile Description	n: (Describe	to the dep	th needed to	document th	e indicator	or confirm	m the absence of indicators.)
Depth	Matrix			Redox Featu	ires		
<u>(inches)</u> C	olor (moist)		Color (moi	st) %	Type ¹	Loc ²	Texture Remarks
A4	yr 3/2	100	·				loain/clay
20"+ 101	yr H	Sol					Clarkon (Some Saly Hit)
10)	N 5/6	158				and an internal state of the st	//
		70					in the second se
	yr 6/6		-			***************************************	

-							
¹ Type: C=Concen	tration D=Der	detion RM:		riv CS=Cove	red or Coate	d Sand Gr	rains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indica	tors: (Applic	able to all	LRRs. unless	otherwise n	oted.)	d Sand Gr	Indicators for Problematic Hydric Soils ³ :
Histosol (A1)				edox (S5)	,		2 cm Muck (A10)
Histic Epipedo	n (A2)			Matrix (S6)			Red Parent Material (TF2)
Black Histic (A				ucky Mineral	(F1) (except	t MLRA 1)	
Hydrogen Sulf	ide (A4)			leyed Matrix (Í	Other (Explain in Remarks)
Depleted Belo		æ (A11)		Matrix (F3)			
Thick Dark Su				ark Surface (F			³ Indicators of hydrophytic vegetation and
Sandy Mucky				Dark Surface			wetland hydrology must be present,
Sandy Gleyed Restrictive Layer		Albanist make	Redox Di	epressions (F	B)		unless disturbed or problematic.
-	(ii bresent):						
Type:			-				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Depth (inches): Remarks:							Hydric Soil Present? Yes No
Bagit	Coloral So	ns wa	tie una	edulud 31	als,		
HYDROLOGY		***** *********************************				wa	
Wetland Hydrolog							
Primary Indicators		ne require	t; check all tha	it apply)			Secondary Indicators (2 or more required)
Surface Water			Wat	er-Stained Le	aves (B9) (e	xcept	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Ta				ILRA 1, 2, 4A	, and 4B)		4A, and 4B)
Saturation (A3	•			Crust (B11)			Drainage Patterns (B10)
Water Marks (atic Invertebra			Dry-Season Water Table (C2)
Sediment Dep				rogen Sulfide	. ,		Saturation Visible on Aerial Imagery (C9)
Drift Deposits	- •			lized Rhizospl			ots (C3) Geomorphic Position (D2)
Algal Mat or C				ence of Redu	-	-	Shallow Aquitard (D3)
Iron Deposits				ent Iron Redu		-	
Surface Soil C				ited or Stress		1) (LRR A)	
Inundation Vis Sparsely Vege				er (Explain in l	Remarks)		Frost-Heave Hummocks (D7)
Field Observation		- Sunace (i	JOJ				
Surface Water Pre		on l	No_K De _l	oth (inches).			
Water Table Prese							
	iller I	es	No K Der	oin (inches): _		ŧ	land Hydrology Present? Yes No. X
Saturation Present (includes capillary	r fringe)	es	No 🔀 Der	oth (inches): _		Wetla	land Hydrology Present? Yes No
Describe Recorded		gauge, mo	nitoring well, a	aerial photos,	previous ins	pections),	if available:
Remarks:	pro-		1 1-				
FAIL	s fac r	kutal -	test				
· mar							

ДАЗ: 510 - 32 Secti	' 021	State: CA Sampling Point: 3
Secti		
	ion, Township, Rar	ige:
Loca	al relief (concave, c	convex, none): WHE Slope (%): 0%: 0%: 0%: 0%: 0%: 0%: 0%: 0%: 0%: 0%
		Normal Circumstances" present? Yes X No
		eded, explain any answers in Remarks.)
	mpling point le	ocations, transects, important features, etc.
No X	1	1.0
Absolute Do		Dominance Test worksheet:
		Number of Dominant Species That Are OBL, FACW, or FAC:(A)
		Total Number of Dominant Species Across All Strata: (B)
		Percent of Dominant Species 50/
	otal Cover	That Are OBL, FACW, or FAC: (A/B)
		Prevalence Index worksheet:
		Total % Cover of: Multiply by: OBL species x1 = X1 = OBL species x1 = OBL spe
		OBL species x1 = FACW species x2 =
		FAC species 25 x3 = 75
_ 7		FACU species 70 x4= 250
	_	UPL species x5=
	1	Column Totals: 95 (A) 375 (B)
	4000	Prevalence index = B/A = 3.7
		Hydrophytic Vegetation Indicators:
		1 - Rapid Test for Hydrophytic Vegetation
		2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01
		4 - Morphological Adaptations ¹ (Provide supporting
		data in Remarks or on a separate sheet)
		5 - Wetland Non-Vascular Plants ¹
		Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must
952	otal Cover	be present, unless disturbed or problematic.
	olai Cuvei	
		Hydrophytic
		Vegetation Present? Yes No
Nlac	- <	Can consider the Constitution
	Lat: 40. Information 0-2 Information 0-2 Information 0-2 Information 0-2 Information of year? Significantly disturbation Information of year? Information of year. Info	Lat: 40.9435 Mountain

