WETLAND DETERMINATION DATA FORM - Alaska Region

Projec	t/Site: Susitna-Watana Hydroelectric Project		Borough/City:	Matanusk	xa-Susitna Borough Sampling Date: 24-Jun-12			
Applica	ant/Owner: Alaska Energy Authority				Sampling Point: SW12_T17_02			
	igator(s): SLI, LMF		Landform (hill	side, terrac	ce, hummocks etc.): Hillside			
	relief (concave, convex, none): rolling		Slope:	% / 17.8				
	gion : Southcentral Alaska	Lat:	62.793668212		Long.: -148.935615733 Datum: NAD83			
		Lat	02.793000212	10				
	ap Unit Name:			<u> </u>	NWI classification: Upland			
	matic/hydrologic conditions on the site typical for this ti /egetation \Box , Soil \Box , or Hydrology \Box s		ar? Yes tly disturbed?	No Are "N	(If no, explain in Remarks.) Iormal Circumstances" present? Yes ● No ○			
Are \	/egetation \square , Soil \square , or Hydrology \square ।	naturally բ	problematic?	(If nee	eded, explain any answers in Remarks.)			
CIIMI	MARY OF FINDINGS - Attach site map show	wing co	malina point	locations	transacts important features, etc.			
SUIVII			inpling point	locations	s, transects, important leatures, etc.			
	Hydrophytic Vegetation Present? Yes No No		ls	the Sam	pled Area			
	Hydric Soil Present? Yes No 🖲		within a Wetland? Yes O No •					
_	Wetland Hydrology Present? Yes No •				ottaria i			
	arks: characterizing dense shrubs in aerial. snow recen community, downslope is vacvit tundra w gramin ETATION -Use scientific names of plants. Li	oid patche	es.		ig to emerge. upsiope is subalpine neaul/diapensia			
		Absolute		•	Dominance Test worksheet:			
Tre	ee Stratum_	% Cove		Status	Number of Dominant Species			
1.		_ 0			That are OBL, FACW, or FAC: 2 (A)			
2.		0			Total Number of Dominant Species Across All Strata: 4 (B)			
3.		0			Percent of dominant Species			
4.		0			That Are OBL, FACW, or FAC: 50.0% (A/B)			
5.		0			Prevalence Index worksheet:			
	Total Cover	:	_		Total % Cover of: Multiply by:			
Sap	oling/Shrub Stratum 50% of Total Cover:	0 209	% of Total Cover:	0	OBL Species 0 x 1 = 0			
1.	Alnus viridis	60	✓	FAC	FACW Species 16 x 2 = 32			
2.	Ribes triste	10		FAC	FAC Species 75 x 3 = 225			
3.	0.:			FACU	FACU Species 19 x 4 = 76			
4.	Spiraea stevenii Salix arbusculoides	15		FACW	UPL Species 0 x 5 = 0			
5.					Column Totals: 110 (A) 333 (B)			
6.		•						
7.		0			Prevalence Index = B/A = 3.027			
8.		0			Hydrophytic Vegetation Indicators:			
9.		0			☐ Dominance Test is > 50%			
10.		0			Prevalence Index is ≤3.0			
Hei	Total Cover rb Stratum 50% of Total Cover:		_ 0% of Total Cover	: 17.2	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
1.	Dryopteris expansa	7	\checkmark	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)			
2.	Rubus chamaemorus	-		FACW	¹ Indicators of hydric soil and wetland hydrology must			
3.	Cornus canadensis	1		FACU	be present, unless disturbed or problematic.			
4.	Calamagrostis canadensis	5	_	FAC	Plot size (radius, or length x width) 4x8m			
5.	Spinulum annotinum	10	~	FACU	Plot size (radius, or length x width) 4x8m Cover of Wetland Bryophytes			
6.		0	_		(Where applicable)			
		•			% Bare Ground85			
7.		0			Total Cover of Bryophytes			
					Total cover of bryophytes			
8.					<u>10</u>			
8. 9.					Hydrophytic			
8. 9.		0 0 24	_	4.8				

