## WETLAND DETERMINATION DATA FORM - Alaska Region

	ct/Site: Susitna-Watana Hydroelectric Project		Borough/0	City:	Denali Bo	rough Sampling Date: 06-Aug-13		
Applic	cant/Owner: Alaska Energy Authority			-		Sampling Point: SW13_T174_11		
	tigator(s): WAD, RWM	de, terrac	e, hummocks etc.): landslide scaf					
	relief (concave, convex, none): concave	% / 8.0	-					
	egion : Interior Alaska Mountains	l at ·	- · . 63.3690			Long.: -148.570611954 Datum: WGS84		
	lap Unit Name:	Lut	03.3090	34300		NWI classification: Upland		
	imatic/hydrologic conditions on the site typical for this t	: <b></b>		Von (	No O			
		significan				(If no, explain in Remarks.)  Iormal Circumstances" present? Yes ● No ○		
		naturally				eded, explain any answers in Remarks.)		
		•						
SUM	MARY OF FINDINGS - Attach site map sho	wing sa	mpling p	ooint l	ocations	s, transects, important features, etc.		
	Hydrophytic Vegetation Present? Yes   No	$\supset$						
	Hydric Soil Present? Yes No	•		Is the Sampled Area within a Wetland? Yes ○ No ●				
	Wetland Hydrology Present? Yes O No			within a Wetland? Yes ○ No ●				
Rer	marks: flat debris area of a series of mass movement	scars alon	a ridae lin	ΙΑ				
	name. That debits area of a series of mass movement.	scars alori	g riuge iiii	ic.				
√EG	<b>ETATION</b> -Use scientific names of plants. L	ist all sp.	ecies in	the p	lot.			
		Absolute	e Domir	nant	Indicator	Dominance Test worksheet:		
Tre	ee Stratum	% Cove			Status	Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)		
1.		0	_ [			That are OBL, FACW, or FAC: 3 (A)  Total Number of Dominant		
2.		0				Species Across All Strata:3(B)		
3.		0	_ [			Percent of dominant Species		
4.		0	_ [			That Are OBL, FACW, or FAC: 100.0% (A/B)		
5.		0				Prevalence Index worksheet:		
	Total Cover		_			Total % Cover of: Multiply by:		
Sa	pling/Shrub Stratum 50% of Total Cover:	0 20	% of Total (	Cover:	0	OBL Species		
1.	Spiraea stevenii	10			FACU	FACW Species 45 x 2 = 90		
2.	Salix polaris	35		<b>✓</b>	FACW	FAC Species <u>35</u> x 3 = <u>105</u>		
3.	Betula nana	5			FAC	FACU Species 12 x 4 = 48		
4.	Salix pulchra	5	_ [		FACW	UPL Species x 5 =		
5.						Column Totals: <u>92</u> (A) <u>243</u> (B)		
6.		0				Prevalence Index = B/A = 2.641		
7.		0	_			Trevalence index – B/A –		
8.			-	_		Hydrophytic Vegetation Indicators:		
9.						✓ Dominance Test is > 50%		
10.		0				✓ Prevalence Index is ≤3.0		
	Total Cover erb Stratum_ 50% of Total Cover:			Cover:	11	Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)		
He			_	<b>✓</b>	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)		
-	Foot and Make	10				(LAPIdIT)		
1.	Festuca altaica	_			FACW	1 Indicators of hydric soil and wetland hydrology must		
1. 2.	Festuca altaica Arctagrostis latifolia	5	_ _ [		FACW FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
1.	Festuca altaica Arctagrostis latifolia Calamagrostis canadensis	5				be present, unless disturbed or problematic.		
1. 2. 3.	Festuca altaica Arctagrostis latifolia Calamagrostis canadensis Aconitum delphinifolium	5 5 5			FAC	be present, unless disturbed or problematic.  Plot size (radius, or length x width)		
1. 2. 3. 4.	Festuca altaica Arctagrostis latifolia Calamagrostis canadensis Aconitum delphinifolium Bistorta plumosa	5 5 5 2			FAC	be present, unless disturbed or problematic.  Plot size (radius, or length x width)		
1. 2. 3. 4. 5.	Festuca altaica Arctagrostis latifolia Calamagrostis canadensis Aconitum delphinifolium Bistorta plumosa Carex bigelowii	5 5 5 2 10			FAC FACU	be present, unless disturbed or problematic.  Plot size (radius, or length x width)		
1. 2. 3. 4. 5. 6. 7.	Festuca altaica Arctagrostis latifolia Calamagrostis canadensis Aconitum delphinifolium Bistorta plumosa	5 5 5 2 10 0			FAC FACU	Plot size (radius, or length x width)  % Cover of Wetland Bryophytes (Where applicable)		
1. 2. 3. 4. 5. 6. 7. 8.	Festuca altaica Arctagrostis latifolia Calamagrostis canadensis Aconitum delphinifolium Bistorta plumosa Carex bigelowii	5 5 5 2 10 0			FAC FACU	be present, unless disturbed or problematic.  Plot size (radius, or length x width)		
1. 2. 3. 4. 5. 6. 7. 8. 9.	Festuca altaica Arctagrostis latifolia Calamagrostis canadensis Aconitum delphinifolium Bistorta plumosa Carex bigelowii	5 5 5 2 10 0			FAC FACU	be present, unless disturbed or problematic.  Plot size (radius, or length x width)		
1. 2. 3. 4. 5. 6. 7. 8.	Festuca altaica Arctagrostis latifolia Calamagrostis canadensis Aconitum delphinifolium Bistorta plumosa Carex bigelowii	5 5 5 2 10 0 0 0 0			FAC FACU	be present, unless disturbed or problematic.  Plot size (radius, or length x width) 10m    % Cover of Wetland Bryophytes (Where applicable)    % Bare Ground    Total Cover of Bryophytes 15		

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SOIL Sampling Point: SW13\_T174\_11

Duefile Description	(Describe to	the death no	-1 ad to docum	=+ho ind	:ter ar conf	tha ah	of indic	-+		10mc 5W15_1174_11
	on: (Describe to	tne deptn ne <b>Matrix</b>	edea to aocum	ient the mu		ox Featu		ators)		
Depth (inches)	Color (mo		%	Color (m		%	Type <sup>1</sup>	_Loc_2	Texture	Remarks
0-3	Color (IIIO	isty	100	COIOI (III	Olsty	_/0_	Турс	LUC	Fibric Organics	
3-4			100						Hemic Organics	
4-5		-	100						Sapric Organics	
5-14		4/2	90	10YR		10			Loamy Sand	
5-14	101K	4/2	90	101K	4/6			IVI	Loanly Sanu	
¹Type: C=Con	centration. D=	Depletion.	RM=Reduce	ed Matrix	<sup>2</sup> Location:	PL=Por	e Lining. RC	=Root Cha	annel. M=Matrix	
Hydric Soil Ir	ndicators:			Indicate	ors for Pro	blemati	c Hydric So	oils:		
	Histel (A1)				a Color Cha		4		Alaska Gleyed Without Hu	ie 5Y or Redder
Histic Epip	. ,				a Alpine sw		-	_	Underlying Layer	ic 51 of feeder
	Sulfide (A4)			Alask	a Redox W	ith 2.5Y F	lue		Other (Explain in Remark	5)
	Surface (A12)	)								
Alaska Gle							tic vegetation role position r		mary indicator of wetland hy	ydrology,
Alaska Red	ox (A14)						·		esent	
Alaska Gle	yed Pores (A15	5)		<sup>4</sup> Give d	etails of col	or chang	e in Remark	S		
Restrictive Laye	r (if present):									
Type:									Hydric Soil Present?	Yes ○ No •
Depth (inch	es):									
Remarks:								,		
no hydric soil in	dicators									
,										
LIV/DDQ1 Q	<b>0</b> )/									
HYDROLO		<b>.</b>							Consider Today	1
Wetland Hydr Primary Indicat										ators (two or more are required) led Leaves (B9)
Surface W		s sumcient		□ In	ındətion Vic	rible on A	erial Image	a. (P7)		atterns (B10)
	r Table (A2)						ncave Surfac			nizospheres along Living Roots (C3)
Saturation					rl Deposits		icave Surrac	.e (b0)		Reduced Iron (C4)
☐ Water Mar					drogen Sulf	` '	(C1)		Salt Deposi	` '
	Deposits (B2)				/-Season W					Stressed Plants (D1)
Drift Depo	. ,				ner (Explain		` '			Position (D2)
	or Crust (B4)				ici (Expiaii)				Shallow Aq	
☐ Iron Depo										raphic Relief (D4)
	oil Cracks (B6)								✓ FAC-neutra	
Field Observa	tions:									
Surface Water	Present?	Yes $\bigcirc$	No 💿	De	pth (inches	):				
Water Table P	resent?	Yes $\bigcirc$	No 💿	De	pth (inches	):		Wetla	nd Hydrology Present	t? Yes O No 💿
Saturation Pre	sent?	Vac O	No •			•				
(includes capil	lary fringe)	res $\bigcirc$	NO S	De	pth (inches	):				
Describe Record	ded Data (stre	am gauge,	monitor wel	l, aerial pl	notos, previ	ous inspe	ection) if ava	ilable:		
Remarks:										
no hydrology indicators observed										

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