Color (moist) S. Color (moist) S. Type Loc Texture Remarks		cription: (Desci		depth need				or confirn	n the absence	e of indicators.)
C-6 Over 3/2 NO 10 to 1/2 NO 10	Depth (inches)			Col				1002	Tandona	D
Type: C-Concentration. D=Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. Type: C-Concentration. D=Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. Type: C-Concentration. D=Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. Type: C-Concentration. D=Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. Type: C-Concentration. D=Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. Type: C-Concentration. D=Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. Type: C-Concentration. D=Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. Type: C-Concentration. D=Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. To Sand Rand Reduced Matrix, CS-Covered or Coated Sand Grains. To Matrix, CR-Covered Matrix, CR-Covered or Coated Sand Grains. To Matrix, CR-Covered Matrix, CR-Covered or Coated Sand Grains. To Matrix, CR-Covered Matrix, CR-Covered or Coated Sand Grains. To Matrix, CR-Covered Matrix, CR-Covered or Coated Sand Grains. To Matrix, CR-Covered Matrix, CR-Covered or Coated Sand Grains. To Matrix, CR-Covered Matrix, CR-Cover	A 4 A	-			or (moral)		TYPE	LUC	ž.	Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Nydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoc Epipedon (A2) Black Histic (A3) Hidrogen Suifide (A4) Loamy Mucky Mineral (F1) (except MLRA 1) Hydrogen Suifide (A4) Loamy Gleyed Matrix (F3) Sandy Mucky Mineral (S1) Depleted Matrix (F3) Sandy Nedox (S6) Redox Dark Surface (A12) Sandy Mucky Mineral (S1) Depleted Dark Surface (F5) Sandy Oleyed Matrix (S4) Redox Depressions (F8) Redox Depressions (F8) Remarks: Promitted Layers (F1) Surface (Matrix (F2) Surface (Matrix (F3) Surface (Matrix (F3) Redox Depressions (F8) Redox Depressions (F8) Redox Depressions (F8) Remarks: Promitted Layers (F1) Surface (Matrix (F2) Surface (Matrix (F3) Redox Depressions (F8) Redox Depr	2-72"							•	<u> </u>	Anti Z
Procedition	<u> </u>					. 6.	-		tinc loan	Asia:
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Iocation: PL=Pore Lining, M=Matry Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosoi (A1) Histosoi (A1) Histosoi (A1) Saray Redox (SS) Black Histic (A2) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Loarny Mucky Mineral (F1) (except MLRA 1) Hydrogen Sulfide (A4) Depleted Belov Dark Surface (A11) Depleted Belov Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Metrix (S4) Sandy Gleyed Metrix (S4) Redox Depressions (F8) *Indicators of hydrophytic vegetation at wetland hydrology must be present, unless disturbed or problematic. *New Matrix (F1) **Present:** **Present:*	1 1	10 ye 2/1	<u> 40%</u>			40%			Coord Saly	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. All Coation: PL=Pore Lining, M=Matrix (Ptydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histose (A1)				104	e 5/8	20%				hard reliet modely
Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10)				•					W. 1	
Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10)		-			******					
Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Red Per Matrix (S6) 2 cm Muck (A10) Red Per Matrix (S6) 2 cm Muck (A10) Red Per Matrix (S6) Red Per Matrix (S7) 2 cm Muck (A10) Red Per Matrix (S7) 2 cm Muck (A10) Red Per Matrix (S7) 2 cm Muck (A10) Red Per Matrix (S7) 2 cm Muck (A11) 2 cm Mucky Mineral (F1) (except MLRA 1) 2 cm Mucky Mineral (F1) (except MLRA 1) 2 cm Mucky Mineral (F1) (except MLRA 1) 2 cm Mucky Mineral (S1) 2 cm Mucky		When the state of		******	· · · · · · · · · · · · · · · · · · ·					
Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10)		***************************************			****					
Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10)		·		-						
Histosol (A1) Sandy Recoke (S5) 2 cm Muck (A10) Red Parent Material (FT2) Black Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) Red Parent Material (FT2) Black Histic (A4) Loarny Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) unless disturbed or problematic. Sandy Mucky Mineral (S1) Redox Depressions (F8) unless disturbed or problematic. Sandy Mucky Mineral (S1) Redox Depressions (F8) unless disturbed or problematic. Sandy Mucky Mineral (S1) Redox Depressions (F8) unless disturbed or problematic. Sandy Mucky Mineral (S1) Redox Depressions (F8) unless disturbed or problematic. Sandy Mucky Mineral (S1) Redox Depressions (F8) unless disturbed or problematic. Sandy Mucky Mineral (S1) Redox Depressions (F8) unless disturbed or problematic. Sandy Mucky Mineral (S1) Redox Depressions (F8) unless disturbed or problematic. Sandy Mucky Mineral (S1) Redox Depressions (F8) unless disturbed or problematic. Sandy Mucky Mineral (S1) Redox Depressions (F8) unless disturbed or problematic. Sandy Mucky Mineral (S1) Redox Depressions (F8) Unless disturbed or problematic. Sandy Mucky Mineral (S1) Redox Depressions (F8) Redox Depressions (Type: C=C	oncentration, D=	Depletion, F	RM=Reduc	ed Matrix, C	S=Covered	or Coate	d Sand Gr	ains. ² Lo	cation: PL=Pore Lining, M=Matrix.
Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loarny Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Type: Depth (inches): Type: Depth (inches): Bemarks: Power of Problematic Soil Present): Type: Depth (inches): Water Stained Leaves (B9) (except MLRA 1) Hydric Soil Present? Yes No Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Surface Water (A1) Water Table (A2) Saturation (A3) Salt Crust (B11) Water Marks (B1) Aquatic Invertebrates (B13) Water Marks (B1) Aquatic Invertebrates (B13) Water Marks (B1) Aquatic Invertebrates (B13) Dirit Deposits (B2) Hydrogen Suffice Odor (C1) Drift Deposits (B3) Oxidized Ritizospheres altong Living Roots (C3) Saturation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Depth (inches): urface Water Present? Yes No Depth (inches): Urder Soil Present? Yes No No Depth (inches):			plicable to	all LRRs,	unless othe	erwise note	d.)		Indicato	ors for Problematic Hydric Soils ³ :
Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Gleyed Matrix (E4) Redox Depressions (F8) Type: Depth (Inches): Depth (Inches): Remarks: Protatility Site of bran plu in post Third Value (Chief Feature) PROLOGY Wetland Hydrology Indicators: rimany Indicators (minimum of one required: check all that apphy) Surface Water (A1) Water-Stained Leaves (B9) (except High Water Table (A2) Saturation (A3) Salt Crust (B11) Water Marks (B1) Aqualic Invertebrates (B13) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Image (C2) Drift Deposits (B3) Aqualic Invertebrates (B13) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Cher (Explain in Remarks) Depth (inches): unless disturbed or problematic. Very Shallow Dark Surface (TF12) Indicators of hydrophytic vegetation as wetland hydrology present? Yes No A Depth (inches): Very Shallow Dark Surface (A11) Very Shallow Dark Surface (F6) No Matter Stained Leaves (B9) Vertand Hydrology Indicators of hydrophytic vegetation as wetland hydrology Present? Yes No No Depth (inches): Very Shallow Dark Surface (TF12) Vertand Hydrology Indicators of hydrophytic vegetation as wetland hydrology Present? Yes No No Depth (inches): Vertand Hydrology Indicators (TF12) Vertand Hydrology		• •			-	• •			2 cr	m Muck (A10)
Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Depleted Below Dark Surface (A11) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Redox Dark Surface (F6) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Peter (F7) Redox Dark Surface (F8) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Hydric Soil Present? Yes No Remarks: Redox Dark Surface (F6) Sturface (F7) Redox Dark Surface (F7) Sturface (F6) Sturface (F7) And									Red	l Parent Material (TF2)
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Restrictive Layer (if present): Type:			-				,			
Depth (inches):	Restrictive	Layer (if present	i):					· · · · · · · · · · · · · · · · · · ·	urnes	ss distance or problematic.
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Pernettally Site of born plu in past There is a solid research past past There is a solid	Depth (în								Hudria Cail	Present? Yes No 🔀
Portion of the control of the contro	emarks:				*				Hydric Son	Present tesNO_V
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Water Marks (B1)							IU 45)		_	
Sediment Deposits (B2)				******			(D40)			• •
Drift Deposits (B3)				******						
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Sparsely Vegetated Concave Surface (88) ield Observations: urface Water Present? Yes NoK Depth (inches): vater Table Present? Yes NoK Depth (inches): aturation Present? Yes NoK Depth (inches): aturation Present? Yes NoK Depth (inches): become Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: emarks:		• •	al Imagan,	(D7)) (LRR A)	R	aised Ant Mounds (D6) (LRR A)
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escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: emarks:			Yes	_ No	_ Depth (in	ches):		Wetla	nd Hydrology	Present? Yes No 📉
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fails for Newton test		,	partitie		3					
		Jails ?	YNC NK	whit	762					
		Nacr.								

Project/Site: PICKETT LANE			erville Humboak Sampling Date: 12(9/23
Applicant/Owner:	AN: 510-381	- 01.1	State: CA Sampling Point: 4
Applicant/Owner: YACK USO nivestigator(s): J. REGAN			
nvestigator(s):	Section	m, rownsnip, Rai	nge:
andform (hillslope, terrace, etc.):	Local	relief (concave, o	convex, none):
Subregion (LRR):	Lat:	733	- 0
ioil Map Unit Name: ARCATS and CAND			
re climatic / hydrologic conditions on the site typica			6.4
re Vegetation, Soil, or Hydrology _			"Normal Circumstances" present? Yes X No
re Vegetation, Soil, or Hydrology _	naturally problema	atic? (If ne	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site	map showing san	pling point l	ocations, transects, important features, etc.
	No K	Is the Sampled	d Arma
Hydric Soil Present? Yes	No 🔀		nd? Yes No_K
Wetland Hydrology Present? Yes	NO		
MINTEL WITT, VEGETATION	J LOW + MOM / GAZ	so Nat	4 is on packed grand, rate between
		Yords,	along fenaline
/EGETATION – Use scientific names o	of plants.		
LOCIATION OCCOUNTED THE MOST	-	minant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Spe		Number of Dominant Species
1.			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3.			Species Across All Strata: (B)
4.			Percent of Dominant Species 50%
Sapling/Shrub Stratum (Plot size:	= Te	ital Cover	That Are OBL, FACW, or FAC: (A/B)
1			Prevalence Index worksheet:
2			Total % Cover of: Multiply by: OBL species
3.			OBL species
4.			FAC energies 70 v3= 60
5	allege-region-programme and anti-productive special section of the		FACU species 80 x4= 370
Herb Stratum (Plot size: \\ \(\int \)	= To	otal Cover	UPL species x 5 =
1. Hugsday's policite	v0 2	ROU	Column Totals: 100 (A) 380 (B)
2. Totalium George	202 4	me.	Prevalence Index = B/A = 3.8
3. Janila Vilgois	103	File U	Hydrophytic Vegetation Indicators:
4. Ezagna Chilanesis	<u>102</u>	<u>Usa</u>	1 - Rapid Test for Hydrophytic Vegetation
5. Gasses *	<u> 508 4</u>	MCU +	2 - Dominance Test is >50%
6.	-		3 - Prevalence Index is ≤3.01
7			4 - Morphological Adaptations (Provide supporting
8			data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹
.9			- 5 - Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation (Explain)
10			¹Indicators of hydric soil and wetland hydrology must
11.	\@\2 = To	atal Carra	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:		nai Cover	
1	-	***************************************	- Hydrophytic
2			Vegetation
	= To	otal Cover	Present? Yes No _K
% Bare Ground in Herb Stratum			
* Bare Ground in Herb Stratum Remarks: * Gess sp mown 2 low. 4/12 specially s			et one facu-supl