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SOIL Sampling Point: SW12_T17_02

Profile Description: (Describe t	o the depth ne	eded to docume		nfirm the ab		ators)					
Depth (inches) Color (m	noist)	 %	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks			
0-3 7.5YR	3/2	100	Color (moise)		Турс		Silty Clay Loam				
3-13 7.5YR	3/3	100					Sandy Clay	-			
							- 	100			
13-18 7.5YR	3/3						Silty Clay Loam	40% cobbles and coarse gravels, sub ang to			
¹ Type: C=Concentration. [D=Depletion.	RM=Reduced	d Matrix ² Location	n: PL=Por	e Lining. RC	=Root Cha	annel. M=Matrix				
Hydric Soil Indicators:			Indicators for Pr	oblemati	: Hydric So	oils: ³					
Histosol or Histel (A1)			Alaska Color Cl	nange (TA	1)4		Alaska Gleyed Without Hue 5Y or Redder				
Histic Epipedon (A2)			Alaska Alpine s	wales (TA	5)		Underlying Layer				
Hydrogen Sulfide (A4)			Alaska Redox V	Vith 2.5Y H	lue		Other (Explain in Remarks)				
☐ Thick Dark Surface (A1	2)										
Alaska Gleyed (A13)			³ One indicator of and an appropriat				mary indicator of wetland h	ydrology,			
Alaska Redox (A14)					•	•	esent				
Alaska Gleyed Pores (A	15)		⁴ Give details of co	olor chang	e in Remark	S					
Restrictive Layer (if present)):										
Type:							Hydric Soil Present	? Yes ○ No •			
Depth (inches):											
HYDROLOGY											
Wetland Hydrology India	ators:						Secondary Indi	cators (two or more are required)			
Primary Indicators (any one	is sufficient)					Water Stained Leaves (B9)				
Surface Water (A1)			Inundation V	isible on A	erial Imagei	ry (B7)	Drainage F	Patterns (B10)			
High Water Table (A2)			Sparsely Veg	etated Cor	cave Surfac	ce (B8)	Oxidized R	hizospheres along Living Roots (C3)			
Saturation (A3)			Marl Deposits	s (B15)				f Reduced Iron (C4)			
Water Marks (B1)			Hydrogen Su	lfide Odor	(C1)		Salt Depos	its (C5)			
Sediment Deposits (B2)		☐ Dry-Season \	Water Tabl	e (C2)		Stunted or	Stressed Plants (D1)			
Drift Deposits (B3)			Other (Explai	in in Rema	rks)		_	ic Position (D2)			
Algal Mat or Crust (B4))							juitard (D3)			
Iron Deposits (B5)								graphic Relief (D4)			
Surface Soil Cracks (B6	i)					1	☐ FAC-neutra	l Test (D5)			
Field Observations:											
Surface Water Present?		No 💿	Depth (inche	s):							
Water Table Present?	Yes 🔾	No 💿	Depth (inche	s):		Wetla	nd Hydrology Presen	t? Yes O No 🗨			
		No •	Depth (inche	s):							
Saturation Present? (includes capillary fringe)	Yes \cup										
Saturation Present? (includes capillary fringe) Describe Recorded Data (str		monitor well,	aerial photos, prev	vious inspe	ction) if ava	nilable:					
(includes capillary fringe) Describe Recorded Data (str		monitor well,	aerial photos, pre	vious inspe	ction) if ava	ailable:					
(includes capillary fringe) Describe Recorded Data (stream of the control of the	eam gauge,	monitor well,	aerial photos, pre	vious inspe	ction) if ava	ilable:					
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(includes capillary fringe) Describe Recorded Data (stream of the control of the	eam gauge,	monitor well,	aerial photos, pre	vious inspe	ction) if ava	nilable:					

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