WETLAND DETERMINATION DATA FORM - Alaska Region

ct/Site: Susitna-Watana Hydroelectric Project		Borough/City:	Matanusk	a-Susitna Borough Sampling Date: 31-Jul-13
cant/Owner: Alaska Energy Authority				Sampling Point: SW13_T155_02
		Landform (hills	ide, terrac	
		_		
	l at i			
	Lal	63.200460434		
•			2 0	NWI classification: Upland
				(If no, explain in Remarks.)
	-	•		ormal Circumstances" present? Yes ● No ○
Vegetation ☐ , Soil ☐ , or Hydrology ☐ r	naturally p	problematic?	(If nee	ded, explain any answers in Remarks.)
MARY OF FINDINGS - Attach site map show	ving sa	mpling point	locations	s, transects, important features, etc.
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, , , , ₀		ls t	the Sam	
· · · · · · · · · · · · · · · · · · ·		wit	hin a W	etland? Yes ○ No ●
wetland Hydrology Present? Fes Vivo S	/			
marks: graminoid rich patch of tundra. signature exten	ds up val	ley on low slope:	s and valle	y bottom
FTATION - Use scientific names of plants Li	ct all cn	ocios in the r	alot	
LIATION - Ose scientific flames of plants. Li	st all sp	iecies ili tile p	JIUL.	Barriague Tarkarradakask
				Dominance Test worksheet: Number of Dominant Species
		r_speciesr_	Status	That are OBL, FACW, or FAC:3(A)
		_		Total Number of Dominant
		-		Species Across All Strata:3 (B)
		-		Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
		-		
				Prevalence Index worksheet:
		– % of Total Cover:	0	Total % Cover of: Multiply by:
pinig/Siliub Stratum 50% of Fotor Cover.	0 20			OBL Species 0 x1 = 0
Salix reticulata	10		FAC	FACW Species 0 x 2 = 0
· · · · · · · · · · · · · · · · · · ·	-			FACUS pages 43 x 3 = 189
		-		FACU Species 13.1 x 4 = 52.40
		-	FACU	UPL Species <u>10.1</u> x 5 = <u>50.50</u>
		-		Column Totals: <u>86.2</u> (A) <u>291.9</u> (B)
		-		Prevalence Index = B/A =3.386_
		-		
		-		Hydrophytic Vegetation Indicators:
		-		✓ Dominance Test is > 50%
		_		☐ Prevalence Index is ≤3.0
i otai covei.				Morphological Adaptations (Provide supporting data in
erh Stratum 50% of Total Cover:	15 20	% of Total Cover:	6	Remarks or on a separate sheet)
Footune altaine		_		Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
Festuca altaica	35	_	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
Festuca altaica Arnica lessingii	35	_	FAC UPL	
Festuca altaica Arnica lessingii Artemisia norvegica	35		FAC UPL FACU	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Festuca altaica Arnica lessingii Artemisia norvegica Dryas octopetala	35 0.1 4		FAC UPL	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Plot size (radius, or length x width)
Festuca altaica Arnica lessingii Artemisia norvegica Dryas octopetala Sedum rosea	35 0.1 4 10		FAC UPL FACU UPL	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Plot size (radius, or length x width) % Cover of Wetland Bryophytes
Festuca altaica Arnica lessingii Artemisia norvegica Dryas octopetala Sedum rosea	35 0.1 4 10 2		FACUUPLFACUFAC	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Plot size (radius, or length x width)
Festuca altaica Arnica lessingii Artemisia norvegica Dryas octopetala Sedum rosea Carex bigelowii	35 0.1 4 10 2		FAC UPL FACU UPL FAC FAC	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Plot size (radius, or length x width) % Cover of Wetland Bryophytes
Festuca altaica Arnica lessingii Artemisia norvegica Dryas octopetala Sedum rosea Carex bigelowii Anemone narcissiflora	35 0.1 4 10 2 1 2		FAC UPL FACU UPL FAC FAC FAC	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Plot size (radius, or length x width)
Festuca altaica Arnica lessingii Artemisia norvegica Dryas octopetala Sedum rosea Carex bigelowii Anemone narcissiflora Pyrola asarifolia	35 0.1 4 10 2 1 2 0.1		FAC UPL FACU UPL FAC FAC FAC FACU	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Plot size (radius, or length x width) % Cover of Wetland Bryophytes (Where applicable) % Bare Ground Total Cover of Bryophytes
Festuca altaica Arnica lessingii Artemisia norvegica Dryas octopetala Sedum rosea Carex bigelowii Anemone narcissiflora Pyrola asarifolia Sibbaldia procumbens	35 0.1 4 10 2 1 2 0.1 1		FAC UPL FACU UPL FAC FAC FAC FACU FACU	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Plot size (radius, or length x width)
	rant/Owner: Alaska Energy Authority tigator(s): WAD, RWM relief (concave, convex, none): flat region: Interior Alaska Mountains lap Unit Name: limatic/hydrologic conditions on the site typical for this tire vegetation	tigator(s): WAD, RWM relief (concave, convex, none): flat region: Interior Alaska Mountains lap Unit Name: imatic/hydrologic conditions on the site typical for this time of year Vegetation	rant/Owner: Alaska Energy Authority ligator(s): WAD, RWM	rant/Owner: Alaska Energy Authority ligator(s): WAD, RWM

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SOIL Sampling Point: SW13_T155_02

(inches)	Color (m	noiet)	%	Color (m	oist)	%	Type ¹	Loc 2	Texture	Remarks
0-1	(II	loistj	100	COIOI (III	loist)	_/6	Турс	LUC	Fibric Organics	
1-6	10YR	2/2	100						Silt Loam	organic rich
6-9	10YR	4/6	80	10YR	2/2	20			Silt Loam	
9-16	2.5Y	2.5/1	100	10110					Sand	20 parcent cubrounded coarce fragmen
9-10									Saliu	30 percent subrounded coarse fragmen
									-	_
Type: C=Cor	ncentration. D	=Depletior	RM=Reduc	ed Matrix	² Location	: PL=Pore	Lining. RC	=Root Cha	nnel. M=Matrix	-
lydric Soil I	ndicators:			Indicate	ors for Pro	blematic	Hydric So	oils: ³		
Histosol or	r Histel (A1)				ka Color Ch		4		Alaska Gleyed Without I	Hue 5Y or Redder
Histic Epip	edon (A2)			Alasł	ka Alpine sv	vales (TA5	5)		Underlying Layer	
Hydrogen	Sulfide (A4)			Alas	ka Redox W	ith 2.5Y H	lue		Other (Explain in Rema	·ks)
Thick Dark	Surface (A1	2)		3 ∩no ir	ndicator of I	ovdrophyti	ic vegetatio	n one prin	mary indicator of wetland	hydrology
Alaska Gle				and an	appropriate	e landscap	e position r	must be pro	esent	nyurology,
☐ Alaska Red	` ,			4 Give	letails of co	lor change	in Remark	rs.		
	yed Pores (A	15)		GIVE 0	ictalis or co	ior criarige	, in remain			
estrictive Laye	er (if present)):								
Type:									Hydric Soil Presen	t? Yes 🔾 No 💿
5 11 (1 1										
Depth (inchemarks: 5y color prob		naterial colc	or. no hydric	soil indicat	ors.					
emarks:		naterial colo	or. no hydric	soil indicat	ors.					
emarks: 5y color prob	ably parent n		or. no hydric	soil indicat	ors.					
emarks: 5y color prob YDROLO Vetland Hydi	ably parent n GY rology Indic	cators:		soil indicat	ors.					licators (two or more are required)
YDROLO Vetland Hydi	GY rology Indic	cators:						(07)	Water Sta	nined Leaves (B9)
YDROLO //etland Hydrimary Indica Surface W	GY rology Indictors (any one /ater (A1)	cators: e is sufficien		Inc	undation Vi				Water Sta	nined Leaves (B9) Patterns (B10)
YDROLO //etland Hydrimary Indica Surface W High Wate	GY rology Indictors (any one /ater (A1) er Table (A2)	cators: e is sufficien		☐ Int	undation Vi arsely Vege	tated Con			Water Sta	nined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3
YDROLO /etland Hydi /rimary Indica Surface W High Wate	GY rology Indicators (any one //ater (A1) er Table (A2)	cators: e is sufficien		☐ Inu	undation Vi arsely Vege ırl Deposits	etated Con (B15)	cave Surfac		Water Sta Drainage Oxidized Presence	nined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3 of Reduced Iron (C4)
YDROLO YDROLO Yetland Hydi Trimary Indica Surface W High Wate Saturatior Water Ma	GY rology Indictors (any one /ater (A1) er Table (A2) n (A3) rks (B1)	c ators: e is sufficien		Int	undation Vi arsely Vege irl Deposits drogen Suli	etated Con (B15) fide Odor (cave Surfac		Water Sta	nined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3 of Reduced Iron (C4) sits (C5)
YDROLO YDROLO YEtland Hydi Trimary Indica Surface W High Wate Saturatior Water Ma Sediment	GY rology Indictors (any one /ater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2	c ators: e is sufficien		Into Into Into Into Into Into Into Into	undation Visarsely Vege arsely Vege arl Deposits drogen Sult y-Season W	etated Con (B15) fide Odor (/ater Table	cave Surfac (C1) e (C2)		Water Sta Drainage Oxidized Presence Salt Depo	nined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3 of Reduced Iron (C4) sits (C5) or Stressed Plants (D1)
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