

ATTACHMENT A

Natural Resource and Water Supply Summary Tables and Figures

Line 3 Replacement Project Route Segment Alternative (RSA)-Blandin

DRAFT

Table 1
Line 3 Replacement Project – RSA-Blandin-L3
Summary of Waterbodies Crossed by the Proposed Route Segment Alternative Centerline
and within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota

Watershed County	Number Crossed by the Proposed Route Segment Alternative Centerline ^a				Miles Within the 2,000-ft-wide Route Segment Alternative Corridor ^b			
	Perennial	Intermittent	Canal/Ditch/ Artificial Path/ Connector	Total ^c	Perennial	Intermittent	Canal/Ditch/ Artificial Path/ Connector	Total ^c
Prairie-Willow	-	-	-	-	-	<0.1	-	<0.1
Aitkin	-	-	-	-	-	<0.1	-	<0.1
Grand Total ^c	-	-	-	-	-	<0.1	-	<0.1

USGS National Hydrography Dataset (NHD) Data Source: <ftp://nhdftp.usgs.gov/DataSets/Staged/States/FileGDB/HighResolution/>

a Number of NHD waterbodies crossed by the proposed route segment alternative centerline.

b Miles of NHD stream segment(s) crossed by the 2000-ft-wide route segment alternative corridor.

c Numbers may not total consistently due to rounding.

Table 2
Line 3 Replacement Project – RSA-Blandin-L3
Summary of USFWS National Wetlands Inventory Crossed by the Route Segment Alternative Proposed Centerline
and within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota

Watershed County	Miles Crossed by the Proposed Route Segment Alternative Centerline ^a				Acres Within the 2,000-ft-wide Route Segment Alternative Corridor ^b			
	PEM ^c	PFO/PSS ^c	Pond/Lake/ Riverine	Total ^d	PEM ^c	PFO/PSS ^c	Pond/Lake/ Riverine	Total ^d
Prairie-Willow	-	0.2	-	0.2	49.1	137.2	-	186.3
Aitkin	-	0.2	-	0.2	49.1	137.2	-	186.3
Grand Total ^d	0.0	0.2	0.0	0.2	49.1	137.2	0.0	186.3

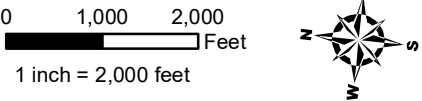
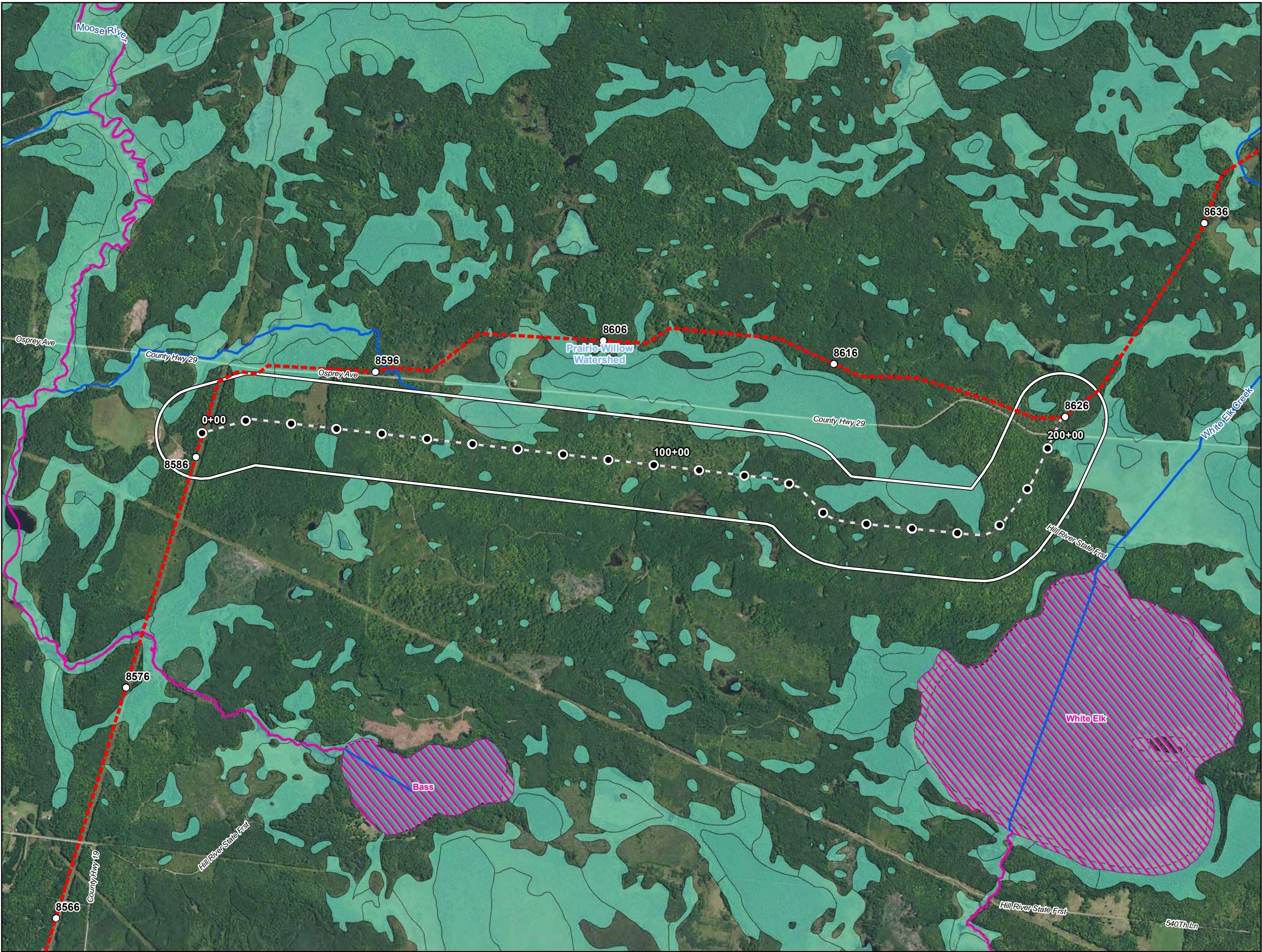
USFWS National Wetlands Inventory (NWI) Data Source: <http://www.fws.gov/wetlands/data/Data-Download.html>

a Total miles of NWI crossed by the proposed route segment alternative centerline.

b Total acres of NWI within the 2000-ft-wide route segment alternative corridor.

c PEM = Palustrine Emergent; PSS = Palustrine Scrub Shrub; PFO = Palustrine Forested (Cowardin et al. 1979).

d Numbers may not total consistently due to rounding.



- Water Well
- Surface Water Intake
- Calcareous Fen
- Line 3 Milepost
- Alternative Stationing
- Proposed Line 3 Replacement Pipeline
- Alternative Centerline
- 2,000 ft Alternative Corridor
- Trout Stream
- PWI Stream
- NHD Stream
- PWI Basin
- NWI
- Watershed Boundary
- WHPA
- DWSMA
- County Boundary

Figure 1
Line 3 Replacement Project
RSA-Blandin-L3
Enbridge
Aitkin County, Minnesota



ATTACHMENT A

Natural Resource and Water Supply Summary Tables and Figures

Line 3 Replacement Project Route Segment Alternative (RSA)-05

DRAFT

Table 1 Line 3 Replacement Project – RSA-05-L3 Summary of Public Waters Inventory Streams Crossed by the Proposed Route Segment Alternative Centerline and within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota		
Watershed County	Number Crossed by the Proposed Route Segment Alternative Centerline^a	Miles Within the 2,000-ft-wide Route Segment Alternative Corridor^b
Clearwater	1	0.5
Clearwater	1	0.5
Mississippi Headwaters	3	3.2
Clearwater	3	3.2
Grand Total^c	4	3.7
<i>Public Waters Inventory (PWI) Stream Data Source: https://gisdata.mn.gov/dataset/water-mn-public-waters</i> a Number of Public Waters Inventory streams crossed by the proposed Route Segment Alternative centerline. b Total miles of Public Waters Inventory stream segment(s) crossed by the 2000-ft-wide Route Segment Alternative corridor. c Numbers may not total consistently due to rounding.		

Table 2
Line 3 Replacement Project – RSA-05-L3
Summary of Waterbodies Crossed by the Proposed Route Segment Alternative Centerline
and within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota

Watershed County	Number Crossed by the Proposed Route Segment Alternative Centerline ^a				Miles Within the 2,000-ft-wide Route Segment Alternative Corridor ^b			
	Perennial	Intermittent	Canal/Ditch/ Artificial Path/ Connector	Total ^c	Perennial	Intermittent	Canal/Ditch/ Artificial Path/ Connector	Total ^c
Clearwater	-	2	-	2	-	0.8	0.1	0.9
Clearwater	-	2	-	2	-	0.8	0.1	0.9
Mississippi Headwaters	1	4	-	5	1.1	3.5	0.6	5.1
Clearwater	1	4	-	5	1.1	3.5	0.6	5.1
Grand Total ^c	1	6	-	7	1.1	4.2	0.7	6.1

USGS National Hydrography Dataset (NHD) Data Source: <ftp://nhdftp.usgs.gov/DataSets/Staged/States/FileGDB/HighResolution/>

a Number of NHD waterbodies crossed by the proposed route segment alternative centerline.

b Miles of NHD stream segment(s) crossed by the 2000-ft-wide route segment alternative corridor.

c Numbers may not total consistently due to rounding.

Table 3
Line 3 Replacement Project – RSA-05-L3
Summary of USFWS National Wetlands Inventory Crossed by the Route Segment Alternative Proposed Centerline
and within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota

Watershed County	Miles Crossed by the Proposed Route Segment Alternative Centerline ^a				Acres Within the 2,000-ft-wide Route Segment Alternative Corridor ^b			
	PEM ^c	PFO/PSS ^c	Pond/Lake/ Riverine	Total ^d	PEM ^c	PFO/PSS ^c	Pond/Lake/ Riverine	Total ^d
Clearwater	0.1	0.1	-	0.2	24.3	20.0	9.9	54.2
Clearwater	0.1	0.1	-	0.2	24.3	20.0	9.9	54.2
Mississippi Headwaters	0.5	0.6	-	1.0	111.8	126.9	2.0	240.6
Clearwater	0.5	0.6	-	1.0	111.8	126.9	2.0	240.6
Grand Total ^d	0.6	0.6	0.0	1.2	136.1	146.9	11.9	294.8

USFWS National Wetlands Inventory (NWI) Data Source: <http://www.fws.gov/wetlands/data/Data-Download.html>

a Total miles of NWI crossed by the proposed Route Segment Alternative centerline.

b Total acres of NWI within the 2000-ft-wide Route Segment Alternative corridor.

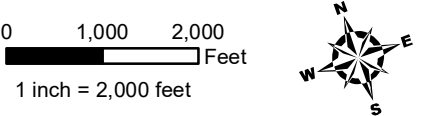
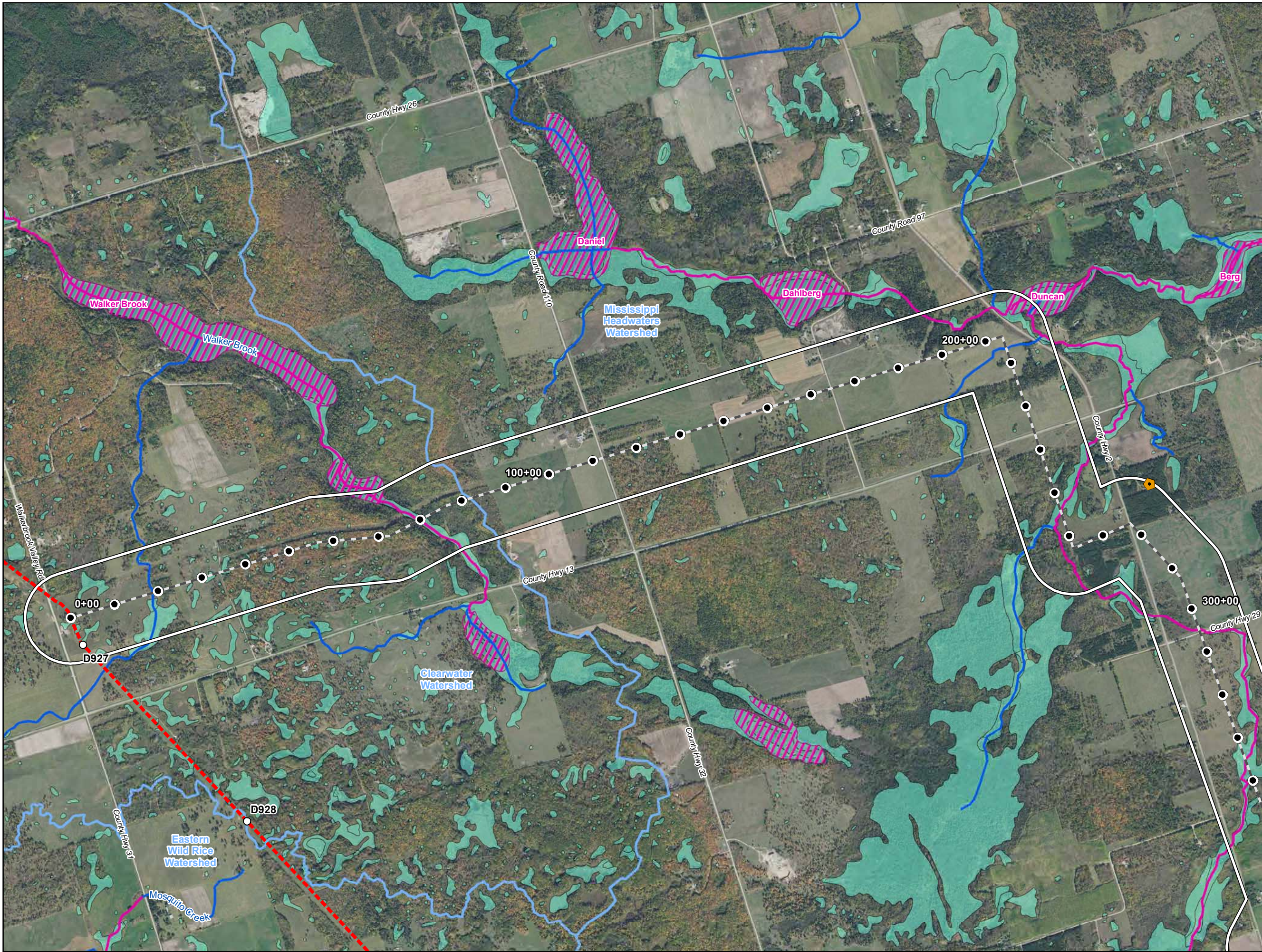
c PEM = Palustrine Emergent; PSS = Palustrine Scrub Shrub; PFO = Palustrine Forested (Cowardin et al. 1979).

d Numbers may not total consistently due to rounding.

Table 4 Line 3 Replacement Project – RA-05-L3 Summary of Public Waters Inventory Wetlands and Basins Crossed by the Proposed Route Segment Alternative Centerline and within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota				
Watershed County	Miles Crossed by the Route Segment Alternative Centerline ^a		Acres Within the Route Segment Alternative Corridor ^b	
	Wetlands	Basins	Wetlands	Basins
Clearwater	-	-	3.1	-
Clearwater	-	-	3.1	-
Mississippi	-	-	5.5	-
Clearwater	-	-	5.5	-
Grand Total ^c	-	-	8.5	-
<i>PWI Wetland and Basin Data Source: https://gisdata.mn.gov/dataset/water-mn-public-waters</i> a Total miles of PWI wetlands and basins crossed by the Route Segment Alternative centerline. b Total acres of PWI wetlands and basins crossed by the 2000-ft-wide Route Segment Alternative corridor. c Numbers may not total consistently due to rounding.				

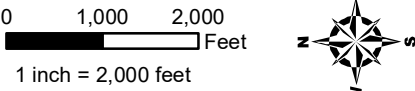
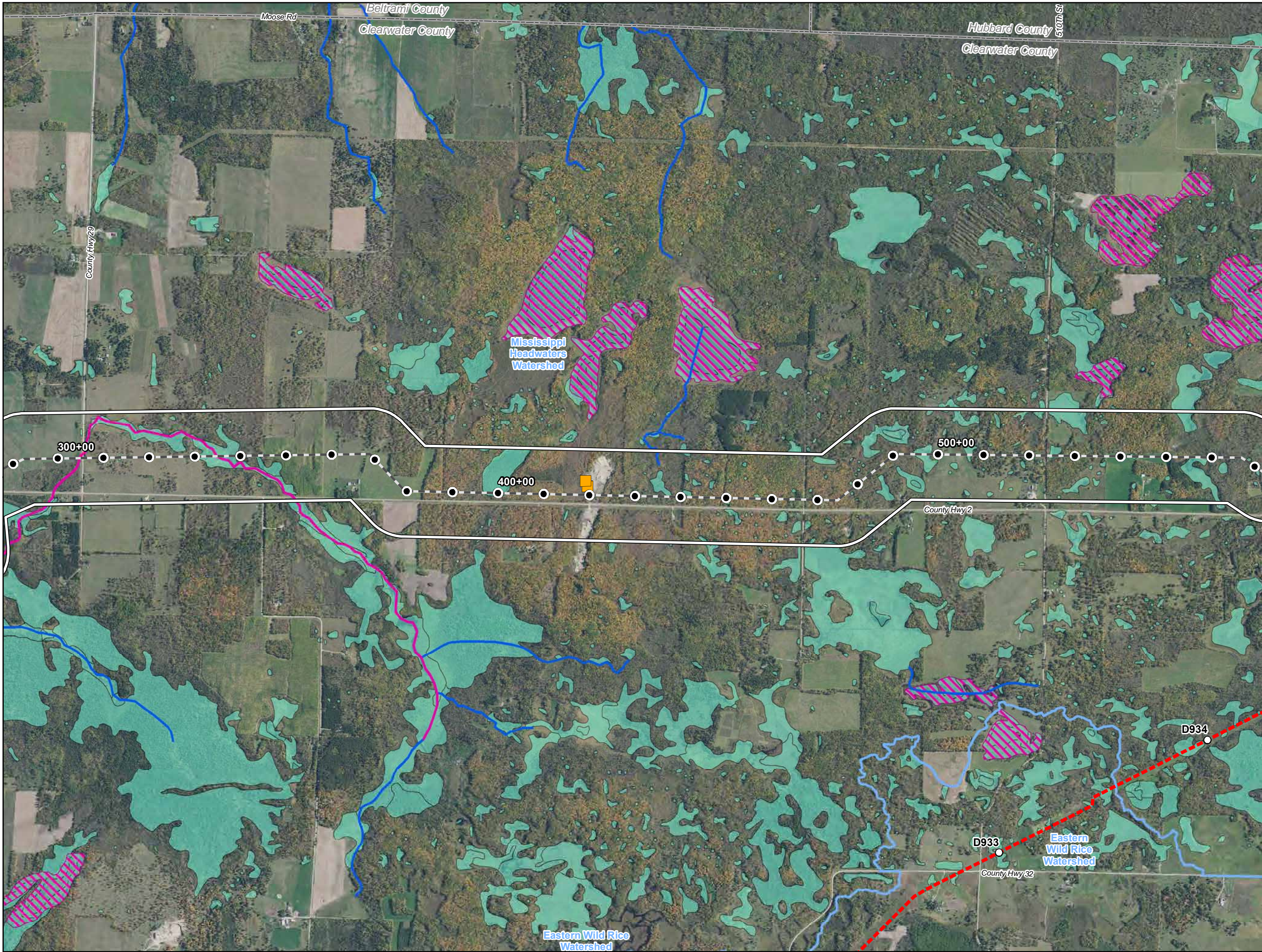
Table 5				
Line 3 Replacement Project – RSA-05-L3				
Wells within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota ^a				
Watershed Name	County	Well Type	Distance from Centerline (feet)	Total Number of Wells
Mississippi Headwaters	Clearwater	Domestic	845	3
			966	
			519	
County Well Index (CWI) Data Source: ftp://mgssun6.mnngs.umn.edu/pub2/cwi4/cwilocs_nps.zip				
a Municipal wells are not included in the source data.				

Table 6				
Line 3 Replacement Project – RSA-05-L3				
Surface Water Intakes within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota ^a				
Watershed Name	County	Permit Type	Permit Status	Total
Mississippi Headwaters	Clearwater	General Permit Authorization	Inactive	1
		Individual Permit	Active	2
MPARS Minnesota DNR, Ecological and Water Resources, Sean Hunt, 651-259-5679				
a Municipal wells are not included in the source data.				