1

I.	supulou (December to un	e depth needed to document the indicator or confirm	
Depth	Matrix	Redox Features	Total
(inches)	-7/	6 Color (moist) % Type ¹ Loc ²	Texture Remarks
0-15	10 yr 3/2 100		Cloy loans
14-200	104R 5/4 A	<u> </u>	
	10 W2 5/6 Ze	2	Short day
	10 Mp 4/3 40	<i>i</i>	
	10 1/2 1/2		
	Samuel - Carlo Car		
		, RM=Reduced Matrix, CS=Covered or Coated Sand Gr	
Hydric Soil	Indicators: (Applicable	to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
Histosol	(A1)	Sandy Redox (S5)	2 cm Muck (A10)
-	pipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)
	istic (A3)	Loamy Mucky Mineral (F1) (except MLRA 1)	
,	en Sulfide (A4) d Below Dark Surface (A1	Loamy Gleyed Matrix (F2) 1) Depleted Matrix (F3)	Other (Explain in Remarks)
	ark Surface (A12)	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and
	lucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
	Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive	Layer (if present):		
Туре:			N.
Depth (in	ches):	and the same of th	Hydric Soil Present? Yes No
HYDROLO	GY		
	GY drology Indicators:		
Wetland Hy	drology Indicators:	quired; check all that apply)	Secondary Indicators (2 or more required)
Wetland Hy Primary India	drology Indicators:	quired; check all that apply) Water-Stained Leaves (B9) (except	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary India Surface	drology Indicators: cators (minimum of one re		
Wetland Hy Primary India Surface	drology Indicators: cators (minimum of one re Water (A1) ater Table (A2)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Wetland Hy Primary India Surface High Wa Saturati Water M	drology Indicators: cators (minimum of one re Water (A1) ater Table (A2) on (A3) farks (B1)	Water-Stained Leaves (B9) (exceptMLRA 1, 2, 4A, and 4B)Salt Crust (B11)Aquatic Invertebrates (B13)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Wetland Hy Primary India Surface High Wa Saturati Water M Sedimei	drology Indicators: cators (minimum of one re Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2)	 Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) 	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hy Primary India Surface High Wa Saturatia Water M Sedimen Drift De	drology Indicators: cators (minimum of one re Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3)	 Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roce 	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Ots (C3) Geomorphic Position (D2)
Wetland Hy Primary India Surface High Wa Saturatia Water M Sedimei Drift Dep	drology Indicators: cators (minimum of one re Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (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) Ots (C3) Shallow Aquitard (D3)
Wetland Hy Primary India Surface High Wa Saturati Water M Sedimer Drift Der Iron Dep	drology Indicators: cators (minimum of one re Water (A1) ater Table (A2) on (A3) flarks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled 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) Season Stail (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Wetland Hy Primary India Surface High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface	drology Indicators: cators (minimum of one re Water (A1) ater Table (A2) on (A3) flarks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatia Water M Sedimen Drift Dep Algal Ma Iron Dep Surface	drology Indicators: cators (minimum of one re Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial Image	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR Ace) ery (B7) Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Season Stail (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Wetland Hy Primary India Surface High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface	drology Indicators: cators (minimum of one re Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial Image y Vegetated Concave Surf	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR Ace) ery (B7) Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatia Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundati	drology Indicators: cators (minimum of one re Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial Image by Vegetated Concave Surf	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR Ace) ery (B7) Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatia Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely	drology Indicators: cators (minimum of one recators (minimum of one recators (Minimum of one recators (Mater Table (A2)) on (A3) Marks (B1) Int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial Image by Vegetated Concave Surfacetors: wations:	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR Act) ery (B7) Other (Explain in Remarks) face (B8)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturation Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser	drology Indicators: cators (minimum of one re Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial Image by Vegetated Concave Surf	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR Act) ery (B7) Other (Explain in Remarks) face (B8) Depth (inches): Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely Field Obser Surface Wat Water Table Saturation P	drology Indicators: cators (minimum of one re Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial Image by Vegetated Concave Surfacetions: are Present? Present? Yes aresent?	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR Act) Eny (B7) Other (Explain in Remarks) Face (B8) No Depth (inches): No Depth (inches): No Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7) and Hydrology Present? Yes No
Wetland Hy Primary India Surface High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely Field Obser Surface Wat Water Table Saturation P	drology Indicators: cators (minimum of one re Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial Image by Vegetated Concave Surfacetions: are Present? Present? Yes aresent?	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6 Stunted or Stressed Plants (D1) (LRR A ery (B7) Other (Explain in Remarks) Face (B8) No Depth (inches): Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Segmorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Wa Saturatia Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely Field Obser Surface Wat Water Table Saturation Pe (includes car Describe Re	drology Indicators: cators (minimum of one re Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial Image by Vegetated Concave Surfacetions: are Present? Present? Yes aresent?	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Dets (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) and Hydrology Present? Yes No if available:
Wetland Hy Primary India Surface High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely Field Obser Surface Wat Water Table Saturation P	drology Indicators: cators (minimum of one re Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial Image by Vegetated Concave Surfacetions: are Present? Present? Yes aresent?	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Dets (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) and Hydrology Present? Yes No if available:
Primary India Surface High Wa Saturatio Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely Field Obser Surface Wat Water Table Saturation P (includes car Describe Re	drology Indicators: cators (minimum of one re Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial Image y Vegetated Concave Surf vations: are Present? Present? Yes present? Yes pillary fringe) corded Data (stream gauge		Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Segmorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Wa Saturatia Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely Field Obser Surface Wat Water Table Saturation Pe (includes car Describe Re	drology Indicators: cators (minimum of one re Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial Image by Vegetated Concave Surfacetions: are Present? Present? Yes aresent?		Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Dets (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) and Hydrology Present? Yes No if available:

	C	city/County: McKM	erville Humbdat Sampling Date: 12 (9 123
	AN: 510-	351-051	State: <u>CA</u> Sampling Point: <u>5</u>
nvestigator(s): J. REGAN	5	Section, Township, Ra	nge:
andform (hillslope, terrace, etc.): TERRACE		Local relief (concave,	convex, none): Slope (%): OZ
Subregion (LRR):	Lat: <u>4(</u>). 9433	_ Long: Datum: Datum: Datum: Datum:
Soil Map Unit Name: ARCETS and CAND	O WATHUMNY	-2° slopes	NWI classification: NONE
Are climatic / hydrologic conditions on the site typic			
Are Vegetation, Soil, or Hydrology _			"Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology _			eeded, explain any answers in Remarks.)
			locations, transects, important features, etc.
	No		
	No X	Is the Sample	d Area
	No D	within a Wetla	and? Yes No
VEGETATION – Use scientific names		David Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:) 1.		Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant Species Across All Strata: (B)
4 (Plot size:		= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Saping/Snrub Stratum (Plot size.			Prevalence Index worksheet:
2.			Total % Cover of: Multiply by:
3			OBL species x1 =
4.			FACW species x 2 = FAC species x 3 =
5		-	FACU species x4=
1.2		_= Total Cover	UPL species x5 =
Herb Stratum (Plot size: M) 1. hypochas Carlicator		Y Shew	Column Totals: (A) (B)
2. Trifdium reports	15 3	Y FAC	Prevalence Index = B/A =
3. Fragsia Chiloenss	90%	Y FACU	Hydrophytic Vegetation Indicators:
4. Gasses *		<u> </u>	1 - Rapid Test for Hydrophytic Vegetation
5.			2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹
6			4 - Morphological Adaptations¹ (Provide supporting
7 8.			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 be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:		_= Total Cover	
1		M. Vandarian Company	Hydrophytic
2	-		Vegetation Present? Yes No
% Bare Ground in Herb Stratum	and the second s	_= Total Cover	
Remarks:		4/12 gass 54	pecins are fire, rest are fixer-upl

die.

