

Sewall Wetland Consulting, Inc.

PO Box 880 Fall City, WA 98024 Phone: 253-859-0515

September 20, 2021

Marty Robinett Robinett Brothers, LLC 2825 Colby Avenue, Suite 304 Everett, Washington 98201

RE: Parcel #31051900400900 & a portion of #31051900401100 – Critical Area Report City of Marysville, Washington SWC Job #21-152

This report describes our observations of any jurisdictional wetlands, streams or buffers on or within 200' of Parcel #31051900400900 and a portion of #31051900401100 located at 1125 & 1507 172nd Street NE in the City of Marysville, Washington (the "site").



Above: Vicinity Map

The 29.76 acre site is located in the SE $\frac{1}{4}$ of Section 29, Township 31 North, Range 5 east of the W.WM.

The site is an irregular shaped and contains active agricultural fields as well as several single family homes, barns, several small outbuildings and associated gravel driveways and landscaped area. Some disturbed douglas fir dominated forest is also present on the site containing an informal atv type road track throughout.



Above: Snohomish County Parcel Map of the site.

METHODOLOGY

Ed Sewall of Sewall Wetland Consulting, Inc. inspected the site between February and May 30 of 2019 and on July 28, 2021. The site had also been reviewed in the past prior to incorporation into Marysville in 2005.

The site was reviewed using methodology described in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987), and the *Western Mountains, Valleys and Coast region Supplement* (Version 2.0) dated June 24, 2010, as required by the US Army Corps of Engineers.

Given the agricultural use and existing drainage modifications that exists (drainage ditches tiles ect) in the western side of the site where inventoried wetlands were mapped, hydrology monitoring in the early growing season was used to verify if wetland hydrology exists on this agricultural field.

The presence of wetland hydrology is the driving force behind wetland presence, without wetland hydrology, an area does not meet wetland criteria. Therefore, only areas on the site that contain all three parameters during the early growing season meet the definition of a wetland. Areas that do not have hydrology do not meet wetland criteria and are considered upland.

Site Hydrology Monitoring Methods

A total of 16 data points (soil pits) were sampled to determine if wetland vegetation, soils and hydrology was present on the site within 12" of the soil surface.



Above: Data point locations on the site

The site was visited between February 28th and May 25 of 2019 to collect hydrology data. Site visits were also conducted in April and July of 2021 to confirm nothing had changed since the 2019 hydrology monitoring.



Rainfall in the region for the water year through the growing season starting in October 2018 and ending in May 2019 was 29.29", which was 90% of a normal rainfall of 32.84". However, this small amount of

difference was not enough to invalidate our hydrology monitoring results, and given the drier years we have been having over the last decade, may be closer to normal at this point in time.

At each data point soil pit was excavated -18" deep. At each pit observations of the level of standing water and/or soil saturation (if any) were recorded through the monitoring period. Only the data point within Wetland A was found to contain wetland hydrology long enough to be called a wetland.

OBSERVATIONS

Existing Site Documentation.

Prior to visiting the site, a review of several natural resource inventory maps was conducted. Resources reviewed included previous studies of the site in 2005 as well as a study of the site to the north of the eastern side of the site, the City of Marysville Critical Areas map, National Wetland Inventory Map, the NRCS Soil Survey online mapping and Data, WADNR Fpars stream mapping and the WDFW Priority Habitats mapping website.

Centered Ventures Study of Parcel#31051900401600

Sewall wetland Consulting conducted a study of Parcel#31051900401600 in October of 2020. This parcel lies immediately north of the site in unincorporated Snohomish County. A single Category III wetland was identified on the eastern side of the site. The hydrology of this area was not confirmed at that time as it was conducted in the dry season.



Above: Wetland Map of Category III wetland on Parcel#31051900401600 located immediately north of the site.

The pasture wetland ended at the site at an east-west ditch which drained towards the railroad tracks to the east. Again, wetland hydrology was not confirmed for this study and areas with wetland grasses and soils were assumed to be wetland.

Snohomish County Mapping

The Snohomish County PDS mapping of the site with wetland and stream layers activated depicts a large wetland to the east of the site in the area shown on the Centered Ventures site, as well as a wetland in the center of the western pasture.



Above: Snohomish County PDS wetland and stream mapping of the area of the site.

City of Marysville Critical Areas Map

According to the City of Marysville Critical Areas Maps, there are no wetlands or streams on the site



Above: City of Marysville Stream mapping.

National Wetlands Inventory (NWI)

The NWI map depicts the same wetlands as shown on the Snohomish County PDS mapping, and in fact the County mapping is a carry-over from the NWI maps. These inventory maps were not field verified and are just an aerial photograph interpretation of the area.



scale, color infrared imagery from 1981.

Above: NWI Map of the area of the site.

Soil Survey

According to the NRCS Soil Mapper website, the majority of the site is mapped as moderately well-drained Alderwood gravelly sandy loam. The eastern side of the site is mapped as Kitsap silt loam. Neither of these soils are considered hydric or wetland soils.



Above: NRCS Soil map of the study area.

WADNR Fpars

The WADNR Fpars stream typing map for the site there are no streams on or near the site.



Above WDNR Fpars Stream Typing map.

WDFW Priority Habitats

According to the WDFW Priority Habitats mapping website, there are no priority habitats on the site. The wetlands identified on the NWI maps have been replicated on this map as wetlands are considered priority habitats.



Above: WDFW Priority Habitats Map of the site

Field observations

Uplands

The site has a high point along the east edge and from there slopes off to the east and gently to the west and south. As previously described, several single family homes are found on the site with associated outbuildings and landscaped lawn areas and gravel driveways.

The eastern and northwest corner contain forested areas with numerous trails and dirt roads throughout. Douglas fir, red alder and big leaf maple make up the sparse overstory in these areas. An informal atv type track is located along the eastern portion of the site and this area is generally disturbed.

The western side of the site contains a large pasture area which is mowed for hay and a portion is used as a large garden area for the westernmost residence. Numerous drainage tiles were noted to be in place in this pasture as outfalls are present along ditches to the west and south of the site with tile outfalls.

The pasture contains a mix of pasture species including sweet vernal grass, orchard grass, reed canary grass and bent grass. Monitoring of data points throughout this pasture revealed none of the pasture meets the criteria of a wetland although some hydric soils and facultative grass species are present.

Soil pits excavated throughout the site were very mixed and varied, with loam in the western area of the site and some dense silty loam and sandy loam and loamy sand on the eastern side of the site. Soils were generally high chroma with colors of 10YR 3/3-3/4. Some area sin the pasture contained marginal hydric soils with B-horizon colors of 2.5Y 3/2 with few fine faint redoximorphic concentrations. However, hydrology monitoring of these areas revealed they do not contain wetland hydrology and were probably drained years ago by tile placement and ditching along the site perimeter.

One area along the northwest corner of the site was determined to meet wetland hydrology criteria. In addition, the buffer of the off-site wetland from the Category III wetland to the north encroaches onto the site. Below is a description of these areas;

Wetland A

A small forested wetland was identified and delineated on the northwest corner of the site with pink flags labeled A1-A12. This area is sparsely vegetated as there are trails through this area removing much of the understory. Small cedars and quaking aspens are present as well as some speedwell and creeping buttercup in the understory.

Soil pits excavated within the wetland revealed a gravelly loam with a color of 10YR 3/2 with common, medium distinct redoximorphic concentrations. Soils were saturated near the surface in our early growing season observations of this area.

This area would be classified as PFO4C (palustrine, forested needle leaved evergreen, seasonally flooded) using the US Fish and Wildlife wetland classification method (Cowardin et al 1979).

City of Marysville Code (MMC 22E.010.060 Wetland rating and classification) states: Wetlands shall be classified as Category I, II, III, or IV using the Washington State Department of Ecology's Wetland Rating System for Western Washington, Publication No. 04-06-025, or as amended hereafter. As a result the wetland area was rated using the 2014 Wetland Rating system.

Using the 2014 WADOE Wetland Rating system and rating the wetland as a depressional wetland, this wetland scored a total of 16 points with 4 for habitat.

Off-site wetland to north

As previously described, our study of the parcel to the north identified a category III wetland. This wetland was found to end at an agricultural ditch that is oriented in an east-west direction, draining to the east. The area to the south which is eats of the site is plowed agricultural field which does not contain any vegetation, nor was any wetland hydrology observed in this area.

The off-site wetland was never confirmed for wetland hydrology so its mapping may be conservative and larger than actually meets wetland criteria. However, we have no further data on this area so it is presumed to be wetland.

Using the 2014 WADOE Wetland Rating system and rating the off-site wetland as a depressional type wetland, the wetlands scored a total of 16 points with 5 for habitat. This indicates a Category III wetland. This indicates a Category III wetland. Category III wetlands in the City of Marysville have a 75' buffer measured from the wetland edge. If you have any questions in regards to this report or need additional information, please feel free to contact me at (253) 859-0515 or at <u>esewall@sewallwc.com</u>.

Sincerely, Sewall Wetland Consulting, Inc.

Sent

Ed Sewall Senior Wetlands Ecologist PWS #212

Attached: Data Sheets Rating Form and Exhibits Site Plan and Survey

REFERENCES

Cowardin, L., V. Carter, F. Golet, and E. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service, FWS/OBS-79-31, Washington, D. C.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1. U. S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, Mississippi.

Muller-Dombois, D. and H. Ellenberg. 1974. Aims and Methods of Vegetation Ecology. John Wiley & Sons, Inc. New York, New York.

Munsell Color. 1988. Munsell Soil Color Charts. Kollmorgen Instruments Corp., Baltimore, Maryland.

National Technical Committee for Hydric Soils. 1991. Hydric Soils of the United States. USDA Misc. Publ. No. 1491.

Reed, P., Jr. 1988. National List of Plant Species that Occur in Wetlands: Northwest (Region 9). 1988. U. S. Fish and Wildlife Service, Inland Freshwater Ecology Section, St. Petersburg, Florida.

Reed, P.B. Jr. 1993. 1993 Supplement to the list of plant species that occur in wetlands: Northwest (Region 9). USFWS supplement to Biol. Rpt. 88(26.9) May 1988.

USDA NRCS & National Technical Committee for Hydric Soils, September 1995. Field Indicators of Hydric Soils in the United States - Version 2.1

City of Marysville Municipal Code

WETLAND DETERMINATION DATA PO	UKM – Western Mountains, Valleys, ar	id Coast Region
Project/Sie Genmen	_ City/County City/County	sampling Date: 3-7-19
Applicant/Owner:	State:A	Sempting Point: D
Investigator(a): Ed 3 will	Section, Township, Range: 524	TJINRDE
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none):	Slope (%):
Subregios (LRR): Lat:	Long:	Datum:
Soil Map Unit Name: <u>Aldravos</u>	NWI classif	Ication:
Are climatic / hydrologic conditions on the site typical for this time of	f year? Yas No (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrology significa	ntly disturbed? Are "Normal Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answ	ers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No	is the Sampled Area within a Wetland?	Yes No
Remarks:			

VEGETATION - Use scientific names of plants.

US Army Corps of Engineers

<u>Iree Simum</u> (Plot size:) 1	Absolute % Cover	Dominant Indicator Soscies? Status File	Dominance Test worksheet: Number of Dominant Species Tati Are OBL FACW, or FAC: (A) Total Number of Dominant Species Across All Strats: (B) Percent of Dominant Species Percent of Dominant Species Composition of Dominant Species
Saplino/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
2			Total % Cover of Multiply by:
3.			FACW species x3 =
5.			FAC species x3 =
		= Total Cover	FACU species x 4 =
1. Russian (Plot size:)	20	FAIL	UPL species x 5 = Column Totals: (A) (B)
3			Prevalence index = B/A =
4			Hydrophytic Vegetation Indicators:
5.			_ Dominance Test is >50%
6		-	Prevalence Index is ≤3.0' Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
a.	**** **********		Welland Non-Vascular Plants
10			Problematic Hydrophytic Vegetation' (Explain)
11.			Indicators of hydric soil and welland hydrology must be present, unless disturbed or problematic.
Woody Yine Stratum (Ptot size:)	<u></u>	_= Total Cover	
2			Vegetation
% Bare Ground in Herb Stratum		= Total Cover	Present? Yes No
Remarks:			۵۰٬۰۰۰ میلاد و ۱۹۹۷ کار ۱۹۹۹ کار ۱۹۹۹ کار در ۲۹۹۹ کار ۱۹۹۹ کار ۱۹۹۹ کار ۱۹۹۹ کار ۱۹۹۹ کار ۱۹۹۹ کار ۱۹۹۹ کار ۱۹

Western Mountains, Valleys, and Coast - Interim Version

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators Depth Matrix Redox Features Color (moist) Color (moist) % Type Loc Texture linche Remarks 14 10m 7/2 cru 75 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains, ²Location: PL=Pore Lining, M=Maink Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) matic Hydric Solis¹: indicators for Proble ____ 2 cm Muck (A10) Histosol (A1) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Histic Epipedon (A2) ----____ Black Histic (A3) Losmy Mucky Mineral (F1) (except MLRA 1) ____ Other (Explain in Remarks) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Hydrogen Sutlide (A4) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) ^bIndicators of hydrophytic vegetation and Thick Dark Surface (A12) Saridy Mucky Mineral (S1) Depleted Dark Surface (F7) wettand hydrology must be present. Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if present): Type: Hydric Soil Present? Yes Depth (inches): No Rameire HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except MLRA Water-Stained Leaves (89) (MLRA 1, 2, ____ Surface Water (A1) High Water Table (A2) 1, 2, 4A, and 4B) 4A, and 48) Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Weter Marks (B1) ____ Aquatic Invertebrates (B13) ___ Dry-Season Water Table (C2) Sediment Deposits (82) Hydrogen Sullide Odor (C1) Saturation Visible on Aerial Imagery (C9) ___ Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) ____ Geomorphic Position (O2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aguitard (D3) ___ Iron Deposits (B5) ___ FAC-Neutral Test (D5) Recent iron Reduction in Tilled Soils (C6) Raised Ant Mounds (D6) (LRR A) Surface Sol Crecks (86) Stunted or Stressed Plants (D1) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegatated Concave Surface (B8) Field Observations: _____Depth (inches): Surface Water Present? No Yes Yes _____ No ____ Depth (inches): Water Table Present? Saturation Present? Yes ____ No ____ Depth (inches): ____ Wetland Hydrology Present? Yes

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

Remarks:

US Army Corps of Engineers

Western Mountains, Valleys, and Coast - Interim Version

Dpt 1

	an incommunitation and interferences	
Project/Site: Grenment	City/County: Manager 1	Sempling Date: 3-7-19 Sempling Point: DPE 2
Investigator(s): Ed Saml	Section, Township, Range: 329	TJINICEE
Landform(hillslope, terrace, etc.):	Local relief (concave, convex, none):	Stope (%):
Subregios (LRR): Lat:	Long:	Datum:
Soi Map Unit Name: Aldrawas	NWI classifi	ation:
Are climate / hydrologic conditions on the site typical for this time of ye	war? YesNo (If no, explain in #	(emarks.)
Ara Vegetation, Soilt, or Hydrology significantly	disturbed? Are "Normal Circumstances"	present? Yes No

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

Are Vegetation . Soil ... or Hydrology ... naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS ~ Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soll Present? Wetland Hydrology Present?	Yes Yes Yes	No	is the Sampled Area within a Wetland?	Yes	No
Remarks					

VEGETATION - Use scientific names of plants.

Interest Stratum (Plot size:	Intel Sintum (Plot size:) 1. 2. 3. 4. Septimu/Shrub Stratum (Plot size:) 1. 2.	% Cover	Species?		Number of Dominant Species That Are OBL, FACW, or FAC: (A) Total Number of Dominant Species Across All Strate: (B) Percent of Dominant Species
1	2 2 3 4 <u>Sackina/Shrub Stratum</u> (Plot size:) 1) 2				Total Are OBL, FACW, or FAC: (A) Total Number of Dominant Species Across All Strats: (B) Percent of Dominant Species
2	2		* Total Co		Totel Number of Dominant Species Across All Strate;
3.	34		* Total Co		Species Across All Strats: (8) Percent of Dominant Species
4.	4		* Total Co		Perment of Dominant Species
Sazina/Shrub Stratum (Pict size:	Sapinu/Shrub Stratum (Pict size:) 1) 2		* Total Co		
Settemportudo Stratum (Provider size: 1.	Settemportuo Suggini (Prod Skot			ve/	That Are OBL, FACW, or FAC: (A/B)
1.	2				Received and a strange to a star
2	Z		-		Total & Course of Adultation
3.	•			*****	COURT TO COVER OF MUNICIPY DY
4.	3.				OBL species x1 *
5.	4.		*****		FACW species x2=
Headb Stratum Pict size:	5				FAC species
Textor Serieum Francesconding Yes Yes <t< td=""><td>Banda David and a firm</td><td>-</td><td>, = Total Co</td><td>181</td><td>FACU species x4=</td></t<>	Banda David and a firm	-	, = Total Co	181	FACU species x4=
1. Image: Im	A attain the transformer	50		FAG	UPL species x5 =
2	1. Mining Barrow			En	Column Totals: (A) (B)
3.	2	. 20		<u>//+(</u>	3.5
4.	3			-	Prevalence Index * B/A =
5.	4		·····	······	Hydrophytic Vegetation indicators:
	5				Dominance Test is >50%
7.	6.				Prevalence index is \$3.0'
6.	7.				Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wedland hydrology mus be present, unless disturbed or problematic. Hydrophytic Vegetation Total Cover Hydrophytic Vegetation Yes % Bare Ground in Herb Stratum Remarks:	D	• ••••••••••••			Wetland Non-Vascular Plants
10	9	* ********			Problematic Hydrophytic Vegetation ¹ (Explain)
11	10.		~~~~~		Indicators of hydric soil and welland hydrology must
Woody Yine Stratum (Plot size:) = Total Cover Hydrophytic 1.	11.	-			be present, unless disturbed or problematic.
Troat Use System	Manda Mine Deathrow (Diatains)	,	= Total Cov	91	
1.	WODDY VIDE SITATUTE (PROVAIZE				
Z Present? Yee No % Bare Ground in Herb Stretum # Totel Cover Remarks:	1.				Hydrophytic Vanetation
% Bere Ground in Herb Stratum * Totel Cover	2				Present? Yes No
76 Dere Ground in mero Stellum	W Dave Consund in Mark Obratism		= Total Cov	er	1
	76 Dere sround in Hero Stretum				
	rugs (sep ma.				

US Army Corps of Engineers

Western Mountains, Valleys, and Coast -- Interim Version

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators. Depth Matrix Redox Features Color (moist) % Type Loc' Texture Color (moist) 4 Remark Onci 104 534 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Solls³ ____ Sandy Redox (S5) ____ 2 om Muck (A10) Histosol (A1) ____ Stripped Matrix (S6) ___ Red Parent Material (TF2) Histic Epipedon (A2) Loamy Mucky Mineral (F1) (axcept MLRA 1) ____ Other (Explain in Remarks) Black Histic (A3) Hydrogen Sulficie (A4) Losmy Gleyed Matrix (F2) Depleted Matrix (F3) Depleted Below Dark Surface (A11) _____ Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and ---wetland hydrology must be present. Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sendy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if present): Type: Hydric Soil Present? Yes Depth (inches): No Remarks: 10 interests HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one recuired; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except MLRA Water-Stained Leaves (B9) (MLRA 1, 2, ____ Surface Water (A1) High Water Table (A2) 1, 2, 4A, and 4B) 4A, and 4B) Drainage Patterns (B10) Salt Crust (B11) ____ Saturation (A3) Dry-Season Water Table (C2) Water Marks (B1) Aquatic Invertebrates (B13) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (82) Hydrogen Sullide Odor (C1) Oxidized Rhizospheres along Living Roots (C3) ____ Geomorphic Position (D2) ___ Drift Deposite (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) ____ Shallow Aquitard (D3) FAC-Neutral Test (D5) Recent Iron Reduction in Tilled Solis (C6) Iron Deposits (85) . _ Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagary (87) Other (Explain in Remarks) Sparsely Vegetated Conceve Surface (88) Field Observationa: Surface Water Present? Moth (inches) Water Table Present? Depth (inches): Yes No Saturation Present? Yes_ No ____ Depth (inchas): Wetland Hydrology Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if evaluable Remarks

US Army Corps of Engineers

SOIL

Z

Western Mountains, Valleys, and Coast -- Interim Version

Sampling Point: DP72

WETLAND	DETERMINATION DATA	FORM - V	Vestern I	Mountains,	Valleys,	and Coast Reg	ion

TELEVIL DETERMINATION DATA FOR	un - Areanauti incritiania, Aaneka, int	o obast usõinu
Project/Site: <u>Grewmun</u>	City/County: Mangal Ma	Sampling Date: <u>3-7-19</u> Sempling Point: <u>DP#</u> 3
Investigator(s): Ed Sand	Section, Township, Range: 329	TJINREE
Landform (hillstope, terrace, etc.):	Local relief (concave, convex, none):	Stope (%):
Subregios (LRR): Lat:	Long:	Datum:
Soil Map Unit Name: <u>Aldraveed</u>	NWI classif	cetion:
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes No (If no, explain in I	Remarks.)
Are Vegetation Soit, or Hydrology significant	y disturbed? Are "Normal Circumstances"	present? Yes No
Are Vegetation, Soit, or Hydrology naturally p	roblematic? (If needed, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showin	g sampling point locations, transect	s, Important features, etc.

the second s	Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes	No No	is the Sampled Area within a Wetland?	Yes	No
The second se	Remarks:					

VEGETATION - Use scientific names of plants.

US Army Corps of Engineers

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Piot size:) 1.	% Cover	Species?	Status	Number of Dorrinant Species (A)
2.				Totel Number of Dominant
3.		****		Species Across All Strate: (B)
4	••••••••••••	* Total Co	ver	Percent of Dominant Species (A/B)
1.				Prevalence index worksheet:
2				Total % Cover of: Multiply by:
3.			- Andrewik and any one of the second	OBL species x1 =
4.				FACW species x2 =
5.	allinda alanan pilanan alalah di	A		FAC species x3=
······································		= Total Co	And Article Contraction	FACU species x 4 =
Herb Stretum (Plot size:			Exal	UPL species x5 =
1 Antreach	$-\frac{uv}{2w}$	·····	FAL	Column Totals: (A) (B)
3. Finan and	- 20	******	FA-	Prevalence index = B/A =
4				Hydrophytic Vegetation Indicators:
5.				Dominance Test is >50%
6				Prevalence index is \$3.01
7				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8				Wetland Non-Vascular Plants
9				Problematic Hydrophytic Vegetation' (Explain)
11,				¹ Indicators of hydric soil and wetland hydrology must
Manual Minus Phanetone (Phanta-Inne)		* Total Co	AGIT .	De preserv, uness distuited of provisioner.
TIMANT THE OWNERS (PRA SET				
····				Vagetation
		= Total Con	 /01	Present? Yes No
% Bare Ground in Herb Stratum				[
NOTBOTIS;				

Western Mountains, Valleys, and Coast - Interim Version

hente seecopeo.	Lindsing	Daday Statute		
inches) Co	alor (moist) %	Color (moist) % Type Los	Textur	e Remarké
10 1	DYX 3/3		10	in
76 37	SUN ZILI			3
<u> </u>	1-21-1			
		-		
Type: C=Concent	tration, D=Depletion, RI	H=Reduced Matrix. CS=Covered or Coeted Ser	nd Grains.	Location: PL=Pore Lining, M=Matrix.
lydric Soil Indica	tors: (Applicable to a	i LRRs, unless otherwise noted.)	1/1/D	cators for Problematic Hydric Sols :
Histosol (A1)		Sandy Redox (S5)		2 cm Muck (A10)
Histic Epipedo	n (A2)	Shipped Mainx (36)		Ned Parent Material (172)
BRECK PHISEC (A	ia) Ide (AA)	LOBINY MUCKY MITHIEL (* 1/ UNCOPE MILT	in ()	Order (Copenie in Reinerke)
Denisted Reice	w Dark Surface (A11)	Depleted Matrix (F3)		
Thick Dark Su	rface (A12)	Redox Dark Surface (F6)	² indi	icators of hydrophytic vegetation and
Sandy Mucky	Mineral (S1)	Depleted Dark Surface (F7)		vetland hydrology must be present,
Sandy Glaved	Matrix (S4)	Redox Depressions (F8)	U	nless disturbed or problematic.
Restrictive Layer	(if present):			
Type:	(If present):	،		_
Type: Depth (inches): Remarks:	(If present):		Hydric	8oil Present? Yes No
testrictive Layer Type: Depth (inches): temarks:	(if present):	- No indice	Hydric	Boil Present? Yes No
Vestrictive Layer Type: Depth (inches): Remarks: YDROLOGY	(if present):	No indice	Hydric	Soli Present? Yes No
Cestrictive Layer Type: Depth (inches): temerks: YDROLOGY Vetland Hydrolog	(if present):	- No india	Hydric	Soli Presant? Yes No
testrictive Layer Type: Depth (inches): temerks: YDROLOGY Vetlend Hydrolog rimery Indicatora	(if present): y indicators: (minimum of one requir	MO indice	Hydric //8	Boil Present? Yes <u>No</u>
Cestricitive Layer Type: Depth (inches): Remarks: YDROLOGY Wetlend Hydrolog Primery Indicators Surface Water	(if present): yy Indicators: (minmum of one requir (A1)	ed: check all (hal exply) 	Hydric ///	Boil Present? Yes <u>No</u> <u>sconderv indicators (2 or more regulated)</u> Water-Stained Leaves (59) (MLRA 1, 2,
teatricitive Layer Type: Depth (inchee): Remerks: YDROLOGY Wetlend Hydrolog Primary Indicatora Surface Water High Water Ta	(if present): py Indicators: (minimum of one requir (A1) ble (A2)	ed: check all (hal spoply) 	Hydric ///	Soil Present? Yes No econdery indicators (2 or more resulted) Water-Stained Leaves (39) (MLRA 1, 2, 4A, and 4B)
Type: Type: Depth (inchee): Termerka: YDROLOGY Netlend Hydrolog rimmy indicatora Surface Water High Water Ta Saluration (A3	(if present): y indicators: (minimum of one read (A1) bite (A2))	ed: check all (hal epply) 	Hydric Mydric Mydric	Boli Presant? Yes No accondary indicators (2 or more resulted) Water-Stained Leaves (80) (MLRA 1, 2, 4A, and 48)
teatricitive Layer Type: Depth (inchee): Remarks: YDROLOGY Vetland Hydrolog rrimary indicators. Subration (A3 Saburation (A3 Water Marks (i	(if present): ay indicators: minimum of one recall (A1) ble (A2)) B1)		Hydric Mydric Myra S NURA	Boil Present? Yes No econdery Indicators (2 or more resulted) Water-Stained Leaves (80) (MLRA 1, 2, 4A, and 48) Drainage Patterns (810) Dry-Sesson Water Table (C2)
testrictive Layer Type: Depth (inches): Termarks: YDROLOGY Wetland Hydrolog rrimary indicators. Surface Water High Water Ta Saturation (A3 Saturation (A3 Saturation A3 Saturation A3	(if present): py Indicators: (minmum of one result (A1) ble (A2))) B1) osits (B2)	sd: check all that exply) 	Hydric	Boil Present? Yes <u>No</u> econdery indicators (2 or more required) Water-Stained Leaves (59) (MLRA 1, 2, 4A, and 45) Drainage Patterns (610) Dry-Seeson Water Table (C2) Saturation Visible on Aerial Imagery (C9
testrictive Layer Type: Depth (inches): termerks: YDROLOGY Vetlend Hydrolog Primary Indicatora Surface Water High Water Ta Saturation (A3 Water Marks (I Setiment Dep Drift Deposite	(if present): py Indicators: (minimum of one requir (A1) ble (A2)) B1) osits (B2) (B3)	ed: check all (hal spply) 	Hydric	Soil Present? Yes No econdery indicators (2 or more resulted) Water-Stained Leaves (39) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (510) Dry-Seson Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (02) Staturation (03)
testrictive Layer Type: Depth (inches): Temarks: YDROLOGY Vetlend Hydrolog Ymary Indicators Surface Water High Water Ta Saturation (A3 Weter Marks (i Sediment Dep Drift Deposite i Drift Deposite i Algal Met or C	(if present): y indicators: (minumum of one recult (A1) (A1) (A1) (B1) (B3) (B3) (B3) (C4) (C4) (C4) (C4) (C4)		Hydric	Boil Present? Yes No econdeny indicators (2 or more resulted) Water-Stained Leaves (39) (MLRA 1, 2, 4A, and 4B) Dreinage Patterns (B10) Dry-Season Water Table (C2) Seturation Visiter on Aerial Imagery (C9 Geomorphic Position (C0) Shallow Aquitart (C0) EAC Market Table (C0)
Seathctilve Layer Type: Depth (inches): Remarks: YDROLOGY Wetland Hydrolog Trimery Indicatora Surface Water High Water Tak Seturation (As Seturation (As Seturation (As Seturation (As) Drift Deposite (Agal Mat or CL Iron Deposite (Seturation (As)	(if present): py indicators: (A1) bits (A2) b) B1) osits (B2) (B3) outs (B4) (B5)	ed: check all (hal soply) 	Hydric	Boil Present? Yes No econdary Indicators (2 or more resulted) Water-Stained Leaves (80) (MLRA 1, 2, 4A, and 48) Drainage Patterns (810) Dry-Sesson Water Table (C2) Seturation Visible on Aarial Imagery (C9 Geomophic Position (02) Shallow Aquitard (03) FAC-Neutral Test (D6) Baised An Memore (D6) (8 P A)
Seathcitive Layer Type: Depth (inches): Remerks: YDROLOGY Wetland Hydrolog Primary Indicatora. Surface Water High Water Ta Saturation (A3 Seatiment Dep Drift Deposite (Atgal Met or C Layer Seator C	(if present): py Indicators: (minimum of one retail (A1) ble (A2)) B1) osits (B2) (B3) mat (B4) (B5) rects (B6)	ed: check all that explv) 	Hydric	Soil Present? Yes <u>No</u> econdery indicators (2 or more required) Water-Stained Leaves (59) (MLRA 1, 2, 4A, and 45) Drainage Patterns (610) Dry-Seson Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (C2) Shalow Aquitart (C3) FAC-Neutral Test (D5) Reliaed Ant Mounds (D5) (LRR A) Empt Heave Hormonics (D2)
Sestinctive Layer Type: Depth (inches): Remerks: YDROLOGY Wetlend Hydrolog Primary Indicatora Surface Water High Water Ta Suface Water High Water Ta Suface Water Gastinest Dep Drift Deposite (Segiment Deposite (Surface Soil C Iron Deposite (Surface Soil C Indication Vison	(if present): ay indicators: (minimum of one requir (A1) ble (A2)) B1) osits (B2) (B3) nut (B4) (B5) racks (B6) able on Aerial Imagery (ed: check all (hal spply) Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Satt Crust (B11) Aquetic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oddized Rhizosphares along Living Presence of Reduced Iron (C4) Recent Iron Raduction in Tifled Sol Stunted or Stressed Plants (D1) (L5 57) Other (Explain in Remarks) real	Hydric	Boil Present? Yes No scondary indicators (2 or more required) Water-Stained Leeves (39) (MLRA 1, 2, 4A, and 4B) Dreinage Patterns (B10) Dry-Seeson Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (02) Shallow Aquitard (03) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Restrictive Layer Type: Depth (Inches): Remarks: PDROLOGY Netland Hydrolog Primary Indicators Surface Water Surface Water High Water Ta Seturation (A3 Water Marks (I Sectiment Depo Drift Deposite (Algal Met or C tron Deposite (Surface Soi C funndation Vis Sparsely Vege	(if present): ay indicators: minimum of one recall (A1) ble (A2) b) B1) osits (B2) (B3) rust (B4) (B5) recks (B6) ble on Aerial Imagery (tated Conceve Surface	A M	Hydric	Boil Present? Yes No econdery indicators (2 or more required) Water-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (810) Dry-Seeson Water Table (C2) Saturation Visible on Aarial Imagery (C9 Geomorphic Position (02) Shallow Aquitard (03) FAC-Neutral Test (D5) Raised An Nounds (D6) (LRR A) Frost-Heave Hummocks (D7)
testrictive Layer Type: Depth (inches): Remerks: YDROLOGY Netland Hydrolog Primary indicators. Surface Water High Water Ta Saturation (X3 Saturation (X3 Saturation (X3 Drift Deposite (Saturation Vis Drift Deposite (Saturation Vis Sparesly Vega Field Observation	(if present): py indicators: (minmum of one requir (A1) bite (A2) b) B1) osits (B2) (B3) cust (B4) (B5) recks (B6) bite on Aerial Imagery (tated Concave Surface B: 	d: check all (hat soply)	Hydric 	Boil Present? Yes No acondery Indicators (2 or more resulted) Water-Stated Leaves (B0) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (610) Dry-Seeson Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitart (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D5) (LRR A) Frost-Heave Hummocks (D7)
Restrictive Layer Type: Depth (inches): Remerks: PDROLOGY Notiend Hydrolog Primary indicatora. Surface Water Ta Suburation (A3 Sectiment Dep Drift Deposite (Sectiment Deposite (Sec	(if present): py indicators: (minimum of one retault (A1) ble (A2)) B1) osits (B2) (B3) mat (B4) (B5) rects (B6) ible on Aerial Imagery (tated Concave Surface is: sent? Yes	di check all that sophy di check all that sophy water-Stained Leaves (B9) (ascept 1, 2, 4A, and 48) Sait Crust (B11) Aquesic Inventebrates (B13) Hydrogen Suffide Odor (C1) Orddzed Rhizosphares along Living Presence of Reduction in Tiffed Sod Started or Stinssed Pients (D1) (L5 T) Other (Explain in Remerks) (B8) No Cutoth (inches):	Hydric 	Boil Present? Yes No secondery Indicators (2 or more required) Water-Stained Leaves (59) (MLRA 1, 2, 4A, and 48) Drainage Patterns (810) Dry-Seeson Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (02) Shallow Application (03) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Sestinctive Layer Type: Depth (inches): Remerks: YDROLOGY Wetlend Hydrolog Primary Indicatora Surface Water High Water Ta Suface Water Arga Met or C Surface Soil C Inundation Vis Surface Water Pre- Surface Pre- Pre- Surface Pre- Pre- Pre- Pre- Pre-	(if present): ay indicators: (minimum of one recuit (A1) ble (A2)) B1) osits (B2) (B3) mat (B4) (B5) recks (B6) ble on Aerial Imagery (tated Concave Surface is: sent? Yes		Hydric	Boil Present? Yes No econderv Indicators (2 or more required) Water-Stained Leeves (39) (MLRA 1, 2, 4A, and 4B) Dreinage Patterns (B10) Dry-Seson Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (02) Shallow Aquitard (03) FAC-Neutral Test (D5) Reised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

Remarks:

Nondicits

US Army Corps of Engineers

Western Mountains, Valleys, and Cosst - Interim Version

シロサフ

Ojecusie:	1 - 14 m		city/county:	Sampling Date:
oplicant/Owner:				State: Sempling Point: P au
vestigator(s):	David		Section, Township, Ra	nge: 329 131 NICBE
ndform(hillslope, terrace, etc.):			Local relief (concave.	convex, none): Slope (%):
bregios (LRR):		Lat:		Long: Datum:
Map Unit Name:4	Varwee	\$		NWI classification:
e climate / hydrologic conditions	on the site typical for	this time of yes	NO Yes No	(If no, explain in Remarks.)
a Vecetation . Soil	or Hydrology	significantly	diaturbed? Are	"Normal Circumstances" present? Yes No
a Vegetation Soil	or Hydrology	naturally on	blematic? (If ne	anded explain any suswers in Remarks.)
UMMART UP FINDINGS	- Adach she ma	th supering	sampling point i	ocations, transects, important reatures, etc.
Hydrophytic Vegetation Present?	Yes	No		A
lydric Soil Present?	Yes	No	within a Watter	nd2 Yes No
Wetland Hydrology Present?	Yes	No		
Remerks:				

EGETATION - Use scien	titic names of pla	ants.		
Tree Siratum (Plot size	,	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
			SPREAK SPREAK	That Are OBL FACW, or FAC:
l,				Species Across All Strats: (8)
k				2.1
			= Total Cover	That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size	#:)			
I				Total & Count of Multiple but
۲				
,				FACW energies x2 =
··				FAC species x3 =
******			= Total Cover	FACU species x 4 =
terb Stratum (Pipt size:	·····		15AU	UPL species x5=
Antrux at	he cout	<u> </u>		Column Totals: (A) (B)
Fecturen		_ <u>3 ~</u>	FA(
Agrin-		_33_	EAL	Prevalence Index = B/A =
	المتكليف الوجوع والمتركب والمستحد والمحمو والمحمول والمحمول والمحمول والمحمول والمحمول والمحمول والمحمول والمح			Hydrophytic Vegetation Indicators:
				Dominance Test is >50%
š				Frevenence index is S.U
*****				data in Remarks or on a separate sheet)
¹				Wetland Non-Vascular Plants
, 				Problematic Hydrophytic Vegetation ¹ (Explain)
1				Indicators of hydric soil and webland hydrology must
			* Total Cover	De present, unless disturbed of problemetic.
Moody Vine Stratum (Plot size:)			
I				Hydrophytic
•	****			Present? Yes No
· · · · · · · · · · · · · · · · · · ·		***	* Total Cover	

US Army Corps of Engineers

Western Mountains, Valleys, and Coast - Interim Version

a u	to the gebru is	anner to coordinate the moncator, of Co		nus ur Blügggurðij
Depth Matrix		Redox Features	Tertra	e Bamarka
S (1) h = /	·	and the second s		***** ********************************
0 /0423/	2			
14 104131	4			
Turne Orthographing OnDen	Jakas OM-Res	hand Blatch CSaCanand a Cantad So	and Graine	A application Displayed Links Methodski
Type: C=Condemination, D=Dep	shis to at 1 RS	a unless otherwise noted)	indi	cators for Problematic Hydric Solis ² :
ingenie son manaeura. (Appilo Mintenal (11)	WARDER DIE GER GERANT	Sandy Dadoy (S6)	117421	2 cm thick (A10)
Filetic Eningdon (A?)		Conny Route (CO) Stringer Matrix (SR)		Red Parant Matariai (TF2)
Risck Histic (A2)	-	i nemu klucku klineni (FS) /svoeni Mi K		Other (Explain in Remarks)
Hudennen Sullide (AA)		Loamy Gleved Matrix (F2)		Arrest freedoms is considered
Deniatori Bolow Dark Surfac		Denietori Matrix (F3)		
Thick Dark Surface (A12)		Redox Dark Surface (F6)	alud	icators of hydrophytic vagetation and
Sandy Mucky Mineral (S1)		Depleted Dark Surface (F7)		vetland hydrology must be present.
Sandy Gleyed Matrix (S4)		Redox Depressions (F8)	L.	niess disturbed or problematic
Restrictive Layer (if present):			1	an an an an air an
Type:				
Denth (inches)			Hydric	Soll Present? Yes No
Remarks				
		NO NO	lice	hy
YDROLOGY		NO NO	lice	hy
YDROLOGY Wetland Hydrology Indicators:		NO NO	11000	hy
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (micrators of s	ane required: ch	eck all that spoty)	s	econdery Indicators (2 or more required)
YDROLOGY Wetland Hydrology Indicators: Primery Indicators (minumum of a Surface Water (A1)	: She required: ch	eck all that spoly) Water-Stained Leaves (B9) (excep	AMLRA S	econdery indicators (2 or more resulted) Water-Stained Leaves (B9) (MLRA 1, 2,
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minumum of s Surface Water (A1) High Water Table (A2)	ane required; ch	eck all that spoly) 	Alicano S	econdery indicators (2 or more resulted) Water-Stained Leaves (89) (MLRA 1, 2, 4A, and 45)
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (micinaum of a Sufface Water (A1) High Water Table (A2) Saturation (A3)	i ine required: ch	eck all that scolv) — Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) — Salt Crust (B11)		econdary Indicatora (2 or more resulted) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Dreinage Patterns (B10)
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Seturation (A3) Weter Marks (B1)	ine required; ch	eck all that apply) — Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) — Salt Crust (B11) — Aquatic Invertebrates (B13)		econdery Indicators (2 or more resulted) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Seeson Water Table (C2)
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minumum of a Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Satiment Deposits (B2)	ane required: ch	Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) Sat Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)		econdary Indicatora (2 or more resulted) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Seeson Water Table (C2) Saturation Visible on Aerial Imaginy (C6
YDROLOGY Wetfand Hydrology Indicators: Primacy Indicators (mitomum of a Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B2)	: : : : : : : : : : : : : : : : : : :	Constant States (States) Constant (g Roots (C3)	econdary Indicatora (2 or more resulted) , Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Dreinage Patterns (B10) Dry-Seeson Water Table (C2) Saturation Visible on Aerial Imagery (CS Geomorphic Position (O2)
YDROLOGY Wetland Hydrology Indicators: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposite (B3) Agai Mar or Crust (B4)	.ne required. ch	Construction of the second secon	g Roots (C3)	econdary Indicatora (2 or more resulted) Weter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Seeson Weter Table (C2) Saturation Visible on Aerial Imagery (C3 Geomorphic Position (D2) Shatlow Aquitard (D3)
YDROLOGY Wetland Hydrology Indicators: Primary Indicators: fmitumum of g Surface Water (A1) High Water Table (A2) Saturation (A3) Water Mariss (B1) Setiment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)		Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sol	g Roots (C3)	econdary Indicatora (2 or more resulted) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Dreinage Patterns (B10) Dry-Seeson Weter Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (02) Shatlow Aquitart (03) FAC-Neutral Test (D5)
YDROLOGY Wetland Hydrology Indicators: Primery Indicators (minimum of e Surface Water (A1) High Water Table (A2) Seturation (A3) Water Marks (B1) Seturation Deposits (B2) Drift Deposite (B3) Agai Mat or Crust (B4) Iron Deposite (B5) Surface Soi Cracks (B6)	some required: ch	Constant of the sector of	g Roots (C3)	econdery Indicators (2 or more resulted)
YDROLOGY Wetland Hydrology Indicators: Fitmary Indicators (miturnum of g Surface Water (A1) High Water Table (A2) Seturation (A3) Weter Marks (B1) Setiment Deposite (B3) Drift Deposite (B3) Agai Mat or Crust (B4) Iron Deposite (B5) Surface Soi Cracks (B6) Inundation Visible on Aerial I	imagery (87)	Constant of the second se	g Roots (C3)	econdary Indicatora (2 or more resulted)
YDROLOGY Wetland Hydrology Indicators: Primary Indicators: (miturnum of g Surface Water (A1) High Water Table (A2) Seturation (A3) Weter Marks (B1) Setiment Deposits (B2) Drift Deposite (B3) Agai Met or Crust (B4) Iron Deposite (B5) Surface Soi Cracks (B6) Inundation Visible on Aerial Sparsely Vegetated Concaw	insgery (67) e Surface (88)	www.mission.com www.mission.com water-Stained Leaves (B9) (exception.com 1, 2, 4A, and 4B) Satt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulide Odor (C1) Oxidized Rhizospheres slong Livin, Presence of Reduced Iron (C4) Recent Iron Reduction In Titled Sol Stunted or Stressed Plants (D1) (L1) Other (Explain In Remarks)	g Roots (C3)	econdary Indicators (2 or more resulted) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Dreinage Patterns (B10) Dry-Seeson Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Pessition (D2) Shallow Aquitart (D3) FAC-Neutral Test (D5) Raited Ant Mounds (D6) (LRR A) Frost-Heave Hummocka (D7)
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minumum of a Surface Water (A1) High Water Table (A2) Satiment Deposits (B2) Drift Deposits (B3) Agal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial I Sparsely Vegetated Concaw Field Observentions:	imagery (87) e Surface (88)	Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Sat Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction In Tilled Son Stunted or Stressed Plants (D1) (L1 Other (Explem in Remarks)	g Roots (C3) is (C8)	econdery Indicators (2 or more resulted) Water-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B) Drainage Paterns (810) Dry-Seeson Water Table (C2) Saturation Visible on Aerial Imagery (C2 Geomorphic Position (02) Statiow Aquiter (03) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocka (D7)
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of a Surface Water (An) — of High Water Table (A2) Seturet Deposits (B1) Seturet Deposits (B2) Drift Deposite (B3) Algal Mat or Crust (B4) Iron Deposite (B5) Surface Soi Cracks (B6) Inundation Visible on Aerial I Sparsely Vegetated Concaw Field Observations?	inagery (57) e Surface (58) /es No	Constant of the second se	g Roots (C3) is (C6)	econdary Indicatora (2 or more resulted) , Weter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Seeson Water Table (C2) Seturation Visible on Aerial Imagery (CS Geomophic Position (O2) Shallow Aquitard (O3) FAC-Neutral Test (O5) Raited Ant Mounds (D6) (LRR A) Frost-Heave Hummocka (D7)
IYDROLOGY Wetland Hydrology Indicators: Primaru Indicators: (mitumum of g Surface Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposite (B3) Agai Mar or Crust (B4) Iron Deposite (B5) Surface Soi Cracks (B6) Inundation Visible on Aerial Sparsely Vegetated Concew Field Observations: Surface Water Present? Y	Imagery (B7) e Surface (B8) (es No No	M. M. M. M. Mater-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) Sal Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L1 Other (Explain in Remarks) Depth (inches): Depth (inches):	g Roots (C3)	econdary Indicators (2 or more resulted) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Dreinage Patterns (B10) Dry-Seeson Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Rated Ant Mounds (D6) (LRR A) Frost-Heave Hummocka (D7)
YDROLOGY Wetland Hydrology Indicators: Primary Indicators: (minimum of g Surface Water (A1) High Water Table (A2) Satimation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) (no Deposits (B5) Surface Soil Cracks (B6) inundation Visible on Aerial I Spanely Vegetated Conceve Field Observations: Surface Water Present? Yetter Table Present?	imagery (87) e Surface (88) /es No _ ces No _	A A	g Roots (C3)	econdery Indicators (2 or more resulted) Water-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (810) Dry-Seeson Wester Table (C2) Saturation Visible on Aerial Imagery (C2 Geomorphic Possion (02) Shaftow Aquitard (03) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of g Surface Water (A1) High Water Table (A2) Setiment Deposits (B2) Drift Deposits (B3) Agai Mat or Crust (B4) Iron Deposits (B5) Surface Soi Cracks (B6) Inundation Visible on Aeriel I Sparsely Vegetated Concew Field Observations: Surface Water Present? Yesturable Present? Yesturable Present? Yesturable Present? Yesturable Present?	imagery (87) e Surface (88) (es No (es No (es No	Constant of the second se	g Roots (C3)	econdery Indicators (2 or more resulted) Weter-Stained Leaves (59) (MLRA 1, 2, 4A, and 4B) Drainage Paterns (510) Dry-Sesson Water Table (C2) Seturation Visible on Aerial Imagery (C5) Geomorphic Position (D2) Statisticw Aquitard (D3) FAC-Neutral Test (D5) Rateed Ant Mounds (D5) (LRR A) Frost-Heave Hummocks (D7) Stogy Present? Yes No
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minumum of g Surface Water (A1) High Water Table (A2) Setiment Deposits (B2) Drift Deposits (B3) Agal Mat or Crust (B4) (ron Deposits (B5) Surface Soi Cracks (B6) Inundation Visible on Aeriel I Sparsely Vegetated Concew Field Observations: Surface Water Present? Yestur Table Present? Yestur Table Present? Yestur Table Present?	Imagery (87) e Surface (88) (es No _ (es No _ (es No _ 1 gauge, monitor	Constant of the second se	g Roots (C3)	
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minumum 0) Surface Water (A1) High Water Table (A2) Satiment Deposits (B2) Drift Deposits (B3) Agal Mat or Crust (B4) (non Deposits (B5) Surface Soil Cracks (B6) Inundation Visable on Aerial I Sparsely Vegetated Concaw Field Observations: Surface Water Present? Y Water Table Present? Y Saturation Present? Y Saturation Present? Y Saturation Present? Y Saturation Present?	imagery (87) e Surface (88) /es No /es No /es No /es No	Constant of the second se	g Roots (C3)	were stand of the second
IVDROLOGY Wetland Hydrology Indicators: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Maria (B1) Sediment Deposits (B2) Drift Deposite (B3) Agal Met or Crust (B4) Iron Deposits (B5) Surface Soil Creats (B6) Inunctation Visible on Aerial Surface Water Present? Yester Table Present? Yester Table Present? Yester Context (B6) Includes capillary fringe) Describe Recorded Data (stream Remarks:	Imagery (67) e Surfece (68) (es No _ (es No _ (es No _	Constraints of the second	g Roots (C3) g Roots (C3) is (C6) Wetland Hydro ons), if available	econdery Indicatora (2 or more resulted) Weter-Stained Leaves (59) (MLRA 1, 2, 4A, and 45) Drainage Patterns (510) Dry-Seeson Water Table (C2) Saturation Visitie on Anarial Imagery (C6) Geomorphic Position (02) Shatlow Aquitard (03) FAC-Neutral Test (D5) Rateed Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) Nogy Present? Yes No

US Army Corps of Engineers

Western Mountains, Valleys, and Coast -- Interim Version

VICUSIE OCMMIL	Ci	ty/County	Sampling Date: 3-7-1
picantOwner			State: WA Sempling Point: DAt
restinguings): Ed 5 am	11 54	rtion Township Ru	JZG T31 NICEE
uniform /billionen terrene ate)		ncel relief (concern	onnier none): Gione (%)
brania / DDt		orde same fronscarae.	
	Lat		
	Elec.		www.dassincerion.
e climatic / hydrologic conditions on the site typic	at for this time of year	7 Y85 No	(If no, explain in Remarks.)
ra Vegetation, Scilt, or Hydrology _	significantly de	sturbed? Are	"Normal Circumstances" present? Yes No
re Vegetation, Sola, or Hydrology _	naturally proble	ematic? (if ne	seded, explain any answers in Remarks.)
UMMARY OF FINDINGS - Attach site	map showing s	ampling point I	ocations, transects, important features, etc.
Hudrophytic Vacetation Present? Yes	NO		
Hvdric Soil Present? Yes	No	is the Sampled	Area
Wetland Hydrology Present? Yes	N0	within a Wetla	nd? Yes No
Remarks:			
EGETATION - Use scientific names of	of plants.		
free Simhon (Pinterre)	Absolute D	Consinant Indicator	Dominance Test worksheet:
	_ALMA234. 3		That Are OBL, FACW, or FAC: (A)
2.			7
3.			Species Across All Strata: (8)
£			Rement of Dominant) Species
And the second		Total Cover	That Are OBL, FACW, or FAC: (A/B)
SabandyShrub Stratum (Piot size:	_)		Prevalence Index worksheet:
2			Total % Cover of: Multiply by:
3.			OBL species x1=
			FACW species x2 =
5			FAC species 5 - x3= 150
	*	Total Cover	FACU species x4= 200
Herb Stretum (Plot size)	50	FAC	UPL species x 5 =
Hatter attin est	7 50	FAL	Column Tatels: (A) (B)
3			Prevalence index = 8/A =
4.			Hydrophytic Vegetation Indicators:
5			Dominance Test is >50%
3			Prevalence Index is \$3.01
7			Morphological Adaptations' (Provide supporting
3			Welland Mon-Vaenitar Plants
B.			Problematic Hydrophytic Vegetation' (Explain)
10			¹ Indicators of hydric soil and wetland hydrology must
11		Tatal Cause	be present, unless disturbed or problematic.
Woody Vine Stratum (Ptot size:)	*	LOIDI COVEL	
			Hydrophytic
I			Vegetation
1 2			(Figeuin) 100
1 2	*	Total Cover	
	*	Total Cover	

DP#5 Sampling Point: SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators Depth Matrix Redox Feetures Color (moist) % Type Loc Texture Color (moist) 4 Remarks Unches 10yn 3/3 13 FFF 541 5/3 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. *Location: PL=Pore Lining, M=Matrix Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Prob atic Hydric Soils ____ Sandy Redox (S5) ____ 2 cm Muck (A10) Histosol (A1) ____ Stripped Matrix (S6) Red Parent Material (TF2) ____ Histic Epipedon (A2) ___ Loamy Mucky Mineral (F1) (except MLRA 1) ____ Other (Explain in Remarks) Black Histic (A3) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depieted Below Dark Surface (A11) Depleted Matrix (F3) Redox Dark Surface (F6) ^aIndicators of hydrophytic vagetation and Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): Hydric Boll Present? Yes No Remarks: No plicity HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (2 or more required) Primary Indicators (minimum of one required: check all that apply) ____ Water-Stained Leaves (B9) (except MLRA Water-Stained Leaves (89) (MLRA 1, 2, Surface Water (A1) 1, 2, 4A, and 4B) 4A, and 4B) Drainage Patterns (B10) ____ Saturation (A3) Salt Crust (B11) Dry-Season Water Table (C2) ____ Water Marks (B1) Aquatic Invertebrates (B13) Sediment Deposits (82) Hydrogen Sulfice Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizoepheres along Living Roots (C3) ____ Geomorphic Position (D2) ___ Drift Deposite (B3) ____ Shallow Aquitard (D3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) ___ FAC-Neutral Test (D5) Recent Iron Reduction in Tilled Soils (C6) ____ Iron Deposits (B5) Raised Ant Mounds (D6) (LRR A) Surface Soil Crecks (96) Stunted or Stressed Plants (D1) (LRR A) Inundation Visible on Aerial Imagery (67) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (88) Field Observations: Surface Water Present? Depth (inches): Water Table Present? Depth (Inches): Yes Saturation Present? Yes ___ No ____ Depth (inches): Wetland Hydrology Present? Yes (includes capitary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks No intrat

US Army Corps of Engineers

Western Mountains, Valleys, and Coast - Interim Version

WETLAND DETERMINATION DATA FOR	(M – Western Mountains, Valleys, an	d Coast Region
Project/Sie: Cremmen	City/County Mangelle	Sampling Date: 3-7-19
Applicant/Owner:	State:	Sempling Point:
Investigator(s): Ed Scull	Section, Township, Range: 529	TJINICE
Landform (hillsiope, terrace, etc.):	Local relief (concave, convex, none):	Siope (%):
Subregios (LRR): Lat:	Long:	Datum:
Sol Map Unit Name: <u>Aldrawead</u>	NWI classifi	cetion:
Are climatic / hydrologic conditions on the site typical for this time of y	ear? YesNo (If no, explain in i	Remarks.)
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If needed, explain any answ	ers in Remarks.)
DUBRIADS OF PRIDINGS Attack alternation		. In a start for the start of a

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No	is the Sampled Area within a Wetland?	Yes	No
Remarks.					

VEGETATION - Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test works	100C:
Tree Stratum (Plot size:)	% Cover	Species?	Statue	Number of Dominant Spe	cies 7
1				That Are OBL, FACW, or	FAC: (A)
2.				Total Mumber of Domina	
3				Species Across All Strate	(B)
4.					
		= Total Con	et i	Percent of Dominant Spe	Cies (+D IARA)
Sapling/Shrub Stratum (Ptot size:)				machie Obc, Phore, or	(NO
1				Prevalence Index works	iteet:
2				Total % Cover of	Multiply by:
3.				OBL species	x1≖
4.				FACW species	x2=
5.				FAC species	x3=
		a Total Cos		FACU species	x4 ×
Herb Stratum (Plot siza:)		,	DAVIN	LIPL species	x5#
1. Phang andmen			71% W	Column Totale	(4) (9)
2. Holins	50		FAL		
3				Prevalence Index =	B/A =
4				Hydrophytic Vegetation	Indicators:
f				-Dominance Test is >	50%
n				Prevalence Index is :	(3.0 ¹
7				Mombological Adapt	tions' (Provide supporting
,				data in Remarks o	or on a separate sheet)
p		*****		Wetland Non-Vascul	er Plants
y				Problematic Hydroph	ytic Vegetation ¹ (Explain)
10				Indicators of hydric soil a	ind welland hydrology must
11				be present, unless disturt	ed or problematic.
Mandu Vine Statum (Diataire)		= Total Cov	61		a yabayan maganak juni yana ngenyanak kara maren yila napa kinamini a ka babah
TINONE THE SECTION (FRANCE.				the state of the	
1. <u> </u>				Vegetation	
4.				Present? Yes	No
& Rere Bround in Herb Stratum	********	* Total Cov	er		
Permanie:				1	

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicator Depth Matrix Redox Feetures Color (molet) Color (moist) Type Loc Texture (inches) % Remarks 1022/2 312 2.54 compart lon *Location: PL=Pore Lining, M=Matrix. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Send Grains. Hydric Soil indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Solls³: ____ 2 cm Muck (A10) ____ Sandy Redox (S5) Histosoi (A1) ____ Stripped Matrix (S6) Red Parent Material (TF2) Histic Epipedon (A2) -Black Histic (A3) ____ Loamy Mucky Mineral (F1) (except MLRA 1) ____ Other (Explain in Remarks) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Redox Depressions (F8) unless disturbed or problematic. Sandy Glayed Matrix (S4) Restrictive Layer (if present): Type: Hydric Soll Present? Yes _ No Depth (inches): Remerke Ŀ No indere HYDROLOGY Watland Hydrology Indicators: Primery indicators (minimum of one required: check all that epply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except MLRA Water-Stained Leaves (89) (MLRA 1, 2, Surface Water (A1) 1, 2, 4A, and 4B) 4A, and 4B) ____ Saturation (A3) Sall Crust (B11) **Drainage Patterns (B10)** ____ Aquatic Invertebrates (B13) ___ Dry-Season Water Table (C2) Water Marks (61) Sediment Deposits (82) Hydrogen Sullide Odor (C1) Saturation Visible on Aerial Imagery (C9) Drift Deposits (83) Oxidized Rhizospheres along Living Roots (C3) ____ Geomorphic Position (D2) Angel Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) ____ FAC-Neutral Test (D5) ____ iron Deposits (85) Recent iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B5) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) _ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (68) Field Observations: Surface Water Present? Depth (inches) Water Table Present? Depth (inches): Yes No / Saturation Present? No ____ Depth (inches): Wetland Hydrology Present? Yes Yes (includes capitary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Nordints

US Army Corps of Engineers

SOIL

Western Mountains, Valleys, and Coast - Interim Version

US Army Corps of Engineers

Western Mountains, Valleys, and Coast - Interim Version

WETLAND DETERMINATION DATA F	"ORM - Western Mountains, Valleys, #	ind Coast Region
Project/Sie Grenner	CityrCounty Many 1/2	Sempling Date: 3-7-19
ApplicantOwner:Ed 5 and	Section, Township, Range: 3 Z C	T31NIC5E
Landform (hillslope, terrace, etc.):	Local relief (concave. convex, none):	Siope (%):
Subregios (LRR): Lat	: Long:	Datum:
Sol Map Unit Name: Aldrawas	NWI class	sification:
Are climate / hydrologic conditions on the site typical for this time	of year? Yes No (If no, explain i	n Remarks.)
Are Vegetation Soil, or Hydrology signific	antly disturbed? Are "Normal Circumstance	s' present? Yes No
Are Vegetation, Soil, or Hydrology natural	lly problematic? (If needed, explain any and	wers in Remarks.)
SUMMARY OF FINDINGS - Attach sits map show	wing sampling point locations, transe	cts, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No	is the Sampied Area within a Wetland?	Yes	No
Remarks:			<u> </u>		

VEGETATION - Use scientific names of plants.

