

Project/Site: Sterling Highway Project MP 45 - 60		Date	08/26/04
Applicant / Owner: ADOT&PF		Borough	KPB
Investigators: J. D. Sivils, A.B. Jones		State	AK
Do Normal Circumstances exist on the site?	⊠YES □NO	Community ID	Lutz spruce/birch upland
Is the site significantly disturbed (Atypical Situation)?	∐YES ⊠NO	Transect ID	-
Is the area a potential Problem Area? (If needed, explain on reverse)	∐YES ⊠NO	Plot ID	Plot 49

Describe Location: VEGETATION

Plant Species	Stratum	%	Indicator	Plant Species	Stratum	%	Indicator
1 Betula papyrifera *	Т	8	FACU	9. Chamerion angustifolium	Н	10	
2 Picea lutzii*	Т	40	NI	10. Calamagrostis canadensis	Н	Tr.	
3. Vaccinium vitis-idaea *	S	25	FAC	11 Lupinus nootkatensis	Н	Tr.	
4. Arctostaphylos uva-ursi*	S	15	UPL	12. Linnaea borealis	Н	Tr.	
5. Salix barclayi	S	2		13. other moss			
6 Empetrum nigrum *	S	30	FAC	14.			
7. Geocaulon lividum*	Н	25	FACU	15			
8. Cornus canadensis*	Н	18	FACU	16.			
Percent of Dominant Species that are	OBL, FAC	CW, or	FAC (exclud	ling FAC-) 33%			
Remarks : Other moss is present (no * Indicates dominants using 50/20 m	t Sphagnun ethod.	1)					

Describe Vegetation Type: open Lutz spruce and paper birch forest

HYDROLOGY

Recorded Data (Describe in Ro Stream, Lake, or Tide Gau Aerial Photographs Other No Recorded Data Available	emarks) Ige	WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands
FIELD OBSERV	ATIONS	
Depth of Surface Water	N/A (in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	N/A (in)	Water-Stained Leaves
Depth to Saturated Soil	N/A (in)	Other (Explain in Remarks)

Remarks: Wetland hydrology not observed.

Map Unit Name	(Series and Phase):			Drainage Class: SWEI)
Taxonomy (Subg	group)		Field Observations C	Confirm Mapped Type?	YES NO
		PROFI	LE DESCRIPTION		
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
4-0	Oi				
0-1	Е	10YR5/1			Sandy loam, SABL
1-7	B ₁	10YR4/4			Loamy sand with 70% gravels, SABL
7-14+	B ₂	5Y2.5/1			Gravelly loamy sand with 95% gravels, GR
Histosol Histic Ep Sulfidic C Aquic Me Reducing Gleyed o	ipedon Odor oisture Regime g Conditions r Low-Chroma Colors	HYDRIC	SOIL INDICATORS: Concretio High Orga Organic S Listed on Cother (Ex	ns anic Content in Surface L treaking in Sandy Soils Local Hydric Soils List National Hydric Soils Li plain in Remarks)	ayer in Sandy Soils st
Remarks: no satu Major root zone:	ration, no hydric soil : 8 inches	indicators.			

Hydrophytic Vegetation Present?	YES NO			
Wetland Hydrology Present?	YES NO	Is this Sampling Point Within a Wetland?	YES	NO NO
Hydric Soils Present?	YES NO			
Remarks:				
GPS: N 60 degrees, 28.909' W 149 degr Topography: undulating/slightly hummoo NWI Class: U HGM Type: U Photos: 1 soil, 2 vegetation Functions:	ees, 43.804' 2ky			





Site: Plot 49 *Date*: 8/26/04

NWI Class: Upland



Project/Site: Sterling Highway Project MP 45 - 60		Date	08/26/04
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Investigators: J. D. Sivils, A.B. Jones		State	AK
Do Normal Circumstances exist on the site?	⊠YES □NO	Community ID	Lutz spruce/birch upland
Is the site significantly disturbed (Atypical Situation)?	□YES ⊠NO	Transect ID	-
Is the area a potential Problem Area? (If needed, explain on reverse)	□YES ⊠NO	Plot ID	Plot 50

Describe Location: 40-50' from horse and foot path VEGETATION

Plant Species	Stratum	%	Indicator	Plant Species	Stratum	%	Indicator
1. Picea lutzii *	Т	25	NI	9. Cornus canadensis*	Н	20	FACU
2. Betula papyrifera *	Т	15	FACU	10. Chamerion angustifolium	Н	3	
3. Empetrum nigrum *	S	50	FAC	11. Lycopodium sp.	Н	Tr	
4. Vaccinium vitis-idaea *	S	25	FAC	12.			
5. Linnaea borealis*	S	20	FACU	13.			
6. Viburum edule	S	Tr		14.			
7. Salix sp.	S	Tr		15			
8. Geocaulon lividum*	Н	20	FACU	16.			
Percent of Dominant Species that are	OBL, FAC	CW, or	FAC (exclud	ling FAC-) 33%			
Domontra i maga (not anhagnum) naga	ant						

Remarks : moss (not sphagnum) present

* Indicates dominants using 50/20 method.

Describe Vegetation Type: open Lutz spruce and paper birch forest

HYDROLOGY

Recorded Data (Describe in R Stream, Lake, or Tide Ga Aerial Photographs Other No Recorded Data Available	emarks) uge	WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Watlands
FIELD OBSERV	ATIONS	
Depth of Surface Water	N/A (in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	N/A (in)	Water-Stained Leaves
Depth to Saturated Soil	N/A (in)	Other (Explain in Remarks)

Remarks: Wetland hydrology not observed.

SOI	LS		

Map Unit Name (See	ries and Phase):			Drainage Class: WD		
Taxonomy (Subgrou	ıp)		Field Observations Confirm Mapped Type? YES NO			
		PROFII	LE DESCRIPTION			
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.	
4-0	Oi					
0-1	E/B1	10YR3/1			Loam, SABL	
1-15+	B2	2.5Y5/3			Clay loam with 25% small cobbles, SABL	
Histosol Histic Epipe Sulfidic Odd Aquic Moist Reducing Co Gleyed or Lo	don or ure Regime onditions ow-Chroma Colors*	HYDRIC	SOIL INDICATORS: Concretion High Organ Organic St Listed on I Listed on N Other (Exp	nic Content in Surface L reaking in Sandy Soils Local Hydric Soils List National Hydric Soils List plain in Remarks)	ayer in Sandy Soils.	
Major root zone: 7 in	y compacted.					

Hydrophytic Vegetation Present?	YES NO			
Wetland Hydrology Present?	YES NO	Is this Sampling Point Within a Wetland?	YES	NO NO
Hydric Soils Present?	YES NO			
Remarks:				
GPS: N 60 degrees, 29.033' W 149 degr Topography: overall flat but somewhat he NWI Class: U HGM Type: U Photos: 1 soil, 2 vegetation Functions:	ees, 43.198' ummocky or undulatin	g		

DATA FORM – ROUTINE WETLAND DETERMINATION





r								
Project/Site: Sterling Highway Proj	ject MP 45 -	60			Date	08/2	26/04	
Applicant / Owner: ADOT&PF					Borough	KPH	3	
Investigators: J. D. Sivils, A.B. Jor	les				State	AK		
Do Normal Circumstances exist on the site?					Community ID	Shru	ıb bog	
Is the site significantly disturbed (Atypical Situation)?					Transect ID	-		
Is the area a potential Problem Area	1? (If needed, e	xplain o	n reverse)	□YES ⊠NO	Plot ID	Plot	51	
Describe Location: VEGETATION								
Plant Species	Stratum	%	Indicator	Plant S	pecies	Stratum	%	Indicator
1 Picea lutzii*								
	Т	10	NI	9. Ledum groen	landicum	S	Tr	
2. Ledum palustre spp. decumbens *	T S	10 40	NI FACW	9. Ledum groen 10. Calamagro canadensis *	landicum stis	S H	Tr 7	FAC
 2. Ledum palustre spp. decumbens * 3. Vaccinium uliginosum * 	T S S	10 40 30	NI FACW FAC	9. Ledum groen 10. Calamagro. canadensis * 11. Equisetum d	landicum stis arvense*	S H H	Tr 7 7	FAC FACU
 2. Ledum palustre spp. decumbens * 3. Vaccinium uliginosum * 4. Empetrum nigrum 	T S S S	10 40 30 20	NI FACW FAC	 9. Ledum groen 10. Calamagros canadensis * 11. Equisetum a 12. Chamerion 	landicum stis arvense* angustifolium	S H H H	Tr 7 7 Tr	FAC FACU
 2. Ledum palustre spp. decumbens * 3. Vaccinium uliginosum * 4. Empetrum nigrum 5. Vaccinium vitis-idaea 	T S S S S S	10 40 30 20 18	NI FACW FAC	 9. Ledum groen 10. Calamagroscanadensis * 11. Equisetum a 12. Chamerion 13. 	landicum stis arvense* angustifolium	S H H H	Tr 7 7 Tr	FAC FACU
 2. Ledum palustre spp. decumbens * 3. Vaccinium uliginosum * 4. Empetrum nigrum 5. Vaccinium vitis-idaea 6. Salix barclayi 	T S S S S S S S	10 40 30 20 18 15	NI FACW FAC	9. Ledum groen 10. Calamagro. canadensis * 11. Equisetum of 12. Chamerion 13. 14.	landicum stis urvense* angustifolium	S H H H	Tr 7 7 Tr	FAC FACU

16.

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-) 75%

Tr

S

Remarks : Very small (<8") Betula papyrifera present. Sphagnum moss present.

* Indicates dominants using 50/20 method.

Describe Vegetation Type: Shrub bog

8. Rubus chamaemorus

HYDROLOGY

Recorded Data (Describe in Rema Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	rks)	WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wotlands
FIELD OBSERVATI	ONS	
Depth of Surface Water	N/A (in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	N/A (in)	Water-Stained Leaves
Depth to Saturated Soil	N/A (in)	Other (Explain in Remarks)

Remarks:

Soil moist at 3". Soil is not saturated but weather has been very dry.

SO	ILS
$\sim \sim$	

Map Unit Name ((Series and Phase):			Drainage Class: SWPD	,
Taxonomy (Subg	roup)		Field Observations C	Confirm Mapped Type?	YES NO
		PROFI	LE DESCRIPTION		
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
8-0	Oi				
0-3	B1	10YR3/2	7.5YR3/4	Few, coarse, Distinct	Silty clay loam with 5% gravels, SABL
3-18+	B2	2.5Y5/2	10YR3/4	Common, coarse, Distinct	Silty clay, Platy/SABL
		HYDRIC	SOIL INDICATORS:		
Histosol			Concretion	ns	
Histic Ep	ipedon		High Orga	anic Content in Surface La	ayer in Sandy Soils
Sulfidic C	Ddor		Organic S	treaking in Sandy Soils	
Aquic Mo	bisture Regime		Listed on	Local Hydric Soils List	
Reducing	Conditions		Listed on	National Hydric Soils Lis	t
Gleved or	r Low-Chroma Colors	6	Other (Ex	plain in Remarks)	
				1	
Remarks: Histic	epipedon was assume	d to be saturated under	normal weather conditi	ions. Low-chroma colors	also with mottles.
Major root zone:	4.5 inches				

Hydrophytic Vegetation Present?	YES NO			
Wetland Hydrology Present?	YES NO	Is this Sampling Point Within a Wetland?	YES YES	NO
Hydric Soils Present?	YES NO			
Remarks:				
GPS: N 60 degrees 29.253' W 149 degree Topography: slightly hummocky NWI Class: PSS4/1B HGM Type: depressional Photos: 1 soil, 2 vegetation Functions: see fxn form	ees 43.105'			

DATA FORM - ROUTINE WETLAND DETERMINATION





Project/Site: Sterling Highway Project MP 45 - 60		Date	08/26/04
Applicant / Owner: ADOT&PF		Borough	KPB
Investigators: J. D. Sivils, A.B. Jones		State	AK
Do Normal Circumstances exist on the site?	⊠YES □NO	Community ID	Open spruce forest
Is the site significantly disturbed (Atypical Situation)?	∐YES ⊠NO	Transect ID	-
Is the area a potential Problem Area? (If needed, explain on reverse)	□YES ⊠NO	Plot ID	Plot 52

Describe Location: End of runway. Near small trail which is visible from air photo. VEGETATION

Plant Species	Stratum	%	Indicator	Plant Species	Stratum	%	Indicator
1 Picea lutzii*	Т	30	NI	9. Geocaulon lividum*	Н	5	FACU
2. Picea mariana	Т	5		10 Chamerion angustifolium*	Н	5	FACU
3. Empetrum nigrum *	S	45	FAC	11. Cornus canadensis	Н	Tr	
4. Ledum palustre spp. decumbens *	S	30	FACW	12. Calamagrostis canadensis	Н	Tr	
5. Vaccinium vitis-idaea	S	10		13. Feathermoss	В	55	
6. Betula paperifera spp. kenaica	S	7		14. Lichen (Peltigera)	В	Tr	
7 Salix barclayi	S	Tr		15			
8. Salix sp.	S	Tr		16.			
Percent of Dominant Species that are	e OBL, FAC	CW, or	FAC (exclud	ling FAC-) 50%			
Remarks : * Indicates dominants using 50/20 m	ethod.						
Describe Vegetation Type: Open Lut	z and black	spruc	e forest.				

HYDROLOGY

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No Recorded Data Available Drift Lines Sediment Deposits Drainage Patterns in Watlands	Describe in Remarks) WETLAND HYDROLOGY INDICATORS e, or Tide Gauge Inundated graphs Saturated in Upper 12 Inches ata Available Drift Lines Sediment Deposits Dreinage Patterns in Wetlands	
FIELD OBSERVATIONS	LD OBSERVATIONS	
Depth of Surface Water N/A (in) Secondary Indicators (2 or more Required): Oxidized Root Channels in Upper 12 Inches	N/A (in) Secondary Indicators (2 or more Required):	hes
Depth to Free Water in Pit N/A (in) Water-Stained Leaves Local Soil Survey Data	it N/A (in) Water-Stained Leaves Local Soil Survey Data	
Depth to Saturated Soil N/A (in) IFAC-Neutral Test Other (Explain in Remarks)	N/A (in)	

Remarks: Wetland hydrology not present.

Map Unit Name (Se	eries and Phase):			Drainage Class: WD	
Taxonomy (Subgro	up)		Field Observations C	onfirm Mapped Type?	YES NO
		PROFI	LE DESCRIPTION		
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
4-0	Oi				
0-1.5	E	5Y4/1			Gravelly Sandy loam, Gr/SABL,
1.5-6.5	B1	5Y5/3			Sandy clay loam, Gr/SABL
6.5-16	B2	5Y5/3			Sandy clay loam with 1% cobbles and 30% gravels, ABL,
Histosol Histic Epipe Sulfidic Od Aquic Mois Reducing C Gleyed or I	edon or sture Regime Conditions Low-Chroma Colors	HYDRIC	SOIL INDICATORS: Concretion High Orga Organic St Listed on I Listed on I Other (Exp	ns nic Content in Surface I reaking in Sandy Soils Local Hydric Soils List National Hydric Soils Li plain in Remarks)	Layer in Sandy Soils
Remarks: Hydric so Major root zone: 6	oil indicators not obse	erved.			

Hydrophytic Vegetation Present?	YES NO	
Wetland Hydrology Present?	YES NO	Is this Sampling Point Within a Wetland? 🗌 YES 🔀 NO
Hydric Soils Present?	YES NO	
Remarks: This area is upland, but there i Moose pellets in plot area.	s a small pocket of we	tlands at the northern tip of the airstrip. Similar to area in Plot 51.
GPS: N 60 degrees, 29.213' W 149 degr Topography: Flat NWI Class: Upland HGM Type: Upland Photos: 1 soil, 2 vegetation Functions:	ees, 42.928'wgs 84 d	atum, elevation 477 '

DATA FORM – ROUTINE WETLAND DETERMINATION







WETLAND DETERMINATION FORM - Alaska Region

Project Stiller Hwy	Borough/City:	KPB		Date: 00	1.29.0	9
Applicant/Owner: Dot & DF				Plot: /	12	A
(huesticstor(s);)eff Schively	(SCO PAL	Hoden		Target:		
1 tot 10.49474 1000 - 149.1	96472	Datum: WG	594 Slope (%)	2	Aspect:	SW
Landform: Broch Feature:			NWI classificatio	on: U		
Shape across slope: linear / convex / concave Sha	pe up/downslope: linea	r / convex / con	Caye Vegetation Typ	e: Distri	nd fall	sprub
Photo #s/descriptions: 2 Soit 2 VE/			HGM Type:	N/P	t.	
Are climatic / hydrologic conditions on the site typical fo	r this time of year? Ye	s: X	No:	(if no, ex	plain in Rem	narks)
Are Vegetation Y / N Soil Y / N or Hydrology Y / N sig	nificantly disturbed?	Are normal circu	imstances present? Yo	es_X	No	
Are Vegetation Y / N, Soil Y / N, or Hydrology Y / N na	turally problematic? (If	f needed, explai	n answers in Remarks)	P		
Hydrophytic Vegetation Present? Yes	- No V		1.1.1. A.			1
Hydric Soil Present? Yes	No	Is the sam	pled Area	Yes	No_V	<
Wetland Hydrology Present? Yes	No	within a vv	euano r			
Remarks:						
VEGETATION				11.10		
			Dominance Test wo	orksheet:		
Tree Stratum (Use scientific names.) Cov.% Dom Ind.	Cov.%	Dom Ind.	Number of Dominant	Species	3	(4)
1. Pop bal (+r.) 5 × FACV 5. Po	p. bal 7	X FAC	That are OBL, FACW	/, or FAC:		(~)
2. TSU MET 3 FAC 6			a			
3. Bet pap 7 X FACU 7.	· ·		Total Number of Dom Species Across All S	ninant trata:	7	(B)
4. <u>lic. gla _2</u>						
201200	25		Percent of Dominant	Species	42.9	(A/D)
Total Cover:	2001 - 11-1-1	5	That are OBL, FACW	, or FAC:	<u></u>	(A/B)
50% of total cover: <u>1215</u>	20% of total cover: _	<u> </u>	Prevalence index w	orksneet.	20.000	
Sapling/Shrub Stratum	0.01		Total % Cove	er of:	Multiply	y by:
Cov.% Dom Ind.	ale sie 6	X FAC	OBL species	2	×1	<u>, </u>
2 Fix ala Z FACU 8 B	4. 1910 20	X FACU	FACVV species	15	Va- 79	35
3 Ros. aci 4 FACU 9. So	J brb 3	FAC	FAC species	65	A3=	20
4. Vib. edu 4 FACU 10.			FACU species	2-	x=_ 2	2
5. Vac vit 5 TAC 11			UPL species	Ch in	40= 91	9 (1)
6. She can 2 NI 12			Column Totals:	<u>.56 (A)</u>	10	<u> </u>
Total Cover:	-19	20			211	
50% of total cover: <u>イスン</u> 2	0% of total cover:	1.8	Prevalence Index	= B/A =	2.01	
Herb Stratum		The last				
Cov,% Dom Ind.	Cov.% E	Dom Ind. EAcu				
1. Epi ang to x FAC 13 Ge	D Tiv. 1	FACU	Hydrophytic Vegeta	tion Indicato	rs:	
3 Ruc. asa 5 FAC 14. Ac	o del. 1	FAC	N_Dominance Te	st is >50%		
4. Ste. Sit 1 FAC 15. St.	r, amp 1	FAC	_K Prevalence Inc	fex is ≤3.0		
5. Cor. can 17 FACU 16. Co	ad terflucture 1	FACU	Morphological	Adaptations ¹	(Provide su	pporting
6. Lyc. ann. 3 FAC 17. Lu	1p. 100 1 -	- FAC	data in Rema	arks or on a s	eparate she	et)
7. Ger. eri. 3 47/10 18.			_N_ Problematic H	ydrophytic Ve	getation ¹ (E	xplain)
8. ryc. sec The sec.				71.31A		Section America
10 GYM. 20 FACU 21.			¹ Indicators of hydric s	soil and wetla	nd hydrolog	y must
11. Sac at- 2 FACW 22.			be present unless dis	turbed or prol	blematic.	
Total Cover:	84	32	2.2.2.2.2.1			
50% of total cover: 2	0% of total cover: $_3$	6.8	Hydrophytic			/
Plot size (radius, or length x width) 0.1 ALTE	% bare ground:	d	Vegetation Y	'es	No	
% Cover of Wetland Bryophytes Tota (Where applicable)	al Cover of Bryophytes	_2	Fresentr			
Remarks: Distriked area.						

US Army Corps of Engineers

Alaska Version 4-10-2007

Sampling Point: AL

Depth Horizon Soil Matrix	Redox Features	-		Alpha	
(inches) Name Color (moist)	% Color (moist) % Type ¹	Loc ²	Texture	(DOS/	Remarke
0-4 A 7.548.3/1 10	0		C11	nea)	Nemana
1-7 E 2.54 4/2 1	<u></u>		212		
7-15 R. 2.54 4/4	0		VESAL		6.20
7.5 VP 4/C			VISAL		5 20
5-14+ B. ZEVE 4/10			VESAL		- 0
2 201 - 22 - 1.215 1/1 1		-	VESAL		520
ype: C = Concentration, D = Depletions, R	M = Reduced Matrix. ² Location: PL = Po	re Lining, F	RC = Root Chan	nel, M = M	atrix
dric Soll Indicators (check ones	Indicators for Problematic Hydric So	oils ³ :			
J Histosol of Histel (A1)	N Alaska Color Change (TA4)		N Alaska (Slaved with	
V Histic Epipedon (A2)	N Alaska Alpine Swales (TA5)		Alaska C		out hue sy or Reade
Hydrogen Sulfide (A4) " from too	N Alacka Paday with 2 5V U		N orberty	ng Layer	544
	IN MISKE REDOX WITH 2.51 HUE		Other (e.	xplain in Re	emarks)
mick Dark Sunace (A12)	30	10.00			
Alaska Gleyed (A13)	One indicator of Hydrophytic vegetatio	n, one prin	nary indicator of	wetland h	drology, and an
Alaska Redox (A14)	appropriate landscape position must	be present	t.		
_ Alaska Gleyed Pores (A15)	Give details of color change in Remark	S.		_	
strictive Layer (if present)	Drainage Class:	Cot P.L.	1		1
Type: NA		Hydric Sc	il Present?	Yes	No_V
Depth (inches):	WD		and the second second		
emarks:					
marks:					
marks: ROLOGY					
marks: PROLOGY tland Hydrology Indicators (check ones th	nat apply):	Second	ary Indicators (at least 2 o	r more required)
Marks: PROLOGY tland Hydrology Indicators (check ones th nary Indicators (any one indicator is sufficient	nat apply): nt)	Second <u>N</u> Wa	ary Indicators (at least 2 o ves (B9)	r more required)
marks: ROLOGY tland Hydrology Indicators (check ones th nary Indicators (any one indicator is sufficie Surface Water (A1)	nat apply): nt) Surface Soil Cracks (B6)	Second _N_Wa _N_Dra	ary Indicators (ater Stained Lea linage Patterns	<u>at least 2 o</u> ves (B9) (B10)	r more required)
marks: PROLOGY tland Hydrology Indicators (check ones the nary Indicators (any one indicator is sufficie Surface Water (A1) <u>N</u> High Water Table (A2) <u>N</u>	nat apply): nt) Surface Soil Cracks (B6) Inundation Visible on Aerial Image (B7)	<u>Second</u> <u>N</u> Wa <u>N</u> Dra <u>N</u> Oxi	ary Indicators (ter Stained Lea linage Patterns dized Rhizosph	at least 2 o ves (B9) (B10) eres on Liv	r more required)
marks: PROLOGY tland Hydrology Indicators (check ones the mary Indicators (any one indicator is sufficient Surface Water (A1) High Water Table (A2) Saturation (A3)	nat apply): nt) Surface Soil Cracks (B6) Inundation Visible on Aerial Image (B7) Marl Deposits (B15)	N Wa N Dra N Oxi N Pre	ary Indicators (ter Stained Lea inage Patterns dized Rhizosph sence of Reduc	at least 2 o ves (B9) (B10) eres on Liv ced Iron (C:	r more required) ring Roots (C3) 4)
Marks: PROLOGY tland Hydrology Indicators (check ones the mary Indicators (any one indicator is sufficient Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	nat apply): nt) Surface Soil Cracks (B6) Inundation Visible on Aerial Image (B7) Marl Deposits (B15) Hydrogen Sulfide Odor (C1)" from top	Second N Wa N Dra N Oxi N Pre N Sal	ary Indicators (ter Stained Lea inage Patterns dized Rhizosph sence of Reduc t Deposits (C5)	at least 2 o ives (B9) (B10) eres on Liv zed Iron (C-	r more required) ring Roots (C3) 4)
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marks: PROLOGY tland Hydrology Indicators (check ones the stand stand) mary Indicators (any one indicator is sufficient sufficient) Surface Water (A1) M High Water Table (A2) M Saturation (A3) J Water Marks (B1) M Sediment Deposits (B2) M Drift Deposits (B3) M Algal Mat or Crust (B4) Iron Deposits (B5)	nat apply): nt) Surface Soil Cracks (B6) Inundation Visible on Aerial Image (B7) Marl Deposits (B15) Hydrogen Sulfide Odor (C1)" from top Dry-Season Water Table (C2) Other (explain in Remarks)	Second N Wa N Dra N Oxi Pre Sal N Stu N Stu N Stu N N N N N Mic	ary Indicators (ter Stained Lea inage Patterns dized Rhizosph sence of Reduc t Deposits (C5) nted or Stresse omorphic Positio illow Aquitard (I rotopographic F	at least 2 o ves (B9) (B10) eres on Liv ced Iron (C- d Plants (D on (D2) D3) Relief (D4)	ring Roots (C3) 4)
marks: PROLOGY tland Hydrology Indicators (check ones the nary Indicators (any one indicator is sufficient Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	nat apply): nt) Surface Soil Cracks (B6) Inundation Visible on Aerial Image (B7) Marl Deposits (B15) Hydrogen Sulfide Odor (C1)* from top Dry-Season Water Table (C2) Other (explain in Remarks)	Second N Wa N Dra N Oxi N Pre N Sal N Stu N Stu N Stu N Sha N C FAC	ary Indicators (ter Stained Lea inage Patterns dized Rhizosph sence of Reduc t Deposits (C5) nted or Stresse omorphic Positio allow Aquitard (I rotopographic F C Neutral Test (at least 2 o ves (B9) (B10) eres on Liv ced Iron (C- d Plants (D on (D2) Con (D2) Con (D2) Con (D4) D5)	r more required) ring Roots (C3) 4)
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marks: PROLOGY tland Hydrology Indicators (check ones the mary Indicators (any one indicator is sufficient sufficient (A1) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) d Observations: ace Water Present? Yes Ner Table Present?	nat apply): nt) Surface Soil Cracks (B6) Inundation Visible on Aerial Image (B7) Marl Deposits (B15) Hydrogen Sulfide Odor (C1)" from top Dry-Season Water Table (C2) Other (explain in Remarks) o Depth (inches) o Depth (inches)	Second N Wa N Dra N Dra N Pre N Stu N Stu N Stu N Stu N Sha N FAC	ary Indicators (ter Stained Lea inage Patterns dized Rhizosph sence of Reduc t Deposits (C5) nted or Stresse omorphic Positio allow Aquitard (I rotopographic F Neutral Test (at least 2 o ves (B9) (B10) eres on Liv ced Iron (C- d Plants (D on (D2) C3) Relief (D4) D5)	r more required) ring Roots (C3) 4) 1)
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DROLOGY Itland Hydrology Indicators (check ones the mary Indicators (any one indicator is sufficient on the s	nat apply): nt) Surface Soil Cracks (B6) Inundation Visible on Aerial Image (B7) Marl Deposits (B15) Hydrogen Sulfide Odor (C1)" from top Dry-Season Water Table (C2) Other (explain in Remarks) Depth (inches) b Depth (inches) t that depth but not yet filled: Y / N Depth (inches)	Second N Wa N Dra N Oxi 가 Pre N Sal N Stu N Stu N Sha N Sha N Sha N Sha N Sha N Sha	ary Indicators (i ter Stained Lea inage Patterns dized Rhizosph sence of Reduc t Deposits (C5) nted or Stresse pmorphic Positio illow Aquitard (I rotopographic F C Neutral Test (i I Hydrology Pri	at least 2 o ves (B9) (B10) eres on Liv ced Iron (C. d Plants (D con (D2) C3) Relief (D4) D5) esent?	r more required) ring Roots (C3) 4) 11) YesNo
marks: PROLOGY tland Hydrology Indicators (check ones the state of the stat	nat apply): nt) Surface Soil Cracks (B6) Inundation Visible on Aerial Image (B7) Marl Deposits (B15) Hydrogen Sulfide Odor (C1)" from top Dry-Season Water Table (C2) Other (explain in Remarks) Depth (inches) t that depth but not yet filled: Y / N Depth (inches)	Second N Wa N Dra N Oxi 가 Pre N Sal N Stu N Stu N Sha N Sha N Sha N Sha N Sha	ary Indicators (ter Stained Lea inage Patterns dized Rhizosph sence of Reduc t Deposits (C5) nted or Stresse prorphic Positio illow Aquitard (I rotopographic F C Neutral Test (Hydrology Pre	at least 2 o ves (B9) (B10) eres on Liv ced Iron (C d Plants (D on (D2) O3) Relief (D4) D5) esent?	r more required) ring Roots (C3) 4) 1) Yes No
marks: IROLOGY tland Hydrology Indicators (check ones the	hat apply): nt) Surface Soil Cracks (B6) Inundation Visible on Aerial Image (B7) Marl Deposits (B15) Hydrogen Sulfide Odor (C1)" from top Dry-Season Water Table (C2) Other (explain in Remarks) Depth (inches) Depth (inches) t that depth but not yet filled: Y / N Depth (inches) Ting well, aerial photos, previous inspections	Second N Wa N Dra N Dra N Pre N Sal N Stu N Stu N Sha N Sha N FAC Wetland	ary Indicators (ter Stained Lea inage Patterns dized Rhizosph sence of Reduc t Deposits (C5) nted or Stresse omorphic Positio illow Aquitard (I rotopographic F C Neutral Test (i I Hydrology Pre-	at least 2 o ves (B9) (B10) eres on Lik ced Iron (C d Plants (D on (D2) C3) Relief (D4) D5) esent?	r more required) ring Roots (C3) 4) 1) Yes No
marks: PROLOGY tland Hydrology Indicators (check ones til mary Indicators (any one indicator is sufficie Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Observations: ace Water Present? Yes N Seeping in a ration Present? Yes N Udes capillary fringe) ribe Recorded Data (stream gauge, monito	nat apply): nt) Surface Soil Cracks (B6) Inundation Visible on Aerial Image (B7) Marl Deposits (B15) Hydrogen Sulfide Odor (C1)" from top Dry-Season Water Table (C2) Other (explain in Remarks) Depth (inches) Depth (inches) t that depth but not yet filled: Y / N Depth (inches) Ting well, aerial photos, previous inspections	Second N Wa N Dra N Dra N Stal N Stal N Sta N Sha N Sha N FAC	ary Indicators (ter Stained Lea inage Patterns dized Rhizosph sence of Reduc t Deposits (C5) nted or Stresse omorphic Positio allow Aquitard (I rotopographic F Neutral Test (Neutral Test (at least 2 o ves (B9) (B10) eres on Liv ced Iron (C- d Plants (D on (D2) C3) Relief (D4) D5) esent?	r more required) ring Roots (C3) 4) 1) Yes No





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ж.							

Date: 09.29.09
Plot./ <u>15</u>
Target:
_ Slope (%): / A Aspect: _ S
I classification:
getation Type: OPEN MIXED FORE
3M Type: / / A
lo: (if no, explain in Remarks)
present? Yes No
in Remarks)
the second se
Yes No 🗹
ice Test worksheet:
of Dominant Species / ,,
OBL, FACW, or FAC:
nber of Dominant
of Dominant Species ul 2
OBL, FACW, or FAC: (A/E
ce Index worksheet:
otal % Cover of: Multiply by:
cies X1=
pecies X2=
ties 31 $x_3 = 93$
ecies <u>98</u> X4= <u>392</u>
sies <u>19</u> X5= <u>95</u>
otals: 148 (A) 580 (E
elence Index = B/A = 3.92
utic Vegetation Indicators:
ync vegetation indicators.
minance Test is >50%
rphological Adaptations' (Provide supporting
ata in Remarks or on a separate sneet)
oblematic Hydrophytic Vegetation ¹ (Explain)
s of hydric soil and wetland hydrology must
it unless disturbed or problematic.
vtic
n Yes No V
/ 1

US Army Corps of Engineers

SOIL

Sampling Point: A5

40. 1. 1. 1.	110112011	Soil Matrix		Re	dox Feat	tures			Alpha	
$\frac{\partial - 2}{\partial - 2}$	Name A	<u>Color (moist)</u> 7.548 3/3	% 100	Color (moist)	%	Type ¹	Loc ²	Texture SIL	(pos/ neg)	Remarks
44		2154 5/2	100					VESAL		
4-12	<u>Dı</u>	104R 5/6	50		Ξ	=	=	VESAL	_	615 65
15-20	<u> 13 2</u>	104R 514	100		=	_	-	ESAL	-	G20 65
_		<u> </u>	-		-				-	
Type: C =	Concentra	ation, D = Depletions	, RM =	Reduced Matrix. ² L	ocation:	PL = Pore	e Lining, F	RC = Root Chan	nel, M = I	Matrix
hat apply)	:	e (alloca alloc		Indicators for Probl	ematic H	lydric Soi	ils ³ :			
M Histo	sol of Histe	I (A1)		N Alaska Color C	hange (T	A4)		M Alaska G	Sleyed wit	hout Hue 5Y or Redde
M Histic	Epipedon	(A2)		Alaska Alpine S	Swales (T	A5)		Underlyi	ng Layer	A MARKED ALWARD
N Hydro	gen Sulfide	e (A4) " from to	p	M Alaska Redox w	vith 2.5Y	Hue		N Other (e)	xplain in F	Remarks)
N Thick	Dark Surfa	ce (A12)		3						
N Alask	a Gleyed (A	13)		³ One indicator of Hyd	rophytic	vegetation	n, one prin	nary indicator of	wetland I	vdrology, and an
N Alask	a Redox (A	14)		appropriate landsc:	ape posit	ion must t	be present	ter occorrections at	0.502.02	y and gri
N Alask	a Gleyed P	ores (A15)		⁴ Give details of color	change in	Remarks	s.			
estrictive l	ayer (if pre	sent)		Drainage Class:		T				
Type:	ŀ	JA		142			Hydric Sc	il Present?	Yes	No
Depth (inches):	NIG		W D			a constraint	L Obeccavite	10	
			1							
DROLOG	γ	11 - 12 - 12 - 1	1		-	-				
DROLOG	SY drology Inc	dicators (check one	s that a	pply):			Second	ary Indicators (a	at least 2	or more required)
DROLOG	Grology Inc ators (any	dicators (check one one indicator is suffi	s that a cient)	pply):			Second <u>AJ</u> Wa	ary Indicators (a	a <u>t least 2</u> ves (B9)	or more required)
DROLOG	GY drology Ind cators (any Water (A1)	dicators (check one one indicator is suffi	s that a cient) 전 Sur	pply): face Soil Cracks (B6)			Second <u>M</u> Wa <u>M</u> Dra	arv Indicators (a ter Stained Lea inage Patterns	a <u>t least 2</u> ves (B9) (B10)	or more required)
DROLOG /etland Hy rimary Indio J Surface High Wa J Saturatio	Grology Ind cators (any Water (A1) ter Table (/	dicators (check one one indicator is suffi A2)	s that a cient) 산 Sur 산 Inur	pply): face Soil Cracks (B6) idation Visible on Aeri	al Image	(87)	Second N Wa P Dra P Oxi	ary Indicators (a ter Stained Lea linage Patterns dized Rhizosph	at least 2 ves (B9) (B10) eres on L	or more required) iving Roots (C3)
DROLOG retland Hy rimary India J Surface High Wa Saturatio Water M	drology Ind cators (any Water (A1) ter Table (/ on (A3) arks (B1)	dicators (check one one indicator is suffi A2)	s that a cient) 신 Sur 신 Inur	pply): face Soil Cracks (B6) idation Visible on Aeria I Deposits (B15)	al Image	(87)	Second <u>N</u> Wa <u>M</u> Dra <u>M</u> Dra <u>M</u> Pre <u>N</u> 2-1	ary Indicators (a ter Stained Lea inage Patterns dized Rhizosph sence of Reduc	at least 2 ves (B9) (B10) eres on L eed Iron (C	or more required) iving Roots (C3) 24)
DROLOG /etland Hy rimary India J Surface High Wa J Saturatio Water M Sedimen	Grology Ind cators (any Water (A1) ter Table (/ on (A3) arks (B1) t Deposits	dicators (check one one indicator is suffi A2)	s that a cient) <u>N</u> Sur <u>N</u> Inur <u>N</u> Mar N Dr	pply): face Soil Cracks (B6) idation Visible on Aeria I Deposits (B15) rogen Sulfide Odor (C Season Water Table /	al Image 1)"	(B7) from top	Second <u>N</u> Wa <u>N</u> Dra <u>I</u> Oxi <u>N</u> Pre <u>N</u> Salt	arv Indicators (a ter Stained Lea inage Patterns dized Rhizosph sence of Reduc t Deposits (C5)	at least 2 ves (B9) (B10) eres on L red Iron (C	or more required) iving Roots (C3) C4)
PROLOG /et/and Hyr rimary Indio J Surface High Wa Saturatio Water M J Sedimen Drift Den	GY drology Ind cators (any Water (A1) ter Table (/ on (A3) arks (B1) t Deposits osits (B3)	dicators (check one one indicator is suffi A2) 	s that a cient) 산 Sur 산 Inur 산 Mar 사 Dry- 사 Dry-	pply): face Soil Cracks (B6) idation Visible on Aeria I Deposits (B15) rogen Sulfide Odor (C Season Water Table (er (explain in Remarks	al Image 1)" (C2)	(B7) from top	Second <u>N</u> Wa <u>N</u> Dra <u>I</u> Dra <u>I</u> Pre <u>N</u> Sall <u>N</u> Stu <u>N</u> Stu	ary Indicators (a ter Stained Lea inage Patterns dized Rhizosph sence of Reduc t Deposits (C5) nted or Stressed	at least 2 ves (B9) (B10) eres on L ed Iron (C d Plants (or more required) iving Roots (C3) C4) D1)
DROLOG /etland Hyi / Surface High Wa / Saturatio / Water M / Sedimen - Drift Dep Algal Ma	eY drology Ind cators (any Water (A1) ter Table (/ on (A3) arks (B1) t Deposits osits (B3) t or Crust (f	dicators (check one one indicator is suffi (B2)	s that a cient) 산 Sur 산 Inur 산 Mar 산 Hyd 사 Dry- 산 Othe	pply): face Soil Cracks (B6) idation Visible on Aeria I Deposits (B15) rogen Sulfide Odor (C Season Water Table (er (explain in Remarks	al Image 1)" (C2))	(B7) from top	Second N Wa P Dra P Dra N Salt N Salt N Stu N Geo	ary Indicators (a ter Stained Lea inage Patterns dized Rhizosph sence of Reduc t Deposits (C5) nted or Stressed pmorphic Positic	at least 2 ves (B9) (B10) eres on L eed Iron (C d Plants (on (D2)	or more required) iving Roots (C3) C4) D1)
DROLOG retland Hy imary India J Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep	Grology Ind cators (any Water (A1) ter Table (/ on (A3) arks (B1) t Deposits osits (B3) t or Crust (f osits (B5)	dicators (check one one indicator is suffi A2) 	s that a cient) 전 Sur 전 Inur 전 Mar 전 Hyd 시 Dry- 전 Othe	pply): face Soil Cracks (B6) idation Visible on Aeria I Deposits (B15) rogen Sulfide Odor (C Season Water Table (er (explain in Remarks	al Image 1)" (C2))	(B7) from top	Second <u>A</u> Wa <u>A</u> Dra <u>A</u> Dra <u>A</u> Dra <u>A</u> Salt <u>N</u> Salt <u>N</u> Stu <u>N</u> Sha <u>N</u>	ary Indicators (a ter Stained Lea inage Patterns dized Rhizosph sence of Reduc t Deposits (C5) nted or Stressed morphic Positic illow Aquitard (D	at least 2 ves (B9) (B10) eres on L ed Iron (C d Plants (on (D2) 03)	or more required) iving Roots (C3) C4) D1)
