WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project	Borough/City:	Matanuska-Susitna Borough	Sampling Date:	07-Aug-12		
Applicant/Owner: Alaska Energy Authority		Sampl	ing Point:SV	N12_T36_02		
Investigator(s): SLI, KMK	Landform (hills	Landform (hillside, terrace, hummocks etc.): Ridgetop				
Local relief (concave, convex, none): convex	Slope: 8.7	% / 5.0 ° Elevation: 85	5			
Subregion : Southcentral Alaska	Lat.: 62.765849908	7 Long.: -149.633479	9966 Da	atum: WGS84		
Soil Map Unit Name:		NWI class	ification: Upland			
	of year? Yes (ificantly disturbed? rally problematic?	 No (If no, explain ir Are "Normal Circumstances (If needed, explain any answ 	" present? Yes (● No 〇		
SUMMARY OF FINDINGS - Attach site map showing	g sampling point	locations, transects, impo	rtant features, e	etc.		
Hydrophytic Vegetation Present? Yes O No 🔍						

Hydrophytic Vegetation Present? Yes ○ No ● Hydric Soil Present? Yes ○ No ● Wetland Hydrology Present? Yes ○ No ●	Is the Sampled Area within a Wetland? Yes \bigcirc No \odot
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Remarks: ridgeline site, very windy. ca 40% cover by crustose and fruticose lichens.

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

		Absolute	Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum		% Cover	Species?	Status	Number of Dominant Species		
1.		0			That are OBL, FACW, or FAC: (A)		
2.		0			Total Number of Dominant Species Across All Strata: 4 (B)		
3.		0					
4.					Percent of dominant Species That Are OBL, FACW, or FAC: 25.0% (A/B)		
5.		0					
	 Total Cover:				Prevalence Index worksheet: Total % Cover of: Multiply by:		
San	ling/Shrub Stratum 50% of Total Cover:	0 20%	of Total Cover:	0			
1.	Dryas octopetala	10		UPL			
2.	Vaccinium uliginosum	5		FAC	FAC Species <u>16</u> $\times 3 = 48$		
3.	Salix arctica			FACU	FACU Species <u>7</u> x 4 = <u>28</u>		
4.	Diapensia lapponica			UPL	UPL Species <u>15</u> x 5 = <u>75</u>		
5.	Betula glandulosa	7	\checkmark	FAC	Column Totals: 38 (A) 151 (B)		
6.	Arctostaphylos alpina	2		FACU			
7.	Vaccinium vitis-idaea	1		FAC	Prevalence Index = B/A = <u>3.974</u>		
8.	Empetrum nigrum	2		FAC	Hydrophytic Vegetation Indicators:		
9.	Potentilla villosa			UPL	Dominance Test is > 50%		
10.		0			Prevalence Index is ≤3.0		
				Morphological Adaptations ¹ (Provide supporting data in			
Herb Stratum 50% of Total Cover: 15.55 20% of Total Cover: 6.22			Remarks or on a separate sheet)				
1.	Anthoxanthum monticola ssp. alpinum	1		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)		
2.	Campanula lasiocarpa	0.1		UPL	¹ Indicators of hydric soil and wetland hydrology must		
3.	Artemisia norvegica	С	\checkmark	FACU	be present, unless disturbed or problematic.		
4.	Carex microchaeta	0.1		FAC			
5.	Antennaria monocephala	1		UPL	Plot size (radius, or length x width) <u>10m</u>		
6.	Silene acaulis	0.1		UPL	% Cover of Wetland Bryophytes		
7.	Arnica louiseana var. mendenhallii		\checkmark	UPL	% Bare Ground		
8.	Antennaria monocephala	0.1		UPL	Total Cover of Bryophytes 5		
9.	Cardamine bellidifolia	0.1		FAC			
10.	Festuca brachyphylla	1		UPL	Hydrophytic		
	Total Cover:	7.5			Vegetation		
	50% of Total Cover: 3		of Total Cover:	1.5	Present? Yes No 💿		
Dam							

Remarks: betgla <20cm tall, prostrate. trace anemone (no flower). arnlou in hulten as arnica trace camlas, carmic, silaca, carbel

SOI	L

Profile Description: (Describe to	the depth need Matrix	ded to docur		nfirm the abs lox Featu		ators)			
Depth Color (mo		%	Color (moist)	%	_Type ¹	Loc ²	Texture	Remarks	
	ist <i>j</i>	<u>%</u>		70	Type	LUC			
		,							
								,	
	p								
·				-		-			
¹ Type: C=Concentration. D=	Depletion. F	۲M=Reduc	ced Matrix ² Location	: PL=Por	e Lining. RC	=Root Cha	annel. M=Matrix		
Hydric Soil Indicators:			Indicators for Pro	oblemati	c Hydric Se	oils: ³			
Histosol or Histel (A1)			Alaska Color Ch	ange (TA	4) ⁴		Alaska Gleyed Without Hu	ue 5Y or Redder	
Histic Epipedon (A2)			Alaska Alpine sv	vales (TA	5)	_	Underlying Layer	5 /	
Hydrogen Sulfide (A4)			🗌 Alaska Redox W	/ith 2.5Y F	lue	L	Other (Explain in Remark	s)	
Thick Dark Surface (A12))		3 o stadianten af	• • • • • • • • •			the distance of something of the	1 I	
Alaska Gleyed (A13)			and an appropriate	nyarophyu e landscar	De position r	n, one prin nust be pr	mary indicator of wetland h resent	ydrology,	
Alaska Redox (A14)									
Alaska Gleyed Pores (A15	5)		⁴ Give details of co	lor change	e in Remark	S			
Restrictive Layer (if present):						-			
Туре:							Hydric Soil Present	? Yes 🔾 No 🖲	
Depth (inches):							-		
Remarks:									
no hydric soil indicators. fractu	ured bedrock	k at surfac	e, no soil pit dug.						
HYDROLOGY									
Wetland Hydrology Indica	tors:						Secondary Indic	cators (two or more are required)	
Primary Indicators (any one i								ned Leaves (B9)	
Surface Water (A1)			Inundation Vis	sible on A	erial Image	ry (B7)	_	atterns (B10)	
High Water Table (A2)			Sparsely Vege		-			hizospheres along Living Roots (C3)	
Saturation (A3)			Marl Deposits				Presence o	f Reduced Iron (C4)	
Water Marks (B1)			Hydrogen Sulf	. ,	(C1)		Salt Deposi	its (C5)	
Sediment Deposits (B2)			Dry-Season W					Stressed Plants (D1)	
Drift Deposits (B3)			Other (Explain				Geomorphi	ic Position (D2)	
Algal Mat or Crust (B4)							Shallow Aq	uitard (D3)	
Iron Deposits (B5)							Microtopog	raphic Relief (D4)	
Surface Soil Cracks (B6)						<u> </u>	FAC-neutra	l Test (D5)	
Field Observations:									
Surface Water Present?	Yes 〇		Depth (inches	5):					
Water Table Present?	Yes \bigcirc	No 🖲	Depth (inches	s):		Wetla	nd Hydrology Presen	t? Yes 🔾 No 🖲	
Saturation Present? (includes capillary fringe)	$_{\rm Yes} \bigcirc$	No 🖲	Depth (inches	s):					

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

Remarks:

no wetland hydrology indicators