## WETLAND DETERMINATION DATA FORM - Alaska Region

Projec	t/Site: Susitna-Watana Hydroelectric Project	Во	orough/City:	Matanusk	xa-Susitna Borough Sampling Date: 30-Jul-13			
Applica	ant/Owner: Alaska Energy Authority	Sampling Point: SW13_T156_06						
Investi	gator(s): BAB	side, terrac	ce, hummocks etc.): Bench					
Local i	relief (concave, convex, none): hummocky		Slope: 3.5	% / 2.0	0 ° Elevation: 1003			
	gion : Interior Alaska Mountains		33.2894124649 Long.: -148.366801618 Datum: WGS8					
			3.2034 12404					
	ap Unit Name:		. V	No ○	NWI classification: Upland			
Are \	regetation ☐ , Soil ☐ , or Hydrology ☐ r	ignificantly laturally pro ving sam	disturbed?	Are "N (If nee	(If no, explain in Remarks.)  Normal Circumstances" present? Yes ● No ○  eded, explain any answers in Remarks.)  s, transects, important features, etc.			
	Hydrophytic Vegetation Present? Yes No No Hydric Soil Present? Yes No No O	the Sampled Area						
	· · · · · · · · · · · · · · · · · · ·		within a Wetland? Yes ○ No ●					
	Wetland Hydrology Present? Yes O No							
	parks: Bench along mountain stream atv trail runs thro willows are heavily browsed  ETATION - Use scientific names of plants. List		rios in tho	nlot				
VLG	TATION - OSE SCIENTIFIC Harries of plants. Lis	st all spec	cies iii tiie	ριστ.	Barrier   Francisco   Laborator   Labora			
		Absolute	Dominant		Dominance Test worksheet:  Number of Dominant Species			
1.	e Stratum	% Cover	_Species?_	Status	That are OBL, FACW, or FAC:3 (A)			
2.					Total Number of Dominant			
3.					Species Across All Strata:3 (B)			
4.		0			Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)			
5.		0						
0.	Total Cover:	0			Prevalence Index worksheet:			
San			of Total Cover:	0	Total % Cover of: Multiply by:  OBL Species 0 x 1 = 0			
	Empetrum nigrum	40	<b>✓</b>	FAC				
2.	Vaccinium uliginosum	15	<b>✓</b>	FAC				
3.	Salix pulchra	<u>10</u> 8		FACW	FACU Species 10 x 4 = 40 UPL Species 0 x 5 = 0			
4.	Salix reticulata	-8		FAC FAC				
5.	Salix alaxensis			FAC	Column Totals: <u>107</u> (A) <u>321</u> (B)			
6. 7.	Dasiphora fruticosa Populus balsamifera	4		FACU	Prevalence Index = B/A = 3.000			
8.	Shepherdia canadensis	1		FACU	Under which Vosetskien Tudieskens			
9.	·			TACO	Hydrophytic Vegetation Indicators:  Dominance Test is > 50%			
10.		0			✓ Prevalence Index is ≤3.0			
10.	Total Cover:				Morphological Adaptations (Provide supporting data in			
Her	<b>b Stratum</b> 50% of Total Cover:		of Total Cover	: 18	Remarks or on a separate sheet)			
1.	Festuca altaica	_10_	<b>✓</b>	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)			
2.	Chamerion latifolium			FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must			
3.	Mertensia paniculata			FACU	be present, unless disturbed or problematic.			
4.	Artemisia norvegica	-		FACU	Plot size (radius, or length x width)			
5.	Chamerion angustifolium			FACU	% Cover of Wetland Bryophytes			
6.	Rubus arcticus (IAM)			FACU	(Where applicable)			
7.	Antennaria friesiana			UPL	% Bare Ground			
8.					Total Cover of Bryophytes5			
		0 0						
10.	Total Covers			Hydrophytic				
	<b>Total Cover:</b> 50% of Total Cover:8		of Total Cover	2.42	Vegetation Present? Yes ● No ○			
	50% of lotal cover. 8	.55 ZU% (	יייטומו נטעפי	3.42				

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SOIL Sampling Point: SW13\_T156\_06

	cion: (Describe to the depth needed to docu <b>Matrix</b>			ument the indicator or confirm the absence of indicators) <b>Redox Features</b>						
Depth (inches)	Color (mois	t)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-1		-	100					Fibric Organics	w some mineral soil.	
1-19			100					Coarse Sand	sand to subrounded cobbles	
									-	
					_			. <u>.</u>		
¹Type: C=Cor	ncentration. D=D	epletion. F	RM=Reduce	ed Matrix <sup>2</sup> Location	n: PL=Por	e Lining. RO	C=Root Cha	annel. M=Matrix		
Hydric Soil I	ndicators:			Indicators for P	roblemati	c Hydric S	oils: <sup>3</sup>		<del></del> -	
	Histosol or Histel (A1)				Change (TA	4		Alaska Gleyed Without H	ue 5Y or Redder	
l —	Histic Epipedon (A2)				swales (TA	5)		Underlying Layer		
	Sulfide (A4)			☐ Alaska Redox With 2.5Y Hue ☐ Other (Explain in Remarks)						
☐ Thick Dark	Surface (A12)									
Alaska Gle	yed (A13)			<sup>3</sup> One indicator of and an appropria				mary indicator of wetland hesent	nydrology,	
Alaska Rec	dox (A14)				•	•	•	CSCITC		
Alaska Gle	yed Pores (A15)			<sup>4</sup> Give details of o	color chang	e in Remarl	ks			
Restrictive Laye	er (if present):									
Type:								<b>Hydric Soil Present</b>	? Yes ○ No •	
Depth (inch	nes):									
HYDROLO	GY									
Wetland Hydi	rology Indicate	ors:						Secondary Indi	cators (two or more are required)	
Primary Indica	tors (any one is	sufficient)						Water Stai	ned Leaves (B9)	
Surface W	ater (A1)			Inundation	Visible on A	erial Image	ery (B7)	Drainage F	Patterns (B10)	
High Water Table (A2)				Sparsely Vegetated Concave Surface (B8)				Oxidized R	hizospheres along Living Roots (C3)	
Saturation (A3)				Marl Deposits (B15)					of Reduced Iron (C4)	
Water Mai				Hydrogen S				Salt Depos		
	Deposits (B2)			☐ Dry-Season					Stressed Plants (D1)	
☐ Drift Depo	` ,			Other (Expla	ain in Rema	rks)			ic Position (D2)	
Iron Depo	or Crust (B4)							_	quitard (D3) graphic Relief (D4)	
= '	oil Cracks (B6)								al Test (D5)	
Field Observa	• • • • • • • • • • • • • • • • • • • •							TAC fleution	11 1651 (153)	
Surface Water		Yes 🔾	No •	Depth (inch	es):					
Water Table P		Yes O		, ,	•		Wetla	nd Hydrology Presen	t? Yes O No 💿	
Saturation Pre				Depth (inch	es):		Weda	na riyarology r resen	iti res a no a	
(includes capil		Yes O	No •	Depth (inch	es):					
Describe Record	ded Data (strear	n gauge, n	nonitor wel	l, aerial photos, pre	evious inspe	ection) if av	ailable:			
Remarks:	ا د الحداد العاما	- ab '								
no wetland hyd	Irology indicator	s observed								

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