APPENDIX K

Supplemental Wetlands Table

for Wetlands Section 3.11

Table K-1: Wetland Categories by National Wetlands Inventory (NWI) Class for Mine, Transportation, and Pipeline Study Areas

Wetland Category	NWI Class	Number of Sub-classes	NWI Description	Primary Vegetation Communities ¹	Group Relative Abundance			Study Area Relative Abundance		
					М	Т	Р	М	Т	Р
Evergreen Forested Wetlands	PEM1/FO4	2	Emergent, Persistent/Forested, Needle-leaved Evergreen	BSW (2)	-	-	-	-	-	-
	PFO4	3	Forested, Needle-leaved Evergreen	CBSF, OBSF (4)	+	+	+	+	+	+
	PFO4/EM1	2	Forested, Needle-leaved Evergreen/ Emergent, Persistent	OWSF (1)			-		1	-
	PFO4/SS1	3	Forested, Needle-leaved Evergreen/ Scrub Shrub, Broad-leaved Deciduous	OBSF (3)	А	Α	Α	Α	Α	Α
	PFO4/SS4	1	Forested, Needle-leaved Evergreen/ Scrub Shrub, Needle-leaved Evergreen	OBSF (2)		-	+		-	+
	PSS1/FO4	3	Scrub Shrub, Broad-leaved Deciduous/ Forested, Needle-leaved Evergreen	BSW (4)	+	Α	+	+	+	+
	PSS4/FO4	1	Scrub Shrub, Needle-leaved Evergreen/ Forested, Needle-leaved Evergreen	OBSF (2)			-			-
Deciduous Forested Wetlands	PEM1/FO1	1	Emergent, Persistent/Forested, Broad-leaved Deciduous	WMF (1)			+			-
	PFO1	3	Forested, Broad-leaved Deciduous	ODF (2)	+	-	Α	-	-	-
	PFO1/EM1	1	Forested, Broad-leaved Deciduous/ Emergent, Persistent	ODF (1)			+		1	-
	PFO1/SS1	3	Forested, Broad-leaved Deciduous/ Scrub Shrub, Broad-leaved Deciduous	ODF (1)		+	Α		-	-
	PSS1/FO1	3	Scrub Shrub, Broad-leaved Deciduous/ Forested, Broad-leaved Deciduous	WMF (3)	А	Α	Α	-	-	-
Mixed Forested Wetlands	PFO1/4	3	Forested, Broad-leaved Deciduous/ Needle-leaved Evergreen	OMF (2)	А	Α	Α	-	-	+
	PFO1/SS4	1	Forested, Broad-leaved Deciduous/ Scrub Shrub, Needle-leaved Evergreen	OMF (1)			+			-
	PFO4/1	4	Forested, Needle-leaved Evergreen/ Broad-leaved Deciduous	OMF (3)	А	Α	Α	+	-	+
Evergreen Scrub Shrub Wetlands	PEM1/SS4	2	Emergent, Persistent/Scrub Shrub, Needle-leaved Evergreen	BSW (1)	-	-	-	-	-	-
	PSS1/4	4	Scrub Shrub, Broad-leaved Deciduous/ Needle-leaved Evergreen	BSW (4)	Α	Α	Α	Α	Α	+
	PSS4	2	Scrub Shrub, Needle-leaved Evergreen	OBSF (3)	Α	+	+	Α	+	+
	PSS4/1	4	Scrub Shrub, Needle-leaved Evergreen/ Broad-leaved Deciduous	OBSF (3)	Α	Α	Α	Α	Α	+
Deciduous Scrub Shrub Wetlands	PEM1/SS1	5	Emergent, Persistent/Scrub Shrub, Broad-leaved Deciduous	ESB-SB, TS (11)	+	+	+	+	+	+
	PSS1	6	Scrub Shrub, Broad-leaved Deciduous	LSB, LST (13)	Α	Α	Α	+	Α	Α
	PSS1/2	1	Scrub Shrub, Broad-leaved Deciduous/ Needle-leaved Deciduous	BSW (1)			-		1	-
	PSS1/EM1	6	Scrub Shrub, Broad-leaved Deciduous/ Emergent, Persistent	LSB (9)	Α	Α	Α	+	+	Α
	PSS1/ML1	1	Scrub Shrub, Broad-leaved Deciduous/Moss-Lichen, Moss	LSB (1)			-			
	PSS1/US	1	Scrub Shrub, Broad-leaved Deciduous/Unconsolidated Shore	OAWS, OWS (2)			-			-
Herbaceous Wetlands	PAB3/EM2	2	Aquatic Bed, Rooted Vascular/ Emergent, Non-persistent	AH (1)			-			-
	PEM1	13	Emergent, Persistent	TS, WH (5)	Α	Α	Α	+	Α	+
	PEM1/2	3	Emergent, Persistent/Non-persistent	AH, WH (2)			+			-
	PEM1/ML1	2	Emergent, Persistent/Moss-Lichen, Moss	WH (1)			-			-
	PEM1/UB	2	Emergent, Persistent/Unconsolidated Bottom	AH (2)	-	-	-	-		-

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Table K-1: Wetland Categories by National Wetlands Inventory (NWI) Class for Mine, Transportation, and Pipeline Study Areas

Wetland Category	NWI Class	Number of Sub-classes	NWI Description		Group Relative Abundance			Study Area Relative Abundance		
				Primary Vegetation Communities ¹	М	Т	Р	М	Т	Р
Herbaceous Wetlands (continued)	PEM1/US	1	Emergent, Persistent/Unconsolidated Shore	MH (1)			-			-
	PEM2	2	Emergent, Non-persistent	AH, WH (2)	+		+	-		-
	PEM2/1	1	Emergent, Non-persistent/Persistent	AH (1)			-			-
	PEM2/AB3	2	Emergent, Non-persistent/Aquatic Bed, Rooted Vascular	AH (1)			+			-
	PEM2/UB	2	Emergent, Non-persistent/ Unconsolidated Bottom	AH (1)	-	-	-	-	-	-
	PML1	1	Moss-Lichen, Moss	ALB (1)			-			-
	PUB/EM1	2	Unconsolidated Bottom/Emergent, Persistent	OW (1)	-		-	-		-
	PUB/EM2	2	Unconsolidated Bottom/Emergent, Non-persistent	AH, OW (2)			-			-
Ponds	PAB3	2	Aquatic Bed, Rooted Vascular	AH (1)			+			-
	PAB3/UB	3	Aquatic Bed, Rooted Vascular/ Unconsolidated Bottom	AH (2)			+			-
	PUB	7	Unconsolidated Bottom	OW (1)	Α	Α	Α	-	-	+
	PUB/AB3	2	Unconsolidated Bottom/Aquatic Bed, Rooted Vascular	OW (1)	+	+	+	-	-	-
	PUS	1	Unconsolidated Shore	AH (1)			-			
Lakes	L1UB	1	Limnetic, Unconsolidated Bottom	OW (1)			Α			-
	L2AB3	1	Littoral, Aquatic Bed, Rooted Vascular	AH (1)			+			-
	L2EM2	1	Littoral, Emergent, Non-persistent	WH (1)			-			-
Rivers	R1UB	1	Tidal, Unconsolidated Bottom	RVS (1)			-			-
	R2UB	2	Lower Perennial, Unconsolidated Bottom	RVS (1)	А	Α	Α	+	+	+
Rivers (continued)	R3UB	3	Upper Perennial, Unconsolidated Bottom	RVS (1)	+	+	А	-	-	+
	R4SB	2	Intermittent, Stream Bed	RVS (1)			+			+

M = Mine Site Wetland Study Area (7,328 acres wetlands)

T = Mine Transportation Wetland Study Area (6,614 acres wetlands)

P = Pipeline Wetland Study Area (18,970 acres wetlands)

1 Vegetation Communities for 20% or more by area of the NWI class for combined study areas followed by number of vegetation communities in parentheses. See vegetation community definitions.

2 Relative abundance of NWI class within Wetland or Water Category/Group by study area.
A = abundant (≥ 20% by area) -= trace (<1% by area)

+ = present (1 to 19% by area) Blank = does not occur

3 Relative abundance of NWI class within all Wetlands and Waters by study area.

A = abundant (≥ 10% by area) - = trace (<1% by area)

+ = present (1 to 9% by area) Blank = does not occur

Source: Michael Baker 2016, 2017.

Vegetation Community Definitions with proportion of occurrences that were classified as wetland or water:

AH – Aquatic Herbaceous 100%

ALB - Alpine Barrens <1%

BSW - Black Spruce Woodland 54% CAS - Closed Alder Shrub 2%

CAWS - Closed Alder Willow Shrub 35%

CBSF - Closed Black Spruce Forest 26% CDF - Closed Mixed Forest 1%

CWS - Closed Willow Shrub 33% CWSF - Closed White Spruce Forest 2%

DSSR - Deciduous Shrub/Sapling Regrowth 14%

DST - Dwarf Shrub Tundra <1%

ESB-SB - Ericaceous Shrub Bog-String Bog 100%

LSB – Low Shrub Bog 100%

LST – Low Shrub Tundra 18%

MH - Mesic Herbaceous 23%

OAS - Open Alder Shrub 8%

OAWS - Open Alder Willow Shrub 54%

OBSF - Open Black Spruce Forest 50%

ODF - Open Deciduous Forest 3%

OMF - Open Mixed Forest 4%

OW - Open Water (Ponds/Lakes) 100%

OWS - Open Willow Shrub 46%

OWSF – Open White Spruce Forest 7%

RVS - Riverine Systems (Water/Bars) 100%

TS - Tussock Sedge Tundra 100%

WDF - Woodland Deciduous Forest 1%

WH - Wet Herbaceous 100%

WMF - Woodland Mixed Forest 8%

WSW – White Spruce Woodland 11%

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