WETLAND DETERMINATION DATA FORM - Alaska Region

Project	/Site: Susitna-Watana Hydroelectric Project	E	Borough/City:	Matanusk	a-Susitna Borough Sampling Date:27-Aug-15
Applica	nt/Owner: Alaska Energy Authority				Sampling Point: SW15_T351_03
	gator(s): SLI, SCB		Landform (hill	side, terrac	ee, hummocks etc.): Hillside
-	elief (concave, convex, none): hummocky		Slope: 14.0		
	ion : Interior Alaska Mountains	Lat.:			Long.: Datum: WGS84
_		Lut			
	p Unit Name:		2 V	<u> </u>	NWI classification: PFO4B
	natic/hydrologic conditions on the site typical for this til	•		No ○	(If no, explain in Remarks.) Iormal Circumstances" present? Yes ● No ○
		-	y disturbed?		iorniai oli odriotarioco present:
Are V	egetation 🗌 , Soil 📙 , or Hydrology 📙 ı	naturally p	roblematic?	(If nee	eded, explain any answers in Remarks.)
SUMN	MARY OF FINDINGS - Attach site map show	wing san	npling point	locations	s, transects, important features, etc.
	Hydrophytic Vegetation Present? Yes 🍑 No 🗀			4. 0.	
	Hydric Soil Present? Yes ● No C)			ıpled Area /etland? Yes ◉ No ◯
	Wetland Hydrology Present? Yes 💿 No 🗅)	Wi	thin a W	etland? Yes ♥ No ∪
Rema	rks: seep similar to that described in SW15_T351_V02	runs thro	ugh signature	approx 10n	n from soil pit
VEGE	TATION - Use scientific names of plants. Li	st all spe	ecies in the	plot.	
		Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree	Stratum	% Cover	Species?	Status	Number of Dominant Species That are OBL, FACW, or FAC: 7 (A)
1.	Picea mariana	35	✓	FACW	Total Number of Dominant
2.		0			Species Across All Strata: 7 (B)
3.		0			Percent of dominant Species
4.		0			That Are OBL, FACW, or FAC: 100.0% (A/B)
5.					Prevalence Index worksheet:
	Total Covers				Total % Cover of: Multiply by:
Sapl	ing/Shrub Stratum 50% of Total Cover:	17.5 20%	of Total Cover:	7	OBL Species x 1 =0
1.	Betula glandulosa	15	✓	FAC	FACW Species <u>48.2</u> x 2 = <u>96.4</u>
2.	Salix pulchra	5	✓	FACW	FAC Species <u>42.1</u> x 3 = <u>126.3</u>
3.	Vaccinium uliginosum	5	✓	FAC	FACU Species <u>0</u> x 4 = <u>0</u>
4.	Vaccinium vitis-idaea	5	✓	FAC	UPL Species <u>0</u> x 5 = <u>0</u>
5.	Picea mariana	5	✓	FACW	Column Totals: 90.3 (A) 222.7 (B)
6.	Empetrum nigrum	2		FAC	Prevalence Index = B/A = 2.466
	Rhododendron groenlandicum	2		FAC	Trevalence index = B/A =
8.	Alnus viridis	_1_		FAC	Hydrophytic Vegetation Indicators:
	Arctous ruber			FAC	✓ Dominance Test is > 50%
10.	Chamaedaphne calyculata	0.1		FACW	Prevalence Index is ≤3.0
Herl	Total Cover: 50% of Total Cover:		% of Total Cover	: 8.04	Morphological Adaptations (P ¹ ovide supporting data in Remarks or on a separate sheet)
	Faviorium envence	10	✓	FAC	Problematic Hydrophytic Vegetation (Explain)
2.	Rubus chamaemorus			FACW	Indicators of hydric soil and wetland hydrology must
3.	Petasites frigidus			FACW	be present, unless disturbed or problematic.
4.	Equisetum sylvaticum			FAC	
5.	Calamagrostis canadensis			FAC	Plot size (radius, or length x width)
6.	Juncus castaneus	0.1		FACW	% Cover of Wetland Bryophytes (Where applicable)
7.		•			% Bare Ground25
					Total Cover of Bryophytes 70
		0			Hydrophytic
	Total Cover:		, ,		Vegetation Present? Yes ● No ○
	50% of Total Cover:	7.55 20%	of Total Cover:	3.02	Present? Yes ♥ No ○
Rema	open canopy black spruce forest, including ma	ny small tr	ees.		

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SOIL Sampling Point: SW15_T351_03

(inches)	Color (mo	oist)	%	Color (m	oist)	%	Type ¹	<u>Loc</u> 2	Texture	Remarks
0-4			100				-7,5-		Peat	
4-7			100						Mucky Peat	
7-10			100						Muck	
10-16	2.5Y	3/2	85	7.5YR	3/6	15		PL	Silt Loam	fine sand lens at 16in
16-20			100						Loamy Sand	vareigated color
									,	vareigatea color
									-	_
							-		-	_
Type: C=Co	ncentration. D	=Depletion.	RM=Reduc	ced Matrix	² Location:	PL=Pore	e Lining. RC	=Root Cha	nnel. M=Matrix	
lydric Soil I	Indicators:			Indicate	ors for Pro	blematio	Hydric S	oils: ³		
Histosol o	r Histel (A1)				ka Color Cha		-		Alaska Gleyed Without I	Hue 5Y or Redder
=	pedon (A2)				ka Alpine sw	•	•		Underlying Layer	1.5
¬ ′ ັ	Sulfide (A4)			∟ Alask	ka Redox W	ith 2.5Y F	lue		Other (Explain in Rema	rks)
_	k Surface (A12)		³ One ir	ndicator of h	nvdrophyt	ic vegetatio	n, one prin	mary indicator of wetland	hydrology,
_	eyed (A13)				appropriate					, ,,,
_	dox (A14) eyed Pores (A1	5)		4 Give d	letails of col	or change	e in Remark	s		
-	er (if present):								Undia Call Bases	t? Yes • No O
Type: sea	sonal frost								Hydric Soil Present	t? Yes 🔍 No 🔾
Depth (inc	hes): 36								-	
	hes): 36								•	
Depth (inc	hes): 36									
emarks:	OGY									
YDROLO	OGY Irology Indica									licators (two or more are required)
YDROLO Vetland Hyd Primary Indica	OGY Irology Indica ators (any one)					(07)	Water Sta	nined Leaves (B9)
YDROLO Vetland Hyd Vrimary Indica Surface V	OGY Irology Indica ators (any one Water (A1))		undation Vis				Water Sta	nined Leaves (B9) Patterns (B10)
YDROLO /etland Hyd rimary Indica / Surface V / High Wat	OGY Irology Indica ators (any one Water (A1) arer Table (A2))	☐ Spa	arsely Vege	tated Cor			Water Sta	nined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (Ca
YDROLO Yetland Hyd Your Indica Your Surface V High Wat Saturatio	OGY Irology Indica ators (any one Vater (A1) ter Table (A2) n (A3))	Spa	arsely Vege arl Deposits	tated Cor (B15)	ncave Surfa		Water Sta Drainage Oxidized Presence	nined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3 of Reduced Iron (C4)
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