WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project	Во	orough/City:	Matanusk	a-Susitna Borough Sampling Date:01-Aug-12									
Applicant/Owner: Alaska Energy Authority													
Investigator(s): SLI, KMK	Sampling Point: SW12_T41_05 e, hummocks etc.): Gulch or Gully												
Local relief (concave, convex, none): concave		Slope: 21.2											
Subregion : Interior Alaska Mountains		32.798099911											
	1												
Soil Map Unit Name: NWI classification: PSS1B Are climatic/hydrologic conditions on the site typical for this time of year? Yes No (If no. explain in Remarks.)													
Are climatic/hydrologic conditions on the site typical for this tir				(If no, explain in Remarks.)									
Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No													
Are Vegetation . , Soil . , or Hydrology . naturally problematic? (If needed, explain any answers in Remarks.)													
SUMMARY OF FINDINGS - Attach site map show	SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.												
Hydrophytic Vegetation Present? Yes ● No C)	_											
Hydric Soil Present? Yes ● No ○)			ppled Area									
Wetland Hydrology Present? Yes No ○)	wi	within a Wetland? Yes $leftilde{left}$ No $lack{igle}$										
Remarks: immediately downslope from PEM1H: open water surrounded by caraqu in 6-12+in water, with heavily used game trails through emergent wetland. This community becomes a steeper, well-defined gully further downslope.													
wedand. This community becomes a steeper, well-defined gally further downstope.													
VEGETATION - Use scientific names of plants. Lis	st all spe	cies in the	plot.										
			-	Dominance Test worksheet:									
Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status	Number of Dominant Species									
Alnus viridis ssp. crispa	20	V	FAC	That are OBL, FACW, or FAC:3(A)									
2.	0			Total Number of Dominant Species Across All Strata: 3 (B)									
3.	0												
4.	0			Percent of dominant Species That Are OBL, FACW, or FAC:									
5.	0			Prevalence Index worksheet:									
Total Cover:	20			Total % Cover of: Multiply by:									
Sapling/Shrub Stratum 50% of Total Cover:	10 20%	of Total Cover:	4	OBL Species 0 x 1 = 0									
4. Alpus viridis con oriens	50	✓	FAC	FACW Species 30 x 2 = 60									
Alnus viridis ssp. crispa Ribes triste			FAC	FAC Species									
2 Description			FACU	FACU Species 16 x 4 = 64									
Rosa acicularis Linnaea borealis	1		FACU	UPL Species 0 x 5 = 0									
5. Rubus idaeus	5	П	FACU										
6.	0			Column Totals: <u>123</u> (A) <u>355</u> (B)									
7.	0			Prevalence Index = B/A = 2.886									
8.	0			Hydrophytic Vegetation Indicators:									
9.	0			✓ Dominance Test is > 50%									
10.	0			✓ Prevalence Index is ≤3.0									
Total Cover:	62			Morphological Adaptations ¹ (Provide supporting data in									
Herb Stratum 50% of Total Cover:	31 20%	of Total Cover	12.4	Remarks or on a separate sheet)									
Cornus canadensis	5		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)									
Rubus arcticus ssp. acaulis	_1_		FAC	¹ Indicators of hydric soil and wetland hydrology must									
3. Arctagrostis latifolia	30	✓	FACW	be present, unless disturbed or problematic.									
4. Trientalis europaea	0.1		FACU	Plot size (radius, or length x width) 2m x 10m									
5. Dryopteris expansa			FACU	% Cover of Wetland Bryophytes									
6. Thalictrum sparsiflorum			FACU	(Where applicable)									
7. Mertensia paniculata			FACU	% Bare Ground									
Cystopteris montana			FAC	Total Cover of Bryophytes <u>15</u>									
9.													
10.	0			Hydrophytic									
Total Cover: 50% of Total Cover: 2		of Total Cover	0 22	Vegetation Present? Yes ● No ○									
Remarks: trace vibedu, lyccla, trieur, phegoptris connectilis, acodel, salgla, viola selkirkii (pubescent above w deep sinus), epilobium sp. collected arclat (different from at other sites) - pressed.													

US Army Corps of Engineers Alaska Version 2.0 SOIL Sampling Point: SW12_T41_05

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators) Redox Features												
Depth (inches)	Color (mois		%	Color (moist)	%	Type ¹	_Loc_2	Texture	Remarks			
0-1	Color (Illois		70	Color (Illoist)	- 70	туре	LUC	Fibric Organics				
1-18								Sapric organics	abundant cobbles to boulders			
1-16								Supric organics	abundant cobbles to boulders			
								-				
	¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix ² Location: PL=Pore Lining. RC=Root Channel. M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: ³											
Hydric Soil I						4	oils:					
✓ Histosol or	r Histel (A1)		Į	Alaska Color C		•						
Histic Epip	edon (A2)		Į	Alaska Alpine s	-	•						
Hydrogen	Sulfide (A4)		Į	Alaska Redox	With 2.5Y F	lue		Other (Explain in Remark	S)			
☐ Thick Dark	Surface (A12)			3.0					d de			
Alaska Gle	eyed (A13)			and an appropria				nary indicator of wetland hesent	yarology,			
Alaska Red	dox (A14)					•						
Alaska Gle	eyed Pores (A15)	1		⁴ Give details of o	color change	e in Remark	KS .					
Restrictive Laye	er (if present):											
Type:								Hydric Soil Present	? Yes ● No O			
Depth (inch	nes):											
refusal at 18in												
HYDROLO	GY											
-	rology Indicat	ors:						Secondary India	cators (two or more are required)			
Primary Indica	tors (any one is	sufficient)							ned Leaves (B9)			
Surface W	/ater (A1)			☐ Inundation \	/isible on A	erial Image	ry (B7)	☐ Drainage P	atterns (B10)			
☐ High Wate	er Table (A2)			Sparsely Ved	getated Cor	cave Surfac	ce (B8)	(B8) Oxidized Rhizospheres along Living Roots (C3)				
☐ Saturation	n (A3)			Marl Deposit	s (B15)		. ,	Presence of Reduced Iron (C4)				
☐ Water Ma	rks (B1)			Hydrogen Su	ılfide Odor	(C1)		Salt Deposits (C5)				
Sediment Deposits (B2) Dry-Season Water Table (C2)									Stressed Plants (D1)			
☐ Drift Deposits (B3) ☐ Other (Explain in Remarks)								✓ Geomorphi	c Position (D2)			
Algal Mat	Algal Mat or Crust (B4)											
☐ Iron Deposits (B5)								Microtopog	raphic Relief (D4)			
Surface S	oil Cracks (B6)							✓ FAC-neutra	I Test (D5)			
Field Observa	ations:											
Surface Water	r Present?	Yes \bigcirc	No 💿	Depth (inch	es):							
Water Table P	Present?	Yes 🔾	No 💿	Donth (inch	, ,		Wetla	nd Hydrology Presen	t? Yes • No O			
Saturation Pre				Depth (inch	25):		VV CCIU	na rryarology i resen	c. ics a no a			
(includes capi		Yes O	No 🖭	Depth (inche	es):							
Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspection) if available:												
Domarke:												
Remarks:		no DEM411			الممادة عامان	a naa		a flour honouth	see separal remarks 5-:			
				face at western ed s plot are moist, b			, appears t	o flow beneath community	. see general remarks for			
accomption of t	-p and action)	.c reatures.	Jone at all	s plot are moist, b	at not satu							

U.S. Army Corps of Engineers Alaska Version 2.0