WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project	Borough/City:	Matanuska-Susitna Borough S	ampling Date: 27-Jun-12
Applicant/Owner: Alaska Energy Authority		Sampling	Point: SW12_T24_01
Investigator(s): SLI, LMF	Landform (hillsi	de, terrace, hummocks etc.):	Plateau
Local relief (concave, convex, none): flat	Slope: 0.0	% / 0.0 ° Elevation: 813	
Subregion : Copper River Basin La	it.: 62.6533199081	Long.: -147.37989997	76 Datum: WGS84
Soil Map Unit Name:		NWI classifie	cation: PEM1E
Are climatic/hydrologic conditions on the site typical for this time of Are Vegetation , Soil , or Hydrology signific Are Vegetation , Soil , or Hydrology natura	year? Yes cantly disturbed? Ily problematic?	No (If no, explain in R Are "Normal Circumstances" p (If needed, explain any answer	emarks.) resent? Yes
			at fact and a sta

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Ye Hydric Soil Present? Ye Wetland Hydrology Present? Ye	′es ● ′es ● ′es ●	No () No () No ()	Is the Sampled Area within a Wetland?	Yes 🖲 No 🔿
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Remarks: several pronounced hummocks with shrubby vegetation, majority of community level wet sedge herbaceous meadow. moose tracks and scat. one large male black bear observed near at plots due west of here. one coyote observed from helicopter in drier areas adjacent to plot.

VEGETATION - Use scientific names of plants. List all species in the plot.

			Ahsol	uto	Dominant	Indicator	Dominance Test worksheet:
Tre	e Stratum		% Co	ver	Species?	Status	Number of Dominant Species
1.			-	0			That are OBL, FACW, or FAC: (A)
2.			-	0			Total Number of Dominant Species Across All Strata: 4 (B)
3.				0			Percent of dominant Species
4.			_	0			That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
5.			_	0			Describer of Tenders models and
		Total Cover:	(0			Total % Cover of: Multiply by:
San	ling/Shruh Stratum	50% of Total Cover:	0	20% of	Total Cover:	0	
Jup	ing, on ab octation		0				$\frac{66}{66} \times 1 - \frac{66}{66}$
1.	Salix reticulata			2		FAC	FACW Species $2 \times 2 = 4$
2.	Betula nana			2		FAC	FAC Species $5 \times 3 = 15$
3.	Andromeda polifolia(CRP)		_	1		OBL	FACU Species $1 \times 4 = 4$
4.	Ledum decumbens		_	2	\checkmark	FACW	UPL Species x 5 =
5.	Picea glauca			1		FACU	Column Totals: 74 (A) 89 (B)
6.			_	0			
7.				0			Prevalence Index = $B/A = 1.203$
8.				0			Hydrophytic Vegetation Indicators:
9.				0			✓ Dominance Test is > 50%
10.				0			✓ Prevalence Index is ≤3.0
		Total Cover:		8			Morphological Adaptations ¹ (Provide supporting data in
Her	b Stratum	50% of Total Cover:	_4	20% o	of Total Cover:	1.6	Remarks or on a separate sheet)
1.	Trichophorum caespitosum			50	\checkmark	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2.	Carex aquatilis			10		OBL	¹ Indicators of hydric soil and wetland hydrology must
3.	Tofieldia coccinea			1		FAC	be present, unless disturbed or problematic.
4.	Carex rariflora			5		OBL	
5.				0			Plot size (radius, or length x width) <u>10m</u>
6.				0			% Cover of Wetland Bryophytes
7			_	0			% Bare Ground 10
8			_	0			
а. а			_	0			
10			-	0			U
10.		Total Cover	6	6			Hydropnytic Vegetation
		50% of Total Cover:	33	20% of	Total Cover	12 2	Present? Yes No
			33	20/0 01		13.2	

Remarks: nuphar scattered throughout pond, mentri at pond margin. numerous cypripedium orchids in drier community at western bound. possibly other sedge species, but no other seed heads. emergent community to the SE dominated by eriang.

SOIL

Profile Description:	(Describe to the depth Matrix	needed to docume	ent the indicator or co Re	onfirm the ab dox Featu	usence of indi ures	cators)		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
				· —				
				-			-	
							-	
							<u>.</u>	
¹ Type: C=Concer	ntration. D=Depleti	on. RM=Reduced	d Matrix ² Locatio	n: PL=Por	re Lining. R	C=Root Char	nnel. M=Matrix	
Hydric Soil Indi	cators:		Indicators for P	roblemati	ic Hydric S	ioils: ³		
		r	Alaska Color C	hange (TA	4 (4)		Alaska Gleved Without H	ue 5Y or Redder
	n (A2)	1	Alaska Alpine	swales (TA	.5)		Underlying Layer	
	fide (A4)	1	Alaska Redox	With 2.5Y	Hue	\checkmark	Other (Explain in Remarl	<s)< td=""></s)<>
Thick Dark Su	Inface (A12)							
Alaska Gleyed	(A13)		³ One indicator of	i hydrophy	tic vegetation	on, one prim	ary indicator of wetland h	ıydrology,
Alaska Redox	(A14)		апа ан арргорна	të lanusca _t	pe posicion	must be pres	sent	
Alaska Gleyed	Pores (A15)		⁴ Give details of c	olor chang	e in Remar	ks		
Restrictive Laver (i	if present);							
Type:	presency.						Hydric Soil Present	7 Yes 🖲 No 🔾
Depth (inches)								
Domarke						I		
	 {							
Wetland Hydrolc	ogy Indicators:						Secondary Indi	cators (two or more are required)
Primary Indicators	i (any one is sufficie	ent)					Water Stai	ned Leaves (B9)
Surface Wate	r (A1)		Inundation V	/isible on A	erial Image	ery (B7)	Drainage F	Patterns (B10)
High Water T	able (A2)		Sparsely Vec	jetated Cor	ncave Surfa	ice (B8)	Oxidized R	hizospheres along Living Roots (C3)
Saturation (A	3)		Marl Deposit	.s (B15)				of Reduced Iron (C4)
	(B1)		Hydrogen Su	Ifide Odor	(C1)			its (C5)
	posits (B2)		Dry-Season	Water Tabi	le (C2)			Stressed Plants (D1)
	(B3)		Uther (Expla	in in Rema	ırks)			
	_rust (64)							Juitara (D3)
Surface Soil ((DD) Stacke (RG)						FAC-neutra	
Field Observatio						<u> </u>		
Surface Water Pr	ns: ecent? Yes	• No O	Denth (inch	مد). 5				
Water Table Pres	onto Yes		Dorth (inch			Wetlan	A Hydrology Presen	
Saturation Preser	nt? Vee			es): U		W CLIAI.		
(includes capillary	/ fringe) Yes		Depth (Inche	es): 0				
Describe Recorded	Data (stream gauç	ge, monitor well,	, aerial photos, pre	vious inspe	ection) if av	ailable:		
Domarkei								
water table at / ah	ove around surface	e with many sm	all shallow water a	reas iron	floc and bic	vaenic sheen	indicate reducing environ	iment
Water table at / ab	Ove ground surrace	2, With many since	all Shallow water a	1603. 1101. 1		yenic sileen	Indicate reducing crimen	inent.