WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project	Borough/City: Matanuska-Susitna Borough Sampling Date: 08-Aug-12
Applicant/Owner: Alaska Energy Authority	Sampling Point: SW12_T44_52
Investigator(s): SLI, KMK	Landform (hillside, terrace, hummocks etc.): Terrace
Local relief (concave, convex, none): hummocky	Slope: 0.0 % / 1.0 ° Elevation: 753
Subregion : Interior Alaska Mountains Lat.:	62.8887182446 Long.: -148.465261642 Datum: WGS84
Soil Map Unit Name:	NWI classification: PSS1/EM1E
	r? Yes ● No ○ (If no, explain in Remarks.) dy disturbed? Are "Normal Circumstances" present? Yes ● No ○ oroblematic? (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?	Yes 🖲	Νο 〇	le the Compled Area	
Hydric Soil Present?	Yes 🖲	No 🔿	Is the Sampled Area	Yes \bullet No \bigcirc
Wetland Hydrology Present?	Yes 🖲	No 🔿	within a Wetland?	

Remarks: complex of shrubby and emergent vegetation w standing and flowing water. misnamed arcpad points as _01 to _03, rather than _50 to _52.

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

			Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum			% Cover	Species?	Status	Number of Dominant Species
1.	Picea mariana	-	5		FACW	That are OBL, FACW, or FAC:6_ (A)
2.			0			Total Number of Dominant Species Across All Strata: 6 (B)
3.			0			Percent of dominant Species
4.			0			That Are OBL, FACW, or FAC:100.0% (A/B)
5.			0			Prevalence Index worksheet:
	Total Co	over:	5			Total % Cover of: Multiply by:
Sap	ling/Shrub Stratum 50% of Total Cover:	2.	<u>5</u> 20% o	of Total Cover:	1	OBL Species $42 \times 1 = 42$
1	Salix pulchra		7		FACW	FACW Species 18 x 2 = 36
2.	Patula nana		5		FAC	FAC Species $42 \times 3 = 126$
3.	Desinhere frutieses		15		FAC	FACU Species 5 $x 4 = 20$
4.	Dises mariana		2		FACW	UPL Species $0 \times 5 = 0$
5.	Picco dauco		5		FACU	
6.	Empetrum nigrum		3		FAC	Column Totals: <u>107</u> (A) <u>224</u> (B)
7.	Vaccinium uliginosum		15	\checkmark	FAC	Prevalence Index = B/A = 2.093
8.	v		1		OBL	
9.			0			✓ Dominance Test is > 50%
10.			0			✓ Prevalence Index is ≤ 3.0
	Total Co		53			Morphological Adaptations ¹ (Provide supporting data in
Her	<u>b Stratum</u> 50% of Total Cover:	26	5.5 20%	of Total Cover:	10.6	Remarks or on a separate sheet)
1.	Eriophorum angustifolium		10	\checkmark	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2.	Carex aquatilis		10	\checkmark	OBL	¹ Indicators of hydric soil and wetland hydrology must
3.	Carex rostrata		15	\checkmark	OBL	be present, unless disturbed or problematic.
4.	Eriophorum russeolum		2		FACW	Plot size (radius, or length x width) 10m
5.	Calamagrostis canadensis		3		FAC	% Cover of Wetland Bryophytes
6.	Equisetum palustre		1		FACW	(Where applicable)
7.	Carex gynocrates		3		OBL	% Bare Ground10
8.	Carex magellanica		3		OBL	Total Cover of Bryophytes85
9.	Rubus chamaemorus		1		FACW	
10.	Equisetum arvense		1		FAC	Hydrophytic
	Total Co	over:	49			Vegetation
	50% of Total Cover:	24	. <u>5</u> 20% o	of Total Cover:	9.8	Present? Yes No
_						

Remarks: trace platanthera hyperborea, thalictrum alpinum, carex tenuiflora, cornus canadensis, carex membranacea, valerian sp. 1% rubarc, rubcha, polemonium sp, sancan, sweper

SOIL						Sampling I	Point: SW12_T44_52
Profile Descript	-	•	ument the indicator or conf		i indicators)		
Depth	Matri	ix	Redr	lox Features			
(inches)	Color (moist)	%	Color (moist)	% Туре	e ¹ <u>Loc</u> ²	Texture	Remarks
						r	
						·	
	, ,			······			
						<i>,</i>	
		Lation PM=Reduc	ced Matrix ² Location:		~ PC-Poot Ch		
				-	-		
Hydric Soil I			Indicators for Pro	4	ic Soils:	-	
	or Histel (A1)		Alaska Color Cha		L	Alaska Gleyed Without Hue Underlying Layer	e 5Y or Redder
	pedon (A2)		Alaska Alpine sw	. ,	5		
	n Sulfide (A4)		Alaska Redox Wi	ith 2.5Y Hue	\checkmark	Other (Explain in Remarks)	,)
	rk Surface (A12)		3 One indicator of t	hudronhutic vear	otation one pri	imary indicator of wetland hy	udrology
	eyed (A13)		and an appropriate				urology,
	edox (A14)		⁴ Give details of col	lor change in Re	marke		
Alaska Gle	eyed Pores (A15)		· Give details of ee.				
Restrictive Lay	/er (if present):				I		
Type:					I	Hydric Soil Present?	? Yes 🖲 No 🔾
Depth (incl	hes):				I	-	
HYDROLO	JGY						
-	drology Indicators:						cators (two or more are required)
Primary Indica	ators (any one is suff	ficient)				Water Stain	ned Leaves (B9)
Surface W	. ,			sible on Aerial Im	5,(,,		atterns (B10)
	ter Table (A2)			etated Concave S	urface (B8)		nizospheres along Living Roots (C3)
Saturation			Marl Deposits	. ,			f Reduced Iron (C4)
Water Ma	. ,		Hydrogen Sulfi	. ,		Salt Deposit	
	t Deposits (B2)			Vater Table (C2)			Stressed Plants (D1)
	posits (B3)		Other (Explain	ı in Remarks)			c Position (D2)
	t or Crust (B4)					Shallow Aqu	
✓ Iron Depo							raphic Relief (D4)
	Soil Cracks (B6)				<u> </u>	✓ FAC-neutral	Test (D5)
Field Observa		es 💿 No 🔿	De the Carebox				
Surface Wate			Depth (inches)	.): 8			\bigcirc
Water Table F		es 🔿 No 🖲	Depth (inches)	<i>;</i>):	Wetla	and Hydrology Present	t? Yes 🖲 No 🔾
Saturation Pre (includes capi	YA	es 🔿 No 🖲	Depth (inches)	;):			
Describe Recor	rded Data (stream g	auge, monitor we	ell, aerial photos, previ	ous inspection) i	if available:		
Remarks:							
ICTION 51							

iron floc on sediments