WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hyd	droelectric Project	B	orough/City:	Matanusk	a-Susitna Borough Sampling Date: 20-Aug-15
Applicant/Owner: Alaska Energy A	Authority				Sampling Point: SW15_T300_04
nvestigator(s): BAB	,		Landform (hil	lside, terrac	e, hummocks etc.): Drainage
ocal relief (concave, convex, none)	: concave		Slope: 26.7	7 % / 15.0	O ° Elevation:
Subregion: Interior Alaska Mounta		Lat.:			Long.: Datum: WGS84
oil Map Unit Name:	1113				NWI classification: Upland
·			. V	● No ○	
are climatic/hydrologic conditions or Are Vegetation , Soil	, or Hydrology \square s , or Hydrology \square n	ignificantly aturally pr	disturbed?	Are "N (If nee	(If no, explain in Remarks.) ormal Circumstances" present? Yes ● No ○ orded, explain any answers in Remarks.) s, transects, important features, etc.
Hydrophytic Vegetation Pres	ent? Yes 🏵 No 🔾		_		
Hydric Soil Present?	Yes 🔾 No 💿				pled Area letland? Yes ◯ No ◉
Wetland Hydrology Present?	Yes 🔾 No 💿		W	ithin a W	etland? Yes UNO 🖲
Remarks:					
/EGETATION -Use scientific	names of plants. Lis	at all spe	cies in the	plot.	Dominance Test worksheet:
Tree Stratum		% Cover	Species?	Status	Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)
Picea glauca		15	✓	FACU	Total Number of Dominant
Betula kenaica		10	✓	FACU	Species Across All Strata:5(B)
		0			Percent of dominant Species
		0			That Are OBL, FACW, or FAC: 60.0% (A/B)
5					Prevalence Index worksheet:
	Total Cover:	25	·		Total % Cover of: Multiply by:
Sapling/Shrub Stratum	50% of Total Cover: <u>1</u>	2.5 20%	of Total Cover	:5	OBL Species x 1 =
1. Alnus viridis ssp. sinuata		80	✓	FAC	
2. Ribes triste		3		FAC	
Picea glauca		3		FACU	
				FACU	UPL Species <u>0.1</u> x 5 = <u>0.500</u>
				FACU	Column Totals: <u>125.1</u> (A) <u>405.5</u> (B)
					Prevalence Index = B/A = 3.241
7					
8					
	Total Cover:	89	of Total Cove	r: 17 8	Morphological Adaptations (Provide supporting data in
<u> </u>					
O Detecites frigidus					
- December :		1	Ĭ	FACU	be present, unless disturbed or problematic.
4 Delahisissa alassassa		1		FACW	
- Mantanaia naniaulata		1		FACU	
o Viola polyotria (IAM)		1		FAC	(Where applicable)
= Delemenium hereele		0.1		UPL	% Bare Ground 25
8.		0			Total Cover of Bryophytes 65
9					
10		0			Hydrophytic
	Total Cover:		-f.T-+-! C		Vegetation Present? Yes No
	50% Of LOTAL COVER: 5	.55 20%	or Total Cover	: 777	riesenti ies – NO –
2. Ribes triste 3. Picea glauca 4. Rosa acicularis 5. Linnaea borealis 6. 7. 8. 9. 10. Herb Stratum 1. Calamagrostis canadensis 2. Petasites frigidus 3. Dryopteris expansa 4. Delphinium glaucum 5. Mertensia paniculata 6. Viola palustris(IAM) 7. Polemonium boreale 8. 9.	Total Cover: Total Cover:	2.5 20% 80 3 3 2 1 0 0 0 0 89 44.5 20% 5 2 1 1 0.1 0 0 0 11.1	of Total Cove	FAC FACU FACU FACU FACU FACU FACU FACU F	OBL Species 0 x1 = 0 FACW Species 3 x2 = 6 FAC Species 89 x3 = 267 FACU Species 33 x4 = 132 UPL Species 0.1 x5 = 0.500 Column Totals: 125.1 (A) 405.5 (E Prevalence Index = B/A = 3.241 Hydrophytic Vegetation Indicators: ✓ Dominance Test is > 50% ☐ Prevalence Index is ≤ 3.0 ☐ Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Plot size (radius, or length x width) 10m % Cover of Wetland Bryophytes (Where applicable) % Bare Ground 25 Total Cover of Bryophytes

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SOIL Sampling Point: SW15_T300_04

		Matrix		Re				_	
(inches)	Color (mo	oist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	<u>Loc</u> 2	Texture	Remarks
0-2								Fibric Organics	Oi
2-7	10YR	3/1						Silt Loam	very fine granular sructure, A horizon
7-15	10YR	3/2	100					Silt Loam	AB horizon with medium granular stru
15-24	10YR	3/2	100					Loam	Bw horizon, medium subangular block strructure
		=Depletion	. RM=Reduc	ed Matrix ² Locatio				nnel. M=Matrix	
ydric Soil In				Indicators for P		4	DIIS:	1	
☐ Histosol or	. ,			Alaska Color C		-		Alaska Gleyed Withou Underlying Layer	t Hue 5Y or Redder
☐ Histic Epipe				☐ Alaska Alpine s	•	•		Other (Explain in Rem	arks)
_ , _	Sulfide (A4)			☐ Alaska Redox	With 2.5Y F	iue		J Other (Explain in Ken	idi No)
Alaska Gley)		³ One indicator of and an appropria				nary indicator of wetlan esent	d hydrology,
☐ Alaska Red	` ,	L)		4 Give details of o	color change	e in Remark	(S		
	yed Pores (A1								
strictive Layer	r (if present):								
Type:								Hydric Soil Prese	nt? Yes O No 💿
Depth (inche	es):								
emarks:		rved							
emarks:		rved							
emarks: hydric soil ind	dicators obse	rved							
marks: hydric soil ind	dicators obse							Secondary I	ndicators (two or more are required)
marks: hydric soil inc	dicators obse	ators:	t)						ndicators (two or more are required) Stained Leaves (B9)
marks: hydric soil inc	GY Tology Indicators (any one	ators:	t)	Inundation \	/isible on A	erial Image	ry (B7)	Water S	
marks: hydric soil ind 'DROLOG etland Hydre imary Indicat Surface Wa	GY Tology Indicators (any one	ators:	<u>t)</u>	☐ Inundation \		-	, , ,	Water S Drainag	Stained Leaves (B9)
marks: hydric soil ind 'DROLOGetland Hydre imary Indicat Surface Wa High Wate	GY rology Indicators (any one later (A1) er Table (A2)	ators:	t)	Sparsely Veg	getated Cor	-	, , ,	Water S Drainag Oxidized	Stained Leaves (B9) e Patterns (B10)
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/DROLOG etland Hydrimary Indicat Surface Wall High Water Saturation Water Mar	GY ology Indicators (any one later (A1) or Table (A2) (A3) rks (B1)	ators: is sufficien	t)	Sparsely Veg Marl Deposit Hydrogen Su	getated Cor s (B15) ulfide Odor	ncave Surfac	, , ,	Water S Drainag Oxidized Presenc Salt Dep	Stained Leaves (B9) te Patterns (B10) d Rhizospheres along Living Roots (Coe of Reduced Iron (C4) toosits (C5)
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