## WETLAND DETERMINATION DATA FORM - Alaska Region

Project	Site: Susitna-Watana Hydroelectric Project		Borough/City:	Matanusk	a-Susitna Borough Sampling Date: 11-Jul-13
Applica	nt/Owner: Alaska Energy Authority				Sampling Point: SW13_T126_12
Investig	jator(s): SLI. SCB		Landform (h	illside, terrac	e, hummocks etc.): Floodplain
Local re	elief (concave, convex, none): undulating		Slope:	%/ 6.0	elevation: 715
Subrea	ion - Southcontrol Alcoko	Lat	 		Long : 140.281010525 Datum: NAD83
		Lai.	02.00090222	224	Long149.381010325 Datum. 19.000
Soli Ma					NWI classification: Upland
Are clin Are V Are V SUMN	natic/hydrologic conditions on the site typical for this ti egetation □ , Soil □ , or Hydrology □ egetation □ , Soil ☑ , or Hydrology □ MARY OF FINDINGS - Attach site map sho	me of ye significa naturally wing sa	ear? Yes ntly disturbed? problematic? ampling poin	Are "N (If nee t locations	(If no, explain in Remarks.) lormal Circumstances" present? Yes ● No ○ loded, explain any answers in Remarks.) s, transects, important features, etc.
	Hydrophytic Vegetation Present? Yes Vol No	)	ls	s the Sam	pled Area
	Hydric Soil Present? Yes V No	> \	v	vithin a W	etland? Yes $\bigcirc$ No $\bigcirc$
Rema	rks: seasonally flooded riparian willow community dor	ninated	by tall salix alay	kensis	
VEGE	<b>TATION</b> - Use scientific names of plants. Li	<u>st all s</u>	pecies in the	e plot.	Dominance Test worksheet:
Tree	Shushum		te Dominant	Indicator	Number of Dominant Species
1 1	Salix alaxensis	<u>-% COV</u>		EAC	That are OBL, FACW, or FAC: <u>3</u> (A)
2					Total Number of Dominant
3				FACU	Species Across All Strata:6(B)
4					Percent of dominant Species That Are OBL_EACW_or EAC: 50.0% (A/B)
5					
0.	Total Cover		<u> </u>		Prevalence Index worksheet:
Com	ling /Shruh Stratum 50% of Total Cover	·	— 0% of Total Cove	r. 11	Total % Cover or: Multiply by:
Japi		5.5 2		1.4	OBL Species $0 \times 1 = 0$
1.	Salix alaxensis	7	0	FAC	FACW Species $0 \times 2 = 0$
2.	Oplopanax horridus	1	<u> </u>	FACU	FAC Species $91 \times 3 = 273$
3.					FACU Species <u>69</u> $\times 4 = 276$
4.		C			UPL Species $0 \times 5 = 0$
5.					Column Totals: <u>160</u> (A) <u>549</u> (B)
6.					Prevalence Index = $B/A = 3.431$
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Dominance Test is > 50%
10.					Prevalence Index is $\leq 3.0$
Herl	Total Cover           o Stratum         50% of Total Cover:	80 <u>40</u> 2	0% of Total Cove	er: <u>16</u>	Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
1.	Heracleum maximum	_2	5 🖌	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2.	Dryopteris expansa	1	5 🖌	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3.	Equisetum arvense	1	5 🖌	FAC	be present, unless disturbed or problematic.
4.	Streptopus amplexifolius	5		FACU	Plot size (radius, or length x width)
5.	Gymnocarpium dryopteris	5		FACU	% Cover of Wetland Bryonbytes
6.	Chamaenerion angustifolium	5		FACU	(Where applicable)
7.	Mertensia paniculata	2		FACU	% Bare Ground
8.	Aconitum delphiniifolium	1		FAC	Total Cover of Bryophytes
9.					
10.					Hydrophytic
	Total Cover	73			Vegetation Present? Ves No (•)
	50% of Total Cover:	36.5 2	U% of Total Cove	r: <u>14.6</u>	
Rem	arks: streamside thicket of tall willows, mostly (all?)	salala. s	shrub growth fo	rm up to 20f	t tall, only a few >3in dbh. very scattered large popbal.

US Army Corps of Engineers

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Dorth		Matrix		Red	ox Featu	res	ators		
(inches)	Color (mo	ist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-2			100					Sapric Organics	
2-5	2.5Y	3/2	100					Silt Loam	
5-8	5Y	5/1	100					Sand	well graded
8-9	2.5Y	3/2	100					Silt Loam	
9-16	5Y	2.5/1	100					Sand	well graded w subang gravels - cobbles
1									
- Type: C=Cor	icentration. D=	Depletion.	RM=Reduce	ed Matrix - Location	: PL=Por	e Lining. RC	.=Root Cha	annel. M=Matrix	
Hydric Soil I	ndicators:			Indicators for Pro	oblematio	c Hydric So 4	oils:	7	
Histosol or	Histel (A1)			Alaska Color Ch	ange (TA	4) ->		Alaska Gleyed Without	Hue 5Y or Redder
Histic Epip	edon (A2)			Alaska Alpine sv	vales (TA	o)		Other (Evplain in Roma	
Hydrogen	Sulfide (A4)			Alaska Redox W	ith 2.5Y F	lue			(KS)
Thick Dark	Surface (A12)			<sup>3</sup> One indicator of I	hvdrophyt	ic vegetatio	n, one prir	mary indicator of wetland	hydrology.
Alaska Gle	yed (A13)			and an appropriate	e landscap	be position r	nust be pr	esent	,
Alaska Rec	lox (A14)	-\		<sup>4</sup> Give details of co	lor chang	e in Remark	S		
	yed Pores (A1	)							
Restrictive Laye	er (if present):								
Type:								Hydric Soil Presen	it? Yes 🔾 No 🔍
Depth (Inch	ies):								
very little organ soil criteria.	iic content, ins	ufficient for	redox featu	ıre development. do	not believ	e this site h	as problen	natic hydrophytic vegetati	ion, cannot apply problematic hydric
HYDROLO	GY								
HYDROLO Wetland Hydr	GY rology Indica	tors:						Secondary Inc	dicators (two or more are required)
HYDROLO Wetland Hydr	GY rology Indica tors (any one	<b>tors:</b> s sufficient)						Secondary Inc	dicators (two or more are required) ained Leaves (B9)
HYDROLO Wetland Hydr Primary Indica Surface W	GY rology Indica tors (any one /ater (A1)	tors: s sufficient)		Inundation Vi	sible on A	erial Image	ry (B7)	Secondary Ind	dicators (two or more are required) ained Leaves (B9) Patterns (B10)
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HYDROLO Wetland Hydr Primary Indica Surface W High Wate Saturation	GY rology Indica tors (any one dater (A1) er Table (A2) n (A3)	tors: s sufficient)		Inundation Vi Sparsely Vege	sible on A stated Cor (B15)	erial Imagen	ry (B7) ce (B8)	Secondary Ind Water Sta Drainage Oxidized Presence	dicators (two or more are required) ained Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4)
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