Profile Desc	ription: (Describe	to the depth	needed to docu	ment the ir	ndicator	or confirm	n the abs	ence of indicators.)	
Depth	Matrix			x Features				_	
(inches)	Color (moist)	<u> </u>	Color (moist)		Type ¹	Loc ²	Textu	re Remarks	
0-21	10ur 3/3	<u> \co} </u>		-			Clos la	1/W	
	Y					Manager Control of Con			
			- 						
								4.7.	
		in appropriate and a second		e emilione management		-	**:	The Control of the Co	
	oncentration, D=Dep					d Sand G		² Location: PL=Pore Lining, M=	
Hydric Soil	Indicators: (Applic	able to all LR	Rs, unless othe	rwise note	ed.)		Ind	icators for Problematic Hydric	: Soils':
Histosol	(A1)	-	_ Sandy Redox (S5)				2 cm Muck (A10)	
Histic Ep	oipedon (A2)		_ Stripped Matrix					Red Parent Material (TF2)	
Black Hi	stic (A3)		_ Loamy Mucky			MLRA 1)		Very Shallow Dark Surface (TF	12)
	n Sulfide (A4)		_ Loamy Gleyed)			Other (Explain in Remarks)	
	d Below Dark Surfac	xe (A11)	_ Depleted Matri				3.		
	ark Surface (A12)		_ Redox Dark Su	, ,				dicators of hydrophytic vegetatio	1
	lucky Mineral (S1)		_ Depleted Dark		1)			wetland hydrology must be pres	
	Gleyed Matrix (S4)		_ Redox Depress	sions (Fo)				unless disturbed or problematic.	
	Layer (if present):								
Type:							1		
Depth (in	ches):						Hydric	Soil Present? Yes	No
Remarks:									
L	-0.7								
HYDROLO									
Wetland Hy	drology Indicators	:							
Primary India	cators (minimum of o	one required; o	check all that app	ly)				Secondary Indicators (2 or more	required)
Surface	Water (A1)		Water-Sta	ined Leave	es (B9) (e	xcept		Water-Stained Leaves (B9)	(MLRA 1, 2,
High Wa	iter Table (A2)		MLRA	1, 2, 4A, a	nd 4B)			4A, and 4B)	
Saturation	on (A3)		Salt Crust	(B11)				Drainage Patterns (B10)	
Water M	larks (B1)		Aquatic Ir	vertebrates	s (B13)			Dry-Season Water Table (C	2)
Sedimer	nt Deposits (B2)		Hydrogen	Sulfide Od	lor (C1)			Saturation Visible on Aerial	lmagery (C9)
Drift Der	oosits (B3)		Oxidized	Rhizospher	es along	Living Roo	ots (C3)	Geomorphic Position (D2)	
Algal Ma	at or Crust (B4)		Presence	of Reduce	d Iron (C	4)		Shallow Aquitard (D3)	
Iron Dep	osits (B5)		Recent In	n Reductio	on in Tille	d Soils (Co	6)	FAC-Neutral Test (D5)	
1	Soil Cracks (B6)		Stunted o	r Stressed	Plants (D	1) (LRR A	4)	Raised Ant Mounds (D6) (L	RR A)
1	on Visible on Aerial	Imagery (B7)	Other (Ex					Frost-Heave Hummocks (D)	7)
1 —	Vegetated Concav)						
Field Obser									
Surface Wat		res No	Depth (ir	nches):					
Water Table		/es No	k	iches):		1			
1						- 1	lond Uvd	rology Present? Yes	No X
Saturation P (includes car		res No	Depth (ir	icries)		Men	ianu nyu	lology Fresent: Tes	RO
Describe Re	corded Data (stream	n gauge, moni	toring well, aerial	photos, pre	evious ins	spections),	, if availab	le:	
1									
Remarks:	_	. 5					ac spacement over the contract		
	FAILS FAC	. Neutral .	test						
	0								

ject/Site: PickETT LAN	£	C	ity/County: NC	Colerville Humbold Sampling Date: 12/9/23
olicant/Owner: VALADEO		AN: 510-	321-021	State: CA Sampling Point: 6
anticutor(a): 1. DEGAN			Section, Township	o. Range:
estigator(s).	la a w b		ocal relief (conc	ave, convex, none): Whe Slope (%): 0%.
	2.00		9425	Long: -124.0958 Datum: WGS 84
oregion (LRR):	3 (4 5 100	Lat: _ 	2 closes	NWI classification: NOW:
Map Unit Name: ARCATA	MA CHUCHIN	NULTERN C	7 2000	NVVI (dassincation: 14644
				No (If no, explain in Remarks.)
Vegetation, Soil, or				Are "Normal Circumstances" present? Yes X No
Vegetation, Soil, or	Hydrology	naturally prob	olematic?	(If needed, explain any answers in Remarks.)
IMMARY OF FINDINGS - A			sampling po	int locations, transects, important features, etc.
ydrophytic Vegetation Present?	Yes		In the Con-	mpled Area
lydric Soil Present?	Yes		within a V	/
Vetland Hydrology Present? Remarks: www. vst. ve	Yes			
GETATION – Use scientific	names of p	lants.		
		Absolute		tuo.
ree Stratum (Plot size:			Species? Sta	That Am ORL FACINI or FAC: (A)
•				
* MANAGEMENT AND ADMINISTRATION OF THE PARTY				Total Number of Dominant Species Across All Strata: (B)
*			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)
apling/Shrub Stratum (Plot size:)		10101 00101	Prevalence Index worksheet:
*				Total % Cover of: Multiply by:
		Alexandra . Announcement and		OBL species x1 =
				FACW species x 2 =
				FAC species x 3 =
				FACU species x 4 =
2	`	VIII.	_= Total Cover	UPL species x 5 =
lerb Stratum (Plot size: M. Raghaus Sativus		15%	YN	
		15%	Y FA	
Carolina Gerans	tem	5%	T N	Totalono moon 2.1
Romer across	, è	10%	-4110	1 - Rapid Test for Hydrophytic Vegetation
i. Macheris cadio		107	Fac	
s. Gases ¥		50	<u> </u>	3 - Prevalence Index is ≤3.01
7.		2		4 - Morphological Adaptations (Provide supporting
3.				data in Remarks or on a separate sheet)
9.				5 - Wetland Non-Vascular Plants ¹
10.				Problematic Hydrophytic Vegetation ¹ (Explain)
· · · · · · · · · · · · · · · · · · ·				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

11.		105%	_= Total Cover	
11 Woody Vine Stratum (Plot size:)	•		
11)		an managana and a man	Hydrophytic
11)			
11 Woody Vine Stratum (Plot size:)		an managana and a man	Hydrophytic

Profile Des	cription: (Describe	to the depth	needed to docui	nent the i	ndicator o	or confirm	n the absence of indicators.)
Depth	Matrix		Redo	x Features	3		
(inches)	Color (moist)		Color (moist)		Type ¹	Loc ²	Texture Remarks
0-16"	Your 3/2	100					loam
17-184	10 m 3/2	17.2					Soly dulcar
	104x 4/4	84					y Compact layer
l	-4	- 80					
ļ	10 yr 5/6						<u>'</u>
l							<u> </u>
			<u> </u>		· windowski	ART ARTER TO THE PARTY OF THE P	s publication in the state of t
							2
	oncentration, D=De					d Sand Gr	
1	Indicators: (Applie	cable to all LR			ed.)		Indicators for Problematic Hydric Soils ³ :
Histoso			_ Sandy Redox (2 cm Muck (A10)
	pipedon (A2)		_ Stripped Matrix	` '		****	Red Parent Material (TF2)
	listic (A3)	***************************************	_ Loamy Mucky !	-		MLRA 1)	
,	en Sulfide (A4)	(0.44)	_ Loamy Gleyed	•)		Other (Explain in Remarks)
	d Below Dark Surfa	ce (A11)	_ Depleted Matrix				31-diseases of budges budges were taken and
	ark Surface (A12)	_	_ Redox Dark Su		·7\		³ Indicators of hydrophytic vegetation and
•	Mucky Mineral (S1)		Depleted DarkRedox Depress	-	(1)		wetland hydrology must be present, unless disturbed or problematic.
	Gleyed Matrix (S4) Layer (if present):		_ Redux Depress	510115 (F0)			uniess disturbed of problematic.
	Layer (III present).						
Type:							Hydric Soil Present? Yes No
Depth (in	icnes):						Hydric Soil Present? Yes No _V
Remarks:	del Talanto	4 - 4	1 11			1 1	
	LET OR (ROLLO	i Mariax,	Dright Soils	s are h	et rec	lex fe	other or are the dep.
		,	,				· K
10/0001-0							
HYDROLC						······································	
Wetland Hy	drology Indicators	:					
Primary Indi	cators (minimum of	one required; c	heck all that app	ly)			Secondary Indicators (2 or more required)
Surface	Water (A1)		Water-Sta	ined Leav	es (B9) (e :	xcept	Water-Stained Leaves (B9) (MLRA 1, 2,
High W	ater Table (A2)		MLRA	1, 2, 4A, a	and 4B)		4A, and 4B)
Saturati	ion (A3)		Salt Crust	(B11)			Drainage Patterns (B10)
Water N	/larks (B1)		Aquatic In	vertebrate	s (B13)		Dry-Season Water Table (C2)
1	nt Deposits (B2)		Hydrogen	Sulfide O	dor (C1)		Saturation Visible on Aerial Imagery (C9)
1	posits (B3)					Livina Roo	ots (C3) Geomorphic Position (D2)
1	at or Crust (B4)		Presence		_		Shallow Aquitard (D3)
	posits (B5)		Recent Iro		•	•	
4	Soil Cracks (B6)		Stunted or			•	
1	ion Visible on Aerial	Imageny (R7)	Other (Ex			·/ (=:\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Frost-Heave Hummocks (D7)
. —	y Vegetated Conca	• • • •		piani ni ixe	iiiaiks <i>j</i>		Trost-fleave Hummocks (D7)
		e Surface (Bo)	!				
Field Obser			X Don't	J			
		Yes No		ches):		- 1	
Water Table		Yes No		ches):			J
Saturation F		Yes No	Depth (in	ches):		_ Wetla	land Hydrology Present? Yes No X
Describe Re	pillary fringe) ecorded Data (strear	n gauge monit	oring well aerial	nhotos pr	evious ins	nections)	if available:
Describe No	בטיינטע בענע נטווטמו	ყოოყი, πιοπι	g .ron, aonar	догоо, рг	1110	F-0000110/,	
Domest'		*****					
Remarks:	Foils Fre	+14	d				
	roics one	venten. In					
1							

,			CAVILLE Humbold Sampling Date: 12 9 23
ppriorite o more	AW: 510-		State: CA Sampling Point:
vestigator(s): J. REGAN		Section, Township, Ra	ange:
andform (hillslope, terrace, etc.): TERRE		Local relief (concave,	convex, none): Note Slope (%): 07
ubregion (LRR): A	Lat: <u>4</u> 6).9433	Long: -124. 0938 Datum: W63 89
oil Map Unit Name: ARCKTS and CANOYI	C GUATRUOM	-7, 2,0068	NWI classification: NOWE
re climatic / hydrologic conditions on the site typical for	or this time of yea	r? Yes 🗴 No_	(If no, explain in Remarks.)
re Vegetation, Soil, or Hydrology	significantly o	listurbed? Are	"Normal Circumstances" present? Yes X No
re Vegetation, Soil, or Hydrology			needed, explain any answers in Remarks.)
			locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes			
Hydric Soil Present? Yes	No <u> </u>	Is the Sample	V-
Wetland Hydrology Present? Yes	No_ <u>><</u>	within a Wetla	ind? YesNO
EGETATION – Use scientific names of p	Absolute		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1		Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2			A
3			Total Number of Dominant Species Across All Strata: (B)
4			
	- Andread Anna Anna Anna Anna Anna Anna Anna An	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
1			Total % Cover of: Multiply by:
2			OBL species x1 =
4			FACW species x 2 =
5.			FAC species x 3 =
1 1/		= Total Cover	FACU species x 4 =
Herb Stratum (Plot size: M)	-	Cacia	UPL species x 5 = Column Totals: (A) (B)
1. Leantadon Soutilis	<u> </u>	V SACU	-
2. Itypichis padicatas	<u> </u>	Y FACU	Prevalence Index = B/A =
a with the state	— 	A MARKANIAN CONTRACTOR OF THE PARK AND A SECOND CONTRACTOR OF THE	Hydrophytic Vegetation Indicators:
3. Totalin vepans	1 6	THE KALL	
4. Ryman acctaelle	<u> </u>	Y BACU NI	1 - Rapid Test for Hydrophytic Vegetation
4. Rungy actorlla 5. GERMIN deectin	- 50% - 50%		2 - Dominance Test is >50%
4. Rungy actualle 5. Germin direction 6. Gerses *	The state of the s	NI	2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹
4. Rimax actualla 5. Germin direction		y Saw	2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
4. Rimax actorlle 5. Germin dectin 6. Gesses * 7.		Y SAW	2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹
4. Runer actualle 5. Germin alectin 6. Gesses * 7. 8. 9.		Y Saw	2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain)
4. Runer actualle 5. Germin Mectin 6. Gerses * 7. 8.		Y Face	2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must
4. Runex actaelle 5. Geronim arectur 6. Geronim arectur 7. 8. 9. 10. 11. Woody Vine Stratum (Plot size:	908	Y Facu	2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Riman actualla 5. German alectin 6. Gerses * 7. 8. 9. 10.	902	Y Sacu	2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must

Sampling Point:

Profile Des	cription: (Describe	to the dep	th needed to docum	ent the i	ndicator	or confirm	the absence	of indicators)	
Depth	Matrix			Feature						
(inches)	Color (moist)	%	Color (moist)		Type ¹	Loc ²	Texture		Remarks	
0-20"	10 yr 42	99_	10 yr 5/6		*_	<u></u>	Cloy loan	(oncrease	is had a	ncretions
21"+	10 yr 3/2	801	10425/6,6/6	702	¥		Song denle	A. Yes		
							ē F			
						-				
		-								***************************************
			,							
							· · · · · · · · · · · · · · · · · · ·			
¹ Tyne: C=C	concentration D=Der	oletion RM:	=Reduced Matrix, CS	=Covere	d or Coat	ed Sand Gr	ains. ² Lo	cation: PL=Po	re Linina. M=N	latrix.
Hydric Soil	Indicators: (Applic	able to all	LRRs, unless other	wise not	ed.)		Indicate	ors for Proble		
Histoso			Sandy Redox (S		•		2 ci	m Muck (A10)		
, —	pipedon (A2)		Stripped Matrix (l Parent Mater	al (TF2)	
	listic (A3)		Loamy Mucky M	ineral (F	1) (excep	t MLRA 1)	Ver	y Shallow Darl	Surface (TF1	2)
Hydrog	en Sulfide (A4)		Loamy Gleyed N		2)		Oth	er (Explain in l	Remarks)	
	d Below Dark Surfac	же (А11)	Depleted Matrix				3			
	ark Surface (A12)		Redox Dark Sur	, ,				ors of hydrophy	_	
. —	Mucky Mineral (S1)		Depleted Dark S Redox Depressi		-1)			and hydrology i ss disturbed or		II,
	Gleyed Matrix (S4) Layer (if present):	······································	Redux Deplessi	Olis (FO)			unic	ss disturbed or	problemanc.	
Type:	Layer (ii present).			\			Ì			
Depth (ir	schoe).		·····				Hydric Soi	I Present?	/es	No.
							1 Tryans do.	4		
ixemains.	Rock	- Ci 13	undutas as	_	Plats	1-4,6	· HARD	Concretter	s presit	
	111 -117	- 0							•	
10 DC	yht Sals, N	or Ke	indutay as	X						
L										
HYDROLO	GY									
Wetland Hy	drology Indicators	•								
Primary Indi	icators (minimum of	one require	d; check all that apply	()			Seco	ndary Indicato	rs (2 or more r	equired)
Surface	Water (A1)		Water-Stair	ned Leav	es (B9) (except	\	Water-Stained	Leaves (B9) (N	NLRA 1, 2,
1	ater Table (A2)			l, 2, 4A,				4A, and 4B	<u>, </u>	
-	ion (A3)		Salt Crust ((B11)			[Drainage Patte	rns (B10)	
	Marks (B1)		Aquatic Inv	ertebrate	es (B13)		[Ory-Season Wa	ater Table (C2)	ı
Sedime	ent Deposits (B2)		Hydrogen \$	Sulfide O	dor (C1)		8	Saturation Visil	ole on Aerial In	nagery (C9)
Drift De	eposits (B3)		Oxidized R	hizosphe	eres along	Living Roc	ots (C3) (Geomorphic Po	sition (D2)	
Algal M	at or Crust (B4)		Presence of					Shallow Aquita	rd (D3)	
Iron De	posits (B5)		Recent Iron	n Reduct	ion in Till	ed Soils (C6		-AC-Neutral To		
Surface	e Soil Cracks (B6)		Stunted or	Stressec	l Plants (l	D1) (LRR A		Raised Ant Mo		-
	tion Visible on Aerial			lain in Re	emarks)			Frost-Heave H	ummocks (D7)	
Sparse	ly Vegetated Concav	e Surface (B8)							
Field Obse			V							
Surface Wa			No Depth (inc			1				
Water Table			No Depth (inc			4				V
Saturation F		Yes	No _K Depth (inc	:hes):	·	Weti	and Hydrolog	gy Present?	Yes	No <u>K</u>
Describe Re	pillary fringe) ecorded Data (stream	n gauge m	onitoring well, aerial p	hotos, p	revious ir	spections).	if available:			· Carana de la car
Besonder	Soorged Bata (Stream	gaage,	oniconing from a cinal p	елее, р		,,				
Remarks:										
romano.	Foils Enc 1	wtal.	ケー							
	and a me	- A. A.	h. m. M. l.							

roject/Site: PICKETT LANE	M: 51/1 -	321 - 021	State: CA Sampling Point: 8
10/10-1			
3			convex, none): WK Slope (%): 0%
andform (hillslope, terrace, etc.):			
			- 0
oil Map Unit Name: ARCATS and CANDY MO			
re climatic / hydrologic conditions on the site typical for			
re Vegetation, Soil, or Hydrology			"Normal Circumstances" present? Yes X No
re Vegetation, Soil, or Hydrology	_naturally prob	olematic? (If no	eeded, explain any answers in Remarks.)
UMMARY OF FINDINGS – Attach site ma	p showing	sampling point l	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes			
Hydric Soil Present? Yes		Is the Sampled within a Wetla	
Wetland Hydrology Present? Yes	No_X	Widin a recta	
EGETATION - Use scientific names of plants of	Absolute	Dominant Indicator Species? Status	Dominance Test worksheet:
1. (Flot Size)			Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2			Total Number of Dominant
3.			Species Across All Strata: (B)
4			Percent of Dominant Species 50%
Sapling/Shrub Stratum (Plot size: 10 md)		= Total Cover	Inat Are OBL, FACW, or FAC: (A/B)
1. Cotonesotes So. (Seedlings)			Prevalence Index worksheet:
2			Total % Cover of: Multiply by: OBL species
3.			OBL species
4.			FAC species C x3= 50
5			FAC species $\frac{70}{75}$ $\times 3 = \underline{60}$ $\times 4 = \underline{300}$
5.		= Total Cover	FACU species
5. Herb Stratum (Plot size: \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	102		FACU species
5	102	= Total Cover	FACU species $\frac{75}{4}$ $\times 4 = \frac{300}{300}$ UPL species $\times 5 = \frac{360}{360}$ (B)
5. Herb Stratum (Plot size: M2) 1. Hupachec's Cadicate. 2. Taldim (apans) 3. Remex acaterilles	10%	= Total Cover	FACU species
5. Herb Stratum (Plot size: _\m^2) 1. _\text{Hypochec's cadicata} 2. _\text{Totalism (nons)}	102	= Total Cover	FACU species 75 x4= 300 UPL species x5= 360 Column Totals: 93 (A) 360 (B) Prevalence Index = B/A = 3.76 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
5	102 102 15 5 502	= Total Cover Facu Facu Facu Facu Facu	FACU species 75 x 4 = 300 UPL species x 5 = 360 Column Totals: 75 (A) 360 (B) Prevalence Index = B/A = 3.78 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
5	10½ 202 15 5 502	= Total Cover Fact Fact Facu Facu Facu	FACU species
5	102 202 (5 c 502	= Total Cover Fact Fac	FACU species 75 x 4 = 300 UPL species x 5 = 360 Column Totals: 75 (A) 360 (B) Prevalence Index = B/A = 3.76 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting)
5	10½ 202 (5 c 502	= Total Cover Gacu Y FAC GACU Y SACU	FACU species
5. Herb Stratum (Plot size: \(\lambda \) 1. Hupodosis adicata. 2. The lim (rooms 3. Rumex actualles 4. Omises to 5. 6. 7. 8. 9.	10%	= Total Cover Facu Facu Facu Facu	FACU species 75 x 4 = 300 UPL species x 5 = 360 Column Totals: 75 (A) 360 (B) Prevalence Index = B/A = 3.76 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting)
5	10½ 202 (5 c 502	= Total Cover Facu Facu Facu Facu	FACU species
5	102	= Total Cover Facu Facu Facu Facu	FACU species
5	102 102 (5 5 50)2	= Total Cover	FACU species
5	102 102 15 6 502	= Total Cover Y FAC HACU Y STRU - Total Cover	FACU species
5	102 102 15 6 502	= Total Cover Y FAC HACU Y STRU - Total Cover	FACU species

Profile Description: (De	escribe to the	e depth needed to	document the	indicator o	or confirm	the absence	of indicators.)
	Matrix		Redox Feature	es			
(inches) Color (m			ist) <u>%</u>	Type ¹	Loc ²	Texture	Remarks
()-19" 10423	1/2 100	<u> </u>				loans	ALCONOMICS
20+ 2104R	3/2 10	%					
10 42		1/2 VOUR 6/	8 14		\	Suprela	lasm n/had relict concretion
			(0.0		(Deve 1001	Employee - A . Common of the C
<u> </u>		<u> </u>			<u></u>		
	destruction of the second				AND DESCRIPTION OF THE PERSON	· Activities of the street of	
							
¹ Type: C=Concentration,					d Sand Gra		cation: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:	(Applicable			ted.)			ors for Problematic Hydric Soils ³ :
Histosol (A1)			edox (S5)			,	m Muck (A10)
Histic Epipedon (A2)			Matrix (S6)				d Parent Material (TF2)
Black Histic (A3)		-	lucky Mineral (F		MLRA 1)		y Shallow Dark Surface (TF12)
Hydrogen Sulfide (A			leyed Matrix (F	2)		Oth	er (Explain in Remarks)
Depleted Below Dark	•	· — ·	Matrix (F3)			31	and the observation of the second
Thick Dark Surface (ark Surface (F6				ors of hydrophytic vegetation and
Sandy Mucky Minera		-	Dark Surface (epressions (F8)	-			and hydrology must be present, ss disturbed or problematic.
Sandy Gleyed Matrix Restrictive Layer (if pre		Redox L	epiessions (Fo)			urile:	ss disturbed of problematic.
	Serry.					i	
Type:		manimum minimum kanada ina m					X
Depth (inches):						Hydric Soil	Present? Yes No V
Remarks:		4	1 . 11 -	1 //		. *	1 1 /
(40DD)	reliet Co	ncretias ih	bught So	Wy Sell	s deep	a ir pi	t, NOT reduced
		4 - 0	J.	0	6 m 18 m		4
NOT IN	PICITIV	f of Co	Hemporari	wed	1 Suth	M.	
	<u>.,</u>						
HYDROLOGY						·	
Wetland Hydrology Indi	icators:						
Primary Indicators (minin	num of one re	quired; check all th	at apply)	····		Seco	ndary Indicators (2 or more required)
Surface Water (A1)		Wa	ter-Stained Lea	ves (B9) (e	xcept	v	Vater-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A	2)	J	VILRA 1, 2, 4A,	and 4B)			4A, and 4B)
Saturation (A3)		Sal	Crust (B11)			[Orainage Patterns (B10)
Water Marks (B1)		Aqı	atic Invertebrat	es (B13)		[Ory-Season Water Table (C2)
Sediment Deposits (B2)	Hyd	lrogen Sulfide C	dor (C1)		8	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	•		dized Rhizosph		Livina Roo		Geomorphic Position (D2)
Algal Mat or Crust (B	34)		sence of Reduc				Shallow Aquitard (D3)
Iron Deposits (B5)	-,		ent Iron Reduc	•	•		FAC-Neutral Test (D5)
Surface Soil Cracks	(B6)		nted or Stresse		•	•	Raised Ant Mounds (D6) (LRR A)
Inundation Visible on			er (Explain in R		., (,		Frost-Heave Hummocks (D7)
Sparsely Vegetated			or (Explain in)	omanio		•	Tool Hours Hammonia (B1)
Field Observations:							
į	Van	No 🗶 De	nth (inches).				
Surface Water Present?							
Water Table Present?		No <u></u> De			- 1		×
Saturation Present?		No 🗶 De	pth (inches):		_ Wetla	and Hydrolog	gy Present? Yes No
(includes capillary fringe) Describe Recorded Data	(stream gaug	e monitoring well	aerial photos, p	revious ins	pections)	if available:	
20001100 1 10001 1000 2010	(00 gaag	,e,ege,	шени ристен, р		p = 0,		
							
Remarks:		nc Neutal	1-1				
	oracs d	LUC LAMAN	100,				
ş							
i .							

roject/Site: PICKETT LANE			eville Humbdat Sampling Date: 12 9 23
1 / 1 2 d and de	AN: 510-3	21 - 07.1	State: CA Sampling Point: 9
oplicant/Owner: <u>VALA VOO</u> vestigator(s): <u>J. REGAN</u>			nge:
vestigator(s):	Sec	ction, rownship, Ra	rige.
andform (hillslope, terrace, etc.):	LO	cai relier (concave,	convex, none): <u>NME</u> Slope (%): <u>OZ-</u> Long: <u>-124.0958</u> Datum: W65 84
ubregion (LRR): A Dil Map Unit Name: ARCATA and CAND	Lat:	1733 **=1====	Long: Ter. Disco
re climatic / hydrologic conditions on the site typical			A A
re Vegetation, Soil, or Hydrology _			"Normal Circumstances" present? Yes X No No
re Vegetation, Soil, or Hydrology _			eeded, explain any answers in Remarks.)
		ampling point I	ocations, transects, important features, etc.
	No	Is the Sampled	i Area
Hydric Soil Present? Yes Wetland Hydrology Present? Yes	No	within a Wetla	
Remarks: WINTER WST, VEGETATION		1	6
EGETATION – Use scientific names of		* 60	wer point on parcel *
		Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover S	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)
- /. I	Specific Control of the Control of t	Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size: Umd	_)	1.7	Prevalence Index worksheet:
1. Cotoneste Sp.	306	Y NI	Total % Cover of: Multiply by:
	5%	Si attes.	OBL species x1 =
3. Lonica Involvanta		<u> </u>	FACW species x 2 =
4		***************************************	FAC species x 3 =
J	<u> </u>	Total Cover	FACU species x 4 =
Herb Stratum (Plot size:)			UPL species x 5 =
1. Dan annia	52_	<u>sac</u>	Column Totals: (A) (B)
2. Hypschus padicuta		Y BCU	Prevalence Index = B/A =
3. Runer acotosile	102 -	Y GALU	Hydrophytic Vegetation Indicators:
4. GERANIN disetur	<u> 507</u>	y FRED	1 - Rapid Test for Hydrophytic Vegetation
	1306	7	2 - Dominance Test is >50%
6			3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (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			¹Indicators of hydric soil and wetland hydrology must
* * ***********************************	803 =	Total Cover	be present, unless disturbed or problematic.
h	, <u> </u>		1
Woody Vine Stratum (Plot size: 10ml)	V 5	
Woody Vine Stratum (Plot size: 10 ml) 72	Y FACU	- Hydrophytic
Woody Vine Stratum (Plot size: 10ml			Hydrophytic Vegetation Present? Yes No
Woody Vine Stratum (Plot size: 10 ml	72	Y FACU Total Cover	Vegetation

Profile Desc	cription: (Describe	to the depth	needed to docu	ment the i	ndicator e	or confirm	the absen	ice of indicators.)
Depth	Matrix			ox Features	3			
(inches)	Color (moist)		Color (moist)	%	Type ¹	_Loc ² _	Texture	Remarks
0-8"	10 ye 3/c	100_					loan	
9-18%	10 VR 3/2	608	JVK-46	-402				
	10 ye 46	402						MOTE COLOR FORTON, MIXED
l	10 4- 110					-		mex
-								
			National Action in the Control of th	ina - distillutuationistication	· . <u></u>	Situation Chambles	· washing and the second second	
1					0	4.0*** 4.0**		duration. Displace Links Matthe
	oncentration, D=Deplications: (Applie					a Sana Gra		Location: PL=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :
1		anie (0 ali Li			su.,			2 cm Muck (A10)
Histosol	pipedon (A2)		Sandy RedoxStripped Matri					Red Parent Material (TF2)
l ——	istic (A3)		_ Loamy Mucky		i) (excent	MIRA 1)		/ery Shallow Dark Surface (TF12)
1	en Sulfide (A4)	-	_ Loamy Gleyed	•				Other (Explain in Remarks)
1	d Below Dark Surface	ce (A11)	_ Depleted Matr		,			,
	ark Surface (A12)	`	_ Redox Dark S				³ Indic	cators of hydrophytic vegetation and
1	Mucky Mineral (S1)		_ Depleted Dark	Surface (F	7)		we	etland hydrology must be present,
Sandy (Gleyed Matrix (S4)		_ Redox Depres	sions (F8)			un	nless disturbed or problematic.
Restrictive	Layer (if present):							
Type:							ŀ	\vee
Depth (in	iches):						Hydric S	Soil Present? Yes No
Remarks:							<u></u>	- 4
	Vo de	olated or	reduced Sa	Land D	Au c	Jos d	6 vot	appento be le-dex.
			-	10.1		~~~~		
							da	
HYDROLO	GY							
Wetland Hy	drology Indicators							
Primary Indi	cators (minimum of	one required;	check all that app	oly)			<u>Se</u>	econdary Indicators (2 or more required)
Surface	Water (A1)		Water-St	ained Leave	es (B9) (e	xcept		_ Water-Stained Leaves (B9) (MLRA 1, 2,
High Wa	ater Table (A2)		MLRA	1, 2, 4A, a	and 4B)			4A, and 4B)
Saturati	ion (A3)		Salt Crus	t (B11)				_ Drainage Patterns (B10)
Water N	/larks (B1)		Aquatic I	nvertebrate	s (B13)			_ Dry-Season Water Table (C2)
Sedime	nt Deposits (B2)		Hydroger	n Sulfide Od	dor (C1)			_ Saturation Visible on Aerial Imagery (C9)
Drift De	posits (B3)		Oxidized	Rhizosphe	res along	Living Roo	its (C3) 🔀	Geomorphic Position (D2)
Algal M	at or Crust (B4)		Presence	of Reduce	ed Iron (C4	1)	******	_ Shallow Aquitard (D3)
Iron De	posits (B5)		Recent Ir	on Reducti	on in Tille	d Soils (C6	s)	_ FAC-Neutral Test (D5)
Surface	Soil Cracks (B6)		Stunted of	or Stressed	Plants (D	1) (LRR A))	_ Raised Ant Mounds (D6) (LRR A)
Inundat	ion Visible on Aerial	Imagery (B7)	Other (E:	kplain in Re	emarks)			_ Frost-Heave Hummocks (D7)
Sparsel	y Vegetated Concav	e Surface (B8	3)					
Field Obser	rvations:							
Surface Wat	ter Present?	Yes No	o <u>X</u> Depth (i	nches):				
Water Table	Present?	Yes No	Depth (i	nches):				A
Saturation F	Present?	Yes N	Depth (i	nches):		Wetla	and Hydro	logy Present? Yes No 🔀
(includes ca	pillary fringe)					_	<u>-</u>	
Describe Re	ecorded Data (stream	n gauge, mon	itoring well, aeria	l photos, pr	evious ins	pections), i	ıt available:	:
Remarks:			CL 11	1 -	<u>, , , , , , , , , , , , , , , , , , , </u>	ile Pa	. 1 6	1 1
	Shillay o	gn covv	are, like	17 260	FE WN	N+ CO	₩ J E C	21EM
	*	6 -	Ē	*				
	Fous Fre	Neutal	ten					

niect/Site: PICKETT LANE	C:	wow. McK. al	erville Humbout Sampling Date: 12 (9 23
1/11168	100 - 3	181 - 171	State: CA Sampling Point: 10
10000			
/estigator(s): J. C.			nge:
ndform (hillslope, terrace, etc.):		ocal relier (concave, o	convex, none): WHE Slope (%): 0%: 0%: 0%: 0%: 0%: 0%: 0%: 0%: 0%: 0%
bregion (LRR):	Lat:	. 7733 7 ⁴ 21-22	
Map Unit Name: ARCATA and CANOYM		B 4	
e climatic / hydrologic conditions on the site typical for			* *
e Vegetation, Soil, or Hydrology			Normal Circumstances" present? Yes X No
e Vegetation, Soil, or Hydrology	naturally probl	ematic? (If ne	eded, explain any answers in Remarks.)
JMMARY OF FINDINGS — Attach site ma	ap showing s	ampling point l	ocations, transects, important features, etc.
lydrophytic Vegetation Present? Yes		le the Campled	Aron
Hydric Soil Present? Yes		Is the Sampled within a Wetlan	
Vetland Hydrology Present? YesRemarks: WINTEL VASIT, VEGETATION L			
EGETATION – Use scientific names of p	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
			Total Number of Dominant Species Across All Strata: (B)
		= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
			Total % Cover of: Multiply by:
			OBL species x1=
			FACW species x 2 =
k,			FACW species x2 = FAC species x3 =
			FACW species C $x2 = C$ FAC species 15 $x3 = 45$ FACU species 85 $x4 = 340$
lerb Stratum (Plot size: M		= Total Cover	FACW species
Herb Stratum (Plot size: In)		= Total Cover	FACW species \bigcirc $\times 2 = \bigcirc$ FAC species \bigcirc $\times 3 = \bigcirc$ FACU species \bigcirc $\times 4 = \bigcirc$ UPL species \bigcirc $\times 5 = \bigcirc$ Column Totals: \bigcirc
Herb Stratum (Plot size: In) Hyperhans yadlata Londontoden Saintilis	10%	= Total Cover ACU FACV	FACW species C
Herb Stratum (Plot size: 1 m) - Hypertrans radicata - Control Santilis - Prunila Vilgaria		= Total Cover FACU FACU FACU	FACW species \bigcirc $\times 2 = \bigcirc$ FAC species \bigcirc $\times 3 = \bigcirc$ FACU species \bigcirc $\times 4 = \bigcirc$ UPL species \bigcirc $\times 5 = \bigcirc$ Column Totals: \bigcirc (A) \bigcirc (B) Prevalence Index $= B/A = \bigcirc$ Hydrophytic Vegetation Indicators:
lerb Stratum (Plot size: In) Hyperthans radicata Lobatzden Santilis Prunila Wigari Runce actosella	10% 8° 5°	= Total Cover ACU FACV	FACW species C
lerb Stratum (Plot size: In?) Hyperhans radicata Leontedon Sainthis Prunch Wagns Runce actosella Toldin repars	10% 8% 5%	= Total Cover FACU FACU FACU Y FACU	FACW species
Herb Stratum (Plot size: In) Hyperthans radicata Leostedan Saintilis Prunila Wigaris Runce actosella Toldin repars Gasses **	10% 8% 5% 12% 15%	= Total Cover FACU FACU FACU Y FACU Y FACU Y FACU Y FACU Y FACU Y FACU	FACW species
Herb Stratum (Plot size: M) Herb Stratum (Pl	10% 8% 5% 12% 15% 50%	= Total Cover FACU FACU FACU Y FACU Y FACU Y FACU Y FACU	FACW species
Herb Stratum (Plot size: In) Hyperthans yadleata Robertsdan Sanntilis Promise Wigais Runce actosella Toldin (yeans Gasses *	10% 8% 56 12% 15%	= Total Cover FACU FACU FACU Y FACU Y FACU Y FACU FACU	FACW species
Herb Stratum (Plot size: In) L. Hyperthans radicata L. Lobatzdon Santilis Diunila Wigeris L. Timux natoscilla Tiffdim (years Casses * 1.	10% 8% 5% 12% 15% 50%	= Total Cover FACU FACU FACU Y FACU Y FACU Y FACU FACU	FACW species
Herb Stratum (Plot size: In) Hyperthans radicata Locatedon Santilis Prunila Wigaris Truncx actosalla Adfalin (years Casses *	10% 8% 56 12% 15%	= Total Cover FACU FACU FACU Y FACU Y FACU Y FACU Y FACU	FACW species
Herb Stratum (Plot size: M.) Hyperthen's Yndigata Le Leontedon Santilis Prunila Wigari	10% 8% 56 12% 15%	= Total Cover FACU FACU FACU Y FACU Y FACU Y FACU FACU	FACW species
Herb Stratum (Plot size: In) Hyperban's radicata Locatedon Santilis Runca actosella Totalin (pans Casses * Totalin (pans)	10% 8% 56 123 158 508	= Total Cover FACU FACU FACU Y FACU Y FACU Y FACU Y FACU	FACW species
Herb Stratum (Plot size: In)	10% 8% 56 12% 15% 508	= Total Cover FACU FACU FACU Y FACU Y FACU Y FACU Y FACU	FACW species
Herb Stratum (Plot size: M)	10% 8% 56 123 152 508	= Total Cover FACU FACU FACU Y FACU Y FACU Y FACU Y FACU	FACW species

