

**WETLAND DETERMINATION DATA FORM - North Central and Northeast Region**

Project/Site: SPP City/County: Aitkin Sampling Date: 2016-08-23  
 Applicant/Owner: Enbridge State: Minnesota Sampling Point: w-50n26w17-ac1  
 Investigator(s): ZCW, MGH Section, Township, Range: S17, T50N, R26W  
 Landform (hillslope, terrace, etc.): Depression Local Relief (concave, convex, none): CC Slope (%): 0-2%  
 Subregion (LRR or MLRA): \_\_\_\_\_ Latitude: 46.8167280173... Longitude: -93.67708610... Datum: NAD83  
 Soil Map Unit Name: 204B NWI Classification: N/A  
 Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in Remarks): No  
 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>	<b>Is the Sampled Area within a Wetland?</b>	
Hydric Soil Present?	<u>Yes</u>		<u>Yes</u>
Wetland Hydrology Present?	<u>Yes</u>		If yes, optional Wetland Site ID: <u>w-50n26w17-ac</u>
Remarks: (Explain alternative procedures here or in a separate report.) Climatic conditions are "wet" based on the results of a WETS analysis.			

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>	<b>Secondary Indicators (minimum of two required)</b>
<u>Primary Indicators (minimum of one is required; check all that apply)</u>	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Stunted/Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Microtopographic Relief (D4)
<input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Aquatic Fauna (B13)	
<input type="checkbox"/> Marl Deposits (B15)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b>	<u>Yes</u>
Surface Water Present?	<u>No</u>	Depth (inches)	_____
Water Table Present?	<u>Yes</u>	Depth (inches)	<u>4</u>
Saturation Present?	<u>Yes</u>	Depth (inches)	<u>0</u>
(includes capillary fringe)			

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

Remarks:

**VEGETATION - Use scientific names of plants.**

Sampling Point: w-50n26w...

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot Size: <u>30</u> )				
1. <u>Fraxinus nigra</u>	<u>50.00</u>	<u>Yes</u>	<u>FACW</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>50</u> = Total Cover				
<b>Sapling/Shrub Stratum</b> (Plot Size: <u>15</u> )				
1. <u>Fraxinus nigra</u>	<u>10.00</u>	<u>Yes</u>	<u>FACW</u>	<b>Prevalence Index worksheet:</b> Total % Cover of: <span style="float:right">Multiply by:</span> OBL species <u>10.00</u> x 1 <u>10</u> FACW species <u>85.00</u> x 2 <u>170</u> FACU species <u>0.00</u> x 3 <u>0</u> UPL species <u>0.00</u> x 4 <u>0</u> Column Totals <u>100</u> (A) <u>195</u> (B) Prevalence Index = B/A = <u>1.95</u>
2. <u>Alnus incana</u>	<u>10.00</u>	<u>Yes</u>	<u>FACW</u>	
3. <u>Acer rubrum</u>	<u>5.00</u>	<u>Yes</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>25</u> = Total Cover				
<b>Herb Stratum</b> (Plot Size: <u>5</u> )				
1. <u>Calamagrostis canadensis</u>	<u>15.00</u>	<u>Yes</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> _____ 1 - Rapid Test for Hydrophytic Vegetation <u>yes</u> 2 - Dominance Test is > 50% <u>yes</u> 3 - Prevalence Index is ≤ 3.0 <sup>1</sup> _____ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Carex lacustris</u>	<u>10.00</u>	<u>Yes</u>	<u>OBL</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
<u>25</u> = Total Cover				
<b>Woody Vine Stratum</b> (Plot Size: <u>30</u> )				
1. _____	_____	_____	_____	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> - Woody plants 3 in. (.76 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> - All herbaeceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> - All woody vines greater than 3.28 ft in height.
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				
				<b>Hydrophytic Vegetation Present?</b> <u>Yes</u>
<b>Remarks:</b> (include photo numbers here or on a separate sheet.)				



Site Photograph 1

Sampling Point: w-50n26w17-ac1



Latitude: 46.8167143967439

Cowardin Classification: PFO

Longitude: -93.6770242453494

Circular 39: 7

Direction: South

Eggers & Reed: Hardwood Swamp/Coniferous Swamp

Remarks:

Empty rectangular box for remarks.

Site Photograph 2

Sampling Point: w-50n26w17-ac1



Latitude: 46.8167143967439

Cowardin Classification: PFO

Longitude: -93.6770243291684

Circular 39: 7

Direction: East

Eggers & Reed: Hardwood Swamp/Coniferous Swamp

Remarks: