## WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project		Borough/City:	Matanusk	a-Susitna Borough Sampling Date: 03-Aug-12			
Applicant/Owner: Alaska Energy Authority				Sampling Point: SW12_T38_04			
Investigator(s): SLI. KMK		Landform (hill	lside, terrac	e, hummocks etc.): Flat			
Local relief (concave, convex, none): flat		Slope:		2 ° Elevation: 514			
	Lat:	- '		Long.: -149.527690705 Datum: NAD83			
Subregion : Southcentral Alaska	Lai	62.83587165	13				
Soil Map Unit Name:				NWI classification: PEM1E			
	significant naturally p	ly disturbed? problematic?	(If nee	(If no, explain in Remarks.) Iormal Circumstances" present? Yes ● No ○ eded, explain any answers in Remarks.) s, transects, important features, etc.			
Hydrophytic Vegetation Present? Yes • No	)						
Hydric Soil Present? Yes  Ves  No	)	Is the Sampled Area					
Wetland Hydrology Present? Yes	ithin a W	/etland? Yes $\odot$ No $\bigcirc$					
Remarks: lower portion of peatland at 5% slope, which ma	y not be re	epresentative o	of entire fen	- review in gis.			
VEGETATION - Use scientific names of plants. L	ist all sp	ecies in the	plot.				
	Absolute		Indicator	Dominance Test worksheet:			
Tree Stratum	% Cover		Status	Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)			
1	0			That are OBL, FACW, or FAC: (A) Total Number of Dominant			
2.	0			Species Across All Strata: 4 (B)			
3.	0			Percent of dominant Species			
4.	0			That Are OBL, FACW, or FAC:(A/B)			
5.	0			Prevalence Index worksheet:			
Total Cover	Total % Cover of: Multiply by:						
Sapling/Shrub Stratum 50% of Total Cover:	0 20%	6 of Total Cover	:	OBL Species 55 x 1 = 55			
1. Betula nana	3		FAC	FACW Species $6 \times 2 = 12$			
2. Myrica gale			OBL	FAC Species $3 \times 3 = 9$			
3. Vaccinium oxycoccos		-	OBL	FACU Species 0 x 4 = 0			
4.				UPL Species $0 \times 5 = 0$			
5.				Column Totals: 64 (A) 76 (B)			
6.	-						
7.	•			Prevalence Index = B/A = <u>1.188</u>			
8.	0			Hydrophytic Vegetation Indicators:			
9.	0			✓ Dominance Test is > 50%			
10	0			✓ Prevalence Index is ≤3.0			
Total Cover		_		Morphological Adaptations <sup>1</sup> (Provide supporting data in			
_Herb Stratum50% of Total Cover:	3 20	% of Total Cove	r: <u>1.2</u>	Remarks or on a separate sheet)			
1. Trichophorum caespitosum	20		OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)			
2. Carex pauciflora	10		OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must			
3. Carex magellanica	5	. Ц	OBL	be present, unless disturbed or problematic.			
4. Eriophorum angustifolium	5	. Ц	OBL	Plot size (radius, or length x width) <u>10m</u>			
5. Drosera rotundifolia		· _	OBL	% Cover of Wetland Bryophytes			
6. Eriophorum gracile			OBL	(Where applicable)			
7 Gentiana douglasiana	3		FACW	% Bare Ground <u>10</u>			
8. Swertia perennis	3		FACW	Total Cover of Bryophytes 88			
9. Carex rotundata	2	· []	OBL				
10. Juncus biglumis	2	. 🗆	OBL	Hydrophytic			
Total Cover 50% of Total Cover:		- 6 of Total Cover	. 11.0	Vegetation Present? Yes • No ·			
	29 209		:11.6	······			

Remarks: additional herbs2% each menyanthes trifoliata, deschampsia brevifolia. 1% comarum palustre. trace viola sp, spirom. erigra - multiple heads, no reddish base, long sheath compared to leaf. gendou, carrot, poapal collected. drorot % includes droang.

		e depth need <b>atrix</b>	ded to docu	ment the indicator or con Rec	nfirm the ab		ators)			
Depth (inches)	Color (mois	t)	%	Color (moist)	%	Type <sup>1</sup>	Loc 2	Texture	Remarks	
								-		
					-		-	-		
									8	
	<u> </u>						-			
	. <u> </u>									
<sup>1</sup> Type: C=Cor	ncentration. D=D	epletion. F	RM=Reduc	ed Matrix <sup>2</sup> Location	n: PL=Por	e Lining. R	C=Root Cha	annel. M=Matrix		
Hydric Soil I	ndicators:			Indicators for Pr	oblemati	c Hydric S	oils: <sup>3</sup>			
✓ Histosol or	r Histel (A1)			Alaska Color Ch	nange (TA	4)		Alaska Gleyed Without H	ue 5Y or Redder	
Histic Epip	edon (A2)			Alaska Alpine s	•		_	Underlying Layer		
Hydrogen	Sulfide (A4)			Alaska Redox V	Vith 2.5Y I	Hue		Other (Explain in Remark	(S)	
	c Surface (A12)			<sup>3</sup> One indicator of	hydrophy	tic vegetatio	n one prir	mary indicator of wetland h	vdrology	
Alaska Gle	, , ,			and an appropriat					iya ology,	
Alaska Red	. ,			<sup>4</sup> Give details of co	olor chang	e in Remarl	(5			
Alaska Gle	eyed Pores (A15)				olor chang					
Restrictive Laye	er (if present):									
Type:								Hydric Soil Present	? Yes 🖲 No 🔾	
Depth (inch	nes):									
Remarks:										
standing water	and near surfac	e saturatio	n preclude	e a soil pit, probing ir	dicates 16	5+ in organi	CS.			
HYDROLO	GY									
Wetland Hyd	rology Indicat	ors:						Secondary Indi	cators (two or more are required)	
	tors (any one is	sufficient)						Water Stai	ned Leaves (B9)	
✓ Surface W	( )			Inundation V		-			Patterns (B10)	
_	✓ High Water Table (A2) Sparsely Vegetated Concave Surface (B8)					ce (B8)	Oxidized Rhizospheres along Living Roots (C3)			
Saturation							Presence of Reduced Iron (C4)			
	Marks (B1) Hydrogen Sulfide Odor (C1)							Salt Deposits (C5)		
Sediment Deposits (B2)     Dry-Season Water Table (C2)       Drift Deposits (B3)     Other (Explain in Remarks)							Stunted or Stressed Plants (D1)			
Drift Deposits (B3)     Other (Explain in Remarks)     Algal Mat or Crust (B4)							Shallow Aquitard (D3)			
✓ Iron Deposits (B5)								Microtopographic Relief (D4)		
	oil Cracks (B6)							FAC-neutra		
Field Observa										
Surface Water		Yes 🖲	No $\bigcirc$	Depth (inche	s): 3					
Water Table P	Present?	Yes 🖲	No $\bigcirc$	Depth (inche	s): 0		Wetla	nd Hydrology Presen	t? Yes 🖲 No 🔾	

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspection) if available:

Yes  $\bullet$  No  $\bigcirc$ 

Depth (inches): 0

Depth (inches): 0

Remarks:

Saturation Present? (includes capillary fringe)

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