WETLAND DETERMINATION DATA FORM - Alaska Region

TOJEC	/Site: Susitna-Watana Hydroelectric Project	E	Borough/City:	Matanusk	a-Susitna Borough Sampling Date: 24-Aug-15
Applica	ant/Owner: Alaska Energy Authority				Sampling Point: SW15_T350_02
nvesti	gator(s): ERT, TXC		Landform (hil	lside, terrac	e, hummocks etc.): Midslope
ocal ı	relief (concave, convex, none): hummocky		Slope: 26.7	7 % / 15.0	0 ° Elevation:
Subrec	gion : Interior Alaska Mountains	Lat.:			Long.: Datum: WGS84
	p Unit Name:				NWI classification: PFO4B
	natic/hydrologic conditions on the site typical for this	: £	-0 Voo	● No ○	(If no, explain in Remarks.)
Are V	regetation ☐ , Soil ☐ , or Hydrology ☐ regetation ☐ , Soil ☐ , or Hydrology ☐ MARY OF FINDINGS - Attach site map sho	significantl naturally p wing san	y disturbed? roblematic?	Are "N (If nee	ormal Circumstances" present? Yes No O
	Hydrophytic Vegetation Present? Yes No	_	le	the Sam	pled Area
	Hydric Soil Present? Yes No	_		ithin a W	-
	Wetland Hydrology Present? Yes No)	W	illiiii a vv	etiality its a no a
Rema	arks:				
/EGF	ETATION - Use scientific names of plants. L	ist all spe		plot.	Dominance Test worksheet:
Tre	e Stratum	% Cover		Status	Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)
1.	Picea mariana	45	✓	FACW	Total Number of Dominant
2.		0			Species Across All Strata: 4 (B)
3.		0			Percent of dominant Species
4.		0			That Are OBL, FACW, or FAC: 100.0% (A/B)
5.					Prevalence Index worksheet:
	Total Cove				Total % Cover of: Multiply by:
Sap	ling/Shrub Stratum 50% of Total Cover:	22.5 20%	6 of Total Cover	:9	OBL Species x 1 =
1.	Vaccinium uliginosum	8	✓	FAC	FACW Species 46.1 x 2 = 92.2
2.	Vaccinium vitis-idaea	8	✓	FAC	FAC Species 32.1 x 3 = 96.3
3.	Empetrum nigrum	4		FAC	FACU Species <u>4.1</u> x 4 = <u>16.4</u>
4.	Arctous alpinus	2		FACU	UPL Species <u>0</u> x 5 = <u>0</u>
5.	Betula nana	2		FAC	Column Totals: <u>82.3</u> (A) <u>204.9</u> (B)
6.	Rosa acicularis	1		FACU	Prevalence Index = B/A =2.490_
7.	Salix pulchra			FACW	<u> </u>
8.					Hydrophytic Vegetation Indicators:
					✓ Dominance Test is > 50%
10.	Total Cove				Prevalence Index is ≤3.0
Her	b Stratum 50% of Total Cover: _		% of Total Cove	r: 5.2	Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
	Carex bigelowii	8	✓	FAC	Problematic Hydrophytic Vegetation (Explain)
	Equisetum sylvaticum			FAC	¹ Indicators of hydric soil and wetland hydrology must
3.	Geocaulon lividum			FACU	be present, unless disturbed or problematic.
4.	Pyrola asarifolia	0.1		FACU	
5.	Petasites frigidus			FACW	Plot size (radius, or length x width) 10m
6.	Calamagrostis canadensis	0.1		FAC	% Cover of Wetland Bryophytes (Where applicable)
7.		0			% Bare Ground
					Total Cover of Bryophytes 98
9.					
10.		0			Hydrophytic
	Total Cove				Vegetation Present? Yes ● No ○
			6 of Total Cover	. 226	PIESENTE IES 🗢 NO 🔾

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SOIL Sampling Point: SW15 T350 02

(inches)	Color (m	oist)	%	Color (m	oist)	%	Type ¹	_Loc_ ²	Textur	e		Remarks
0-4		,			,		-7,5-		Peat			
4-6									Mucky Peat			
6-11									Muck	w	avy boundary	
11-14	5Y	4/1	65	10YR	4/4	35		PL	Sandy Loam		Bg. 5Y 4/1	
14-18									Muck)ab	
						-			-			
Type: C=Conce	ntration. D	=Depletion	.RM=Redu						annel. M=Matrix			
ydric Soil Indi	cators:						C Hydric So	oils: ³	-			
Histosol or Hi	. ,				ka Color Ch		-		Alaska Gleyed Underlying Lay		5Y or Redder	
Histic Epiped					ka Alpine sv ka Redox W	•	,		Other (Explain			
☐ Hydrogen Sul ☐ Thisto David Co	. ,			∟ Alask	ka Redox W	1th 2.51 F	iue		Other (Explain	iii Keilia Ks)		
☐ Thick Dark Su☐ Alaska Gleyed	•	.)							mary indicator of	wetland hyd	lrology,	
Alaska Gleyet Alaska Redox				and an	appropriate	e landscap	e position i	must be pre	esent			
Alaska Gleyed	, ,	5)		4 Give d	etails of co	lor change	e in Remark	(S				
strictive Layer (if nresent)											
Scriccive Layer (ii preserie)									D	Yes 💿	No O
Type:									Hydric Soil	Present?		
gative reaction	to alpha, a		lol strips in	all horizons	s. Infer satu	uration of	organics th	rough seco	Hydric Soil			entation call refer
Depth (inches emarks: gative reaction buried organic l	to alpha, a norizon 150		lol strips in	all horizons	s. Infer satu	uration of	organics th	rough seco				
Depth (inches emarks: egative reaction buried organic l	to alpha, a norizon 150	m.	lol strips in	all horizons	s. Infer satu	uration of	organics th	rough seco	ondary wetland h	ydrology ind	icators.Sedime	entation call refer
Depth (inches emarks: egative reaction buried organic l	to alpha, a norizon 150 Y ogy Indic	ators:		all horizons	s. Infer satu	ıration of	organics th	rough seco	ondary wetland h	nydrology ind	icators.Sedime	entation call refer
Depth (inches emarks: egative reaction buried organic land type)	to alpha, a norizon 156 Y ogy Indic s (any one	ators:					organics th		ondary wetland h	nydrology ind	tors (two or m	entation call refer
Depth (inches marks: gative reaction buried organic l	Y ogy Indic s (any one er (A1)	ators:			undation Vis	sible on A		ry (B7)	Secon	nydrology ind ndary Indicat Water Staine Drainage Pat	tors (two or m d Leaves (B9) terns (B10)	entation call refer
Depth (inches marks: gative reaction buried organic laws) /DROLOG etland Hydrologimary Indicator Surface Water	Y Ogy Indic s (any one er (A1) Table (A2)	ators:		☐ Inu ☐ Sp. ☐ Ma	undation Vis arsely Vege rl Deposits	sible on Aretated Con (B15)	erial Image ncave Surfac	ry (B7)		ndary Indicat Water Staine Drainage Pat Oxidized Rhiz	tors (two or m d Leaves (B9) terns (B10)	entation call reference of the control of the contr
Depth (inches) marks: gative reaction buried organic l /DROLOG etland Hydrol mary Indicator Surface Wate High Water T Saturation (A Water Marks	Y ogy Indic s (any one er (A1) Table (A2) 3) (B1)	ators:		☐ Int☐ Sp.☐ Ma	undation Vis arsely Vege irl Deposits drogen Sulf	sible on Ad tated Con (B15) fide Odor	erial Image ncave Surfac (C1)	ry (B7)	Seco	ndary Indicat Water Staine Drainage Pat Oxidized Rhiz Presence of F Salt Deposits	tors (two or m d Leaves (B9) terns (B10) cospheres alor Reduced Iron ((C5)	nore are required) The properties of the control o
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