## WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project	Во	rough/City:	Matanusk	a-Susitna Borough Sampling Date: 03-Jul-13								
Applicant/Owner: Alaska Energy Authority				Sampling Point: SW13_T106_03								
Investigator(s): WAD, BAB Landform (hillside, terrace, hummocks etc.): Toeslope												
Local relief (concave, convex, none): concave		Slope:	%/ 3.9									
Subregion : Interior Alaska Mountains	Lat 6	2.881566166		Long.: -148.583896876 Datum: NAD83								
Soil Map Unit Name:												
			• No ()	NWI classification: PEM1F								
Are climatic/hydrologic conditions on the site typical for this Are Vegetation , Soil , or Hydrology Are Vegetation , Soil , or Hydrology SUMMARY OF FINDINGS - Attach site map sho	significantly naturally pro	disturbed? blematic?	Are "N (If nee	(If no, explain in Remarks.) ormal Circumstances" present? Yes ● No ○ ded, explain any answers in Remarks.) s, transects, important features, etc.								
Hydrophytic Vegetation Present? Yes No												
Hydric Soil Present? Yes  No	the Sam	npled Area										
Wetland Hydrology Present? Yes  No (	)	wi	thin a W	/etland? Yes $ullet$ No $igloodow$								
Remarks: forb meadow in toeslope on bench above creek. 969 photo num 13,19 time												
VEGETATION - Use scientific names of plants. I	<u>ist all spec</u>	cies in the	plot.									
	Absolute	Dominant		Dominance Test worksheet:								
Tree Stratum	<u>% Cover</u>	Species?	Status	Number of Dominant Species That are OBL, FACW, or FAC: 5 (A)								
	0			Total Number of Dominant								
2				Species Across All Strata:5_ (B)								
3.				Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)								
4 5	0			That Are OBL, FACW, or FAC: (A/B)								
Total Cove				Prevalence Index worksheet:								
		of Total Cover:	0	Total % Cover of: Multiply by:								
Sapling/Shrub Stratum 50% of Total Cover:	20/80		0	OBL Species <u>105</u> x 1 = <u>105</u>								
1. Salix pulchra	5		FACW	FACW Species $5 \times 2 = 10$								
2. Salix barclayi	10		FAC	FAC Species <u>25</u> x 3 = <u>75</u>								
3. Salix hastata			FAC	FACU Species $0 \times 4 = 0$								
4.				UPL Species x 5 =								
5				Column Totals: <u>135</u> (A) <u>190</u> (B)								
6.				Prevalence Index = B/A =1.407								
7												
8				Hydrophytic Vegetation Indicators: ✓ Dominance Test is > 50%								
9.												
10				✓ Prevalence Index is ≤3.0								
Herb Stratum 50% of Total Cover:		of Total Cover	: 5	Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)								
1. Equisetum fluviatile	50	$\checkmark$	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)								
2. Comarum palustre	50	$\checkmark$	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must								
3. Eriophorum angustifolium	5		OBL	be present, unless disturbed or problematic.								
4. Calamagrostis canadensis	5		FAC	Plot size (radius, or length x width)								
5	0			Plot size (radius, or length x width) <u>10m</u> % Cover of Wetland Bryophytes <u>65</u>								
6	•			(Where applicable)								
7	0			% Bare Ground								
8	0			Total Cover of Bryophytes65								
9												
10	0			Hydrophytic								
Total Cove		f Total Course	22	Vegetation Present? Yes  No								
50% of Total Cover:	<u> </u>	n Total Cover:	22									
Remarks:												

SOIL
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Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)          Matrix       Redox Features							ators)			
Depth (inches)	Color (mois		0/-			Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
	Color (mois		%	Color (moist)	%	Туре	LOC	Texture	Keindriko	
	. <u> </u>									
	. <u> </u>									
	. <u> </u>									
<sup>1</sup> Type: C=Co	ncentration. D=[	Depletion. R	M=Reduce	d Matrix <sup>2</sup> Location	: PL=Pore	e Lining. RC	C=Root Chai	nnel. M=Matrix		
Hydric Soil I	ndicators:			Indicators for Pro	oblematic	Hydric S	oils: <sup>3</sup>			
Histosol o	r Histel (A1)			🗌 Alaska Color Ch	ange (TA4	ł) <b>*</b>		Alaska Gleyed Without H	ue 5Y or Redder	
Histic Epip	oedon (A2)			Alaska Alpine sv	vales (TA5	5)	_	Underlying Layer		
Hydrogen	Sulfide (A4)			🗌 Alaska Redox W	/ith 2.5Y H	lue	$\checkmark$	Other (Explain in Remark	s)	
Thick Darl	k Surface (A12)									
🗌 Alaska Gle	eyed (A13)			<sup>3</sup> One indicator of I and an appropriate				hary indicator of wetland h	ydrology,	
🗌 Alaska Ree	dox (A14)				e lanuscap	e position i	nust be pre	Sent		
	eyed Pores (A15)	1		<sup>4</sup> Give details of co	lor change	e in Remarl	s			
Restrictive Laye	er (if present):									
-	rmittent seasona	al frost						Hydric Soil Present	? Yes 🖲 No 🔾	
Depth (incl										
Remarks:										
	a aaila aiwan flaa	ding and au	-	ia lavar. Challau iaa	longon et	ill procent i	n natahaa h	need on probing		
Assumed flyuri	c solis given noo	ung and su	fiace organ	nic layer. Shallow ice	e lenses su	iii present i	n patches b	ased on probing		
HYDROLO	GY									
Wetland Hyd	rology Indicat	ors:						Secondary Indi	cators (two or more are required)	
Primary Indica	ators (any one is	sufficient)						Water Stai	ned Leaves (B9)	
✓ Surface V	Vater (A1)			Inundation Vision	sible on A	erial Image	ry (B7)	🗌 Drainage F	atterns (B10)	
🖌 High Wat	✓ High Water Table (A2)							hizospheres along Living Roots (C3)		
✓ Saturation	Saturation (A3)							Presence o	f Reduced Iron (C4)	
🗌 Water Ma									its (C5)	
Sediment	Sediment Deposits (B2)							_	Stressed Plants (D1)	
	Drift Deposits (B3)							Geomorphic Position (D2)		
Algal Mat	Algal Mat or Crust (B4)								uitard (D3)	
Iron Depo	Iron Deposits (B5)								raphic Relief (D4)	
	oil Cracks (B6)							FAC-neutra	l Test (D5)	
Field Observa	ations:									
Surface Wate		Yes 🖲	No $\bigcirc$	Depth (inches	s): 2					
Water Table F		Yes 🖲	No O	Depth (inches	-		Wetlar	nd Hydrology Presen	t? Yes 🖲 No 🔾	
Saturation Pre		Yes •			,					
(includes capi				Depth (inches						
Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspection) if available:										
Remarks:										
	n patches inter	spersed with	i moss satu	rated substrates.						
Surface Mater	in pateries, inter	persea ma	111055 5444							