

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: RSA 22 **City/County:** Aitkin **Sampling Date:** 07-Sep-17

Applicant/Owner: Enbridge **State:** MN **Sampling Point:** w-51n22w20-a3

Investigator(s): SMR **Section, Township, Range:** S. 20 T. 51N R. 22W

Landform (hillslope, terrace, etc.): Lowland **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

Subregion (LRR or MLRA): LRR K **Lat.:** 46 53.0451 **Long.:** -93 8.3279 **Datum:** NAD 83

Soil Map Unit Name: 204B **NWI classification:** N/A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)

Are Vegetation , **Soil** , **or Hydrology** **significantly disturbed?** **Are "Normal Circumstances" present?** Yes No

Are Vegetation , **Soil** , **or Hydrology** **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? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks: (Explain alternative procedures here or in a separate report.) 	

Hydrology

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of 2 required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-neutral Test (D5)
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Field Observations:

Surface Water Present? Yes No Depth (inches): 0

Water Table Present? Yes No Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes No Depth (inches): 0

Wetland Hydrology Present? Yes No

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

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: w-51n22w20-a3

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30</u>)				Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: Total % Cover of: <u>60</u> Multiply by: <u>2.5</u> OBL species <u>60</u> x 1 = <u>60</u> FACW species <u>40</u> x 2 = <u>80</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>100</u> (A) <u>140</u> (B) Prevalence Index = B/A = <u>1.400</u> Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is > 50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ 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 (1m) tall.. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>
1. _____	0	<input type="checkbox"/>	_____	
2. _____	0	<input type="checkbox"/>	_____	
3. _____	0	<input type="checkbox"/>	_____	
4. _____	0	<input type="checkbox"/>	_____	
5. _____	0	<input type="checkbox"/>	_____	
6. _____	0	<input type="checkbox"/>	_____	
7. _____	0	<input type="checkbox"/>	_____	
0 = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15</u>)				
1. _____	0	<input type="checkbox"/>	_____	
2. _____	0	<input type="checkbox"/>	_____	
3. _____	0	<input type="checkbox"/>	_____	
4. _____	0	<input type="checkbox"/>	_____	
5. _____	0	<input type="checkbox"/>	_____	
6. _____	0	<input type="checkbox"/>	_____	
7. _____	0	<input type="checkbox"/>	_____	
0 = Total Cover				
Herb Stratum (Plot size: <u>5</u>)				
1. <i>Onoclea sensibilis</i>	20	<input checked="" type="checkbox"/>	FACW	
2. <i>Solidago gigantea</i>	20	<input checked="" type="checkbox"/>	FACW	
3. <i>Calamagrostis canadensis</i>	60	<input checked="" type="checkbox"/>	OBL	
4. _____	0	<input type="checkbox"/>	_____	
5. _____	0	<input type="checkbox"/>	_____	
6. _____	0	<input type="checkbox"/>	_____	
7. _____	0	<input type="checkbox"/>	_____	
8. _____	0	<input type="checkbox"/>	_____	
9. _____	0	<input type="checkbox"/>	_____	
10. _____	0	<input type="checkbox"/>	_____	
11. _____	0	<input type="checkbox"/>	_____	
12. _____	0	<input type="checkbox"/>	_____	
100 = Total Cover				
Woody Vine Stratum (Plot size: <u>30</u>)				
1. _____	0	<input type="checkbox"/>	_____	
2. _____	0	<input type="checkbox"/>	_____	
3. _____	0	<input type="checkbox"/>	_____	
4. _____	0	<input type="checkbox"/>	_____	
0 = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: w-51n22w20-a3

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks	
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²			
0-4	10YR	2/1	100				Silt Loam		
4-20	10YR	4/2	85	10YR	4/4	15	C	M	Silt Loam

¹Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	Indicators for Problematic Hydric Soils : ³
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) LRR K, L)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Stratified Layers (A5)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Muck Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		
<input type="checkbox"/> Sandy Redox (S5)		
<input type="checkbox"/> Stripped Matrix (S6)		
<input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No

Remarks: