WETLAND DETERMINATION DATA FORM - Alaska Region

Projec	t/Site: Susitna-Watana Hydroelectric Project	В	orough/City:	Matanusk	a-Susitna Borough Sampling Date: 30-Jul-13			
Applica	ant/Owner: Alaska Energy Authority				Sampling Point: SW13_T172_04			
Investi	gator(s): WAD, RWM	ı	Landform (hillside, terrace, hummocks etc.): Hillside					
	relief (concave, convex, none): concave		Slope:	% / 6.0	N-			
Subre	gion : Interior Alaska Mountains	lat: 6	63.26814305		Long.: -148.255928994 Datum: NAD83			
		Lut (33.200143030	<u> </u>				
	ap Unit Name:			■ N= ○	NWI classification: PSS1/EM1B			
		significantly	disturbed?	No Are "N	(If no, explain in Remarks.) Iormal Circumstances" present? Yes ● No ○			
Are \	/egetation ☐ , Soil ☐ , or Hydrology ☐	naturally pro	oblematic?	(If nee	eded, explain any answers in Remarks.)			
SUM	MARY OF FINDINGS - Attach site map sho	wing sam	pling point	locations	s, transects, important features, etc.			
	Hydrophytic Vegetation Present? Yes No			41	1.14			
	Hydric Soil Present? Yes ● No C		Is the Sampled Area within a Wetland? Yes No					
	Wetland Hydrology Present? Yes No		W	ithin a W	etland? res © No C			
Rem	arks: hillside with very sparse mature white spruce							
VEGI	ETATION - Use scientific names of plants. L	•			Dominance Test worksheet:			
Tre	e Stratum	Absolute % Cover	Dominant Species?	Indicator Status	Number of Dominant Species			
	Picea glauca	5	~	FACU	That are OBL, FACW, or FAC: 2 (A)			
2.		0			Total Number of Dominant Species Across All Strata: 3 (B)			
3.					Percent of dominant Species			
4.		0			That Are OBL, FACW, or FAC: 66.7% (A/B)			
5.		0			Prevalence Index worksheet:			
	Total Cover	r: <u>5</u>			Total % Cover of: Multiply by:			
Sap	oling/Shrub Stratum 50% of Total Cover:	2.5 20%	of Total Cover	:1	OBL Species 0 x 1 = 0			
1.	Betula glandulosa	45	✓	FAC	FACW Species 20.1 x 2 = 40.20			
	Salix pulchra	15		FACW	FAC Species 132 x 3 = 396			
3.	Vaccinium uliginosum	10		FAC	FACU Species 5 x 4 = 20			
4.	Arctous ruber	5		FAC	UPL Species 0 x 5 = 0			
5.	Salix barclayi	5		FAC	Column Totals: 157.1 (A) 456.2 (B)			
6.	Empetrum nigrum	5		FAC				
7.		0			Prevalence Index = B/A = 2.904			
8.		0			Hydrophytic Vegetation Indicators:			
9.		0			✓ Dominance Test is > 50%			
10.		0			✓ Prevalence Index is ≤3.0			
Hei	Total Cover: 50% of Total Cover:		of Total Cove	r: 17	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
1.	Equisetum sylvaticum	55	✓	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)			
2.	Petasites frigidus	5		FACW	¹ Indicators of hydric soil and wetland hydrology must			
3.	Cornus suecica	5		FAC	be present, unless disturbed or problematic.			
4.	Equisetum arvense			FAC	Plot size (radius, or length x width) 10m			
5.	Arctagrostis latifolia	0.1		FACW	Plot size (radius, or length x width)			
6.		0			(Where applicable)			
					% Bare Ground			
0					Total Cover of Bryophytes			
		0						
9.								
9.		0			Hydrophytic			
9.		0 67.1	of Total Cove		Hydrophytic Vegetation Present? Yes No			

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SOIL Sampling Point: SW13_T172_04