	Absolute	Dominant Indicator	Dominance Test worksheet:		
Ince Statum (Plot size:)	% Cover	Species? Status	Number of Dominant Species	-7	
1			That Are OBL, FACW, or FAC	: <u> </u>	(A)
2			Total Number of Dominant		
3			Species Across All Strata:		(8)
4.			Barrowst of Daminush English	1	
		· Total Cover	That Are OBL, FACW, or FAC	- 100	(A/B)
Saping/Shrub Stratum (Plot size:)					
1			Prevalence sidex worksheet		
2			CON % COVER OF	MURDIV OV.	-
3			OEL SPECIES	x1*	-
4			FACW species	×2*	~
5			FAC species	×3=	~
		. ≈ Total Cover	FACU species	x4 =	
Herb Steptum (Plot size:	S7 ;	FAL	UPUspecies	x5≖	
- Phanes america	- Ali		Column Totals:	(A)	_ (8)
2 Festion	2	<u> </u>			
3			Prevalence index > b/A	, z	
4			Hydrophytic Vegetation Indi	cators:	
5			Dominance Test is >50%		
6			Prevalence Index is \$3.0		
7			Morphological Adaptation data in Remarks or on	s' (Provide suppor a separate sheet)	ting
8			Welland Non-Vascular Pl	ants	
9			Problemetic Hydrophytic	Vegetation ¹ (Expla	int
10			Indicators of hydric soil and w	vetiland hydrology r	nust
11			be present, unless disturbed of	r problematic.	
		= Total Cover			
TANK THE STAND (NO SIZE			a share to at	1	
1			Vecetation		
2.			Present? Yes	No	
W. Barn Gravend in Mark Charter	*****	≠ Total Cover		-	
Paraster					
Contration A.					

US Army Corps of Engineers

Western Mountains, Valleys, and Coast - Interim Version

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Matrix Redox Feetures Color (moist) % Color (moist) % Type' Loc' Texture Depth (inches Remarks 16 10m3/2 In Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sant Grains, Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) *Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: ___ Sandy Redox (S5) Histosol (A1) ____ 2 om Muck (A10) ____ Stripped Matrix (S6) Red Parent Material (TF2) Histic Epipedon (A2) -----Loamy Mucky Mineral (F1) (except NLRA 1) Other (Explain in Remarks) Black Histic (A3) _ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depieted Below Dark Surface (A11) Depleted Matrix (F3) -----Redox Dark Surface (F6) ³Indicators of hydrophylic vegetation and Thick Dark Surface (A12) -----Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): Hydric Boll Present? Yes Remarks: No mints

HYDROLOGY

SOIL

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required	: check all that sophy)	Secondery Indicators (2 or more required)
Surface Water (A1)		MLRA Water-Stained Leaves (89) (MLRA 1, 2,
	1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)	Salt Cruet (B11)	Drainage Patterns (B10)
Weter Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (82)	Hydrogen Sullide Odor (C1)	Seturation Visible on Aerial Imagery (C9)
Drift Deposite (B3)	Oxidized Rhizospheres along Living I	Roots (C3) Geomorphic Position (D2)
Algel Mat or Crust (84)	Presence of Reduced Iron (C4)	Shaflow Aquitard (D3)
Iron Deposits (85)	Recent iron Reduction in Tilled Soils	(C8) FAC-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRF	R A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (87) Other (Explain in Remarks)	Frost-Heave Humanocka (D7)
Sparsely Vegetated Concave Surface (E	86)	
Field Observations:		
Surface Water Present? Yes I	loBepth (inches):	
Water Table Present? Yes I	io Depth (inches):	
Seturation Present? Yes 1	io Depith (inches): W	Vetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous inspection	ns), if available:
Remarks		
	1	15
	No Idi	12-66
1		-
1		

US Army Corps of Engineers

Western Mountains, Vallays, and Coast - Interim Version

PP#7 Sampling Point: _

No_-

WEILAND DEIERMINATION DATA PO	run – western mountains, vaneys,	and Coast region
Projectisie Gennum	- City/County Monga / The	sempting Date: 3-7-19
Applicant/Owner:	State:	Sempling Point:
investigator(s): Ed Sand	_ Section, Township, Range:3 Z <	T31 NICEE
Landform (hillslope, lerrace, etc.):	Local relief (concave, convex, none):	Siope (%):
Subregios (LRR): Lat:	Long:	Datum:
Soil Map Unit Name: <u>Aldravoed</u>	NWI clear	sification:
Are climate / hydrologic conditions on the site typical for this time of	year? Yes No (If no, explain	in Remarks.)
Are Vegetation, Soilt, or Hydrology significant	ly disturbed? Are "Normal Circumstano	es" present? Yes No
Are Vegetation, Soil, or Hydrology naturally p	problematic? (If needed, explain any an	swors in Remarks.)
	a counting a stat leastlong termos	and a lange stand factures also

which a work is a war working the stress descents the Methods and discust Plantan

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc

 Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No	is the Sampled Area within a Wetland?	Yes	No
Remarks:					

VEGETATION -- Use scientific names of plants.

	Absolute Dominant Indicato	x Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Species? Statue	Number of Dominant Species
1		That Are OBL, FACW, or FAC: (A)
2.		Total Number of Dominant
3.		Species Across All Strate: (B)
4.		
	a Total Cover	Percent of Dominant Species 7
Sapling/Shrub Stratum (Plot size:)	That Are OBL, FACW, or FAC:
t	2	Prevalance index worksheet:
**		Total % Course of Multiply by
£		
3		OBL species
f		FACW species
5		FAC species x3 =
	= Total Cover	FACU species x4 =
terb Stratum (Ptot size:),	ED FA	/ UPL species x 5 =
1_ Frs/2 ch milm		- Column Totale: / UC/ (A) 355 (B)
2. Artita no odu	, 50 FA	
3.		Prevalence Index = B/A =
1		Hydrophytic Vegetation Indicators:
**	ngangkénanggén programoson bisékenen tanan anyan bélénénénén dipangkénéné na	Dominance Test is >50%
** ************************************		Prevalence Index is \$3.0
		Mambalagiant Adaptetians' (Denside summering
·		data in Remarks or on a separate sheet)
		- Wetland Non-Vascular Plants
		- Problematic Hydrophylic Vecetation' (Excisio)
10		Indicators of buttin and and undired budrolous must
11		be present, unless disturbed or problematic.
	= Total Cover	
Moody Vine Stratum (Plot size:)		· · · · · · · · · · · · · · · · · · ·
I		Hydrophytic
2		Vegetation
	Total Count	Present? Yes No
& Bara Ground in Harb Stratum	* IVAN VOVEF	
		,

US Army Corps of Engineers

Western Mountains, Valleys, and Coast - Interim Version

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators. Redox Features Depti Matrix Color (moist) Color (moist) % Type Loc' Texture Remarks **Onches** 2 104212 1040 411. 955 16 ¹Type: C=Concentration, D=Depistion, RM=Reduced Matrix. CS=Covered or Coated Sand Grains. Hydric Soli indicators: (Applicable to all LRRs, unless otherwise noted.) ²Location: PL=Pore Lining, M=Matrix Indicators for Problematic Hydric Soils¹: Histosol (A1) ____ Sandy Redox (S5) 2 cm Muck (A10) ____ Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Loamy Mucky Mineral (F1) (except MLRA 1) Black Histic (A3) Other (Explain in Remarks) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Redox Dark Surface (F6) ³Indicators of hydrophytic vagetation and Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present. Sandy Glayed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if present): Type: Hydric Boll Present? Yes _____ Depth (inches): No ____ Remarks No idjutio HYDROLOGY Watland Hydrology Indicators: Primary Indicators (minimum of one required: check all that eoply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except NLRA Water-Stained Leaves (B9) (MLRA 1, 2, Surface Water (A1) ____ High Water Table (A2) 1, 2, 4A, and 4B) 4A, and 4B) Saturation (A3) Sett Crust (B11) Orainage Patterns (610) ___ Water Marks (B1) ____Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Hydrogen Sullide Odor (C1) Seturation Visible on Aerial Imagery (C9) ____ Sediment Deposits (82) Oxidized Rhizospheres along Living Roots (C3) ____ Geomorphic Position (D2) ___ Drift Deposits (B3) ____ Shallow Aquitard (D3) ____ Algal Mat or Crust (B4) Presence of Reduced Iron (C4) FAC-Neutral Test (D5) Iron Deposits (B5) Recent iron Reduction in Tilled Soils (C6) ----Raised Ant Mounds (D6) (LRR A) Surface Soil Crecks (86) Stunted or Stressed Planis (D1) (LRR A) Frost-Heave Hummocks (D7) Other (Explain in Remarks) inundation Visible on Aerial Imagery (87) Sparsely Vegetated Conceve Surface (B8) Field Observations: Depth (inches): Surface Water Present? T Water Table Present? Depth (inches): Saturation Present? Yes Depth (inches): Wetland Hydrology Present? Yes (includes capiliary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available Remarks: ro adanta

US Army Corps of Engineers

SOIL

Western Mountains, Valleys, and Coast - Interim Version

WEILAND DEIERMINATION DATA FOR	um - vvestern mountains, valieys, an	o coast region
Project/Ste: Genmen	City/County	Sampling Date: 3-7-19
Applicant/Owner:	State:A	Sampling Point: DP#9
Investigator(s): Ed Sand	Section, Township, Range: 329	TJINIZE
Landform (hillslope, terrace, etc.):	Local relief (conceve, convex, none):	Slope (%):
Subregios (LRR): Let:	Long:	Datum:
Sol Map Unit Name: Alan was	NWI classifi	cetion:
Are climatic / hydrologic conditions on the site typical for this time of y	ear? YesNo (If no, explain in I	Remarks.)
Are Vegetation, Soil, or Hydrology significant	y disturbed? Are "Normal Circumstances"	present? Yes No
Are Vegelation, Soil, or Hydrology naturally p	oblematic? (If needed, explain any answ	ere in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

H H S	ydrophytic Vegetation Preaent? ydric Soil Present? etland Hydrology Present?	Yes No Yes No Yes No	is the Sampled Area within a Wetland?	Yes	No
R	amarks:				

VEGETATION - Use scientific names of plants.

Tree Olester (Olet size)			
TUBE SANATEL (Laor netre:	% Cover	Species? Status	Number of Dominant Species
1		-	That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3.		-	Species Across All Strate: (B)
4.			
		= Total Cover	Ther Are OBL EACW or EAC:
Septing/Shrub Stratum (Plot size:)			
1			Prevalence Index worksheet:
2			Total % Cover of Multiply by:
3			OBL species x1 =
4			FACW species x 2 =
5.			FAC species
		= Total Cover	FACU species 50 x4= 200
Herb Stretum_ (Plot size:)		ETA/	UPL species x 5 =
1 Agristy	<u> </u>	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Column Totals: 1 12 (A) 3 5 (B)
2_ A. A. when has	_ 20_	FAir	
3.			Prevalence index = B/A =
4.			Hydrophytic Vegetation Indicators:
5.			Dominance Test is >50%
B.			Prevalence Index is \$3.01
7			Morphological Adaptations' (Provide supporting
8			data in Remarks or on a separate sheet)
D			Welland Non-Vaecular Plants*
^{6.}			Problematic Hydrophytic Vegetation ¹ (Explain)
10			Indicators of hydric soil and wetland hydrology must
11.			be present, unless disturbed or problematic.
Woody Vine Strakem (Plot size:)		≖ totel Cover	
the second s			Mudzonshutie
** **********************************	****		Vegetation
••			Present? Yes No
% Bare Ground in Herb Stratum			
			1
Remarks:			
Remarks:			

US Army Corps of Engineers

Western Mountains, Valleys, and Coast - Interim Version

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Type Loc Texture Color (moiet) Color (moist) **Unches** * % tim 10/2/2 En_ L. 14 ²Location: PL=Pore Lining, M=Matri 'Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains, Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Proble ematic Hydric Solis¹: ____ Sandy Redox (S5) Histosol (A1) ____ 2 cm Muck (A10) ____ Stripped Matrix (S6) Red Parent Material (TF2) Histic Epipedon (A2) Losmy Mucky Mineral (F1) (except NLRA 1) Other (Explain in Remarks) Black Histic (A3) -----Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) ³Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleved Matrix (S4) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if present): Type: Hydric Soil Present? Yes Depth (inches): No Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary indicators (minimum of one required: check all that apply) Secondary Indicators (2 or more required) ____ Water-Stained Leaves (B9) (except MLRA Water-Stained Leaves (89) (MLRA 1, 2, ____ Surface Water (A1) ____ High Water Table (A2) 1, 2, 4A, and 48) 4A, and 4B) Drainage Patterns (B10) ____ Saturation (A3) Salt Crust (811) ___ Dry-Season Water Table (C2) Water Marks (B1) Aquatic Invertebrates (B13) -----____ Sediment Deposits (B2) Hydrogen Sullide Odor (C1) ____ Saturation Visible on Aerial Imagery (C9) ____ Oxidized Rhizospheres along Living Roots (C3) ____ Geomorphic Position (O2) Drift Deposite (83) Algai Mat or Crust (B4) Presence of Reduced Iron (C4) ___ Shattow Aquitard (D3) ___ FAC-Neutral Test (D5) Recent iron Reduction in Tilled Soils (C6) fron Deposits (85) Raised Ant Mounds (D8) (LRR A) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) inundation Visible on Aerial Imagery (87) ___ Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Field Observations: 1 Surface Water Present? **Gepth** (inches) Depth (inches): Water Table Present? No Yes No ____ Depth (inches): Saturation Present? Yes ____ Wetland Hydrology Present? Yes No (includes capitary fringe) Describe Recorded Data (stream gauge, monitoring well, asrial photos, previous inspections), if available: Remarks: Norditts

US Army Corps of Engineers

SOIL

Western Mountains, Valleys, and Coast - Interim Version

DATES

Point:	$\underline{v_{P}}$	7	
		٩.	

Samolin

Vegetation Solid Solid Vegetation Solid Solid Vegetation Solid Solid Vegetation Solid Solid Vegetation Solid So	State Company Date: Long: Date: NWI classification: Company Date:
Bitcant/Dumer:	State:
stigator(s):	b, Range: 322 153 101 105 100 1
	Ave. convex. none): Slope (%) Long: Datum: NWI cleasification:
region (LRR):	Long: Datum:
Map Unit Name: <u>A / A N V C C C</u> climatic / hydrologic conditions on the site typical for this time of year? Yes Vegetation <u>Soil</u> or Hydrology <u>significantly disturbed</u> ? Vegetation <u>Soil</u> or Hydrology <u>naturally problematic</u> ? (NWI classification:
Climatic / hydrologic conditions on the site typical for this time of year? Yes I Vegetation Soil, or Hydrology significantly disturbed? // Vegetation, Soil, or Hydrology naturally problematic? (()	No ill'un combrin in Desmarken 1
Vegetation Soit or Hydrology significantly disturbed? , Vegetation Soit or Hydrology naturally problematic? ((ITTIO, Explains of Poetrian KS.)
Vegetstion, Soil, or Hydrology naturally problematic? (Are "Normal Circumstances" present? Yes No
	(If needed, explain any answers in Remarks.)
MMARY OF FINDINGS - Attach site man showing sempling poi	nt locations, transacts, important features, etc.
drophytic Vegetation Present? Yes No Is the Sam	pled Area
dric Soil Present? Yes No within a W	etiend? Yes No
atland Hydrology Present? Yes No	
mans:	
GETATION Lise scientific names of niants	ar an
Alengite During the second the second s	tor Cominance Test worksheet:
te Stratum (Plot size:) % Cover Species? Stetu	Number of Dominant Species
	That Are OBL, FACW, or FAC:
	Total Number of Dominant
	Species Across All Strats: (B)
	Percent of Dominant Species
wing Shouh Stratum (Plot size:)	That Are OBL, FACW, or FAC: (A/B)
Manager and Spanning (Find and .	Prevalence index worksheet:
	Total % Cover of Multicly by:
	OBL species x1 =
	FACW species x 2 =
	FAC species x 3 =
= Total Cover	FACU species x 4 =
to suntum (Plot size) / / / / / / /	UPL species x 5 =
Fort Court court 30	Column Totals: (A) (B)
THE STATES	Provalence Index a B/A z
	Hydrachytic Vacantation Indicators
	Dominance Teat is >50%
	Prevalence index is \$3.0
	Morphological Adaptations' (Provide supporting
	data in Remarks or on a separate sheet)
	Wetland Non-Vascular Plants
***************************************	Problematic Hydrophytic Vegetation (Explain)
	¹ Indicators of hydric soil and wetland hydrology must
* Total Cover	
vody Vine Stratum (Plot size:)	
	Hydrophytic
	- Present? Yes No
* Totel Cover	
Dent Studio III reto Special	

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Metrix Redox Features Color (moist) % Color (moist) % Type' Loc' Texture Depth (inches) **Bernarks** 4 10/23/7 1011314 14 7-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. *Location: PL=Pore Lining, M=Matrix Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils³: Sandy Redox (S5) 2 cm Muck (A10) Histosol (A1) ____ Stripped Matrix (S6) Histic Epipedon (A2) Black Histic (A3) Red Parent Material (TF2) ____ Loamy Mucky Mineral (F1) (except MLRA 1) Other (Explain in Remarks) -----____ Hydrogen Sullide (A4) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) ____ Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and -----____ Sendy Mucky Mineral (S1) ____ Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): Hydric Soli Present? Yes _____ No Remarks:

No which

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one require	Secondary Indicators (2 or more required)	
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Dritt Deposits (B3) Agal Mat or Crust (B4) Iron Deposits (B5) Surface Soit Cracks (B6) Inundation Visible on Aerial Imagery (B	Water-Stained Leaves (B9) (except NLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquetic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizeapheres along Living Roota (C3) Presence of Reduced Iron (C4) Recent Iron Reduction In Tilled Solis (C6) Stunied or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)	Water-Stained Loaves (59) (MLRA 1, 2, AA, and 48) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (02) Shallow Aquitard (C3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummotks (D7)
Sparsely Vegetated Concave Surface (Field Observations: Surface Water Present? Yes Water Table Present? Yes Seturation Present? Yes	B8) No Deptr (inches): No Deptr (inches): Wetland Hy	rdrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, m	phitoring well, aerial photos, previous inspections), if availa	sble:
Remarks:	110 indication	

US Army Corps of Engineers

Western Mountains. Valleys, and Coast - Interim Version

US Army Corps of Engineers

Western Mountains, Valleys, and Coast - Interim Version

In Codar - Indian Polakin

WETLAND DETERM	NATION DATA FORM - Wester	n Mountains, Vaileys, a	nd Coast Region	
Projectiste: Ocm	City/County	Mongolik	_ Sampling Date: 3-7-19	- 1-7
ApplicantOwner:	and Section, Town	ship, Range: 329	T31NIZBE	/ •
Landform(hillslope, terrace, etc.):	Local relief (co	oncave, convex, none):	Stope (%):	
Subregios (LRR):	Lat:	Long:	Datum:	
Soil Map Unit Name: Alala	Ameel	NWI class	fication:	
Are climate / hydrologic conditions on the s	te typical for this time of year? Yes	No (If no, explain in	Remarks.)	
Are Vegetation, Soil, or Hyd	ology significantly disturbed?	Are "Normal Circumstances	"present? Yes No	
Are Vegetation, Soil, or Hyd	ology naturally problematic?	(If needed, explain any ansi	wers in Remarka.)	
SUMMARY OF FINDINGS - Atta	h site map showing sampling ;	point locations, transec	ts, important features, etc.	
ſ				

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No	is the Sampled Area within a Wetland?	Yes	No
Remarks:					

VEGETATION - Use scientific names of plants.

	Absolute Dominant Indicato	Dominance Test worksheet:
Irea Siratum (Plot size:)	% Cover Species? Status	- Number of Dominant Species
1.		That Are OBL, FACW, or FAC: (A)
2.		- Total Mumber of Dominant
3.		Species Across All Strata: (B)
4		
	a Total Cover	Percent of Dominant Species
Sapling/Shrup Stratum (Pict size:)	Inst Are Obl., FACW, or FAC?
1.		Prevalence Index worksheet:
2.		Totel % Cover of: Multiply by:
3		OBL apecies x1=
*		FACW species x 2 =
**	*******	EAC anarina BU 13 90
Ø	- Matel Day -	- FACIL marine 20 4- 280
Herb Statum (Piot size	* TOEBU COVIER	
1 Dachte aturnt	=70 FAC	U OFL SPECIES X0- 370
Production I.	AU PA	Column Totals: (A) (B)
2 Pester anna		
3.		
4		Hydrophysic vegetation indicators:
5		Dominance Test is >50%
6.		Prevalence Index is \$3.01
7.		Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
8.		Wetland Non-Vascular Plants
9		Problematic Hydrophytic Vegetation ¹ (Exclain)
10		Indicators of twritic and wetland bydrology must
11		- be present, unless disturbed or problematic.
	* Total Cover	
Woody Vine Stratum (Plot size:)		
1.		Hydrophytic
2.		Vegetation
	* Total Cover	
% Bere Ground in Herb Stratum		

US Army Corps of Engineers

Western Mountains, Valleys, and Coast - Interim Version

PTOT05 U06C71	banes (paracessa					
Depth _	Matrix		Redox Feetun	\$3		
(inches)	Color (moist)		Color (moist) %	Type Loc	Texture	Remarks
14	10m31			~	مسا رہے ج	*
			n der an der			
		-				
-						
'Type: C=Con	centration, D=De	pletion, RM=Re	duced Matrix. CS=Cover	ed or Costed Sand C	Sneins. 'Lo	cation: PL=Pore Lining, M=Matrix.
Hydric Soil Inc	dicators: (Appli)	cable to all LR	Rs, unless otherwise no	vted.)	indicate	ors for Problematic Hydric Solis*:
Histosol (A	(1)		Sandy Redox (S5)		2 ci	m Muck (A10)
Histic Epip	edon (A2)		Stripped Matrix (S6)		Re	Parent Material (TF2)
Black Hist	c (A3)		Losmy Mucky Mineral (F	F1) (except NLRA 1) Oth	er (Explain in Remarks)
Hudenoon	Stifficie (A4)		Loamy Gleved Matrix /F	2)		
	Colour Dark Stafe		Danielad Matrix (E2)	-,		
Thisk Dad	Services (\$17)		Dependent (r.J)		Structional	we at independentian and
Inick User	C BUTINOE (A 12)		Reobx Dark durade (re		TT BLOOM	and of hydrophysic vegetation and
Sandy Mu	cky Mineral (51)		Depleted Dark Surrace ((F7)	weas	ind nydrology must be present.
Sandy Gle	yed Matrix (54)		Sedox Depressions (15	}	Uniei	is disturbed or problematic.
Restrictive La	yer (if present):					
Туре:			-			
Depth (inch	ee):				Hudelo Boll	Present? Yes No
Remarka:			-	ND.	- dec	n de la composition de la comp
Remarks:	Y			ND ,	-dec	
Remarks: IYDROLOG	Y place inficators			13.	- dec	
Remarks: IYDROLOG Wetland Hydr	Y ology indicators			12.	- dec	
Remarks: IYDROLOG Wetland Hydr Primary Indica	Y ology indicators lors (minimum of	; ; one required; c2	beck all that apply)	13.	- Seco	nderv Indicators. (2 or more, resulted
Remarks: IYDROLOG Wetland Hydr Primary Indicat	Y ology Indicators lors (minimum of later (A1)	; one required; c	heck all that apply)	M D ,		nderv Indicators (2 or more resulted Vater-Steined Leaves (39) (MLRA 1
Remarks: IYDROLOG Wetland Hydn Primary Indicas Surface W High Wate	Y ology Indicators lors (minimum of later (A1) x Table (A2)	: one required: ci	heck all that appiv) Water-Stained Lea 1, 2, 4A, and 4	vos (B9) (except Mi B)		ndery Indicators (2 or more resulted Vater-Stained Loaves (59) (MLRA 1 AA. and 48)
Remarks: IYDROLOG Wetland Hydr Primary Indicat Surface High Wate Saturation	Y ology Indicators loss (minimum of later (A1) xr Table (A2) (A3)	: one required: ci	heck all that appiv) 	vos (B9) (except Mi B)		ndery Indicators (2 or more resulted Vater-Stained Loaves (89) (MLRA 1 AA, and 48) Josinace Patterns (810)
Remarks: IYDROLOG Wetland Hydr Primary Indicat Surface W High Wate Saturation Water Mar	Y ology indicators lors (minimum of later (A1) r Table (A2) (A3) ks (B1)	: one required: C	heck all that apply) Watar-Stained Lea 1, 2, 4A, and 4i Sait Crust (811) Acuatic Invertience	vos (B9) (except Mi B) be (B13)	Seco Seco Seco	nderv Indicators. (2 or more resulted Vater-Stained Leaves (39) (MLRA 1 4A. and 4B) Trainage Patterns (B10) hr-Season Water Table (C2)
Remarks: IYDROLOG Wetland Hydn Primary Indical Surface W High Wate Saturation Water Mar	Y ology Indicators fors (rhinmum of later (A1) r Table (A2) (A3) ks (B1)	; one required; ci	heck all that apply) 	ves (B9) (except Mi B) tes (B13)	\$eco \$eco \$eco \$	ndery Indicators (2 or more resulted Vater-Steined Leaves (59) (MLRA 1 AA, and 48) Irainage Patterns (810) hy-Seeson Water Table (C2)
Remarks: IYDROLOG Wetland Hydro Primary Indical Saturation High Wate Saturation Weter Mar Sediment	Y ology Indicators fors (minimum of later (A1) r Table (A2) (A3) ks (B1) Deposits (B2)	; one required: ci	beck all that apply) 	vves (B9) (except Mi B) hes (B13) Ddor (C1)		ndery Indicators (2 or more resulted Vater-Steined Leaves (39) (MLRA 1 A., and 48) Xrainage Patterns (510) Xy-Seeson Water Table (C2) Jaturation Visible on Aerial Imagery (
Remarks: IYDROLOG Wetland Hydr Primary Indicat Suftace W High Wate Saturation Weter Mar Sediment Drift Depoi	Y ology indicators fors (minimum of ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) aits (B3)	: : : : : : : : : : : : : : : : :	heck all that appiv) Watar-Stained Lea 1, 2, 4A, and 4I Salt Crust (81) Aquesic Invertebrat Hydrogen Sulfac Oxidized Rhizosph	ves (B9) (except Mi b) kes (B13) Ddor (C1) wres along Living Ro	Seco Seco C _ C	nderv Indicators (2 or more recuired Vater-Stained Leaves (39) (MLRA 1 4A. and 48) Irainage Patterns (810) Iry-Seeson Water Table (C2) sturation Visible on Aerial Imagery (Beomorphic Poetion (D2)
Remarks: IYDROLOG Wetland Hydn Primary Indicat Surface W Surface W Sufface W Suff	Y ology indicators for (Minmum of later (A1) r Table (A2) (A3) ts (B1) Deposits (B2) aits (B2) aits (B2) aits (B4)	: one required: c	heck all that apply) 	vves (B9) (except Mi B) hes (B13) Ddor (C1) heres along Living Ro hed Iron (C4)	Seco Seco Seco C C C C S 	ndery Indicators (2 or more resulted Vater-Stained Leaves (89) (MLRA 1 4A, and 48) Trainage Patterns (810) Try-Sesson Water Table (C2) saturation Visible on Aerial Imagery (Beomorphic Position (02) ihallow Aquitard (03)
Remarks: IYDROLOG Wedland Hydn Primary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depo Algal Mat i tron Depoi	Y lots (minimum of later (A1) r Table (A2) (A3) Deposits (B2) aits (B3) or Crust (B4) aits (B5)	: : one required: ci	heck all that appiv) 	vos (B9) (except Mi B) tes (B13) Ddor (C1) sete along Living Ro sed Iron (C4) tion in Tifked Soils (C	Seco Seco Seco S	ndery Indicators. (2 or more resulted Vater-Steined Leaves (39) (MLRA 1 4A, and 48) Insinage Patterns (510) nys-Seeson Water Table (C2) isturation Visible on Aerial Imagary (Jeomorphic Position (02) ihellow Aquitard (03) AC-Neutral Test (D5)
Remarks: IYDROLOG Wetland Hydn Primary Indicat Saturation Water Mar Saturation Water Mar Drift Depoi Algal Mat (Tron Depoi Surface S:	Y ology indicators lors (minimum of iter (A1) r Table (A2) (A3) rts (B1) Deposits (B2) alts (B3) or Cruck (B4) sits (B5) ail Cracks (B6)	: cone received: ci	heck all that appi// Water-Stained Lea 1, 2, 4A, and 4H Salt Crust (B11) Aquasic Invertebrat Hydrogen Sulfide (Oridized Rhizoph Presence of Reduc Recent Iron Reduc Sturted or Stresse	ves (B9) (except Mi B) bdor (C1) eres along Living Ro sed Iron (C4) ation in Tifled Soils (C d Plenis (D1) (LRR	Seco Seco Seco C C C C C Seco C Seco _ Se	ndery Indicators (2 or more recuited Vater-Stained Leaves (89) (MLRA 1 4A, and 45) Irainage Patterns (810) Iry-Season Water Table (C2) staturetion Visiter Table (C2) Seomorphic Poeition (D2) Hattow Aquitard (D3) (AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Remarks: IYDROLOG Wetland Hydn Primary Indicat Surface W High Water Saturation Weter Mar Sediment I Drift Depoi Agel Mat i Iron Depoi Surface St Joundation	Y ology indicators fors (minimum of. fater (A1) x Table (A2) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3	: one required: cl	beck all that apply) 	vves (B9) (except MI B) bes (B13) Ddor (C1) eres along Living Rc sed fron (C4) tion in Tifled Soils (C d Planis (D1) (LRR / temenda)	Seco Seco	ndery Indicators (2 or more resulted Vater-Steined Leaves (89) (MLRA 1 4A, and 48) Tosinage Patterns (810) hy-Season Water Table (C2) saturation Visible on Aeriat Imagery (Seconorphic Position (D2) Hatlow Aquitard (D3) AC-Neutral Test (D5) Tasted Ant Mounda (D6) (LRR A) Tost-Heave Hummocke (D7)
Remarks: IYDROLOG Wetland Hydro Brimary Indicet Surface W High Wate Saturation Weter Mar Sediment I Drift Depo Agel Mat fron Depor Surface Si Jundetion Sector Si	Y ology Indicators frainmum of ater (A1) r Table (A2) (A3) r Table (A2) (A3) r Table (A2) aits (B3) or Crust (B4) aits (B3) pi Cracks (B6) Visible on Aerial	: : one required: ci imagery (B7)	heck all that apply) Water-Stained Lee 1, 2, 4A, and 4i Salt Crust (811) Aquesic Invertebrat Hydrogen Sulfac Oxidized Rhizoeph Presence of Reduc Recent Iron Reduc Sturied or Stresse Other (Explain in R	vos (B9) (except Mi B) tes (B13) Ddor (C1) teres along Living Ro sed Iron (C4) titon in Tifled Sola (C d Plants (D1) (LRR - ternarks)	Seco 	nderv Indicators. (2 or more resulted Vater-Stained Leaves (39) (MLRA 1 4A, and 4B) Drainage Patterns (B10) Ny-Season Water Table (C2) staturation Visible on Aerial Imagery I beomorphic Position (02) ihallow Aquitard (03) Ac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Remarks: YDROLOG Wetland Hydn Primary Indicat Saturation Weter Mar Saturation Weter Mar Saturation Drift Depoi Algal Mat of Irun Depoi Surtace Sti Irundation Sparsely V	Y ology Indicators for free free free free free free free f	: one received: cl imegery (B7) re Surface (B8)	heck all that appiv) Water-Stained Lea 1, 2, 4A, and 4H Salt Crust (B11) Aquesic Invertebrat Hydrogen Sulfide (Oxidized Rhizoph) Presence of Reduc Recent Iron Reduc Stunted or Stresses Other (Explein in R	vves (B9) (except Mi B) bes (B13) Dotor (C1) set iron (C4) stion in Tifled Soils (C d Planis (D1) (LRR . termarks)	Seco Seco Seco C	ndery Indicators (2 or more resulted Vater-Stained Leaves (89) (MLRA 1 4A, and 45) Trainage Patterns (810) Try-Season Water Table (C2) stauration Visible on Aerial Imagery (Jeomorphic Position (D2) ihatlow Aquitard (D3) AC-Neutral Test (D9) taised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Remarks: IYDROLOG Wetland Hydn Prinary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depoi Algal Mat Iron Depoi Surface Si Inundation Sparsely V Field Observa	Y ology Indicators fors (minimum of vr Table (A2) (A3) (A3) Deposits (B2) alite (B3) or Crust (B4) alite (B5) al Cracts (B6) visible on Aerial depatated Concess filores:	: one required: ci imagery (B7) e Surface (B6)	beck all that apply) 	vves (B9) (except Mi B) bes (B13) Ddor (C1) sites atong Living Rr sed Iron (C4) tion in Tifled Soils (C d Plants (D1) (LRR / temarks)	Seco S	ndery Indicators (2 or more resulted Vater-Steined Leaves (39) (MLRA 1 A., and 48) Irrainage Patterns (B10) hyr-Seeson Water Table (C2) laturation Visible on Aeriat Imagery (isomorphic Position (D2) hattlow Aquitator (D3) (AC-Neutral Test (D5) Rateed Ant Mounds (D6) (LRR A) irrost-Heave Hummocks (D7)
Remarks: YDROLOG Wetland Hydn Primary Indicat Saturation Weter Mar Saturation Drift Depoi Argal Mat Drift Depoi Surface Water Field Observa Surface Water	Y ology Indicators fors.fminmum of. table (A1) r Table (A2) (A3) r Table (A2) (A3) r Table (A2) aits (B3) or Cruck (B4) aits (B3) or Cruck (B4) aits (B5) oil Cracts (B6) Visible on Aerial Alegetated Concav filons:	: : : : : : : : : : : : : : : : : : :	heck all that apply) Water-Stained Lee 1, 2, 4A, and 4I Salt Crust (81)) Aquesic Invertebrat Hydrogen Sulfac Oxidized Rhizoaph Presence of Reduc Recent Iron Reduc Stunied or Stresse Other (Explein in R Depth (inches);	ves (B9) (except Mi B) bes (B13) Ddor (C1) isres along Living Ro sed Iron (C4) tion in Tifled Solis (C d Plants (D1) (LRR / termarks)	Second Second	nderv Indicators. (2 or more resulted Vater-Stained Leaves (39) (MLRA 1 4A. and 4B) Trainage Patterns (B10) hyr-Season Water Table (C2) stauration Visible on Aariat Imagery (Seomorphic Poation (D2) ihallow Aquitard (D3) Ac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Remarks: IYDROLOG Wetland Hydn Primary Indicat Surface W High Wate Saturation Weter Mar Saturation Drift Depoir Agat Mar I fron Depoir Surface Surface Surface Inundation Sparsely V Field Observa Surface Water Water Table Pi	Y ology indicators fors (minimum of, later (A1) r Table (A2) (A3) ts (B1) Deposits (B2) aits (B3) aits (B3) aits (B3) aits (B4) sits (B6) ail Cracts (B6) sits (B6) ail Cracts (B6) vits (B6) ail Cracts (B6) Visible on Aertal /egetated Concav effors: Present?	: 	heck all that apply) 	vves (B9) (except Mi B) bles (B13) Ddor (C1) eres along Lliving Ro sed fron (C4) tion in Tifled Soils (C d Plants (D1) (LRR / termarks)	Seco _	ndery Indicators (2 or more resulted Vater-Stained Leaves (89) (MLRA 1 AA, and 48) Trainage Patterns (810) Try-Season Water Table (C2) saturation Visible on Aerial Imagery (Beomorphic Position (D2) Haitlow Aquitard (D3) AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Remarks: IYDROLOG Wetland Hydn Primary Indical Surface W High Wate Saturation Water Mar Sediment I Drift Depo Algel Mat I fron Depo Surface Sc Inundation Sparsely V Field Observa Surface Water Water Table PI	Y lots (minimum of later (A1) r Table (A2) (A3) r Table (A2) (A3) Deposits (B2) alis (B3) or Crust (B4) alis (B5) oil Cracks (B6) Visible on Aerial depatated Concas elepatated Concas Present?	:	heck all that appin Water-Stained Lee 1, 2, 4A, and 4i Sait Crust (811) Aquesic Invertebrat Hydrogen Sulfied Oxidized Rhizesph Presence of Reduc Recent Iron Reduc Stunted or Stresse Other (Explain in R Depth (inches): Depth (inches): Depth (inches):	vos (B9) (except Mi B) les (B13) Ddor (C1) sres atong Living Ro sed Iron (C4) tion in Tifked Soils (C d Plants (D1) (LRR - ternarks)	Seco Seco Seco S	ndery Indicators (2 or more resulted Vater-Steined Leaves (39) (MLRA 1 A., and 48) Irrainage Patterns (510) nys-Seeson Water Table (C2) isturation Visible on Aerial Imagary (seconophic Position (02) ihailow Aquitard (03) AcX-Neutral Test (05) Raised Ant Mounds (06) (LRR A) rost-Heave Hummocks (07)
Remarks: YDROLOG Wetland Hydn Primary Indicat Saturation Weter Mar Saturation Weter Mar Saturation Algal Mat of fron Depoi Surface Surface Surface Inundation Sparsely V Field Observa Surface Water Water Table P Saturation Pre-	Y ology indicators for from the second sec	imagery (87) e Surface (88) Yes No Yes No	heck all that sophy) Water Steined Lea 1, 2, 4A, and 4i Sait Crust (B11) Aquesic Invertebrat Hydrogen Suffice Oxidized Rhizosph Presence of Reduc Recent Iron Reduc Sturide or Stresse Other (Explain in R Depth (inches): Depth (inches): Depth (inches):	ves (B9) (except Mi B) les (B13) Jobor (C1) eres along Living Ro sed Iron (C4) tion in Tifled Solis (C d Plants (D1) (LRR / ternarts)		ndery Indicators (2 or more resulted Vater-Stained Leaves (89) (MLRA 1 4A, and 45) Trainage Patterns (810) Ny-Season Water Table (C2) stauration Visible on Aerial Imagery (Jeomorphic Position (02) ihallow Aquitard (03) AC-Neutral Test (D5) taleed Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
YDROLOG Wetland Hydn Primary Indicat Sufration High Wate Saturation Saturation Water Man Softer Man Drift Depon Algal Met of fron Depon Algal Met of fron Depon Sufrace States Sufrace States Varface States Sufrace States Sufrace States States Park States Cast	Y ology indicators los (minmum of fater (1) r Table (A2) (A3) ks (B1) Deposits (B2) alite (B3) or Crusk (B4) alite (B5) or Crusk (B6) alite (B5) or Crusk (B6) alite (B6) alite (Cacha (B6) resent? resent? resent? resent? resent?	: : : : : : : : : : : : : : : : : : :	heck all that sopiv) Water-Stained Lee 1, 2, 4A, and 4i Sait Crust (81)) Aquesic Invertebrat Hydrogen Sulfac Oxidized Rhizosph Presence of Reduc Recent fron Reduc Stunied or Stresse Other (Explein in R Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches):	ves (B9) (except Mi B) bes (B13) Ddor (G1) wres along Living Ro sed Iron (C4) tion in Tilled Sols (C d Plants (D1) (LRR / terments) we wervicue inspections;		Indery Indicators (2 or more resulted Vater-Stainted Leeves (89) (MLRA 1 4A, and 48) Trainage Patterns (810) Ny-Seeson Water Table (C2) staturation Visible on Aerial Imagery (Jeomorphic Position (02) shallow Aquitard (03) AC-Neutral Test (D5) tabled Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7) y Present? Yes No
Remarks: YDROLOG Wetland Hydn Primary Indicat Surface W 	Y ology Indicators tater (A1) r Table (A2) (A3) r Table (A2) (A3) or Chait (A2) aits (B3) or Chait (B4) aits (B5) ait (B6) ait Cracks (B6) Visible on Aerial Ageisted Concav filonas: Present? secht? secht? secht? secht? secht?	imagary (B7) le Surface (B8) Yes No Yes No n gauge, monit	heck all that apply) Water-Stained Lee 1, 2, 4A, and 4i Sait Crust (811) Aquesic Invertebrat Hydrogen Sulfac Oxidized Rhizosph Presence of Reduc Recent from Reduc Sturited or Stresse Other (Explain in R Depth (inches): Dapth (inches): Dapth (inches): Dapth (inches): Dapth (inches):	vos (B9) (except Mi B) tes (B13) Ddor (C1) teres atong Living Ro sed Iron (C4) tion in Tilled Sols (C d Planis (D1) (LRR d termarks) were vervious inspections;		nderv Indicators. (2 or more resulted Vater-Stained Leaves (39) (MLRA 1 A. and 48) Drainage Patterns (B10) nys-Seson Water Table (C2) isturation Visible on Aeriat Imagary (Jeomorphic Position (02) ihatlow Aquitard (03) AC-Neutral Test (D5) Italeed Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7) y Present? Yes No
Remarks: IVDROLOG Wetland Hydn Primary Indicat Saturation Weter Mar Saturation Weter Mar Saturation Drift Depoi Algal Mat d Irun Depoi Surface Surface Irun dation Sparsely V Field Observe Water Table Pr Saturation Pre- (includes capill Describe Reco Remarks:	Y ology indicators fors (minimum of, later (A1) r Table (A2) (A3) ts (B1) Deposits (B2) aits (B3) aits (B4) aits (B4) aits (B4) aits (B5) aits (B3) aits (B4) aits (B5) aits (B5) ait	: one required: cl imagery (B7) te Surface (B8) Yes No Yes No res No n gauge, monits	heck all that sophy) Water Steined Lea 1, 2, 4A, and 4I Salt Crust (B11) Aquesic Invertebrat Hydrogen Suffice C Oxidized Rhizosph Presence of Reduc Recent Iron Reduc Sturide or Stresse Other (Explain in R Depth (inches): Depth (inch	ves (B9) (except Mi B) hes (B13) Dobr (C1) eres along Living Ro sed fron (C4) tion in Tifled Solis (C d Plants (D1) (LRR / ternarts)		ndery Indicators (2 or more resulted Vater-Stained Leaves (89) (MLRA 1 4A, and 48) Trainage Patterns (810) Ny-Sesson Water Table (C2) staustion Visible on Aerial Imagery (Beomorphic Position (02) statistic (03) AC-Neutral Test (05) Railed Ant Mounds (06) (LRR A) rost-Heave Hummocks (07)
Remarks: IYDROLOG Wetland Hydn Primary Indicat Surface Wit Surface Water Agai Mari Iron Dapoi Surface Si Inundation Sparcely V Field Observa Surface Water Water Table Pri (includes capit) Describe Reco Remarks:	Y ology Indicators fater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) alis (B3) or Crust (B4) alis (B5) or Crust (B4) alis (B5) alis (B5) al	imagery (B7) lmagery (B7) e Surface (B8) fes No res No res No n gauge, monite	beck all the sopiv)	ves (B9) (except Mi B) hes (B13) Ddor (C1) sites along Living Rc sed Iron (C4) tion in Tifked Soils (C d Plants (D1) (LRR / kennerks) we zervious inspections)	In the second se	ndery Indicators (2 or more resulted Vater-Stained Leaves (39) (MLRA 1 AA, and 48) Irrainage Patterns (510) hyr-Seeson Water Table (C2) saturation Visible on Aerial Imagery (isomorphic Poeltion (D2) hattow Aquitart (D3) (AC-Neutral Test (D5) taised Ant Mounds (D6) (LRR A) irrost-Heave Hummocks (D7) y Present? Yes No

US Army Corps of Engineers

Western Mountains, Valleys, and Coast - Interim Version

Project/Sie: Genmer	_ City/County	_ Sampling Date: 3-7-19
Applicant/Owner:	State:	Sampling Point:
Investigator(s) Ed Sand	Section, Township, Range: 3Z4_	TJINIZE
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none):	Slope (%):
Subregios (LRR): Lat:	Long:	Datum:
Soi Map Unit Name: <u>Aldrawas</u>	NWI dessift	ketion:
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes No (If no, explain in I	Remarks.)
Are Vegetation, Soil, or Hydrology significan	thy disturbed? Are "Normal Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrology neturally	problematic? (If needed, explain any answ	ers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes	No	is the Sampied Area within a Wetland?	Yes	No
Remarks:	Yes	NO	L		

VEGETATION - Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test worksheet:
1)	% Cover	Species?	Stetus	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				
3.				Species Across All Strats: (8)
4				
		a Total Co	vers	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)			~~	THREATE USC, PAGW, OF PAG.
1. Ribis Sisally	_ (A (A		MAG	Prevalence index worksheet:
2.				Total % Cover of Multiply by:
3				OBi, species x1 =
4		****		FACW species x 2 =
5				FAC species 1.2 x3= 1.80
		a Tatal Co		FACILIANATINE 40 YAX (12)
Herb Stretum (Plot size:)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		van Prost	10) energies v 5 a
1 Doch To coloman	- 50		144	Column Tables 118 1 740 m
2				Column rolans: (A) (B)
*	ander landstrader landstare			Prevalence Index = 8/A = 3 . L/
A		-		Hydrophytic Vegetation Indicators:
6				Dominance Test is >50%
0.		-	*****	Prevelence loder is \$3.01
0,				Montological Adaptations ¹ /Provide supporting
·			*****	data in Remarks or on a separate sheet)
8.				Wetland Non-Vescular Plants
9				Problematic Hydrophytic Vegetation (Explain)
10				Indicators of hydric soil and wetland hydrology must
11				be present, unless disturbed or problematic.
tate and the second second second second		= Total Cov	181	
Woody Vine Stratum (Plot size:				
1.				Hydrophyde Vanstation
2		An		Present? Yes No
of these designs the black designs	******	* Total Cov	ner	
% Bare Ground in Hero Stratum				1
rsoniarsa;				

US Army Corps of Engineers

Western Mountains, Valleys, and Coast - Interim Version

						$\overline{\mathcal{V}}^{\prime\prime}$
JIL						Sampling Point:
Tofile Desc	ription: (Describ	e to the de	pth needed to document	the indicator or o	confirm the ab	sence of indicators.)
Depth	Matrix		Redox Fer	140 8 5		
(inches)	Color (moist)	<u> </u>	Color (moist)	5 TYDE 1	oc Tex	lureRemerks
4-1	120 25					
	1 63:10 -	276	7			
		<u>ج میں</u>	P			Land Martin Comments
	-					
			·····			
fype: C=Co	ncentration, D=De	epletion, Rk	A=Reduced Matrix. CS=Co	vered or Coeted S	and Grains.	² Location: PL=Pore Lining, M=Matrix.
ydric Soil k	ndicators: (Appl	icable to a	li LRRs, unless otherwise	noted.}	łr	dicators for Problematic Hydric Solls":
Histosoi I	(A1)		Sandy Redox (S5)		-	_ 2 cm Muck (A10)
_ Histic Ep	ipedon (A2)		Stripped Matrix (S6)			Red Parent Material (TF2)
Black His	stic (A3)		Loamy Mucky Miner	el (F1) (except Mi	LRA 1)	Other (Explain in Remarks)
_ Hydroger	n Sulfide (A4)		Loamy Gleyed Matri	x (F2)		
Uepleted	Below Dark Sum	ICB (A11)	Depieted Mattix (F3)	(CR)	34	ndicators of hydroniculic usnetstion and
Sanda 64	rk Surtace (# +2) iuriu: Minerel (\$1)		Contested Dark Surfa	(ru) m (E7)		wettend instrument wat he present
Sendy Se	louart Matrix (Sd)		Refer Denressions	(FR)		unless disturbed or problematic
	to you make in (um)		House Depression	(· •)		
antriction f	aver (if nmeant)	*****				
Instrictive L	ayer (if present):			~~		
Type:	ayer (if present):	;			tinde	ic Roll Descent? Yes No.
Type: Depth (inc	ayer (if present): :hes):				Hydr	ic Ball Present? Yes No
Type: Depth (inc temerks:	ayer (if present): ihes):				Hyde	ic Ball Present? Yes No
Type: Depth (inc temarks:	ayer (if present): :hes):			0 /	Hydr	ic Boll Present? Yes No
testrictive L Type: Depth (inc temarks:	ayer (if present): :hes):			0 /	Hyde	ic Boll Present? Yes No
lestrictive L Type: Depth (inc ternarks:	ayer (If present): hes):			01	Hyde	ic Boll Present? Yes No
Instrictive L Type: Depth (inc ternetks:	ayer (If present): :hes): GY			0 1	Hyde Ale and	ic Boll Present? Yes No
Instrictive L Type: Depth (inc lemarks: YDROLOO Vetland Hyd	syer (if precent): ites): GY irology indicator			0 /	Hyde A. A.	ic Boll Present? Yes No
Depth (inc emarks: /DROLOG /etiand Hyd	syer (If present): hes): GY krology Indicator stors (minjmum of	s: Long requir	ed: check all lines spoly)	0 /	Hydr	ic Boll Present? Yes No
testrictive L Type: Depth (inc ternarks: YDROLOG Vetland Hyd Timery Indig Surface \	ayer (If present): hes): GY irology Indicator ators (minimum of Water (A1)	s: Long requir	ed: check all that spoh/)	C /	Hyde	ic Boll Present? Yes No
VDROLOG Votland Hyd Sufface 1 High Wal	syer (if present): hes): GY irology indicator stora (maintum of Water (A1) ter Teble (A2)	s: Lane recult	ed: check all that spok/) 	() / /	Hyde	ic Boll Present? Yes No Seconderv Indicators (2 or more resulted) Water-Stained Loeves (59) (MLRA 1, 4A, and 4B)
Lestrictive L Type: Depth (inc Lemarks: YDROLOO Vetland Hyd rimery India Surface 1 High Wat High Wat Saturatio	syer (If present): hes): GY irology indicator atora (minimum of Water (A1) ter Table (A2) m (A3)	Si Long requir	ed: check all that apph/ Water-Stained 1 5,2,4A, and 	() / / / / / / / / / / / / / / / / / / /	Hyde	ic Boll Present? Yes No Secondary Indicators (2 or more required) Water-Stained Leaves (B0) (MLRA 1, 4A, and 48) Drainage Patterns (B10)
Isstrictive L Type: Depth (inc ternetks: YDROLOO Vetland Hyd ritnery India Surface 1 High Wat Seturation Water Ma	syer (if present): hes): GY trology indicaton stors (minimum of Water (A1) ter Table (A2) m (A3) arks (B1)	s: I one requir	ed: check all that spoh/ 	Leaves (B9) (exce d 4B) }	Hydr	ic Boll Present? Yes No Secondery Indicators (2 or more required) Water-Stained Loeves (39) (MLRA 1, 4A, and 48) Dreinage Patterns (810) Dry-Secon Water Table (C2)
Isstrictive L Type: Depth (inc lemarks: YDROLOO Vetland Hyd rimery Inde 1 Surface 1 High Wat Seturatio Weter Mi Sedimer Mi	Syer (If present): hes): GY GY GY GY Mater (A1) ter Table (A2) n (A3) arts (B1) (Deposits (B2)	s: Long requir	ed: check all that spoh/) 	Leaves (B9) (exce d 48) } brates (B13) te Odor (C1)	Hydr	ic Boll Present? Yes No Secondery Indicators (2 or more resulted) Water-Stained Leaves (89) (MLRA 1, 4A, and 48) Drainage Patterns (810) Dry-Seeson Wester Table (C2) Saturation Visible on Aerial Imagery (C
Isstrictive L Type: Depth (inc tematks: YDROLOO Vetland Hyd ritmery India Surface 1 High Wat Seturatio Weter Ma Seturatio Drift Dep	syer (if present): hes): irology indicaton stora (minimum of Water (A1) stor (A1) stor (A1) arts (B1) t Deposits (B2) ouite (B3)	s: Lone requir	ed: check all that spoky Water-Stained 1 1, 2, 4A, an Salt Gruat (B11 Aquatic Invertei Hydrogen Suffic Oxidized Rhito:	Leaves (B9) (exce d 4B) } prates (B13) te Odor (C1) spheres along Livi	Hydr	ic Boll Present? Yes No Secondery Indicators (2 or more required) Water-Stained Loeves (39) (MLRA 1, 4A, and 48) Drainage Patterns (B10) Dry-Seeson Water Table (C2) Saturation Visible on Aeriat Imagery (C Geomorphic Position (02)
Isstrictive L Type: Depth (inc Lemerks: YDROLOO Wetland Hyd Hingh Wat Setursio Setursio Setursio Weter Mi Setursio Drift Dep Agel Mai	syer (If present): hes): irology Indicaton irology Indicaton Water (A1) ter Table (A2) n (A3) arks (B1) it Deposits (B2) outhe (B3) to r Crusi (B4)	s: [gne requir	ed: check all that epoh/) 	Leaves (B9) (axce d 48) brates (B13) te Odor (C1) spheres along Livi duced from (C4)	Hydr	ic Boll Present? Yes No Secondery Indicators (2 or more required) Water-Stained Loeves (39) (MLRA 1, 4A, and 48) Drainage Patterns (310) Dry-Secon Water Table (C2) Saturation Visible on Aeriat Imagery (C Geomorphic Position (02) Shaflow Aguitard (03)
VDROLOO Vetland Hyd YDROLOO Vetland Hyd Ymary Indis Surface 1 High Wat Sedimer Ma Sedimer Drift Dep Agal Ma Iron Dea	syer (if present): hes): GY GY GY GY GY GY GY Mater (A1) ter Table (A2) n (A3) arts (A3) arts (B1) It Deposits (B2) calls (B3) tor Crust (B4) calls (B4) calls (B4)	s: [gage regard	ed: check all that spph/) 	Leaves (B9) (exce d 4B) } Drates (B13) te Cdor (C1) spheres along Livi ducton in Tilled S	Hydr	ic Boll Present? Yes No Secondary Indicators (2 or more required) Water-Steined Loeves (B0) (MLRA 1, 4A, and 4B) Dry-Secon Weler Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (02) Shallow Aquitard (03) FAC-Neutral Test (D5)
testrictive L Type: Depth (inc temerks: YDROLOO Vetland Hyd Sufface N Sufface N Sufface N Setimer Setimer Dritt Dep Algel Mei Sufface S	GY GY GY GY GY GY GY GY GY GY GY GY GY G	s: [gage rectual	ed: check all that spoh) 	Leaves (B9) (exce d 49) } brates (B13) te Odor (C1) spheres along Livi duced Iron (C4) ducton in Tilled S sed Plants (D1) (Hydr hydr MLRA ing Roots (C3) LER A)	ic Boll Present? Yes No Secondary Indicators (2 or more resulted) Water-Stained Leaves (38) (MLRA 1, 4A, and 48) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (02) Shaflow Aquitart (C3) FAcNeutral Test (D5) Raised Ant Mounds (C6) (LRR A)
Vestand Hyd Type: Depth (inc ternerica: YDROLOO Wetland Hyd trimery India Setrace 1 — High Wat Setrace 1 — High Wat Setrace 1 — High Wat Setrace 1 — Drift Dep Drift Dep Agal Wat Agal Ma Setrace 1 Incoden	syer (If present): hes): irology indicaton stora (minimum of Water (A1) ter Table (A2) n (A3) arts (B1) (Deposits (B2) oaite (B3) tor Crusi (B4) oaite (B5) Soil Creats (B5) Soil or Aerta (B6)	e: I one requir	ed: check all that spoh/) 	Leaves (B9) (exce d 4B) b) brates (B13) te Odor (C1) sphares along Lini ducton in Tilled S saed Plants (D1) (in Remarks)	Hydr hydr MLRA ing Roots (C3) olis (C8) LER A)	ic Boll Present? Yes No Secondery Indicators (2 or more required) Water-Stained Loeves (S9) (MLRA 1, 4A, and 48) Drainage Patterns (S10) Dry-Sesson Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (O2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Rained Ant Mounds (D6) (LRR A) Prost-Heave Hummocks (D7)
Vetland Hyd YDROLOO Vetland Hyd YDROLOO Vetland Hyd Ymery India Satraet High Wat Satraet Weter Mi Setimer Drift Dep Algal Mat Iron Dep Saraet Saraet Saraet Saraet	syer (If present): hes): GY GY GY GY GY GY Mater (A1) ter Table (A2) m (A3) arks (B1) t Deposits (B2) ouite (B3) t or Crust (B4) ouite (B3) t or Crust (B4) ouite (B5) Soil Crecks (B6) nv Visible on Artis	S: Egne regult H Imagery (I	ed: check all that spoh/) 	Leaves (B9) (exce d 4B) } prates (B13) te Odor (C1) spheres along Livi duced fron (C4) ucton in Tifled S sead Planis (D1) (in Remerks)	Hydr hydr MLRA ing Roots (C3) oits (C3) LRR A)	ic Boll Present? Yes No Seconderv Indicators (2 or more required) Water-Stained Loeves (39) (MLRA 1, 4A, and 48) Drainage Patterns (310) Dry-Secon Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (02) Shaltow Aquitard (03) FAC-Neutral Test (05) Raised Ant Mounds (06) (LRR A) Frost-Heave Hummocks (07)
VDROLOO Vetland Hyd YDROLOO Vetland Hyd YDROLOO Vetland Hyd Ymar Indig Surface 1 Surface 1 Sedimer Drift Dep Agal Mei Surface 1 Surface	syer (If present): hes): GY GY GY GY GY GY GY GY GY GY	s: [<u>gne requir</u> H Imagery () we Surface	ed: check all that spoh/) — Water-Stained I 3, 2, 4A, and — Satt Crust (B11 — Aquatic Inverted — Hydrogen Suffic — Oxidized Rhizo — Presence of Re — Recent Iron Re — Stunted or Stre (B8)	Leaves (B9) (exce d 49) } brites (B13) te Odor (C1) apheres along Livi duced from (C4) ducton in Tilleo 4 seed Plants (D1) (in Remarks)	Hydr pr MLRA ing Roots (C3) olis (C8) LLRC A)	ic Boll Present? Yes No Secondery Indicators (2 or more required) Water-Steined Leaves (38) (MLRA 1, 4A, and 48) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shatlow Aquitart (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
VDROLOC Vetland Hyd Trimer India VDROLOC Vetland Hyd Trimer India Saturatio Saturatio Saturatio Dritt Dep Dritt Dep Dritt Dep Marace 1 Saturatio S	syer (If present): hes): GY trology Indicaton stora (minimum of Water (A1) ter Table (A2) m (A3) arks (B1) t Deposits (B2) oaits (B3) t or Crusi (B4) oaits (B5) Soil Cracks (B6) Soil Cracks (B6) N Visible or Aerid Vegetated Conce setions: ar Present?	s: I <u>one requir</u> H Imagery () we Surface Yes	ed: check all that spoh) — Water-Stained 1,2,4A, and — Sait Crust (B1) — Aquatic Invertet — Hydrogen Suffic — Oxidized Rhizon — Presence of Re — Recent Iron Re — Stunted or Stre. B7) — Other (Explemini (B5) No — Depth (inchest)	Leaves (B9) (exce d 4B) brates (B13) te Odor (C1) spheres along Livit ducton in Tilled S ssed Planis (D1) (in Remerks)	Hydr All All All All All All All All All All	be Boll Present? Yes No Secondery Indicators (2 or more required) Water-Stained Leaves (36) (MLRA 1, 4A, and 48) Drainage Patterns (310) Dry-Seeson Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shatlow Aquitard (D3) FAC-Neutral Tat (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Vetland Hyd Type: Depth (inc ternerka: YDROLOO Vetland Hyd Trimerr India Satraeto High Wai Satraeto High Wai Satraeto High Wai Satraeto High Wai Satraeto High Wai Satraeto Satraeto High Wai Satraeto Satrae	syer (If present): hes): GY irology Indicaton water (A1) ter Table (A2) m (A3) arks (B1) t Deposits (B2) oaite (B3) to Crouel (B4) osite (B5) Soil Cracks (B5) Soil Cracks (B5) Soil Visible on Aeria Vegetated Concer refineern? Desert?	s: [<u>one requir</u> H Imagery () we Surfece Yes		Leaves (B9) (exce d 4B) } strates (B13) te Odor (C1) spheres atong Livit ducton in Tilled S ssed Plants (D1) (in Remarks)	Hydr hydr MLRA ing Roots (C3) Julia (C3) LURA)	ic Boll Present? Yes No Secondery Indicators (2 or more required) Water-Stained Loeves (39) (MLRA 1, 4A, and 48) Drainage Patterns (310) Dry-Seeson Water Table (C2) Seturation Visible on Aerial Imagery (C Geomorphic Position (02) Shallow Aquitard (03) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Fröst-Heave Hummocka (D7)

