WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project	Borough/City:	Matanuska-Susitna Borough Sam	pling Date: 04-Jul-13
Applicant/Owner: Alaska Energy Authority		Sampling Po	Dint: SW13_T109_06
Investigator(s): JGK	Landform (hills	ide, terrace, hummocks etc.): Hills	side
Local relief (concave, convex, none): hummocky	Slope:	% / 11.6 ° Elevation: 654	
Subregion : Interior Alaska Mountains Lat.:	62.866992234	Description Long.: -148.312015177	Datum: NAD83
Soil Map Unit Name:		NWI classificat	ion: Upland
	ar? Yes (htly disturbed? problematic?	 No (If no, explain in Rem Are "Normal Circumstances" pres (If needed, explain any answers in 	ent? Yes $oldsymbol{igstar}$ No $oldsymbol{igstar}$
SUMMARY OF FINDINGS - Attach site map showing sa	mpling point	ocations, 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 🔿 No 🖲
Remarks:				

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

			۵he	Absolute Dominant		Indicator	Dominance Test worksheet:
Tree Stratum			Cover	Species?	Status	Number of Dominant Species	
1.	Picea glauca			4	\checkmark	FACU	That are OBL, FACW, or FAC: (A)
2.	Picea mariana			3	\checkmark	FACW	Total Number of Dominant Species Across All Strata: 5 (B)
3.				0			Percent of dominant Species
4.				0			That Are OBL, FACW, or FAC: <u>80.0%</u> (A/B)
5.			_	0			Prevalence Index worksheet:
	Total Cover		er:	7			Total % Cover of: Multiply by:
Sap	ling/Shrub Stratum	50% of Total Cover:	3.5	_ 20%	of Total Cover:	1.4	OBL Species $0 \times 1 = 0$
1.	Betula nana			10		FAC	FACW Species <u>3.1</u> x 2 = <u>6.2</u>
2.	Rhododendron groenlandicu			20	\checkmark	FAC	FAC Species <u>101.3</u> x 3 = <u>303.9</u>
3.	Vaccinium uliginosum			35	\checkmark	FAC	FACU Species x 4 =24.4
4.	Vaccinium vitis-idaea			15		FAC	UPL Species x 5 =
5.	Energy of the second second			10		FAC	Column Totals: 110.5 (A) 334.5 (B)
6.	Deee esieuleria			2		FACU	
7.	O alive alaresa			0.1		FAC	Prevalence Index = B/A = <u>3.027</u>
8.	Salix pseudomonticola			0.1		FAC	Hydrophytic Vegetation Indicators:
9.	Alnus viridis			0.1		FAC	✓ Dominance Test is > 50%
10.				0			Prevalence Index is ≤3.0
Total Cover: 92.3							Morphological Adaptations ¹ (Provide supporting data in
Herb Stratum 50% of Total Cover: 46.15 20% of Total Cover: 18						18.46	Remarks or on a separate sheet)
1.	Equisetum sylvaticum		_	10	\checkmark	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2.	Cornus suecica		_	1		FAC	¹ Indicators of hydric soil and wetland hydrology must
3.	Pedicularis labradorica			0.1		FACW	be present, unless disturbed or problematic.
4.	Geocaulon lividum			0.1		FACU	Plot size (radius, or length x width) <u>10m</u>
5.							% Cover of Wetland Bryophytes 15
6.				0			(Where applicable)
7.				0			% Bare Ground
8.				0			Total Cover of Bryophytes40
9.				0			
			_	0			Hydrophytic
Total Cover: <u>11.2</u>						Vegetation	
		50% of Total Cover:	5.6	_ 20%	of Total Cover:	2.24	Present? Yes No
Remarks: LICHEN 10%							

Profile Descripti Depth	e Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators) Matrix Redox Features				ators)				
(inches)	Color (mo	ist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4								Fibric Organics	
4-10	10YR	3/2						Sandy Clay Loam	with coarse sand
10-14	10YR	3/2				- <u> </u>		Sandy Clay Loam	with sandy angular gravel and larger angula
				,					
	,,								
¹ Type: C=Cor	ncentration. D=	=Depletion.	RM=Reduce	ed Matrix ² Location	: PL=Por	– <u> </u>	=Root Cha	annel. M=Matrix	
Hydric Soil I	ndicators:			Indicators for Pro	oblematio	c Hydric So	ils ³		
	Histel (A1)			Alaska Color Ch		4		Alaska Gleyed Without H	ue 5Y or Redder
Histic Epip	. ,			Alaska Alpine s				Underlying Layer	
	Sulfide (A4)			Alaska Redox W	ith 2.5Y ا	lue		Other (Explain in Remar	ks)
	Surface (A12)							
🗌 Alaska Gle	yed (A13)			³ One indicator of and an appropriate				mary indicator of wetland l	nydrology,
🗌 Alaska Rec						-	-	esent	
🗌 Alaska Gle	yed Pores (A1	5)		⁴ Give details of co	lor chang	e in Remark	5		
Restrictive Laye	er (if present):								
Type:								Hydric Soil Present	? Yes 🔾 No 🖲
Depth (inch	nes):								
Remarks:									
Soil too rocky a	nd thixotropic	to dig beyo	nd 14 in. La	rge angular cobbles	(3 in) at 1	4in but no p	primary hy	dric soil indicators.	
HYDROLO	GY								
Wetland Hyd	rology Indica	tors:						Secondary Ind	cators (two or more are required)
Primary Indica	tors (any one	is sufficient						Water Sta	ned Leaves (B9)
Surface W	. ,			Inundation Vi	sible on A	erial Imager	y (B7)	Drainage I	Patterns (B10)
High Wate	()			Sparsely Vege	etated Cor	ncave Surfac	e (B8)	Oxidized F	hizospheres along Living Roots (C3)
Saturation	n (A3)			Marl Deposits	(B15)			_	of Reduced Iron (C4)
Water Ma				Hydrogen Sul				Salt Depos	
	Deposits (B2)			Dry-Season V		. ,		_	Stressed Plants (D1)
Drift Depo				Other (Explain	n in Rema	rks)			ic Position (D2)
	or Crust (B4)							_	quitard (D3)
Iron Depo	()								graphic Relief (D4)
	oil Cracks (B6)						1	☐ FAC-neutra	al Test (D5)
Field Observa		X ()	No 🖲						
Surface Water				Depth (inche	s):				
Water Table P		Yes 🔍	No \bigcirc	Depth (inche	s): 11		Wetla	nd Hydrology Preser	it? Yes 🖲 No 🔾
Saturation Pre (includes capil		Yes 🖲	No \bigcirc	Depth (inche	s): 6				
Describe Recor	ded Data (stre	am gauge,	monitor wel	l, aerial photos, prev	ious inspe	ection) if ava	ilable:		
Remarks:									
NCHIAI KS:									