

WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project Borough/City: Matanuska-Susitna Borough Sampling Date: 23-Jun-12
 Applicant/Owner: Alaska Energy Authority Sampling Point: SW12_T10_04
 Investigator(s): SLI, LMF Landform (hillside, terrace, hummocks etc.): Channel (abandoned)
 Local relief (concave, convex, none): concave Slope: 0.0 % / 0.0 ° Elevation: 232
 Subregion: Southcentral Alaska Lat.: 62.7844699086 Long.: -149.664819965 Datum: WGS84
 Soil Map Unit Name: _____ NWI classification: **PEM1E**

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>fine substrate, seasonally flooded PEM wetland.</u>	

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

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum				Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
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: <u>0</u>				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL Species <u>31</u> x 1 = <u>31</u> FACW Species <u>8</u> x 2 = <u>16</u> FAC Species <u>5</u> x 3 = <u>15</u> FACU Species <u>2</u> x 4 = <u>8</u> UPL Species <u>1</u> x 5 = <u>5</u> Column Totals: <u>47</u> (A) <u>75</u> (B) Prevalence Index = B/A = <u>1.596</u>
Sapling/Shrub Stratum		50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	
1. <u>Salix myrtilifolia</u>	5	<input checked="" type="checkbox"/>	FACW	
2. _____	0	<input type="checkbox"/>	_____	
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>5</u>				
Herb Stratum		50% of Total Cover: <u>2.5</u>	20% of Total Cover: <u>1</u>	
1. <u>Carex utriculata</u>	30	<input checked="" type="checkbox"/>	OBL	
2. <u>Phalaris arundinacea</u>	1	<input type="checkbox"/>	OBL	
3. <u>Taraxacum officinale</u>	1	<input type="checkbox"/>	FACU	
4. <u>Equisetum arvense</u>	5	<input type="checkbox"/>	FAC	
5. <u>Equisetum palustre</u>	3	<input type="checkbox"/>	FACW	
6. <u>Galeopsis bifida</u>	1	<input type="checkbox"/>	UPL	
7. <u>Mertensia paniculata</u>	1	<input type="checkbox"/>	FACU	
8. _____	0	<input type="checkbox"/>	_____	
9. _____	0	<input type="checkbox"/>	_____	
10. _____	0	<input type="checkbox"/>	_____	
Total Cover: <u>42</u>				
50% of Total Cover: <u>21</u>		20% of Total Cover: <u>8.4</u>		
Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is > 50% <input checked="" type="checkbox"/> Prevalence Index is ≤ 3.0 <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)				
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Plot size (radius, or length x width) <u>2m x 10m</u> % Cover of Wetland Bryophytes (Where applicable) _____ % Bare Ground <u>98</u> Total Cover of Bryophytes <u>0</u>				
Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>				
Remarks: <u>pressed grass, appears to be phalaris - in standing water, 1.5m tall, hollow stem. taraxacum officianalis completely submerged. equarv appears stressed (chlorotic). salix keys to S. pseudomyrsinites in viereck&little, not available in dropdown. galbif is unknown mint, pressed.</u>				

SOIL

Sampling Point: SW12_T10_04

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		

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

<p>Hydric Soil Indicators:</p> <input type="checkbox"/> Histosol or Histel (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Alaska Gleyed (A13) <input type="checkbox"/> Alaska Redox (A14) <input type="checkbox"/> Alaska Gleyed Pores (A15)	<p>Indicators for Problematic Hydric Soils:³</p> <input type="checkbox"/> Alaska Color Change (TA4) ⁴ <input type="checkbox"/> Alaska Alpine swales (TA5) <input type="checkbox"/> Alaska Redox With 2.5Y Hue <input type="checkbox"/> Alaska Gleyed Without Hue 5Y or Redder Underlying Layer <input checked="" type="checkbox"/> Other (Explain in Remarks)
<p>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</p>	
<p>Restrictive Layer (if present): Type: Depth (inches):</p>	<p>Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/></p>
<p>Remarks: no soil pit due to standing water throughout site. assume hydric soils based on hydrophytic vegetation and wetland hydrology.</p>	

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators (any one is sufficient)</p> <input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Other (Explain in Remarks)	<p>Secondary Indicators (two or more are required)</p> <input type="checkbox"/> Water Stained Leaves (B9) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Salt Deposits (C5) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-neutral Test (D5)
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<p>Field Observations:</p> <p>Surface Water Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): 4</p> <p>Water Table Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches):</p> <p>Saturation Present? (includes capillary fringe) Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches):</p>	<p>Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/></p>
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Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspection) if available:

Remarks: