WETLAND DETERMINATION DATA FORM - Alaska Region

Projec	t/Site: Susitna-Watana Hydroelectric Project		Boro	ough/City:	Denali Bo	rough Sampling Date: 03-Aug-13
Applica	ant/Owner: Alaska Energy Authority		_			Sampling Point: SW13_T159_01
	gator(s): CTS, AMD		Lar	ndform (hill	side, terrac	e, hummocks etc.): Hillside
	relief (concave, convex, none): flat			ope:	% / 5.6	· · · · · · · · · · · · · · · · · · ·
	gion : Interior Alaska Mountains	l at	_	374643563		Long.: -148.771990657 Datum: NAD83
		. Lai.	. 03.	374043303	01	
	ap Unit Name:				No ○	NWI classification: PSS1B
Are \	matic/hydrologic conditions on the site typical for the selection , Soil , or Hydrology (regetation , Soil , or Hydrology , Soil , or Hydrology MARY OF FINDINGS - Attach site map s	significa naturally	intly di y probl	sturbed? ematic?	Are "N (If nee	(If no, explain in Remarks.) Iormal Circumstances" present? Yes ● No ○ Ided, explain any answers in Remarks.) Iormal Circumstances" present? Yes ● No ○ Ided, explain any answers in Remarks.)
	Hydrophytic Vegetation Present? Yes No	\circ				
	, , , ,	\circ				pled Area
	.,	\circ		wi	thin a W	etland? Yes No
Rema	·					
	ETATION - Use scientific names of plants e Stratum	. List all s Absolu	ite [es in the Dominant Species?	•	Dominance Test worksheet: Number of Dominant Species
1.		(0			That are OBL, FACW, or FAC:6(A)
2.			0			Total Number of Dominant Species Across All Strata: 7 (B)
3.			0			Percent of dominant Species
4.			0			That Are OBL, FACW, or FAC: 85.7% (A/B)
5.		(0			Prevalence Index worksheet:
	Total Co	ver: <u>0</u>	_			Total % Cover of: Multiply by:
Sap	ling/Shrub Stratum 50% of Total Cover:	02	0% of	Total Cover:	0	OBL Species 0 x 1 = 0
1.	Betula nana	3	85	✓	FAC	FACW Species 54.1 x 2 = 108.2
2.	Empetrum nigrum		80	✓	FAC	FAC Species 101.1 x 3 = 303.3
3.	Rhododendron tomentosum		 25	✓	FACW	FACU Species8 x 4 =32
4.	Salix pulchra		20		FACW	UPL Species0 x 5 =0
5.	Salix glauca	1	.5		FAC	Column Totals: <u>163.2</u> (A) <u>443.5</u> (B)
6.	Vaccinium uliginosum	1	.0		FAC	
7.	Vaccinium vitis-idaea		4		FAC	Prevalence Index = B/A = 2.718
8.	Picea glauca		4		FACU	Hydrophytic Vegetation Indicators:
9.	Salix reticulata		1		FAC	✓ Dominance Test is > 50%
10.	Arctous ruber		1		FAC	✓ Prevalence Index is ≤3.0
Her	Total Co b Stratum 50% of Total Cover:			Total Cover	: 29	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
1.	Carex stylosa	:	5	✓	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2.	Carex bigelowii		5	~	FAC	¹ Indicators of hydric soil and wetland hydrology must
3.	Bistorta plumosa		4	V	FACU	be present, unless disturbed or problematic.
4.	Petasites frigidus		4		FACW	Plot size (radius, or length x width)
5.	Tephroseris atropurpurea		.1		FAC	% Cover of Wetland Bryophytes
6.	Eriophorum vaginatum		.1		FACW	(Where applicable)
			0			% Bare Ground5
			<u> </u>			Total Cover of Bryophytes
			0			
10.	Total Co					Hydrophytic Vegetation
	i otal Co					
	50% of Total Cover:	9.1 2	:0% of	Total Cover:	3.64	Present? Yes No

