

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 ₂			Study Area Relative Abundance ₃		
					M	T	P	M	T	P
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)			-			-
	PFO4/SS1	3	Forested, Needle-leaved Evergreen/ Scrub Shrub, Broad-leaved Deciduous	OBSF (3)	A	A	A	A	A	A
	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)	+	A	+	+	+	+
	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)	+	-	A	-	-	-
	PFO1/EM1	1	Forested, Broad-leaved Deciduous/ Emergent, Persistent	ODF (1)			+			-
	PFO1/SS1	3	Forested, Broad-leaved Deciduous/ Scrub Shrub, Broad-leaved Deciduous	ODF (1)		+	A		-	-
	PSS1/FO1	3	Scrub Shrub, Broad-leaved Deciduous/ Forested, Broad-leaved Deciduous	WMF (3)	A	A	A	-	-	-
Mixed Forested Wetlands	PFO1/4	3	Forested, Broad-leaved Deciduous/ Needle-leaved Evergreen	OMF (2)	A	A	A	-	-	+
	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)	A	A	A	+	-	+
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)	A	A	A	A	A	+
	PSS4	2	Scrub Shrub, Needle-leaved Evergreen	OBSF (3)	A	+	+	A	+	+
	PSS4/1	4	Scrub Shrub, Needle-leaved Evergreen/ Broad-leaved Deciduous	OBSF (3)	A	A	A	A	A	+
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)	A	A	A	+	A	A
	PSS1/2	1	Scrub Shrub, Broad-leaved Deciduous/ Needle-leaved Deciduous	BSW (1)			-			-
	PSS1/EM1	6	Scrub Shrub, Broad-leaved Deciduous/ Emergent, Persistent	LSB (9)	A	A	A	+	+	A
	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)	A	A	A	+	A	+
	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)	-	-	-	-	-	-

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 ₂			Study Area Relative Abundance ₃		
					M	T	P	M	T	P
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)	A	A	A	-	-	+
	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)			A			-
	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)	A	A	A	+	+	+
Rivers (continued)	R3UB	3	Upper Perennial, Unconsolidated Bottom	RVS (1)	+	+	A	-	-	+
	R4SB	2	Intermittent, Stream Bed	RVS (1)			+			+

Notes:

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%	OAS – Open Alder Shrub 8%
ALB – Alpine Barrens <1%	OAWS – Open Alder Willow Shrub 54%
BSW – Black Spruce Woodland 54%	OBSF – Open Black Spruce Forest 50%
CAS – Closed Alder Shrub 2%	ODF – Open Deciduous Forest 3%
CAWS – Closed Alder Willow Shrub 35%	OMF – Open Mixed Forest 4%
CBSF – Closed Black Spruce Forest 26%	OW – Open Water (Ponds/Lakes) 100%
CDF – Closed Mixed Forest 1%	OWS – Open Willow Shrub 46%
CWS – Closed Willow Shrub 33%	OWSF – Open White Spruce Forest 7%
CWSF – Closed White Spruce Forest 2%	RVS – Riverine Systems (Water/Bars) 100%
DSSR – Deciduous Shrub/Sapling Regrowth 14%	TS – Tussock Sedge Tundra 100%
DST – Dwarf Shrub Tundra <1%	WDF – Woodland Deciduous Forest 1%
ESB-SB – Ericaceous Shrub Bog-String Bog 100%	WH – Wet Herbaceous 100%
LSB – Low Shrub Bog 100%	WMF – Woodland Mixed Forest 8%
LST – Low Shrub Tundra 18%	WSW – White Spruce Woodland 11%
MH – Mesic Herbaceous 23%	