## WETLAND DETERMINATION DATA FORM - Alaska Region

Project	Site: Susitna-Watana Hydroelectric Project		Borough/City:	Matanusk	a-Susitna Borough Sampling Date: 05-Aug-13
Applica	nt/Owner: Alaska Energy Authority			-	Sampling Point: SW13_T113_04
	pator(s): WAD, RWM		Landform (hills	side, terrac	e, hummocks etc.): terraces
	elief (concave, convex, none): concave		Slope:	% / 4.5	
	,	l at ·	-		Long.: -147.629790545 Datum: NAD83
_	ion : Interior Alaska Mountains	Lat	62.770552038	90	
	p Unit Name:			<u> </u>	NWI classification: PSS1B
	natic/hydrologic conditions on the site typical for this ti			● No ○	(If no, explain in Remarks.) ormal Circumstances" present? Yes ● No ○
		-	itly disturbed?		omai orioamotanoco procont.
Are V	egetation . , Soil . , or Hydrology	naturally	problematic?	(If nee	ded, 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 (		Is	the Sam	pled Area
	Wetland Hydrology Present? Yes   No C		wi	thin a W	etland? Yes ○ No ●
			g edge supports	closed dwa	arf birch communities, flat tops hummocky ericaceous.
	describing the flat tops at this site.		3 3		, , , , , , , , , , , , , , , , , , , ,
VEGE	TATION Has associately associated allowers to	ده المادة			
VEGE	<b>TATION</b> - Use scientific names of plants. Li	ist all sp	becies in the	piot.	Dominance Test worksheet:
Two	Stratum	Absolut % Cove		Indicator Status	Number of Dominant Species
1.	: Stratum	0		Status	That are OBL, FACW, or FAC:5(A)
2.			_		Total Number of Dominant
3.			-		Species Across All Strata:5(B)
4.		0			Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
5.			-		
	Total Cover		_		Prevalence Index worksheet:  Total % Cover of: Multiply by:
San	ing/Shrub Stratum 50% of Total Cover:		— 1% of Total Cover:	0	001 0 :
-					
	Vaccinium uliginosum			FAC	FACW Species 12 x 2 = 24 FAC Species 72 x 3 = 216
2.	Vaccinium vitis-idaea	5		FAC	FACU Species 2 x 4 = 8
	Empetrum nigrum			FAC	UPL Species 0 x 5 = 0
	Salix reticulata			FACW	
6.	Salix pulchra			FACW	Column Totals: <u>86</u> (A) <u>248</u> (B)
7.					Prevalence Index = B/A =
_		0			Hydrophytic Vogotation Indicators
9.		0			Hydrophytic Vegetation Indicators:  ✓ Dominance Test is > 50%
10.		0	_ =		✓ Prevalence Index is ≤3.0
10.	Total Cover	: 60	_		Morphological Adaptations (Provide supporting data in
Her	Stratum 50% of Total Cover:		 0% of Total Cover	:12	Remarks or on a separate sheet)
1.	Equisetum sylvaticum	5	$\checkmark$	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2.	Artemisia norvegica			FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3.	Carex bigelowii		<b>~</b>	FAC	be present, unless disturbed or problematic.
4.	Valeriana capitata			FAC	Plot size (radius, or length x width) 10m
5.	Arctagrostis latifolia		✓	FACW	Plot size (radius, or length x width)
6.	Rhodiola integrifolia	2		FAC	(Where applicable)
7.	Dodecatheon pulchellum	1		FACW	% Bare Ground
8.	Petasites frigidus	2	_	FACW	Total Cover of Bryophytes 20
9.	Aconitum delphiniifolium	1		FAC	
10.	Festuca altaica	. 3		FAC	Hydrophytic
	Total Cover		_		Vegetation Present?  Yes  No
	50% of Total Cover:	13 20	% of Total Cover:	5.2	Present? Yes • No ·
Rem	bare ground at base of depressions between h sancan 1, sentri .1.	nummocks	S.		

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SOIL Sampling Point: SW13 T113 04

Profile Descript	ion: (Describe to	the depth nee	ded to docume	ent the indi	cator or conf	firm the ab	sence of indic	ators)		
Depth		Matrix				ox Featu			_	
(inches)	Color (mo	ist)	%	Color (mo	oist)	<u>%</u>	Type <sup>1</sup>	<u>Loc</u> 2	Texture	Remarks
0-3			100						Fibric Organics	
3-4			100						Hemic Organcis	
4-14	5Y	3/1	80	5YR	3/4	20	RM	PL	Sandy Loam	
	-								-	
Type: C=Co	ncentration. D=		RM=Reduced	d Matrix	Location:	PL=Por	E Lining. RC	=Root Cha	annel. M=Matrix	
Hydric Soil I	ndicators			Indicato	rs for Pro	hlematic	: Hydric So	nile <sup>3</sup>		
	r Histel (A1)				a Color Cha		4	,iis. 	Alaska Gleyed Without Hu	ia SV or Baddar
	pedon (A2)				a Alpine sv		-		Underlying Layer	ie 31 di Reddei
	Sulfide (A4)				a Redox W	•	•		Other (Explain in Remarks	5)
	k Surface (A12)	)								
_	eyed (A13)	,							mary indicator of wetland hy	/drology,
Alaska Re	, , ,			and an a	appropriate	e iandscap	e position r	nust be pro	esent	
Alaska Gle	eyed Pores (A1	5)		4 Give de	etails of co	lor chang	e in Remark	S		
Restrictive Lay	er (if present):									
Type:	. ( ) 7								Hydric Soil Present?	Yes ○ No •
Depth (incl	hes):								,	
Remarks:										
	do not meet re	equirement o	of value and	chroma o	of 4 or mor	e for AK r	edox (A14)			
				-	-	-	, , ,			
HYDROLO	NGY									
HYDROLO Wetland Hyd		tors:							Secondary Indic	ators (two or more are required)
Wetland Hyd										ators (two or more are required)
Wetland Hyd Primary Indica	rology Indica			☐ Inu	ndation Vis	sible on A	erial Image	ry (B7)	Water Stain	ators (two or more are required) led Leaves (B9) atterns (B10)
Wetland Hyd Primary Indica Surface V	rology Indica ators (any one i						erial Image		Water Stain  Drainage Pa	ed Leaves (B9)
Wetland Hyd Primary Indica Surface V	rology Indica ators (any one i Vater (A1) er Table (A2)			Spa		tated Cor	erial Image Icave Surfac		☐ Water Stain☐ Drainage Pa	ed Leaves (B9) atterns (B10)
Wetland Hyd Primary Indica Surface V High Wat	Irology Indica ators (any one i Vater (A1) er Table (A2) n (A3)			Spa	rsely Vege	tated Cor (B15)	cave Surfac		☐ Water Stain☐ Drainage Pa	ed Leaves (B9) atterns (B10) aizospheres along Living Roots (C3) Reduced Iron (C4)
Wetland Hyd Primary Indica Surface V High Wat Saturation Water Ma	Irology Indica ators (any one i Vater (A1) er Table (A2) n (A3)			Spa	rsely Vege I Deposits	tated Cor (B15) îde Odor	cave Surfac		Water Stain     Drainage Pa     ✓ Oxidized Rh     Presence of     Salt Deposit	ed Leaves (B9) atterns (B10) aizospheres along Living Roots (C3) Reduced Iron (C4)
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