

WETLAND DETERMINATION DATA FORM - North Central and Northeast Region

Project/Site: SPP City/County: Aitkin Sampling Date: 2016-08-30
 Applicant/Owner: Enbridge State: Minnesota Sampling Point: w-47n22w24-aa1
 Investigator(s): DPT, MGH Section, Township, Range: S24, T47N, R22W
 Landform (hillslope, terrace, etc.): Depression Local Relief (concave, convex, none): CL Slope (%): 0-2%
 Subregion (LRR or MLRA): _____ Latitude: 46.5409091720... Longitude: -93.07445433... Datum: NAD83
 Soil Map Unit Name: 164B 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> | Is the Sampled Area within a Wetland? | |
| Hydric Soil Present? | <u>Yes</u> | | <u>Yes</u> |
| Wetland Hydrology Present? | <u>Yes</u> | | If yes, optional Wetland Site ID: <u>w-47n22w24-aa1</u> |
| Remarks: (Explain alternative procedures here or in a separate report.) No digging, existing forest road, potential buried utilities. Precipitation above normal based on WETS analysis. | | | |

HYDROLOGY

| | |
|--|---|
| Wetland Hydrology Indicators: | <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> Water-Stained Leaves (B9) | <u> </u> Drainage Patterns (B10) |
| <u>yes</u> High Water Table (A2) | <u> </u> Moss Trim Lines (B16) |
| <u> </u> Aquatic Fauna (B13) | <u> </u> Dry-Season Water Table (C2) |
| <u>yes</u> Saturation (A3) | <u> </u> Crayfish Burrows (C8) |
| <u> </u> Marl Deposits (B15) | <u> </u> Saturation Visible on Aerial Imagery (C9) |
| <u> </u> Water Marks (B1) | <u> </u> Stunted/Stressed Plants (D1) |
| <u> </u> Hydrogen Sulfide Odor (C1) | <u>YES</u> Geomorphic Position (D2) |
| <u> </u> Oxidized Rhizospheres on Living Roots (C3) | <u>NO</u> Shallow Aquitard (D3) |
| <u> </u> Presence of Reduced Iron (C4) | <u> </u> Microtopographic Relief (D4) |
| <u> </u> Recent Iron Reduction in Tilled Soils (C6) | <u>YES</u> FAC-Neutral Test (D5) |
| <u> </u> Thin Muck Surface (C7) | |
| <u> </u> Other (Explain in Remarks) | |
| <u> </u> Sparsely Vegetated Concave Surface (B8) | |

| | | | |
|--|------------|-----------------------------------|------------|
| Field Observations: | | Wetland Hydrology Present? | <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? (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 | |
|--|------------------|-------------------|------------------|--|
| Tree Stratum (Plot Size: <u>30</u>) | | | | |
| 1. _____ | _____ | _____ | _____ | |
| 2. _____ | _____ | _____ | _____ | |
| 3. _____ | _____ | _____ | _____ | |
| 4. _____ | _____ | _____ | _____ | |
| 5. _____ | _____ | _____ | _____ | |
| 6. _____ | _____ | _____ | _____ | |
| 7. _____ | _____ | _____ | _____ | |
| | <u>0</u> | = Total Cover | | |
| Sapling/Shrub Stratum (Plot Size: <u>15</u>) | | | | |
| 1. <u>Alnus incana</u> | <u>60.00</u> | <u>Yes</u> | <u>FACW</u> | |
| 2. <u>Salix petiolaris</u> | <u>15.00</u> | <u>No</u> | <u>OBL</u> | |
| 3. <u>Acer rubrum</u> | <u>5.00</u> | <u>No</u> | <u>FAC</u> | |
| 4. _____ | _____ | _____ | _____ | |
| 5. _____ | _____ | _____ | _____ | |
| 6. _____ | _____ | _____ | _____ | |
| 7. _____ | _____ | _____ | _____ | |
| | <u>80</u> | = Total Cover | | |
| Herb Stratum (Plot Size: <u>5</u>) | | | | |
| 1. <u>Calamagrostis canadensis</u> | <u>50.00</u> | <u>Yes</u> | <u>FACW</u> | |
| 2. <u>Impatiens capensis</u> | <u>20.00</u> | <u>Yes</u> | <u>FACW</u> | |
| 3. <u>Onoclea sensibilis</u> | <u>20.00</u> | <u>Yes</u> | <u>FACW</u> | |
| 4. <u>Carex lacustris</u> | <u>10.00</u> | <u>No</u> | <u>OBL</u> | |
| 5. _____ | _____ | _____ | _____ | |
| 6. _____ | _____ | _____ | _____ | |
| 7. _____ | _____ | _____ | _____ | |
| 8. _____ | _____ | _____ | _____ | |
| 9. _____ | _____ | _____ | _____ | |
| 10. _____ | _____ | _____ | _____ | |
| 11. _____ | _____ | _____ | _____ | |
| 12. _____ | _____ | _____ | _____ | |
| | <u>100</u> | = Total Cover | | |
| Woody Vine Stratum (Plot Size: <u>30</u>) | | | | |
| 1. _____ | _____ | _____ | _____ | |
| 2. _____ | _____ | _____ | _____ | |
| 3. _____ | _____ | _____ | _____ | |
| 4. _____ | _____ | _____ | _____ | |
| | <u>0</u> | = Total Cover | | |
| Remarks: (include photo numbers here or on a separate sheet.) | | | | |
| | | | | |

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

| | | | | |
|--------------------------|---------------|---------------------|------------|-----|
| Total % Cover of: | | Multiply by: | | |
| OBL species | <u>25.00</u> | x 1 | <u>25</u> | |
| FACW species | <u>150.00</u> | x 2 | <u>300</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>180</u> | (A) | <u>340</u> | (B) |

Prevalence Index = B/A = 1.888888...

Hydrophytic Vegetation Indicators:

_____ 1 - Rapid Test for Hydrophytic Vegetation

yes 2 - Dominance Test is > 50%

yes 3 - Prevalence Index is ≤ 3.0¹

_____ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (.76 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb - All herbaecous (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? Yes

Site Photograph 1

Sampling Point: w-47n22w24-aa1



Latitude: 46.5409092558981

Cowardin Classification: PSS

Longitude: -93.0744544231268

Circular 39: 6

Direction: west

Eggers & Reed: Shrub-Carr/Alder Thicket

Remarks:

Site Photograph 2

Sampling Point: w-47n22w24-aa1



Latitude: 46.5409094654457

Cowardin Classification: PSS

Longitude: -93.0744542554888

Circular 39: 6

Direction: south

Eggers & Reed: Shrub-Carr/Alder Thicket

Remarks: