WETLAND DETERMINATION DATA FORM - Alaska Region

⊃roje	ct/Site: Susitna-Watana Hydroelectric Project		Borough/City	Matanusk	xa-Susitna Borough Sampling Date:24-Aug-15
Applic	cant/Owner: Alaska Energy Authority				Sampling Point: SW15_T333_20
	tigator(s): ERT, TXC		Landform (I	nillside, terrac	ce, hummocks etc.): Nivation Hollow
Local	relief (concave, convex, none): none		_		0 ° Elevation:
	egion : Interior Alaska Mountains	Lat.:	-		Long.: Datum: WGS84
	lap Unit Name:	Lut			
	·		o V-	- A N- O	NWI classification: Upland
	limatic/hydrologic conditions on the site typical for this				
	Vegetation , Soil , or Hydrology		tly disturbed?		tormal officialities process.
Are	Vegetation , Soil , or Hydrology	naturally p	problematic?	(If nee	eded, explain any answers in Remarks.)
SUM	IMARY OF FINDINGS - Attach site map sho	owing sa	mpling poi	nt locations	s, transects, important features, etc.
	Hydrophytic Vegetation Present? Yes No	\supset			
	Hydric Soil Present? Yes No	•		ls the Sam	npled Area
	Wetland Hydrology Present? Yes No		,	within a W	/etland? Yes ○ No ⊙
Dom	narks:		ļ		
Keli	Idiks.				
/FG	ETATION -Use scientific names of plants. I	ict all ca	ocios in th	o nlot	
LG	ETATION - Ose scientific flames of plants. I	ist all sp	ecies iii tii	ε ρισι.	
_	-	Absolute		t Indicator	Dominance Test worksheet: Number of Dominant Species
1.	ee Stratum	% Cove	r Species?	Status	That are OBL, FACW, or FAC:4 (A)
					Total Number of Dominant
2.					Species Across All Strata:5(B)
3.					Percent of dominant Species
4.					That Are OBL, FACW, or FAC: 80.0% (A/B)
5.					Prevalence Index worksheet:
_	Total Cove		_		Total % Cover of: Multiply by:
Sa	pling/Shrub Stratum 50% of Total Cover:	0 209	% of Total Cov	er: <u>0</u>	OBL Species <u>0.1</u> x 1 = <u>0.1</u>
1.	Salix pulchra	4	✓	FACW	FACW Species 20 x 2 = 40
2.	Salix reticulata	2	✓	FAC	FAC Species 37 x 3 = 111
3.		2	✓		FACU Species0 x 4 =0
4.					UPL Species <u>1</u> x 5 = <u>5</u>
5.		0			Column Totals: <u>58.1</u> (A) <u>156.1</u> (B)
6.		0_			Prevalence Index = B/A = 2.687
7.		0_			Z.007
8.	·	0			Hydrophytic Vegetation Indicators:
9.	·	0			✓ Dominance Test is > 50%
10.	·	0			✓ Prevalence Index is ≤3.0
	Total Cove				Morphological Adaptations (Provide supporting data in
	erb Stratum 50% of Total Cover:		% of Total Cov		Remarks or on a separate sheet)
1.		_ 30		FAC	Problematic Hydrophytic Vegetation (Explain)
2.			. 🔽	FACW	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.				FACW	be present, unless disturbed of problematic.