DROLOG /etland Hyu rimary India J Surface High Wa Saturatio Water M J Sedimen Drift Dep Algal Ma Iron Dep	GY drology Ind cators (any Water (A1) ter Table (/ on (A3) arks (B1) t Deposits osits (B3) t or Crust (If osits (B5)	dicators (check one one indicator is suffi A2) 	s that a cient) 신 Sur 신 Mar 신 Hyd 시 Dry- 신 Othe	pply): face Soil Cracks (B6) idation Visible on Aeria I Deposits (B15) rogen Sulfide Odor (C Season Water Table (er (explain in Remarks	al Image 1)" (C2))	(B7) from top	Second <u>N</u> Wa <u>N</u> Dra <u>N</u> Dra <u>N</u> Pre <u>N</u> Sali <u>N</u> Stu <u>N</u> Stu <u>N</u> Stu <u>N</u> Sha <u>N</u> Mic <u>N</u> FAC	ary Indicators (a ter Stained Lea inage Patterns dized Rhizosph sence of Reduc t Deposits (C5) nted or Stressed morphic Positio illow Aquitard (D rotopographic R Neutral Test (1)	at least 2 ves (B9) (B10) eres on L ed Iron (C d Plants (on (D2) 03) celief (D4) 05)	or more required) iving Roots (C3) C4) D1)
PROLOG /etland Hyr rimary Indig J Surface High Wa J Saturatio Water M J Sedimen Drift Dep Algal Ma / Iron Dep eld Observa	drology Ind cators (any Water (A1) ter Table (/ on (A3) arks (B1) t Deposits osits (B3) t or Crust (f osits (B5)	dicators (check one one indicator is suffi (B2) (B2)	s that a cient) 산 Sur 산 Inur 산 Mar 산 Hyd 시 Dry- 산 Othe	pply): face Soil Cracks (B6) idation Visible on Aeria I Deposits (B15) rogen Sulfide Odor (C Season Water Table (er (explain in Remarks	al Image 1)" (C2))	(B7) from top	Second N Wa P Dra P Dra P C N Salt N Salt N Stu N Geo N Sha N Mic D FAC	ary Indicators (a ter Stained Lea inage Patterns dized Rhizosphi sence of Reduc t Deposits (C5) nted or Stressed pmorphic Positic omorphic Positic tillow Aquitard (D rotopographic R Neutral Test (D	at least 2 ves (B9) (B10) eres on L ed Iron (C d Plants (d Plants (d D) d D) d D) d D) d D) d D) d D) d D)	or more required) iving Roots (C3) C4) D1)
DROLOG /etland Hy rimary India J Surface High Wa J Saturatio Water M J Sedimen Drift Dep Algal Ma T Iron Dep Id Observa rface Wate	Grology Ind cators (any Water (A1) ter Table (/ on (A3) arks (B1) t Deposits osits (B3) t or Crust (f osits (B5) ations: r Present?	dicators (check one one indicator is suffi (B2) (B2) 34) Yes	s that a <u>cient)</u> 산 Sur 산 Inur 산 Mar 산 Hyd 시 Dry- 산 Othe	pply): face Soil Cracks (B6) idation Visible on Aeria I Deposits (B15) rogen Sulfide Odor (C Season Water Table (er (explain in Remarks	al Image 1)" (C2)) s)	(B7) from top	Second N Wa P Dra P Dra N Salt N Salt N Stu N Stu N Sta N Sta N Sta N FAC	ary Indicators (a ter Stained Lea inage Patterns dized Rhizosph sence of Reduc t Deposits (C5) nted or Stressed pmorphic Positic illow Aquitard (D rotopographic R Neutral Test (D	at least 2 ves (B9) (B10) eres on L ced Iron (C d Plants (on (D2) con (D2) celief (D4) D5)	or more required) iving Roots (C3) C4) D1)
DROLOG (etland Hyrimary India J Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Ton Dep Id Observa rface Wate Iter Table F	Grology Ind cators (any Water (A1) ter Table (/ on (A3) arks (B1) t Deposits osits (B3) t or Crust (If osits (B5) t or Crust (If osits (B5) attions: r Present?	dicators (check one one indicator is suffi (62)	s that a cient) 신 Sur 신 Inur 신 Hyd 시 Dry- 신 Othe No	pply): face Soil Cracks (B6) idation Visible on Aeria I Deposits (B15) rogen Sulfide Odor (C Season Water Table (Season Water Table (er (explain in Remarks	al Image 1)" (C2)) s) s)	(B7) from top	Second <u>N</u> Wa <u>N</u> Dra <u>I</u> Oxi <u>N</u> Pre <u>N</u> Sal <u>N</u> Stu <u>N</u> Stu <u>N</u> Stu <u>N</u> Stu <u>N</u> FAC	arv Indicators (a ter Stained Lea inage Patterns dized Rhizosph sence of Reduc t Deposits (C5) nted or Stressed morphic Positio illow Aquitard (D rotopographic R C Neutral Test (I	at least 2 ves (B9) (B10) eres on L ed Iron (C d Plants (on (D2) 03) celief (D4) 05)	or more required) iving Roots (C3) C4) D1)
PROLOG /etland Hyr rimary India J_Surface L_High Wa J_Saturatio J_Water M J_Sedimen L_Drift Dep J_Con Dep I on Dep I on Dep I d Observa rface Wate ater Table F	GY drology Ind cators (any Water (A1) ter Table (/ on (A3) arks (B1) t Deposits osits (B3) t or Crust (If osits (B5) ations: r Present? Present?	dicators (check one one indicator is suffi (B2) (B2) 34) Yes Yes Seeping i	s that a cient) <u>N</u> Sur <u>N</u> No No No n at tha	pply): face Soil Cracks (B6) idation Visible on Aeria I Deposits (B15) rogen Sulfide Odor (C Season Water Table (Season Water Table (er (explain in Remarks	al Image 1)" (C2) (C2) () s) s) ed: Y /	(B7) from top	Second <u>N</u> Wa <u>I</u> Dra <u>I</u> Dra <u>I</u> Pre <u>N</u> Sall <u>N</u> Stu <u>N</u> Stu <u>N</u> Stu <u>N</u> Stu <u>N</u> Stu <u>N</u> Sta <u>N</u> Sta	ary Indicators (a ter Stained Lea inage Patterns dized Rhizosph- sence of Reduc t Deposits (C5) nted or Stresser pmorphic Positic illow Aquitard (D rotopographic R Neutral Test (I	at least 2 ves (B9) (B10) eres on L ed Iron (C d Plants (d Plants (00 (D2) 03) telief (D4) 05)	or more required) iving Roots (C3) 24) D1)
PROLOG /etland Hyn rimary Indig J Surface High Wa J Saturation Water M J Sedimen Drift Dep Algal Ma Ton Dep eld Observa rface Wate ater Table F turation Pre	GY drology Ind cators (any Water (A1) ter Table (/ on (A3) arks (B1) t Deposits osits (B3) t or Crust (for osits (B5) attions: r Present? esent?	dicators (check one one indicator is suffi (B2) (B2) 34) Yes Yes Seeping i Yes	s that a cient) Sur Sur Mar Mar Mar Mo No No n at tha No	pply): face Soil Cracks (B6) idation Visible on Aeria I Deposits (B15) rogen Sulfide Odor (C Season Water Table (Season Water Table (ser (explain in Remarks Depth (inches t depth but not yet fille Depth (inches	al Image 1)" (C2)) s) s) s) s) s)	(B7) from top	Second N Wa P Dra P Dra N Pre N Salt N Stu N Geo N Sha N Mic N FAC	ary Indicators (a ter Stained Lea inage Patterns dized Rhizosphi sence of Reduct Deposits (C5) inted or Stressed pmorphic Positic illow Aquitard (D rotopographic R Neutral Test (I Neutral Test (I	at least 2 ves (B9) (B10) eres on L ed Iron (C d Plants (d Plants (00 (D2) 03) ellief (D4) 05)	or more required) iving Roots (C3) C4) D1)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:





WETLAND DETERMINATION FORM - Alaska Region

-149.9777 Feature:	beinge	Hook.	~		Plot:	Aq	
-149.9777 Feature:	1 George	Hook.	~		Trent		
-149.9777 Feature:	1 0				Target		
Feature:	4	Datum	: W650	Slope (*	%): 5	_Aspect: _	5
-				NWI classific:	ation:]	
Shape up/do	wnslope: line	ar / cor	vex / con	cave Vegetation	Type:	mixed	fors
veg				HGM Type:	NIA	1.	
typical for this tim	ne of year? Y	es:	x	No:	(if no, e	xplain in Re	marks)
Y / @ significant	ly disturbed?	Are no	rmal circi	umstances present?	Yes		L
Y /N naturally p	roblematic?	(If need	ed, expla	in answers in Remar	ks)		
Yes X	No						1
Yes	NoV	1	s the sam	pled Area	Yes	No "	/
Yor	NoV	v	ithin a W	etland?	100	175-	-
Tes							
ila. truck							
				Dominance Test	worksheet:		
	-	-		Number of Dente	at Caseles	2	
-	Cov.%	Dom	ino.	That are OBL, FAC	CW, or FAC:		(A
U 5							
7		-		Total Number of D	ominant	3	
8.				Species Across Al	I Strata:		(B
-						1-	~1
over: 35				Percent of Domina	int Species	67	A/B
5 20%	of total cover:	-	7-	Prevalence Index	worksheet:		
2070	or total cover.			Total % C	aver of	Mailer	aly by
	Cou %	Dom	Ind	OBL species	over oi.	X1=	Siy Dy.
r 7	CUV. 70	Dom	ind.	EACW/species	d	X2=	d
8.		_	_	FAC appaies	78	¥2= 2	34
9.		\square	Ξ	FAC species	62	×4- 7	17
v 10			1	FACU species	2	A4=	15
י 11	<u></u>			UPL species	2	X5=	1.
_ 12		-		Column Totals: _	154 (A)	-1	<u>61</u> (E
over: <u>SZ</u>				121403472		2.4	
20% of t	otal cover:	10,	4	Prevalence Inc	lex = B/A =	1.	I
	Cov.%	Dom	Ind.				
12	·			Hydrophytic Vege	atation Indica	tors:	
13		-		V Deminance	Tost is >50%	-	
9 14		-		N Prevalence	Index is ≤3.0		
15						1	
17			-	Morphologic	cal Adaptation	s' (Provide s	upporting
_ 1/		_	100	Gata in re			
19			_	Problematic	Hydrophytic V	/egetation i	Explain)
20.	3 3 3						
21.		-		¹ Indicators of hydr	ic soil and wet	land hydrold	gy must
22		_		be present unless	disturbed or p	oblematic.	
over: 47							
20% of to	otal cover:	9.	4	Hydrophytic	17		
icre %	pare ground	d'	5	Vegetation	Yes X	_ No	_
Total Cover	of Bryophyte	is T	5	Present?			
	Y / \bigcirc significant Y / \bigcirc naturally p Yes Yes <td>Y / Ø significantly disturbed? Y / Ø naturally problematic? Yes X No Yes No Yes Yes 20% of total cover: Cov.% Cover: 35 20% of total cover: Cov.% Cover: 52 20% of total cover: Cov.% 11. Cover: Cov.% 12. 20% of total cover: Cov.% 13. 14. 15. 14. 12. 20% 13. 20% of total cover: 20% 21. 20% of total cover: 20% 22. 20% of total cover: 30% of total cover:</td> <td>Y / Ø significantly disturbed? Are not Y / Ø naturally problematic? (If need Yes X No Yes No Is Sover: 35 Yes 20% of total cover: 10 Yes 11. Is Yes 12. Is Yes 13. Is Yes 14. Is Yes 14. Is Yes 14. Is Yes 15. Is Yes 16. Is Yes 17. Yes Yes 18. Yes Yes 19. Yes Yes 19.<td>Y / \bigcirc significantly disturbed? Are normal circles? (If needed, explain of the set of th</td><td>Y / Ø significantly disturbed? Are normal circumstances present? Y / Ø naturally problematic? (If needed, explain answers in Remar Yes No Yes Dominance Test: Number of Dominance Species Across Al Percent of Dominance Species Across Al Yerevalence Index Total Number of Dominance Yerevalence Ind. Yerevalence Ind. Yerevalence Percent of Dominance Yerevalence Ind.</td><td>Y Ø significantly disturbed? Are normal circumstances present? Yes Y Ø naturally problematic? (if needed, explain answers in Remarks) Yes No Yes Dominant Species Yes Yes Yes Yes<!--</td--><td>Y / Ø significantly disturbed? Are normal circumstances present? Yes</td></td></td>	Y / Ø significantly disturbed? Y / Ø naturally problematic? Yes X No Yes No Yes Yes 20% of total cover: Cov.% Cover: 35 20% of total cover: Cov.% Cover: 52 20% of total cover: Cov.% 11. Cover: Cov.% 12. 20% of total cover: Cov.% 13. 14. 15. 14. 12. 20% 13. 20% of total cover: 20% 21. 20% of total cover: 20% 22. 20% of total cover: 30% of total cover:	Y / Ø significantly disturbed? Are not Y / Ø naturally problematic? (If need Yes X No Yes No Is Sover: 35 Yes 20% of total cover: 10 Yes 11. Is Yes 12. Is Yes 13. Is Yes 14. Is Yes 14. Is Yes 14. Is Yes 15. Is Yes 16. Is Yes 17. Yes Yes 18. Yes Yes 19. Yes Yes 19. <td>Y / \bigcirc significantly disturbed? Are normal circles? (If needed, explain of the set of th</td> <td>Y / Ø significantly disturbed? Are normal circumstances present? Y / Ø naturally problematic? (If needed, explain answers in Remar Yes No Yes Dominance Test: Number of Dominance Species Across Al Percent of Dominance Species Across Al Yerevalence Index Total Number of Dominance Yerevalence Ind. Yerevalence Ind. Yerevalence Percent of Dominance Yerevalence Ind.</td> <td>Y Ø significantly disturbed? Are normal circumstances present? Yes Y Ø naturally problematic? (if needed, explain answers in Remarks) Yes No Yes Dominant Species Yes Yes Yes Yes<!--</td--><td>Y / Ø significantly disturbed? Are normal circumstances present? Yes</td></td>	Y / \bigcirc significantly disturbed? Are normal circles? (If needed, explain of the set of th	Y / Ø significantly disturbed? Are normal circumstances present? Y / Ø naturally problematic? (If needed, explain answers in Remar Yes No Yes Dominance Test: Number of Dominance Species Across Al Percent of Dominance Species Across Al Yerevalence Index Total Number of Dominance Yerevalence Ind. Yerevalence Ind. Yerevalence Percent of Dominance Yerevalence Ind.	Y Ø significantly disturbed? Are normal circumstances present? Yes Y Ø naturally problematic? (if needed, explain answers in Remarks) Yes No Yes Dominant Species Yes Yes Yes Yes </td <td>Y / Ø significantly disturbed? Are normal circumstances present? Yes</td>	Y / Ø significantly disturbed? Are normal circumstances present? Yes

US Army Corps of Engineers

Depth Horizon	Soil Matrix		Re	dox Feat		ninu me i	absence of in	dicators)	
(inches) <u>Name</u> 0-2 A	Color (moist) 7.5122.5/2	<u>%</u> 100	Color (moist)	%	Type ¹	Loc ²	_Texture_	(pos/ neg)	Remarks
2-3 E 3-14 B	10VR 4/2 2,5V 4/4	100		Ξ	Ξ	-	SIL ESAL	Ξ	DISCONTINUOUS
14-20+ B2	10VR 4/3	100		-	-	\equiv	SAL	=	63055
¹ Type: C = Concentra Hydric Soil Indicator that apply): ♪ Histosol of Histe ♪ Histic Epipedon ♪ Hydrogen Sulfide ♪ Thick Dark Surfa ♪ Alaska Gleyed (A ♪ Alaska Gleyed P	ation, D = Depletions, (check ones (A1) (A2) (A2) (A4)" from top (ce (A12) A13) 14) ores (A15)	RM = Re II 	educed Matrix. ² L ndicators for Proble A Alaska Color C A Alaska Alpine S A Alaska Redox v One indicator of Hyd appropriate landsc Sive details of color	cocation: lematic H hange (T. Swales (T. Swales (T. vith 2.5Y rophytic v ape positic	PL = Pore lydric Soil A4) A5) Hue vegetation, ion must b	Lining, R(Is ³ : , one prima e present.	C = Root Chan Alaska C Underlyi Other (e: ary indicator of	nel, M = N Gleyed with ng Layer xplain in R wetland h	Matrix nout Hue 5Y or Redder emarks) ydrology, and an
Restrictive Layer (if pre	esent)	D	rainage Class:				10.001	Var	No. 1/

HYDROLOGY

Wetland Hydrology Indica Primary Indicators (any one	tors (check one: indicator is suffi	Secondary Indicators (at least 2 or more required)			
▲ Surface Water (A1) ▲ High Water Table (A2) ▲ Saturation (A3) ▲ Water Marks (B1) ▲ Sediment Deposits (B2) ▲ Drift Deposits (B3) ▲ Algal Mat or Crust (B4) ▲ Iron Deposits (B5)		✓ Surface S ✓ Inundation ✓ Marl Depo ✓ Hydrogen ✓ Dry-Seaso ✓ Other (exp	oil Cracks (B6) I Visible on Aerial Image sits (B15) Sulfide Odor (C1) n Water Table (C2) Iain in Remarks)	a (B7) from top	Note:
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stre	Yes Yes Seeping in Yes eam gauge, mon	No No n at that depth No itoring well, a	Depth (inches) Depth (inches) h but not yet filled: Y / Depth (inches) erial photos, previous in	N Ispections),	Wetland Hydrology Present? Yes No
Remark <u>s</u> :		• -		2.000.00	

4	WETLAND DE	TERMINATION	FORM – Alaska Re	egion	
Project Studies Hwy		Borough/City:	KPB.	Date:	9-29-2009
policast/Owner Dott PF				Plot:	A13
policiator(s): left Schive	14	bearer	Hoden	Target:	
at LO. 49096	Long - 149,98154		itum: 46584	Slope (%):7	Aspect:S
andform: Succe / (- we do se	Long Feature:		N	WI classification: PE	MIL
hane across slope: linear / convex / c	shape up/c	ownslope: linear	convex / concave	Vegetation Type: Fo	ib / braining and
hoto #s/descriptions: 2 504	- OVEG	and and a second second		HGM Type: Slope	-
re climatic / hydrologic conditions on	the site typical for this ti	me of year? Yes:	X	No: (if no,	explain in Remarks)
re Vegetation Y / NSoil Y / NOor Hyd	drology Y / No significan	tly disturbed? Ar	e normal circumstance	es present? Yes	No
re Vegetation Y / N Soil Y / N or Hyd	drology Y / N naturally	problematic? (If r	eeded, explain answe	rs in Remarks)	
Hydrophytic Vegetation Present?	Yes V	No	Lo mains 1	/	
Hydric Soil Present?	Yes V	No	Is the sampled Are	a Yes 🖌	No
Wetland Hydrology Present?	Yes V	No	within a vvetland?		
Remarks:			1		
EGETATION					
Tree Obstume (I has a she tills a series)	1		Domin	ance Test worksheet:	
Cov.% Dom	Ind.	Cov.% D	om Ind. Numbe	er of Dominant Species	4 (A)
	5		That a	re OBL, FACW, or FAC:	
2	6			lumber of Demission	11
3	7		lotal n Specie	s Across All Strata:	<u>7</u> (B)
	8,				
	4.4.1 0.000		Percer	t of Dominant Species	100 (A/B)
	Total Cover:	-	That a	re OBL, FACW, or FAC:	(, 0.2)
50% of total cover: _	20%	of total cover		Table Mack workshoot	Manufacture Barris
Sapling/Shrub Stratum	15.01	Car % D		Total % Cover or:	$x_{1=}$ 7_{-}
Cov.% Dom	FAR 7 Oal M		FACU FACIN		$x_{2} = \frac{48}{2}$
hos all 5	FALV B.			species 84	x3= 252
Bet pap. 2	FACU 9.		FACI	sonsies 21	×4= 84
Ala sia 15 X	EAC 10		UBL a	species	¥5= 0
5. Vib. edu. 1	FACU 11			a Tatala: 131 (A)	396 (B)
Balpap 3 -	racu 12.		Colum		
· Itali Atlanticatio	Total Cover: 34	- ^	c	INVERSION AND ADDRESS	295
50% of total cover: _	20% of	total cover:	Pre	evalence Index = B/A = _	0.15
Herb Stratum	20.0				
Cov.% Dom	FAL 12 (aver de	Cov.% Do	FACI	and the second la	
Eau ch 20 X	FACW 13.	+	Hydro	phytic Vegetation Indic	ators:
Ally boo 1	FACU 14.			Dominance Test is >50%	6
Vio epi. 1	NI 15			Prevalence Index is 53.0	,
. Mec. pan. 3	FACU 16	-		Morphological Adaptatio	ns ¹ (Provide supporting
Str. sit	EAC 17			data in Remarks or on	a separate sheet)
- Jan 271. 4 -	Paul 10		<u>~</u>	Problematic Hydrophytic	· Vegetation ¹ (Explain)
For pal 1	OBL 20.				
O. Ran. hype 1	0BL 21.		1 Indica	tors of hydric soil and w	etland hydrology must
1. Pol. acv. 1	FAL 22.		be pres	sent unless disturbed or	problematic.
	Total Cover: 98		,		3
50% of total cover: _	49 20% of	total cover:	Hydro	phytic /	
at a second second second second with a	30 x75 %	bare ground:	2 (water) Vegeta	ation Yes V	No
lot size (radius, or length x width)					
6 Cover of Wetland Bryophytes	Total Cove	er of Bryophytes _	15 Prese		

US Army Corps of Engineers

Profile D	escription	(Describe to the d	lepth ne	eded to document th	ne indica	ator or con	firm the a	absence of inc	dicators)	
Depth	Horizon	Soil Matrix		Re	dox Feat	ures			Alpha	10 m
(inches) 0 - 20	<u>Name</u> 	<u>Color (moist)</u> 7. 5YR 2. 5/1	% 160 	· <u>Color (moist)</u>	<u>%</u>			<u>Texture</u>	(pos/ neg)	Remarks
Type: C =	Concentra	ation, D = Depletions		Reduced Matrix. ² L		PL = Pore	Lining, R	C = Root Chan	nel, M = N	Aatrix
nat apply) [▶] Histo ² Histic ² Hydro ³ Hydro ³ Alaski ⁴ Alaski ⁴ Alaski	: sol of Histe Epipedon ogen Sulfide Dark Surfa a Gleyed (A a Redox (A a Gleyed Po	I (A1) (A2) = (A4) <u>7</u> " from top ce (A12) A13) 14) pores (A15)	2	Indicators for Proble Alaska Color Cf Alaska Alpine S Alaska Redox w - ³ One indicator of Hydr appropriate landsca ⁴ Give details of color of	ematic H hange (T wales (T rith 2.5Y rophytic ape posit	lydric Soil A4) A5) Hue vegetation, ion must be n Remarks.	s³: one prima ∋ present.	Alaska C Underlyi Other (e:	Sleyed witl ng Layer xplain in R wetland h	hout Hue 5Y or Redder Remarks) hydrology, and an
estrictive I Type: _ Depth (ayer (if pre)) لم inches):	esent) A		Drainage Class: VPD		ŀ	lydric Soil	Present?	Yes 🗸	No
emarks: SRGANI	ics thr	oughout, Lu	LELY	sloughing :	Sort	D6W2 5	209E,	MIXED a	ORGAN	IC/MINERAL

HYDROLOGY

Wetland Hydrology Indicators (check ones that apply):	Secondary Indicators (at least 2 or more required)
Primary Indicators (any one indicator is sufficient)	Water Stained Leaves (B9)
Y Surface Water (A1) N Surface Soil Cracks (B6) Y High Water Table (A2) N Inundation Visible on Aerial Image (B7) Y Saturation (A3) N Marl Deposits (B15) Y Water Marks (B1) Y Hydrogen Sulfide Odor (C1) T Y Sediment Deposits (B2) N Dry-Season Water Table (C2) N Drift Deposits (B3) N Other (explain in Remarks) N Iron Deposits (B5) N	✓ Drainage Patterns (B10) G_W D toch ARGE ✓ Oxidized Rhizospheres on Living Roots (C3) ✓ Presence of Reduced Iron (C4) ✓ Salt Deposits (C5) ✓ Stunted or Stressed Plants (D1) ✓ Geomorphic Position (D2) D ISCHATESE Store ✓ Shallow Aquitard (D3) ✓ ✓ Microtopographic Relief (D4) FAC Neutral Test (D5)
Field Observations: Yes No Depth (inches) 0-3 Surface Water Present? Yes X No Depth (inches) 0-3 Water Table Present? Yes X No Depth (inches) 0-7 Seeping in at that depth but not vet filled: Y / N	
Saturation Present? Yes No Depth (inches)/ (includes capillary fringe)	Wetland Hydrology Present? Yes 📈 No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections)), if available:
Remarks: Numerous GW seeps throughout - Flowing water	

Project: Studies Hang Borough/City: KPB	Date: 9/9/2009
Applicant/Owner: Dort PF	Plot: A 1 G
vestigator(s): Jeff Schively George Hoden	Target:
at. 60, 189862 Long. 149. 98471 Datum: W.	/₂58 [∠]
andform: Swale (dry) Feature:	NWI classification:
nape across slope: linear / convex / concave Shape up/downslope: linear / convex / c	oncave Vegetation Type: Forb (grammaid do
noto #s/descriptions: 2 SUIL 2 VEG	HGM Type: N [A
e climatic / hydrologic conditions on the site typical for this time of year? Yes:	No: (if no, explain in Remarks)
e Vegetation Y / N) Soil Y / N) or Hydrology Y / N) significantly disturbed? Are normal ci	rcumstances present? Yes <u>X</u> No
e Vegetation Y / N, Soil Y / N or Hydrology Y / N naturally problematic? (If needed, exp	lain answers in Remarks)
Hydrophytic Vegetation Present? Yes No K	· · · · · · · · · · · · · · · · · · ·
-tydric Soil Present? Yes No X Is the sa within a	Wefland? Yes No X
Vetland Hydrology Present? Yes No X	
Remarks	
GETATION	Destingues Test workshoot
ree Stratum (Use scientific names.)	Dominance rest worksneet.
Cov.% Dom Ind. Cov.% Dom Ind.	Number of Dominant Species (A
$\frac{1ic. q_{12}}{0.1}$ $\frac{T}{10}$ $\frac{\Lambda}{10}$ $\frac{PRCV}{0}$ $\frac{5}{0}$ $\frac{1}{10}$	-
<u>Bet pap.</u> <u>10 = 1 + + + + + + + + + + + + + + + + + +</u>	Total Number of Dominant
8	Species Across All Strata:6(B
Total Cover: 32	That are OBL_EACW_or EAC:
50% of total cover: 16 20% of total cover: 6.4	Prevalence Index worksheet:
anling/Shrub Stratum	Total % Cover of: Multiply by:
Cov.% Dom Ind. Cov.% Dom Ind.	OBL species X1=0
Ros aci. 5 FACU 7. Ala. ten 4 FACU	FACW species 3 X2= 6
<u>R.b. idi 10 X FAC 8</u>	- FAC species X3=73
<u>Opt. hor.</u> <u>C</u> <u>FACU 9.</u>	FACU species 100 X4= 400
Q lad 2 500.11	UPL species X5=
Alo Sio 10 \times FAC12	Column Totals: 194 (A) 679 (B
Total Cover: 36	
50% of total cover: 18 20% of total cover: 7,7	Prevalence Index = B/A = 3.5
Cov.% Dom Ind. Cov.% Dom Ind.	
Cal can. 65 X FAC 12 Stc. amp 1 _ FAC	Hydrophytic Vegetation Indicators:
Mer. pan. 4 FACU 13. Vio. epi. 1 NI	
Del. gla. Z FACW 14. Equ arv 35 X FACU	N Prevalence Index is ≤3.0
Ane. ric 1 FACU 15. Gal. + rit birm 1 FACU	
<u>Gan. 57.</u> <u>FACU 10. Cal our</u> <u>FACU 17</u>	 Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
Ave day. 7 TACU18	
Aro del 1 FAC19.	Problematic Hydrophytic Vegetation (Explain)
Act, cub. 1 NL 20.	
D. Epi. ang. 2 FACU 21	¹ Indicators of hydric soil and wetland hydrology must
1. The span FALV 22	be present unless disturbed or problematic.
Total Cover: 126	
50% of total cover: 20% of total cover: 25.2	Hydrophytic Vac No X
lot size (radius, or length x width) $30 \neq 100$ % bare ground: 5	Present?
Cover of Wetland Bryophytes Total Cover of Bryophytes3	
(where applicable)	

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Sampling Point: AIL	3	
Sampling Fornt. /110	- "A	

Profile Description: (Describe to the death	and deal and the second second	
Depth Horizon Soil Matrix (inches) Name Color (moist) % $\partial - 14$ A 7.5YR 3/2 100 14 B 2.5Y 3/3 100	Redox Features Color (moist) % Type1	$\frac{\text{Loc}^2}{\underline{S}1\underline{L}} = \frac{5}{\underline{C}} + \frac{1}{\underline{C}} + \frac{1}$
¹ Type: C = Concentration, D = Depletions, RM Hydric Soil Indicators (check ones that apply): <u>N</u> Histosol of Histel (A1) <u>IN</u> Histic Epipedon (A2) <u>IN</u> Hydrogen Sulfide (A4)" from top <u>N</u> Thick Dark Surface (A12) <u>N</u> Alaska Gleyed (A13) <u>N</u> Alaska Redox (A14) N Alaska Gleyed Pores (A15)	 Reduced Matrix. ²Location: PL = Por Indicators for Problematic Hydric Sc Alaska Color Change (TA4) Alaska Alpine Swales (TA5) Alaska Redox with 2.5Y Hue ³One indicator of Hydrophytic vegetation appropriate landscape position must ⁴Give details of color change in Remark 	The Lining, RC = Root Channel, M = Matrix Dils ³ : Multiple Alaska Gleyed without Hue 5Y or Redder Underlying Layer Dother (explain in Remarks) In, one primary indicator of wetland hydrology, and an be present.
Restrictive Layer (if present) Type: NA Depth (inches): NA	Drainage Class: い ア	Hydric Soil Present? Yes No
SOIL PIT DUG IN	DRAINAGE BOTTON	1

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HYDROLOGY

Wetland Hydrology Indicators (check ones that apply):			Secondary Indicators (at least 2 or more required)	
Primary Indicators (any one indicator is sufficient)			N Water Stained Leaves (B9)	
N Surface Water (A1) N High Water Table (A2) N Saturation (A3) W Water Marks (B1) N Sediment Deposits (B2) M Drift Deposits (B3) N Algal Mat or Crust (B4) N Iron Deposits (B5))	N Surface N Inundatio N Marl Dep N Hydrogen N Dry-Seas N Other (ex	Soil Cracks (B6) on Visible on Aerial Image (B7) posits (B15) n Sulfide Odor (C1)" from top son Water Table (C2) splain in Remarks)	N Drainage Patterns (B10) N Oxidized Rhizospheres on Living Roots (C3) N Presence of Reduced Iron (C4) N Salt Deposits (C5) N Stunted or Stressed Plants (D1) N Geomorphic Position (D2) N Shallow Aquitard (D3) N FAC Neutral Test (D5)
Field Observations:		×		4
Surface Water Present?	Yes	No	Depth (inches)	
Water Table Present?	Yes	No X	Depth (inches)	
	Se	eping in at that dep	oth but not yet filled: Y / N	
Saturation Present?	Yes	No ^	Depth (inches)	Wetland Hydrology Present? Yes No
(includes capillary fringe)				
Describe Recorded Data (st	ream gaug	e, monitoring well,	aerial photos, previous inspections	s), if available:
Remarks:				
LIKELY AN	EPHEN	HERAL T	DAWARE	
the second se				

Appendix **B**

List of Plant Species

Common Name	Latin Name (former name)	
Barclay's willow	Salix barclayi	
Beaked sedge	Carex utriculata (Carex rostrata)	
Black cottonwood	Populus balsamifera	
Black spruce	Picea mariana	
Bluejoint reedgrass	Calamagrostis canadensis	
Bog blueberry	Vaccinium uliginosum	
Chamisso's cotton grass	Eriophorum russeolum	
Cloudberry	Rubus chamaemorus	
Crowberry	Empetrum nigrum	
Dwarf birch	Betula nana	
Dwarf dogwood	Cornus canadensis	
Field horsetail	Equisetum arvense	
Fireweed	Chamerion angustifolium (Epilobium angustifolium)	
Five-leaved bramble	Rubus pedatus	
High bush cranberry	Viburnum edule	
Lady fern	Athyrium filix-femina	
Low bush cranberry	Vaccinium vitis-idaea	
Lutz spruce	Picea lutzii	
Rusty menziesia	Menziesia ferruginea	
Meadow horsetail	Equisetum pratense	
Mountain hemlock	Tsuga mertensiana	
Narrow-leaved cotton grass	Eriophorum angustifolium	
Northern Labrador tea	Ledum decumbens	
Northern scouring rush	Equisetum variegatum	
Oak fern	Gymnocarpium dryopteris	
Paper birch	Betula papyrifera	
Pink wintergreen	Pyrola asarifolia	
Prickly rose	Rosa acicularis	
Pumpkinberry	Geocaulon lividum	
Quaking aspen	Populus tremuloides	
Shrubby cinquefoil	Dasiphora floribunda (Potentilla fruticosa)	
Sitka alder	Alnus sinuata	
Sitka spruce	Picea sitchensis	
Soapberry	Shepherdia canadensis	
Spirea	Spiraea stevenii (Spirea beauverdiana)	
Stiff clubmoss	Lycopodium annotinum	
Sweet gale	Myrica gale	
Twinflower	Linnaea borealis	
Water sedge	Carex aquatilis	
Western hemlock	Tsuga heterophylla	