Appendix L

Wetlands Crossed by the Proposed Pipeline

Guardian Pipeline Expansion and Extension Project Wetlands Crossed by the Pipeline a/							
Approx. Milepost	**Wetland I.D.**	**WWI Classification b/**	**NWI Classification c/**	**Survey Type d/**	**Approximate Crossing Length (ft) e/**	**Acreage Affected During Construction f/**	**Acreage Affected During Operation g/**
2.5	002W2	E4Kf	PEM2Af	FD	22	**0.22**	0.00
3.1	003W1	E1Kf	PEM1Yf	FD	906	2.62	0.00
5.4	005W1	E1K	PEM1Y	FD	91	0.15	0.00
6.3	006W1	E4Kf	PEM2Af	FD	0	1.00	0.00
6.6	006W2	E1K	PEM1Y	FD	65	0.11	0.00
9.8	009W1	T3Kw/E1K	PFO1C/PEM1C	FD	1330	2.50 h/	0.00 h/
10.5	010W1	E4Kf	PEM2Af	FD	392	1.08	0.00
10.8	010W2	E1K	PEM1Y	FD	0	0.07	0.00
10.9	010W3	E1Kf	PEM1Af	FD	792	**2.42**	0.00
11.5	011W2	E1Kf	PEM1Yf	FD	134	0.38	0.00
11.7	011W3	E1K/T3K	PEM1E/PFO1C	FD	540	**1.51**	0.15
12.4	*OS_W01*	*E1K*	*PEM1E*	*OS*	*33*	*0.38*	*0.00*
13.0	013W1	E1Kf	PEM1Yf	FD	125	0.19	0.00
15.1	015W1	E4Kf	PEM2Af	FD	0	0.02	0.00
15.2	015W2	E1K	PEM1Y	FD	95	0.29	0.00
15.4	015W3	E4Kf	PEM2Af	FD	33	0.09	0.00
15.6	015W4	E4Kf	PEM2Af	FD	0	0.08	0.00
16.0	016W1	E1K	PEM1Y	FD	64	**0.11**	0.00
17.7	017W1	T3K/S3K	PFO1Y/PSS1Y	FD	424	**0.66**	0.10
18.8	018W1	E1Kf	PEM1Yf	FD	201	0.36	0.00
19.1	***OS_W29***	***E1K/S3K***	***PEM1C/PSS1C***	***OS***	***155***	***0.42***	***0.00***
21.9	021W1	E4Kf	PEM2Af	FD	150	0.38	0.00
22.2	022W1	E4K	PEM2C	FD	53	0.12	0.00
23.5	023W1	E1Kf	PEM1Yf	FD	167	0.31	0.00
23.9	023W3	E4Kf	PEM2Af	FD	136	0.23	0.00
25.4	025W1	E4Kf	PEM2Af	FD	50	**0.16**	0.00
27.9	027W2	E4Kf	PEM2Af	FD	68	0.09	0.00
31.1	*OS_W02*	*E1Kf*	*PEM1Ef*	*FD*	*1200*	***2.81***	*0.00*
32.3	032W1	E1K	PEM1C	FD	256	0.51	0.00
37.8	037W1	E1K/T3K	PEM1C/PFO1C	FD	319	**0.81**	0.12
38.5	*OS_W19*	*E1Kg*	*PEM1E*	*OS*	*100*	***0.27***	*0.00*
38.9	*OS_W03*	*E1Kf*	*PEM1Ef*	*OS*	*500*	***1.94***	*0.00*
39.0	*OS_W04*	*E1Kf*	*PEM1Ef*	*OS*	*300*	*1.16*	*0.00*
40.2	040W1	E1Kf	PEM1Yf	FD	1609	3.83	0.00
41.7	041W1	E1K	PEM1Y	FD	67	0.12	0.00
41.8	041W2	T1K/E1k	PFO1Y/PEM1Y	FD	453	**0.71**	0.12
42.0	042W1	T3K	PFO1Y	FD	293	**0.52**	0.20
42.5	042W2	E1K	PEM1C	FD	90	0.15	0.00
45.9	045W1	E1K	PEM1Y	FD	366	0.61	0.00
46.1	046W1	E1K/T3K	PEM1C/PFO1C	FD	98	**0.17**	0.03
46.2	046W2	E1K	PEM1Y	FD	151	0.26	0.00
46.6	046W3	E1K/S3K	PEM1C/PSS1C	FD	166	**0.28**	0.07