Celutator research (actudes capitary finge) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

no plante

Remarks:

US Army Corps of Engineers

Western Mountaine, Valleys, and Coast - Interim Varsion

WETLAND DETERMINATION DATA	A FORM – Western M	ountains, Valleys, and	d Coast Region
Projectisie Genmen	City/County:	norma sille	Sampling Date: 3-7-19
Applicant/Owner:		State:	Sempting Point:
Investigator(s): Ed Sand	Section, Township,	Range: <u>324</u>	TJINICBE
Landform (hillalope, terrace, etc.):	Local relief (concav	e. convex, none):	Siope (%):
Subregios (LRR): I	Lat:	Long:	Datum:
Sol Map Unit Nome: Aldrewood		NWI classifir	ation:
Are climate / hydrologic conditions on the site typical for this tix	me of year? YesN	o (If no, explain in R	(emarks.)
Are Vegetation, Soil, or Hydrology sign	ilicantly disturbed? A	re "Normal Circumstances" (present? Yes No
Are Vegetation, Soll, or Hydrology natu	anally problematic? (il	I needed, explain any answe	rs in Remarks.)
			have a start fragment of a

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

 Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes	No No No	is the Sampled Area within a Wetland?	Yes	No
 Remarks					

VEGETATION - Use scientific names of plants.

	Absolute	Dominant Indicator	Dominance Test worksheet:
Tice 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 Strats: (B)
4			Perment of Dominant Species
Senting/Shouth Strategy (Dict size:		* Total Cover	That Are OBL, FACW, or FAC: (A/B)
1			Prevalence Index worksheet:
2			Tatel % Cover of Multiply by:
3			OBL apecies x1 =
4	istan dingkaskalanding		FACW species x2 =
5			FAC species x3 =
1 **		a Total Cover	FACU species x 4 =
Herb Stretum (Ptot size:)			UPL species x 5 *
1. Phahy andury	_ 75_	- An	Column Totals: (A) (B)
2			
3			Prevalence Index * B/A =
4.			Hydrophytic Vegetation Indicators:
5			Dominance Test is >50%
8			Prevalence Index is \$3.01
7.			Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
8	*****		Wetland Non-Vascular Plants
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 (Pict size:		= Total Cover	
ALARRA LET STERNE (FRA State,			Mudanhusia
2			Vegetation
A		a Tatal Counts	Present? Yes No
% Bare Ground in Herb Stratum	********	+ rotal Cover	
Remarks:			1
Log-1,			

US Army Corps of Engineers

Western Mountains, Valleys, and Coast - Interim Version

Redox Feebres set) % Type Loc Texture Depth Matrix 4 Color (moist) Color (moist) Remarks (inches) * 10nzh 92 16 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Greins, Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) ²Location: PL=Pore Lining, M=Matrix, Indicators for Problematic Hydric Solis³: Histosol (A1) ____ Sandy Redox (S5) ____ 2 cm Muck (A10) ____ Stripped Matrix (S6) ___ Red Parent Material (TF2) Histic Epipedon (A2) ----____ Loamy Mucky Mineral (F1) (axcept MLRA 1) Other (Explain in Remarks) Black Histic (A3) ____ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) ____ Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) ^aIndicators of hydrophytic vegetation and -----Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Mucky Mimeral (S1) Sandy Glayed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layor (if present): Type: Depth (inches): Hydric Soll Present? Yes ____ Remarks: 10 voluts

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

HYDROLOGY

SOIL

Wetland Hydrology Indicato	rs:			
Primary Indicators (minimum)	n one required; che	ick all that apply)	,	Secondary Indicators (2 or more required)
Surface Water (A1) Grand Deposition (A2) Seturation (A3) Weter Marks (B1) Setiment Deposits (B2) Drift Deposite (B3) Algal Mat or Crust (B4) fron Deposits (B5) Surface Soil Cracks (B6)		Water-Stained Leaves (B9) (et 1, 2, 4A, and 4B) Sat Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sutifice Odor (C1) Oxidized Rhizospheres along I Presence of Reduced Iron (C4 Recent Iron Reduction in Tiffac Stunted or Stressed Plants (D)	Living Roots (C3)) i Soils (C6) 1) (LRR A)	Weter-Stained Leaves (39) (MLRA 1, 2, 4A, and 4B) Drainege Pattorns (B10) Dry-Sesson Weter Table (C2) Seturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Sheflow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D8) (LRR A)
inundation Visible on Aeri Sparsely Vegetated Conc Field Observations: Surface Water Present? Water Table Present?	al imagery (67) ave Surface (88) Yes No Yes	Other (Explain in Remarks)	_	Frost-Heave Hummocka (D7)
Saturation Present? (includes capillary fringe) Describe Recorded Data (stre	Yes No	Depth (inches):	pections), if availa	drology Present? Yes No
Remarks:	NO	1-dicels		

US Army Corps of Engineers

Western Mountains, Valleys, and Coast -- Interim Version

DP#14 Sampling Point:

No.

BCVSRE CY	·· Ward Mr.	City/C	ounty.	St Late -	mpang Date:	712++
ntowner:	5. 41			State: Sd	mpling Point	CE
ibr(s):	- owner	Section	m, Township, Ra	nge:2 < <1	5110102	<u> </u>
m(hillslope, terrace, etc.): _	****	Local	relief (conceve.	convex, hone):	Slope (%):	
ios (LRR):		_ Lat:		_ Long:	Datum:	
ap Unit Nama:4	Jannael			NWI classificatio	m:	
imate / hydrologic conditions	on the site typical for this	time of year? Y	es No _		Brks.)	-
egetation, Soil	, or Hydrology si	gnificantly diatur	erA ?bed	Normal Circumstances" pres	ent? Yes 🦾 N	o
egenation, Soil		aturally problema	utic? (If no	aded, explain any answers k	a Remarks.)	
MARY OF FINDINGS .	- Attach site man (inowing sam	unling point l	ocations transacts in	noortant feature	a ato
trophytic Vegetation Present? Aric Soil Present? Itand Hydrology Present? nerks:	Yes No Yes No Yes No		is the Sampled within a Wetla	Area ad? Yes	No	
TATION - Use scient	tific names of plant	3 .				
Stratum (Plot size:		ADSORUTE DOIT	cies? Status	Number of Dominant State	int;	
				That Are OBL, FACW, or F	AC:	(A)
				Total Number of Dominant	~	
				Species Across All Strata:		(8)
				Percent of Dominant Speci	ias	.
n/Shrub Stratum (Piot size	r)	= Tol	tai Cover	That Are OBL, FACW, or F	AC:	(A/B)
Pubur de	4	40	- XX	Prevalence Index worksh	est:	a lasta a las las
				Total % Cover of	Multiply by	-
والمستنف المراقب والمناور والمحرور والمراجع والمحاولة والمحاوم				OBL species	x1=	
	****			FACW species	x2 =	-
	·*····			FAC species	x3=	
Stehum (Diet size:	,	= Tol	tal Cover	FACU species	×4 =	-
Fich	***************************************	Ŵ	FAC	UPL species	X5*	-
			Kalabatia	Column Foliale:	(A)	(8)
******	R <u>andin - Ale Ale Ale Ale Ale Ale Ale A</u> le Ale Ale Ale Ale Ale Ale Ale Ale Ale A			Prevalence index = I	3/A =	
				Hydrophytic Vegetation I	ndicators:	
				Dominance Test is >5i	3%	1
				Prevalence Index is \$3	1.01	
				Morphological Adapter	ions' (Provide suppor	rting
				data in Remarks or	on a separate sheet)	
				Welland Non-Vascular	"Plants"	
					ac vegetation (Expla	an)
				be present, unless disturbe	a weesno nyorology / id or problematic.	11051
	•	Tok	al Cover			
ody Vine Stratum (Picit size: ,				4	-	1
ody Yine Stratum (Pict size: ,				Hydrophytic		1
<u>dv Vine Stratum</u> (Picit alze: ,				Hydrophytic Vegetation Present? Yes	No	
<u>dv Yine Stratum</u> (Piot size: ,			el Cover	Hydrophytic Vegetation - Present? Yes	No	

US Army Corps of Engineers

Western Mountains, Valleys, and Coast - Interim Version

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Color (mojet) % Type Loc² Texture Depti Matrix Color (moist) Remarks finches 1042314 en ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Solis¹ ---- Histosol (A1) ____ Sandy Radox (S5) ____ 2 cm Muck (A10) ____ Histic Epipedon (A2) ____ Stripped Matrix (S6) ___ Red Parent Material (TF2) ____ Loamy Mucky Mineral (F1) (except MLRA 1) Black Histic (A3) Other (Explain in Remarks) ____ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Deplated Below Dark Surface (A11) ____ Depleted Matrix (F3) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and Thick Dark Surface (A12) Depieted Dark Surface (F7) wetland hydrology must be present, Sandy Mucky Mineral (S1) Sendy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): Hydric Soll Present? Yes Remarks: No which HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Secondary Indicators (2 or more required) ____ Surface Water (A1) Water-Stained Leaves (89) (except NLRA Water-Stained Leaves (89) (MLRA 1, 2, ____ High Water Table (A2) 1, 2, 4A, and 4B) 4A, and 4B) ____ Saturation (A3) Salt Crust (B11) Dreinage Patterns (B10) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Hydrogen Sullide Odor (C1) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Drift Deposite (B3) Oxidized Rhizospheres along Living Roots (C3) ____ Geomorphic Position (D2) Algel Met or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) ____ ___ Recent iron Reduction in Tilled Soils (C6) ___ FAC-Neutral Test (D5) fron Deposits (B5) ____ Surface Soil Crecks (86) Raised Ant Mounds (D6) (LRR A) ____ Stunted or Stressed Plants (D1) (LRR A) ____ Other (Explain in Remarks) Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (87) Sparsely Vegetated Conceve Surface (B8) Field Observations: Surface Water Present? Dupth (inches): て Water Table Present? Depth (inches): Yes Saturation Present? Depth (inches): Wetland Hydrology Present? Yes Yes NO. No (includes capitlary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: No intinto

US Army Corps of Engineers

SOIL

Western Mountains, Valleys, and Coast - Interim Version

Sampling Point:

WETLAND DET	ERMINATION DATA	FORM -	Western Mor	untains, Valley	s, and Coa	st Region	
roject/Site: Genn	uh	City/	County M	mys 1 /2	Same	ling Date:	3-7-
oficant/Owner:				State:	NA Same	lina Point:	DPa
restigator(s) Ed	Saull	Seci	tion Township R	ance: 5 :	ZAT	SINI	25E
ndiarm (hillsione terrace atc.)		100	al relief (concave			Sione	1961-
haning (I PP)		at:		Long:		Catum:	(11)/
it Man Linis Mamai	Fran			NIME -	describention	Watorn.	
n map Unit Name.	<u> </u>		V / No.	/Man. 4141	sis in Osmani	•)	
e climatic / nyorologic conditions on	the site typical loi this ten	ne or year?	Tes NO	(in no, expi	ant in reemark	·.)	
e vegetation, Soil, o	r Hydrology signi	incantly dist.	inded / Are	Normal Circumsta	inces present	Y Yes	NO
e Vegetation, Soli, c	r Hydrology natu	rally problem	nauc? (irn	leeded, explain any	answers in R	emarks.)	
UMMARY OF FINDINGS -	Attach site map sh	owing sai	mpling point	locations, tran	sects, imp	ortant feat	ures, etc.
Hydrophytic Vegetation Present?	Vet No	/					~
lydric Soil Present?	Yes No		is the Sample	d Area			
Wetland Hydrology Present?	Yes No	_	within a wetle	ind/ Te	s	NO	
Remarks							
EGETATION - Use scientifi	c names of plants.			-			
ree Stratum (Plot size:	Al) %	bsolute Do Cover So	minant Indicator ecies? Status	Dominance Ter	st worksheet		
				That Are OBL, F	ACW, or FAC		(A)
				Tatal Mumber of	Deminant		
				Species Across	All Strata:		(8)
				Recent of Dom	icant Soecies		
	.	= T	otal Cover	That Are OBL, F	ACW, or FAC	-	(A/B)
Sapling/Shrub Stratum (Mot size: _				Prevalence Ind	er workshee	ŀ	
, 				Total % Co	ver of:	Multiply b	v:
**				OBL species		x1=	Ar
				FACW species		x2=	
5.				FAC species		x3=	
	_	= T	otal Cover	FACU species		x 4 =	
terb Stratum (Plot size:)			UPL species		x 5 =	
*				Column Totals:		(A)	(B)
· · · · · · · · · · · · · · · · · · ·				Prevalenci	e Index = R/A	2	
·				Hydrophytic Ve	oetation Ind	cators:	
·				Dominance	Test is >50%		
				Prevalence	Index is ≤3.0 ¹		
,				Morphologi	cal Adaptation	s' (Provide su	pporting
).				data in F	Remarks or on	a separate sh	eet)
)				vvetiand No	n-vascular Pl	BRIS	volain)
10.				indicators of hu	dric soil and u	veyousiou (C	Apadess) Yelv must
1.				be present, unie	ss disturbed (or problematic.	-97 III 401
Noody Vine Stratum (Dint size	, –	≃ To	otal Cover				
I				Hydrophytic			
2				Vegetation			
······································		= Te	stal Cover	Present?	Yes	No	-
& Bare Ground in Herb Stratum				1			
(emarks:	. 10	1	-	.1			
A		111 × 1					

US Army Corps of Engineers

Western Mountains, Valleys, and Coast -- Interim Version

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix **Redox Features** Color (moist) Color (moist) % Type Loc² Texture Remarks (inches 102313 E 2.5414/2 cm Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Send Grains. ²Location: PL=Pore Lining, M=Malrix Indicators for Problematic Hydric Soils¹: Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) 2 cm Muck (A10) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (TF2) Histic Epipedon (A2) Black Histic (A3) ___ Loamy Mucky Mineral (F1) (except MLRA 1) ____ Other (Explain in Remarks) ____ Hydrogen Sulfide (A4) Loamy Gleved Matrix (F2) Depleted Matrix (F3) ____ Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and -Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No. Remarks: HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (2 or more required) Primary Indicators (minimum of one required; check all that apply) ____ Water-Stained Leaves (89) (except MLRA Surface Water (A1) Water-Stained Leaves (89) (MLRA 1, 2, ____ High Water Table (A2) 1, 2, 4A, and 4B) 4A. and 4B) ____ Salt Crust (B11) ____ Saturation (A3) ___ Drainage Patterns (B10) ___ Aquatic Invertebrates (B13) Dry-Seeson Water Table (C2) Water Marks (B1) ____ Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) ____ Oxidized Rhizospheres along Living Roots (C3) ____ Geomorphic Position (D2) ____ Algai Mat or Crust (B4) ____ Shallow Aquitard (D3) Presence of Reduced Iron (C4) ____ Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (85) ____ FAC-Neutral Test (D5) ____ Raised Ant Mounds (D6) (LRR A) Surface Soil Cracks (86) Stunted or Stressed Plants (D1) (LRR A) ----------Inundation Visible on Aerial Imagery (B7) ____ Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (88) Field Observations: Surface Water Present? moth (inches) 2 Water Table Present? No Bepth (inches): Yes > Saturation Present? Yes No ___ Depth (inches): __ Wetland Hydrology Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available Remarks: No indicato

US Army Corps of Engineers

Western Mountains, Valleys, and Coast - Interim Version

Wetland name or number	Wetland	name	or	number	$\underline{\mathcal{A}}$
------------------------	---------	------	----	--------	---------------------------

RATING SUMMARY – Western Washington

Name of wetland (or ID #):	wet A	Demminy	Date of site visit:	3-7-14
Rated by Id Sa	uj	Trained by Ecology?	YesNo Date of	training
HGM Class used for rating	Dipation	Wetland has mu	tiple HGM classes?	YN

NOTE: Form is not complete without the figures requested (figures can be combined). Source of base aerial photo/map

OVERALL WETLAND CATEGORY

1. Category of wetland based on FUNCTIONS



Score for each function based on three ratings
(order of ratings is not important)
9 = H,H,H
8 = H,H,M
7 = H,H,L
7 = H,M,M
6 = H,M,L
6 = M,M,M
5 = H,L,L
5 = M,M,L
4 = M,L,L
3 = L,L,L

1

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CAT	EGORY
Estuarine	1	II
Wetland of High Conservation Value		I
Bog		1
Mature Forest		I
Old Growth Forest		I
Coastal Lagoon	1	II
Interdunal	III	шу
None of the above		

Wetland Rating System for Western WA: 2014 Update Rating Form – Effective January 1, 2015



Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

Mep of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (can be added to another figure)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (can be added to figure above)	S 4.1	
Boundary of 150 ft buffer (can be added to another figure)	\$ 2.1, \$ 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	\$ 3.1, \$ 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	\$ 3.3	
Wetland Rating System for Western WA: 2014 Update	2	

Rating Form – Effective January 1, 2015

Wetland name or number

HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1. Are the water levels in the entire unit usually controlled by tides except during floods?

NO-go to 2

2 YES - the wetland class is **Tidal Fringe** - go to 1.1

1:1 is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO – Saltwater Tidal Fringe (Estuarine) If your wetland can be classified as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it is Saltwater Tidal Fringe it is an Estuarine wetland and is not scored. This method cannot be used to score functions for estuarine wetlands.

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

<u>YES</u> – The wetland class is **Flats** *If your wetland can be classified as a Flats wetland, use the form for Depressional wetlands.*

Does the entire wetland unit meet all of the following criteria?
 ___The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;
 __Atleast 30% of the open water area is deeper than 6.6 ft (2 m).

YES - The wetland class is Lake Fringe (Lacustrine Fringe)

- 4. Does the entire wetland unit meet all of the following criteria?
 - ____The wetland is on a slope (slope can be very gradual),
 - ____The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks, ____The water leaves the wetland without being impounded.

NO - go to 5

NO - go to 4

YES – The wetland class is Slope

- NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).
- 5. Does the entire wetland unit meet all of the following criteria?
 - ____The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,
 - _____The overbank flooding occurs at least once every 2 years.

Wetland Rating System for Western WA: 2014 Update Rating Form - Effective January 1, 2015 3

Wetland name or number

NO - go to 6 YES - The wetland class is **Riverine** NOTE: The Riverine unit can contain depressions that are filled with water when the river is not flooding

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? This means that any outlet, if present, is higher than the interior of the wetland.

NO - go to 7



7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES - The wetland class is Depressional

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit being rated	HGM class to
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as ESTUARINE

If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.

Wetland Rating System for Western WA: 2014 Update Rating Form – Effective January 1, 2015

DEPRESSIONAL AND FLATS WETLANDS	
Water Quality Functions - Indicators that the site functions to improve water quality	
D 1.0. Does the site have the potential to improve water quality?	
D 1.1. Characteristics of surface water outflows from the wetland:	
Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet).	
points = 3 Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. صرحاف المراجع	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points -1	12
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1	
D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). Yes = 4 No = 0	TO
D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes)	
Wetland has persistent, ungrazed, plants > 95% of area points = 5	
Wetland has persistent, ungrazed, plants > ½ of area points = 3.	
Wetland has persistent, ungrazed plants $> \frac{1}{10}$ of area points = 1	
Wetland has persistent, ungrazed plants <1/10 of area points = 0	
D 1.4. Characteristics of seasonal ponding or inundation: This is the area that is ponded for at least 2 months. See description in manual.	
Area seasonally ponded is > ½ total area of wetland points = 4	
Area seasonally ponded is > ¼ total area of wetland points = 7	2
Area seasonally ponded is < % total area of wetland points = 0	<u> </u>
Total for D 1 Add the points in the boxes above	9
Pating of Site Detential If searching 12.15 = 1 (1.14 = 14 0.5 = 1) Description of the Sector	

Rating of Site Potential If score is: 12-16 = H ___6-11 = M ___0-5 = L Record the rating on the first page

Total for D 2 Add the point	s in the boxes above	1
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in quest Source	tions D 2.1-D 2.3? Yes = 1 (No = 0)	0
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 (No = 0)	5
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	(Yes = 1) No = 0	1
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0	0
D 2.0. Does the landscape have the potential to support the water quality function of t	he site?	

Rating of Landscape Potential If score is:___3 or 4 = H _____ for 2 = M ____0 = L Record the rating on the first page

D 3.0. Is the water quality improvement provided by the site valuable to	o society?	
D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, 303(d) list?	lake, or marine water that is on the $Yes = 1$ No = 0)
D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on th	e 303(d) list? Yes = No = 0	~
D 3.3. Has the site been identified in a watershed or local plan as important for if there is a TMDL for the basin in which the unit is found)?	r maintaining water quality (<i>onswer YES</i> Vese No = Q	-
Total for D 3	Add the points in the boxes above	Б
Deting of Malua if an instanting the literation of a literation	Barrish at a first start	

Rating of Value if score is: 2-4 = H ___1 = M ___0 = L

Wetland name or number _____

Record the rating on the first page

Wetland Rating System for Western WA: 2014 Update Rating Form – Effective January 1, 2015

5

Wetland name or number <u>A</u>

DEPRESSIONAL AND FLATS WETLANDS	
Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation	
D 4.0. Does the site have the potential to reduce flooding and erosion?	
D 4.1. Characteristics of surface water outflows from the wetland: points = 4 Wetland is a depression or flat depression with no surface water leaving it (no outlet) points = 4 Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outletpoints = 1 wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outletpoints = 1 Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing points = 1 wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 0	z
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands	
with no outlet, measure from the surface of permanent water or if any, the deepest part. Marks of ponding are 3 ft or more above the surface or bottom of outlet	
Marks of pointing are or hore and are or bottom of outlet pointing 5	
Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet points = 3	
The wetland is a "headwater" wetland points = 3	
Wetland is flat but has small depressions on the surface that trap water	-
Marks of ponding less than 0.5 ft (6 in)	0
D 4.3. <u>Contribution of the wetland to storage in the watershed</u> : Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself.	
The area of the basin is less than 10 times the area of the unit points = 5	
The area of the basin is 10 to 100 times the area of the unit (points = 3)	
The area of the basin is more than 100 times the area of the unit points-0	3
Entire wetland is in the Flats class points = 5	
Total for D 4 Add the points in the boxes above	5
Rating of Site Potential If score is: 12-16 = H6-11 = M0-5 = L Record the rating on the	first page
D 5.0. Does the landscape have the potential to support hydrologic functions of the site?	
D 5.1. Does the wetland receive stormwater discharges? Yes = 1 No = 0	0
D 5.2. is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? (Yes = 1) No = Q	ſ
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at	2
Total for D 5 Add the points in the boxes above	
Rating of Landscape Potential If score is: 3 = H 1 or 2 = M 0 = L Record the rating on the	first page
D 6.0. Are the hydrologic functions provided by the site valuable to society?	
D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met. The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds): • Flooding occurs in a sub-basin that is immediately down-gradient of unit. points = 2 • Surface flooding problems are in a sub-basin. points = 1 > Flooding from groundwater is an issue in the sub-basin. points = 1	
The existing or potential outflow from the wetland is so constrained by human or natural conditions that the	
water stored by the wetland cannot reach areas that flood. Explain why points = Q	1
There are no problems with flooding downstream of the wetland. points = Q	
D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = Z No.# D	5
Total for D 6 Add the points in the boxes above	1

Rating of Value If score is: ____2-4 = H ____1 = M ____0 = L

Record the rating on the first page

.

Wetland Rating System for Western WA: 2014 Update Rating Form – Effective January 1, 2015

Wetland name or number _____

These questions apply to wetlar	nds of all HGM classes.	
HABITAL FUNCTIONS - Indicators that site functions to pro	vide important nabitat	
H11 Structure of plant community: Indicators are Cowardin classes and	d strata within the Egrected class. Check the	
Cowardin plant classes in the wetland. Up to 10 patches may be co	ombined for each class to meet the threshold	
of ¼ ac ar more than 10% of the unit if it is smaller than 2.5 ac. Ad	d the number of structures checked.	
Aquatic bed	4 structures or more: points = 4	
Emergent	3 structures: points = 2	
Screb-shrub (areas where shrubs have > 30% cover)	2 structures: points = 1	
Forested (areas where trees have > 30% cover)	1 structure: points = 0	~
If the unit has a Forested class, check if:	_	0
The Forested class has 3 out of 5 strata (canopy, sub-canopy,	shrubs, herbaceous, moss/ground-cover)	
that each cover 20% within the Forested polygon		
H 1.2. Hydroperiods		
Check the types of water regimes (hydroperiods) present within th more than 10% of the wetland or ¼ ac to count (see text for descri	ne wetland. The water regime has to cover iptions of hydroperiods).	
Permanently flooded or inundated	4 or more types present: points = 3	
Seasonally flooded or inundated	3 types present: points = 2	
Occasionally flooded or inundated	2 types present: points = 1	
Saturated only	1 type present: points = 0	
Permanently flowing stream or river in, or adjacent to, the w	etland	
Seasonally flowing stream in, or adjacent to, the wetland		0
Lake Fringe wetland	2 points	هو ب
Freshwater tidal wetland	2 points	
H 1.3. Richness of plant species		
Count the number of plant species in the wetland that cover at lea	ast 10 ft ² .	
Different patches of the same species can be combined to meet the	e size threshold and you do not have to name	
the species. Do not include Eurasian milfoil, reed canarygrass, p	urple loosestrife, Canadian thistle	
If you counted: > 19 species	points = 2	
5 - 19 species	points = 1	1
< 5 species	points = 0	
H 1.4. Interspersion of habitats		
Decide from the diagrams below whether interspersion among Co	wardin plants classes (described in H 1.1), or	
have four or more plant classes or three classes and open water of more	he rating is abuque bigh	
nove jour of more plant classes of three classes and open water, it	re ruting is always nigh.	
\frown	\square	
()		
None = 0 points Low = 1 point	Moderate = 2 points	
and the second sec		
All three diagrams		
in this row		Land Contraction
are HIGH = 3points		

Wetland Rating System for Western WA: 2014 Update Rating Form – Effective January 1, 2015

Wetland name or number _____

H 1.5. Special habitat features:		
Check the habitat features that are present in the wetland. The number of checks is	s the number of paints.	
Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long	t).	
Standing snags (dbh > 4 in) within the wetland		
Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants	extends at least 3.3 ft (1 m)	
over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m)	
Stable steep banks of fine material that might be used by beaver or muskrat for	or denning (> 30 degree	
slope) OR signs of recent beaver activity are present (cut shrubs or trees that i where wood is exposed)	have not yet weathered	
At least ¼ ac of thin-stemmed persistent plants or woody branches are presen	t in areas that are	
permanently or seasonally inundated (structures for egg-laying by amphibian	is)	1
Invasive plants cover less than 25% of the wetland area in every stratum of pla strata)	ints (see H 1.1 for list of	1
Total for H 1 Add the	points in the boxes above	Z
Rating of Site Potential If score is:15-18 = H7-14 = M0-6 = L	Record the rating on t	the first page
H 2.0. Does the landscape have the potential to support the habitat functions of t	he site?	
H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit).	_	
Calculate: / % undisturbed habitat _ + [(% moderate and low intensity lan	d uses)/2]_5 =%	
If total accessible habitat is:		
> 1/3 (33.3%) of 1 km Polygon	points = 3	
20-33% of 1 km Polygon	points = 2	
10-19% of 1 km Polygon	points = 1	
< 10% of 1 km Polygon	points = 0	Q
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.		
Calculate: 70 % undisturbed habitat 40+ 11% moderate and low intensity lan	d uses)/21 3/ = 5 3 %	
Undisturbed habitat > 50% of Polygon	points = 3	
Undisturbed habitat 10-50% and in 1-3 patches	points = 2	
Undisturbed habitat 10-50% and > 3 patches	points = 1	~
Undisturbed habitat < 10% of 1 km Polygon	points = 0	<u> </u>
H 2.3. Land use intensity in 1 km Polygon: If		
> 50% of 1 km Polygon is high intensity land use	points = (-2)	
< 50% of 1 km Polygon is high intensity	points = 0/	\sim
Total for H 2 Add the	points in the boxes above	~
Rating of Landscape Potential If score is:4-6 = H1-3 = M<1 = L	Record the rating on th	ne first page
H 3.0. Is the habitat provided by the site valuable to society?	<u></u>	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Ch	oose only the highest score	
cion appines to che wenana being ratea. Site meete ANV ef the following esiteria:		
Site meets Airy of the following criteria:	points = 2	
— It has 3 or more priority habitats within 100 m (see next page)	1	

- It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)
- It is mapped as a location for an individual WDFW priority species
- ---- It is a Wetland of High Conservation Value as determined by the Department of Natural Resources
- --- It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan
- Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1

Wetland Rating System for Western WA: 2014 Update Rating Form - Effective January 1, 2015

beints = fl Record the rating on the first page

Site does not meet any of the criteria above Rating of Value If score is:___2 = H ___1 = M ___0 = L

Wetland name or number $\not+$

WDFW Priority Habitats

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. http://wdfw.wa.gov/conservation/ohs/list/) http://wdfw.wa.gov/conservation/ohs/list/)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: **NOTE:** This question is independent of the land use between the wetland unit and the priority habitat.

- Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- Biodiversity Areas and Corridors: Areas of habitat that are relatively important to various species of native fish and
 wildlife (full descriptions in WDFW PHS report).
- Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock.
- Old-growth/Mature forests: <u>Old-growth west of Cascade crest</u> Stands of at least 2 tree species, forming a multilayered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. <u>Mature forests</u> - Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- Oregon White Oak: Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak
 component is important (full descriptions in WDFW PHS report p. 158 see web link above).
- Riparlan: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet
 prairie (jull descriptions in WDFW PHS report p. 161 see web link above).
- Instream: The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.
- Nearshore: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and
 Puget Sound Nearshore. (full descriptions of habitats and the definition of relatively undisturbed are in WDFW report
 see web link on previous page).
- Caves: A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- --- Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- Talus: Homogenous areas of rock rubble ranging in average size 0.5 6.5 ft (0.15 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- Snags and Logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to
 enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western
 Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft
 (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

Wetland Rating System for Western WA: 2014 Update Rating Form - Effective January 1, 2015 15

Wetland name or number

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category	
Check off any criterio that apply to the wetland. Circle the category when the appropriate criterio are met.		
SC 1.0. Estuarine wettands		
The device of the following criteria for Estuarine wetlands r		
- Ine dominant water regime is tidal,	1	
- vegetated, and	1	
- With a salinity greater than 0.5 ppt Yes -Go to SC 1.1 No= No= Not en estuarine wetland	ł	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area		
Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151?	Cat I	
Yes = Category I No - Go to 5C 1.2		
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?		
The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less		
than 10% cover of non-native plant species. (If non-native species are Spartina, see page 25)	Cat. I	
At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-		
mowed grassland.		
The wetland has at least two of the following features: tidal channels, depressions with open water, or	Cat. II	
contiguous freshwater wetlands. Yes = Category I No = Category II		
CC2.0 Michaele of Mich. Commencies Makes Ballion	<u> </u>	
Sc 2.0. We want of the second se		
SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High	Cat I	
Conservation Value? Yes - Go to SC 2.2 No - Go to SC 2.3		
SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?		
Yes = Category I No = Not a WHCV	1	
SC 2.3. Is the wetland in a Section/ I ownship/Kange that contains a Natural Heritage wetland?		
http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetiands.pdf		
res - curract which which a constant of the second state of the constant of the second state of the seco	P	
so zive, has work full-infectine wetrand within the stripk as a wetrand of high conservation value and insteal to in their webricka		
COLO DATA	<u> </u>	
Does the wetland (or any part of the Unit) meet both the criteria for soils and vegetation in bogs? Use the key		
below. If you answer ves you win stin need to rate the wetiana based on its junctions.	1	
SC 3.1. Does an area within the wettand unit have organic soil norizons, either peats or mucks, that compose 14 in all	Ł	
more of the first 32 in of the soil profiler $Yes = Go to 3c 3.3$ $No - Go to 3c 3.3$	T	
SC 3.2. Does an area within the wettand unit have organic soils, either peats or mucks, that are less than 16 in deep		
over bedrock, or an impermeable naropan such as ciay or volcanic ash, or that are hosting on top or a take or	Ł	
pondr 765 - Go to St 3.3. No = is not a por	Г	
SC 3.3. Does an area with peats or mucks have more than 70% cover or mosses at ground level, AND at least a 30%		
cover or plant species listed in Table 4r Tes = is a Lategory i $\log N_0 - G_0$ to SL 3.4		
NOTE: If you are uncertain about the extent of mosses in the uncerstory, you may substitute that criterion by		
measuring the ph of the water that seeps into a noie dug at least 16 in deep, if the pH is less than 5.0 and the	Cat I	
plant species in label 4 are present, the wetrand is a log.		
SC 3.4. Is an area with peaks or mucks forested (> 30% cover) with sitka spruce, subalpine fir, western red cedar,		
western remout, lougepole pine, quaking espen, engemann spruce, or western white pine, Avb any or the	ł	
species (or combination of species) insteam rable 4 provide more than 30% of the cover under the catappy		
Tes = is a wategory i bog No = is hot a bog	1	

Wetland Rating System for Western WA: 2014 Update Rating Form – Effective January 1, 2015

Wetland name or number _____

SC 4.0. Forested Wetlands		
Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate</i> the wetland based on its functions		
 Old-growth forests (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of a 20 million of the stands of the stands		
more a manneer at breast neight (aun) of 32 in (31 cm) of more the areast rees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm).		
Yes = Category I No.= Not a forested wetland for this section	Cat. I	
SC 5.0. Wetlands in Coastal Lagoons	1	
Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? — The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks — The lagoen is which the wetland is lacted expecting a pended water that is called as hereight (0.0.5 and		
The lagoon in which the wetland is located contains ponded water that is saline or brackish (<u>so S pot</u>) during most of the year in at least a portion of the lagoon (<i>neede to be measured near the bottom</i>) Yes - Go to SC 5.4. No = Not a wetland in a coastal lagoon		
SC 5.1. Does the wetland meet all of the following three conditions?	T	
— The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100).		
— At least % of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un- mowed grassland.		
The wetland is larger than $^{1}/_{10}$ ac (4350 ft ²)		
Yes = Category I No = Category II		
SC 6.0. Interdunal Wetlands		
Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? If you answer yes you will still need to rate the wetland based on its habitat functions. In practical terms that means the following geographic areas:		
Long Beach Peninsula: Lands west of SR 103		
- Grayland-Westport: Lands west of SR 105	Catl	
Ocean Shores-Copalis: Lands west of SR 115 and SR 109 Yes – Go to SC 6.1 No = not an interdunal wetland for rating	₽	
SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)? Yes = Category I No - Go to SC 6.2	Cat. II	
SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? Yes = Category II No - Go to SC 6.3	Cat. ill	
SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac? Yes = Category III No = Category IV		
	Cat. IV	
Category of wetland based on Special Characteristics	100	
It you answered No for all types, enter "Not Applicable" on Summary Form	14	

3

× +

National Wetlands Inventory surface waters and wetlands

	BASEMAPS >
	MAP LAYERS >
O Wetlands	0 6
🗆 Riparian	06
🗆 Riparian Mapping Areas	06
🗷 Data Source	06
O Source Type	
O Image Scale	
O Image Year	
C Areas of Interest	G
FWS Managed Lands	06
Historic Wetland Data	06

7-

W

0

e





😅 Assessment of state waters 303d 🗙 📀 Water Quality Atlas - Map

 $\leftarrow \rightarrow$ C

+

×

е

W



Dissolved Oxygen	View
Temperature	View
Dissolved Oxygen	View
	First Previous Next Last

11:10 AM A -9/8/2021

- 0 X

2

☆

*

× (+)

X

0

National Wetlands Inventory surface waters and wetlands

	BASEMAPS >
	MAP LAYERS >
O Wetlands	00
Riparian	00
C Riparian Mapping Areas	00
🗷 Data Source	00
O Source Type	
O Image Scale	
O Image Year	
Areas of Interest	0
FWS Managed Lands	00
Historic Wetland Data	00

W

0

е



- 0 X

11:04 AM 9/8/2021