WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Main L3R ESC		City/C	County: Cass	Samplin	Date: 21-Sep-17			
Applicant/Owner: Enbridge			State: MN	Sampling Point:	w-138n30w10-aa1			
Investigator(s): SMR		Se	ection, Township, Range:	s. 10 t. 138N	R. 30W			
Landform (hillslope, terrace, etc): Lowland		relief (concave, convex, r		Slope: 0.0 % / 0.0 °			
Subregion (LRR or MLRA): LR	? K	Lat.: 46 46.	8660 Lon e		Datum: NAD 83			
Soil Map Unit Name: 549				NWI classification:	PSS1C			
Are climatic/hydrologic conditio	ns on the site ty	pical for this time of year?	Yes ● No ○	(If no, explain in Remarks	s.)			
Are Vegetation \Box , Soil \Box	, or Hydrol			Circumstances" present?	Yes ● No ○			
Are Vegetation, Soil	, or Hydrol	· ·		•	narks.)			
Are Vegetation , Soil , or Hydrology anaturally 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 •	No O		•				
Hydric Soil Present?	Yes	No O	Is the Sampled Area within a Wetland?	Yes No				
Wetland Hydrology Present?	Yes	No O	Within a Wetanus	100 - 110 -				
Remarks: (Explain alternative								
Hydrology								
Wetland Hydrology Indicators:				Secondary Indicators (minim				
Primary Indicators (minimum of Surface Water (A1)	if one required;			Surface Soil Cracks (B6)				
✓ Surface Water (A1) ✓ High Water Table (A2)		✓ Water-Stained Leaves (B9✓ Aquatic Fauna (B13))	☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16)				
Saturation (A3)		Marl Deposits (B15)		Dry Season Water Table	e (C2)			
Water Marks (B1)		Hydrogen Sulfide Odor (C	1)	Crayfish Burrows (C8)	, (02)			
Sediment Deposits (B2)		Oxidized Rhizospheres alo		Saturation Visible on Ae	rial Imagery (C9)			
Drift deposits (B3)		Presence of Reduced Iron		Stunted or Stressed Plan	nts (D1)			
Algal Mat or Crust (B4)		Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic Position (D:	2)			
☐ Iron Deposits (B5)	(= -)	Thin Muck Surface (C7)		Shallow Aquitard (D3)				
Inundation Visible on Aerial Im		Other (Explain in Remarks	3)	Microtopographic Relief	(D4)			
Sparsely Vegetated Concave Si	Irrace (68)			✓ FAC-neutral Test (D5)				
Field Observations:	s • No O	D II (' 1)						
		Depth (inches):						
	s • No O	Depth (inches):	0 Wetland Hvd	rology Present? Yes	● No ○			
(includes capillary fringe) Yes	s • No O		0					
Describe Recorded Data (stream	n gauge, monito	oring well, aerial photos, prev	vious inspections), if avai	lable:				
Damarka.								
Remarks:								

VEGETATION - Use scientific names of plants

VEGETATION - OSE SCIENCING Harnes of pla	Sampling Point: w-138n30w10-aa1					
(0) (1) (2)	Absolute		dicator	Dominance Test worksheet:		
Tree Stratum (Plot size: 30)	% Cover	Species? St	atus	Number of Dominant Species		
1				That are OBL, FACW, or FAC: (A)		
2		Ц –		Total Number of Dominant		
3	0			Species Across All Strata: (B)		
4	0					
5	0			Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)		
6	0			That Are ODE, TACW, OF FAC.		
7	0			Prevalence Index worksheet:		
Sapling/Shrub Stratum (Plot size: 15)	0 = Total Cover			Total % Cover of: Multiply by:		
	0			0BL speci es 100 x 1 = 100		
1				FACW species 0 x 2 = 0		
2				FAC speciles x 3 =0		
3				FACU species $0 \times 4 = 0$		
4				UPL speci es		
5		H -		Column Totals: 100 (A) 100 (B)		
6	-					
7				Prevalence Index = B/A = 1.000		
Herb Stratum (Plot size: 5		= Total Cover		Hydrophytic Vegetation Indicators:		
	40		D.	✓ Rapid Test for Hydrophytic Vegetation		
1. Iris versicolor			BL	✓ Dominance Test is > 50%		
2. Carex lacustris			BL	✓ Prevalence Index is ≤3.0 ¹		
3. Carex laslocarpa			BL	Morphological Adaptations ¹ (Provide supporting		
4		H -		data in Remarks or on a separate sheet)		
5				Problematic Hydrophytic Vegetation ¹ (Explain)		
6				1 To discharge of hoods and so the dealers are the		
7		Н –		Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
8	0					
9	0			Definitions of Vegetation Strata:		
10	0			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter		
11				at breast height (DBH), regardless of height.		
12	0			Sapling/shrub - Woody plants less than 3 in. DBH and		
Woody Vine Stratum (Plot size: 30	100 =			greater than 3.28 ft (1m) tall		
				Hards All bank a constant of the state of th		
1				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
2		H -		oles, and needy plante less than eles it tam		
3				Woody vine - All woody vines greater than 3.28 ft in		
4				height.		
		= Total Cover				
				Hadaaalada		
				Hydrophytic Vegetation		
				Present? Yes No		
Remarks: (Include photo numbers here or on a separate sh	eet.)					
•	=					

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

Soil Sampling Point: w-138n30w10-aa1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth Matrix Redox Features			-				
(inches)	Color (moist)		Color (moist)		Loc2	Texture	Remarks
0-24	10YR 2/2	100				Peat	
			-			-	
						-	
			-				
¹ Type: C=Cond	centration. D=Deplet	ion. RM=Redu	ced Matrix, CS=Covere	ed or Coated Sand Gra	ins ² Loca	ition: PL=Pore Lining. M=M	atrix
Hydric Soil I	Indicators:					Indicators for Broble	ematic Hydric Soils: 3
Histosol (Polyvalue Belov	v Surface (S8) (LRR R	,		
	pedon (A2)		MLRA 149B)		•		(LRR K, L, MLRA 149B)
Black Hist			Thin Dark Surfa	ace (S9) (LRR R, MLR	A 149B)		x (A16) (LRR K, L, R)
	Sulfide (A4)			Mineral (F1) LRR K, L)			or Peat (S3) (LRR K, L, R)
	Layers (A5)		Loamy Gleyed	Matrix (F2)		Dark Surface (S7)	
Depleted	Below Dark Surface ((A11)	Depleted Matrix			Thin Dark Surface	urface (S8) (LRR K, L)
☐ Thick Dar	k Surface (A12)		Redox Dark Su				(39) (LRR K, L) lasses (F12) (LRR K, L, R)
Sandy Mu	ick Mineral (S1)		Depleted Dark				in Soils (F19) (MLRA 149B)
Sandy Gle	eyed Matrix (S4)		Redox Depress	ions (F8)) (MLRA 144A, 145, 149B)
Sandy Red	dox (S5)					Red Parent Materia	
Stripped M	Matrix (S6)					Very Shallow Dark	• •
☐ Dark Surfa	ace (S7) (LRR R, MLF	RA 149B)				Other (Explain in R	
3 Indicators of	f hydronhytic yeaetat	ion and wetlan	d hydrology must be r	resent, unless disturb	ed or proble		condition (a)
			a flydrology fflust be p	reserit, uriless disturbi	ed of proble	ematic.	
	ayer (if observed):						
Type:						Hydric Soil Present?	Yes ● No ○
Depth (incl	hes):					Tryune son Fresence	162 0 140 0
Remarks:							