WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project		Borough/City:	Matanuska-Susitna Borough		_ Sampling Date:	e: 23-Aug-15
Applicant/Owner: Alaska Energy Authority				Samp	oling Point:	SW15_T310_04
Investigator(s): BAB		Landform (hill	side, terrace, hu	immocks etc.):	Hillside	
Local relief (concave, convex, none): hummocky		Slope: 10.5	%/ <u>6.0</u> °	Elevation:	-	
Subregion : Interior Alaska Mountains	Lat.:		Long.:			
Soil Map Unit Name:				NWI clas	sification: Upla	and
	naturally p	tly disturbed? problematic? mpling point	(If needed,	. ,	swers in Remark	,
Hydrophytic Vegetation Present? Yes ○ No ● Hydric Soil Present? Yes ○ No ● Wetland Hydrology Present? Yes ○ No ●	I		the Sample thin a Wetla		Yes 🔿 No 🖲	
Remarks:						

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

Abs		Absolute	Dominant	Indicator	Dominance Test worksheet:		
Tre	e Stratum	% Cover		Status	Number of Dominant Species		
1.	Picea glauca	35	\checkmark	FACU	That are OBL, FACW, or FAC:(A)		
2.		0			Total Number of Dominant Species Across All Strata: 3 (B)		
3.		0			Percent of dominant Species		
4.		0			That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)		
5.		0			Prevalence Index worksheet:		
	Total Cover:	35			Total % Cover of: Multiply by:		
Sap	ling/Shrub Stratum 50% of Total Cover: 1	7.5 20%	6 of Total Cover:	7	OBL Species $0 \times 1 = 0$		
1.	Alnus viridis ssp. sinuata	70	\checkmark	FAC	FACW Species 21 x 2 = 42		
2.	Picea mariana	15		FACW	FAC Species x 3 =273		
3.	Vaccinium uliginosum			FAC	FACU Species <u>42</u> x 4 = <u>168</u>		
4.	Empetrum nigrum			FAC	UPL Species x 5 =100		
5.	Rhododendron groenlandicum	2		FAC	Column Totals: 174 (A) 583 (B)		
6.	Salix pulchra			FACW			
7.	Rosa acicularis	2		FACU	Prevalence Index = B/A = <u>3.351</u>		
8.	Linnaea borealis	1		FACU	Hydrophytic Vegetation Indicators:		
9.	Salix reticulata	1		FAC	Dominance Test is > 50%		
10.	Ribes triste	1		FAC	Prevalence Index is ≤3.0		
	Total Cover:	110	_		Morphological Adaptations (Provide supporting data in		
Her	b Stratum 50% of Total Cover:	55 20	20% of Total Cover:		Remarks or on a separate sheet)		
1.	Boykinia richardsonii	20	\checkmark	UPL	Problematic Hydrophytic Vegetation (Explain)		
2.	Equisetum arvense	2		FAC	¹ Indicators of hydric soil and wetland hydrology must		
3.	Dodecatheon jeffreyi	_2		FACW	be present, unless disturbed or problematic.		
4.	Cornus canadensis	_2		FACU	Plot size (radius, or length x width)		
5.	Mertensia paniculata	1		FACU	% Cover of Wetland Bryophytes		
6.	Petasites frigidus	1		FACW	(Where applicable)		
7.		0			% Bare Ground		
8.		0			Total Cover of Bryophytes 45		
10.		0			Hydrophytic		
	Total Cover:	29			Vegetation		
	50% of Total Cover: <u>1</u>	4.5 20%	6 of Total Cover:	5.8	Present? Yes No 💿		
Remarks: 1% rubus pedatus							

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators) Matrix Redox Features												
(inches)	(inches) Color (moist) %		%	Color (moist)		%	<u>% Туре¹</u>	Loc ²	Texture	Remarks		
0-1.5									Fibric Organics	Oi		
1.5-4									Hemic Organics	Oe		
4-8	,,					u	·		Sapric Organics	Оа		
8-11	5YR	3/4	95	10YR	2/2	5	C		Silt Loam			
11-17	7.5YR	3/2	75	7.5YR	2.5/1	25	C	M	Sandy Loam			
	·											
¹ Type: C=Cor	ncentration. D=	Depletion.	RM=Reduc	ed Matrix	² Location	: PL=Pore	e Lining. R	C=Root Cha	nnel. M=Matrix			
Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³												
Histosol or	Histel (A1)			Alas	ka Color Ch	ange (TA4	4 })		Alaska Gleyed Without H	ue 5Y or Redder		
Histic Epip	edon (A2)			Alas	ka Alpine sv	vales (TA5	5)		Underlying Layer			
Hydrogen	Sulfide (A4)			Alas	ka Redox W	/ith 2.5Y H	lue		Other (Explain in Remar	ks)		
Thick Dark	s Surface (A12)			3 One i	ndiantar of l	a, dran b, t	ia vogatati		non indicator of watland l	N dealagu		
Alaska Gle	yed (A13)							must be pre	nary indicator of wetland l esent	iyarology,		
Alaska Rec	. ,			4 Give	details of co	lor change	in Remar	ks				
🔄 Alaska Gle	yed Pores (A15)		Give		ior change		105				
Restrictive Laye	er (if present):											
Type:									Hydric Soil Present	? Yes 🔾 No 🖲		
Depth (inch	nes):											
Remarks:												
no hydric soil indicators observed.Bare leaf litter in micro lo position. Oe horizon from 1.5-4" is rich with mycorhyzi. Small blob of tephra at 3".												
HYDROLO	GY											
Wetland Hyd		tors:							Secondary Indi	cators (two or more are required)		
-	tors (any one is									ined Leaves (B9)		
Surface W	/ater (A1)			🗌 In	undation Vis	sible on A	erial Image	ery (B7)		Patterns (B10)		
High Wate	High Water Table (A2) Sparsely Vegetated Concave Surface (B8)						ice (B8)	Oxidized Rhizospheres along Living Roots (C3)				
Saturation	n (A3)			_ м	arl Deposits	(B15)			Presence of Reduced Iron (C4)			
Water Ma	rks (B1)			🗌 ну	drogen Sulf	fide Odor	(C1)		Salt Depos	sits (C5)		
	Deposits (B2)				y-Season W		• •		Stunted or Stressed Plants (D1)			
	Drift Deposits (B3) Other (Explain in Remarks) Geomorphic Position (D2)								()			
	Algal Mat or Crust (B4) Shallow Aquitard (D3)								,			
· - ·	Iron Deposits (B5) Microtopographic Relief (D4) Surface Soil Cracks (B6) FAC-neutral Test (D5)											
Field Observa	. ,									al Test (D5)		
Surface Water			No 🖲	D	epth (inches							
								Watle		it? Yes 🔿 No 🖲		
Water Table P				D	epth (inches	5):		wetiai	nd Hydrology Preser	nt? Yes 🔾 No 🖲		
Saturation Pre (includes capi		Yes 🔾	No 🖲	D	epth (inches	5):						
Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspection) if available:												
Remarks:												
no wetland hydrology indicators observed												
	-											