WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project	Borough/City: Matanuska-Susitna Borough Sampling Date: 27-Jun-12
Applicant/Owner: Alaska Energy Authority	Sampling Point: SW12_T24_08
Investigator(s): SLI, LMF	Landform (hillside, terrace, hummocks etc.): Plateau
Local relief (concave, convex, none): hummocky	Slope: 0.0 % / 2.0 ° Elevation: 823
Subregion : Copper River Basin Lat.:	62.6688799088 Long.: -147.402729976 Datum: WGS84
Soil Map Unit Name:	NWI classification: PSS1/EM1E
	ar? Yes No (If no, explain in Remarks.) Itly 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?	Yes ● Yes ● Yes ●	No () No () No ()	Is the Sampled Area within a Wetland?	Yes \odot No \bigcirc
Remarks:				

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

		•	bsolute	Dominant	Indicator	Dominance Test worksheet:
Tre	e Stratum		6 Cover	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: 3 (B)
3.			0			
4.			0			Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
5.			0			
0.	Total	Cover:	0			Prevalence Index worksheet:
-				of Total Cover:	0	Total % Cover of: Multiply by:
Sap	ling/Shrub Stratum 50% of Total Cove	ii. <u>0</u>	20%	or rotal cover.	0	OBL Species <u>48</u> x 1 = <u>48</u>
1.	Picea mariana		8	\checkmark	FACW	FACW Species <u>28</u> x 2 = <u>56</u>
2.	Betula nana		30	\checkmark	FAC	FAC Species x 3 =
3.	Vaccinium uliginosum		7		FAC	FACU Species <u>0</u> x 4 = <u>0</u>
4.	Chamaedaphne calyculata		7		FACW	UPL Species x 5 =
5.	Ledum groenlandicum		5		FAC	Column Totals: <u>119</u> (A) <u>233</u> (B)
6.	Salix pulchra		7		FACW	
7.	Vaccinium oxycoccos		1		OBL	Prevalence Index = B/A = <u>1.958</u>
8.			0			Hydrophytic Vegetation Indicators:
			0			✓ Dominance Test is > 50%
4.0			0			✓ Prevalence Index is ≤3.0
		Cover:	65			Morphological Adaptations ¹ (Provide supporting data in
Her	b Stratum 50% of Total Cove	er: <u>32</u>		of Total Cover:	13	Remarks or on a separate sheet)
1.	Comarum palustre		5		OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2.	Equisetum palustre		3		FACW	¹ Indicators of hydric soil and wetland hydrology must
3.	Rubus chamaemorus		3		FACW	be present, unless disturbed or problematic.
4.	Eriophorum angustifolium		30	\checkmark	OBL	
5.	Equisetum fluviatile		1		OBL	Plot size (radius, or length x width) <u>10m</u>
6.	Carex canescens(CRP)		1		FAC	% Cover of Wetland Bryophytes (Where applicable)
7.	Carex aquatilis		10		OBL	% Bare Ground
8.	Caltha palustris		1		OBL	Total Cover of Bryophytes
9.			0			
			0			Hydrophytic
		Cover:	54			Vegetation
	50% of Total Cove	er: <u>27</u>		of Total Cover:	10.8	Present? Yes \bullet No \bigcirc
Rem	arks: 3% picmar trees recorded in shrub strat	um, as tr	ee stratu	ım total % cov	er <5%	

SOI	L

(inches) Color (moist) %	Color (moist)	lox Features <u>%</u> Type ¹	Loc ²	Texture	Remarks
		· /			
		·			
		·			
		·			
		·			
¹ Type: C=Concentration. D=Depletion. RM=		_		nnel. M=Matrix	
Hydric Soil Indicators:	Indicators for Pro	oblematic Hydric S	oils: ³		
Histosol or Histel (A1)	Alaska Color Ch	ange (TA4)		Alaska Gleyed Without H	ue 5Y or Redder
Histic Epipedon (A2)	Alaska Alpine s	· · · ·		Underlying Layer	
Hydrogen Sulfide (A4)	Alaska Redox V	Vith 2.5Y Hue	V	Other (Explain in Remark	s)
Thick Dark Surface (A12)	³ One indicator of	hydrophytic vegetatic	one prim	ary indicator of wetland h	vdrology
Alaska Gleyed (A13)	and an appropriat	e landscape position	must be pre	sent	yurolog,,
Alaska Redox (A14)	⁴ Give details of co	olor change in Remarl	s		
Alaska Gleyed Pores (A15)	-		-		
Restrictive Layer (if present):					
-					\sim \sim
Type:				Hydric Soil Present	? Yes 🖲 No 🔾
Type: Depth (inches): Remarks:				Hydric Soil Present	? Yes 🖲 No 🔾
Depth (inches):	ric soils due to hydrophytic	vegetation and wetla	nd hydrolog		? Yes • No -
Depth (inches): Remarks:	ric soils due to hydrophytic	vegetation and wetla	nd hydrolog		? Yes • No -
Depth (inches): Remarks: no soil pit due to standing water. assume hydr HYDROLOGY Wetland Hydrology Indicators:	ric soils due to hydrophytic	vegetation and wetla	nd hydrolog	y Secondary India	cators (two or more are required)
Depth (inches): Remarks: no soil pit due to standing water. assume hydr HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one is sufficient)				y Secondary India	<u>cators (two or more are required)</u> ned Leaves (B9)
Depth (inches): Remarks: no soil pit due to standing water. assume hydrone HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one is sufficient) Surface Water (A1)	Inundation Vi	isible on Aerial Image	ry (B7)	y Secondary India Water Stai Drainage P	<u>cators (two or more are required)</u> ned Leaves (B9) 'atterns (B10)
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Depth (inches): Remarks: no soil pit due to standing water. assume hydrono soil pit due to standing water. Alternative to sufficient. ✓ Surface Water (A1) ✓ High Water Table (A2) ✓ Saturation (A3) ✓ Water Marks (B1) ✓ Sediment Deposits (B2) ✓ Drift Deposits (B3) ✓ Algal Mat or Crust (B4) ✓ Iron Deposits (B5) ✓ Surface Soil Cracks (B6) 	☐ Inundation Vi ☐ Sparsely Vegi ☐ Marl Deposits ☐ Hydrogen Sul ☐ Dry-Season V ☐ Other (Explai	isible on Aerial Image etated Concave Surfa s (B15) Ifide Odor (C1) Vater Table (C2) n in Remarks)	ry (B7)	y	cators (two or more are required) ned Leaves (B9) Patterns (B10) hizospheres along Living Roots (C3) f Reduced Iron (C4) its (C5) Stressed Plants (D1) ic Position (D2) juitard (D3) rraphic Relief (D4)
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Remarks:

scattered shrubby hummocks with saturated soils, predominantly sedge in shallow water.