WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project	Borough/City: Matanuska-Susitna Borough Sampling Date: 22-Aug-15
Applicant/Owner: Alaska Energy Authority	Sampling Point: SW15_T210_06
Investigator(s): WAD, SCB	Landform (hillside, terrace, hummocks etc.): drainage
Local relief (concave, convex, none): hummocky	Slope: 8.7 % / 5.0 ° Elevation:
Subregion : Interior Alaska Mountains Lat.:	Long.: Datum: WGS84
Soil Map Unit Name:	NWI classification: PSS1/EM1E
Are Vegetation , Soil , or Hydrology naturally	ear? Yes No (If no, explain in Remarks.) ntly disturbed? Are "Normal Circumstances" present? Yes No (If needed, explain any answers in Remarks.) ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks:	
VEGETATION - Use scientific names of plants. List all sp	pecies in the plot.

		Absolute		Indicator	Dominance Test worksneet:				
Tre	e Stratum	% Cover	Species?	Status	Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)				
					Total Number of Dominant				
2.					Species Across All Strata:3_ (B)				
3.					Percent of dominant Species				
4.					That Are OBL, FACW, or FAC: (A/B)				
5.					Prevalence Index worksheet:				
	Total Cover				Total % Cover of: Multiply by:				
Sap	ling/Shrub Stratum 50% of Total Cover:	0 20%	of Total Cover:	0	OBL Species <u>35</u> x 1 = <u>35</u>				
1.	Salix barclayi	30	\checkmark	FAC	FACW Species <u>15.2</u> x 2 = <u>30.40</u>				
2.	Salix pulchra	10	\checkmark	FACW	FAC Species <u>33.1</u> x 3 = <u>99.3</u>				
3.	Picea mariana			FACW	FACU Species <u>0</u> x 4 = <u>0</u>				
4.	Vaccinium uliginosum	1		FAC	UPL Species x 5 =				
5.	Salix myrtillifolia	0.1		FACW	Column Totals: 83.3 (A) 164.7 (B)				
6.	-	•							
					Prevalence Index = B/A = <u>1.977</u>				
					Hydrophytic Vegetation Indicators:				
					✓ Dominance Test is > 50%				
		0			✓ Prevalence Index is \leq 3.0				
Total Cover: 46.1					Morphological Adaptations (Provide supporting data in				
Herb Stratum 50% of Total Cover: 23.05 20% of Total Cover				9.22	Remarks or on a separate sheet)				
1.	Equisetum fluviatile	30	\checkmark	OBL	Problematic Hydrophytic Vegetation (Explain)				
2.	Comarum palustre	5		OBL	¹ Indicators of hydric soil and wetland hydrology must				
3.	Viola palustris(IAM)	1		FAC	be present, unless disturbed or problematic.				
4.	Calamagrostis canadensis	1		FAC	Plot size (radius, or length x width)10m				
5.	Petasites frigidus	0.1		FACW	% Cover of Wetland Bryophytes				
6.	Cornus suecica	0.1		FAC	(Where applicable)				
7.		0			% Bare Ground _5				
8.		0			Total Cover of Bryophytes 50				
10.		0			Hydrophytic				
	Total Cover	0712			Vegetation Present? Yes • No ·				
	50% of Total Cover:	<u>18.6</u> 20% (of Total Cover:	7.44	Present? Yes • No U				
Rem	Remarks: willow-equisetum fen, a few mossy hummocks with ericaceous shrubs								

SOI	L

Profile Descripti Depth		ie depth nee atrix	ded to docum	ent the indicator or co Re	onfirm the ab		cators)		
(inches)	Color (mois	:t)	%	Color (moist)	%	Type ¹	Loc 2	Texture	Remarks
		-,							
	· ·								
	· ·			,					
¹ Type: C=Cor	ncentration. D=[Depletion. I	RM=Reduce	d Matrix ² Locatio	n: PL=Por	e Lining. RC	C=Root Cha	nnel. M=Matrix	
Hydric Soil I	ndicators:			Indicators for P	roblemati	c Hvdric So	oils: ³		
	Histel (A1)			Alaska Color C		4		Alaska Gleyed Without H	ue 5Y or Redder
Histic Epip	. ,			Alaska Alpine				Underlying Layer	
	Sulfide (A4)			Alaska Redox	-	-	\checkmark	Other (Explain in Remark	ය)
	Sunde (A4)								
Alaska Gle	. ,							nary indicator of wetland h	ydrology,
Alaska Rec				and an appropria	te landsca	pe position i	must be pre	esent	
	yed Pores (A15)			⁴ Give details of c	olor chang	e in Remark	s		
	· · · ·								
Restrictive Laye	er (il present):							Undrie Ceil Dresent	? Yes 🖲 No 🔾
Type: Depth (inch								Hydric Soil Present	r fes 🖲 No 🖯
	ies).								
Remarks:									
inundated, no p	oit. assume hydr	ic soil.							
HYDROLO	GY								
Wetland Hyd	rology Indicat	ors:						Secondary Indi	cators (two or more are required)
Primary Indica	tors (any one is	sufficient)						Water Stai	ned Leaves (B9)
✓ Surface W	/ater (A1)			Inundation \	/isible on A	erial Image	ry (B7)	🗌 Drainage F	Patterns (B10)
🖌 High Wate	er Table (A2)			Sparsely Veg	jetated Cor	ncave Surfa	ce (B8)	Oxidized R	hizospheres along Living Roots (C3)
✓ Saturation	n (A3)			🗌 Marl Deposit	s (B15)			Presence o	f Reduced Iron (C4)
🗌 Water Ma	rks (B1)			🗌 Hydrogen Su	ılfide Odor	(C1)		Salt Depos	its (C5)
Sediment	Deposits (B2)			Dry-Season	Water Tabl	le (C2)		Stunted or	Stressed Plants (D1)
Drift Depo	osits (B3)			Other (Expla	in in Rema	ırks)		Geomorph	ic Position (D2)
🗌 Algal Mat	or Crust (B4)							Shallow Ac	juitard (D3)
✓ Iron Depo	sits (B5)							Microtopog	raphic Relief (D4)
Surface Se	oil Cracks (B6)							✓ FAC-neutra	l Test (D5)
Field Observa	tions:	-	_						
Surface Water	Present?	Yes 🖲	No 🔾	Depth (inche	es): 1				
Water Table P	resent?	Yes 🖲	No \bigcirc	Depth (inche	es): 0		Wetlaı	nd Hydrology Presen	t? Yes 🖲 No 🔾
Saturation Pre	esent?	Yes 🖲	No O	Depth (inche	,				
(includes capi	llary fringe)	103 0		Deptil (inche	=5). 0				
Describe Record	ded Data (strea	m gauge, r	nonitor well	, aerial photos, pre	vious inspe	ection) if ava	ailable:		
Remarks:									
B5-iron floc.									