

# **Sewall Wetland Consulting, Inc.**

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

August 15, 2022

Ryan Wear Ideal Property Investments 2732 Grab Avenue, Suite 212 Everett, Washington 98201

RE: Critical Area Report - Parcels #31053300202200, #2300, #2400, #1500, #2500 & #0600 City of Marysville, Washington SWC Job #22-164

Dear Ryan,

This report describes our observations of any jurisdictional wetlands, streams or buffers on or within 200' of Parcels #31053300202200, #2300, #2400, #1500, #2500 & #0600, located on the east side of Smokey Point Boulevard, in the City of Marysville, Washington (the "site"). The 10.15 acre site is located in the NW ¼ of Section 33, Township 31 North, Range 5 east of the W.WM.



Above: Vicinity Map of the site.

The site is an irregular shaped 10.15 acre property containing several vacant single family homes as well as several outbuildings and gravel driveways and driving surfaces. The site is located within the NW ¼ of Section 33, Township 31 North, Range 5 East of the W.M. in Snohomish County, Washington.

## **METHODOLOGY**

Ed Sewall of Sewall Wetland Consulting, Inc. inspected the site on August 11, 2022.

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 and City of Marysville.



Above: 2020 aerial photograph of the site.

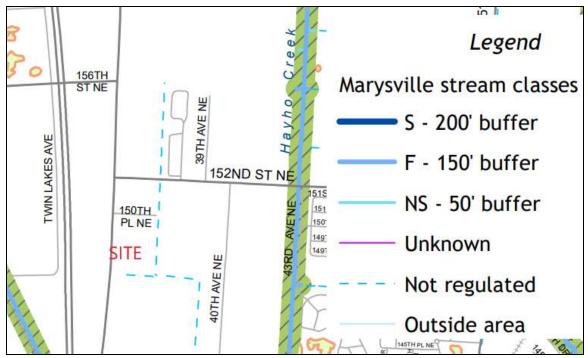
## **OBSERVATIONS**

## Existing Site Documentation.

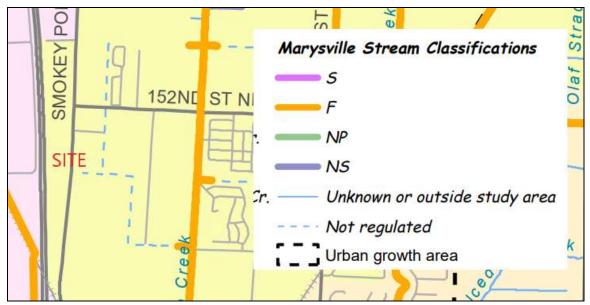
Prior to visiting the site, a review of several natural resource inventory maps was conducted. Resources reviewed included the City of Marysville Critical Areas map, National Wetland Inventory Map, the NRCS Soil Survey online mapping and Data, and the WDFW Priority Habitats mapping website.

# City of Marysville Critical Areas Map

According to the City of Marysville Critical Areas Maps, there are no wetlands or streams on the site. Ditches along the south and east sides of the site are identified as "not regulated".



City of Marysville Critical Areas Map



Above: City of Marysville stream map.

# **National Wetlands Inventory (NWI)**

The NWI map depicts no wetlands or streams on or near the site. The same unregulated ditches along the east and west side are depicted.



Above: NWI Map of the area of the site.

# **Soil Survey**

According to the NRCS Soil Mapper website, the site is mapped as Custer fine sandy loam. Custer soils (soil unit #13) are poorly drained soils formed in outwash plains. Custer soils that are not drained are considered hydric or wetland soils. Many Custer soil units in the Marysville area have been manipulated and drained and are not wetlands.



Above: NRCS Soil map of the study area.

## **WDFW Priority Habitats**

According to the WDFW Priority Habitats mapping website, there are no priority habitats on or near the site. The closest mapped priority habitat is a wetland depicted on the NWI map over 700' east of the site. The unregulated ditches are depicted as well on the maps.



Above: WDFW Priority Habitats Map of the site

## Field observations

## *Uplands*

The site is a relatively flat group of parcels containing vacant and dilapidated single family hommes as well as scattered outbuildings and disturbed soil surfaces. Parts of the site appear to be fallow pasture areas which were historically mowed or cropped.

Vegetation throughout the area is a mix of blackberry, bracken fern, orchard grass, bent grass, and other weedy species. A small cluster of cottonwoods is located on the southeast side of the site. The perimeter of the site on the south and east is generally Douglas firs located along the unregulated ditches.

A disturbed area of soils are found on the southeast portion of the site which contain some reed canary grass, creeping buttercup and toad rush. This is in an area of tire ruts and general soil disturbance.

Soil pits excavated within this area of hydrophytes revealed a gravelly loam soils with a color of 10YR 2/2 with no hydric soil characteristics.

Soil pits excavated throughout the remainder of the site also lacked any hydric soil indicators or evidence of wetland hydrology.



Above: Data point locations on the site

## Conclusion

No wetlands, streams or buffers exist on the site.

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 <a href="mailto:esewall@sewallwc.com">esewall@sewallwc.com</a>.

Sincerely,

Sewall Wetland Consulting, Inc.

Ed Sewall

Senior Wetlands Ecologist PWS #212

Attached: Data Sheets

## **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 FORM - Arid West Region

Project/Site:	. 1	City/County:	Maysville Sampling Date: 8-11-22
Applicant/Owner:			State: WA Sampling Point: DP#1
Investigator(s):	Seml	Section Towns	nip, Range:
Landform (hillslope, terrace, etc.):			cave, convex, none): Slope (%):
• • • • • • •			
Subregion (LRR):			
Soil Map Unit Name:			NWI classification:
Are climatic / hydrologic conditions of		1	No (If no, explain in Remarks.)
Are Vegetation, Soil,		~	Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil,	, or Hydrology naturally p	roblematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS -	Attach site map showin	g sampling p	oint locations, transects, important features, etc.
Hydrophytic Vegetation Present?	Yes No		
Hydric Soil Present?	Yes No		mpled Area
Wetland Hydrology Present?	Yes No	within a	Wetland? Yes No
Remarks:		-	
}			
<b>VEGETATION</b> – Use scienti	ific names of plants.		
	Absolut		
Tree Stratum (Plot size:		Species? Sta	Number of Dominant Species
1			That Are OBL, FACW, or FAC: (A)
2		<del></del>	Total Number of Dominant 3
3.			Species Across All Strata: (B)
4		= Total Cover	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:		_ = rotal cover	That Are OBL, FACW, or FAC: (A/B)
1.			Prevalence Index worksheet:
2.		I	Total % Cover of: Multiply by:
3.			OBL species x 1 =
4			FACW species x 2 =
5			FAC species x 3 =
Howh Stratum (Diet sine)		= Total Cover	FACU species x 4 =
Herb Stratum (Plot size:  1. Dacky lis gland	note 60	FA	UPL species x 5 =
2. Rubus discon	hun 20	7	Column Totals: (A) (B)
3. Agrushis 5		F	Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
5.		T	Dominance Test is >50%
6.			Prevalence Index is ≤3.0¹
7.			Morphological Adaptations <sup>1</sup> (Provide supporting
8.			data in Remarks or on a separate sheet)
		= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		10.00.00.00.00.00.00.00.00.00.00.00.00.0
1			¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2			
	Marie Town Colored	= Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum	% Cover of Biotic	Crust	Present? Yes No No
Remarks:			
US Army Corps of Engineers			Arid West - Version 2.0

-		

Sampling Point: \_\_\_\_\_\_\_

DPF
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Profile Desc	ription: (Describe to	the depth ne	eded to document	the indicator or	confirm	the absence of indicators.)
Depth	Matrix		Redox Fe	atures		
(inches)	Color (moist)	% C		1 Type	Loc <sup>2</sup>	Texture Remarks
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	ncentration, D=Deple				Sand Gra	
	ndicators: (Applical	DIE TO AII LKKS		1		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol		_	_ Sandy Redox (S	1 '		1 cm Muck (A9) (LRR C)
	ipedon (A2)	-	Stripped Matrix	η '		2 cm Muck (A10) (LRR B)
Black His		_	Loamy Mucky M			Reduced Vertic (F18)
	n Sulfide (A4)	-	Loamy Gleyed N			Red Parent Material (TF2)
	Layers (A5) (LRR C)	_	Depleted Matrix			Other (Explain in Remarks)
	ck (A9) (LRR D)		Redox Dark Sur	1 ' '		
	Below Dark Surface	(A11) _	_ Depleted Dark S	1 ' '		
	rk Surface (A12)	<del></del>	_ Redox Depressi			<sup>3</sup> Indicators of hydrophytic vegetation and
-	ucky Mineral (S1)		Vernal Pools (F9	<del>3</del> )		wetland hydrology must be present,
	leyed Matrix (S4)					unless disturbed or problematic.
	ayer (if present):					
Туре:	· · · · · · · · · · · · · · · · · · ·					
Depth (inc	hes):					Hydric Soil Present? Yes No
Remarks:						
			No	indies	હ	
HYDROLOG						
	rology indicators:					
Primary Indica	ators (minimum of one	required; che	ck all that apply)			Secondary Indicators (2 or more required)
Surface V	Vater (A1)		Salt Crust (B11	}		Water Marks (B1) (Riverine)
High Wat	er Table (A2)		Biotic Crust (B*	12)		Sediment Deposits (B2) (Riverine)
Saturation	n (A3)		Aquatic Inverte	1 '		Drift Deposits (B3) (Riverine)
	arks (B1) (Nonriverin	e)	Hydrogen Sulfi	1		Drainage Patterns (B10)
	Deposits (B2) (Nonr			spheres along Li	vina Root	, , ,
	osits (B3) ( <b>Nonriveri</b> r			educed Iron (C4)	ing root	, ,
	Soil Cracks (B6)	,		duction in Tilled	Soile (CC)	Crayfish Burrows (C8)
	n Visible on Aerial Im	anery (R7)	Thin Muck Surf		polia (CO)	
	ained Leaves (B9)	racia (ni)	Othrer (Explain	1 ' '		Shallow Aquitard (D3)
Field Observ		······································	Opiei (Explain	in Remarks)	 	FAC-Neutral Test (D5)
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Saturation Pre						
(includes capi		No	Depth (inches)	· ————	Wetlai	nd Hydrology Present? Yes No
Describe Rec	orded Data (stream g	auge, monitorii	ng well, aerial photo	s, previous inspe	ctions). if	available:
	· -		,		,,	
Remarks:						

### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: State: WA Sampling Point: DD#Z Applicant/Owner: \_\_\_\_ Investigator(s): Section, Township, Range: Landform (hillslope, terrace, etc.): \_\_\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): \_\_\_\_ Subregion (LRR): \_\_\_\_\_\_ Lat: Soil Map Unit Name: \_\_\_\_ NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No \_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? is the Sampled Area Yes No Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Yes No ... Remarks: VEGETATION - Use scientific names of plants. **Dominance Test worksheet:** Absolute Dominant Indicator Tree Stratum (Plot size: \_\_\_\_\_) % Cover Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: Total Number of Dominant (B) Species Across All Strata: Percent of Dominant Species = Total Cover That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size: \_\_ 1. Pubus discola 34 Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ FACW species \_\_\_\_\_ x 2 = \_\_\_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ = Total Cover FACU species \_\_\_\_\_ x 4 = \_\_\_\_ Herb Stratum (Plot size: UPL species \_\_\_\_\_ x 5 = \_\_\_\_ 20 Column Totals: \_\_\_\_\_ (A) \_\_\_\_ (B) Prevalence Index = B/A = Hydroghytic Vegetation Indicators: Dominance Test is >50% Prevalence Index is ≤3.01 Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants<sup>1</sup> \_ Problematic Hydrophytic Vegetation¹ (Explain) 10. \_\_\_\_ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. = Total Cover Woody Vine Stratum (Plot size: \_\_\_\_) Hydrophytic Vegetation Present? Yes \_\_\_\_ No \_\_\_\_ = Total Cover % Bare Ground in Herb Stratum \_\_\_\_\_ Remarks:

Western Mountains, Valleys, and Coast - Interim Version

**US Army Corps of Engineers** 

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Sampling Point: \_\_\_\_

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### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: State: WA Sampling Point: DV#3 Applicant/Owner: \_\_\_\_ Section, Township, Range: Investigator(s): Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): \_\_\_\_ Subregion (LRR): Lat: NWI classification: Soil Map Unit Name: \_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks,) Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No\_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Yes \_\_\_\_ No\_ Hydrophytic Vegetation Present? is the Sampled Area Hydric Soil Present? Yes \_\_\_\_ No \_ Yes\_\_\_\_No within a Wetland? Wetland Hydrology Present? Yes \_\_\_\_ No \_ Remarks: VEGETATION - Use scientific names of plants. Absolute Dominant Indicator **Dominance Test worksheet:** Tree Stratum (Plot size: \_\_\_\_) % Cover | Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species = Total Cover That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size: 1. Puls disets Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ FACW species FAC species 30 x3= = Total Cover FACU species x 4 = \_\_\_\_ UPL species ZC x5= /50 Herb Stratum (Plot size: \_\_\_\_\_) Column Totals: 50 (A) 190 (B) Prevalence Index = B/A = 3. 8 Hydrophytic Vegetation Indicators: Dominance Test is >50% Prevalence Index is ≤3.01 \_\_\_ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 10. <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. = Total Cover Woody Vine Stratum (Plot size: \_\_\_\_) Hydrophytic Vegetation Present? = Total Cover % Bare Ground in Herb Stratum \_\_\_\_\_ Remarks:

Western Mountains, Valleys, and Coast - Interim Version

**US Army Corps of Engineers** 

Sampling Point:

D	pt	3
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Depth (inches)	Matrix		Redox Fe	atures			
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Type: C=Co	ncentration, D=Dep	letion, RM=Re	educed Matrix, CS=Co	vered or Coated	Sand Gra	ins. <sup>2</sup> Loc	ation: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Application	able to all LR	IRs, unless otherwise	noted.)			rs for Problematic Hydric Solls <sup>3</sup> :
Histosol (	(A1)		_ Sandy Redox (S5)			2 cn	n Muck (A10)
Histic Ep	ipedon (A2)		_ Stripped Matrix (S6)			Red	Parent Material (TF2)
Black His		*******	_ Loamy Mucky Miner		ILRA 1)	Othe	er (Explain in Remarks)
	n Sulfide (A4)		_ Loamy Gleyed Matr	1 ' '			
	Below Dark Surface	e (A11)	_ Depleted Matrix (F3			3	
	rk Surface (A12)		_ Redox Dark Surface				rs of hydrophytic vegetation and
	ucky Mineral (S1) leyed Matrix (S4)		<ul><li>Depleted Dark Surfs</li><li>Redox Depressions</li></ul>	1 ' '			nd hydrology must be present, s disturbed or problematic.
	ayer (if present):		_ Neuva Depressions	(FO)	т	UINES	s disturbed or problematic.
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Wetland Hyd Primary Indicator Surface V High Wat Saturation Water Mat Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatio Sparsely Field Observ	Irology Indicators: ators (minimum of o Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) in Visible on Aerial In Vegetated Concave ations:	magery (B7) s Surface (B8)	Water-Stained 1, 2, 4A, an Salt Crust (B11 Aquatic Inverte Hydrogen Sulfi Oxidized Rhizo Presence of Re Recent Iron Re Stunted or Stre Other (Explain	d 48) ) brates (B13) de Odor (C1) spheres along Li duced Iron (C4) duction in Tilled ( ssed Plants (D1) in Remarks)	ving Roots Soils (C6)	D D S	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
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Wetland Hyd Primary Indica Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatio Sparsely Field Observ Surface Water Water Table F	irology Indicators: ators (minimum of o Water (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) osits (B3) it or Crust (B4) osits (B5) Soil Cracks (B6) in Visible on Aerial II Vegetated Concave ations: ir Present? Ye	magery (B7) : Surface (B8) es No es No	Water-Stained 1, 2, 4A, an Salt Crust (B11 Aquatic Inverte Hydrogen Sulfi Oxidized Rhizo Presence of Re Recent Iron Re Stunted or Stre Other (Explain  Depth (inches	d 48) ) brates (B13) de Odor (C1) spheres along Li duced Iron (C4) duction in Tilled ( ssed Plants (D1) in Remarks)  ):	ving Roots Soils (C6) (LRR A)	D D S S S F	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Wetland Hyd Primary Indicator Surface V High Water Mater Table F Saturation Proficiency Surface Saturation Proficiency Saturation Proficiency Mater Ma	irology Indicators: ators (minimum of o Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) in Visible on Aerial In Vegetated Concave ations: ir Present? Present? yesent?	magery (B7) s Surface (B8) es No es No es No	Water-Stained 1, 2, 4A, an Salt Crust (B11 Aquatic Inverte Hydrogen Sulfi Oxidized Rhizo Presence of Re Recent Iron Re Stunted or Stre Other (Explain  Depth (inches Depth (inches	d 48) ) brates (B13) de Odor (C1) spheres along Li duced Iron (C4) duction in Tilled ( ssed Plants (D1) in Remarks)	ving Roots Soils (C6) (LRR A) Wetlar	D	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hyd Primary Indicator Surface V High Water Mater Table F Saturation Proficiency Surface Saturation Proficiency Saturation Proficiency Mater Ma	irology Indicators: ators (minimum of o Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) in Visible on Aerial In Vegetated Concave ations: ir Present? Present? yesent?	magery (B7) s Surface (B8) es No es No es No	Water-Stained 1, 2, 4A, an Salt Crust (B11 Aquatic Inverte Hydrogen Sulfi Oxidized Rhizo Presence of Re Recent Iron Re Stunted or Stre Other (Explain  Depth (inches	d 48) ) brates (B13) de Odor (C1) spheres along Li duced Iron (C4) duction in Tilled ( ssed Plants (D1) in Remarks)	ving Roots Soils (C6) (LRR A) Wetlar	D	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Wetland Hyd Primary Indicator Surface V High Water Mater Table F Saturation Proficiency Surface Saturation Proficiency Saturation Proficiency Mater Ma	irology Indicators: ators (minimum of o Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) in Visible on Aerial In Vegetated Concave ations: ir Present? Present? yesent?	magery (B7) s Surface (B8) es No es No es No	Water-Stained 1, 2, 4A, an Salt Crust (B11 Aquatic Inverte Hydrogen Sulfi Oxidized Rhizo Presence of Re Recent Iron Re Stunted or Stre Other (Explain  Depth (inches Depth (inches	d 48) ) brates (B13) de Odor (C1) spheres along Li duced Iron (C4) duction in Tilled ( ssed Plants (D1) in Remarks)	ving Roots Soils (C6) (LRR A) Wetlar	D	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Wetland Hyd Primary Indica Surface V High Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatio Sparsely Field Observ Surface Water Water Table F Saturation Pro (includes capi	irology Indicators: ators (minimum of o Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) in Visible on Aerial In Vegetated Concave ations: ir Present? Present? yesent?	magery (B7) s Surface (B8) es No es No es No	Water-Stained 1, 2, 4A, an Salt Crust (B11 Aquatic Inverte Hydrogen Sulfi Oxidized Rhizo Presence of Re Recent Iron Re Stunted or Stre Other (Explain  Depth (inches Depth (inches	d 48) ) brates (B13) de Odor (C1) spheres along Li duced Iron (C4) duction in Tilled ( ssed Plants (D1) in Remarks)	ving Roots Soils (C6) (LRR A) Wetlar	D	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Primary Indication Surface V High Water Mater Mater Mater Drift Depote Surface S Inundation Sparsely Field Observ Surface Water Water Table F Saturation Proincludes capi Describe Recommendation	irology Indicators: ators (minimum of o Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) in Visible on Aerial In Vegetated Concave ations: ir Present? Present? yesent?	magery (B7) s Surface (B8) es No es No es No	Water-Stained 1, 2, 4A, an Salt Crust (B11 Aquatic Inverte Hydrogen Sulfi Oxidized Rhizo Presence of Re Recent Iron Re Stunted or Stre Other (Explain  Depth (inches Depth (inches	d 48) ) brates (B13) de Odor (C1) spheres along Li educed Iron (C4) duction in Tilled seed Plants (D1) in Remarks)  :	ving Roots Soils (C6) (LRR A)  Wetlar	D D S S (C3) G S F R F P And Hydrology	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Primary Indication Surface V High Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatio Sparsely Field Observ Surface Water Water Table F Saturation Preincludes capi Describe Reco	irology Indicators: ators (minimum of o Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) in Visible on Aerial In Vegetated Concave ations: ir Present? Present? yesent?	magery (B7) s Surface (B8) es No es No es No	Water-Stained 1, 2, 4A, an Salt Crust (B11 Aquatic Inverte Hydrogen Sulfi Oxidized Rhizo Presence of Re Recent Iron Re Stunted or Stre Other (Explain  Depth (inches Depth (inches	d 48) ) brates (B13) de Odor (C1) spheres along Li educed Iron (C4) duction in Tilled seed Plants (D1) in Remarks)  :	wing Roots Soils (C6) (LRR A)  Wetlar	D	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Primary Indication Surface V High Water Mater Mater Mater Mater Drift Depote Mater Mater Surface Surface Surface Surface Water Table Featuration Preincludes capi	irology Indicators: ators (minimum of o Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) in Visible on Aerial In Vegetated Concave ations: ir Present? Present? yesent?	magery (B7) s Surface (B8) es No es No es No	Water-Stained 1, 2, 4A, an Salt Crust (B11 Aquatic Inverte Hydrogen Sulfi Oxidized Rhizo Presence of Re Recent Iron Re Stunted or Stre Other (Explain  Depth (inches Depth (inches	d 48) ) brates (B13) de Odor (C1) spheres along Li educed Iron (C4) duction in Tilled seed Plants (D1) in Remarks)  :	ving Roots Soils (C6) (LRR A)  Wetlar	D D S S (C3) G S F R F P And Hydrology	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)

### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: State: W/ Sampling Point: DP#4 Applicant/Owner: \_\_\_\_\_ Ed Scull Section, Township, Range: Investigator(s): Landform (hillstope, terrace, etc.): Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): \_\_\_\_ Subregion (LRR): \_\_\_\_\_ Lat: Long: \_\_\_\_\_ Datum: \_\_\_\_ Soil Map Unit Name: \_\_\_\_\_ NWI classification: No \_\_\_\_\_ (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_ Are "Normal Circumstances" present? Yes \_\_\_\_ No \_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? 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? Yes / is the Sampled Area Hydric Soil Present? Yes \_\_\_\_\_ No \_\_\_ within a Wetland? Wetland Hydrology Present? Yes \_\_\_\_\_ No \_ Remarks: VEGETATION - Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: \_\_\_\_) Species? Status % Cover **Number of Dominant Species** That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species = Total Cover That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size: \_\_\_\_\_) Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ FACW species \_\_\_\_\_ x 2 = \_\_\_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ = Total Cover FACU species \_\_\_\_\_ x 4 = \_\_\_\_ Herb Stratum (Plot size: \_\_\_\_\_) UPL species \_\_\_\_\_ x 5 = \_\_\_\_ Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: Dominance Test is >50% Prevalence Index is ≤3.0¹ \_\_\_ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation¹ (Explain) <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. = Total Cover Woody Vine Stratum (Plot size: \_\_\_\_) Hydrophytic Vegetation Present? = Total Cover % Bare Ground in Herb Stratum Remarks: most of over home

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ampling Point: DP+ 4

Profile Description: (Describe to the o	lepth needed to document	the indicator o	confirm	the absence o	f indicators.)
Depth Matrix	Redox Fe	atures			
(inches) Color (moist) %	Color (moist)	% Type¹	Loc <sup>2</sup>	<u>Texture</u>	Remarks
16 104313				946	
		***************************************			
		<del></del>		-	
			***************************************	-	
	****		<del></del>		
				···	
<sup>1</sup> Type: C=Concentration, D=Depletion, F	RM=Reduced Matrix, CS=Co	vered or Coated	Sand Gra	ains. <sup>2</sup> Local	tion: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to					for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)			2 cm l	Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)				arent Material (TF2)
Black Histic (A3)	Loamy Mucky Mine	al (F1) (except i	MLRA 1)	Other	(Explain in Remarks)
Hydrogen Sulfide (A4)	Loamy Gleyed Matr	x (F2)			
Depleted Below Dark Surface (A11)		ľ			
Thick Dark Surface (A12)	Redox Dark Surface	· ·			of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surfa				hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions	(F8)		unless	disturbed or problematic.
Restrictive Layer (if present):					
Type:	NA PARAMETRIA PROPERTY AND PROP				
Depth (inches):				Hydric Soil P	resent? Yes No
Remarks:					
			A -	Sicata	
		No	100	ed to and the	<b>7</b>
HYDROLOGY	······································		<del></del>		
Wetland Hydrology Indicators:					
Primary Indicators (minimum of one requ					ary Indicators (2 or more required)
Surface Water (A1)		Leaves (B9) (ex	cept MLR		ter-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)	1, 2, 4A, an	1			IA, and 48)
Saturation (A3)	Salt Crust (B11	ŀ'			inage Patterns (B10)
Water Marks (B1)	Aquatic Inverte	l ' '			-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfi		].		uration Visible on Aerial Imagery (C9)
Drift Deposits (B3)		spheres along L			omorphic Position (D2)
Algal Mat or Crust (B4)		duced Iron (C4)	1		llow Aquitard (D3)
Iron Deposits (B5)		duction in Tilled	, , ,		C-Neutral Test (D5)
Surface Soil Cracks (B6)	· ·	ssed Plants (D1	(LRR A)	Rai	sed Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery		in Remarks)		Fro	st-Heave Hummocks (D7)
Sparsely Vegetated Concave Surfac	e (B8)	************************************			
Field Observations:					
Surface Water Present? Yes			<b>4</b> [		
Water Table Present? Yes	_ NoDepth (inches	<b>)</b> :	4		Approxime 1
Saturation Present? Yes	No Depth (inches	):	Wetla	nd Hydrology I	Present? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge,	monitoring well serial phote	s pravious inen	ections) ii	available	
and the state of t	was work prior	, premous nisp		· urunes#G,	
Remarks:					
enteringeno.				· .	
		No	لمرساد ا	icato	
					·

#### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region City/County: Project/Site: State: Sampling Point: Applicant/Owner: \_\_\_\_\_ Sout Investigator(s): Section, Township, Range: Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): \_\_\_\_ Subregion (LRR): Long: \_\_\_\_\_ Datum: \_\_\_\_\_ NWI classification: Soil Map Unit Name: No \_\_\_\_\_ (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_ No \_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes is the Sampled Area Hydric Soil Present? Yes \_\_\_\_ No within a Wetland? Yes \_\_\_\_\_ No \_ Wetland Hydrology Present? Yes \_\_\_ No Remarks: VEGETATION - Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: \_\_\_\_) Species? Status % Cover **Number of Dominant Species** That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species = Total Cover That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = 3. FACW species \_\_\_\_\_ x 2 = \_\_\_\_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ FACU species \_\_\_\_\_ x 4 = \_\_\_\_ = Total Cover Herb Stratum (Plot size: UPL species x 5 = Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B) Prevalence Index = B/A = Hydrophysic Vegetation Indicators: Dominance Test is >50% Prevalence Index is ≤3.0<sup>1</sup> \_\_\_ Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet) \_ Wetland Non-Vascular Plants<sup>1</sup> \_ Problematic Hydrophytic Vegetation¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. = Total Cover Woody Vine Stratum (Plot size: \_\_\_\_\_) Hydrophytic Vegetation Present? = Total Cover % Bare Ground in Herb Stratum \_\_\_\_ Remarks:

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ampling Point: DA

Profile Des	cription: (Describe to the dep	oth needed to document the indicator	or confirm the absence of indicators.)
Depth	Matrix O	Redox Features	
(inches)	Color (moist) %	Color (moist) % Type <sup>†</sup>	Loc <sup>2</sup> Texture Remarks
7_	10 2/2		
160	10913/4		<u>95L</u>
	***************************************		
¹Tuna C=C	aggregation D-Danielian DM	=Reduced Matrix, CS=Covered or Coate	Const Organization 24 months are Discontinuous Advantaged
		LRRs, unless otherwise noted.)	ed Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.  Indicators for Problematic Hydric Soils <sup>3</sup> :
Histoso		Sandy Redox (S5)	2 cm Muck (A10)
	pipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)
	istic (A3)	Loamy Mucky Mineral (F1) (excep	
	en Sulfide (A4)	Loamy Gleyed Matrix (F2)	Annual Constitution of the
Deplete	d Below Dark Surface (A11)	Depleted Matrix (F3)	
Thick D	ark Surface (A12)	Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
	Aucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present.
THE RESIDENCE OF THE PARTY OF T	Sleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
	Layer (if present):		
Туре:		atario, and a second se	
Depth (in	ches):		Hydric Soil Present? Yes No
Remarks:			
			e
		No	dients
HYDROLO	·cv		
		***************************************	
-	drology Indicators:	A. A	
	cators (minimum of one require		Secondary Indicators (2 or more required)
	Water (A1)	Water-Stained Leaves (B9) (	1
	ater Table (A2)	1, 2, 4A, and 4B)	4A, and 4B)
Saturati	· • •	Salt Crust (B11)	Drainage Patterns (B10)
	larks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
	nt Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
	posits (B3)	Oxidized Rhizospheres along	and the second s
	at or Crust (B4)	Presence of Reduced Iron (C	* * * *
	oosits (B5) Soil Cracks (B6)	Recent Iron Reduction in Tille	7
	• •	Stunted or Stressed Plants (D	
	on Visible on Aerial Imagery (B	, , , , , , , , , , , , , , , , , , , ,	Frost-Heave Hummocks (D7)
Field Obser	y Vegetated Concave Surface (	DC)	
Surface Wat	***************************************	NoDepth (inches):	
Water Table		No Depth (inches):	
Saturation P		No Depth (inches):	Wetland Hydrology Present? Yes No
(includes car Describe Re		onitoring well, aerial photos, previous ins	L spections), if available:
	2 Section Committee Commit		re Tanana, a management
Remarks:			
- 1 100 - 1 100 1 1100 1			
		no redica	K. 1
		no fector	
1			

#### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region City/County: \_\_\_ Project/Site: State: Sampling Point: Applicant/Owner: \_\_\_\_ Semel Investigator(s): Section, Township, Range: \_ Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): \_\_\_\_\_\_ Slope (%): Long: \_\_\_\_\_ Datum: Subregion (LRR): NWI classification: Soil Map Unit Name: Are climatic / hydrologic conditions on the site typical for this time of year? Yes No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_ 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. Yes \_\_ ~ Hydrophytic Vegetation Present? is the Sampled Area Hydric Soil Present? Yes No within a Wetland? Wetland Hydrology Present? Yes No Remarks: VEGETATION - Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: \_\_\_\_) % Cover Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species = Total Cover That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size: \_\_\_\_) Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_ x 1 = \_\_\_\_ FACW species \_\_\_\_\_ x 2 = \_\_\_\_ FAC species x 3 = = Total Cover FACU species \_\_\_\_ x 4 = \_\_\_\_ Herb Stratum (Plot size: UPL species \_\_\_\_ x 5 = \_\_\_\_ 1. Phylos andrews Column Totals: \_\_\_\_\_ (A) \_\_\_\_ (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: \_\_ Cominance Test is >50% Prevalence Index is ≤3.0<sup>1</sup> \_ Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) \_\_\_ Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. = Total Cover Woody Vine Stratum (Plot size: \_\_\_\_) Hydrophytic Vegetation Present? = Total Cover % Bare Ground in Herb Stratum \_\_\_\_\_ Remarks:

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empling Point:

Profile Description: (Describe to the c	lepth needed to documer	nt the indicator	or confirm	the absence of indicators.)
Depth Matrix	Redox F	eatures		
(inches) Color (moist) %	Color (moist)	% Type	Loc <sup>2</sup>	Texture Remarks
14 1012/2				sdy low
	····	<del> </del>	- +	
			-	
£				
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	····			
¹Type: C=Concentration, D=Depletion, F	M=Reduced Matrix CS=C	Covered or Coat	ed Sand Gra	ins. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to				Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	1 .		2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (St	I		Red Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Min		t MLRA 1)	Other (Explain in Remarks)
Hydrogen Sulfide (A4)	Loamy Gleyed Ma			and the second second
Depleted Below Dark Surface (A11)	Depleted Matrix (F	1 ' '		
Thick Dark Surface (A12)	Redox Dark Surface	(F6)		<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Sur	face (F7)		wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depression	s (F8)		unless disturbed or problematic.
Restrictive Layer (if present):				
Туре:				
Depth (inches):				Hydric Soil Present? Yes No
Remarks:	<del>manne de contra formage</del> Capación de contra de Capación			
, torraine.				
	/	to 1	Sutr	<u> </u>
HYDROLOGY				
Wetland Hydrology Indicators:				
Primary Indicators (minimum of one requ	irod: abade all that annh à			Consendent testinature (O in increase and in at
		11		Secondary Indicators (2 or more required)
Surface Water (A1)		d Leaves (B9) (	except MLR	
High Water Table (A2)	1, 2, 4A, a	1 *		4A, and 4B)
Saturation (A3)	Salt Crust (B1	I'		Drainage Patterns (B10)
Water Marks (B1)		tebrates (B13)		Dry-Season Water Table (C2)
Sediment Deposits (B2)		fide Odor (C1)		Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		I		s (C3) Geomorphic Position (D2)
Algai Mat or Crust (B4)		Reduced Iron (C	· 1	Shallow Aquitard (D3)
Iron Deposits (B5)		duction in Tille	, ,	FAC-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Str	ressed Plants (E	)1) (LRR A)	Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery	(B7) Other (Explain	n in Remarks)		Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface	e (B8)			
Field Observations:				
Surface Water Present? Yes	No Depth (inche	s):		
Water Table Present? Yes	No Depth (inche	8):		ar.
Saturation Present? Yes			Watte	nd Hydrology Present? Yes No
(includes capillary fringe)	•, •		·	
Describe Recorded Data (stream gauge,	monitoring well, aerial pho	tos, previous in	spections), if	available:
Remarks:				
		1		

#### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Marysv//e\_\_\_\_\_ Sampling Date:\_\_\_ City/County: \_\_\_ Project/Site: State: WA Sampling Point: 0 P#7 Applicant/Owner: \_\_\_\_\_ Investigator(s): Section, Township, Range: \_\_\_ Local relief (concave, convex, none): \_\_\_\_\_\_ Slope (%): \_\_\_\_\_ Landform (hillslope, terrace, etc.): Subregion (LRR): \_\_\_\_\_ Lat: \_\_\_\_ Long: \_\_\_\_\_ Datum: NWI classification: Soil Map Unit Name: \_\_\_\_\_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_ No (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes \_\_\_\_\_ No \_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? 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. Yes -Hydrophytic Vegetation Present? is the Sampled Area Hydric Soil Present? Yes No within a Wetland? Yes \_\_\_\_\_ No \_\_\_ Wetland Hydrology Present? Yes \_\_\_ No. Remarks: VEGETATION - Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: \_\_\_\_) % Cover Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species = Total Cover That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size: \_\_\_\_) Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_ x 1 = \_\_\_\_ FACW species \_\_\_\_\_ x 2 = \_\_\_\_ FAC species x 3 = = Total Cover FACU species \_\_\_\_ x 4 = \_\_\_\_ Herb Stratum (Plot size: \_\_\_\_ UPL species \_\_\_\_\_ x 5 = \_\_\_\_ 1. Thates andrew 40 Column Totals: \_\_\_\_\_ (A) \_\_\_\_ (B) 2. Juneus bufunius zu 3. Cirsm ans Prevalence Index = B/A = Hydrophytic Vegetation Indicators: Dominance Test is >50% Prevalence Index is ≤3.01 \_\_\_ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) \_\_\_ Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation (Explain) 10. <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. = Total Cover Woody Vine Stratum (Plot size: ) Hydrophytic Vegetation Present? = Total Cover % Bare Ground in Herb Stratum \_\_\_\_\_ Remarks:

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amolina Point:

Profile Desc	ription: (Descri	e to the depti	h needed to documen	the indicator of	or confirm	the absence	of indicators.)
Depth	Matrix		Redox Fe	atures			
(inches)	Color (moist)		Color (moist)	% Type¹	Loc²	<u>Texture</u>	Remarks
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						7	
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		-					
	***************************************			·		-	
***************************************		-					
Tune: C=Co	n-O anitratanan	aniation DM=1	Reduced Matrix, CS=Co	warad or Conta	d Sond Co	21 o	cation: PL=Pore Lining, M=Matrix.
			RRs, unless otherwis		u Sanu Gra		ors for Problematic Hydric Soils <sup>3</sup> :
		iivabia to dii L		B 1101011./			· · ·
Histosol		-	Sandy Redox (S5)				m Muck (A10)
Black His	oipedon (A2)	-	Stripped Matrix (S6				d Parent Material (TF2)
1	stic (A3) n Sulfide (A4)		Loamy Mucky Mine Loamy Gleyed Matr		mura 1)	Oth	er (Explain in Remarks)
1	n Sunde (A4) I Below Dark Surf	ace (A11)	Depleted Matrix (F3				
	irk Surface (A12)	(r111)	Redox Dark Surface	•		3Indicat	ors of hydrophytic vegetation and
1	lucky Mineral (S1	- 1	Depleted Dark Surfa	• •			and hydrology must be present,
1	leyed Matrix (S4)	-	Redox Depressions				and rivology must be present, as disturbed or problematic.
	.ayer (if present)			(, 0)	***************************************	1	os distance of proventato.
Туре:	, ( p. 000)	•					
1			**************************************				
	:hes):	****	and an annual state of the stat	***************************************		Hydric Soi	I Present? Yes No
Remarks:			, ,	_			
		d15	Labor	tire n	15		
		3		,,,			
L			**************************************	*******		**************************************	
HYDROLO	GY						
Wetland Hyd	rology Indicator	<b>5</b> :	***************************************	<del></del>	33 CO T TO THE STREET OF THE S		
Primary Indic	ators (minimum o	fone required:	check all that apply)			Seco	ndary Indicators (2 or more required)
1	Water (A1)			Leaves (89) (ex	cent MI R		Vater-Stained Leaves (B9) (MLRA 1, 2,
1	ter Table (A2)		1, 2, 4A, an		tobi men	· ·	4A, and 4B)
Saturatio			Salt Crust (B1			•	Orainage Patterns (B10)
1	arks (B1)			,			
1	• •		Aquatic Inverte				Ory-Season Water Table (C2)
	t Deposits (B2)		Hydrogen Sulfi		1		Saturation Visible on Aerial Imagery (C9)
}	osits (B3)			spheres along t			Geomorphic Position (D2)
1	t or Crust (B4)			educed Iron (C4	' I		Shallow Aquitard (D3)
1	osits (B5)			duction in Tilled	1 ' '		AC-Neutral Test (D5)
Surface :	Soil Cracks (B6)			ssed Plants (D1	(LRR A)	F	Raised Ant Mounds (D6) (LRR A)
Inundatio	on Visible on Aeri	il Imagery (B7)	Other (Explain	in Remarks)		F	rost-Heave Hummocks (D7)
Sparsely	Vegetated Conc	ive Surface (B	8)		1		
Field Observ	ations:		/			VII alient lettelerriere reterente titanaria esten	
Surface Water	er Present?	Yes N	oDepth (inches	):	<b>↓</b>		
Water Table I	Present?	Yes N	oDepth (inches	):			
Saturation Pr			oDepth (inches		Wette	nd Hudrolco	y Present? Yes No
(includes cap	illary fringe)				7 (		15
		ım gauge, mon	nitoring well, aerial phot	os, previous insp	ections), it	available:	
			4.4				
Remarks:		<del></del>			+	· · · · · · · · · · · · · · · · · · ·	oriente Pars de frança de en constante en estadores de estadores de Africa de encolar de estadores de estadores de entre
**			* *				
1			4				
1			4				
		*************************				Making kanang pangkan panggan salah	

#### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region City/County: Project/Site: \_\_\_ State: W4 Sampling Point: DA#8 Applicant/Owner: Some Investigator(s): Section, Township, Range: \_\_ Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): \_\_\_\_\_\_ Slope (%): \_\_\_\_\_ Subregion (LRR): \_\_\_\_\_\_ Lat: \_\_\_\_ \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_ Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_ No (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_\_No \_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Yes \_\_\_\_\_ Hydrophytic Vegetation Present? is the Sampled Area Hydric Soil Present? Yes No within a Wetland? Wetland Hydrology Present? Yes No Remarks: VEGETATION - Use scientific names of plants. Absolute Dominant Indicator **Dominance Test worksheet:** Tree Stratum (Plot size: \_\_\_\_) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species = Total Cover That Are OBL. FACW, or FAC: Sapling/Shrub Stratum (Plot size: \_\_\_\_\_) Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x1=\_\_\_\_ (e) x2= FACW species FAC species FACU species = Total Cover Herb Stratum (Plot size: \_ UPL species \_ 20 x5= 100 1. Agosts spe con 2. Physiden ogustum 20 Column Totals: 80 (A) 280 (B) Prevalence Index = B/A = 3,5 Hydrophytic Vegetation Indicators: Dominance Test is >50% Prevalence Index is ≤3.0<sup>1</sup> Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants<sup>1</sup> \_\_\_ Problematic Hydrophytic Vegetation¹ (Explain) 1Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. = Total Cover Woody Vine Stratum (Plot size: \_\_\_\_) Hydrophytic Vegetation Present? = Total Cover % Bare Ground in Herb Stratum \_\_\_\_\_ Remarks:

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Sampling Point: DATE

Profile Description:	: (Describe to the dep	th needed to documen	t the i	ndicator o	r confirm	the absence	e of indicator	<b>s.</b> )	
Depth	Matrix	Redox Fe	atures	<b>}</b>				-	
	or (moist) %	Color (moist)	%	Type'	Loc2	Texture	·	Remarks	***************************************
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		annertheunesterniquementation qui qui que qui	<del></del>	***************************************			* · · · · · · · · · · · · · · · · · · ·		***************************************
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	***************************************	***************************************			-			······	***************************************
'Type: C=Concentra	ation, D=Depletion, RM=	Reduced Matrix, CS=C	overed	or Coated	Sand Gra	ains. <sup>2</sup> L	ocation: PL=P	ore Lining, N	f=Matrix.
		LRRs, unless otherwis					tors for Probl		
Histosol (A1)		Sandy Redox (S5)				2	cm Muck (A10	)	
Histic Epipedon	(A2)	Stripped Matrix (S6					ed Parent Mate	•	
Black Histic (A3)	),	Loamy Mucky Mine	ral (F1	) (except	MLRA 1)	01	her (Explain in	Remarks)	
Hydrogen Sulfid	e (A4)	Loamy Gleyed Mati		)			•		
	Dark Surface (A11)	Depleted Matrix (F3							
Thick Dark Surfa	` '	Redox Dark Surface					tors of hydropi		
Sandy Mucky M		Depleted Dark Surf		7)		wet	land hydrology	must be pre	sent,
Sandy Gleyed M		Redox Depressions	(F8)	··/h-vi-x-amenus vantuus va	-	unk	ess disturbed o	or problemation	C.
Restrictive Layer (if	f present):								
Type:	the state of the State State of the State of	<del>ogus, i ages</del>							
Depth (inches):		Machaniman				Hydric So	il Present?	Yes	No
Remarks:			a committe de la constant		**************************************	<del> </del>	**************************************	***************************************	
				<del></del>	-		***************************************		
HYDROLOGY									
Wetland Hydrology	Indicators:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
Primary Indicators (n	ninimum of one required				ļ		ondary Indicate	ors (2 or mor	e required)
Surface Water (/	A1)	Water-Stained	Leave	es (B9) (ex	cept MLR	Α	Water-Stained	Leaves (B9)	(MLRA 1, 2,
High Water Tabl	e (A2)	1, 2, 4A, ar	d 4B)				4A, and 4E	3)	
Saturation (A3)		Salt Crust (B1	)				Drainage Patte	ems (B10)	
Water Marks (B1	1)	Aquatic Inverte	brates	s (B13)		*******	Dry-Season W	later Table ((	C2)
Sediment Depos	sits (B2)	Hydrogen Sulf	de Od	lor (C1)			Saturation Vis	ible on Aeriai	Imagery (C9)
Drift Deposits (B	3)	Oxidized Rhize			ving Root		Geomorphic P		_ , ,
Algai Mat or Cru		Presence of R			1		Shallow Aquita		
Iron Deposits (B	5)	Recent Iron Re					FAC-Neutral T	* /	
Surface Soil Cra	cks (B6)	Stunted or Stre					Raised Ant Mo		.RR A)
Inundation Visible	le on Aerial Imagery (B7			•	1	-	Frost-Heave H		· · · · · · · · · · · · · · · · · · ·
l	ited Concave Surface (E	, , ,		•		*******			<u> </u>
Field Observations:	**************************************			**************************************	tr		***************************************		· · · · · · · · · · · · · · · · · · ·
Surface Water Prese	nt? Yes	loDepth (inches	):		11				
Water Table Present	***************************************	toDepth (inches			TI				
Saturation Present?		lo Depth (inches		······································	Wette	nd Hudeolo	gy Present?	Yes	No /
(includes capillary fri	nge)		-		T		27 1 100 mill	. 40	. 170
Describe Recorded D	Data (stream gauge, mo	nitoring well, aerial phot	os, pre	vious insp	ections), if	available:		ra era era began e samel probe etneg see era este este este este este este este est	
·									
Remarks:			<del></del>	Takin di di walandaha ngamasa	<u> </u>	***************************************			
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