WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydroelectric Project	Borough/City: Matanuska-Susitna Borough Sampling Date: 02-Aug-12
Applicant/Owner: Alaska Energy Authority	Sampling Point: SW12_T54_07
Investigator(s): SLI, KMK	Landform (hillside, terrace, hummocks etc.): Kettle
Local relief (concave, convex, none): flat	Slope: 0.0 % / 1.0 ° Elevation: 754
Subregion : Southcentral Alaska Lat.:	62.8343876585 Long.: -149.148681207 Datum: WGS84
Soil Map Unit Name:	NWI classification: PEM1F
	ar? Yes ● No ○ (If no, explain in Remarks.) htty disturbed? Are "Normal Circumstances" present? Yes ● No ○ problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sa	mpling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes ● Yes ● Yes ●	No () No () No ()	Is the Sampled Area within a Wetland?	Yes 🖲 No 🔿
Remarks:				

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

			Abso	olute	Dominant	Indicator	Dominance Test worksheet:
Tre	e Stratum		% C		Species?	Status	Number of Dominant Species
1.	Dodecatheon jeffreyi		-	5	\checkmark	FACW	That are OBL, FACW, or FAC: (A)
2.	Tofieldia pusilla		_	1		FAC	Total Number of Dominant Species Across All Strata: 5 (B)
3.	Carex livida			1		OBL	Percent of dominant Species
4.	The lister we also in the			2	\checkmark	FAC	That Are OBL, FACW, or FAC: 100.0% (A/B)
5.	Drosera rotundifolia			1		OBL	Prevalence Index worksheet:
		Total Cover:	_	10			Total % Cover of: Multiply by:
Sap	ling/Shrub Stratum	50% of Total Cover:	5	20% o	of Total Cover:	2	OBL Species 64 x 1 = 64
1.	Dasiphora fruticosa			5	\checkmark	FAC	FACW Species <u>10</u> x 2 = <u>20</u>
2.	Betula nana		-	1		FAC	FAC Species x 3 =63
3.			-	2		FAC	FACU Species x 4 =8
4.	Empetrum nigrum			5	\checkmark	FAC	UPL Species x 5 =
5.	Andromeda polifolia			2		FACW	Column Totals: 97 (A) 155 (B)
6.	Diago dougo			1		FACU	
7.	Spiraea stevenii			1		FACU	Prevalence Index = B/A = <u>1.598</u>
8.			_	0			Hydrophytic Vegetation Indicators:
9.	Corox vaginata			1		OBL	✓ Dominance Test is > 50%
10.	Deschampsia brevifolia			1		OBL	✓ Prevalence Index is \leq 3.0
		Total Cover:		19			Morphological Adaptations ¹ (Provide supporting data in
Her	b Stratum	50% of Total Cover:	9.5	20%	of Total Cover:	3.8	Remarks or on a separate sheet)
1.	Carex pluriflora		_	5		OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2.	Carex pauciflora		_	1		OBL	¹ Indicators of hydric soil and wetland hydrology must
3.	Carex anthoxanthea		-	1		FACW	be present, unless disturbed or problematic.
4.	Trichophorum caespitosum		_	45	\checkmark	OBL	Plot size (radius, or length x width) 10m
5.	Eriophorum angustifolium			7		OBL	Plot size (radius, or length x width) <u>10m</u> % Cover of Wetland Bryophytes
6.	Menyanthes trifoliata			1		OBL	(Where applicable)
7.	Spiranthes romanzoffiana			1		OBL	% Bare Ground
8.	Swertia perennis			1		FACW	Total Cover of Bryophytes
9.	Festuca altaica			5		FAC	
10.	Arctagrostis latifolia		_	1		FACW	Hydrophytic
		Total Cover:	(68			Vegetation
		50% of Total Cover:	34	20% o	of Total Cover:	13.6	Present? Yes \bullet No \bigcirc

Remarks: possibly a mix of tricess and trialp. Grasses collected for id. Trace senecio sp, plantathera sp, equpal. Additional herbs listed in tree and shrub layers.

	on: (Describe to the depth Matrix	needed to docu		confirm the ab		cators)		
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc 2	Texture	Remarks
								-
								-
							- ,	
		· ·					·	
¹ Type: C=Con	centration. D=Depletic	n. RM=Redu					annel. M=Matrix	
Hydric Soil In	ndicators:		Indicators for P		4	oils: ³		
Histosol or	Histel (A1)		Alaska Color C	Change (TA	·4) [*]		Alaska Gleyed Without H	ue 5Y or Redder
Histic Epip	edon (A2)		Alaska Alpine	•			Underlying Layer	
	Sulfide (A4)		Alaska Redox	With 2.5Y I	Hue	V	Other (Explain in Remar	<\$)
	Surface (A12)		³ One indicator o	of hydrophy	/tic vegetatio	on, one prir	mary indicator of wetland h	vdrology.
Alaska Gle			and an appropria					
Alaska Red			⁴ Give details of o	color chanc	in Remar	ks		
Alaska Gle	yed Pores (A15)				,e			
Restrictive Laye	r (if present):							
Type:							Hydric Soil Present	? Yes 🖲 No 🔾
Depth (inch	es):							
Remarks:								
no soil pit due t	o inundation. assume l	nydric soils du	le to standing water	and hydro	phytic veget	tation.		
HYDROLO	GY							
	ology Indicators:						Secondary Indi	cators (two or more are required)
Primary Indicat	tors (any one is sufficie	ent)					Water Stai	ned Leaves (B9)
✓ Surface W	ater (A1)		Inundation V	Visible on A	Aerial Image	ery (B7)	Drainage I	Patterns (B10)
High Wate	er Table (A2)		Sparsely Veg	getated Co	ncave Surfa	ce (B8)	Oxidized R	hizospheres along Living Roots (C3)
Saturation	(A3)		Marl Deposit	ts (B15)			Presence o	of Reduced Iron (C4)
Water Mai	⁻ ks (B1)		Hydrogen Su	ulfide Odor	r (C1)		Salt Depos	sits (C5)
_	Deposits (B2)		Dry-Season	Water Tab	le (C2)		Stunted or	Stressed Plants (D1)
Drift Depo			Other (Expla	ain in Rema	arks)			ic Position (D2)
	or Crust (B4)						_	quitard (D3)
✓ Iron Depo	sits (B5)							graphic Relief (D4)
Surface So	oil Cracks (B6)						✓ FAC-neutra	al Test (D5)

Field Observations:

(includes capillary fringe)

Yes

No Depth (inches): 2 Surface Water Present? Yes \bigcirc No \bigcirc Wetland Hydrology Present? Water Table Present? Depth (inches): Saturation Present? Yes 🔿 No 🖲

Depth (inches):

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

Remarks:

standing water throughout community, with shrubs on strangs. iron floc and biogenic sheen.

Yes 💿 No 🔾