Depth	Matrix		Redox	c Feature				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-16"	10 yr 3/3	les					100m	
(7°-20"	10 yr 3/3	976	10 yr 4/3	37		ΔV	loam dy	FAINT CONTRET
214	10 ye 3/3	<u>602</u>	1042 4/3,4/9	402	()	<u> </u>	Cly lan	Sour Contract
				•				
**	***************************************		**************************************			-		
					-			
	<u>, granger i de service à maleure i de descrit</u>			- <u></u>	محتم بيد محيد الله و الله	in sangenessi meneralah "		
1Towns C-Cs		nlotion DM	=Reduced Matrix, CS	-Covere	d or Coat	ad Sand Gr	raine ² l or	cation: PL=Pore Lining, M=Matrix.
			LRRs, unless other			eu oanu oi		ors for Problematic Hydric Soils ³ :
Histosol			Sandy Redox (S		•		2 cr	m Muck (A10)
	oipedon (A2)		Stripped Matrix				Rec	Parent Material (TF2)
Black His	stic (A3)		Loamy Mucky M	lineral (F	1) (excep	t MLRA 1)		y Shallow Dark Surface (TF12)
	n Sulfide (A4)		Loamy Gleyed I		2)		Oth	er (Explain in Remarks)
	d Below Dark Surfa ark Surface (A12)	ce (A11)	Depleted Matrix Redox Dark Sui		١		3Indicate	ors of hydrophytic vegetation and
	lucky Mineral (S1)		Depleted Dark S	•				and hydrology must be present,
	Gleyed Matrix (S4)		Redox Depress		,			ss disturbed or problematic.
Restrictive I	Layer (if present):							•
Type:							1	\sim
Depth (inc	ches):						Hydric Soil	Present? Yes No
HYDROLO								
I I DROLO	GY	***************************************				L earning and the second seco		
	GY drology Indicators);						
Wetland Hy	drology Indicators		ed; check all that apple	y)				ndary Indicators (2 or more required)
Wetland Hyd Primary Indic Surface	drology Indicators cators (minimum of Water (A1)		Water-Stai	ned Leav		except		Vater-Stained Leaves (B9) (MLRA 1,
Wetland Hyd Primary Indic Surface High Wa	drology Indicators cators (minimum of Water (A1) ater Table (A2)		Water-Stai	ned Leav 1, 2, 4A,		except	V	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B)
Wetland Hyd Primary Indic Surface High Wa	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3)		Water-Stai MLRA Salt Crust	ned Leav 1, 2, 4A, (B11)	and 4B)	except	v	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Orainage Patterns (B10)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1)		Water-Stai MLRA Salt Crust Aquatic Inv	ined Leav 1, 2, 4A, (B11) vertebrate	and 4B) es (B13)	except	v r r	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2)		Water-Stai MLRA Salt Crust Aquatic Int Hydrogen	ined Leav 1, 2, 4A, (B11) vertebrate Sulfide C	and 4B) es (B13) dor (C1)	·	v c s	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3)		Water-Stai MLRA Salt Crust Aquatic Int Hydrogen	ined Leav 1, 2, 4A, (B11) vertebrate Sulfide C	and 4B) es (B13) dor (C1) eres along	ı Living Roc	V E Sts (C3) C	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4)		Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized F	ned Leaven. (B11) vertebrate Sulfide Control Rhizosphere	and 4B) es (B13) edor (C1) eres along ed Iron (C	y Living Roo (4)	V E E S C S C S	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4)		Water-Stai MLRA Salt Crust Aquatic Int Hydrogen Oxidized F	ned Leaven. 1, 2, 4A, (B11) Vertebrate Sulfide Canticosphere of Reducting Reducting 1, 2, 2, 2, 2, 2, 2, 3, 4, 2, 4, 2, 4, 2, 4, 2, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4,	and 4B) es (B13) dor (C1) eres along ed Iron (C	g Living Roo (4) ed Soils (C6	V E S S S S S F	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria	one require	Water-Stai MLRA Salt Crust Aquatic Int Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp	ned Leaven. 1, 2, 4A, (B11) Vertebrate Control Reduction Reductions and the Stressection Research Rese	es (B13) dor (C1) eres along ed Iron (C ion in Tille I Plants (I	g Living Roo (4) ed Soils (C6	V E S S S S F F F	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca	one require	Water-Stai MLRA Salt Crust Aquatic Int Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp	ned Leaven. 1, 2, 4A, (B11) Vertebrate Control Reduction Reductions and the Stressection Research Rese	es (B13) dor (C1) eres along ed Iron (C ion in Tille I Plants (I	g Living Roo (4) ed Soils (C6	V E S S S S F F F	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (Ca) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca	one require I Imagery (E	Water-Stai MLRA Salt Crust Aquatic Int Hydrogen Oxidized F Presence G Recent Iro Stunted or 37) Other (Exp.	ned Leav 1, 2, 4A, (B11) vertebrate Sulfide C Rhizosphe of Reduct n Reduct Stressed	and 4B) es (B13) dor (C1) eres along ed Iron (C tion in Tille I Plants (I emarks)	J Living Roo (4) ed Soils (C6 (C1) (LRR A	V E S S S S F F F	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (Ca) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Observation	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca vations: er Present?	I Imagery (Eve Surface	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp (B8)	ned Leav 1, 2, 4A, (B11) vertebrate Sulfide C Rhizosphe of Reduct n Reduct Stressed plain in Reduct	and 4B) es (B13) edor (C1) eres along ed fron (C ion in Tille I Plants (I emarks)	J Living Roo (4) ed Soils (C6 (1) (LRR A	V E S S S S F F F	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (Ca) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Water Table	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca vations: er Present? Present?	I Imagery (Eve Surface Yes	Water-Stain MLRA Salt Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp (B8) No Depth (inc	ned Leaven 1, 2, 4A, (B11) vertebrate Sulfide Control Reduction Reduction Reduction Reduction Researches):ches):ches):ches):ches):ches	and 4B) es (B13) dor (C1) eres along ed Iron (C ion in Tille I Plants (I emarks)	g Living Roo (4) ed Soils (C6 (21) (LRR A	— V — E — S ots (C3) — S S) — F	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (Ca) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Water Water Table Saturation Pe (includes cap	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca vations: er Present? Present? resent?	I Imagery (Eve Surface Yes Yes	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp (B8) No Depth (inc No Depth (inc	ned Leaven 1, 2, 4A, (B11) vertebrate Sulfide CRhizosphe of Reduct n Reduct Stressed	and 4B) es (B13) edor (C1) eres along ed Iron (C ion in Tille d Plants (I emarks)	g Living Roo (4) ed Soils (C6 (C1) (LRR A		Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (Ca) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Water Water Table Saturation Pe (includes cap	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca vations: er Present? Present? resent?	I Imagery (Eve Surface Yes Yes	Water-Stain MLRA Salt Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp (B8) No Depth (inc	ned Leaven 1, 2, 4A, (B11) vertebrate Sulfide CRhizosphe of Reduct n Reduct Stressed	and 4B) es (B13) edor (C1) eres along ed Iron (C ion in Tille d Plants (I emarks)	g Living Roo (4) ed Soils (C6 (C1) (LRR A		Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (Ca) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Water Water Table Saturation Pe (includes cap	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca vations: er Present? Present? resent?	I Imagery (Eve Surface Yes Yes	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp (B8) No Depth (inc No Depth (inc	ned Leaven 1, 2, 4A, (B11) vertebrate Sulfide CRhizosphe of Reduct n Reduct Stressed	and 4B) es (B13) edor (C1) eres along ed Iron (C ion in Tille d Plants (I emarks)	g Living Roo (4) ed Soils (C6 (C1) (LRR A		Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (Ca) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
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