NorthMet Project

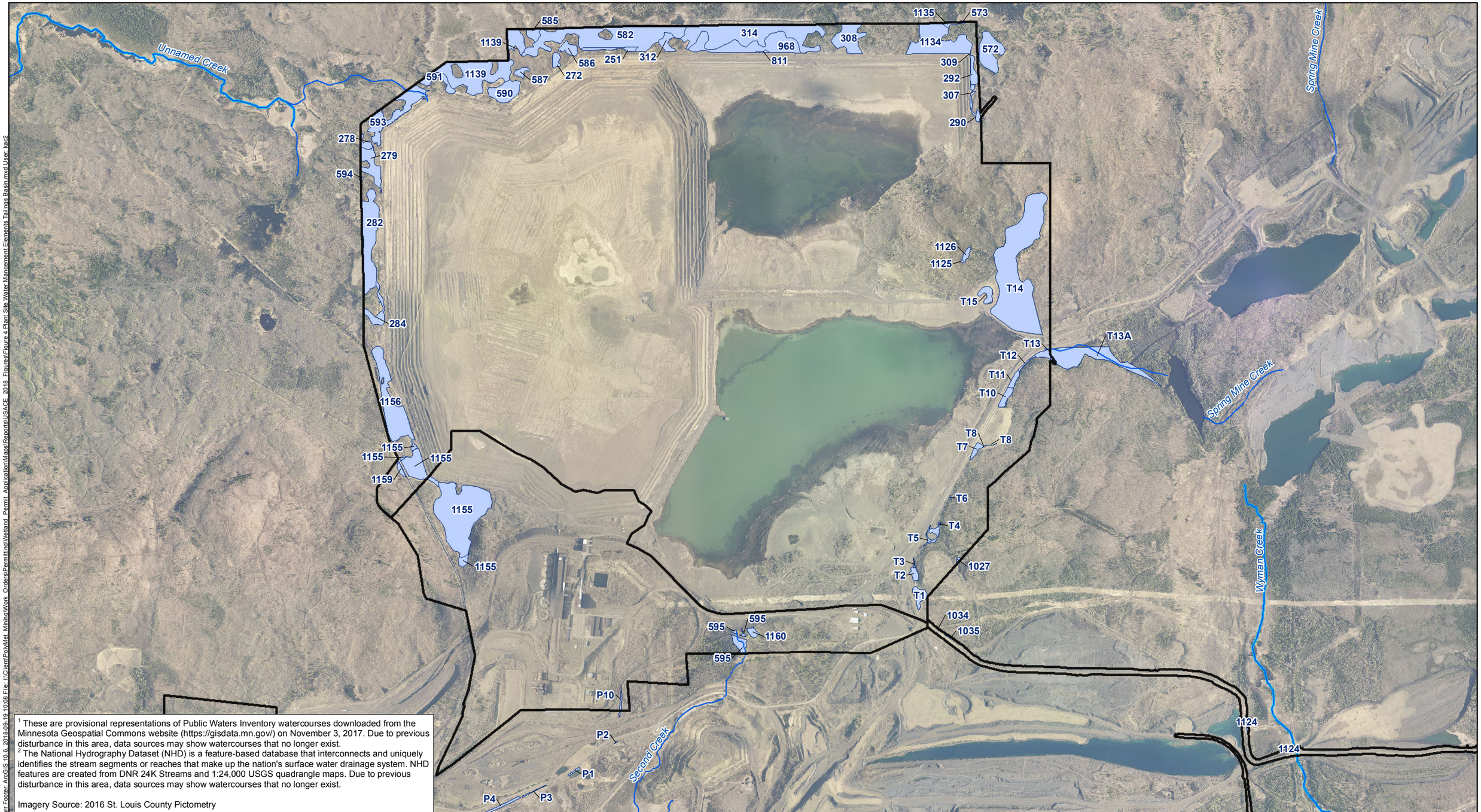
File 1999-5528-JKA
Final Record of Decision - Appendix F

Authorized Wetland Impacts

Contents

Figures 1-3 Showing Wetland Polygons and Wetland I.D. Numbers

Table 1 - Listing of Wetland size, impact acreage, remaining acrage, wetland type, plant community, and wetland quality



[1] These are provisional representations of Public Waters Inventory watercourses downloaded from the Minnesota Geospatial Commons website (https://gisdata.mn.gov/) on November 3, 2017. Due to previous disturbance in this area, data sources may show watercourses that no longer exist.
[2] The National Hydrography Dataset (NHD) is a feature-based database that interconnects and uniquely identifies the stream segments or reaches that make up the nation's surface water drainage system. NHD features are created from DNR 24K Streams and 1:24,000 USGS quadrangle maps. Due to previous disturbance in this area, data sources may show watercourses that no longer exist.

