WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project	Borough/City:	Matanusk	a-Susitna Borough Sampling Date: 02-Aug-12								
Applicant/Owner: Alaska Energy Authority	Sampling Point: SW12_T54_04										
Investigator(s): SLLKMK Landform (hillside. terrace. hummocks etc.): Swale											
Local relief (concave, convex, none): convex	Slope:	%/ 13.3	3 ° Elevation: 738								
Subregion Southcentral Alaska	l at 62 8337000'	223	Long: 149 15650404 Datum: NAD83								
	Lat 02.05579992	223									
Are climatic/hydrologic conditions on the site typical for this time of year? Yes \bigcirc No \bigcirc (If no, explain in Remarks.)											
Are Vegetation, Soil, or Hydrology	lormal Circumstances" present?										
Are Vegetation \Box , Soil \Box , or Hydrology \Box	naturally problematic?	(If nee	ded, explain any answers in Remarks.)								
SUMMARY OF FINDINGS - Attach site map sho	wing sampling poir	nt locations	s, transects, important features, etc.								
Hydrophytic Vegetation Present? Yes No No											
Hvdric Soil Present? Yes O No	s the Sam	he Sampled Area									
Wetland Hydrology Present? Yes O No	vithin a W	Netland? Yes \bigcirc No \bigcirc									
Remarks: tall closed canopy alder-willow community near head of drainage.											
	5										
VEGETATION - Use scientific names of plants U	ist all spacias in the	o plot									
	list all species in the	e plot.	Dominance Test worksheet:								
Tree Stratum	Absolute Dominant % Cover Species?	: Indicator Status	Number of Dominant Species								
1.			That are OBL, FACW, or FAC: (A)								
2			Total Number of Dominant								
3			Species Across All Strata:(B)								
4			Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)								
5.											
Total Cove	- <u> </u>		Prevalence Index worksheet:								
Sanling /Shrub Stratum 50% of Total Cover:	n 20% of Total Cove	er: 0									
			$\frac{OBL Species}{D} = \frac{1}{2} + \frac{1}{2} = \frac{1}{2}$								
1. Alnus viridis	50 🗹	FAC	FAC Species 23 $x^2 = 46$								
2. Ribes triste	- <u>5</u> L	FAC	FAC Species 121 x 3 - 363								
3. Salix barclayı	$ \frac{10}{20}$	FAC									
4. Salix puichra	- <u>20</u> V	FACW									
5. Opiopanax norridus		FACU	Column Totals: <u>177</u> (A) <u>541</u> (B)								
0			Prevalence Index = $B/A = 3.056$								
<i>1.</i>											
8			Hydrophytic Vegetation Indicators:								
9			Dominance rest is > 50%								
	- <u> </u>		$\square \text{ Prevalence index is } \leq 5.0$								
Herb Stratum 50% of Total Cover:	er: 18	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)									
1 Athyrium cyclosorum	50	FAC	\square Problematic Hydrophytic Vegetation ¹ (Explain)								
2 Cystopteris montana		FAC	¹ Indicators of hydric soil and wetland hydrology must								
3 Phegopteris connectilis	- <u> </u>	FACU	be present, unless disturbed or problematic.								
4 Dryopteris expansa	10	FACU									
5 Arctagrostis latifolia	3	FACW	Plot size (radius, or length x width) <u>5m</u>								
6. Cornus canadensis	3	FACU	% Cover of Wetland Bryophytes								
7. Streptopus amplexifolius	5	FACU	% Bare Ground 85								
8. Thalictrum sparsiflorum	5	FACU	Total Cover of Bryonhytes								
9 Carex microchaeta	1	FAC									
10.	0		Hydrophytic								
Total Cove		Vegetation									
50% of Total Cover:	er: <u>17.4</u>	<u>7.4</u> Present? Yes \bullet No \bigcirc									

Remarks: all shrubs heavily browsed by insects. trace unid solidago collected at aw12_t54_02. tr acodel, pyrola secunda. 3% unid viola sp.

Profile Description	tion: (Describe to the depth needed to document the indicator or confirm the absence of indicators) Matrix Redox Features					cators)				
(inches)	(inches) Color (moist)		%	Color (moist)	% Type ¹		Loc ²	Texture	Remarks	
0-2		_						Fibric Organics		
2-4	5YR	3/3	100					Silt Loam		
4-5			100		u			Sapric Organics		
5-6	7 5VP	5/2	100					Silt		
		5/2	100					Capuia Organica		
6-8			100							
8-8.5	5YR	3/4	100					Fine Sand		
8.5-16	5YR	3/2	100					Silt Loam		
¹ Type: C=Con	centration. D=	Depletion.	RM=Reduce	d Matrix ² Location	: PL=Pore	e Lining. R	C=Root Cha	nnel. M=Matrix		
Hydric Soil Ir	dicators:			Indicators for Pro	oblematio	Hydric S	oils: ³			
Histosol or	Histel (A1)			Alaska Color Ch	ange (TA4	4 +)] Alaska Gleyed Without Hue 5Y or Redder		
Histic Epipe	Histic Epipedon (A2) Alaska Alpine swales (TA5)				_	Underlying Layer				
Hydrogen S	Sulfide (A4)			Alaska Redox W	/ith 2.5Y F	lue		Other (Explain in Remarks)		
Thick Dark	Surface (A12)			3 One indicator of l	hudrophut	ic voqotati	on ono prim	nary indicator of wotland by	(drology)	
Alaska Gley	/ed (A13)			and an appropriate	e landscap	e position	must be pre	esent	yarology,	
Alaska Red	ox (A14)			4 Give details of co	lor change	e in Remar	ks			
Alaska Gley	ved Pores (A15)			ior change					
Restrictive Laye	r (if present):									
Type:								Hydric Soil Present?	Yes 🔾 No 🖲	
Depth (inch	es):									
Remarks:										
heterogeneous soil profile, many colors / textures in patches rather than distinct horizons. buried sapric organic lenses throughout. No hydric soil indicators.										
HYDROLO	GY									
Wetland Hydr	ology Indicat	ors:						Secondary Indic	ators (two or more are required)	
Primary Indicat	ors (any one is	sufficient)					Water Stair	ed Leaves (B9)	
Surface W	ater (A1)			Inundation Vision	sible on A	erial Image	ery (B7)	Drainage Pa	atterns (B10)	
High Wate	High Water Table (A2)				ce (B8)	(B8) Oxidized Rhizospheres along Living Roots (C3)				
Saturation	Saturation (A3) Marl Deposits (B15)							Presence of Reduced Iron (C4)		
Water Mar	Water Marks (B1) Hydrogen Sulfide Odor (C1)							Salt Deposits (C5)		
Sediment	☐ Sediment Deposits (B2)							Stunted or Stressed Plants (D1)		
Drift Depo	sits (B3)			☐ Other (Explain	n in Rema	rks)			C Position (D2)	
Algal Mat (or Crust (B4)							Shallow Aquitard (D3)		
	Deposits (B5)									
Surface Water	Present?	Yes 〇	No 🖲	Denth (inches	s):					
Water Table D	recent?				·/·		Watlas	nd Hydrology Procord		
Saturation Pro-	cont?			Depth (inches	5):		weud!	na nyarology riesen		
(includes capil	ary fringe)	Yes 🔾	No 🔍	Depth (inches	5):					
Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspection) if available:										
Remarks										
Nema NS.										