WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project	Bo	prough/City:	Denali Bo	rough Sampling Date:01-Aug-13						
Applicant/Owner: Alaska Energy Authority	Sampling Point:SW13_T145_04									
Investigator(s): SLI, EAC	e, hummocks etc.): Swale									
Local relief (concave, convex, none): concave		Slope:	%/ 1.8	e elevation: 721						
Subregion : Interior Alaska Mountains	Lat.: 6	3.399011253	39	Long.: -148.658578277 Datum: NAD83						
Soil Map Unit Name:	_			NWI classification: PSS1/EM1E						
Are climatic/hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation , soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.										
Hydrophytic Vegetation Present? Yes 🖲 No	0		the Com	where Arres						
Hydric Soil Present? Yes 🔍 No	0		Is the Sampled Area within a Wetland? Yes $ullet$ No $igodoldsymbol{ imes}$							
Wetland Hydrology Present? Yes No Remarks: lowland swale connecting various lakes/ponds.	0	W	ithin a w							
VEGETATION - Use scientific names of plants. List all species in the plot. Absolute Dominant Indicator Dominance Test worksheet:										
Tree Stratum	% Cover	Species?	Indicator Status	Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)						
1	0		. <u></u>	That are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant						
2	0			Species Across All Strata:3(B)						
3	0			Percent of dominant Species						
4	0			That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)						
5	0			Prevalence Index worksheet:						
Total Cov	Total % Cover of: Multiply by:									
Sapling/Shrub Stratum 50% of Total Cover:	20% (of Total Cover	:0	OBL Species x 1 =28.1						
1. Salix pulchra	40	\checkmark	FACW	FACW Species <u>45.1</u> x 2 = <u>90.2</u>						
2. Betula glandulosa	3		FAC	FAC Species x 3 =69						
3. Salix richardsonii	5		FACW	FACU Species 0.1 x 4 = 0.400						
4. Salix barclayi			FAC	UPL Species x 5 =						
5				Column Totals: <u>96.3</u> (A) <u>187.7</u> (B)						
6				Prevalence Index = B/A = 1.949						
7										
8				Hydrophytic Vegetation Indicators:						
9	0			 ✓ Dominance Test is > 50% ✓ Prevalence Index is ≤3.0 						
10										
Herb Stratum 50% of Total Cover:		of Total Cover	r: 10.6	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)						
1. Calamagrostis canadensis	15	\checkmark	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)						
2. Carex aquatilis	25	\checkmark	OBL	¹ Indicators of hydric soil and wetland hydrology must						
3. Comarum palustre	3		OBL	be present, unless disturbed or problematic.						
4. Parnassia palustris	0.1		FACW	Plot size (radius, or length x width) <u>10m</u>						
5. Chamaenerion angustifolium	0.1		FACU	% Cover of Wetland Bryophytes						
6. Hippuris vulgaris			OBL	(Where applicable)						
7				% Bare Ground _75						
8	•			Total Cover of Bryophytes						
9										
10	0			Hydrophytic						
Total Cover: 50% of Total Cover:		of Total Cover	: 866	Vegetation Present? Yes O No O						
	21.03 20/00		. 0.00							

Remarks: small scattered hummocks w herbaceous veg, but overall the site is flooded w graminoid/shrub vegetation. bare ground includes open water.

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators) Matrix Redox Features										
(inches)	Color (mois	t) %	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
	· ·	p								
					-					
		p								
¹ Type: C=Con	centration. D=[epletion. RM=Re	duced Matrix ² Locatio	n: PL=Por	e Lining. RC	C=Root Char	nnel. M=Matrix			
Hydric Soil Ir	ndicators:		Indicators for P	roblemati	c Hydric S	oils: ³				
Histosol or	Histel (A1)		Alaska Color C	hange (TA	4 1)		Alaska Gleyed Without Hu	ue 5Y or Redder		
Histic Epip	. ,		Alaska Alpine	swales (TA	5)		Underlying Layer			
Hydrogen	Sulfide (A4)		Alaska Redox	With 2.5Y H	lue	\checkmark	Other (Explain in Remark	s)		
Thick Dark	Surface (A12)									
🗌 Alaska Gle	yed (A13)		³ One indicator or and an appropria				hary indicator of wetland h	ydrology,		
Alaska Red	ox (A14)			ite ianustap		must be pre	Sent			
🗌 Alaska Gle	ed Pores (A15)		⁴ Give details of o	color change	e in Remarl	s				
Restrictive Laye	r (if precent):									
Type:	i (ii presenc).						Hydric Soil Present	? Yes 🖲 No 🔿		
Depth (inch	es):						Tryunc Son Fresents			
Remarks:			and the effective state							
assume nyaric s	soil due to hydro	phytic vegetation	and standing water							
HYDROLO	GY									
Wetland Hydr	ology Indicate	ors:					Secondary Indic	cators (two or more are required)		
Primary Indicat	ors (any one is	sufficient)					Water Stair	ned Leaves (B9)		
Surface W	ater (A1)		Inundation \	/isible on A	erial Image	ry (B7)	🗌 Drainage P	atterns (B10)		
🗌 High Wate	High Water Table (A2) Sparsely Vegetated Concave Surface (B8)				ce (B8)	Oxidized Rhizospheres along Living Roots (C3)				
Saturation (A3) Marl Deposits (B15)						Presence of Reduced Iron (C4)				
🗌 Water Mar	Water Marks (B1)						Salt Deposi	its (C5)		
Sediment Deposits (B2)						Stunted or Stressed Plants (D1)				
Drift Depo	Drift Deposits (B3)						Geomorphic Position (D2)			
Algal Mat or Crust (B4) Shallow Aquitard (D3)							uitard (D3)			
✓ Iron Depo	sits (B5)						Microtopographic Relief (D4)			
Surface So	oil Cracks (B6)						✓ FAC-neutra	l Test (D5)		
Field Observa	tions:	-	_							
Surface Water	Present?	Yes 💿 No 🤇	Depth (inch	es): 6						
Water Table P	resent?	Yes O No (Depth (inch	es):		Wetlan	nd Hydrology Presen	t? Yes 🖲 No 🔾		
Saturation Pre		Yes O No (
(includes capillary fringe) 100 Deput (incluse). Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspection) if available:										
Damas										
Remarks:										
iron floc and bi	ogenic sheen									