

WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project Borough/City: Matanuska-Susitna Borough Sampling Date: 26-Jun-12
 Applicant/Owner: Alaska Energy Authority Sampling Point: SW12_T20_06
 Investigator(s): SLI, LMF Landform (hillside, terrace, hummocks etc.): Hillside
 Local relief (concave, convex, none): flat Slope: 17.6 % / 10.0 ° Elevation: 615
 Subregion: Southcentral Alaska Lat.: 62.7290999085 Long.: -148.829679969 Datum: WGS84
 Soil Map Unit Name: _____ NWI classification: Upland

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 type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" 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.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Picea glauca</u>	10	<input checked="" type="checkbox"/>	FACU	Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	0	<input type="checkbox"/>	_____	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. _____	0	<input type="checkbox"/>	_____	Percent of dominant Species That Are OBL, FACW, or FAC: <u>40.0%</u> (A/B)
4. _____	0	<input type="checkbox"/>	_____	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL Species <u>0</u> x 1 = <u>0</u> FACW Species <u>20</u> x 2 = <u>40</u> FAC Species <u>50</u> x 3 = <u>150</u> FACU Species <u>28</u> x 4 = <u>112</u> UPL Species <u>0</u> x 5 = <u>0</u> Column Totals: <u>98</u> (A) <u>302</u> (B) Prevalence Index = B/A = <u>3.082</u>
5. _____	0	<input type="checkbox"/>	_____	
Total Cover:	<u>10</u>			
Sapling/Shrub Stratum	50% of Total Cover: <u>5</u>	20% of Total Cover: <u>2</u>		
1. <u>Betula glandulosa</u>	40	<input checked="" type="checkbox"/>	FAC	
2. <u>Vaccinium uliginosum</u>	10	<input type="checkbox"/>	FAC	
3. <u>Spiraea stevenii</u>	7	<input type="checkbox"/>	FACU	
4. <u>Ledum decumbens</u>	20	<input checked="" type="checkbox"/>	FACW	
5. <u>Picea glauca</u>	5	<input type="checkbox"/>	FACU	
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>82</u>			
Herb Stratum	50% of Total Cover: <u>41</u>	20% of Total Cover: <u>16.4</u>		
1. <u>Cornus canadensis</u>	3	<input checked="" type="checkbox"/>	FACU	
2. <u>Trientalis europaea</u>	3	<input checked="" type="checkbox"/>	FACU	
3. _____	0	<input type="checkbox"/>	_____	
4. _____	0	<input type="checkbox"/>	_____	
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:	<u>6</u>			
50% of Total Cover:	<u>3</u>	20% of Total Cover:	<u>1.2</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 0
 Total Cover of Bryophytes 95

Hydrophytic Vegetation Present? Yes No

Remarks: w scattered peltigera lichens

SOIL

Sampling Point: SW12_T20_06

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

Table with columns: Depth (inches), Matrix (Color (moist), %), Redox Features (Color (moist), %, Type 1, Loc 2), Texture, Remarks. Rows include depths 0-2, 2-5, 5-12, 12-18 with corresponding soil characteristics.

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

Hydric Soil Indicators:

- 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:

- Indicators for Problematic Hydric Soils: Alaska Color Change (TA4), Alaska Gleyed Without Hue 5Y or Redder Underlying Layer, Alaska Alpine swales (TA5), Alaska Redox With 2.5Y Hue, 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:

no hydric soil indicators

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one is sufficient)

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

Secondary Indicators (two or more are required)

- Secondary Indicators: 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
Water Table Present? Yes No
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:

no wetland hydrology indicators