WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric P	roject	Borough/City:	Matanusk	a-Susitna Borough Sampling Date:	26-Aug-15
Applicant/Owner: Alaska Energy Authority				Sampling Point: S	W15_T309_02
nvestigator(s): JGK	Landform (hillside, terrace, hummocks etc.): Bench				
ocal relief (concave, convex, none): concave	e	_ Slope: 1.7	% / 1.0	° Elevation:	
Subregion : Interior Alaska Mountains	Lat.:			Long.:	Datum: WGS84
oil Map Unit Name:				NWI classification: PEM1/	
		0 V	● No ○		SS1F
Are climatic/hydrologic conditions on the site type Are Vegetation , Soil , or Hydro Are Vegetation , Soil , or Hydro , Soil , or Hydro , Soil , or Hydro	ology Significan	ntly disturbed? problematic?	Are "N (If nee	(If no, explain in Remarks.) formal Circumstances" present? Yes ided, explain any answers in Remarks.) s, transects, important features,	
Hydrophytic Vegetation Present? Yes				•	
Hydric Soil Present? Yes	Is the Sampled Area				
Hydric Soil Present? Yes ● No ○ Wetland Hydrology Present? Yes ● No ○		within a Wetland? Yes ● No ○			
Remarks: Small stream flowing to the west at i					
/EGETATION - Use scientific names o	· · · · · · · · · · · · · · · · · · ·			Dominance Test worksheet:	
Tree Stratum	Absolut % Cove		Indicator Status	Number of Dominant Species	
1.	-		-	That are OBL, FACW, or FAC:	(A)
2.				Total Number of Dominant Species Across All Strata:	2 (B)
3.				Percent of dominant Species	
4.					100.0% (A/B)
5.				Prevalence Index worksheet:	
	Total Cover: 0	_		Total % Cover of: Multiply	bv:
Sapling/Shrub Stratum 50% of Total	al Cover: <u>0</u> 20	% of Total Cover	:0	OBL Species 67 x 1 =	67
4 Designate fruitiones	25	~	FAC	FACW Species 4 x 2 =	8
2 Detule none		- =	FAC	FAC Species 27 x 3 =	
2 A - d (IAAA)		_	OBL	FACU Species 0 x 4 =	0
4 Diagram ()			FACW	UPL Species 0 x 5 =	0
<u> </u>			171011		
6.	•		-	Column Totals: 98 (A)	<u>156</u> (B)
7.				Prevalence Index = B/A =	1.592
8		-		Hydrophytic Vegetation Indicators:	
9.	0			✓ Dominance Test is > 50%	
10.				✓ Prevalence Index is ≤3.0	
	 0% of Total Cove	r: 6	Morphological Adaptations (Provide Remarks or on a separate sheet)	supporting data in	
Carex aquatilis	35	_	OBL	Problematic Hydrophytic Vegetation	
			OBL	¹ Indicators of hydric soil and wetland hydr	ology must
		_	OBL	be present, unless disturbed or problemat	IC.
4. Carex rariflora		_	OBL	Plot size (radius, or length x width)	_10m
	5	_	OBL	% Cover of Wetland Bryophytes	
	2		FACW	(Where applicable)	
7. Parnassia palustris			FACW	% Bare Ground	_35
8		- =		Total Cover of Bryophytes	_30
9.		- =			
10.				Hydrophytic	
Total Cover: <u>68</u> 50% of Total Cover: <u>34</u> 20% of Total Cover: <u>13.6</u>				Vegetation Present? Yes • No •	
	34 20	770 OF TOTAL COVER	13.6		
Remarks: Bare ground is mostly water					

US Army Corps of Engineers Alaska Version 2.0

SOIL Sampling Point: SW15_T309_02 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators) **Redox Features** Depth <u>Loc</u> 2 (inches) Color (moist) Color (moist) Type ¹ ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix ² Location: PL=Pore Lining, RC=Root Channel, M=Matrix Indicators for Problematic Hydric Soils: **Hydric Soil Indicators:** Histosol or Histel (A1) Alaska Color Change (TA4) ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer Alaska Alpine swales (TA5) Histic Epipedon (A2) Alaska Redox With 2.5Y Hue U Other (Explain in Remarks) ✓ Hydrogen Sulfide (A4) Thick Dark Surface (A12) ³ One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, Alaska Gleved (A13) and an appropriate landscape position must be present Alaska Redox (A14) ⁴ Give details of color change in Remarks Alaska Gleyed Pores (A15) Restrictive Layer (if present): Yes ● No ○ Type: **Hydric Soil Present?** Depth (inches): Remarks: No soil pit dug-- surface water. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (two or more are required) Primary Indicators (any one is sufficient) Water Stained Leaves (B9) ✓ Surface Water (A1) Drainage Patterns (B10) ☐ Inundation Visible on Aerial Imagery (B7) ✓ High Water Table (A2) Oxidized Rhizospheres along Living Roots (C3) Sparsely Vegetated Concave Surface (B8) ✓ Saturation (A3) Presence of Reduced Iron (C4) Marl Deposits (B15) Water Marks (B1) Salt Deposits (C5) ✓ Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Dry-Season Water Table (C2) Stunted or Stressed Plants (D1) Drift Deposits (B3) Other (Explain in Remarks) Geomorphic Position (D2) Algal Mat or Crust (B4) Shallow Aquitard (D3) ☐ Iron Deposits (B5) Microtopographic Relief (D4) Surface Soil Cracks (B6) ✓ FAC-neutral Test (D5)

W High Water Table (A2)
Sparsely Vegetated Concave Surface (B8)
Oxidized Rhizospheres along Living Roots (C3)

Saturation (A3)
Marl Deposits (B15)
Presence of Reduced Iron (C4)

Water Marks (B1)
W Hydrogen Sulfide Odor (C1)
Salt Deposits (C5)

Sediment Deposits (B2)
Dry-Season Water Table (C2)
Stunted or Stressed Plants (D1)

Drift Deposits (B3)
Geomorphic Position (D2)

Algal Mat or Crust (B4)
Shallow Aquitard (D3)

Iron Deposits (B5)
Microtopographic Relief (D4)

Surface Soil Cracks (B6)
FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): 0

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspection) if available:

Remarks:

U.S. Army Corps of Engineers Alaska Version 2.0