<u> </u>								- · r •	110 54415_1172_54	
Profile Description			ded to docume	ent the indicator or co			ators)			
Depth (inches)		Matrix			dox Featu		2	Tantuna	Damanka	
(inches)	Color (mo	ist)		Color (moist)	<u>%</u>	Type ¹	<u>Loc</u> 2	Texture	Remarks	
0-4			100					Fibric Organics	-	
4-7			100					Hemic Organics		
7-8			100					Sapric Organics	with a few coarse sand grains.	
8-12	10YR	2/2	100					Loamy Sand		
-										
¹ Type: C=Con	ncentration. D=	:Depletion.	RM=Reduced	d Matrix ² Location	n: PL=Pore	e Lining. RC	=Root Cha	nnel. M=Matrix		
Hydric Soil Ir	ndicators:			Indicators for Pi	roblematic	Hydric So	oils:			
Histosol or	r Histel (A1)		l	Alaska Color C	hange (TA4	4 })		Alaska Gleyed Without H	ue 5Y or Redder	
✓ Histic Epip	. ,			Alaska Alpine s	swales (TA5	5)		Underlying Layer		
Hydrogen		Alaska Redox \	With 2.5Y H	lue		Other (Explain in Remark	(S)			
☐ Thick Dark	Surface (A12))		_						
Alaska Gle	yed (A13)			³ One indicator of and an appropria				nary indicator of wetland h	ydrology,	
Alaska Red	dox (A14)				·	•	•	esenc		
Alaska Gle	yed Pores (A1	5)		4 Give details of c	olor change	in Remark	S			
Restrictive Laye	er (if present):									
Type: seas								Hydric Soil Present	? Yes ● No ○	
Depth (inch								.,		
Remarks:	•									
Remains.										
HYDROLO	GY									
Wetland Hydr	rology Indica	tors:						Secondary Indi	cators (two or more are required)	
Primary Indicat	tors (any one i	s sufficient)						Water Stai	ned Leaves (B9)	
✓ Surface Water (A1)				☐ Inundation Visible on Aerial Imagery (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)				Presence of	of Reduced Iron (C4)	
Water Marks (B1)				Hydrogen Sulfide Odor (C1)				☐ Salt Depos	its (C5)	
Sediment	Deposits (B2)			Dry-Season	Water Table	e (C2)		✓ Stunted or	Stressed Plants (D1)	
☐ Drift Depo	osits (B3)			Other (Expla	in in Remar	rks)		Geomorph	ic Position (D2)	
Algal Mat	or Crust (B4)								quitard (D3)	
Iron Depo	osits (B5)							Microtopog	graphic Relief (D4)	
Surface So	oil Cracks (B6)							FAC-neutra	al Test (D5)	
Field Observa	ations:									
Surface Water	r Present?	Yes 🕑	No O	Depth (inche	es): 2					
Duriuse Trute.	i i cociic.				es). ()		Wetlar	nd Hydrology Presen	t? Yes • No O	
Water Table P		Yes 💿	No 🔾	Depth (inche	CO). O		cia.	. ,		
Water Table P Saturation Pre	Present? esent?				,		cua	, , , , , , , , , , , , , , , , , , , ,		
Water Table P	Present? esent?	Yes • Yes •		Depth (inche	,					
Water Table P Saturation Pre (includes capil	Present? esent? llary fringe)	Yes •	No O		es): 0	ction) if ava				
Water Table P Saturation Pre (includes capil	Present? esent? llary fringe)	Yes •	No O	Depth (inche	es): 0	ction) if ava				
Water Table P Saturation Pre (includes capil	Present? esent? llary fringe)	Yes •	No O	Depth (inche	es): 0	ction) if ava				
Water Table P Saturation Pre (includes capil Describe Record	Present? esent? Ilary fringe) ded Data (stre	Yes •	No Omonitor well,	Depth (inche	es): 0	ction) if ava				
Water Table P Saturation Pre (includes capil Describe Record	Present? esent? Ilary fringe) ded Data (stre	Yes •	No Omonitor well,	Depth (inche	es): 0	ction) if ava				
Water Table P Saturation Pre (includes capil Describe Record Remarks:	Present? esent? Ilary fringe) ded Data (stre	Yes •	No Omonitor well,	Depth (inche	es): 0	ction) if ava				

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