WETLAND DETERMINATION DATA FORM - Alaska Region

Project	/Site: Susitna-Watana Hydroelectric Project	В	orough/City:	Matanusk	a-Susitna Borough Sampling Date: 07-Aug-13							
Applicant/Owner: Alaska Energy Authority Sampling Point: SW13_T142_01												
	gator(s): WAD, RWM		Landform (hil	ndform (hillside, terrace, hummocks etc.): Hillside								
Local r	elief (concave, convex, none): concave		Slope:	% / 6.2	2 ° Elevation: 136							
Subreo	ion: Interior Alaska Mountains	lat: (63.0914872883 Long.: -148.263257742 Datum: N/									
	p Unit Name:	<u></u>	03.09 1407 200									
			2 V	No ○	NWI classification: PSS1B							
Are V Are V	egetation , Soil , or Hydrology	significantly naturally pr wing sam	/ disturbed? oblematic?	Are "N (If nee	(If no, explain in Remarks.) Iormal Circumstances" present? Yes ● No ○ Iorded, explain any answers in Remarks.) Iorded, explain any answers in Remarks.)							
	Hydrophytic Vegetation Present? Yes No		le	the Sam	nlad Araa							
	Hydric Soil Present? Yes ● No		Is the Sampled Area within a Wetland? Yes No									
	Wetland Hydrology Present? Yes No	W	thin a Wetland? Yes ● No ○									
Rema VEGE	TATION -Use scientific names of plants. L	ist all spe	cies in the	plot.	Dominance Test worksheet:							
T	Shorton	Absolute % Cover	Dominant Species?	Indicator Status	Number of Dominant Species							
1.	e Stratum	0		Status	That are OBL, FACW, or FAC: 3 (A)							
2.					Total Number of Dominant							
3.					Species Across All Strata: 4 (B)							
4.		0			Percent of dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)							
5.												
	Total Cover				Prevalence Index worksheet:							
San	ling/Shrub Stratum 50% of Total Cover:		of Total Cover	: 0	Total % Cover of: Multiply by: OBL Species 0 x 1 = 0							
Зар			_									
	Cassiope tetragona		✓	FACU								
	Salix polaris			FACW								
	Salix reticulata			FAC	FACU Species 17 x 4 = 68 UPL Species 8 x 5 = 40							
4.	Dryas ajanensis			UPL FAC								
5.	Vaccinium uliginosum			FAC	Column Totals: 91.1 (A) 285.3 (B)							
6. 7.		٥			Prevalence Index = B/A = 3.132							
					Undershit Variation Indicators							
8. 9.		•			Hydrophytic Vegetation Indicators: ✓ Dominance Test is > 50%							
4.0		- 0			Prevalence Index is ≤ 3.0							
	Total Cover 50% of Total Cover:	53	of Total Cove	r: 10.6	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)							
1.	Carex microchaeta	15	✓	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)							
2.	Carex bigelowii		✓	FAC	¹ Indicators of hydric soil and wetland hydrology must							
3.	Petasites frigidus			FACW	be present, unless disturbed or problematic.							
4.	Artemisia norvegica			FACU	Diet size (radius au les eth muidth)							
5.	Dodecatheon frigidum	-		FACW	Plot size (radius, or length x width) Modern Cover of Wetland Bryophytes							
6.	Poa arctica	0.1		FAC	(Where applicable)							
7.		0			% Bare Ground							
8.		0			Total Cover of Bryophytes 10							
9.												
10.		0			Hydrophytic							
	Total Cover 50% of Total Cover:		of Total Cover	7.62	Vegetation Present? Yes ● No ○							
Rem	arks: patches of bare soil and water 10 percent .											

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SOIL Sampling Point: SW13_T142_01

Profile Descript	ion: (Describe to	the depth ne	eded to docum	nent the indicator or co	nfirm the at	sence of indic	ators)		10mc. 51115_		
	IOII. (Describe w	Matrix	eucu to docum		dox Featu		duisj				
Depth (inches)	Color (moist)		%	Color (moist)	%	Type ¹	_Loc_2	Texture	Remarks		
0-3			100					Fibric Organics			
3-4			100		-			Hemic Organics			
4-12	10YR	3/3	100		-			Sapric Organics	with sand and silt		
					- —						
	-										
Type: C=Co	ncentration. D	=Depletion	. RM=Reduce	ed Matrix ² Location	n: PL=Por	e Lining. RC	=Root Cha	nnel. M=Matrix			
Hydric Soil I	ndicators:			Indicators for Pr	oblemati	c Hydric So	oils: ³				
	r Histel (A1)			Alaska Color Ch		4		Alaska Gleyed Without H	ue 5Y or Redder		
✓ Histic Epip	` '			Alaska Alpine swales (TA5)				Underlying Layer			
Hydrogen	Sulfide (A4)			Alaska Redox V	Nith 2.5Y I	Hue		Other (Explain in Remark	rs)		
Thick Darl	k Surface (A12	2)		3 One indicator of	: hudranhu	tia vaaatatia		aam, indicator of watland b	v dvology		
Alaska Gle	eyed (A13)			and an appropriat	nyaropnyi te landsca	nc vegetation r pe position r	n, one prin nust be pre	nary indicator of wetland hesent	уагоюду,		
Alaska Red	` '			4 Give details of co	olor chand	e in Remark	rc ·				
☐ Alaska Gle	eyed Pores (A1	15)		GIVE details of ex	Jior criarig	e iii Remark					
Restrictive Laye	er (if present)	:									
Type:								Hydric Soil Present	? Yes ⊙	No O	
Depth (inch	nes):										
Remarks:											
rock at base of	pit										
HYDROLO	G <u>Y</u>										
Wetland Hyd	rology Indic	ators:						Secondary Indi	cators (two or mo	re are required)	
Primary Indica		is sufficient	t)					Water Stained Leaves (B9)			
✓ Surface Water (A1)				Inundation Visible on Aerial Imagery (B7)				✓ Drainage Patterns (B10) ○ Oxidized Rhizospheres along Living Roots (○ Presence of Reduced Iron (C4) ○ Salt Deposits (C5) ○ Stunted or Stressed Plants (D1)			
✓ High Water Table (A2)				Sparsely Vegetated Concave Surface (B8)							
✓ Saturation (A3)				Marl Deposits (B15)							
Water Marks (B1)				☐ Hydrogen Sulfide Odor (C1)☐ Dry-Season Water Table (C2)							
	Deposits (B2))							,	D1)	
Drift Depo				Other (Explai	in in Rema	ırks)			ic Position (D2)		
	or Crust (B4)								uitard (D3)	•	
Iron Depo	osits (B5) oil Cracks (B6	`							raphic Relief (D4))	
Field Observa)						I AC IICuu	וו ופטן (רסי)		
Surface Water		Yes 🧿	No O	Depth (inche	·s): 1						
Water Table F			No O	Depth (inche	-		Wetlar	nd Hydrology Presen	t? Yes 💿	No O	
Saturation Pre					,		1100.0	id 11,41010g, 11022	t: 100 -	110 –	
(includes capi		Yes 💌	No O	Depth (inche	:s): 0						
Describe Recor	ded Data (str	eam gauge,	monitor wel	l, aerial photos, pre	vious inspe	ection) if ava	ailable:				
Remarks:											
water table at the surface, active channels throughout. water probably originates from a seep or spring upslope. impounded in small concavity.											

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