		2		FACW	Plot size (radius, or length x width) 4X8m
4.	Observation Lagrange	2	1 1	FAC	
5.	Chamaenerion latifolium	2		EAC	% Cover of Wetland Bryophytes
5. 6.	Chamaenerion latifolium Festuca altaica	2		FAC	(Where applicable)
5. 6. 7.	Chamaenerion latifolium Festuca altaica Viola palustris(IAM)	1		FAC	(Where applicable) % Bare Ground _0
5. 6. 7. 8.	Chamaenerion latifolium Festuca altaica Viola palustris(IAM) Antennaria monocephala	2 1 1		FAC UPL	(Where applicable)
5. 6. 7. 8. 9.	Chamaenerion latifolium Festuca altaica Viola palustris(IAM) Antennaria monocephala Luzula wahlenbergii	1 1 0.1		FAC	(Where applicable) % Bare Ground Total Cover of Bryophytes 3
5. 6. 7. 8.	Chamaenerion latifolium Festuca altaica Viola palustris(IAM) Antennaria monocephala Luzula wahlenbergii	2 1 1 0.1 0		FAC UPL	(Where applicable) % Bare Ground Total Cover of Bryophytes Hydrophytic
5. 6. 7. 8. 9.	Chamaenerion latifolium Festuca altaica Viola palustris(IAM) Antennaria monocephala Luzula wahlenbergii	2 1 1 0.1 0 sr: 52.1		FAC UPL OBL	(Where applicable) % Bare Ground Total Cover of Bryophytes 3

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SOIL Sampling Point: SW15_T333_20

(inches) Color (Red	٠.,		. 2	_ Texture		Remarks
0-2 Color (noist)	<u> </u>	Color (m	DIST)	_%_	Type ¹	_Loc_ ²	Fibric Organics		Oi
	4/2	100						Loamy Fine Sand	·	
2-2.5 10YR	4/2				-			Loanly Fine Sand		C material washed colluvium/slope alluvium.
2.5-4								Hemic Organics		Oeb, buried organic
4-16 10YR	4/2		7.5YR	4/4	50		M	Sandy Loam		AB, gravelly mixed broken horizon. Screep
				-						
				-					·	
ype: C=Concentration.	D=Depletion	n. RM=Reduc	ed Matrix	² Location	: PL=Pore	Lining. RC	=Root Cha	annel. M=Matrix		
dric Soil Indicators:			Indicato	ors for Pro	oblematic	Hydric S	oils: ³			
Histosol or Histel (A1)			Alask	ka Color Ch	ange (TA4	.)4		Alaska Gleyed V		ie 5Y or Redder
Histic Epipedon (A2)			Alask	ka Alpine sv	wales (TA5	5)		Underlying Laye		
Hydrogen Sulfide (A4)			Alask	ka Redox W	/ith 2.5Y H	lue		Other (Explain i	in Remark	5)
Thick Dark Surface (A	12)		30	.d:				:-:d:k		.duala a
Alaska Gleyed (A13)						ic vegetatio e position i		mary indicator of sesent	wetiand ny	arology,
Alaska Redox (A14)					•	•	•			
Alaska Gleyed Pores (1 15)		* Give a	etails of co	olor change	e in Remark	iS .			
strictive Layer (if presen	t):									
Type:								Hydric Soil F	Present?	Yes O No 💿
Depth (inches):								•		
Depth (inches):								•		
emarks:								•		
								<u>, </u>		
emarks:								<u>'</u>		
emarks:								·		
emarks:								·		
marks: hydric soil indicators										
marks: hydric soil indicators /DROLOGY etland Hydrology Ind								Secon	dary Indic	ators (two or more are required
marks: hydric soil indicators /DROLOGY etland Hydrology Indignary Indicators (any or		nt)						_Secon	dary Indic Vater Stair	ned Leaves (B9)
marks: hydric soil indicators /DROLOGY etland Hydrology Ind		ıt)	Inu	ındation Vi	sible on Ae	erial Image	ry (B7)	_Secon	dary Indic Vater Stair	
/DROLOGY etland Hydrology Indicators Surface Water (A1) High Water Table (A2)	ne is sufficier	nt)				erial Image cave Surfac			<u>ıdary Indic</u> Vater Stair Orainage Po Oxidized RP	ned Leaves (B9) atterns (B10) nizospheres along Living Roots (
PMOLOGY etland Hydrology Ind imary Indicators (any or Surface Water (A1) High Water Table (A2) Saturation (A3)	ne is sufficier	nt)	Spa	arsely Vege rl Deposits	etated Con (B15)	cave Surfa			<u>ıdary Indic</u> Vater Stair Orainage Po Oxidized RP	ned Leaves (B9) atterns (B10)
