WETLAND DETERMINATION DATA FORM - Alaska Region

Project	/Site: Susitna-Watana Hydroelectric Project		Borough/City:	Denali Bo	rough Sampling Date: 01-Aug-13
Applica	nt/Owner: Alaska Energy Authority				Sampling Point: SW13_T202_07
	gator(s): CTS, AMD		Landform (hi	lside, terrac	e, hummocks etc.): Floodplain
-	elief (concave, convex, none): flat		- Slope:	% / 1.4	
	ion : Interior Alaska Mountains	l at ·	63.39746833		Long.: -148.543000001 Datum: NAD83
_		Lat	03.39740033	04	
	p Unit Name:		- 1/	<u> </u>	NWI classification: Upland
	natic/hydrologic conditions on the site typical for this ti	•		● No ○	(If no, explain in Remarks.) ormal Circumstances" present? Yes ● No ○
		•	itly disturbed?		omai on amatanaca present:
Are v	egetation 🔲 , Soil 🔲 , or Hydrology 🔲	naturally	problematic?	(If nee	eded, explain any answers in Remarks.)
SUMN	MARY OF FINDINGS - Attach site map show	wing sa	mpling point	locations	s, transects, important features, etc.
	Hydrophytic Vegetation Present? Yes ● No C)			
	Hydric Soil Present? Yes No •)			pled Area
	Wetland Hydrology Present? Yes No C)	W	ithin a W	etland? Yes ○ No ●
Rema	· · · · · · · · · · · · · · · · · · ·				
VEGE	TATION - Use scientific names of plants. Li	st all sr	necies in the	nlot.	
	ose scientino names or plants. El	Absolut			Dominance Test worksheet:
Tree	e Stratum	% Cove		Status	Number of Dominant Species
1.	Picea glauca	40	✓	FACU	That are OBL, FACW, or FAC:5 (A)
2.	Populus balsamifera	15	✓	FACU	Total Number of Dominant Species Across All Strata: 9 (B)
3.					Percent of dominant Species
4.		0			That Are OBL, FACW, or FAC: 55.6% (A/B)
5.		0			Prevalence Index worksheet:
	Total Cover	55	_		Total % Cover of: Multiply by:
Sap	ling/Shrub Stratum 50% of Total Cover:	27.5 20	% of Total Cover	:11	OBL Species 0 x 1 = 0
1.	Salix pseudomonticola	8	✓	FAC	FACW Species 8 x 2 = 16
	Salix richardsonii	7		FACW	FAC Species <u>94</u> x 3 = <u>282</u>
3.	Dasiphora fruticosa		✓	FAC	FACU Species <u>104</u> x 4 = <u>416</u>
4.	Salix reticulata	5	✓	FAC	UPL Species <u>0</u> x 5 = <u>0</u>
5.	Rosa acicularis	5	✓	FACU	Column Totals: <u>206</u> (A) <u>714</u> (B)
6.	Populus balsamifera	_ 4		FACU	
7.	Vaccinium uliginosum	_ 2		FAC	Prevalence Index = B/A = 3.466
8.	Shepherdia canadensis	2	_ 📙	FACU	Hydrophytic Vegetation Indicators:
9.	Vaccinium vitis-idaea	_1	_	FAC	✓ Dominance Test is > 50%
10.	Salix pulchra	1	_	FACW	☐ Prevalence Index is ≤3.0
	Total Cover 50% of Total Cover:		 0% of Total Cove	r· o	Morphological Adaptations ¹ (Provide supporting data in
	Faviority anyone	70			Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
1.	Equisetum arvense	25		FACU	
2.	Cornus canadensis Mertensia paniculata	10	_ =	FACU FACU	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. 4.	Ob and a series and a series of the lives			FACU	
5.	Calamagrostis canadensis		-	FAC	Plot size (radius, or length x width) 10m
6.	Anemone richardsonii	- 1		FAC	% Cover of Wetland Bryophytes (Where applicable)
7.	Rubus arcticus (IAM)	1		FACU	% Bare Ground 40
8.	,				Total Cover of Bryophytes 5
		0			<u></u>
		0			Hydrophytic
	Total Cover	111	_		Vegetation
	50% of Total Cover:	55.5 20	% of Total Cover	22.2	Present? Yes No
Rem	50% of Total Cover: arks: Lichen = 0. Betnan = 0.1. Linbor 2.	<u>55.5</u> 20	% of Total Cover	22.2	LIESEUR IES O NO O

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SOIL Sampling Point: SW13_T202_07

Prome Describe	(Describe to	the death ne	adad to docum	ant the indicator or co	-firm the abou	and of indica	+~~)			
		tne deptn ne Matrix	edea to aocuii	nent the indicator or co	nfirm the abse		itors)			
Depth (inches)	Color (mo		%	Color (moist)		Type ¹	Loc 2	Texture	Remarks	
0-3			100		· –			Hemic Organics		
3-5			100					Fibric Organics		
5-9	2.5Y	3/2	100					Sandy Loam		
9-11			100					Sapric Organics		
11-20	2.5Y	4/1	100					Loamy Sand		
					-					
¹Type: C=Con	centration. D	=Depletion.	RM=Reduce	ed Matrix ² Location	n: PL=Pore	Lining. RC:	=Root Cha	nnel. M=Matrix		
Hydric Soil In	ndicators:			Indicators for Pr	oblematic	Hydric So	ils: ³			
Histosol or	Histel (A1)			Alaska Color Cl		4		Alaska Gleyed Without Hu	e 5Y or Redder	
Histic Epipe	edon (A2)			Alaska Alpine swales (TA5)				Underlying Layer		
Hydrogen S	Sulfide (A4)			Alaska Redox V	With 2.5Y Hu	ıe		Other (Explain in Remarks	3)	
Thick Dark	Surface (A12)		3 One indicator of	hydrophytic	vegetation	one prim	nary indicator of wetland hy	drology	
Alaska Gley				and an appropriat					diology,	
Alaska Red	. ,	->		4 Give details of co	olor change	in Remarks	6			
Alaska Gley	yed Pores (A1	5)								
Restrictive Laye	r (if present):									
Type:	`							Hydric Soil Present?	Yes O No 💿	
Depth (inch	es):									
floodplain positi	on, indication	s of floodin	g (see hydro	logy below). believe	e insufficient	soil carbon	for develo	opment of redox features.		
Wetland Hydr	ology Indica		.						ators (two or more are required)	
Wetland Hydr	rology Indicators (any one)	Injundation V	ficible on Acc	rial Imagor	(P7)	Water Stain	ed Leaves (B9)	
Wetland Hydr Primary Indicat Surface W	tors (any one dater (A1))	☐ Inundation V		-		Water Stain Drainage Pa	ed Leaves (B9) atterns (B10)	
Wetland Hydr Primary Indicat Surface W High Wate	rology Indicators (any one later (A1) er Table (A2))	Sparsely Veg	etated Conc	-		Water Stain Drainage Pa Oxidized Rh	ed Leaves (B9) htterns (B10) izospheres along Living Roots (C3)	
Wetland Hydr Primary Indicat Surface W	tors (any one dater (A1) er Table (A2))	Sparsely Veg Marl Deposits	etated Conc s (B15)	ave Surfac		Water Stain Drainage Pa Oxidized Rh	ed Leaves (B9) htterns (B10) izospheres along Living Roots (C3) Reduced Iron (C4)	
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