

WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project Borough/City: Matanuska-Susitna Borough Sampling Date: 22-Jun-12
 Applicant/Owner: Alaska Energy Authority Sampling Point: SW12_T18_11
 Investigator(s): SLI, EKJ Landform (hillside, terrace, hummocks etc.): Shoreline
 Local relief (concave, convex, none): flat Slope: 5.2 % / 3.0 ° Elevation: 755
 Subregion: Southcentral Alaska Lat.: 62.8488599087 Long.: -149.230019968 Datum: WGS84
 Soil Map Unit Name: _____ NWI classification: **PEM1B**

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 checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks: <u>graminoid community adjacent to lake.</u>	

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

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/>	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	0	<input type="checkbox"/>	_____	
3. _____	0	<input type="checkbox"/>	_____	
4. _____	0	<input type="checkbox"/>	_____	
5. _____	0	<input type="checkbox"/>	_____	
Total Cover: <u>0</u>				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL Species <u>22</u> x 1 = <u>22</u> FACW Species <u>13</u> x 2 = <u>26</u> FAC Species <u>34</u> x 3 = <u>102</u> FACU Species <u>0</u> x 4 = <u>0</u> UPL Species <u>0</u> x 5 = <u>0</u> Column Totals: <u>69</u> (A) <u>150</u> (B) Prevalence Index = B/A = <u>2.174</u>
Sapling/Shrub Stratum	50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>		
1. <u>Empetrum nigrum</u>	7	<input checked="" type="checkbox"/>	FAC	
2. <u>Betula nana</u>	5	<input checked="" type="checkbox"/>	FAC	
3. <u>Andromeda polifolia</u>	2	<input type="checkbox"/>	FACW	
4. <u>Ledum decumbens</u>	3	<input type="checkbox"/>	FACW	
5. <u>Vaccinium uliginosum</u>	5	<input checked="" type="checkbox"/>	FAC	
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: <u>22</u>				
Herb Stratum	50% of Total Cover: <u>11</u>	20% of Total Cover: <u>4.4</u>		
1. <u>Dodecatheon jeffreyi</u>	3	<input type="checkbox"/>	FACW	
2. <u>Rubus chamaemorus</u>	3	<input type="checkbox"/>	FACW	
3. <u>Sanguisorba officinalis</u>	2	<input type="checkbox"/>	FACW	
4. <u>Anemone richardsonii</u>	1	<input type="checkbox"/>	FAC	
5. <u>Deschampsia cespitosa</u>	15	<input checked="" type="checkbox"/>	FAC	
6. <u>Carex adelostoma</u>	5	<input type="checkbox"/>	OBL	
7. <u>Trichophorum caespitosum</u>	7	<input type="checkbox"/>	OBL	
8. <u>Viola adunca</u>	1	<input type="checkbox"/>	FAC	
9. <u>Eriophorum angustifolium</u>	10	<input checked="" type="checkbox"/>	OBL	
10. _____	0	<input type="checkbox"/>	_____	
Total Cover: <u>47</u>				
50% of Total Cover: <u>23.5</u>	20% of Total Cover: <u>9.4</u>			

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 2
 Total Cover of Bryophytes 95

Hydrophytic Vegetation Present? Yes No

Remarks: trace pedicularis and erigeron. desces pressed, unidentified brome. likely underestimated graminoid cover due to standing dead and the fact that many are still developing. carade unidentified sedge, pressed.

SOIL

Sampling Point: **SW12_T18_11**

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		
0-1		100					Fibric Organics	
1-13		100					Hemic Organics	

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): 2
 Water Table Present? Yes No Depth (inches):
 Saturation Present? (includes capillary fringe) Yes No Depth (inches):

Wetland Hydrology Present? Yes No

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

Remarks:
 lacustrine fringe wetland with small areas of standing water throughout site