

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: SPP City/County: Carlton Sampling Date: 5/20/2014
 Applicant/Owner: Enbridge State: MN Sampling Point: CRC5043_310c1W
 Investigator(s): BJC/DGF Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): CL
 Slope (%): 0 - 2% Lat.: 46.537305 Long.: -92.892765 Datum: _____
 Soil Map Unit Name: 46 NWI Classification: _____
 Are climatic/hydrologic conditions of the site typical for this time of the year? ☒ (If no, explain in remarks)
 Are vegetation ☐, soil ☐, or hydrology ☐ significantly disturbed? Are "normal circumstances" present? ☒
 Are vegetation ☐, soil ☐, or hydrology ☐ naturally problematic? (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>Y</u> Hydric soil present? <u>Y</u> Indicators of wetland hydrology present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) The wetland consists of a small area along a fenceline within a cattle pasture.	

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two 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) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8)	☐ Water-Stained Leaves (B9) ☐ Aquatic Fauna (B13) ☐ Marl Deposits (B15) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres on Living Roots (C3) ☐ Presence of Reduced Iron (C4) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ Thin Muck Surface (C7) ☐ Other (Explain in Remarks)	☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☒ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ Microtopographic Relief (D4) ☒ FAC-Neutral Test (D5)	
Field Observations: Surface water present? Yes ☐ Water table present? Yes ☒ Saturation present? Yes ☒ (includes capillary fringe)		Depth (inches): _____ Depth (inches): <u>10</u> Depth (inches): <u>8</u>	Indicators of wetland hydrology present? <u>Y</u>
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Surface water is present in other areas of the wetland, but not at the sample point.			

VEGETATION - Use scientific names of plants
Sampling Point: :RC5043_310c1\

Tree Stratum					Plot Size (30 ft)			Absolute % Cover	Dominant Species	Indicator Status
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
							0	= Total Cover		

Sapling/Shrub Stratum					Plot Size (15 ft)			Absolute % Cover	Dominant Species	Indicator Status
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
							0	= Total Cover		

Herb Stratum					Plot Size (5 ft)			Absolute % Cover	Dominant Species	Indicator Status
1	<i>Scirpus atrovirens</i>						70	Y	OBL	
2	<i>Phalaris arundinacea</i>						20	N	FACW	
3	<i>Poa pratensis</i>						10	N	FACU	
4	<i>Ranunculus hispidus</i>						10	N	FAC	
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
							110	= Total Cover		

Woody Vine Stratum					Plot Size (30)			Absolute % Cover	Dominant Species	Indicator Status
1										
2										
3										
4										
5										
							0	= Total Cover		

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	22	55
Woody Vine Stratum	0	0

Dominance Test Worksheet
 Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
 Total Number of Dominant Species Across all Strata: 1 (B)
 Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet
 Total % Cover of:
 OBL species 70 x 1 = 70
 FACW species 20 x 2 = 40
 FAC species 10 x 3 = 30
 FACU species 10 x 4 = 40
 UPL species 0 x 5 = 0
 Column totals 110 (A) 180 (B)
 Prevalence Index = B/A = 1.64

Hydrophytic Vegetation Indicators:
☒ Rapid test for hydrophytic vegetation
☒ Dominance test is >50%
☒ Prevalence index is ≤3.0*
 Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
 _____ Problematic hydrophytic vegetation* (explain)
*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:
Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
Herb - All herbaceous (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.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)
 The wetland is dominated by *Scirpus* spp.

SOIL **Sampling Point:** RC5043 310c1)

Sampling Point: RC5043_310c1)

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

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- | | |
|--|---|
| ☐ Histosol (A1) | ☐ Polyvalue Below Surface |
| ☐ Histic Epipedon (A2) | ☐ (S8) (LRR R, MLRA 149B) |
| ☐ Black Histic (A3) | ☐ Thin Dark Surface (S9) |
| ☐ Hydrogen Sulfide (A4) | ☐ (LRR R, MLRA 149B) |
| ☐ Stratified Layers (A5) | ☐ Loamy Mucky Mineral (F1) |
| ☐ Depleted Below Dark Surface (A11) | ☐ (LRR K, L) |
| ☐ Thick Dark Surface (A12) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Sandy Mucky Mineral (S1) | ☐ Depleted Matrix (F3) |
| ☐ Sandy Gleyed Matrix (S4) | ☒ Redox Dark Surface (F6) |
| ☐ Sandy Redox (S5) | ☐ Depleted Dark Surface (F7) |
| ☐ Stripped Matrix (S6) | ☐ Redox Depressions (F8) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ☐ Dark Surface (S7) (**LRR K, L**)
- ☐ Polyvalue Below Surface (S8) (**LRR K, L**)
- ☐ Thin Dark Surface (S9) (**LRR K, L**)
- ☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric soil present? Y

Remarks:

The area along the fenceline is compacted due to cattle.