WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project	Borough/City: Matanuska-Susitna Borough Sampling Date: 03-Aug-12
Applicant/Owner: Alaska Energy Authority	Sampling Point:SW12_T38_04
Investigator(s): SLI, KMK	Landform (hillside, terrace, hummocks etc.): Flat
Local relief (concave, convex, none): flat	Slope: 8.7 % / 5.0 ° Elevation: 535
Subregion : Southcentral Alaska Lat.:	62.8358732453 Long.: -149.527714969 Datum: WGS84
Soil Map Unit Name:	NWI classification: PEM1E
	ar? Yes ● No ○ (If no, explain in Remarks.) htly disturbed? Are "Normal Circumstances" present? Yes ● No ○ problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sa	mpling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	~	No () No () No ()	Is the Sampled Area within a Wetland?	Yes \odot No \bigcirc	
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Remarks: lower portion of peatland at 5% slope, which may not be representative of entire fen - review in gis.

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

			Abso	olute	Dominant	Indicator	Dominance Test worksheet:	
Tree	e Stratum		% C		Species?	Status	Number of Dominant Species	
1.	Comarum palustre			1	\checkmark	OBL	That are OBL, FACW, or FAC: <u>7</u> (A)	
2.	Menyanthes trifoliata			2	\checkmark	OBL	Total Number of Dominant Species Across All Strata: 7 (B)	
3.	Deschampsia brevifolia			2	\checkmark	OBL	Percent of dominant Species	
4.				0			That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)	
5.				0			Prevalence Index worksheet:	
		Total Cover:	_	5			Total % Cover of: Multiply by:	
Sap	ling/Shrub Stratum	50% of Total Cover:	2.5	20% o	of Total Cover:	1	OBL Species60 x 1 =60	
1.	Betula nana			3	\checkmark	FAC	FACW Species 6 x 2 = 12	
2.				2	\checkmark	OBL	FAC Species x 3 =	
				1		OBL	FACU Species <u>0</u> x 4 = <u>0</u>	
4.				0			UPL Species x 5 =	
5.				0			Column Totals: <u>69</u> (A) <u>81</u> (B)	
-				0				
				0			Prevalence Index = B/A = <u>1.174</u>	
				0			Hydrophytic Vegetation Indicators:	
				0			✓ Dominance Test is > 50%	
				0			✓ Prevalence Index is \leq 3.0	
		Total Cover:		6			Morphological Adaptations ¹ (Provide supporting data in	
Her	b Stratum	50% of Total Cover:	3	20%	of Total Cover:	1.2	Remarks or on a separate sheet)	
1.	Carex pauciflora			10		OBL	Problematic Hydrophytic Vegetation ¹ (Explain)	
2.	Eriophorum gracile			3		OBL	¹ Indicators of hydric soil and wetland hydrology must	
3.	Gentiana douglasiana			3		FACW	be present, unless disturbed or problematic.	
4.	Drosera rotundifolia			5		OBL	Plot size (radius, or length x width) 10m	
5.	Carex rotundata			2		OBL	Plot size (radius, or length x width) <u>10m</u> % Cover of Wetland Bryophytes	
6.	Carex magellanica			5		OBL	(Where applicable)	
7.	Eriophorum angustifolium			5		OBL	% Bare Ground 10	
8.	Juncus biglumis			2		OBL	Total Cover of Bryophytes 88	
9.	Trichophorum caespitosum			20	\checkmark	OBL		
10.	Swertia perennis			3		FACW	Hydrophytic	
		Total Cover:	_	58			Vegetation	
		50% of Total Cover:	29	20% o	of Total Cover:	11.6	Present? Yes No	

Remarks: additional herbs listed under tree stratum. trace viola sp, spirom. erigra - multiple heads, no reddish base, long sheath compared to leaf. gendou, carrot, poapal collected. drorot % includes droang.

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators) Matrix Redox Features									
Depth (inches) Color (mo		Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
						-	-		
		·							
							-		
······································									
¹ Type: C=Concentration. D:	=Depletion. RM=Red	uced Matrix ² Location	1: PL=Por	e Lining. R	C=Root Cha	annel. M=Matrix			
Hydric Soil Indicators:		Indicators for Pr	oblemati	c Hydric S	oils: ³				
Histosol or Histel (A1)		Alaska Color Ch		4		Alaska Gleyed Without H	ue 5Y or Redder		
Histic Epipedon (A2)		Alaska Alpine s	wales (TA	5)	_	Underlying Layer			
Hydrogen Sulfide (A4)		Alaska Redox V	Vith 2.5Y I	Hue	L	Other (Explain in Remark	ദ)		
Thick Dark Surface (A12	.)	30							
Alaska Gleyed (A13)		and an appropriat				nary indicator of wetland h esent	iyarology,		
Alaska Redox (A14)					•				
Alaska Gleyed Pores (A1	5)	⁴ Give details of co			KS				
Restrictive Layer (if present):									
Type:						Hydric Soil Present	? Yes 🖲 No 🔾		
Depth (inches):									
Remarks:									
standing water and near surf	ace saturation preclu	de a soil pit, probing in	dicates 16	5+ in organ	ics.				
HYDROLOGY									
Wetland Hydrology Indica	ators:					Secondary Indi	cators (two or more are required)		
Primary Indicators (any one							ned Leaves (B9)		
Surface Water (A1)		Inundation V	isible on A	erial Imag	ery (B7)	Drainage Patterns (B10)			
High Water Table (A2)							Oxidized Rhizospheres along Living Roots (C3)		
Saturation (A3)		Marl Deposits	s (B15)			Presence o	of Reduced Iron (C4)		
Water Marks (B1)		Hydrogen Su	lfide Odor		Salt Deposits (C5)				
Sediment Deposits (B2)		Dry-Season V	Nater Tabl	le (C2)		Stunted or Stressed Plants (D1)			
Drift Deposits (B3)	: Deposits (B3) Other (Explain in Remarks)						Geomorphic Position (D2)		
Algal Mat or Crust (B4)						_	quitard (D3)		
✓ Iron Deposits (B5)						_	graphic Relief (D4)		
Surface Soil Cracks (B6)	<u> </u>					FAC-neutra	al Test (D5)		
Field Observations:	Yes 💿 No C								
Surface Water Present?	$res \odot no \odot$	Depth (inche)	.s): 3						

Wetland Hydrology Present?

Yes 💿 No 🔿 Depth (inches): 0 (includes capillary fringe) Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspection) if available:

Yes \bullet No \bigcirc

Remarks:

Water Table Present?

Saturation Present?

peatland a mix of standing water and saturation at the surface. iron floc in areas w standing water.

Depth (inches): 0

Yes 💿 No 🔾