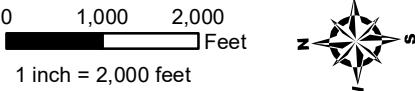
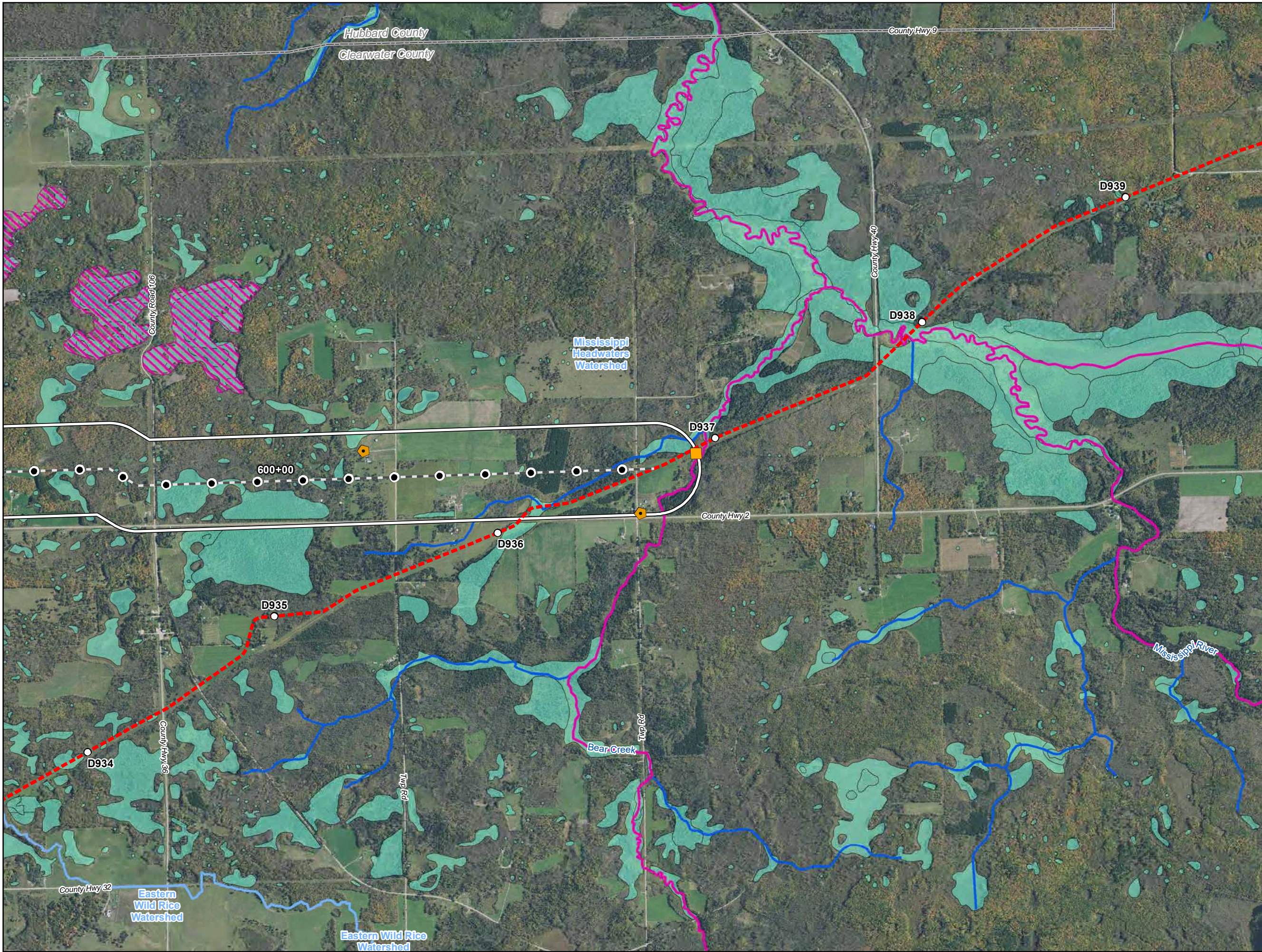
- Water Well
- Surface Water Intake
- Calcareous Fen
- Line 3 Milepost
- Alternative Stationing
- Proposed Line 3 Replacement Pipeline
- Alternative Centerline
- 2,000 ft Alternative Corridor
- Trout Stream
- PWI Stream
- NHD Stream
- PWI Basin
- NWI
- Watershed Boundary
- WHPA
- DWSMA
- County Boundary

Figure 1
Line 3 Replacement Project
RSA-05-L3
Enbridge
Clearwater County, Minnesota



- Water Well
- Surface Water Intake
- Calcareous Fen
- Line 3 Milepost
- Alternative Stationing
- Proposed Line 3 Replacement Pipeline
- Alternative Centerline
- 2,000 ft Alternative Corridor
- Trout Stream
- PWI Stream
- NHD Stream
- PWI Basin
- NWI
- Watershed Boundary
- WHPA
- DWSMA
- County Boundary

Figure 2
Line 3 Replacement Project
RSA-05-L3
Enbridge
Clearwater County, Minnesota



- Water Well
- Surface Water Intake
- Calcareous Fen
- Line 3 Milepost
- Alternative Stationing
- Proposed Line 3 Replacement Pipeline
- Alternative Centerline
- 2,000 ft Alternative Corridor
- Trout Stream
- PWI Stream
- NHD Stream
- PWI Basin
- NWI
- Watershed Boundary
- WHPA
- DWSMA
- County Boundary

Figure 3

Line 3 Replacement Project

RSA-05-L3

Enbridge

Clearwater County, Minnesota

ATTACHMENT A

Natural Resource and Water Supply Summary Tables and Figures

Line 3 Replacement Project Route Segment Alternative (RSA)-10

DRAFT

Table 1 Line 3 Replacement Project – RSA-10-L3 Summary of Public Waters Inventory Streams Crossed by the Proposed Route Segment Alternative Centerline and within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota		
Watershed County	Number Crossed by the Proposed Route Segment Alternative Centerline^a	Miles Within the 2,000-ft-wide Route Segment Alternative Corridor^b
Rum	3	2.1
Mille Lacs	3	2.1
Snake	13	8.7
Kanabec	8	5.9
Pine	5	2.8
Grand Total^c	16	10.8
<i>Public Waters Inventory (PWI) Stream Data Source: https://gisdata.mn.gov/dataset/water-mn-public-waters</i> <i>a</i> Number of Public Waters Inventory streams crossed by the proposed Route Segment Alternative centerline. <i>b</i> Total miles of Public Waters Inventory stream segment(s) crossed by the 2000-ft-wide Route Segment Alternative corridor. <i>c</i> Numbers may not total consistently due to rounding.		

Table 2
Line 3 Replacement Project – RSA-10-L3
Summary of Waterbodies Crossed by the Proposed Route Segment Alternative Centerline
and within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota

Watershed County	Number Crossed by the Proposed Route Segment Alternative Centerline ^a				Miles Within the 2,000-ft-wide Route Segment Alternative Corridor ^b			
	Perennial	Intermittent	Canal/Ditch/ Artificial Path/ Connector	Total ^c	Perennial	Intermittent	Canal/Ditch/ Artificial Path/ Connector	Total ^c
Snake	9	3	8	20	6.7	1.6	3.6	11.9
Pine	4	1	2	7	2.2	0.4	0.8	3.5
Kanabec	5	1	6	12	4.5	0.7	2.7	7.9
Mille Lacs	-	1	-	1	-	0.5	-	0.5
Rum	2	-	4	6	1.2	0.1	2.5	3.8
Mille Lacs	2	-	4	6	1.2	0.1	2.5	3.8
Grand Total ^c	11	3	12	26	7.9	1.8	6.1	15.7

USGS National Hydrography Dataset (NHD) Data Source: <ftp://nhdftp.usgs.gov/DataSets/Staged/States/FileGDB/HighResolution/>

a Number of NHD waterbodies crossed by the proposed Route Segment Alternative centerline.

b Miles of NHD stream segment(s) crossed by the 2000-ft-wide Route Segment Alternative corridor.

c Numbers may not total consistently due to rounding.

Table 3
Line 3 Replacement Project – RSA-10-L3
Summary of USFWS National Wetlands Inventory Crossed by the Proposed Route Segment Alternative Centerline
and within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota

Watershed County	Miles Crossed by the Proposed Route Segment Alternative Centerline ^a				Acres Within the 2,000-ft-wide Route Segment Alternative Corridor ^b			
	PEM ^c	PFO/PSS ^c	Pond/Lake/ Riverine	Total ^d	PEM ^c	PFO/PSS ^c	Pond/Lake/ Riverine	Total ^d
Rum	0.5	0.1	-	0.6	218.9	43.5	12.6	275.0
Mille Lacs	0.5	0.1	-	0.6	218.9	43.5	12.6	275.0
Snake	1.9	0.7	0.1	2.7	825.7	479.5	41.4	1346.6
Mille Lacs	0.1	-	-	0.1	31.1	5.0	-	36.1
Kanabec	0.7	0.5	0.1	1.3	420.5	291.4	39.0	751.0
Pine	1.0	0.2	-	1.3	374.0	183.1	2.4	559.5
Grand Total ^d	2.4	0.8	0.1	3.2	1044.6	523.0	54.0	1621.6

USFWS National Wetlands Inventory (NWI) Data Source: <http://www.fws.gov/wetlands/data/Data-Download.html>

a Total miles of NWI crossed by the proposed Route Segment Alternative centerline.

b Total acres of NWI within the 2000-ft-wide Route Segment Alternative corridor.

c PEM = Palustrine Emergent; PSS = Palustrine Scrub Shrub; PFO = Palustrine Forested (Cowardin et al. 1979).

Numbers may not total consistently due to rounding.

Table 4 Line 3 Replacement Project – RSA-10-L3 Summary of Public Waters Inventory Wetlands and Basins Crossed by the Proposed Route Segment Alternative Centerline and within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota				
Watershed County	Miles Crossed by the Route Segment Alternative Centerline ^a		Acres Within the Route Segment Alternative Corridor ^b	
	Wetlands	Basins	Wetlands	Basins
Snake	-	-	-	2.1
Kanabec	-	-	-	2.1
Grand Total ^c	-	-	-	2.1
<i>PWI Wetland and Basin Data Source: https://gisdata.mn.gov/dataset/water-mn-public-waters</i> a Total miles of PWI wetlands and basins crossed by the Route Segment Alternative centerline. b Total acres of PWI wetlands and basins crossed by the 2000-ft-wide Route Segment Alternative corridor. c Numbers may not total consistently due to rounding.				

Table 5 Line 3 Replacement Project – RSA-10-L3 Summary of Trout Streams Crossed by the Proposed Route Segment Alternative Centerline and within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota		
Watershed County	Number Crossed by the Proposed Route Segment Alternative Centerline ^a	Miles Within the 2,000-ft-wide Route Segment Alternative Corridor ^b
Snake	1	0.4
Pine	1	0.4
Grand Total^c	1	0.4
<i>Trout Stream Data Source: https://gisdata.mn.gov/dataset/env-trout-stream-designations</i> a Number of trout streams crossed by the Route Segment Alternative centerline. b Total miles of trout stream segment(s) crossed by the 2000-ft-wide Route Segment Alternative corridor. c Numbers may not total consistently due to rounding.		

Table 6 Line 3 Replacement Project – RSA-10-L3 Wells within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota^a				
Watershed Name	County	Well Type	Distance from Centerline (feet)	Total Number of Wells
Rum	Mille Lacs	Abandoned	505	7
			792	
			264	
			548	
			753	
			275	
			807	
		Domestic	304	10
			38	
			182	
			508	
			641	
			345	
			278	
			278	
			308	
			952	
		Monitoring	415	14
			418	
			380	
			454	
			400	
			408	
			445	
			589	
			577	
			748	
			432	
			498	
			500	
			504	
Snake	Mille Lacs	Domestic	824	3
			603	
			514	
	Kanabec	Abandoned	909	9
			114	
			253	
			271	
			203	

Snake (cont.)	Kanabec (cont.)	Abandoned (cont.)	241	9 (cont.)
			132	
			163	
			91	
		Domestic	213	98
			394	
			774	
			511	
			432	
			915	
			339	
			325	
			427	
			692	
			413	
			245	
			168	
			634	
			642	
			907	
			825	
			158	
			27	
			21	
			337	
			615	
			893	
			372	
			338	
			834	
			138	
			211	
			565	
			201	
			256	
			824	
			271	
			553	
			723	
			432	
			342	
			355	
			96	
			438	

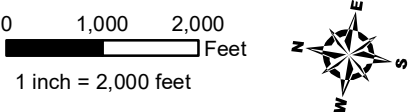
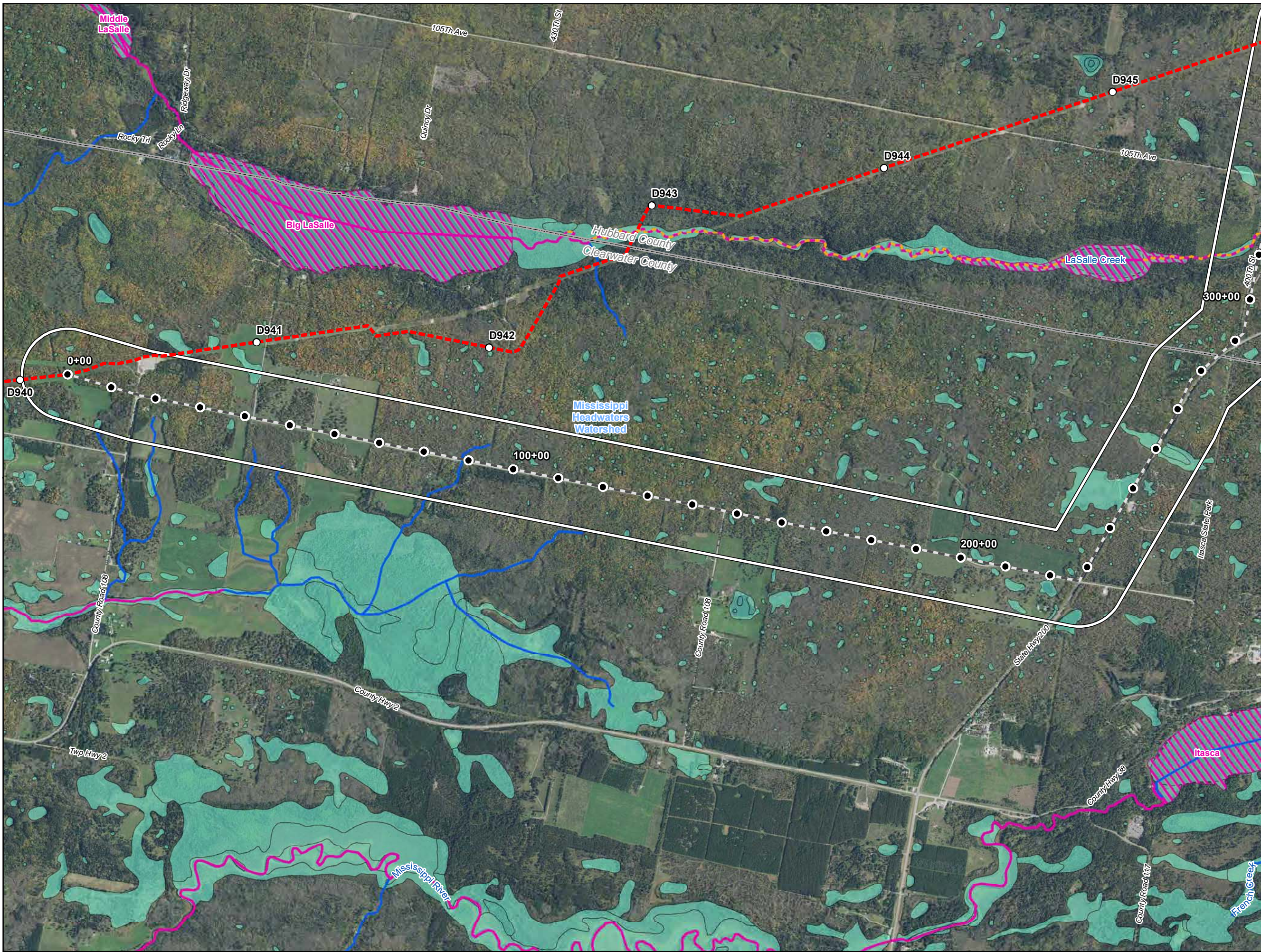
Snake (cont.)	Kanabec (cont.)	Domestic (cont.)	271	98 (cont.)
			471	
			223	
			893	
			258	
			421	
			237	
			171	
			114	
			100	
			717	
			232	
			880	
			740	
			107	
			246	
			179	
			958	
			574	
			474	
			882	
			913	
			430	
			383	
			233	
			221	
			951	
			22	
			530	
			306	
			932	
			957	
			553	
			381	
			328	
			625	
			433	
			730	
			492	
			131	
			755	
			302	
			739	
			162	

Snake (cont.)	Kanabec (cont.)	Domestic (cont.)	366	98 (cont.)
			118	
			280	
			186	
			687	
			115	
			848	
			126	
			152	
			519	
			705	
			110	
			262	
			171	
		Irrigation	914	1
		Monitoring	199	7
			224	
			164	
			252	
			584	
			258	
			172	
		Observation	272	1
		Test Well	1	7
			178	
			4	
			407	
			623	
			952	
			57	
		Unknown	6	5
			315	
			289	
			27	
			159	
	Pine	Abandoned	448	9
			499	
			430	
			548	
			883	
			737	
			775	
			717	
			821	

Snake (cont.)	Pine (cont.)	Commercial	136	1
		Domestic	735	20
			422	
			148	
			914	
			979	
			961	
			740	
			916	
			758	
			101	
			19	
			421	
			660	
			518	
			131	
			528	
			64	
			227	
			354	
			445	
		Monitoring	889	16
			672	
			460	
			481	
			632	
			493	
			446	
			541	
			580	
			865	
			772	
			784	
			728	
			535	
			895	
			905	
County Well Index (CWI) Data Source: ftp://mgssun6.mngs.umn.edu/pub2/cwi4/cwilocs_nps.zip				
^a Municipal wells are not included in the source data.				

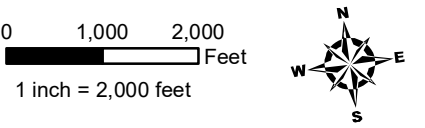
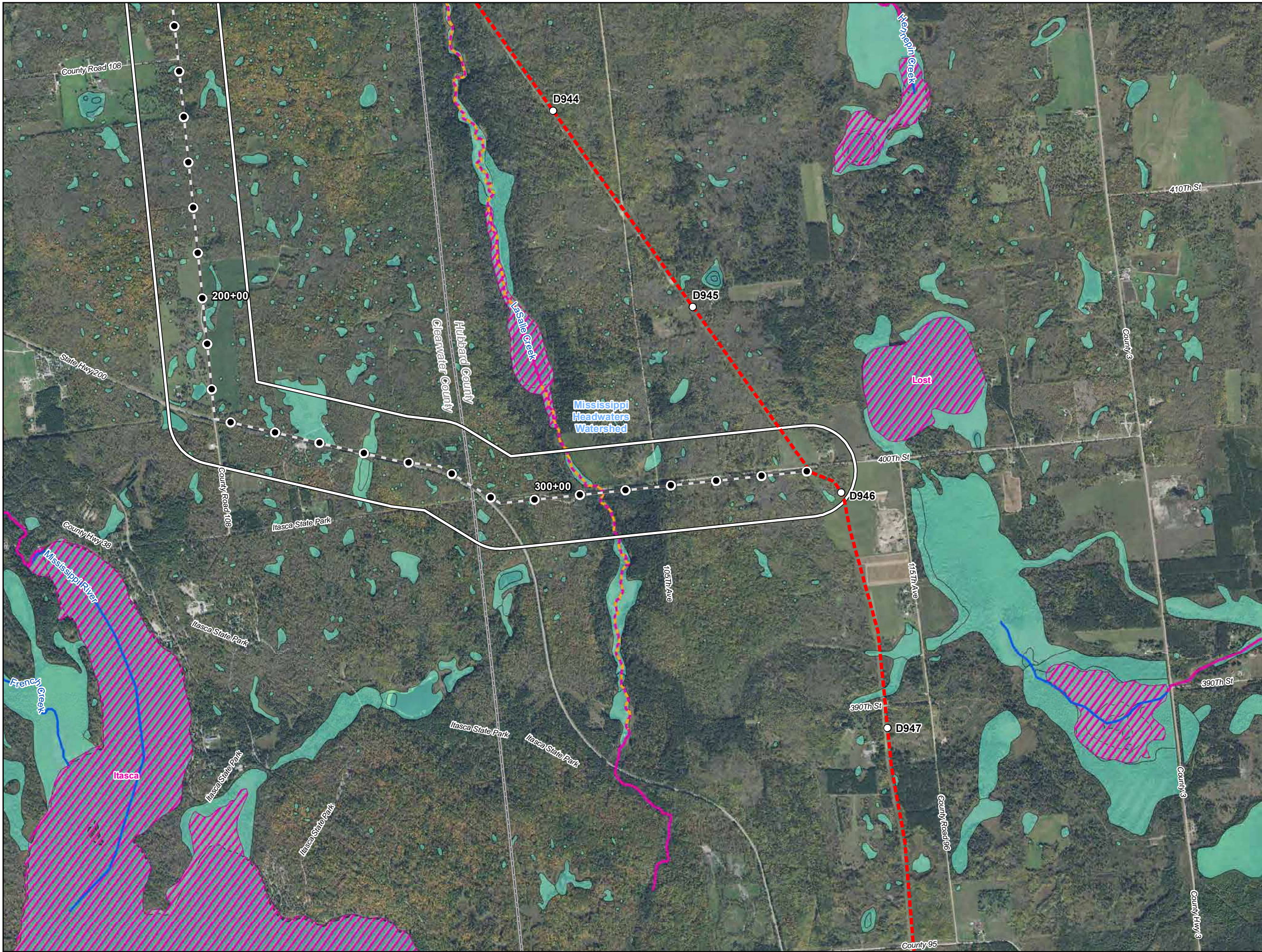
Table 7 Line 3 Replacement Project – RSA-10-L3 Drinking Water Supply Management Areas (DWSMA) and Wellhead Protection Areas (WHPA) Crossed by the Proposed Route Segment Alternative Centerline and within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota					
Watershed	County	Approximate Stationing ^a	Name	Miles Crossed by the Route Segment Alternative Centerline ^b	Acres Within the Route Segment Alternative Corridor ^c
Rum	Mille Lacs	358+00	Bock WHPA	-	18.6
		361+00	Bock DWSMA	-	40.1
Snake	Kanabec	685+00	Ogilvie WHPA	-	32.4
		689+00	Ogilvie DWSMA	-	75.0
DWSMA Data Source: https://qisdata.mn.gov/dataset/water-drinking-water-supply WHPA Data Source: https://qisdata.mn.gov/dataset/water-wellhead-protection-areas a Stationing for features not crossed by the centerline are interpolated based on the closest Route Segment Alternative centerline stationing. b Total miles of DWSMA and WHPA crossed by the Route Segment Alternative centerline. c Total acres of DWSMA and WHPA crossed by the 2000-ft-wide Route Segment Alternative corridor.					

Table 8 Line 3 Replacement Project – RSA-10-L3 Surface Water Intakes within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota^a				
Watershed Name	County	Permit Type	Permit Status	Total
Rum	Mille Lacs	Individual Permit	Inactive	1
Snake	Kanabec	Individual Permit	Active	3
	Pine	Individual Permit	Active	1
MPARS Minnesota DNR, Ecological and Water Resources, Sean Hunt, 651-259-5679 ^a Municipal wells are not included in the source data.				



