

WETLAND DETERMINATION DATA FORM - North Central and Northeast Region

Project/Site: SPP City/County: Aitkin Sampling Date: 2015-07-10
 Applicant/Owner: Enbridge State: Minnesota Sampling Point: AI085a2W_R
 Investigator(s): DPT/ZSW Section, Township, Range: 26, 49n, 26w
 Landform (hillslope, terrace, etc.): Road ditch Local Relief (concave, convex, none): Concave Slope (%): 0
 Subregion (LRR or MLRA): LRR K Latitude: 46.7107096827... Longitude: -93.59860818... Datum: Minnesota State ...
 Soil Map Unit Name: 625 NWI Classification: _____

Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in Remarks): Yes
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes
 Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	<u>Yes</u>	Is the Sampled Area within a Wetland?	<u>Yes</u>
Hydric Soil Present?	<u>Yes</u>		
Wetland Hydrology Present?	<u>Yes</u>		If yes, optional Wetland Site ID: <u>AI085aW</u>
Remarks: (Explain alternative procedures here or in a separate report.) <u>PEM, Road ditch</u>			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
<u>yes</u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)	
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u> </u> Drainage Patterns (B10)	
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)	
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)	
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)	
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)	
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted/Stressed Plants (D1)	
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u>yes</u> Geomorphic Position (D2)	
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)	
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)	
		<u>yes</u> FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	<u>Yes</u> Depth (inches) <u>2</u>	Wetland Hydrology Present? <u>Yes</u>	
Water Table Present?	<u>Yes</u> Depth (inches) <u>0</u>		
Saturation Present? (includes capillary fringe)	<u>Yes</u> Depth (inches) <u>0</u>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

Sampling Point: AI085a2W...

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot Size: 30)				Dominance Test worksheet:
1.				Number of Dominant Species
2.				That Are OBL, FACW, or FAC: 3 (A)
3.				Total Number of Dominant
4.				3
5.				Species Across All Strata: (B)
6.				Percent of Dominant Species
7.				That Are OBL, FACW, or FAC: 100 (A/B)
				Prevalence Index worksheet:
0 = Total Cover				Total % Cover of: Multiply by:
Obl species	40.00	x 1	40	
FACW species	75.00	x 2	150	
FACU species	0.00	x 3	0	
UPL species	0.00	x 4	0	
Column Totals	115 (A)	190 (B)		
				Prevalence Index = B/A = 1.6521739...
Sapling/Shrub Stratum (Plot Size: 15)				Hydrophytic Vegetation Indicators:
1. Salix bebbiana	5.00	Yes	FACW	1 - Rapid Test for Hydrophytic Vegetation
2.				yes 2 - Dominance Test is > 50%
3.				yes 3 - Prevalence Index is ≤ 3.0 ¹
4.				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5.				Problematic Hydrophytic Vegetation ¹ (Explain)
6.				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.				Definitions of Vegetation Strata:
5 = Total Cover				Tree - Woody plants 3 in. (.76 cm) or more in diameter at breast height (DBH), regardless of height.
				Sapling/Shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
				Herb - All herbaeaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
				Woody vines - All woody vines greater than 3.28 ft in height.
Herb Stratum (Plot Size: 5)				Hydrophytic Vegetation Present? _____
1. Phalaris arundinacea	70.00	Yes	FACW	
2. Carex lacustris	30.00	Yes	OBL	
3. Scirpus atrovirens	5.00	No	OBL	
4. Cicuta maculata	5.00	No	OBL	
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
110 = Total Cover				
Woody Vine Stratum (Plot Size: 30)				
1.				
2.				
3.				
4.				
0 =Total Cover				
Remarks: (include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: AI085a2W...

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:		Indicators for Problematic Hydric Soil ³ :
☐ Histosol (A1)	☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	☐ Coast Prairie Redox (A16)(LRR K, L, R)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (LRR K, L)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Dark Surface (S7) (LRR K, M)
☐ Stratified Layers (A5)	☐ Depleted Matrix (F3)	☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Depleted Below Dark Surface (A11)	☐ Redox Dark Surface (F6)	☐ Thin Dark Surface (S9) (LRR K, L)
☐ Thick Dark Surface (A12)	☐ Depleted Dark Surface (F7)	☐ Iron-Manganese Masses (F12) (LRR K, L, R)
☐ Sandy Mucky Mineral (S1)	☐ Redox Depressions (F8)	☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
☐ Sandy Gleyed Matrix (S4)		☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
☐ Sandy Redox (S5)		☐ Red Parent Material (F21)
☐ Stripped Matrix (S6)		☐ Very Shallow Dark Surface (TF12)
☐ Dark Surface (S7) (LRR R, MLRA 149B)		☒ Other (explain in remarks)
Restrictive Layer (if observed): ☐	Hydric Soil Present? <u>Yes</u>	
Type: _____		
Depth (inches): _____		
Remarks:		
No soils, road ditch Soils assumed based on vegetation and hydrology		



Latitude: 46.7107045278388
Longitude: -93.5985980463155
Direction: East

Cowardin Classification: PEM
Circular 39: 2
Eggers & Reed: Fresh (Wet) Meadow

Remarks: