## WETLAND DETERMINATION DATA FORM - Alaska Region

Project	/Site: Susitna-Watana Hydroelectric Project	E	Borough/City:	Matanusk	ka-Susitna Borough Sampling Date: 24-Aug-15
Applica	ant/Owner: Alaska Energy Authority				Sampling Point: SW15_T350_04
	gator(s): ERT, TXC		Landform (hill	side, terrac	ce, hummocks etc.): MID BACKSLOPE
Local	elief (concave, convex, none): undulating		Slope: 44.5	% / 24.0	
Subred	ion : Interior Alaska Mountains	Lat.:			Long.: Datum: WGS84
		Latti			NWI classification: PSS1/4B
	p Unit Name:		• V	<u> </u>	<del></del>
	matic/hydrologic conditions on the site typical for this ti	•		No ○	(If no, explain in Remarks.)  Iormal Circumstances" present? Yes ● No ○
		J	y disturbed?		ionnai oli odinotanoco present:
Are v	egetation ☐ , Soil ☐ , or Hydrology ☐	naturally p	roblematic?	(If nee	eded, explain any answers in Remarks.)
SUMI	MARY OF FINDINGS - Attach site map sho	wing sar	npling point	locations	s, transects, important features, etc.
	Hydrophytic Vegetation Present? Yes   No C	)			
	Hydric Soil Present? Yes ● No C		Is	the Sam	npled Area
	Wetland Hydrology Present? Yes  No C		wi	ithin a W	/etland? Yes   No ○
Rem	, ,		nanics (troughs	caused b	y game trails or moss growing on tree boles. Possible
i (Ciri	permafrost?	ssected org	gariics (trougris	o) causeu b	y game trails of moss growing off tree boles. Possible
	•				
VEGE	TATION - Use scientific names of plants. L	ist all spe	ecies in the	nlot.	
	- Coc co.cc.nc.nc.cc c. p.ac.	<u> </u>			Dominance Test worksheet:
Tro	e Stratum	Absolute % Cover		Indicator Status	Number of Dominant Species
	Picca mariana	30	<u> </u>	FACW	That are OBL, FACW, or FAC:5 (A)
_	D'anna da an			FACU	Total Number of Dominant
3.				TACO	Species Across All Strata: 5 (B)
4.		0			Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
5.		0			
	Total Cover				Prevalence Index worksheet:  Total % Cover of: Multiply by:
Sar	ling/Shrub Stratum 50% of Total Cover:		6 of Total Cover:	6.2	001.0
	Picea mariana		<b>✓</b>	FACW	
2.	Salix pulchra	-	<b>✓</b>	FACW	FAC Species 33 x 3 = 99 FACU Species 5 x 4 = 20
3.	Vaccinium uliginosum			FAC	UPL Species 0 x 5 = 0
4.	Rhododendron groenlandicum	6		FACU	
5.	Arctous alpinus  Phododondron tomontosum	- 4		FACW	Column Totals: <u>95</u> (A) <u>233</u> (B)
6. 7.	Rhododendron tomentosum  Vaccinium vitis-idaea	4		FAC	Prevalence Index = B/A = 2.453
8.	Betula nana	4		FAC	Undership Vosetskien Indieskom
_	Alassa siiridia aara ariana			FAC	Hydrophytic Vegetation Indicators:  ✓ Dominance Test is > 50%
10.	· · ·			TAC	✓ Prevalence Index is ≤3.0
10.	Total Cover				
Her	<b>b Stratum</b> 50% of Total Cover:		% of Total Cover	: 11.2	Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
_	Carex bigelowii	5	<b>✓</b>	FAC	Problematic Hydrophytic Vegetation (Explain)
	Calamagrostis canadensis			FAC	Indicators of hydric soil and wetland hydrology must
3.	Equisetum arvense			FAC	be present, unless disturbed or problematic.
_	Petasites frigidus			FACW	Distriction (and time and leave the CAULY)
					Plot size (radius, or length x width)  10m
					% Cover of Wetland Bryophytes (Where applicable)
		_			% Bare Ground
					Total Cover of Bryophytes 98
		0			Hydrophytic
10.					Vegetation
10.	<b>Total Cover</b> 50% of Total Cover:				Present? Yes • No O

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SOIL Sampling Point: SW15\_T350\_04

Depth — (inches)	Color (mo	ist)	%	Color (n	noist)	%	Type <sup>1</sup>	Loc 2	Texture	Remarks
0-5									Peat	Oi
5-8									Mucky Peat	Oe
8-9.5						-			Muck	 Oa
9.5-16		4/1	85	10YR	4/6	15		PL	Sandy Clay Loam	Bg, very gravelly. Iron redox in root
				20111	.,,,				,,	channels
Type: C=Concer	ntration. D=	Depletion.	RM=Redu	ced Matrix	<sup>2</sup> Location	: PL=Por	e Lining. RO	=Root Cha	annel. M=Matrix	
		•			ors for Pro			_		
ydric Soil Indic					ka Color Ch		4	DIIS:	Alacka Cloved With	out Huo EV or Roddor
<ul><li>J Histosol or His</li><li>✓ Histic Epipedo</li></ul>	. ,				ka Color Cri ka Alpine sv		-		Underlying Layer	out Hue 5Y or Redder
Hydrogen Sulf					ka Redox W	•	,		Other (Explain in R	emarks)
Thick Dark Su	` ,	ı								
Alaska Gleyed					ndicator of l appropriate				nary indicator of wet	land hydrology,
Alaska Redox	(A14)						•		esent	
Alaska Gleyed	l Pores (A15	5)		4 Give o	details of co	lor chang	e in Remark	(S		
strictive Layer (i	if present):									
									Hydric Soil Pre	sent? Yes • No
Type: sandy c	clay loam								riyane son ric	50.1C. 1C5 - 110 -
Type: sandy c Depth (inches)	•								nyune son me	sent. Tes a No a
Depth (inches)	•								Tryune son Tre	
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Depth (inches)	): 9.5	tion to alp	ha, alpha-d	ipyridol.						- 10 ° 10 °
•	): 9.5	tion to alp	ha, alpha-d	ipyridol.					Tryanc Son Tre	- 10 ° 10 °
Depth (inches)	): 9.5	tion to alp	ha, alpha-d	ipyridol.					Tryanic Son Fre	
Depth (inches) emarks: il temp is very co	): 9.5 old. no reac	tion to alp	ha, alpha-d	ipyridol.					Tryanic Son Tro	
Depth (inches) marks: il temp is very co	): 9.5 old. no reac		ha, alpha-d	ipyridol.						y Indicators (two or more are required)
Depth (inches) emarks: il temp is very co	y 9.5 old. no reac	tors:		ipyridol.					Secondar	
Depth (inches) emarks: il temp is very co	y  old. no reac  Y  ogy Indica s (any one i	tors:			undation Vi	sible on A	erial Image	ry (B7)	Secondar	y Indicators (two or more are required)
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Depth (inches)  marks: il temp is very co  /DROLOG) etland Hydrolo imary Indicators  Surface Wate  / High Water T	y  ogy Indica s (any one iser (A1)  Table (A2)	tors:		In		etated Cor	_		Secondar  Wate Drair  Oxidi Prese	y Indicators (two or more are required) er Stained Leaves (B9) nage Patterns (B10) ized Rhizospheres along Living Roots (C ence of Reduced Iron (C4)
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