Imagery Source: 2016 St. Louis County Pictometry

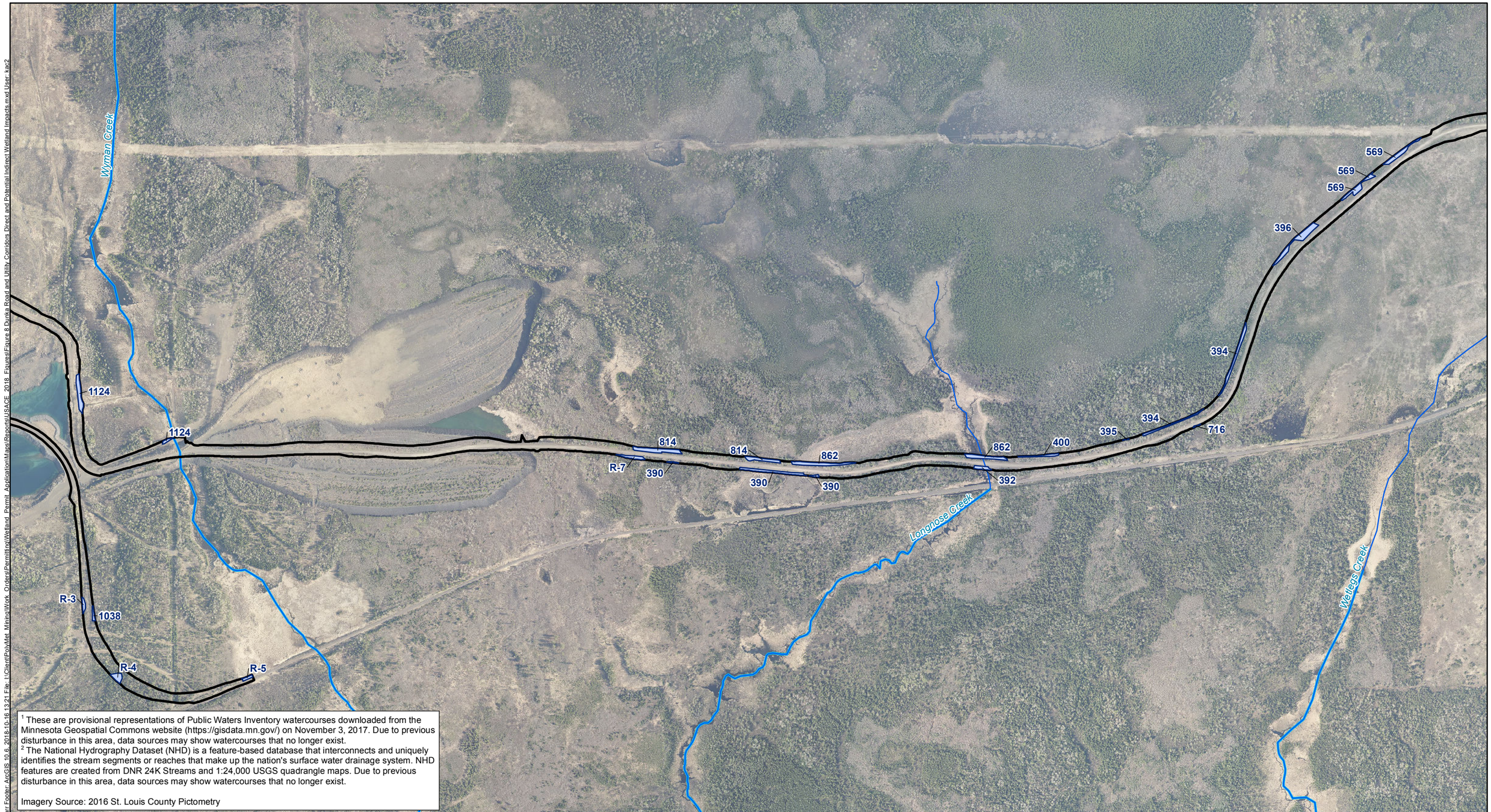
EIS Project Areas
Wetlands
Public Waters Inventory (PWI) Watercourses[1]
National Hydrography Dataset (NHD) Rivers & Streams[2]

0 2,000 4,000
Feet

PLANT SITE WETLANDS
NorthMet Project
Poly Met Mining, Inc.

Figure 1

Barr Footer: ArcGIS 10.6, 2018-09-19 10:08 File: I:\Client\PolyMet_Mining\Work_Orders\Permitting\Wetland_Permit_Application\Maps\Reports\USACE_2018_Figures\Figure 4 Plant Site Water Management Elements Tailings Basin.mxd User: kar2



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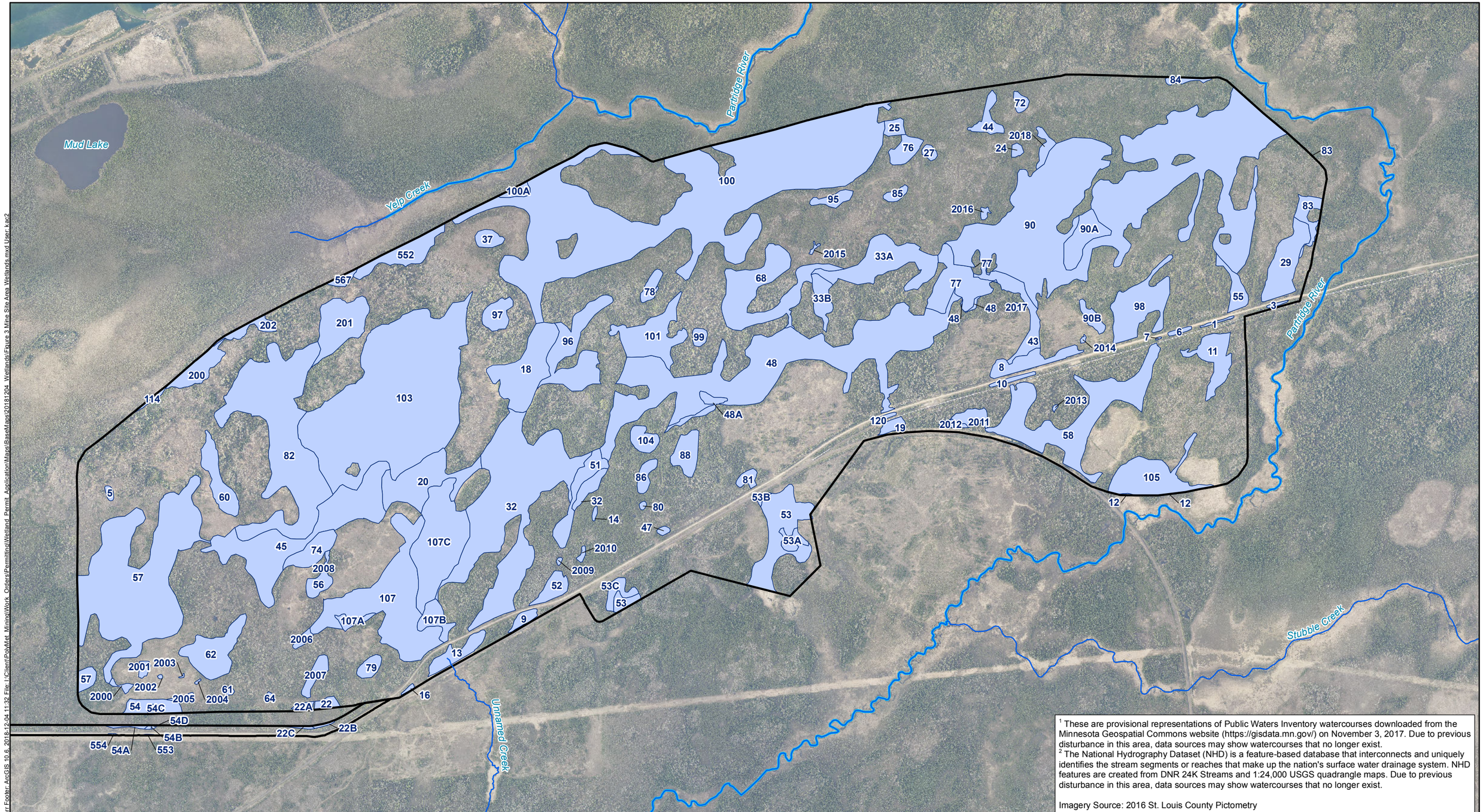
EIS Project Areas
Wetlands
Public Waters Inventory (PWI) Watercourses[1]
National Hydrography Dataset (NHD) Rivers & Streams[2]

0 500 1,000 2,000
Feet

TRANSPORTATION AND UTILITY CORRIDORS WETLANDS
NorthMet Project
Poly Met Mining, Inc.

Figure 2

Barr Footer: ArcGIS 10.6, 2018-10-16 13:21 File: I:\Client\PolyMet_Mining\Work_Orders\Permitting\Wetland_Permit_Application\Maps\Reports\USACE_2018_Figures\Figure 8 Dunka Road and Utility Corridors Direct and Potential Indirect Wetland Impacts.mxd User: kae2



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EIS Project Areas
Wetlands
Public Waters Inventory (PWI) Watercourses[1]
National Hydrography Dataset (NHD) Rivers & Streams[2]

0 750 1,500 3,000
Feet

MINE SITE AREA WETLANDS
NorthMet Project
Poly Met Mining, Inc.

Figure 3

Barr Footer: ArcGIS 10.6, 2018-12-04 11:32 File: I:\Client\PolyMet_Mining\Work_Orders\Permitting\Wetland_Permit_Application\Maps\BaseMaps\20181204_Wetlands\Figure 3 Mine Site Area Wetlands.mxd User: kac2

Large Table 1 Summary of Wetlands (July 2018)

Project Area[1,2]	Aquatic Resource Type	Aquatic Resource ID	Dominant Circular 39 Community	Total Wetland Area within the Project Area (acres)	Direct Wetland Impacts (acres)	Fragmentation Impact (acres)	Remaining Wetland Area (acres)	Dominant Existing Plant Community Type(s) in Impact Area [3]	Wetland Quality	Type of Direct Impact[4]	Duration of Impact[5]	County, Major Watershed #, and Bank Service Area # of Impact Area[6]
Mine Site	Wetland	1	3	0.42	0	0	0.42	Shallow marsh	Moderate			
Mine Site	Wetland	3	3	0.35	0	0	0.35	Shallow marsh	Moderate			
Mine Site	Wetland	5	2	0.61	0.61	0	0	Wet meadow	High	F	P	SLC, 3,1
Mine Site	Wetland	6	3	0.62	0	0	0.62	Shallow marsh	Moderate			
Mine Site	Wetland	7	2	0.07	0	0	0.07	Wet meadow	Moderate			
Mine Site	Wetland	8	2	6.80	6.80	0	0	Sedge meadow	Moderate	F,E	P	SLC, 3,1
Mine Site	Wetland	9	3	1.80	0.07	0	1.73	Shallow marsh	High	F	P	SLC, 3,1
Mine Site	Wetland	10	2	1.17	0	0	1.17	Sedge meadow	High			
Mine Site	Wetland	11	8	8.73	0	0	8.73	Coniferous bog	High			
Mine Site	Wetland	12	6	0.13	0	0	0.13	Alder thicket	High			
Mine Site	Wetland	13	4	5.03	0.09	0	4.94	Deep marsh	High	F	P	SLC, 3,1
Mine Site	Wetland	14	2	0.33	0.33	0	0	Wet meadow	High	F	P	SLC, 3,1
Mine Site	Wetland	16	3	0.31	0	0	0.31	Shallow marsh	High			
Mine Site	Wetland	18	3	18.90	18.90	0	0	Shallow marsh	High	E	P	SLC, 3,1
Mine Site	Wetland	19	3	1.68	0.05	0	1.63	Shallow marsh	High	E	P	SLC, 3,1
Mine Site	Wetland	20	2	17.06	16.96	0.1	0	Sedge meadow	High	E, Fr	P	SLC, 3,1
Mine Site	Wetland	22	3	1.43	0	0	1.43	Shallow marsh	High			
Mine Site	Wetland	22A	7	0.89	0	0	0.89	Coniferous swamp	High			
Mine Site	Wetland	24	6	0.80	0.39	0	0.41	Alder thicket	High	E	P	SLC, 3,1
Mine Site	Wetland	25	8	1.95	0	0	1.95	Coniferous bog	High			
Mine Site	Wetland	27	8	1.07	1.07	0	0	Coniferous swamp	Moderate	E	P	SLC, 3,1
Mine Site	Wetland	29	3	12.02	0	0	12.02	Shallow marsh	High			
Mine Site	Wetland	32	8	73.36	70.99	2.37	0	Coniferous bog	High	F,E, Fr	P	SLC, 3,1
Mine Site	Wetland	33A	6	18.46	5.77	0	12.69	Alder thicket	High	E	P	SLC, 3,1
Mine Site	Wetland	33B	7	4.56	0	0	4.56	Coniferous swamp	High		P	SLC, 3,1
Mine Site	Wetland	37	6	2.53	2.53	0	0	Shrub-carr	High	F	P	SLC, 3,1
Mine Site	Wetland	43	6	8.39	6.39	0	2.00	Alder thicket	High	F	P	SLC, 3,1
Mine Site	Wetland	44	6	3.55	2.27	0	1.28	Alder thicket	High	E	P	SLC, 3,1
Mine Site	Wetland	45	6	37.55	28.83	3.58	5.14	Alder thicket	High	F,E, Fr	P	SLC, 3,1
Mine Site	Wetland	47	8	0.54	0.40	0.14	0	Open bog	High	F, Fr	P	SLC, 3,1
Mine Site	Wetland	48	8	88.16	27.30	1.86	59.00	Coniferous bog	High	F,E, Fr	P	SLC, 3,1
Mine Site	Wetland	48A	7	2.65	2.19	0.02	0.43	Coniferous swamp	High	F, Fr	P	SLC, 3,1
Mine Site	Wetland	51	6	7.47	7.45	0.02	0	Alder thicket	High	F, Fr	P	SLC, 3,1
Mine Site	Wetland	52	6	3.88	3.88	<0.01	0	Alder thicket	High	F,E, Fr	P	SLC, 3,1
Mine Site	Wetland	53	6	20.13	0	0	20.13	Alder thicket	High			
Mine Site	Wetland	53A	7	2.35	0	0	2.35	Coniferous swamp	High			
Mine Site	Wetland	53B	7	0.43	0	0	0.43	Coniferous swamp	High			
Mine Site	Wetland	53C	7	2.88	0	0	2.88	Coniferous swamp	High			
Mine Site	Wetland	54	7	4.11	0	0	4.11	Coniferous swamp	High			
Mine Site	Wetland	54C	6	0.74	0	0	0.74	Alder thicket	High			

Project Area[1,2]	Aquatic Resource Type	Aquatic Resource ID	Dominant Circular 39 Community	Total Wetland Area within the Project Area (acres)	Direct Wetland Impacts (acres)	Fragmentation Impact (acres)	Remaining Wetland Area (acres)	Dominant Existing Plant Community Type(s) in Impact Area [3]	Wetland Quality	Type of Direct Impact[4]	Duration of Impact[5]	County, Major Watershed #, and Bank Service Area # of Impact Area[6]
Mine Site	Wetland	55	6	3.91	3.85	0.06	0	Alder thicket	High	F,E, Fr	P	SLC, 3,1
Mine Site	Wetland	56	8	2.79	2.79	0	0	Open bog	High	E	P	SLC, 3,1
Mine Site	Wetland	57	7	78.06	50.49	1.41	26.16	Coniferous swamp	High	F,E, Fr	P	SLC, 3,1
Mine Site	Wetland	58	6	35.40	0	0	35.4	Alder thicket	High			
Mine Site	Wetland	60	6	7.93	7.93	0	0	Alder thicket	High	F	P	SLC, 3,1
Mine Site	Wetland	61	7	0.45	0	0	0.45	Coniferous swamp	High			
Mine Site	Wetland	62	8	12.13	0	0	12.13	Coniferous bog	High			
Mine Site	Wetland	64	7	0.31	0	0	0.31	Hardwood swamp	High			
Mine Site	Wetland	68	7	24.22	10.89	0.09	13.24	Coniferous swamp	High	F,E, Fr	P	SLC, 3,1
Mine Site	Wetland	72	7	1.39	0	0	1.39	Coniferous swamp	High			
Mine Site	Wetland	74	7	6.12	6.12	0	0	Hardwood swamp	High	E	P	SLC, 3,1
Mine Site	Wetland	76	8	3.92	2.21	0	1.71	Coniferous bog	High	E	P	SLC, 3,1
Mine Site	Wetland	77	8	13.31	0.94	<0.01	12.37	Coniferous bog	High	F,E, Fr	P	SLC, 3,1
Mine Site	Wetland	78	8	2.41	2.41	0	0	Coniferous bog	High	F	P	SLC, 3,1
Mine Site	Wetland	79	8	2.39	0	0	2.39	Coniferous bog	High			
Mine Site	Wetland	80	8	0.29	0	0	0.29	Coniferous bog	High			
Mine Site	Wetland	81	7	1.68	1.44	0.24	0	Coniferous swamp	High	F,E, Fr	P	SLC, 3,1
Mine Site	Wetland	82	8	62.40	60.77	1.63	0	Coniferous bog	High	F,E, Fr	P	SLC, 3,1
Mine Site	Wetland	83	8	3.99	0	0	3.99	Open bog	High			
Mine Site	Wetland	84	8	1.33	0	0	1.33	Coniferous bog	High			
Mine Site	Wetland	85	8	1.41	1.41	0	0	Coniferous bog	High	E	P	SLC, 3,1
Mine Site	Wetland	86	8	2.47	0	0	2.47	Coniferous bog	High			
Mine Site	Wetland	88	8	5.58	2.84	0	2.74	Coniferous bog	High	F	P	SLC, 3,1
Mine Site	Wetland	90	8	166.79	25.6	0	141.19	Coniferous bog	High	F,E	P	SLC, 3,1
Mine Site	Wetland	90A	8	7.91	1.20	0	6.71	Open bog	High	F	P	SLC, 3,1
Mine Site	Wetland	90B	8	2.34	2.34	0	0	Coniferous bog	High			
Mine Site	Wetland	95	8	2.54	2.54	0	0	Coniferous swamp	High	E	P	SLC, 3,1
Mine Site	Wetland	96	8	17.54	13.2	0	4.34	Coniferous bog	High	F,E	P	SLC, 3,1
Mine Site	Wetland	97	8	4.46	2.57	1.89	0	Coniferous bog	High	F,E, Fr	P	SLC, 3,1
Mine Site	Wetland	98	8	15.69	15.27	0.42	0	Coniferous bog	High	F,E, Fr	P	SLC, 3,1
Mine Site	Wetland	99	8	1.40	0.49	0	0.91	Coniferous bog	High	F,E	P	SLC, 3,1
Mine Site	Wetland	100	8	176.19	102.96	3.44	69.79	Coniferous bog	High	F,E, Fr	P	SLC, 3,1
Mine Site	Wetland	100A	6	1.66	1.66	0	0	Alder thicket	High	F	P	SLC, 3,1
Mine Site	Wetland	101	8	14.45	11.97	0.08	2.40	Coniferous bog	High	F,E, Fr	P	SLC, 3,1
Mine Site	Wetland	103	8	118.84	109.97	8.86	0	Coniferous bog	High	F,E, Fr	P	SLC, 3,1
Mine Site	Wetland	104	8	3.57	1.82	0.10	1.65	Coniferous bog	High	F, Fr	P	SLC, 3,1
Mine Site	Wetland	105	8	15.48	0	0	15.48	Coniferous bog	High			
Mine Site	Wetland	107	8	40.92	31.63	0.10	9.19	Coniferous bog	High	F,E, Fr	P	SLC, 3,1
Mine Site	Wetland	107A	7	1.74	1.69	0.05	0	Coniferous swamp	High	F,E, Fr	P	SLC, 3,1
Mine Site	Wetland	107B	3	4.51	2.89	0	1.62	Shallow marsh	High	F,E	P	SLC, 3,1
Mine Site	Wetland	107C	6	27.60	27.60	0	0	Alder thicket	High	E	P	SLC, 3,1

