WETLAND DETERMINATION DATA FORM - Alaska Region

Project	/Site: Susitna-Watana Hyd	droelectric Project	i	Borough/City:	Denali Bo	orough Sampling Date: 08-Aug-13
Applica	nt/Owner: Alaska Energy	Authority				Sampling Point: SW13_T169_09
Investi	gator(s): BAB			Landform (hil	lside, terrac	ce, hummocks etc.): Bluff
Local r	elief (concave, convex, none)	: undulating		Slope: 70.0	35.0	0 ° Elevation: 714
Subreg	ion: Interior Alaska Mounta	ins	Lat.:	63.42116609	22	Long.: -148.629734376 Datum: WGS84
Soil Ma	p Unit Name:					NWI classification: Upland
Are V	natic/hydrologic conditions or egetation , Soil egetation , Soil	, or Hydrology	significant naturally p wing sar	ly disturbed? roblematic?	(If nee	(If no, explain in Remarks.) Iormal Circumstances" present? Yes No Oeded, explain any answers in Remarks.) Iormal Circumstances" present? Yes No Oeded, explain any answers in Remarks.)
	Hydrophytic Vegetation Pres Hydric Soil Present? Wetland Hydrology Present? arks:	Yes O No G)		the Sam ithin a W	rpled Area /etland? Yes ○ No ●
/EGE	TATION -Use scientific	names of plants. Li			•	Dominance Test worksheet:
Tree	Stratum		Absolute % Cover		Indicator Status	Number of Dominant Species
	Betula neoalaskana		45	V	FACU	That are OBL, FACW, or FAC: (A)
2.	Picea glauca		10		FACU	Total Number of Dominant Species Across All Strata: 4 (B)
3.	<u> </u>		0			Percent of dominant Species
4.			0			That Are OBL, FACW, or FAC: 50.0% (A/B)
5.		Total Cover	0 55			Prevalence Index worksheet:
San	ling/Shrub Stratum			- 6 of Total Cover	": 11	Total % Cover of: Multiply by:
-				_		OBL Species 0 x 1 = 0 FACW Species 0 x 2 = 0
	Vaccinium uliginosum		35	_	FAC	
2.	Vaccinium vitis-idaea			- V	FAC	FAC Species 64 x 3 = 192 FACU Species 82 x 4 = 328
3.	Betula glandulosa		8	. 📙	FACU	UPL Species $0 \times 5 = 0$
4. 5.	Betula neoalaskana Salix alaxensis		15 1	. 📙	FACU FAC	
6.	Rosa acicularis		3	-	FACU	Column Totals: <u>146</u> (A) <u>520</u> (B)
	Linnaea borealis		1	. П	FACU	Prevalence Index = B/A = 3.562
	Spiraga stavanii			·	FACU	Hydrophytic Vegetation Indicators:
	opii dod oto voriii				-7100	Dominance Test is > 50%
						Prevalence Index is ≤3.0
	b Stratum_	Total Cover 50% of Total Cover:	85		r: 17	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
	Chamerion angustifolium				FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
	0			·	FACU	Indicators of hydric soil and wetland hydrology must
	Comac danadencie					be present, unless disturbed or problematic.
			•			Plot cize (radius, or length y width)
						Plot size (radius, or length x width)
						(Where applicable)
7.			0	. 📃		% Bare Ground
8.						Total Cover of Bryophytes
9.						
10.			0	. \square		Hydrophytic
		Total Cover	6			Vegetation
		50% of Total Cover:		6 of Total Cover	: 1.2	Present? Yes O No •

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SOIL Sampling Point: SW13_T169_09

Depth	ion. (Describe to	tne depth i	needed to docu	ment the indicator or o	edox Featur		ators)		
(inches)	Color (m	oist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-2								Fibric Organics	
2-3	10YR	4/2	100					Loam	
3-17	10YR	3/4	100					Loamy Sand	
									-
¹Type: C=Co	ncentration. D	=Depletio	n. RM=Reduc	ced Matrix ² Location	on: PL=Pore	Lining. RC	=Root Cha	nnel. M=Matrix	
Hydric Soil I	indicators:			Indicators for P	roblematic	Hydric So	oils: ³		
Histosol o	r Histel (A1)			Alaska Color (Change (TA4))4		Alaska Gleyed Without H	ue 5Y or Redder
Histic Epip	pedon (A2)			Alaska Alpine	swales (TA5))		Underlying Layer	
Hydrogen	Sulfide (A4)			Alaska Redox	With 2.5Y Hu	ue		Other (Explain in Remark	rs)
Thick Dark	k Surface (A12	2)		3 One indicator o	f hudvanhutir			name indicator of wetland b	v dvology
Alaska Gle	eyed (A13)			and an appropria				nary indicator of wetland h esent	yurology,
Alaska Re	. ,			4 Give details of	color change	in Remark	·		
∐ Alaska Gle	eyed Pores (A1	.5)		GIVE details of	color change	III Remark			
Restrictive Laye	er (if present)	:							
Type:								Hydric Soil Present	? Yes ○ No •
Depth (incl	hes):								
Remarks: no hydric soil ir	ndicators obse	rved							
	ndicators obse	rved							
		rved							
no hydric soil ir HYDROLO Wetland Hyd	OGY Irology Indic	ators:							cators (two or more are required)
HYDROLO Wetland Hyd Primary Indica	IGY Irology Indic ators (any one	ators:	nt)					Water Stai	ned Leaves (B9)
HYDROLO Wetland Hyd Primary Indica Surface V	Irology Indic ators (any one Vater (A1)	ators:	nt)		Visible on Ae	_		Water Stai Drainage F	ned Leaves (B9) latterns (B10)
HYDROLO Wetland Hyd Primary Indica Surface W High Wat	Irology Indicators (any one Vater (A1) er Table (A2)	ators:	nt)	Sparsely Ve	getated Cond	_		Water Stai Drainage F Oxidized R	ned Leaves (B9) latterns (B10) hizospheres along Living Roots (C3)
HYDROLO Wetland Hyd Primary Indica Surface W High Wate	OGY Irology Indic ators (any one Vater (A1) er Table (A2) n (A3)	ators:	nt)	Sparsely Ve	getated Cond ts (B15)	cave Surfac		Water Stai Drainage F Oxidized R Presence of	ned Leaves (B9) htterns (B10) hizospheres along Living Roots (C3) f Reduced Iron (C4)
HYDROLO Wetland Hyd Primary Indica Surface W High Wate Saturation Water Ma	PGY Irology Indicators (any one Vater (A1) Her Table (A2) In (A3) Harks (B1)	ators: is sufficier	nt)	Sparsely Ve Marl Deposi Hydrogen S	getated Cond ts (B15) ulfide Odor (cave Surfac		Water Stai Drainage F Oxidized R Presence c Salt Depos	ned Leaves (B9) atterns (B10) hizospheres along Living Roots (C3) f Reduced Iron (C4) its (C5)
HYDROLO Wetland Hyd Primary Indica Surface W High Wate Saturation Water Ma Sediment	PGY Irology Indicators (any one Vater (A1) ter Table (A2) in (A3) arks (B1) the Deposits (B2)	ators: is sufficier	nt)	Sparsely Ve Marl Deposi Hydrogen S Dry-Season	getated Cond ts (B15) ulfide Odor (Water Table	cave Surface C1) (C2)		Water Stai Drainage F Oxidized R Presence o Salt Depos Stunted or	ned Leaves (B9) atterns (B10) hizospheres along Living Roots (C3) f Reduced Iron (C4) its (C5) Stressed Plants (D1)
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