## WETLAND DETERMINATION DATA FORM - Alaska Region

Projec	t/Site: Susitna-Watana Hydroelectric Project	Во	orough/City:	Matanusk	a-Susitna Borough Sampling Date: 01-Aug-13
Applic	ant/Owner: Alaska Energy Authority				Sampling Point: SW13_T141_01
nvest	gator(s): BAB	L	andform (hill	side, terrac	ee, hummocks etc.): Hillside
	relief (concave, convex, none): hummocky		Slope: 21.2		
	gion : Interior Alaska Mountains		· 3.221904868		Long.: -148.295973781 Datum: WGS84
	ap Unit Name:		3.22 1904000		
		· · · · · · · · · · · · · · · · · · ·	Vac	No ○	NWI classification: Upland
Are \	matic/hydrologic conditions on the site typical for this /egetation  , Soil  , or Hydrology  , or Hydrophytic Vegetation Present?  Yes  , No  , No  , or Hydrology  ,	significantly naturally pro wing sam	disturbed?	Are "N (If nee	(If no, explain in Remarks.)  Iormal Circumstances" present? Yes No No eded, explain any answers in Remarks.)  Iormal Circumstances" present? Yes No No No eded, explain any answers in Remarks.)
	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )		Is	the Sam	pled Area
	Hydric Soil Present? Yes No			thin a W	-
	Wetland Hydrology Present? Yes O No	•)			ottaria :
	narks:  ETATION -Use scientific names of plants. L	ist all spec	cies in the	·	Dominance Test worksheet:
Tre	e Stratum	% Cover	Species?	Status	Number of Dominant Species
1.		0			That are OBL, FACW, or FAC: 3 (A)
2.		0_			Total Number of Dominant Species Across All Strata: 3 (B)
3.					Percent of dominant Species
4.		0			That Are OBL, FACW, or FAC: 100.0% (A/B)
5.		0			Prevalence Index worksheet:
	Total Cove	r: <u> </u>			Total % Cover of: Multiply by:
Sap	oling/Shrub Stratum 50% of Total Cover:	0 20% (	of Total Cover	0	OBL Species0 x 1 =0
1.	Betula nana	70	<b>✓</b>	FAC	FACW Species 13 x 2 = 26
2.	Vaccinium uliginosum	20		FAC	FAC Species <u>118.1</u> x 3 = <u>354.3</u>
3.	Vaccinium vitis-idaea	10		FAC	FACU Species <u>1</u> x 4 = <u>4</u>
4.	Empetrum nigrum	8		FAC	UPL Species <u>1</u> x 5 = <u>5</u>
5.	Salix pulchra	8		FACW	Column Totals: <u>133.1</u> (A) <u>389.3</u> (B)
6.	Ledum decumbens	5		FACW	
7.		0			Prevalence Index = B/A = 2.925
8.		0			Hydrophytic Vegetation Indicators:
9.		0			✓ Dominance Test is > 50%
10.		0			Prevalence Index is ≤3.0
He	Total Coverb Stratum 50% of Total Cover:		of Total Cover	24.2	Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
1.	Anthoxanthum monticola ssp. alpinum	1		FACU	Problematic Hydrophytic Vegetation (Explain)
2.	Festuca altaica		<b>~</b>	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3.	Festuca rubra			FAC	be present, unless disturbed or problematic.
4.	Artemisia frigida			UPL	Plot size (radius, or length x width)
5.	Cornus suecica			FAC	% Cover of Wetland Bryophytes
		_			(Where applicable)
					% Bare Ground
					Total Cover of Bryophytes
					Hartan batta
10.	Total Cove				Hydrophytic Vegetation
	50% of Total Cover:	6.05 20% (	of Total Cover:	2.42	Present? Yes ● No ○

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SOIL Sampling Point: SW13\_T141\_01

(inches)	Calas (se	-:	0/	Calas (malat)	0/	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-2	Color (m	OIST)	<u>%</u> 100	Color (moist)		туре -	LOC -	Fibric Organics	Fibric Organics
2-4	7.5YR	4/2	100					Silt Loam	few subrounded gravel and cobbles
								-	
4-5	7.5YR	2.5/3						Sandy Loam	few subrounded gravel and cobbles
5-9	2.5Y	4/3						Sandy Loam	few subrounded gravel and cobbles
9-19	5Y	4/2						Silt Loam	few subrounded gravel and cobbles
Type: C=Cor	ncentration. D	=Depletior	. RM=Reduce	d Matrix <sup>2</sup> Location	n: PL=Pore	Lining. RC	=Root Cha	nnel. M=Matrix	
lydric Soil I	ndicators:			Indicators for Pi	roblematic	Hydric Sc	oils: <sup>3</sup>		
<u>-</u>	Histel (A1)			Alaska Color C		4		Alaska Gleyed Withou	ıt Hue 5Y or Redder
Histic Epip	, ,			Alaska Alpine s	swales (TA5	)		Underlying Layer	
Ξ	Sulfide (A4)			Alaska Redox V	With 2.5Y H	ue		Other (Explain in Ren	marks)
Thick Dark	Surface (A1	2)		_					
Alaska Gle	yed (A13)			<sup>3</sup> One indicator of and an appropria				nary indicator of wetlar	nd hydrology,
Alaska Red	dox (A14)					•	•	COCITE	
Alaska Gle	yed Pores (A	15)		<sup>4</sup> Give details of c	olor change	in Remark	S		
strictive Laye	er (if present)	:							
Type:								Hydric Soil Prese	ent? Yes O No 💿
	nes): ndicators obse	erved							
emarks:		erved							
emarks: hydric soil ir	ndicators obse	erved							
emarks: hydric soil ir	ndicators obse							_Secondary 1	Indicators (two or more are required)
emarks: hydric soil ir YDROLO Vetland Hydric	ndicators obse	ators:	<u>t)</u>						Indicators (two or more are required) Stained Leaves (B9)
emarks: hydric soil ir YDROLO etland Hydric	GY rology Indic	ators:	t)	☐ Inundation V	/isible on Ae	erial Imagei	ry (B7)	Water	
POROLO etland Hydrimary Indica Surface W High Wate	GY rology Indictors (any one /ater (A1) er Table (A2)	ators:	<u>t</u> )	Sparsely Veg	etated Cond			Water Drainag Oxidize	Stained Leaves (B9) ge Patterns (B10) ed Rhizospheres along Living Roots (C
YDROLO etland Hydrimary Indica Surface W High Wate	GY rology Indicators (any one /ater (A1) er Table (A2)	ators:	t)	Sparsely Veg Marl Deposit	getated Cond s (B15)	cave Surfac		Water Draina Oxidize Presen	Stained Leaves (B9) ge Patterns (B10) ed Rhizospheres along Living Roots (C ce of Reduced Iron (C4)
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