## WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana	Hydroelectric Project	B	orough/City:	Matanusk	a-Susitna Borough Sampling Date: 19-Aug-15
pplicant/Owner: Alaska Ene	rgy Authority				Sampling Point: SW15_T322_05
vestigator(s): BAB	,		Landform (hil	lside, terrac	e, hummocks etc.): Kettle
ocal relief (concave, convex, n	one): concave		Slope: 0.0	% / 0.0	° Elevation:
ubregion : Cook Inlet Mounta	ins	Lat.:			Long.: Datum: WGS84
oil Map Unit Name:					NWI classification: PEM1F
re climatic/hydrologic condition	a an the cite typical for this	ima of voor	yos	● No ○	(If no, explain in Remarks.)
Are Vegetation $\Box$ , Soil $\Box$ Are Vegetation $\Box$ , Soil $\Box$	, or Hydrology , or Hydrology  - Attach site map sho	significantly naturally prowing sam	disturbed? oblematic?	Are "N (If nee	ormal Circumstances" present? Yes No odded, explain any answers in Remarks.)  s, transects, important features, etc.
Hydrophytic Vegetation F		_	la.	the Com	wheel Area
Hydric Soil Present?	Yes   No				ıpled Area /etland? Yes ◉ No ◯
Wetland Hydrology Pres	ent? Yes 🏵 No 🤇	)	W	ithin a W	etiand? Tes © No ©
Remarks: paludified kettle lake					
EGETATION - Use scien	tific names of plants. L	Absolute	Dominant	Indicator	Dominance Test worksheet:  Number of Dominant Species
Tree Stratum  1.		% Cover	Species?	Status	That are OBL, FACW, or FAC:
2					Total Number of Dominant
3					Species Across All Strata: (B)
4.					Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
5.					
	Total Cove	r:			Prevalence Index worksheet:  Total % Cover of: Multiply by:
Sapling/Shrub Stratum	50% of Total Cover:	0 20%	of Total Cover	:0	OBL Species 16.1 x 1 = 16.1
		1		FACW	FACW Species 1 x 2 = 2
<ol> <li>Andromeda polifolia</li> <li>Rhododendron groenlan</li> </ol>	dicum			FACV	FAC Species 1 x 3 = 3
Vaccinium oxycoccos				OBL	FACU Species 0 x 4 = 0
4					UPL Species 0 x 5 = 0
_					Column Totals: <u>18.1</u> (A) <u>21.10</u> (B)
•		•			
_					Prevalence Index = B/A =1.166_
8.		0			Hydrophytic Vegetation Indicators:
9.		0			✓ Dominance Test is > 50%
10		0			✓ Prevalence Index is ≤3.0
Herb Stratum_	<b>Total Cove</b> 50% of Total Cover: _			r: <u>0.42</u>	Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
Carex livida		10	<b>✓</b>	OBL	Problematic Hydrophytic Vegetation (Explain)
2. Eriophorum angustifoliu		5	<b>✓</b>	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Trichophorum caespitos				OBL	be present, unless disturbed or problematic.
4					Plot size (radius, or length x width)
5		_			% Cover of Wetland Bryophytes
6					(Where applicable)
7					% Bare Ground 10
8					Total Cover of Bryophytes
9 10.					Hadaaah.dia
			_		Hydrophytic Vegetation
	Total Cove				Present? Yes • No O

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SOIL Sampling Point: SW15\_T322\_05

Depth	Matrix		Re	dox Featu			-	
	moist)	<u>%</u>	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc_2	Texture	Remarks
0-1						-	Peat	
							Mucky Peat	
4-14							Peat	
				_				
						-		
Type: C=Concentration	 D=Depletion	RM=Reduc	ed Matrix <sup>2</sup> Locatio	n: PI =Pore	Lining RC	=Root Cha	unnel M=Matrix	-
	D-Depiction	. It I – Iteauc	Indicators for P		_		milet Pi-Piduix	
Hydric Soil Indicators:			Alaska Color (		4	)iis. 	Alaska Clayed Without H	us EV or Doddor
Histosol or Histel (A1			Alaska Alpine		-		Alaska Gleyed Without Hi Underlying Layer	ue 51 or Reader
Histic Epipedon (A2)			Alaska Redox	•	,		Other (Explain in Remark	cs)
Hydrogen Sulfide (A4			Alaska Redux	Wiui Z.51 H	lue		outer (Explain in Remain	<b>5</b> )
Thick Dark Surface (A	12)		<sup>3</sup> One indicator o	f hydrophyti	ic vegetatio	n, one prin	nary indicator of wetland h	ydrology,
Alaska Gleyed (A13)			and an appropria	ate landscap	e position r	nust be pre	esent	
Alaska Redox (A14) Alaska Gleyed Pores	۸15)		4 Give details of	color change	in Remark	S		
•	-					I		
estrictive Layer (if prese	τ):						Hydric Soil Present	? Yes • No O
Typot							Hyaric Soil Present	r res 🙂 No 🔾
Type: Depth (inches):							•	
* *							,	
Depth (inches):							, 	
Depth (inches):							,	
Depth (inches): emarks:	icators:						,	cators (two or more are required)
Depth (inches): emarks:  YDROLOGY Vetland Hydrology Inc		t)					Secondary India	cators (two or more are required) ned Leaves (B9)
Depth (inches): emarks:  YDROLOGY Vetland Hydrology Inc		t)	☐ Inundation	Visible on Ae	erial Imager	ry (B7)	Secondary Indi	
Depth (inches): emarks:  YDROLOGY Vetland Hydrology Inc Primary Indicators (any c  Surface Water (A1) High Water Table (A	ne is sufficier	t)	☐ Inundation				Secondary Indio	ned Leaves (B9) atterns (B10)
Depth (inches): emarks:  YDROLOGY Vetland Hydrology Inc Primary Indicators (any of Surface Water (A1) High Water Table (A Saturation (A3)	ne is sufficier	t)		getated Con			Secondary Indio  Water Stain  Drainage P  Oxidized R  Presence o	ned Leaves (B9) Patterns (B10) hizospheres along Living Roots (C3) f Reduced Iron (C4)
Depth (inches): emarks:  YDROLOGY Vetland Hydrology Inc Primary Indicators (any of ✓ Surface Water (A1) ✓ High Water Table (A ✓ Saturation (A3)	ne is sufficier	t)	Sparsely Ve	getated Con ts (B15)	cave Surfac		Secondary Indio  Secondary Indio  Water Stai  Drainage P	ned Leaves (B9) Patterns (B10) hizospheres along Living Roots (C3) f Reduced Iron (C4)
Depth (inches): emarks:  YDROLOGY Vetland Hydrology Inc Primary Indicators (any of Surface Water (A1) High Water Table (A Saturation (A3)	ne is sufficier	t)	Sparsely Ve	getated Con ts (B15) ulfide Odor (	cave Surfac		Secondary Indio Water Staio Drainage P Oxidized R Presence o Salt Depos	ned Leaves (B9) Patterns (B10) hizospheres along Living Roots (C3) f Reduced Iron (C4)
Depth (inches):  emarks:  YDROLOGY  Vetland Hydrology Incominary Indicators (any of the continuous of	ne is sufficier	t)	Sparsely Ve Marl Deposi Hydrogen S	getated Con ts (B15) ulfide Odor ( Water Table	cave Surfac (C1) e (C2)		Secondary India Water Staii Drainage P Oxidized R Presence o Salt Depos	ned Leaves (B9) latterns (B10) hizospheres along Living Roots (C3) f Reduced Iron (C4) its (C5)
Depth (inches): emarks:  YDROLOGY  Vetland Hydrology Incomprimery Indicators (any of the second of t	ne is sufficier	t)	Sparsely Ve Marl Deposi Hydrogen S Dry-Season	getated Con ts (B15) ulfide Odor ( Water Table	cave Surfac (C1) e (C2)		Secondary India Water Stair Drainage F Oxidized R Presence o Salt Depos Stunted or	ned Leaves (B9) Patterns (B10) Indicate the service of the service
Depth (inches): emarks:  YDROLOGY  Vetland Hydrology Inc Primary Indicators (any of ✓ Surface Water (A1) ✓ High Water Table (A ✓ Saturation (A3)      Water Marks (B1)     Sediment Deposits (B3)	ne is sufficier	t)	Sparsely Ve Marl Deposi Hydrogen S Dry-Season	getated Con ts (B15) ulfide Odor ( Water Table	cave Surfac (C1) e (C2)		Secondary India Water Stair Drainage P Oxidized R Presence o Salt Depos Stunted or Geomorphi Shallow Ag	ned Leaves (B9) Patterns (B10) Patterns (B10) Patterns (B10) Patterns (C3) Patterns (C4) Patterns (C5) Patterns (C1) Patterns (C1) Patterns (C1) Patterns (C2) Patterns (C2)
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Depth (inches):  emarks:  YDROLOGY  Vetland Hydrology Incomprimery Indicators (any of the content of the conte	e is sufficien  2)  2)  4)		Sparsely Ve Marl Deposi Hydrogen S Dry-Season	getated Con ts (B15) ulfide Odor ( Water Table	cave Surfac (C1) e (C2)		Secondary India Water Stail Drainage P Oxidized R Presence o Salt Depos Stunted or Geomorphi Shallow Aq Microtopog	ned Leaves (B9) Patterns (B10) Phizospheres along Living Roots (C3) If Reduced Iron (C4) Its (C5) Stressed Plants (D1) Its Position (D2) Injuitard (D3) Iraphic Relief (D4)
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