## WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:		L3R								Date: 09/29/14	
Applicant:		Enbridge						MLRA 56		County: Pennington	
Investigators:		RAJ/BJC			_Subregio	•	State: <u>MN</u>				
Soil Unit:	I55A						I Classification	: PSS1B			
	Depression				cal Relief:					Sample Point: w-153n44w11-c3	
\ /	0 - 2%		atitude: 48.090		Longitude:			Datum:		_	
		onditions on the site t	<u> </u>		ar? (If no, exp		•		□ No	Section:	
Are Vegetation			significantly o			Are	e normal circur	•	esent?	Township:	
Are Vegetation			naturally prob	lematic?				□ No		Range: Dir:	
SUMMARY O											
Hydrophytic \	egetation P	resent?	Yes		-				Is Present?		
Wetland Hydi			Yes							nt Within A Wetland? Yes	
Remarks:	A hardwood	swamp community	dominated by	y quaking a	spen, Ame	erican eli	m, and tree-siz	ed pussy wi	llow with a	shrub layer dominated by red osier dogwood	
	in a broad o	lepression. All parar	neters of wet	land condit	ions are pr	esent.					
HYDROLOGY	<b>′</b>										
Wetland Hye	drology Ind	icators (Check all th	at apply: Min	imum of on	e nrimary	or two s	econdary requi	red):			
Primary:	•	icators (Check all th	at apply, will		e primary	OI TWO S	econdary requi	ieu).	Secondary	<i>J</i> :	
	A1 - Surface	Water		П	B11 - Salt (	Crust					
	A2 - High Wa				B13 - Aqua				_	B8 - Sparsely Vegetated Concave Surface	
	A3 - Saturation				C1 - Hydro	gen Sulfic	le Odor			B10 - Drainage Patterns	
	B1 - Water M				C2 - Dry Se					C3 - Oxidized Rhizospheres on Living Roots (tilled)	
	B2 - Sedimen	•					spheres on Living	Roots (not till	lŧ 📙	C8 - Crayfish Burrows	
	B3 - Drift Dep				C4 - Prese					C9 - Saturation Visible on Aerial Imagery	
	B4 - Algal Ma B5 - Iron Dep				C7 - Thin N Other (Exp		ace			D2 - Geomorphic Position D5 - FAC-Neutral Test	
	•	on Visible on Aerial Imag	erv		Other (Exp	iaii i)				D7 - Frost-Heaved Hummocks (LRR F)	
		tained Leaves	o. y						_	27 Trest Heartea Hammedite (2.1111)	
Field Observ	ations:										
Surface Wate	er Present?	Yes 🗆	Depth:		(in.)						
Water Table		Yes	Depth:		- (in.)			Wetland F	Hydrology	Present? Y	
Saturation Pr		Yes $\square$	Depth:		- (in.)					<del></del>	
		stream gauge, monitor		al photos, pr	evious insp	ections),	ıf available:				
Remarks:	Indicators o	f wetland hydrology a	are present.								
SOILS	11 (5										
		ibe to the depth need									
(Type: C=Concen	tration, D=Depi	etion, RM=Reduced Matri	x, CS=Covered/	Coated Sand	Grains, Local	ion: PL=P	ore Lining, ivi=iviat	(IX)			
		Matrix				Mottl	00				
Danth (In)			0/	Oalan (	N / - ! - 4\	Mottle		Lasation		Damarka	
Depth (In.)		Color (Moist)	%	Color (	MOIST)	%	Туре	Location	Texture	Remarks	
0-9	Hue_10YR		100						M		
9-16	Hue_10YR		100						MMI	the mineral component is a loamy fine sand	
16-23	Hue_10YR	5/2	100						LFS		
NRCS Hydri	c Soil Field	Indicators (chec	k here if indi	cators are r	not present	t):				-	
l mixed my and		maroatoro (onoc		catore are r	iot procen	.,.			Indicators	for Problematic Soils <sup>1</sup>	
	A1- Histosol			S5 - Sandy R	edox					Muck (LRR I, J)	
	A2 - Histic Ep	pipedon		S6 - Stripped						st Prairie Redox (LRR F, G, H)	
✓	A3 - Black His	•		F1 - Loamy N		al				Surface (LRR G)	
	A4 - Hydroge	n Sulfide		F2 - Loamy C						Plains Depressions (LRR H, outside MLRA 72, 73)	
	A5 - Stratified	Layers (LRR F)		F3 - Depleted	d Matrix				F18 - Redu	uced Vertic	
		ck (LRR FGH)		F6 - Redox D						Parent Material	
		ed Below Dark Surface		F7 - Depleted		ce			•	y Shallow Dark Surface	
	A12 - Thick D			F8 - Redox D	•	- ' - · · · / N AI	D 4 70 70 (1 D)		Other (Expl	lain in Remarks)	
	S1 - Sandy M	•		r 16 - High Pl	ains Depres	sions (IVIL	.RA 72, 73 of LRI	х п)			
		lucky Peat or Peat (LRR cky Peat or Peat (LRR F	. ,						<sup>1</sup> Indicators of	hydrophytic vegetation and wetland hydrology must be present,	
	S4 - Sandy G		/							bed or problematic.	
										·	
Description :	-			<b>D</b> . 41							
Restrictive Layer	Type:			Depth:			Hydric Soil Present? Y				
Remarks:	The soil has A3, Black H		uck at the su	ırface over	mucky loa	my fine :	sand to 16 inch	nes; below 1	6 inches is	gray fine sand. The profile meets indicator	

## WETLAND DETERMINATION DATA FORM

**Great Plains Region** 

Special Board   Secretary	Project/Site:	: L3R				Sample Point: w-153n44w11-c3
Dominance Test Worksheet   Service						
Signate Maring		` ` '	re non-native	species.)		
1.   Save descrees   30	ee Stratum	·				
Provider remarkative   20	4		1			
3.						
Total Cover   Total Cover   45		Populus tremuloides	20			Number of Dominant Species that are OBL, FACW, or FAC: 6 (A)
Percent of Dominant Species That Are OBL FACKY, or FACE   100.0%   (A/B)	3.	Ulmus americana	20	Υ	FAC	
Percent of Dominant Species That Are OBL FACKY, or FACE   100.0%   (A/B)	4.		1		-,	Total Number of Dominant Species Across All Strata: 6 (B)
Prevalence Index Workshop   Statum (Plot size: 15 ft. radius)   FACW   Statum (Plot size: 30 ft. radius)   FA			(		-	
Prevalence Index Worksheet			<u> </u>			Percent of Dominant Species That Are OBL FACW, or FAC: 100.0% (A/B)
S						Toront or Borning Reported Market 222, 11211, 1211
9.			ſ			Provolence Index Worksheet
Total Cover			1			-
Section   Plot size   15 it. radius   Provide remuksides   Prov			1			Total % Cover of.
Section   Plot size   15 it. radius   Provide remuksides   Prov	10.	Total Cover -	70			$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Section   Plot size   15 it. radius   Provide remuksides   Prov		I Ulai Guvei –	10		,	FACW spp. $100$ $X \angle = 200$
Section   Plot size   15 it. radius   Provide remuksides   Prov	/Obb	The second of th				$\begin{array}{cccccccccccccccccccccccccccccccccccc$
2. Popular remodulation 20 Y FAC 3. 3. 5. Total 175 (A) 395 (B)  Prevalence Index = BIA = 2.257  Hydrophytic Vegetation Indicators: Rapid Tast for Hydrophytic Vegetation  Total Cover = 45			- OF			
Total 175 (A) 395 (B)  Total 175 (A) 395 (B)  Prevalence lndex = BXA = 2.257  Total Cover = 45  Total Cover = 60  Total Cover = 60  Total Cover = 60  Total Cover = 0  Total Cover = 0  Total Cover = 0  Total Cover = 0  Total T75 (A) 395 (B)  Prevalence lndex = BXA = 2.257  Total T75 (A) 395 (B)  Prevalence lndex = BXA = 2.257  Total T75 (A) 395 (B)  Prevalence lndex = BXA = 2.257  Total Cover = 45  Total Cover = 60  Total T75 (A) 395 (B)  Prevalence lndex = BXA = 2.257  Hydrophytic Vegetation Indicators:  Rapid Test for Hydrophytic Vegetation  X Dominance Test is > 50%  X Prevalence lndex = SXA  Morphological Adaptations (Explain) *  Prevalence lndex = BXA = 2.257  Hydrophytic Vegetation Indicators:  Rapid Test for Hydrophytic Vegetation  X Dominance Test is > 50%  X Prevalence lndex = SXA  Morphological Adaptations (Explain) *  Prevalence lndex = BXA = 2.257  Hydrophytic Vegetation Indicators:  Rapid Test for Hydrophytic Vegetation (Explain) *  Prevalence lndex = BXA = 2.257  Hydrophytic Vegetation Indicators:  Rapid Test for Hydrophytic Vegetation (Explain) *  Prevalence lndex = BXA = 2.257  Hydrophytic Vegetation Indicators:  Rapid Test for Hydrophytic Vegetation (Explain) *  Prevalence lndex = BXA = 2.257  Total Cover = 50  Total Cover = 60  Total C				Y		
4.		Populus tremuloides	20	Y	FAC	
Prevalence Index = B/A = 2.257						Total 175 (A) 395 (B)
6.   7.   8.   9.   10.						
Hydrophytic Vegetation Indicators:   Rapid Test for Hydrophytic Vegetation	5.					Prevalence Index = B/A = 2.257
Total Cover   45   Stratum (Plot size: 5 ft. radius)   Facultina managements   Facultina	6.					<u></u>
Hydrophytic Vegetation Indicators:   9.						
Rapid Test for Hydrophytic Vegetation   X   Dominance Test is > 50%   X   Prevalence Index is ≤ 3.0 *   Morphological Adaptations (Explain) *   Problem Hydrophytic Vegetation (Explain) *   Problem Hy						Hvdrophytic Vegetation Indicators:
Total Cover = 45						
Total Cover = 45						
Morphological Adaptations (Explain) *   Problem Hydrophytic Vegetation (Explain) *	10.	Total Cover =	45			<del></del>
Problem Hydrophytic Vegetation (Explain) *			10		•	
1. Phalars aurudinacea 40 Y FACW 2. Carex lacusarias 10 N OBL 3. Sacutestaria territora 5 N FACW present, unless disturbed or problematic. 4. Lycopus americanus 5 N OBL 5. Carex lacusarias territora 5 N OBL 6. Carex lacusarias territora 5 N OBL 7. Carey lacusarias construints of the sacusarias construints						
2. Carex lacustris 10 N OBL 3. Scruelators in territoria 5 N FACW present, unless disturbed or problematic. 4. Lycopus americanus 5 N OBL 5. N OBL 5. N OBL 6. N OBL 7. N OBL 8. N OBL 8. N OBL 9. N OBL	lerb Stratum (	<u> </u>			<u> </u>	
3. Scurelitaria lateritiona 5 N OBL 5. Coody Vine Stratum (Plot size: 30 ft. radius) 1	<u> </u>			<u> </u>		-
4. Lycopus americanus 5 N OBL 5 N OBL 5 Splintions of Vegetation Strata:  5.   Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height. (DBH), regardless of height.  8.   Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.  10.   Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.  11.   Herb - All herbaceous (non-woody) plants, regardless of size.  13.   Woody Vines - All woody vines, regardless of height.  14.   Woody Vines - All woody vines, regardless of height.  15.   Total Cover = 60   Woody Vines - All woody vines, regardless of height.  16.   Woody Vines - All woody vines, regardless of height.  17.   Woody Vines - All woody vines, regardless of height.  18.   Woody Vines - All woody vines, regardless of height.  19.   Woody Vines - All woody vines, regardless of height.  10.   Woody Vines - All woody vines, regardless of height.  10.   Woody Vines - All woody vines, regardless of height.  10.   Woody Vines - All woody vines, regardless of height.  10.   Woody Vines - All woody vines, regardless of height.  10.   Woody Vines - All woody vines, regardless of height.  11.   Woody Vines - All woody vines, regardless of height.  12.   Woody Vines - All woody vines, regardless of height.  13.   Woody Vines - All woody vines, regardless of height.  14.   Woody Vines - All woody vines, regardless of height.  15.   Woody Vines - All woody vines, regardless of height.  16.   Woody Vines - All woody vines, regardless of height.  17.   Woody Vines - All woody vines, regardless of height.  18.   Woody Vines - All woody vines, regardless of height.  19.   Woody Vines - All woody vines, regardless of height.  19.   Woody Vines - All woody vines, regardless of height.  19.   Woody Vines - All woody vines, regardless of height.  19.   Woody Vines - All woody vines, regardless of height.						<b>-</b>
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7.	6					
8.	7.					
Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.  10.						1
10.						Sanling/Shrub - Woody plants less than 3 in. DBH, regardless of height.
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14.   15.   Woody Vines - All woody vines, regardless of height.  Total Cover =60						Hern - All Herbaceous (Horr-woody) plants, regulation 5. 5.25.
Total Cover =60						$\downarrow$
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Todal Cover = 0  emarks:  A hardwood swamp community dominated by quaking aspen, American elm, and tree-sized pussy willow with a shrub layer dominated by red osier dogwood and a herbaceous layer dominated by red canary grass. Though the sample point is fairly representative of the forested portion of this wetland complex, there is some variation in the dominant canopy and herbaceous species acrowetland. Hydrophytic vegetation is present.	15.					Woody Vines - All woody vines, regardless of height.
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3. Hydrophytic Vegetation Present? Y  5. 4. Total Cover = 0  emarks: A hardwood swamp community dominated by quaking aspen, American elm, and tree-sized pussy willow with a shrub layer dominated by red osier dogwood and a herbaceous layer dominated by reed canary grass. Though the sample point is fairly representative of the forested portion of this wetland complex, there is some variation in the dominant canopy and herbaceous species acrowetland. Hydrophytic vegetation is present.	1.				,	
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wetland. Hydrophytic vegetation is present.	Remarks:		· · · · · · · · · · · · · · · · · · ·		•	
			presentative o	of the lorestor	a portion or a	.his wetland complex, there is some variation in the dominant carropy and herbaceous species across
dditional Remarks:		Wetlatiu. Tryurophytio vegetation to procent.				
dditional kemarks:	^ dditional /	Damanka.				
	Additionari	Remarks:				