## WETLAND DETERMINATION DATA FORM - Alaska Region

Projec	ct/Site: Susitna-Watana Hydroelectric Project		Borough/City:	Matanusk	ka-Susitna Borough Sampling Date: 23-Aug-15
Applic	ant/Owner: Alaska Energy Authority				Sampling Point: SW15_T307_04
	igator(s): WAD, SCB		Landform (h	illside, terrac	ce, hummocks etc.): Swale
	relief (concave, convex, none): hummocky		Slope: 5.		,
	gion : Interior Alaska Mountains	La			Long.: Datum: WGS84
		La			<u> </u>
	ap Unit Name:			<u> </u>	NWI classification: PSS4/3B
	imatic/hydrologic conditions on the site typical for this ti		•	s • No O	(If no, explain in Remarks.)  Normal Circumstances" present? Yes ● No ○
		-	antly disturbed?		
Are	Vegetation . , Soil . , or Hydrology .	natural	ly problematic?	(If nee	eded, explain any answers in Remarks.)
SUM	MARY OF FINDINGS - Attach site map show	wing s	sampling poir	nt locations	s, transects, important features, etc.
	Hydrophytic Vegetation Present? Yes   No C	)			
	Hydric Soil Present? Yes ● No C	)	l:	s the Sam	npled Area
	Wetland Hydrology Present? Yes   No   No   No   No   No   No   No   N		v	vithin a W	/etland? Yes $lacktriangle$ No $lacktriangle$
Rem	narks:		l l		
I (CIII	arks.				
/FG	<b>ETATION</b> -Use scientific names of plants. Li	ct all	snecies in the	nlot	
	ETATION - 03e scientific flames of plants. Li	st an	species in the	piot.	Dominance Test worksheet:
T	a a Shunkuun	Absol % Co		Indicator Status	Number of Dominant Species
1.	ee Stratum	-70 CC	Species:	_ Status	That are OBL, FACW, or FAC: 4 (A)
2.		_	_		Total Number of Dominant
3.		_	— H		Species Across All Strata:5 (B)
4.		_			Percent of dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)
5.		_			
	Total Cover	: -			Prevalence Index worksheet:  Total % Cover of: Multiply by:
Sa	pling/Shrub Stratum 50% of Total Cover:	0	20% of Total Cove	er: 0	001.0
			_		OBL Species 0 x 1 = 0 FACW Species 10.2 x 2 = 20.40
	Empetrum nigrum	_	15 10	FAC	FAC Species 52 x 3 = 156
2. 3.		_		FACU	FACU Species 10 x 4 = 40
4.		_	10 🗸	FACU	UPL Species 0 x 5 = 0
5.		_	5	FAC	
6.	Potula nana	_	2	FAC	Column Totals: <u>72.2</u> (A) <u>216.4</u> (B)
7.		_	0	TAC	Prevalence Index = B/A = 2.997
8.		_	<u> </u>		Hydrophytic Vegetation Indicators:
9.		_	0		Dominance Test is > 50%
			0		✓ Prevalence Index is ≤3.0
	Total Cover	: 5			Morphological Adaptations (Provide supporting data in
Не	rb Stratum 50% of Total Cover:	26	20% of Total Cov	er: <u>10.4</u>	Remarks or on a separate sheet)
1.	Carex bigelowii	_:	20	FAC	Problematic Hydrophytic Vegetation (Explain)
2.	Rubus chamaemorus	(	0.1	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3.	Pedicularis labradorica		0.1	FACW	be present, unless disturbed or problematic.
4		_	0		Plot size (radius, or length x width)
т.	P. Control of the Con		0 📙		% Cover of Wetland Bryophytes
		_			
5.		_	0		(Where applicable)
5. 6. 7.		_	0		
5. 6. 7. 8.		_			(Where applicable)
5. 6. 7. 8. 9.		- -	0		(Where applicable)  % Bare Ground
5. 6. 7. 8. 9.					(Where applicable)  % Bare Ground  Total Cover of Bryophytes  Hydrophytic
5. 6. 7. 8. 9.			0	er: 4,04	(Where applicable)  % Bare Ground  Total Cover of Bryophytes

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SOIL Sampling Point: SW15\_T307\_04

Depth — (inches)	Color (mo	ist)	%	Color (n	noist)	%	Type <sup>1</sup>	_Loc_ <sup>2</sup>	Texture	Remarks
0-3									Peat	
3-5									Mucky Peat	_
 5-9									Muck	_
9-16	10YR	5/3	85%	5GY	3/1	15%		PL	Sandy Clay Loam	thixotropic, gleys are sand around large
										pebbles
Type: C=Conce	entration. D=	-Depletion	. RM=Redu						annel. M=Matrix	
lydric Soil Ind	licators:				ors for Pro		4	oils:³	_	
Histosol or H	listel (A1)				ka Color Cha		-		Alaska Gleyed Without I Underlying Layer	Hue 5Y or Redder
Histic Epiped	` '				ka Alpine sv	•	,		Other (Explain in Rema	·kc)
☐ Hydrogen Su	. ,			∟ Alas	ka Redox W	itn 2.5Y F	iue		J Other (Explain in Kemai	13)
☐ Thick Dark S		)		<sup>3</sup> One i	ndicator of h	nydrophyt	ic vegetatio	n, one prir	mary indicator of wetland	hydrology,
<ul><li> Alaska Gleye</li><li> Alaska Redox</li></ul>				and an	appropriate	landscap	e position i	must be pro	esent	
Alaska Gleye	` '	5)		4 Give	details of col	lor change	e in Remark	(S		
estrictive Layer (	•	-,								
Scriedite Layer (	(ii present).									t? Yes • No O
Type: sandy	clay loam								Hydric Soil Presen	T? YPS (*) NO ( )
Type: sandy Depth (inches	•								Hydric Soil Presen	t? Yes © No C
Depth (inches emarks: ineral soils bene	eath organics	s not chron	na 2 or less	, but high	confidence i	n hydric s	oil due to p	orimary wet		, landscape position, low slope angle
Depth (inchesemarks:	eath organics	s not chron	na 2 or less	, but high	confidence i	n hydric s	oil due to p	orimary wet		
Depth (inches emarks: ineral soils bene	eath organics regetation.	s not chron	na 2 or less	, but high	confidence i	n hydric s	oil due to p	orimary wet		
Depth (inches emarks: ineral soils bene nd hydrophytic v	s): 9 eath organics vegetation.		na 2 or less	, but high	confidence i	n hydric s	oil due to p	orimary wet	tland hydrology indicators	
Depth (inches emarks: ineral soils bene nd hydrophytic v	eath organics vegetation.	tors:		, but high	confidence i	n hydric s	oil due to p	orimary wet	tland hydrology indicators	, landscape position, low slope angle
Depth (inches emarks: ineral soils bene hd hydrophytic v	eath organics vegetation.  SY  logy Indica	tors:			confidence i				Secondary Inc.  Water Sta	, landscape position, low slope angle
Depth (inches emarks: ineral soils bene ind hydrophytic v  YDROLOG //etland Hydrol	eath organics vegetation.  SY  logy Indica rs (any one inter (A1)	tors:		In		sible on A	erial Image	ry (B7)	Secondary Inc.  Secondary Inc.  Water Sta	, landscape position, low slope angle licators (two or more are required) lined Leaves (B9)
Depth (inches emarks: ineral soils bene d hydrophytic v  YDROLOG /etland Hydrol /rimary Indicator Surface Wat  High Water Saturation (A	eath organics vegetation.  SY  logy Indica rs (any one inter (A1)  Table (A2)  A3)	tors:		In	undation Vis	sible on A	erial Image	ry (B7)	Secondary Inc.  Secondary Inc.  Water Sta.  Drainage  Oxidized  Presence	, landscape position, low slope angle licators (two or more are required) sined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3 of Reduced Iron (C4)
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