## WETLAND DETERMINATION DATA FORM - Alaska Region

rojeci	/Site: Susitna-Watana Hydroelectric Project		В	orough/City:	Matanusk	a-Susitna Borough Sampling Date: 21-Aug-15
Applica	nt/Owner: Alaska Energy Authority					Sampling Point: SW15_T313_04
	gator(s): BAB			Landform (hills	side, terrac	e, hummocks etc.): Hillside
	elief (concave, convex, none): hummocky			Slope: 5.2		
	ion : Cook Inlet Mountains	1.4	at.:			Long.: Datum: WGS84
			- I			
	p Unit Name:			- \	<u> </u>	NWI classification: Upland
	natic/hydrologic conditions on the site typical for th	_	-		● No ○	(If no, explain in Remarks.)  ormal Circumstances" present? Yes ● No ○
	egetation U , Soil U , or Hydrology L	, ,	•	disturbed?		oma on ounotainoso procenti
Are V	egetation 🔲 , Soil 🔲 , or Hydrology 🗀	natura	lly pr	oblematic?	(If nee	ded, explain any answers in Remarks.)
SUMI	MARY OF FINDINGS - Attach site map s	howing	sam	pling point	locations	s, transects, important features, etc.
	Hydrophytic Vegetation Present? Yes ● N	0 0				
		o		Is	the Sam	pled Area
	^	o		wi	thin a W	etland? Yes ○ No ●
Doma						
Rema	arks: hummocky (ice and boulder hummocks) plana	ar siope				
/FGF	TATION -Use scientific names of plants	Lict all	cno	cios in tha	alat	
LOL	TATION - Use scientific flames of plants	. LIST all	spe	cies iii tile į	piot.	December 2011
_		Abso		Dominant		Dominance Test worksheet:  Number of Dominant Species
1.	e Stratum	<u> % C</u>	over	Species?	Status	That are OBL, FACW, or FAC:5(A)
						Total Number of Dominant
2.						Species Across All Strata: 5 (B)
3. 4.						Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
5.			_			111at Are OBL, FAGW, 01 FAG. 100:096 (A/B)
J.	Total Co					Prevalence Index worksheet:
C		0 nvei:	20%	of Total Cover:	0	Total % Cover of: Multiply by:
Sap	ling/Shrub Stratum 50% of Total Cover:		20%	_	0	OBL Species 0 x 1 = 0
1.	Betula glandulosa		30_	<b>✓</b>	FAC	FACW Species 15 x 2 = 30
2.	Vaccinium uliginosum		20	<b>~</b>	FAC	FAC Species 89 x 3 = 267
3.	Empetrum nigrum		20	<b>✓</b>	FAC	FACU Species 7 x 4 = 28
4.	Rhododendron tomentosum		15		FACW	UPL Species <u>1</u> x 5 = <u>5</u>
5.	Vaccinium vitis-idaea		5		FAC	Column Totals: <u>112</u> (A) <u>330</u> (B)
6.	Picea glauca		5		FACU	Prevalence Index = B/A = 2.946
7.	Betula occidentalis		5		FAC	
8.	Salix barclayi		2		FAC	Hydrophytic Vegetation Indicators:
	Spiraea stevenii		1		FACU	✓ Dominance Test is > 50%
10.	T.1.10		0			✓ Prevalence Index is ≤3.0
Hor	Total Co b Stratum 50% of Total Cover:		. <u>03</u> 20%	of Total Cover:	20.6	Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
	0			✓	FAC	Problematic Hydrophytic Vegetation (Explain)
	Cornus suecica Festuca altaica		2	<b>✓</b>	FAC	, , , , , , , , , , , , , , , , , , , ,
	Anomono noroingifloro		1		FACU	Indicators of hydric soil and wetland hydrology must     be present, unless disturbed or problematic.
3.			1		UPL	
5.	Equisetum sylvaticum		1		FAC	Plot size (radius, or length x width) <u>10m</u>
_	Carex bigelowii		1		FAC	% Cover of Wetland Bryophytes (Where applicable)
	- Caron Digorom		0			
			0			% Bare Ground         15           Total Cover of Bryophytes         70
			0			Total cover of bryophytes
			0			Hydrophytic
	Total Co		9	_		Vegetation
	. Juli ed	_				
	50% of Total Cover:	4.5	20%	of Total Cover:	1.8	Present? Yes • No •

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SOIL Sampling Point: SW15\_T313\_04

O-3.5		Matrix		ument the inc	dicator or con <b>Red</b>	ox Featu		cators)		
0-3.5	Color (m	oist)	%	Color (n	noist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
									Fibric Organics	Oi
3.5-5									Hemic Organics	Oe
5-5.5									Sapric Organics	Oa
5.5-7	10YR	2/2	60	10YR	4/3	40			Silt Loam	AE mixed horizons, in transition. no redox
				20111	.,,,,					features
7-11	2.5YR	3/2	100						Silt Loam	Bs
11-12	7.5YR	5/6							Very Fine Loamy Sand	Bw1 tephra
12-18	7.5YR	3/4	100						Sandy Loam	Bw2
18-20	2.5Y	4/3	100						Sandy Loam	C boarderline loam
¹Type: C=Cond				cod Matrix	2 Location	. DI Dore	Lining PC		-	
		-Depiction	i. Ki-i-kedu					_	Tillel. M=Maulx	
Hydric Soil In	ndicators:				ors for Pro		4	oils: ¯		
Histosol or	, ,				ka Color Ch	• .	•		Alaska Gleyed Without H Underlying Layer	lue 5Y or Redder
Histic Epipe	edon (A2)			$\equiv$	ka Alpine sv	•	•		1	1>
	Sulfide (A4)			∟ Alas	ka Redox W	/ith 2.5Y H	lue		Other (Explain in Remar	KS)
	Surface (A12	2)		3 ∩ne ii	ndicator of	hvdronhvti	ic vegetatio	n one nrim	nary indicator of wetland I	hydrology
Alaska Gley					appropriate					nyurology,
Alaska Red				4 Give	details of co	lor change	in Remark	(S		
Alaska Gley	yed Pores (A1	.5)		0.70						
Restrictive Layer	r (if present)	:								
Type:									<b>Hydric Soil Present</b>	t? Yes O No 💿
Depth (inche	es):									
Remarks:										
no hydric soil ind	dicators obse	rved								
•										
HYDROLOG	GY									
HYDROLOO Wetland Hydro		ators:							Secondary Indi	icators (two or more are required)
	ology Indic		ıt)							icators (two or more are required) ined Leaves (B9)
Wetland Hydro	ology Indic		t)		undation Vi	sible on Ae	erial Image	ry (B7)	Water Sta	
Primary Indicat  Surface Wa	ology Indic		t)		undation Vi parsely Vege				Water Sta	ined Leaves (B9)
Primary Indicat  Surface Wa	cology Indic cors (any one ater (A1) er Table (A2)		t)	Sp	arsely Vege	etated Con			Water Sta Drainage I Oxidized F	ined Leaves (B9) Patterns (B10)
Primary Indicat Surface Wa	rology Indic cors (any one ater (A1) or Table (A2) (A3)		it)	☐ Sp	arsely Vege arl Deposits	etated Con (B15)	icave Surfa		Water Sta Drainage I Oxidized F	ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4)
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