

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

Project/Site: SPP City/County: Aitkin Sampling Date: 2016-08-29  
 Applicant/Owner: Enbridge State: Minnesota Sampling Point: w-47n22w11-ab1  
 Investigator(s): DPT, MGH Section, Township, Range: S11, T47N, R22W  
 Landform (hillslope, terrace, etc.): Depression Local Relief (concave, convex, none): CL Slope (%): 0-2%  
 Subregion (LRR or MLRA): \_\_\_\_\_ Latitude: 46.568570332645 Longitude: -93.07918399... Datum: NAD83  
 Soil Map Unit Name: 736 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<br/>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-47n22w11-ab</u> |
| Remarks: (Explain alternative procedures here or in a separate report.)<br>Existing forest road, no digging, potential buried utilities. Precipitation above normal based on WETS analysis. |            |  |  |

**HYDROLOGY**

| <b>Wetland Hydrology Indicators:</b>   | <u>Secondary Indicators (minimum of two required)</u>   |
|--|---|
| <u>Primary Indicators (minimum of one is required; check all that apply)</u> |   |
| <u>yes</u> Surface Water (A1)  | <u>      </u> Surface Soil Cracks (B6)                  |
| <u>      </u> High Water Table (A2)  | <u>      </u> Drainage Patterns (B10)                   |
| <u>      </u> Saturation (A3)  | <u>      </u> Moss Trim Lines (B16)                     |
| <u>      </u> Water Marks (B1)   | <u>      </u> Dry-Season Water Table (C2)               |
| <u>      </u> Sediment Deposits (B2)   | <u>      </u> Crayfish Burrows (C8)                     |
| <u>      </u> Drift Deposits (B3)  | <u>      </u> Saturation Visible on Aerial Imagery (C9) |
| <u>      </u> Algal Mat or Crust (B4)  | <u>      </u> Stunted/Stressed Plants (D1)              |
| <u>      </u> Iron Deposits (B5)   | <u>      </u> <u>YES</u> Geomorphic Position (D2)       |
| <u>      </u> Inundation Visible on Aerial Imagery (B7)                      | <u>      </u> Shallow Aquitard (D3)                     |
| <u>      </u> Sparsely Vegetated Concave Surface (B8)                        | <u>      </u> Microtopographic Relief (D4)              |
|  | <u>      </u> <u>YES</u> FAC-Neutral Test (D5)          |

|  |            |                                   |            |
|--|------------|-----------------------------------|------------|
| <b>Field Observations:</b>                         |            | <b>Wetland Hydrology Present?</b> | <u>Yes</u> |
| Surface Water Present?                             | <u>Yes</u> | Depth (inches)                    | <u>4</u>   |
| Water Table Present?                               | <u>Yes</u> | Depth (inches)                    | <u>0</u>   |
| Saturation Present?<br>(includes capillary fringe) | <u>Yes</u> | Depth (inches)                    | <u>0</u>   |

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

Remarks:

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

Sampling Point: w-47n22w...

|  | Absolute % Cover | Dominant Species? | Indicator Status |  |
|--|------------------|-------------------|------------------|--|
| <b>Tree Stratum</b> (Plot Size: <u>30</u> )                          |                  |                   |                  |  |
| 1. _____   | _____            | _____             | _____            | <b>Dominance Test worksheet:</b><br>Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>5</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)  |
| 2. _____   | _____            | _____             | _____            |  |
| 3. _____   | _____            | _____             | _____            |  |
| 4. _____   | _____            | _____             | _____            |  |
| 5. _____   | _____            | _____             | _____            |  |
| 6. _____   | _____            | _____             | _____            |  |
| 7. _____   | _____            | _____             | _____            |  |
| 0 = Total Cover  |                  |                   |                  |  |
| <b>Sapling/Shrub Stratum</b> (Plot Size: <u>15</u> )                 |                  |                   |                  |  |
| 1. <u>Salix petiolaris</u>   | 40.00            | Yes               | OBL              | <b>Prevalence Index worksheet:</b><br>Total % Cover of: <span style="float:right">Multiply by:</span><br>OBL species <u>80.00</u> x 1 <u>80</u><br>FACW species <u>75.00</u> x 2 <u>150</u><br>FACU species <u>0.00</u> x 3 <u>0</u><br>UPL species <u>0.00</u> x 4 <u>0</u><br>Column Totals <u>165</u> (A) <u>260</u> (B)<br>Prevalence Index = B/A = <u>1.5757575...</u>  |
| 2. <u>Alnus incana</u>   | 20.00            | Yes               | FACW             |  |
| 3. <u>Fraxinus nigra</u>   | 5.00             | No                | FACW             |  |
| 4. _____   | _____            | _____             | _____            |  |
| 5. _____   | _____            | _____             | _____            |  |
| 6. _____   | _____            | _____             | _____            |  |
| 7. _____   | _____            | _____             | _____            |  |
| 65 = Total Cover   |                  |                   |                  |  |
| <b>Herb Stratum</b> (Plot Size: <u>5</u> )                           |                  |                   |                  |  |
| 1. <u>Calamagrostis canadensis</u>                                   | 50.00            | Yes               | FACW             | <b>Hydrophytic Vegetation Indicators:</b><br>_____ 1 - Rapid Test for Hydrophytic Vegetation<br>yes _____ 2 - Dominance Test is > 50%<br>yes _____ 3 - Prevalence Index is ≤ 3.0 <sup>1</sup><br>_____ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br>Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)<br><sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 2. <u>Carex lacustris</u>  | 20.00            | Yes               | OBL              |  |
| 3. <u>Scirpus cyperinus</u>  | 20.00            | Yes               | OBL              |  |
| 4. <u>Solidago gigantea</u>  | 10.00            | No                | FAC              |  |
| 5. _____   | _____            | _____             | _____            |  |
| 6. _____   | _____            | _____             | _____            |  |
| 7. _____   | _____            | _____             | _____            |  |
| 8. _____   | _____            | _____             | _____            |  |
| 9. _____   | _____            | _____             | _____            |  |
| 10. _____  | _____            | _____             | _____            |  |
| 11. _____  | _____            | _____             | _____            |  |
| 12. _____  | _____            | _____             | _____            |  |
| 100 = Total Cover  |                  |                   |                  |  |
| <b>Woody Vine Stratum</b> (Plot Size: <u>30</u> )                    |                  |                   |                  |  |
| 1. _____   | _____            | _____             | _____            | <b>Definitions of Vegetation Strata:</b><br><b>Tree</b> - Woody plants 3 in. (.76 cm) or more in diameter at breast height (DBH), regardless of height.<br><b>Sapling/Shrub</b> - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.<br><b>Herb</b> - All herbaeceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.<br><b>Woody vines</b> - All woody vines greater than 3.28 ft in height.                                |
| 2. _____   | _____            | _____             | _____            |  |
| 3. _____   | _____            | _____             | _____            |  |
| 4. _____   | _____            | _____             | _____            |  |
| 0 = Total Cover  |                  |                   |                  |  |
| <b>Hydrophytic Vegetation Present?</b>                               |                  |                   |                  | Yes _____  |
| <b>Remarks:</b> (include photo numbers here or on a separate sheet.) |                  |                   |                  |  |
|  |                  |                   |                  |  |



Site Photograph 1

Sampling Point: w-47n22w11-ab1



Latitude: 46.5685702907355

Cowardin Classification: PSS

Longitude: -93.0791837443533

Circular 39: 6

Direction: north

Eggers & Reed: Shrub-Carr/Alder Thicket

Remarks:



Latitude: 46.5685699135499

Cowardin Classification: PSS

Longitude: -93.0791830738011

Circular 39: 6

Direction: east

Eggers & Reed: Shrub-Carr/Alder Thicket

Remarks: