

WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project Borough/City: Denali Borough Sampling Date: 06-Aug-12
 Applicant/Owner: Alaska Energy Authority Sampling Point: SW12_T16_01
 Investigator(s): SLI, KMK Landform (hillside, terrace, hummocks etc.): Ridgetop
 Local relief (concave, convex, none): convex Slope: 17.6 % / 10.0 ° Elevation: 1231
 Subregion: Interior Alaska Mountains Lat.: 63.4295932445 Long.: -148.585868312 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: southern aspect near mountaintop.	

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

Tree Stratum	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>2</u> (A)
2. _____	0	<input type="checkbox"/>	_____	Total Number of Dominant Species Across All Strata: <u>6</u> (B)
3. _____	0	<input type="checkbox"/>	_____	Percent of dominant Species That Are OBL, FACW, or FAC: <u>33.3%</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>0</u> x 2 = <u>0</u> FAC Species <u>17</u> x 3 = <u>51</u> FACU Species <u>18</u> x 4 = <u>72</u> UPL Species <u>38</u> x 5 = <u>190</u> Column Totals: <u>73</u> (A) <u>313</u> (B) Prevalence Index = B/A = <u>4.288</u>
5. _____	0	<input type="checkbox"/>	_____	
Total Cover:			<u>0</u>	
Sapling/Shrub Stratum	50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>		
1. <u>Dryas octopetala</u>	35	<input checked="" type="checkbox"/>	UPL	
2. <u>Salix arctica</u>	15	<input checked="" type="checkbox"/>	FACU	
3. <u>Salix reticulata</u>	10	<input type="checkbox"/>	FAC	
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>60</u>	
Herb Stratum	50% of Total Cover: <u>30</u>	20% of Total Cover: <u>12</u>		
1. <u>Antennaria friesiana</u>	2	<input checked="" type="checkbox"/>	UPL	
2. <u>Erigeron acris</u>	1	<input type="checkbox"/>	FAC	
3. <u>Carex microchaeta</u>	3	<input checked="" type="checkbox"/>	FAC	
4. <u>Trisetum spicatum</u>	2	<input checked="" type="checkbox"/>	FAC	
5. <u>Luzula arctica</u>	1	<input type="checkbox"/>	FAC	
6. <u>Festuca ovina var. alaskensis</u>	1	<input type="checkbox"/>	UPL	
7. <u>Hedysarum alpinum</u>	1	<input type="checkbox"/>	FACU	
8. <u>Anthoxanthum monticola ssp. alpinum</u>	2	<input checked="" type="checkbox"/>	FACU	
9. _____	0	<input type="checkbox"/>	_____	
10. _____	0	<input type="checkbox"/>	_____	
Total Cover:			<u>13</u>	
	50% of Total Cover: <u>6.5</u>	20% of Total Cover: <u>2.6</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 30
 Total Cover of Bryophytes 15

Hydrophytic Vegetation Present? Yes No

Remarks: 50% lichen cover. trace anemone sp, campanula lasiocarpa, bisoff. Fesovi = festuca brevissimahedalp small fuzzy legume. Eriacr unidentified erigeron.

SOIL

Sampling Point: SW12_T16_01

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							Fibric Organics	
1-10	7.5YR	3/3	50				Loam	50% angular gravels and cobbles. refusal a

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:
no hydric soil indicators

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one is sufficient)

- 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)

- 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? (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