## WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project	Borough/City:	Matanuska-Susitna Borough Sampling	Date: 07-Jul-13			
Applicant/Owner: Alaska Energy Authority		Sampling Point:	SW13_T181_05			
Investigator(s): JER	Landform (hillsi	Landform (hillside, terrace, hummocks etc.): peat plateau				
Local relief (concave, convex, none): hummocky	Slope: 1.7	% / 1.0 ° Elevation: 754				
Subregion : Interior Alaska Mountains Lat.:	62.792335391	Long.:147.914541245	Datum: WGS84			
Soil Map Unit Name:	NWI classification: PSS1E					
Are climatic/hydrologic conditions on the site typical for this time of year? Yes No C (If no, explain in Remarks.) Are Vegetation , Soil , or Hydrology naturally disturbed? Are "Normal Circumstances" present? Yes No C 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 ●       No ○         Hydric Soil Present?       Yes ●       No ○         Wetland Hydrology Present?       Yes ●       No ○	Is the Sampled Area within a Wetland? Yes $ullet$ No $igodoldsymbol{ imes}$
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Remarks: shrub fen, mosaic of slobb and hgwsll, shrub bog dominant, perched peatland

## **VEGETATION** - Use scientific names of plants. List all species in the plot.

		۵he	Absolute Domina		Indicator	Dominance Test worksheet:		
			Cover_	Species?	Status	Number of Dominant Species		
1.			0			That are OBL, FACW, or FAC: (A)		
2.		_	0			Total Number of Dominant Species Across All Strata: 7 (B)		
3.			0					
4.			0			Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)		
5.		_	0					
0.	Total Cove		0			Prevalence Index worksheet:		
6		••• _		of Total Cover:	0	Total % Cover of: Multiply by:		
Sap	ing/Shrub Stratum	0	_ 2070		0	OBL Species <u>21</u> x 1 = <u>21</u>		
1.	Betula nana	_	30	$\checkmark$	FAC	FACW Species <u>46</u> x 2 = <u>92</u>		
2.	Ledum decumbens	_	35	$\checkmark$	FACW	FAC Species <u>103</u> x 3 = <u>309</u>		
3.	Vaccinium uliginosum	_	25	$\checkmark$	FAC	FACU Species <u>1</u> x 4 = <u>4</u>		
4.	Vaccinium vitis-idaea		15		FAC	UPL Species x 5 =		
5.	Salix pulchra		3		FACW	Column Totals: 171 (A) 426 (B)		
6.	Empetrum nigrum		15		FAC			
7.	Dasiphora fruticosa		10		FAC	Prevalence Index = B/A = 2.491		
8.	Vaccinium oxycoccos		1		OBL	Hydrophytic Vegetation Indicators:		
9.	Picea glauca		1		FACU	$\checkmark$ Dominance Test is > 50%		
10.	<u> </u>	_	0			✓ Prevalence Index is $\leq 3.0$		
	Total Cove	r:	135			Morphological Adaptations <sup>1</sup> (Provide supporting data in		
					Remarks or on a separate sheet)			
1.	Rubus chamaemorus		5	$\checkmark$	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)		
2.	Carex aquatilis	_	8	$\checkmark$	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must		
3.	Eriophorum angustifolium		10	$\checkmark$	OBL	be present, unless disturbed or problematic.		
4.	Eriophorum vaginatum		1		FACW			
5.	Eriophorum russeolum		2		FACW	Plot size (radius, or length x width) <u>10m</u>		
6	Carex canescens (IAM)		5		FAC	% Cover of Wetland Bryophytes (Where applicable)		
7.	Calamagrostis canadensis	_	2		FAC			
7. 8.			1		OBL			
9.	Carex limosa	_	1		OBL	Total Cover of Bryophytes		
9. 10		_	1		FAC			
Total Cover: 36						Hydrophytic Vegetation		
	50% of Total Cover:	18		of Total Cover:	7.2	Present? Yes • No		
Remarks: sphag, plesch								
Refi	spinay, piesen							

SOI	L

		e depth neede atrix	ed to docume	ent the indicator or con <b>Red</b>	nfirm the abs <b>lox Featu</b>		cators)		
Depth (inches)	Color (mois	t)	%	Color (moist)	%	Type <sup>1</sup>	_Loc_2	Texture	Remarks
								-	
	· ·								
					·				
<sup>1</sup> Type: C=Cond	centration. D=D	epletion. R		d Matrix <sup>2</sup> Location				annel. M=Matrix	
Hydric Soil In	dicators:			Indicators for Pro		4	oils:		
Histosol or	Histel (A1)			Alaska Color Ch		,		Alaska Gleyed Without H	ue 5Y or Redder
Histic Epipe				Alaska Alpine sv			F	Underlying Layer	
✓ Hydrogen S	( )			Alaska Redox W	/ith 2.5Y H	lue	L	Other (Explain in Remark	(S)
	Surface (A12)			<sup>3</sup> One indicator of	hydrophyl	ric vegetatio	on one prir	mary indicator of wetland h	wdrology
Alaska Gley				and an appropriate					
Alaska Red	. ,			<sup>4</sup> Give details of co	olor chang	e in Remarl	ks		
— Alaska Giey	ed Pores (A15)								
Restrictive Layer									$\sim$
Type: frost								Hydric Soil Present	? Yes $ullet$ No $igodom$
Depth (inche	es): 9								
Remarks:									
No pit dug, surfa	ace water throu	ghout site.							
HYDROLOG	-								
Wetland Hydro									cators (two or more are required)
Primary Indicate		<u>sumciency</u>				- viel Image			ned Leaves (B9)
<ul> <li>Surface was</li> <li>High Water</li> </ul>	. ,			Inundation Vi		-			Patterns (B10) hizospheres along Living Roots (C3)
Saturation	. ,			Marl Deposits		ICave Suita	Ce (Do)		of Reduced Iron (C4)
Water Marl				✓ Hydrogen Sul		(C1)		Salt Depos	( )
	Deposits (B2)			Dry-Season W					Stressed Plants (D1)
Drift Depos				Other (Explain				_	ic Position (D2)
Algal Mat c	or Crust (B4)			<u> </u>				Shallow Ac	
Iron Depos								Microtopog	graphic Relief (D4)
Surface So	il Cracks (B6)							✓ FAC-neutra	al Test (D5)
Field Observat	tions:								
Surface Water	Present?	Yes 🖲		Depth (inches	s): 1				
Water Table Pr	resent?	Yes 🖲	No $\bigcirc$	Depth (inches	s): 4		Wetla	nd Hydrology Presen	t? Yes $ullet$ No $igcap$
Saturation Pres (includes capill		Yes 🖲	No O	Depth (inches	s): 2				
Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspection) if available:									
l									
Remarks:									
water pooling in	areaas up to 1	п							