

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: SPP City/Country: Carlton Sampling Date: 5/27/2014
Applicant/Owner: Enbridge State: MN Sampling Point: CRR51010_615b1W
Investigator(s): BJC/DGL Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): CC
Slope (%): 0 - 2% Lat.: 46.608127 Long.: -92.544972 Datum: _____
Soil Map Unit Name: 975C 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
Are vegetation ☐, soil ☐, or hydrology ☐ naturally problematic? circumstances" present? ☒
(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 is a wet meadow community dominated by <i>Scirpus atrovirens</i> and <i>Phalaris arundinacea</i> . Encroachment by willow and alder suggest the area is transitioning into a scrub-shrub community.	

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply) ☐ 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)			Secondary Indicators (minimum of two required) ☐ 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): _____ Depth (inches): _____			Indicators of wetland hydrology present? <u>Y</u>		
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks: The wetland is located in a low-lying depressional area and is dominated by hydrophytic vegetation.					

VEGETATION - Use scientific names of plants

Sampling Point:

CRR51010_615b1W

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	<i>Salix petiolaris</i>	10	Y	FACW
2	<i>Alnus incana</i>	10	Y	FACW
3	<i>Betula papyrifera</i>	5	Y	FACU
4				
5				
6				
7				
8				
9				
10				
		25 = Total Cover		

Herb Stratum	Plot Size (5 ft)	Absolute % Cover	Dominant Species	Indicator Status
1	<i>Scirpus atrovirens</i>	65	Y	OBL
2	<i>Phalaris arundinacea</i>	15	N	FACW
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		80 = Total Cover		

Woody Vine Stratum	Plot Size (30 ft)	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	5	13
Herb Stratum	16	40
Woody Vine Stratum	0	0

Dominance Test Worksheet		
Number of Dominant Species that are OBL, FACW, or FAC:		
	3	(A)
Total Number of Dominant Species Across all Strata:		
	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:		
	75.00%	(A/B)

Prevalence Index Worksheet		
Total % Cover of:		
OBL species	65 x 1 =	65
FACW species	35 x 2 =	70
FAC species	0 x 3 =	0
FACU species	5 x 4 =	20
UPL species	0 x 5 =	0
Column totals	105 (A)	155 (B)
Prevalence Index = B/A =		
		1.48

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)

Vegetation is currently dominated by *Scirpus atrovirens* with reed canary grass and scattered shrubs. Bare soil is present at approximately 20 percent.

SOIL

Sampling Point: CRR51010_615b1W

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 | |

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 soil meets hydric soil indicator F6- Redox Dark Surface.