PMARKS: hydric soil indicators PDROLOGY etland Hydrology Indicators (any or Surface Water (A1) High Water Table (A2)	ne is sufficier	nt)	Spa	arsely Vege	etated Con (B15)	cave Surfa			<u>ıdary Indic</u> Vater Stair Orainage Po Oxidized RP	ned Leaves (B9) atterns (B10) nizospheres along Living Roots (FReduced Iron (C4)
PMOLOGY etland Hydrology Ind imary Indicators (any or Surface Water (A1) High Water Table (A2) Saturation (A3)	ne is sufficier	nt)	Spa	arsely Vege rl Deposits	etated Con (B15) fide Odor (cave Surfac			dary Indic Vater Stain Orainage Po Oxidized Rh Oresence of Oralt Deposi	ned Leaves (B9) atterns (B10) nizospheres along Living Roots (FReduced Iron (C4)
PMOLOGY etland Hydrology Indicators Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	ne is sufficier	nt)	Spa	arsely Vege rl Deposits drogen Sul	etated Con (B15) fide Odor (Vater Table	cave Surfac			idary Indic Vater Stair Orainage Po Oxidized Rh Presence of Falt Deposi Otunted or	ned Leaves (B9) atterns (B10) nizospheres along Living Roots (FReduced Iron (C4) ts (C5)
Property of the control of the contr	ne is sufficier)	nt)	Spa	arsely Vege rl Deposits drogen Sul y-Season W	etated Con (B15) fide Odor (Vater Table	cave Surfac			idary Indic Vater Stair Orainage Po Oxidized Rh Presence of Falt Deposi Orait Deposi Orait Deposi Orait Deposi	ned Leaves (B9) atterns (B10) nizospheres along Living Roots (FReduced Iron (C4) ts (C5) Stressed Plants (D1)
Property of the property of th	ne is sufficier)	nt)	Spa	arsely Vege rl Deposits drogen Sul y-Season W	etated Con (B15) fide Odor (Vater Table	cave Surfac			dary Indic Vater Stair Orainage Po Oxidized Rh Presence of Galt Deposi Stunted or Geomorphi Shallow Aqu	ned Leaves (B9) atterns (B10) nizospheres along Living Roots (Reduced Iron (C4) ts (C5) Stressed Plants (D1) C Position (D2)
PROLOGY etland Hydrology Indrimary Indicators (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B	ne is sufficier) 2)	nt)	Spa	arsely Vege rl Deposits drogen Sul y-Season W	etated Con (B15) fide Odor (Vater Table	cave Surfac			dary Indic Vater Stair Orainage Po Oxidized Rh Presence of Falt Deposi Stunted or Geomorphi Schallow Aqu dicrotopog	ned Leaves (B9) atterns (B10) nizospheres along Living Roots (FReduced Iron (C4) ts (C5) Stressed Plants (D1) to Position (D2) uitard (D3)
Property of the property of th	ne is sufficier) 2)	nt)	Spa	arsely Vege rl Deposits drogen Sul y-Season W	etated Con (B15) fide Odor (Vater Table	cave Surfac			dary Indic Vater Stair Orainage Po Oxidized Rh Presence of Falt Deposi Stunted or Geomorphi Schallow Aqu dicrotopog	ned Leaves (B9) atterns (B10) nizospheres along Living Roots (FReduced Iron (C4) ts (C5) Stressed Plants (D1) C Position (D2) uitard (D3) raphic Relief (D4)
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Property of the property of th	e is sufficier 2) 4) Yes Yes) No ⊙	Spa Mai Hyc Dry Oth	arsely Vege rrl Deposits drogen Sul y-Season W ner (Explain	etated Con (B15) fide Odor (Vater Table n in Reman	cave Surfac	ce (B8)		dary Indic Vater Stair Orainage Po Oxidized Rh resence of Ialt Deposi Stunted or Geomorphic Seomorphic Scillow Aqu dicrotopog AC-neutral	ned Leaves (B9) atterns (B10) nizospheres along Living Roots (FReduced Iron (C4) ts (C5) Stressed Plants (D1) c Position (D2) uitard (D3) raphic Relief (D4) Test (D5)
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