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SOIL Sampling Point: SW13_T159_01

Depth	tion: (Describe to	Matrix			Red	ox Featu	res			
(inches)	Color (mo	ist)	%	Color (m	oist)	%	Type ¹	_Loc_2	Texture	Remarks
0-4			100						Hemic Organics	
4-8			100						Fibric Organics	
8-16	5Y	4/1	80	10YR	5/4	20	С	PL	Clay Loam	
						-		-	-	
						-		-		
Type: C=Co	ncentration. D=	Depletion.	RM=Reduce	d Matrix	² Location	: PL=Pore	e Lining. RC	=Root Cha	nnel. M=Matrix	
lydric Soil I	indicators:			Indicate	ors for Pro	blematic	: Hydric S	oils: ³		
_	r Histel (A1)				ka Color Ch		4		Alaska Gleyed Without H	ue 5Y or Redder
	pedon (A2)				ka Alpine sv		-		Underlying Layer	
=	Sulfide (A4)			Alask	a Redox W	/ith 2.5Y F	lue		Other (Explain in Remark	rs)
_ , ,	k Surface (A12)									
Alaska Gle	eyed (A13)						ic vegetation role position r		nary indicator of wetland h	ydrology,
🖊 Alaska Re								•	esent	
Alaska Gle	eyed Pores (A15	5)		4 Give d	etails of co	lor change	e in Remark	(S		
estrictive Lay	er (if present):									0 0
		wor							Hydric Soil Present	? Yes 💿 No 🔾
Type: clay		iyei								
•	y loam, active la	iyei								
Depth (incl		iyei								
Depth (incl emarks: YDROLO	hes): 8, 16									
Depth (incl emarks: YDROLO	hes): 8, 16									cators (two or more are required)
Depth (incl emarks: YDROLO /etland Hyd	hes): 8, 16 OGY Irology Indica	tors:)						Water Stai	ned Leaves (B9)
PDEPTH (incl emarks: YDROLO Vetland Hyd Primary Indica Surface V	DGY Irology Indica ators (any one i	tors:)				erial Image		Water Stai	ned Leaves (B9) atterns (B10)
Pepth (inclease of the content of th	OGY Irology Indica ators (any one i Water (A1) ier Table (A2)	tors:)	☐ Spa	arsely Vege	etated Con	erial Image acave Surfac		☐ Water Stai☐ Drainage F ✓ Oxidized R	ned Leaves (B9) Patterns (B10) hizospheres along Living Roots (C3)
Pepth (incleanable) PDROLO Vetland Hyd Primary Indica Surface V High Wat Saturation	OGY Irology Indica ators (any one i Water (A1) ter Table (A2) n (A3)	tors:)	Spa	arsely Vege rl Deposits	etated Con (B15)	ncave Surfa		Water Stai □ Drainage F ✓ Oxidized R □ Presence o	ned Leaves (B9) Patterns (B10) hizospheres along Living Roots (C3) f Reduced Iron (C4)
Primary Indication Surface V High Wat Saturation Water Ma	DGY Irology Indica ators (any one i Water (A1) ter Table (A2) n (A3) arks (B1)	tors:)	Spa	arsely Vege rl Deposits drogen Suli	etated Con (B15) fide Odor	ncave Surfac			ned Leaves (B9) Patterns (B10) hizospheres along Living Roots (C3) f Reduced Iron (C4) its (C5)
Primary Indication Surface W High Wat Saturation Water Ma Sediment	DGY Irology Indicators (any one in Water (A1) arer Table (A2) n (A3) arks (B1) t Deposits (B2)	tors:)	Spa	arsely Vege rl Deposits drogen Suli y-Season W	etated Con (B15) fide Odor /ater Table	cave Surfac		Water Stai Drainage F Oxidized R Presence c Salt Depos Stunted or	ned Leaves (B9) Patterns (B10) hizospheres along Living Roots (C3) f Reduced Iron (C4) its (C5) Stressed Plants (D1)
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