- Water Well
- Surface Water Intake
- Calcareous Fen
- Line 3 Milepost
- Alternative Stationing
- Proposed Line 3 Replacement Pipeline
- Alternative Centerline
- 2,000 ft Alternative Corridor
- Trout Stream
- PWI Stream
- NHD Stream
- PWI Basin
- NWI
- Watershed Boundary
- WHPA
- DWSMA
- County Boundary

Figure 1
Line 3 Replacement Project
RSA-10-L3
Enbridge
Clearwater County, Minnesota



- Water Well
- Surface Water Intake
- Calcareous Fen
- Line 3 Milepost
- Alternative Stationing
- Proposed Line 3 Replacement Pipeline
- Alternative Centerline
- 2,000 ft Alternative Corridor
- Trout Stream
- PWI Stream
- NHD Stream
- PWI Basin
- NWI
- Watershed Boundary
- WHPA
- DWSMA
- County Boundary

Figure 2
Line 3 Replacement Project
RSA-10-L3
Enbridge
Hubbard County, Minnesota

ATTACHMENT A

Natural Resource and Water Supply Summary Tables and Figures

Line 3 Replacement Project Route Segment Alternative (RSA)-15

DRAFT

Table 1 Line 3 Replacement Project – RSA-15-L3 Summary of Public Waters Inventory Streams Crossed by the Proposed Route Segment Alternative Centerline and within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota		
Watershed County	Number Crossed by the Proposed Route Segment Alternative Centerline^a	Miles Within the 2,000-ft-wide Route Segment Alternative Corridor^b
Crow Wing	1	1.4
Hubbard	1	1.4
Grand Total^c	1	1.4
<i>Public Waters Inventory (PWI) Stream Data Source: https://gisdata.mn.gov/dataset/water-mn-public-waters</i> ^a Number of Public Waters Inventory streams crossed by the proposed Route Segment Alternative centerline. ^b Total miles of Public Waters Inventory stream segment(s) crossed by the 2000-ft-wide Route Segment Alternative corridor. ^c Numbers may not total consistently due to rounding.		

Table 2
Line 3 Replacement Project - RSA-15-L3
Summary of Waterbodies Crossed by the Proposed Route Segment Alternative Centerline
and within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota

Watershed County	Number Crossed by the Proposed Route Segment Alternative Centerline ^a				Miles Within the 2,000-ft-wide Route Segment Alternative Corridor ^b			
	Perennial	Intermittent	Canal/Ditch/ Artificial Path/ Connector	Total ^c	Perennial	Intermittent	Canal/Ditch/ Artificial Path/ Connector	Total ^c
Crow Wing	1	-	-	1	1.9	-	-	1.9
Hubbard	1	-	-	1	1.9	-	-	1.9
Grand Total ^c	1	-	-	1	1.9	-	-	1.9

USGS National Hydrography Dataset (NHD) Data Source: <ftp://nhdftp.usgs.gov/DataSets/Staged/States/FileGDB/HighResolution/>

a Number of NHD waterbodies crossed by the proposed Route Segment Alternative centerline.

b Miles of NHD stream segment(s) crossed by the 2000-ft-wide Route Segment Alternative corridor.

c Numbers may not total consistently due to rounding.

Table 3
Line 3 Replacement Project – RSA-15-L3
Summary of USFWS National Wetlands Inventory Crossed by the Proposed Route Segment Alternative Centerline
and within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota

Watershed County	Miles Crossed by the Proposed Route Segment Alternative Centerline ^a				Acres Within the 2,000-ft-wide Route Segment Alternative Corridor ^b			
	PEM ^c	PFO/PSS ^c	Pond/Lake/ Riverine	Total ^d	PEM ^c	PFO/PSS ^c	Pond/Lake/ Riverine	Total ^d
Crow Wing	0.7	1.4	-	2.1	147.7	383.6	25.8	557.0
Hubbard	0.7	1.4	-	2.1	147.7	383.6	25.8	557.0
Grand Total ^d	0.7	1.4	-	2.1	147.7	383.6	25.8	557.0

USFWS National Wetlands Inventory (NWI) Data Source: <http://www.fws.gov/wetlands/data/Data-Download.html>

a Total miles of NWI crossed by the proposed Route Segment Alternative centerline.

b Total acres of NWI within the 2000-ft-wide Route Segment Alternative corridor.

c PEM = Palustrine Emergent; PSS = Palustrine Scrub Shrub; PFO = Palustrine Forested (Cowardin et al. 1979).

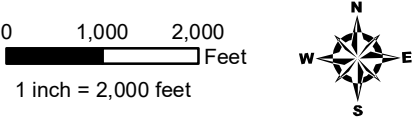
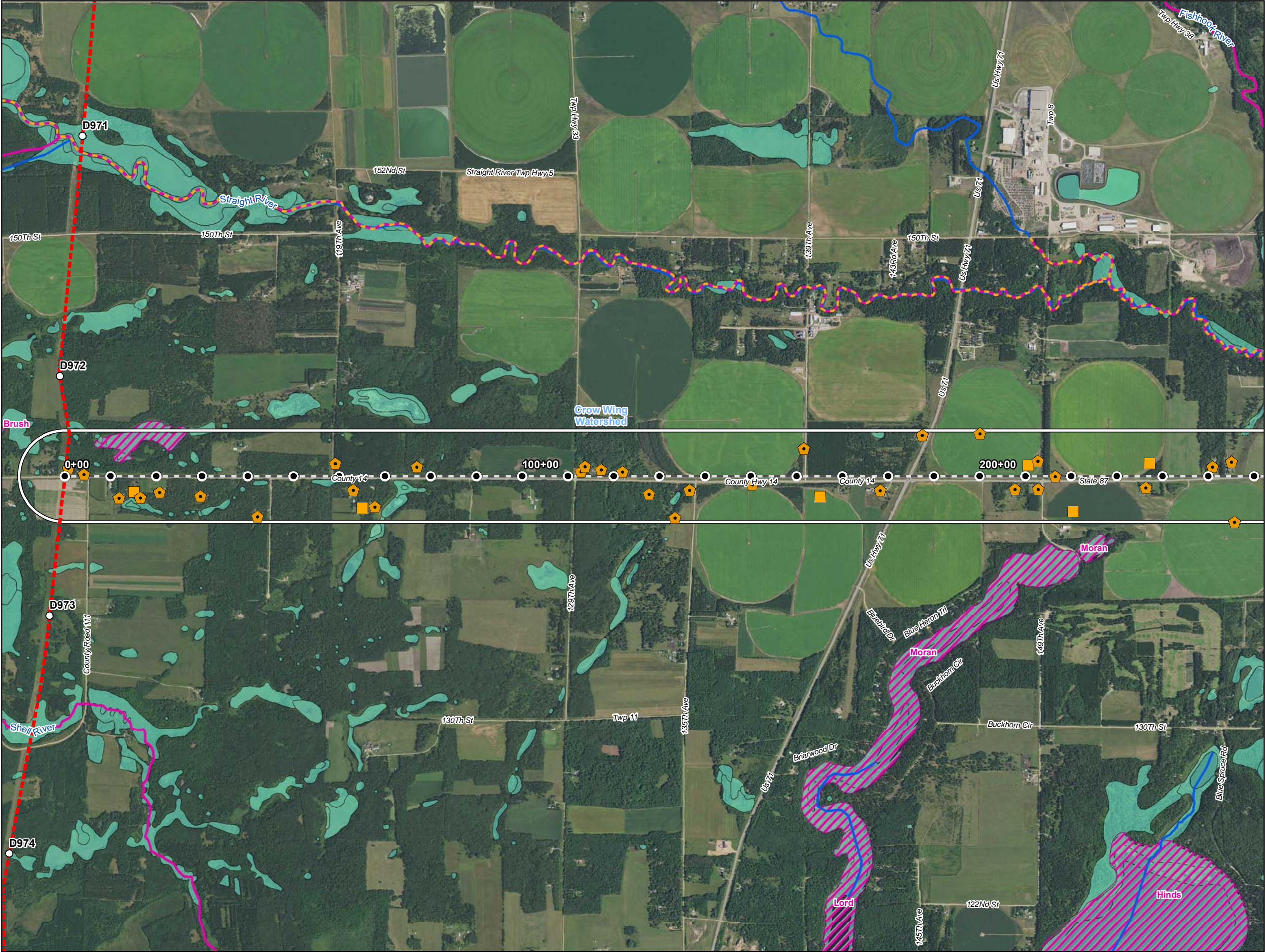
d Numbers may not total consistently due to rounding.

Table 4 Line 3 Replacement Project – RSA-15-L3 Summary of Public Waters Inventory Wetlands and Basins Crossed by the Proposed Route Segment Alternative Centerline and within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota				
Watershed County	Miles Crossed by the Route Segment Alternative Centerline ^a		Acres Within the Route Segment Alternative Corridor ^b	
	Wetlands	Basins	Wetlands	Basins
Crow Wing	-	-	14.6	-
Hubbard	-	-	14.6	-
Grand Total ^c	-	-	14.6	-
<i>PWI Wetland and Basin Data Source: https://gisdata.mn.gov/dataset/water-mn-public-waters</i> a Total miles of PWI wetlands and basins crossed by the Route Segment Alternative centerline. b Total acres of PWI wetlands and basins crossed by the 2000-ft-wide Route Segment Alternative corridor. c Numbers may not total consistently due to rounding.				

Table 5 Line 3 Replacement Project – RSA-15-L3 Wells within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota^a				
Watershed Name	County	Well Type	Distance from Centerline (feet)	Total Number of Wells
Crow Wing	Hubbard	Domestic	182	33
			46	
			474	
			468	
			437	
			881	
			301	
			667	
			205	
			104	
			216	
			147	
			101	
			386	
			909	
			301	
			309	
			900	
			278	
			281	
			3	
			246	
			209	
			313	
			112	
			721	
			475	
			401	
			238	
			371	
			459	
			176	
			329	
		Irrigation	350	3
			333	
			998	
		Monitoring	179	4
			592	
			603	
			598	

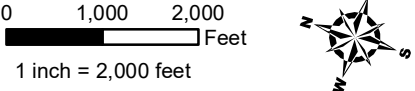
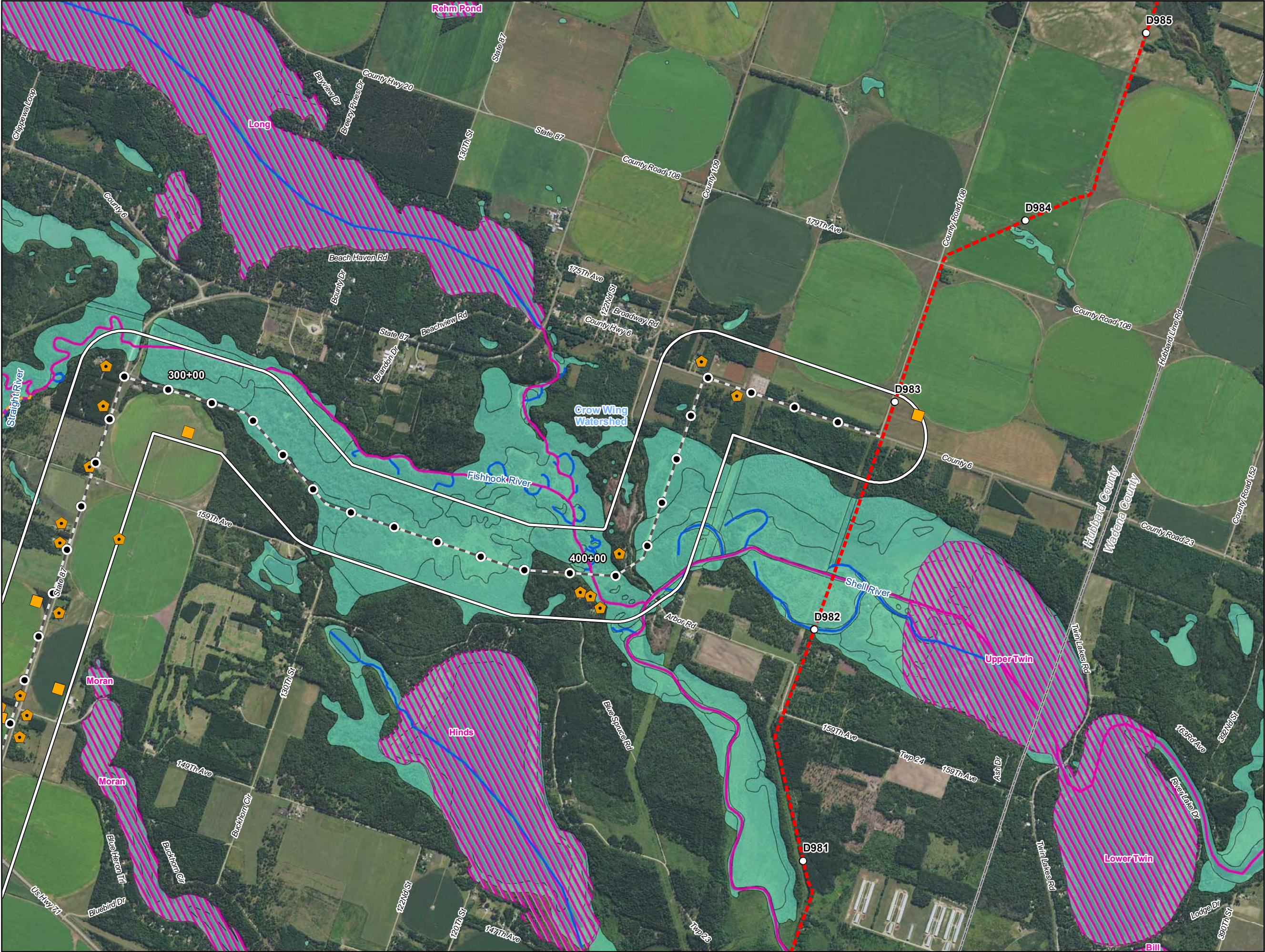
Crow Wing (cont.)	Hubbard (cont.)	Test Well	281	2
			931	
County Well Index (CWI) Data Source: ftp://mgssun6.mngs.umn.edu/pub2/cwi4/cwilocs_nps.zip ^a Municipal wells are not included in the source data.				

Table 6 Line 3 Replacement Project – RSA-15-L3 Surface Water Intakes within the 2,000-ft-wide Route Segment Alternative Corridor in Minnesota ^a				
Watershed Name	County	Permit Type	Permit Status	Total
Crow Wing	Hubbard	Individual Permit	Active	4
			Inactive	4
MPARS Minnesota DNR, Ecological and Water Resources, Sean Hunt, 651-259-5679 a Municipal wells are not included in the source data.				



- Water Well
- Surface Water Intake
- Calcareous Fen
- Line 3 Milepost
- Alternative Stationing
- Proposed Line 3 Replacement Pipeline
- Alternative Centerline
- 2,000 ft Alternative Corridor
- Trout Stream
- PWI Stream
- NHD Stream
- PWI Basin
- NWI
- Watershed Boundary
- WHPA
- DWSMA
- County Boundary

Figure 1
Line 3 Replacement Project
RSA-15-L3
Enbridge
Hubbard County, Minnesota



- Water Well
- Surface Water Intake
- Calcareous Fen
- Line 3 Milepost
- Alternative Stationing
- Proposed Line 3 Replacement Pipeline
- Alternative Centerline
- 2,000 ft Alternative Corridor
- Trout Stream
- PWI Stream
- NHD Stream
- PWI Basin
- NWI
- Watershed Boundary
- WHPA
- DWSMA
- County Boundary

Figure 2
Line 3 Replacement Project
RSA-15-L3
Enbridge
Hubbard County, Minnesota