

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: SPP City/County: Hubbard Sampling Date: 6/13/2014
 Applicant/Owner: Enbridge State: MN Sampling Point: HUC5107_200c1U
 Investigator(s): EAB/RAJ Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Side slope Local relief (concave, convex, none): CL
 Slope (%): 3 - 7% Lat.: 46.932317 Long.: -95.139544 Datum: _____
 Soil Map Unit Name: 260 NWI Classification: _____
 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>N</u> Hydric soil present? <u>N</u> Indicators of wetland hydrology present? <u>N</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) The sample site is located in an aspen/oak forest upslope from a sedge meadow.	

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)		Indicators of wetland hydrology present? <u>N</u>	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No indicators of wetland hydrology observed.			

VEGETATION - Use scientific names of plants
Sampling Point:

HUC5107 200c1U

Tree Stratum					Plot Size (30 ft)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Populus tremuloides</i>		25	Y	FAC				
2	<i>Quercus ellipsoides</i>		25	Y	NI				
3	<i>Prunus serotina</i>		15	Y	FACU				
4									
5									
6									
7									
8									
9									
10									
			65	= Total Cover					

Sapling/Shrub Stratum					Plot Size (15 ft)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Populus tremuloides</i>		15	Y	FAC				
2	<i>Alnus incana</i>		10	Y	FACW				
3									
4									
5									
6									
7									
8									
9									
10									
			25	= Total Cover					

Herb Stratum					Plot Size (5 ft)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Carex pensylvanica</i>		50	Y	NI				
2	<i>Pteridium aquilinum</i>		30	Y	FACU				
3	<i>Rubus idaeus</i>		20	N	FAC				
4	<i>Trientalis borealis</i>		5	N	FAC				
5	<i>Toxicodendron rydbergii</i>		5	N	FAC				
6	<i>Maianthemum canadense</i>		5	N	FACU				
7	<i>Thalictrum dioicum</i>		5	N	FACU				
8	<i>Galium triflorum</i>		1	N	FACU				
9									
10									
11									
12									
13									
14									
15									
			121	= 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	13	33
Sapling/Shrub Stratum	5	13
Herb Stratum	24	61
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 7 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 42.86% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	70	x 3 =	210
FACU species	56	x 4 =	224
UPL species	0	x 5 =	0
Column totals	136	(A)	454 (B)
Prevalence Index = B/A = <u>3.34</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? N

Remarks: (Include photo numbers here or on a separate sheet)
 The canopy is dominated by quaking aspen, with Pennsylvania sedge in the understory.

SOIL

Sampling Point: HUC5107 200c1U

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

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- | | |
|---|---|
| ☐ Histosol (A1) | ☒ Polyvalue Below Surface |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) |
| ☐ Black Histic (A3) | ☐ Thin Dark Surface (S9) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B) |
| ☐ Stratified Layers (A5) | ☐ Loamy Mucky Mineral (F1) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) |
| ☐ Thick Dark Surface (A12) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Sandy Mucky Mineral (S1) | ☐ Depleted Matrix (F3) |
| ☐ Sandy Gleyed Matrix (S4) | ☐ Redox Dark Surface (F6) |
| ☐ Sandy Redox (S5) | ☐ Depleted Dark Surface (F7) |
| ☐ Stripped Matrix (S6) | ☐ Redox Depressions (F8) |
| ☐ Dark Surface (S7) (LRR R, MLRA | |

Indicators for Problematic Hydric Soils:

- | | |
|--------------------------|--|
| ☐ | 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ☐ | Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ | Dark Surface (S7) (LRR K, L) |
| ☐ | Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ | Thin Dark Surface (S9) (LRR K, L) |
| ☐ | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ | Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ | Red Parent Material (F21) |
| ☐ | Very Shallow Dark Surface (TF12) |
| ☐ | Other (Explain in Remarks) |

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

Restrictive Layer (if observed):

Type: _____

Depth (inches):

Hydric soil present? N

Remarks:

No hydric soil indicators observed.