Guardian Pipeline Expansion and Extension Project Wetlands Crossed by the Pipeline a/							
Approx. Milepost	**Wetland I.D.**	**WWI Classification b/**	**NWI Classification c/**	**Survey Type d/**	**Approximate Crossing Length (ft) e/**	**Acreage Affected During Construction f/**	**Acreage Affected During Operation g/**
49.4	049W1	E1K	PEM1Y	FD	1124	1.92	0.00
51.4	051W1	E1K	PEM1C	FD	281	0.49	0.00
56.9	056W1	E1Kf	PEM1Cf	FD	58	0.10	0.00
57.6	057W1	E1K	PEM1Y	FD	76	0.11	0.00
57.7	057W2	E1K	PEM1C	FD	130	0.17	0.00
60.2	060W1	E1Kx	PEM1Cx	FD	166	0.28	0.00
60.6	*OS_W05*	*E1Kf*	*PEM1Ef*	*OS*	*122*	*0.40*	*0.00*
64.5	*OS_W06*	*E2Kf*	*PEM1Ef*	*OS*	*272*	*0.88*	*0.00*
64.9	064W1	T1K/E1K	PFO1E/PEM1E/	FD	594	1.36	0.00
66.7	*OS_W07*	*T3/S3K*	*PFO1E/PSS1E*	*OS*	*501*	*1.03*	*0.28*
69.3	069W1	E1K	PEM1Y	FD	0	0.07	0.00
69.7	069W2	E1K	PEM1Y	FD	1962	4.63	0.00
70.1	070W1	E1Kf	PEM1Af	FD	308	1.13	0.00
70.9	070W2	E1K	PEM2C	FD	231	0.40	0.00
71.2	071W1	E4Kf	PEM2Af	FD	0	0.04	0.00
71.3	071W2	E4Kf	PEM2Af	FD	39	0.07	0.00
71.4	071W3	E4Kf	PEM2Af	FD	0	0.08	0.00
71.7	*OS_W08*	*E1K/S3K*	*PEM1E/PSS1E*	*OS*	*474*	*0.63*	*0.03*
72.0	072W1	E1K	PEM1C	FD	256	**0.21**	0.00
72.3	072W2	E4Kf	PEM2Af	FD	136	0.13	0.00
72.4	072W3	E4Kf	PEM2Af	FD	138	0.30	0.00
72.5	072W5	E4Kf	PEM2Af	FD	65	0.19	0.00
72.7	072W6	E4Kf	PEM2Af	FD	0	0.02	0.00
73.3	073W1	E1Kf	PEM1Cf	FD	47	0.08	0.00
73.4	073W2	E1Kf	PEM1Ef	FD	471	0.62	0.00
73.6	073W3	T3K	PFO1C	FD	160	0.28	0.10
73.7	073W4	T3K	PFO1C	FD	245	0.43	0.16
73.9	073W5	T3K	PFO1C	FD	185	0.28	0.12
74.5	074W1	E4Kf	PEM2Af	FD	0	0.02	0.00
74.7	074W2	E1Kf	PEM1Y	FD	11	0.03	0.00
76.7	076W2	E1Kf	PEM1Yf	FD	226	0.79	0.00
76.8	076W3	E1Kf	PEM1Yf	FD	58	0.10	0.00
77.1	077W1	E1Kf	PEM1Yf	FD	0	0.12	0.00
77.5	*OS_W20*	*E1K*	*PEM1B*	*OS*	*350*	*0.60*	*0.00*
77.9	077W3	E1K	PEM1C	FD	288	0.69	0.00
78.6	078W1	E1Kf/S3K	PEM1Cf/PSS1C	FD	1687	**4.42**	0.08
78.9	078W2	E1K	PEM1Y	FD	347	0.57	0.00
79.7	*OS_W09*	*E1Kf*	*PEM1Ef*	*OS*	*245*	*0.84*	*0.00*
80.3	080W1	T3K/E1K	PFO1C/PEM1C	FD	145	**0.28**	0.10
80.4	080W2	T3K/E1K	PFO1C/PEM1C	FD	0	0.03	0.01
80.6	080W4	T3K/E1K	PFO1C/PEM1C	FD	0	0.01	0.00
80.6	080W5	T3K/E1K	PFO1C/PEM1C	FD	24	0.01	0.01

Guardian Pipeline Expansion and Extension Project
Wetlands Crossed by the Pipeline a/

Approx. Milepost	Wetland I.D.	WWI Classification b/	NWI Classification c/	Survey Type d/	Approximate Crossing Length (ft) e/	Acreage Affected During Construction f/	Acreage Affected During Operation g/
80.7	080W6	T3K/E1K	PFO1C/PEM1C	FD	0	0.01	0.00
81.2	*OS_W10*	*E1Kf*	*PEM1Ef*	*OS*	*261*	*0.59*	*0.00*
81.8	081W1	T3K/E2K	PFO1C/PSS1C	FD	166	**0.21**	0.05
82.3	082W1	E4Kf	PEM2Cf	FD	30	0.06	0.00
82.9	082W2	E4Kf	PEM2Af	FD	48	0.33	0.00
83.8	*OS_W11*	*E1Kf*	*PEM1Ef*	*OS*	*194*	*0.33*	*0.00*
83.9	*OS_W12*	*S3K*	*PSS1E*	*OS*	*16*	*0.06*	*0.00*
85.4	085W1	E1K/T3K	PEM1Y/PFO1Y	FD	102	0.18	0.03
85.5	085W2	E1K	PEM1Y	FD	139	0.21	0.00
95.3	***OS_W24***	***E1Kg***	***PEM1E***	***OS***	***250***	***0.79***	***0.00***
101.4	***OS_W26***	***E2K/S3K/T3K***	***PEM1C/PSS1C/PFO1A***	***OS***	***821***	***1.84***	***0.01***
102.0	*OS_W22*	*T3K*	*PFO1C*	*OS*	*416*	***0.71***	*0.29*
106.0	***OS_W27***	***E1K/T3K***	***PEM1C/PFO1C***	***OS***	***251***	***0.76***	***0.00***
106.9	*OS_W23*	*T3K*	*PFO1C*	*OS*	*1988*	***2.87***	***1.29***
109.0	***OS_W28***	***S3K/E1K/T3K***	***PSS1C/PEM1C/PFO1A***	***OS***	***0***	***0.05***	***<0.01***
		Pipeline Total			**28,098**	**63.94**	**3.35**

a/ Italicized rows indicate parcels where no access has been granted by landowners and field investigations have not yet been completed. Listed features in italicized rows (and designated with an "OS" ID) are inferences based on off-site analysis.

b/ Types listed are those occurring within the 200-foot-wide field survey corridor based on the Wisconsin Wetland Inventory codes. For wetlands with multiple types, impacts may not occur to all types listed.

E1K - Emergent/Wet Meadow, Persistent, Palustrine.
E1Kf - Emergent/Wet Meadow, Persistent, Palustrine, Farmed.
E1Kx - Emergent/Wet Meadow, Persistent, Palustrine, Excavated.
E2K - Emergent/Wet Meadow, Narrow-Leaved Persistent, Palustrine.
E4Kf - Emergent/Wet Meadow, Non-Persistent, Palustrine, Farmed.
S3K - Scrub/Shrub, Broad-Leaved Deciduous, Palustrine.
S3K - Scrub/Shrub, Broad-Leaved Deciduous, Palustrine, Floodplain.
T3K - Forested, Broad-Leaved Deciduous, Palustrine.
T3K - Forested, Broad-Leaved Deciduous, Palustrine, Floodplain.

c/ Types listed are those occurring within the 200-foot-wide field survey corridor based on the National Wetland Inventory codes. For wetlands with multiple types, impacts may not occur to all types listed.

PEM1B – Palustrine, Emergent, Persistent, Saturated.
PEM1Bf – Palustrine, Emergent, Persistent, Saturated, Farmed.
PEM1C – Palustrine, Emergent, Persistent, Seasonally Flooded.
PEM1Cx – Palustrine, Emergent, Persistent, Seasonally Flooded, Excavated.
PEM1E – Palustrine, Emergent, Persistent, Seasonally Flooded/Saturated.
PEM1Ef – Palustrine, Emergent, Persistent, Seasonally Flooded/Saturated, Farmed.
PEM1Ex – Palustrine, Emergent, Persistent, Seasonally Flooded/Saturated, Excavated.
PEM1H – Palustrine, Emergent, Persistent, Permanently Flooded.
PEM1Y – Palustrine, Emergent, Persistent, Saturated Semi-Permanent - Seasonal.
PEM2Af – Palustrine, Emergent, Non-persistent, Temporarily Flooded, Farmed.
PEM2Ef – Palustrine, Emergent, Non-persistent, Seasonally Flooded/Saturated, Farmed.
PSS1B – Palustrine, Shrub-Scrub, Broad-Leaved, Saturated.
PSS1C – Palustrine, Shrub-Scrub, Broad-Leaved, Seasonally Flooded.
PSS1E – Palustrine, Shrub-Scrub, Broad-Leaved, Seasonally Flooded/Saturated.
PFO1C – Palustrine Forested, Broad-Leaved Deciduous, Seasonally Flooded.
PFO1E – Palustrine Forested, Broad-Leaved Deciduous, Seasonally Flooded/Saturated.

d/ FD = Field Delineated, OS = Off Site Delineation.

e/ Length of centerline crossing calculated from Guardian's field surveys completed on parcels where access was granted and estimated from off-site analysis elsewhere, rounded to the nearest foot. Zeroes indicate wetlands not crossed by the project centerline.

Guardian Pipeline Expansion and Extension Project
Wetlands Crossed by the Pipeline a/

Approx. Milepost	Wetland I.D.	WWI Classification b/	NWI Classification c/	Survey Type d/	Approximate Crossing Length (ft) e/	Acreage Affected During Construction f/	Acreage Affected During Operation g/

f/ Based on a 75-foot construction corridor through wetlands and standard construction widths in uplands and agricultural lands.

g/ Based on existing community type(s) within 15 feet of the project centerline. In wetlands, Guardian will maintain a ten-foot strip over the pipeline in an herbaceous condition. Trees greater than 15 feet in height within 15 feet on either side of the pipeline centerline may also be cut in accordance with Guardian's right-of-way maintenance Procedures. Values rounded to nearest hundredth of an acre.

h/ Impacts on the forested portion of the wetland associated with the Rock River will be avoided by using the horizontal directional drill (HDD) technique. Impacts on a portion of the emergent component of this wetland will result from work space associated with the HDD.