Project Area[1,2]	Aquatic Resource Type	Aquatic Resource ID	Dominant Circular 39 Community	Total Wetland Area within the Project Area (acres)	Direct Wetland Impacts (acres)	Fragmentation Impact (acres)	Remaining Wetland Area (acres)	Dominant Existing Plant Community Type(s) in Impact Area [3]	Wetland Quality	Type of Direct Impact[4]	Duration of Impact[5]	County, Major Watershed #, and Bank Service Area # of Impact Area[6]
Mine Site	Wetland	114	8	0.73	0.73	0	0	Coniferous bog	High	F	P	SLC, 3,1
Mine Site	Wetland	120	3	0.58	0.12	0	0.46	Shallow marsh	Moderate	E	P	SLC, 3,1
Mine Site	Wetland	200	7	6.36	6.36	0	0	Hardwood swamp	High	F	P	SLC, 3,1
Mine Site	Wetland	201	2	13.49	13.49	0	0	Wet meadow	High	F	P	SLC, 3,1
Mine Site	Wetland	202	8	3.11	3.11	0	0	Open bog	High	F	P	SLC, 3,1
Mine Site	Wetland	552	8	8.72	8.72	0	0	Coniferous bog	High	F	P	SLC, 3,1
Mine Site	Wetland	567	3	1.40	1.40	0	0	Shallow marsh	High	F	P	SLC, 3,1
Mine Site	Wetland	2000	7	0.75	0	0	0.75	Hardwood swamp	High			
Mine Site	Wetland	2001	6	0.98	0	0	0.98	Alder thicket	High			
Mine Site	Wetland	2002	6	0.11	0	0	0.11	Alder thicket	High			
Mine Site	Wetland	2003	6	0.07	0	0	0.07	Alder thicket	High			
Mine Site	Wetland	2004	6	0.10	0	0	0.1	Alder thicket	High			
Mine Site	Wetland	2005	7	0.66	0	0	0.66	Hardwood swamp	High			
Mine Site	Wetland	2006	7	1.14	0.53	0	0.61	Hardwood swamp	High	F	P	SLC, 3,1
Mine Site	Wetland	2007	7	2.85	0	0	2.85	Hardwood swamp	High			
Mine Site	Wetland	2008	7	0.36	0.36	0	0	Hardwood swamp	High	F	P	SLC, 3,1
Mine Site	Wetland	2009	6	0.20	0.20	0	0	Alder thicket	High	F	P	SLC, 3,1
Mine Site	Wetland	2010	7	0.47	0.47	0	0	Coniferous swamp	High	F	P	SLC, 3,1
Mine Site	Wetland	2011	7	3.10	0	0	3.1	Coniferous swamp	High			
Mine Site	Wetland	2012	8	0.86	0	0	0.86	Coniferous bog	High			
Mine Site	Wetland	2013	6	0.16	0	0	0.16	Alder thicket	High			
Mine Site	Wetland	2014	6	0.21	0.21	0	0	Alder thicket	High	F	P	SLC, 3,1
Mine Site	Wetland	2015	6	0.26	0.26	0	0	Alder thicket	High	F	P	SLC, 3,1
Mine Site	Wetland	2016	6	0.53	0.53	0	0	Alder thicket	High	F	P	SLC, 3,1
Mine Site	Wetland	2017	6	0.25	0.25	0	0	Alder thicket	High	F	P	SLC, 3,1
Mine Site	Wetland	2018	7	2.23	0	0	2.23	Coniferous swamp	High			
MINE SITE SUBTOTAL		**107**		**1311.11**	**749.50**	**26.46**	**522.65**		**100/107 High 7/107 Moderate**			
Railroad Connection Corridor	Wetland	1038	7	0.07	0.07	0	0	Coniferous swamp	High	F	P	SLC, 3,1
Railroad Connection Corridor	Wetland	R-3	6	0.10	0.10	0	0	Shrub-carr	High	F	P	SLC, 3,1
Railroad Connection Corridor	Wetland	R-4	6	0.20	0.20	0	0	Alder thicket	High	F	P	SLC, 3,1
Railroad Connection Corridor	Wetland	R-5	3	0.07	0.07	0	0	Shallow marsh	High	F	P	SLC, 3,1
RAILROAD CONNECTION CORRIDOR SUBTOTAL		**4**		**0.44**	**0.44**	**0**	**0**		**4/4 High**			
Dunka Road and Utility Corridor	Wetland	22B	3	0.34	0.34	0	0	Shallow marsh	High	F	P	SLC, 3,1
Dunka Road and Utility Corridor	Wetland	22C	6	0.38	0.38	0	0	Alder thicket	High	F	P	SLC, 3,1
Dunka Road and Utility Corridor	Wetland	54A	7	0.60	0.60	0	0	Coniferous swamp	High	F	P	SLC, 3,1
Dunka Road and Utility Corridor	Wetland	54B	6	0.13	0.13	0	0	Alder thicket	High	F	P	SLC, 3,1
Dunka Road and Utility Corridor	Wetland	54D	7	0.09	0.09	0	0	Coniferous swamp	High	F	P	SLC, 3,1
Dunka Road and Utility Corridor	Wetland	390	6	0.41	0.41	0	0	Alder thicket	High	F	P	SLC, 3,1

Project Area[1,2]	Aquatic Resource Type	Aquatic Resource ID	Dominant Circular 39 Community	Total Wetland Area within the Project Area (acres)	Direct Wetland Impacts (acres)	Fragmentation Impact (acres)	Remaining Wetland Area (acres)	Dominant Existing Plant Community Type(s) in Impact Area [3]	Wetland Quality	Type of Direct Impact[4]	Duration of Impact[5]	County, Major Watershed #, and Bank Service Area # of Impact Area[6]
Dunka Road and Utility Corridor	Wetland	392	6	0.14	0.14	0	0	Alder thicket	High	F	P	SLC, 3,1
Dunka Road and Utility Corridor	Wetland	394	7	0.64	0.64	0	0	Coniferous swamp	High	F	P	SLC, 3,1
Dunka Road and Utility Corridor	Wetland	395	7	0.01	0.01	0	0	Coniferous swamp	High	F	P	SLC, 3,1
Dunka Road and Utility Corridor	Wetland	396	6	0.65	0.65	0	0	Alder thicket	High	F	P	SLC, 3,1
Dunka Road and Utility Corridor	Wetland	400	8	0.14	0.14	0	0	Coniferous bog	High	F	P	SLC, 3,1
Dunka Road and Utility Corridor	Wetland	553	7	0.09	0.09	0	0	Coniferous swamp	High	F	P	SLC, 3,1
Dunka Road and Utility Corridor	Wetland	554	7	0.11	0.11	0	0	Coniferous swamp	High	F	P	SLC, 3,1
Dunka Road and Utility Corridor	Wetland	569	6	0.68	0.68	0	0	Alder thicket	High	F	P	SLC, 3,1
Dunka Road and Utility Corridor	Wetland	716	6	0.02	0.02	0	0	Alder thicket	High	F	P	SLC, 3,1
Dunka Road and Utility Corridor	Wetland	814	8	0.75	0.75	0	0	Coniferous bog	High	F	P	SLC, 3,1
Dunka Road and Utility Corridor	Wetland	862	6	0.78	0.78	0	0	Alder thicket	High	F	P	SLC, 3,1
Dunka Road and Utility Corridor	Wetland	1034	6	0.02	0.02	0	0	Alder thicket	High	F	P	SLC, 3,1
Dunka Road and Utility Corridor	Wetland	1035	6	0.16	0.16	0	0	Alder thicket	High	F	P	SLC, 3,1
Dunka Road and Utility Corridor	Wetland	1124	6	0.44	0.44	0	0	Alder thicket	High	F	P	SLC, 3,1
Dunka Road and Utility Corridor	Wetland	R-7	3	0.18	0.18	0	0	Shallow marsh	High	F	P	SLC, 3,1
DUNKA ROAD AND UTILITY CORRIDOR SUBTOTAL		**21**		**6.76**	**6.76**	**0**	**0**		**21/21 High**			
FTB	Wetland	251	6	1.43	1.43	0	0	Alder thicket	Moderate	C	P	SLC, 3,1
FTB	Wetland	272	4	1.11	1.10	0.01	0	Deep marsh	Low	C, Fr	P	SLC, 3,1
FTB	Wetland	278	6	1.04	0.23	0	0.81	Alder thicket	Low	C	P	SLC, 3,1
FTB	Wetland	279	6	4.84	3.33	<0.01	1.51	Alder thicket	Low	C, Fr	P	SLC, 3,1
FTB	Wetland	282	3	14.25	7.42	0	6.83	Shallow marsh	Moderate	C	P	SLC, 3,1
FTB	Wetland	284	6	2.92	2.51	0	0.41	Alder thicket	Low	C	P	SLC, 3,1
FTB	Wetland	290	7	0.48	0.37	0.02	0.10	Coniferous swamp	Moderate	F,E, Fr	P	SLC, 3,1
FTB	Wetland	292	4	1.71	1.71	0	0	Deep marsh	Low	C	P	SLC, 3,1
FTB	Wetland	307	3	0.78	0.78	0	0	Shallow marsh	Low	C	P	SLC, 3,1
FTB	Wetland	308	4	7.17	2.91	0	4.26	Deep marsh	Low	C	P	SLC, 3,1
FTB	Wetland	309	2	0.02	0.02	0	0	Wet meadow	Low	C	P	SLC, 3,1
FTB	Wetland	312	6	1.98	1.33	0	0.65	Shrub-carr	Low	C	P	SLC, 3,1
FTB	Wetland	314	3	24.87	6.01	0	18.86	Shallow marsh	Low	C	P	SLC, 3,1
FTB	Wetland	572	4	7.33	0.02	0	7.31	Deep marsh	Moderate	C	P	SLC, 3,1
FTB	Wetland	573	3	0.12	0	0	0.12	Shallow marsh	Low			
FTB	Wetland	582	4	27.49	8.11	0	19.38	Deep marsh	Low	C	P	SLC, 3,1
FTB	Wetland	585	6	1.58	0	0	1.58	Alder thicket	Low			
FTB	Wetland	586	4	1.89	1.53	0	0.36	Deep marsh	Low	C	P	SLC, 3,1
FTB	Wetland	587	3	0.97	0.17	0	0.80	Shallow marsh	Low	C	P	SLC, 3,1
FTB	Wetland	590	3	5.43	5.38	0	0.05	Shallow marsh	Low	C	P	SLC, 3,1
FTB	Wetland	591	4	2.71	0.7	0	2.01	Deep marsh	Low	C	P	SLC, 3,1
FTB	Wetland	593	4	9.80	8.47	0.15	1.18	Deep marsh	Low	C, Fr	P	SLC, 3,1
FTB	Wetland	594	4	0.06	0	0	0.06	Deep marsh	Low			
FTB	Wetland	595	4	2.14	1.09	0.01	1.04	Deep marsh	Low	F, Fr	P	SLC, 3,1

Project Area[1,2]	Aquatic Resource Type	Aquatic Resource ID	Dominant Circular 39 Community	Total Wetland Area within the Project Area (acres)	Direct Wetland Impacts (acres)	Fragmentation Impact (acres)	Remaining Wetland Area (acres)	Dominant Existing Plant Community Type(s) in Impact Area [3]	Wetland Quality	Type of Direct Impact[4]	Duration of Impact[5]	County, Major Watershed #, and Bank Service Area # of Impact Area[6]
FTB	Wetland	811	7	0.20	0.20	0	0	Coniferous swamp	Low	C	P	SLC, 3,1
FTB	Wetland	968	7	13.76	11.37	0	2.40	Coniferous swamp	Low	C	P	SLC, 3,1
FTB	Wetland	1027	6	0.20	0	0	0.20	Alder thicket	Moderate			
FTB	Wetland	1125	2	0.07	0.07	0	0	Sedge meadow	Low	C	P	SLC, 3,1
FTB	Wetland	1126	7	0.69	0.69	0	0	Hardwood swamp	Low	C	P	SLC, 3,1
FTB	Wetland	1134	3	14.45	8.73	0.02	5.70	Shallow marsh	Low	C, Fr	P	SLC, 3,1
FTB	Wetland	1135	4	0.51	0	0	0.51	Deep marsh	Low			
FTB	Wetland	1139	3	20.25	2.54	0	17.71	Shallow marsh	Low	C	P	SLC, 3,1
FTB	Wetland	1155	3	0.55	0.41	0.15	0	Shallow marsh	Low	C, Fr	P	SLC, 3,1
FTB	Wetland	1156	3	14.49	11.08	0.06	3.35	Shallow marsh	Low	C, Fr	P	SLC, 3,1
FTB	Wetland	1159	3	0.05	0	0.05	0	Shallow marsh	Low	Fr	P	SLC, 3,1
FTB	Wetland	1160	5	0.85	0	0	0.85	Deep water	Low			
FTB	Wetland	1176	7	0.34	0	0	0.34	Hardwood Swamp	Moderate			
FTB	Wetland	P10	6	0.34	0	0	0.34	Alder thicket	Low			
FTB	Wetland	T1	4	1.93	0.11	0	1.82	Deep marsh	Low	F	P	SLC, 3,1
FTB	Wetland	T2	4	0.90	0.90	0	0	Deep marsh	Low	F	P	SLC, 3,1
FTB	Wetland	T3	2	0.09	0.09	0	0	Wet meadow	Low	F	P	SLC, 3,1
FTB	Wetland	T4	2	1.02	1.02	0	0	Wet meadow	Low	F	P	SLC, 3,1
FTB	Wetland	T5	2	0.24	0.24	0	0	Wet meadow	Low	F	P	SLC, 3,1
FTB	Wetland	T6	6	0.07	0.07	0	0	Shrub-carr	Low	F	P	SLC, 3,1
FTB	Wetland	T7	3	0.92	0.92	0	0	Shallow marsh	Low	F	P	SLC, 3,1
FTB	Wetland	T10	4	1.48	1.48	0	0	Deep marsh	Low	F	P	SLC, 3,1
FTB	Wetland	T11	4	0.95	0.95	0	0	Deep marsh	Low	F	P	SLC, 3,1
FTB	Wetland	T12	3	0.39	0.39	0	0	Shallow marsh	Low	F	P	SLC, 3,1
FTB	Wetland	T13	4	1.05	0.97	0	0.08	Deep marsh	Low	F	P	SLC, 3,1
FTB	Wetland	T13A	4	12.72	0.16	0	12.56	Deep marsh	Low	F	P	SLC, 3,1
FTB	Wetland	T14	4	45.20	45.20	0	0	Deep marsh	Low	E	P	SLC, 3,1
FTB	Wetland	T15	3	1.70	1.70	0	0	Shallow marsh	Low	F	P	SLC, 3,1
FTB SUBTOTAL		**52**		**257.53**	**143.91**	**0.47**	**113.18**		**6/52 Moderate** **46/52 Low**			
HRF	Wetland	1159	3	0.62	0.62	0	0	Shallow marsh	Low	F	P	SLC, 3,1
HRF SUBTOTAL		**1**		**0.62**	**0.62**	**0**	**0**		**1/1 Low**			
Colby Lake Water Pipeline Corridor	Wetland	P1	4	0.23	0	0	0.23	Deep marsh	Low			
Colby Lake Water Pipeline Corridor	Wetland	P2	6	0.03	0	0	0.03	Shrub-carr	Low			
Colby Lake Water Pipeline Corridor	Wetland	P3	3	0.25	0	0	0.25	Shallow marsh	Low			
Colby Lake Water Pipeline Corridor	Wetland	P4	6	1.28	0	0	1.28	Shrub-carr	Low			

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Colby Lake Water Pipeline Corridor	Wetland	P5-1	4	0.77	0	0	0.77	Deep marsh	Low			
Colby Lake Water Pipeline Corridor	Wetland	P5-2	3	0.14	0	0	0.14	Shallow marsh	Low			
Colby Lake Water Pipeline Corridor	Wetland	P6	3	0.18	0	0	0.18	Shallow marsh	Low			
Colby Lake Water Pipeline Corridor	Wetland	P7-1	3	0.11	0	0	0.11	Shallow marsh	Low			
Colby Lake Water Pipeline Corridor	Wetland	P7-2	3	1.90	0	0	1.90	Shallow marsh	Low			
Colby Lake Water Pipeline Corridor	Wetland	P8	2	0.07	0	0	0.07	Wet meadow	Low			
Colby Lake Water Pipeline Corridor	Wetland	P9	2	1.28	0	0	1.28	Wet meadow	Low			
Colby Lake Water Pipeline Corridor	Wetland	P10	6	0.41	0	0	0.41	Alder thicket	Low			
Colby Lake Water Pipeline Corridor	Wetland	P11	6	0.03	0	0	0.03	Shrub-carr	Low			
Colby Lake Water Pipeline Corridor	Wetland	P12	6	0.31	0	0	0.31	Shrub-carr	Moderate			
COLBY LAKE WATER PIPELINE CORRIDOR SUBTOTAL		**14**		**6.99**	**0**	**0**	**6.99**		**1/14 Moderate 13/14 Low**			
Second Creek	Wetland	1031	4	2.06	0	0	2.06	Deep marsh	Low			
Second Creek	Wetland	1161	4	9.41	0	0	9.41	Deep marsh	Low			
Second Creek	Wetland	1162	3	40.84	0	0	40.84	Shallow marsh	Low			
Second Creek	Wetland	1163	7	14.8	0	0	14.80	Hardwood swamp	Low			
Second Creek	Wetland	1164	6	8.23	0	0	8.23	Alder thicket	Low			
Second Creek	Wetland	1165	7	6.25	0	0	6.25	Hardwood swamp	Low			
Second Creek	Wetland	1166	3	28.04	0	0	28.04	Shallow marsh	Low			
Second Creek	Wetland	1167	3	2.88	0	0	2.88	Shallow marsh	Low			
Second Creek	Wetland	1168	5	0.36	0	0	0.36	Shallow, open water	Low			
Second Creek	Wetland	1169	3	4.92	0	0	4.92	Shallow marsh	Low			
Second Creek	Wetland	1170	4	3.32	0	0	3.32	Deep marsh	Low			
Second Creek	Wetland	1171	6	3.87	0	0	3.87	Shrub-carr	Low			
Second Creek	Wetland	1172	3	1.96	0	0	1.96	Shallow marsh	Low			
Second Creek	Wetland	1173	5	0.93	0	0	0.93	Shallow, open water	Low			
Second Creek	Wetland	1174	6	118.75	0	0	118.75	Alder thicket	Low			
Second Creek	Wetland	1175	7	16.82	0	0	16.82	Coniferous swamp	Low			
Second Creek	Wetland	P1A	4	0.61	0	0	0.61	Deep marsh	Low			
Second Creek	Wetland	P2A	6	0.43	0	0	0.43	Shrub-carr	Low			
Second Creek	Wetland	P3A	3	24.24	0	0	24.24	Shallow marsh	Low			
Second Creek	Wetland	P4A	6	0.29	0	0	0.29	Shrub-carr	Low			
Second Creek	Wetland	P5-1A	4	0.03	0	0	0.03	Deep marsh	Low			
Second Creek	Wetland	P5-2A	3	2.75	0	0	2.75	Shallow marsh	Low			

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SECOND CREEK SUBTOTAL		**22**		**291.79**	**0**	**0**	**291.79**		**22/22 Low**			
PROJECT TOTAL		**221**		**1,875.24**	**901.23**	**26.93**	**934.61**		**125/221 High** **14/221 Moderate** **82/221 Low**			

(1) The Project areas include the Mine Site, Railroad Connection Corridor, Dunka Road and Utility Corridor, Flotation Tailings Basin (FTB), Hydrometallurgical Residue Facility (HRF), Colby Lake Water Pipeline Corridor, and Second Creek.

(2) All wetlands are located in St. Louis County, Major Watershed #3 – St. Louis County, and Bank Service Area (BSA) #1.

(3) Information is from the *Wetland Plants and Plant Community Types of Minnesota and Wisconsin* 3rd Ed. as modified in MN Rules 8420.0405 Subp. 2.

(4) The types of wetland impacts include excavation (E), fill (F), fragmentation (Fr), and containment system (C).

(5) The duration of the impacts include permanent (P) or temporary (T).

(6) The impacts are located in St. Louis County (SLC), Major watershed #3, Bansk Servie Area #1.