

WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project Borough/City: Matanuska-Susitna Borough Sampling Date: 30-Jul-13
 Applicant/Owner: Alaska Energy Authority Sampling Point: **SW13_T172_08**
 Investigator(s): WAD, RWM Landform (hillside, terrace, hummocks etc.): Hillside
 Local relief (concave, convex, none): concave Slope: % / 2.8 ° Elevation: 880
 Subregion: Interior Alaska Mountains Lat.: 63.2775344849 Long.: -148.255155922 Datum: NAD83
 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 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 showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

VEGETATION -Use scientific names of plants. List all species in the plot.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum				
1. _____	0	<input type="checkbox"/>	_____	
2. _____	0	<input type="checkbox"/>	_____	
3. _____	0	<input type="checkbox"/>	_____	
4. _____	0	<input type="checkbox"/>	_____	
5. _____	0	<input type="checkbox"/>	_____	
Total Cover:		0		
Sapling/Shrub Stratum				
	50% of Total Cover: 0	20% of Total Cover: 0		
1. <u>Salix pulchra</u>	45	<input checked="" type="checkbox"/>	FACW	
2. <u>Salix barclayi</u>	10	<input type="checkbox"/>	FAC	
3. <u>Salix reticulata</u>	30	<input checked="" type="checkbox"/>	FAC	
4. <u>Vaccinium uliginosum</u>	55	<input checked="" type="checkbox"/>	FAC	
5. _____	0	<input type="checkbox"/>	_____	
6. _____	0	<input type="checkbox"/>	_____	
7. _____	0	<input type="checkbox"/>	_____	
8. _____	0	<input type="checkbox"/>	_____	
9. _____	0	<input type="checkbox"/>	_____	
10. _____	0	<input type="checkbox"/>	_____	
Total Cover:		140		
Herb Stratum				
	50% of Total Cover: 70	20% of Total Cover: 28		
1. <u>Arctagrostis latifolia</u>	5	<input checked="" type="checkbox"/>	FACW	
2. <u>Carex aquatilis</u>	10	<input checked="" type="checkbox"/>	OBL	
3. <u>Equisetum arvense</u>	5	<input checked="" type="checkbox"/>	FAC	
4. <u>Cornus suecica</u>	5	<input checked="" type="checkbox"/>	FAC	
5. _____	0	<input type="checkbox"/>	_____	
6. _____	0	<input type="checkbox"/>	_____	
7. _____	0	<input type="checkbox"/>	_____	
8. _____	0	<input type="checkbox"/>	_____	
9. _____	0	<input type="checkbox"/>	_____	
10. _____	0	<input type="checkbox"/>	_____	
Total Cover:		25		
	50% of Total Cover: 12.5	20% of Total Cover: 5		

Dominance Test worksheet:
 Number of Dominant Species That are OBL, FACW, or FAC: 7 (A)
 Total Number of Dominant Species Across All Strata: 7 (B)
 Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:
 Total % Cover of: Multiply by:
 OBL Species 10 x 1 = 10
 FACW Species 50 x 2 = 100
 FAC Species 105 x 3 = 315
 FACU Species 0 x 4 = 0
 UPL Species 0 x 5 = 0
 Column Totals: 165 (A) 425 (B)
 Prevalence Index = B/A = 2.576

Hydrophytic Vegetation Indicators:
 Dominance Test is > 50%
 Prevalence Index is ≤ 3.0
 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Plot size (radius, or length x width) 10m
 % Cover of Wetland Bryophytes (Where applicable) _____
 % Bare Ground _____
 Total Cover of Bryophytes _____

Hydrophytic Vegetation Present? Yes No

Remarks:

SOIL

Sampling Point: SW13_T172_08

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix		Redox Features				Texture	Remarks	
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²			
0-6		100					Fibric Organics		
6-20	5Y	3/1	80	7.5YR	4/4	20	C	PL	Sandy Loam

¹Type: C=Concentration. D=Depletion. RM=Reduced Matrix ² Location: PL=Pore Lining. RC=Root Channel. M=Matrix

Hydric Soil Indicators:

Histosol or Histel (A1)
 Histic Epipedon (A2)
 Hydrogen Sulfide (A4)
 Thick Dark Surface (A12)
 Alaska Gleyed (A13)
 Alaska Redox (A14)
 Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils:³

Alaska Color Change (TA4)⁴
 Alaska Alpine swales (TA5)
 Alaska Redox With 2.5Y Hue
 Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
 Other (Explain in Remarks)

³ One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present
⁴ Give details of color change in Remarks

Restrictive Layer (if present):
 Type:
 Depth (inches):

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one is sufficient)

Surface Water (A1) Inundation Visible on Aerial Imagery (B7)
 High Water Table (A2) Sparsely Vegetated Concave Surface (B8)
 Saturation (A3) Marl Deposits (B15)
 Water Marks (B1) Hydrogen Sulfide Odor (C1)
 Sediment Deposits (B2) Dry-Season Water Table (C2)
 Drift Deposits (B3) Other (Explain in Remarks)
 Algal Mat or Crust (B4)
 Iron Deposits (B5)
 Surface Soil Cracks (B6)

Secondary Indicators (two or more are required)

Water Stained Leaves (B9)
 Drainage Patterns (B10)
 Oxidized Rhizospheres along Living Roots (C3)
 Presence of Reduced Iron (C4)
 Salt Deposits (C5)
 Stunted or Stressed Plants (D1)
 Geomorphic Position (D2)
 Shallow Aquitard (D3)
 Microtopographic Relief (D4)
 FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches):
 Water Table Present? Yes No Depth (inches):
 Saturation Present? Yes No Depth (inches): 8

Wetland Hydrology Present? Yes No

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

Remarks: