

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: SPP City/County: Carlton Sampling Date: 5/28/2014
 Applicant/Owner: Enbridge State: MN Sampling Point: CRR51010_629a1W
 Investigator(s): LEB/CPF Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): CC
 Slope (%): 0 - 2% Lat.: 46.620779 Long.: -92.511899 Datum: _____
 Soil Map Unit Name: 534 NWI Classification: PSSB
 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 large alder thicket transitioning into a cedar swamp.	

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): <u>6</u> Depth (inches): <u>0</u> Depth (inches): <u>0</u>	
		Indicators of wetland hydrology present? <u>Y</u>	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Much of the wetland was inundated at the time of survey.			

VEGETATION - Use scientific names of plants
Sampling Point:

CRR51010_629a1W

Tree Stratum				Plot Size (30 ft)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Thuja occidentalis</i>				15	Y	FACW	
2								
3								
4								
5								
6								
7								
8								
9								
10								
					15	=	Total Cover	

Sapling/Shrub Stratum				Plot Size (15 ft)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Alnus incana</i>				50	Y	FACW	
2	<i>Thuja occidentalis</i>				20	Y	FACW	
3	<i>Spiraea alba</i>				5	N	FACW	
4								
5								
6								
7								
8								
9								
10								
					75	=	Total Cover	

Herb Stratum				Plot Size (5 ft)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Calamagrostis canadensis</i>				10	Y	OBL	
2	<i>Equisetum fluviatile</i>				5	Y	OBL	
3	<i>Caltha palustris</i>				5	Y	OBL	
4	<i>Iris versicolor</i>				5	Y	OBL	
5	<i>Rubus pubescens</i>				5	Y	FACW	
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
					30	=	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	3	8
Sapling/Shrub Stratum	15	38
Herb Stratum	6	15
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 8 (A)

Total Number of Dominant Species Across all Strata: 8 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	<u>25</u>	x 1 =	<u>25</u>
FACW species	<u>95</u>	x 2 =	<u>190</u>
FAC species	<u>0</u>	x 3 =	<u>0</u>
FACU species	<u>0</u>	x 4 =	<u>0</u>
UPL species	<u>0</u>	x 5 =	<u>0</u>
Column totals	<u>120</u> (A)		<u>215</u> (B)
Prevalence Index = B/A =			<u>1.79</u>

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 regenerating alder with sporadic young white cedar throughout. Poorly developed sphagnum hummocks are present throughout the wetland as well.

SOIL

Sampling Point: CRR51010_629a1W

[illegible]