## WETLAND DETERMINATION DATA FORM - Alaska Region

Project/S	Site: Susitna-Watana Hydroelectric Project	В	orough/City:	Matanusk	a-Susitna Borough Sampling Date: 21-Aug-15
Applican	t/Owner: Alaska Energy Authority				Sampling Point: SW15_T302_07
Investiga		ı	Landform (hill	side, terrace	e, hummocks etc.): Bluff
-	ief (concave, convex, none): concave		Slope: 57.7	% / 30.0	
	n: Interior Alaska Mountains	Lat.:			Long.: Datum: WGS84
_					
	Unit Name:			<b>○</b> N: ○	NWI classification: Upland
Are Ve		significantly	disturbed?		(If no, explain in Remarks.) ormal Circumstances" present? Yes ● No ○
Are Ve	getation $\square$ , Soil $\square$ , or Hydrology $\square$ r	naturally pro	oblematic?	(If nee	ded, explain any answers in Remarks.)
SUMM	ARY OF FINDINGS - Attach site map show	ving sam	pling point	locations	transects, important features, etc.
	lydrophytic Vegetation Present? Yes No		7 7 7		,
	) p) cg		Is	the Sam	pled Area
	, · · · · · · · · · · · · · · · · ·			thin a W	-
	7	<u>'</u>			
Remark	KS:				
VECET	TATION Has scientific names of plants hi	-+ -II	-::		
VEGE	<b>TATION</b> -Use scientific names of plants. Lis	st all spe	cies in the	piot.	
1		Absolute	Dominant	Indicator	Dominance Test worksheet:  Number of Dominant Species
	Stratum	<b>% Cover</b> 30	Species?	Status	That are OBL, FACW, or FAC:1(A)
	Picea glauca		<b>✓</b>	FACU	Total Number of Dominant
2. <u>E</u>	Betula neoalaskana	15		FACU	Species Across All Strata: 3 (B)
4.					Percent of dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)
5.		0			
-					Prevalence Index worksheet:
Sanlir	ng/Shrub Stratum 50% of Total Cover: 2		of Total Cover:	9	Total % Cover of: Multiply by:
Заріп	ig/sinub scratum				OBL Species 0 x 1 = 0 FACW Species 0 x 2 = 0
_	Alnus viridis ssp. crispa		<b>✓</b>	FAC	
_	Betula neoalaskana			FACU	FAC Species <u>39.2</u> x 3 = <u>117.6</u> FACU Species 56.3 x 4 = 225.2
_	Ribes triste	5 3 3		FAC FAC	UPL Species 0 x 5 = 0
_	/accinium vitis-idaea Rosa acicularis	3		FACU	· ——
_	Empetrum nigrum	1		FAC	Column Totals: <u>95.5</u> (A) <u>342.8</u> (B)
_	/accinium uliginosum	0.1		FAC	Prevalence Index = B/A = 3.590
_	Linnaea borealis	0.1		FACU	Hydrophytic Vegetation Indicators:
_	Picea glauca	0.1		FACU	Dominance Test is > 50%
40	3	0			Prevalence Index is ≤3.0
	Total Cover:	47.3			Morphological Adaptations (Provide supporting data in
Herb	Stratum 50% of Total Cover: 2	23.65 20%	of Total Cover	9.46	Remarks or on a separate sheet)
10	Geocaulon lividum	3		FACU	Problematic Hydrophytic Vegetation (Explain)
2. <u>F</u>	Poa arctica	0.1		FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
· · -	Boschniakia rossica	0.1		FACU	be present, unless disturbed or problematic.
40	Orthilia secunda	0.1		FACU	Plot size (radius, or length x width) 10m
5					% Cover of Wetland Bryophytes
		_			(Where applicable)
					% Bare Ground15
					Total Cover of Bryophytes 75
10	Total Cover:				Hydrophytic Vegetation
	50% of Total Cover: 1		of Total Cover:	0.66	Present? Yes No •
D					
Remar	ks: bare ground is litter, near continuous featherm	osses. no 0	ioiiiiiant nerd	is as lotai N	eid tovei <5%.

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SOIL Sampling Point: SW15\_T302\_07

Depth (inches)						_ 1	. 2	Toyturo	Domarko
(inches) 0-1	Color (m	oist)	<u> </u>	Color (moist)		Type <sup>1</sup>	<u>Loc</u> <sup>2</sup>	Texture Fibric Organics	Remarks
								Hemic Organics	
1-6									
6-8	2.5Y	4/2						Silty Clay Loam	
8-12	2.5Y	4/3			_			Sand	_
12-17	2.5Y	4/3			_			Sand	few rounded gravel
17-31	5Y	5/2	100					Sand	well sorted
Type: C=Con	icentration. D	=Depletior	ı. RM=Reduc	ed Matrix <sup>2</sup> Location	n: PL=Pore	Lining. RC	=Root Cha	nnel. M=Matrix	
lydric Soil Ir	ndicators:			Indicators for P	roblematic	Hydric So	oils: <sup>3</sup>		
Histosol or	Histel (A1)			Alaska Color (	Change (TA4	<b>4</b>		Alaska Gleyed Withou	t Hue 5Y or Redder
Histic Epipe	edon (A2)			Alaska Alpine	swales (TA5	5)		Underlying Layer	
Hydrogen :	Sulfide (A4)			Alaska Redox	With 2.5Y H	lue		Other (Explain in Rem	arks)
Thick Dark	Surface (A12	2)		3 One indicator o	f hudronhuti	ia vaaatatia		ann indicator of watlan	d budvologu
Alaska Gley	yed (A13)			and an appropria				nary indicator of wetlan esent	a nyarology,
∐ Alaska Red	` '			4 Give details of	color change	in Domark	re .		
	yed Pores (A:	15)		Give details of	color change	z III Kemark			
estrictive Laye	er (if present)	:							
Type: Silty	Clay Loam							<b>Hydric Soil Prese</b>	nt? Yes ○ No •
Beatle Cont.									
Depth (inchemarks:		ly 10ft awa	y, same aspe	ct. Other soil pit wa	as enitrely w	rell sorted c	layey silt fr	om 8 - 31 in.	
emarks:		ly 10ft awa	y, same aspe	ct. Other soil pit wa	as enitrely w	rell sorted c	layey silt fr	om 8 - 31 in.	
emarks:	s aproximate	ly 10ft awa	y, same aspe	ct. Other soil pit wa	as enitrely w	rell sorted c	layey silt fr	om 8 - 31 in.	
emarks: ug two soil pit	s aproximate		y, same aspe	ct. Other soil pit wa	as enitrely w	rell sorted c	layey silt fr		ndicators (two or more are required)
emarks:  ug two soil pit	GY  rology Indic	ators:						_Secondary I	ndicators (two or more are required) Stained Leaves (B9)
YDROLO  Yetland Hydrrimary Indicat  Surface W	GY rology Indictors (any one later (A1)	ators:		Inundation	Visible on Ae	erial Image	ry (B7)	Secondary I	Stained Leaves (B9) e Patterns (B10)
YDROLO  Yetland Hydr  rimary Indicat  Surface W  High Wate	GY rology Indictors (any one fater (A1) er Table (A2)	ators:		☐ Inundation ☐ Sparsely Ve	Visible on Ae getated Con	erial Image	ry (B7)	Secondary II  Water S  Drainag  Oxidized	itained Leaves (B9) e Patterns (B10) d Rhizospheres along Living Roots (C
YDROLO  Yetland Hydr  Surface W  High Wate  Saturation	GY rology Indictors (any one later (A1) er Table (A2)	ators:		☐ Inundation ☐ Sparsely Ve	Visible on Aegetated Conts (B15)	erial Image cave Surfac	ry (B7)	Secondary II  Water S  Drainag  Oxidized  Presence	stained Leaves (B9) le Patterns (B10) d Rhizospheres along Living Roots (C le of Reduced Iron (C4)
YDROLO Vetland Hydr Surface W High Wate Saturation Water Man	GY rology Indictors (any one later (A1) er Table (A2) (A3) rks (B1)	ators: is sufficier		Inundation Sparsely Ve Marl Deposi Hydrogen S	Visible on Ae getated Con ts (B15) ulfide Odor (	erial Image cave Surfac	ry (B7)	Secondary II  Water S  Drainag  Oxidized  Presenc	Stained Leaves (B9) te Patterns (B10) d Rhizospheres along Living Roots (Cote of Reduced Iron (C4) toosits (C5)
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