

APPENDIX D

Wildlife Habitat Losses (Footprint & Effective) in the Mine Site & Access Road LSAs

Table D.1: Ungulates – ELC Areas Directly Lost to Mine Development (Footprint) in the Mine Site LSA during the Growing & Winter Seasons

ELC Type	Area Lost in Mine Site LSA during Growing (ha) Habitat Suitability			Area Lost in Mine Site LSA during Winter (ha) Habitat Suitability		
	Low	Moderate	High	Low	Moderate	High
Water	225			225		
Sedge			161		161	
Birch & Riparian Shrub			78		78	
Heath Tundra		49				49
Lichen		67				67
Lichen-Rock		29				29
Ridge Crest / Esker / Avens		<0.1				<0.1
Rock & Boulder	94			94		
Disturbed	0			0		
Unmapped	0			0		
Totals	319	145	239	319	239	145
	Low	Moderate	High	Low	Moderate	High
Percent of Mine Site LSA	1.6	0.7	1.2	1.6	1.2	0.7
Percent of RSA	0.06	0.03	0.05	0.06	0.05	0.03

Table D.2: Ungulates – ELC Areas Directly & Effectively Lost to Mine Development (Footprint plus 1,000 m ZOI) in the Mine Site LSA during the Growing & Winter Seasons

ELC Type	Area Lost in Mine Site LSA during Growing (ha) Habitat Suitability			Area Lost in Mine Site LSA during Winter (ha) Habitat Suitability		
	Low	Moderate	High	Low	Moderate	High
Water	1999			1999		
Sedge			1057		1057	
Birch & Riparian Shrub			497		497	
Heath Tundra		353				353
Lichen		478				478
Lichen-Rock		278				278
Ridge Crest / Esker / Avens		1				1
Rock & Boulder	611			611		
Disturbed	0			0		
Unmapped	9			9		
Totals	2,619	1,110	1,554	2,619	1,554	1,110
	Low	Moderate	High	Low	Moderate	High
Percent of Mine Site LSA	13.5	5.7	8.0	13.5	8.0	5.7
Percent of RSA	0.51	0.22	0.30	0.51	0.30	0.22

Table D.3: Ungulates – ELC Areas Directly Lost to Road Development (Footprint) in the Access Road LSA during the Growing & Winter Seasons

ELC Type	Area Lost in Access Road LSA during Growing (ha) Habitat Suitability			Area Lost in Access Road LSA during Winter (ha) Habitat Suitability		
	Low	Moderate	High	Low	Moderate	High
Water	1			1		
Sedge			21		21	
Birch & Riparian Shrub			42		42	
Heath Tundra		107				107
Lichen		57				57
Lichen-Rock		15				15
Ridge Crest / Esker / Avens		9				9
Rock & Boulder	25			25		
Disturbed	3			3		
Unmapped	3			3		
Totals	32	188	63	32	63	188
	Low	Moderate	High	Low	Moderate	High
Percent of Access Road LSA	0.1	0.7	0.2	0.1	0.2	0.7
Percent of RSA	0.01	0.04	0.01	0.01	0.01	0.04

Table D.4: Ungulates – ELC Areas Directly & Effectively Lost to Road Development (Footprint plus 1,000 m ZOI) in the Access Road LSA during the Growing & Winter Seasons

ELC Type	Area Lost in Access Road LSA during Growing (ha) Habitat Suitability			Area Lost in Access Road LSA during Winter (ha) Habitat Suitability		
	Low	Moderate	High	Low	Moderate	High
Water	2,240			2,240		
Sedge			1,673		1,673	
Birch & Riparian Shrub			2,983		2,983	
Heath Tundra		6,496				6,496
Lichen		3,556				3,556
Lichen-Rock		1,095				1,095
Ridge Crest / Esker / Avens		613				613
Rock & Boulder	1,926			1,926		
Disturbed	234			234		
Unmapped	1,386			1,386		
Totals	5,786	11,760	4,656	5,786	4,656	11,760
	Low	Moderate	High	Low	Moderate	High
Percent of Access Road LSA	20.0	42.7	16.9	20.0	16.9	42.7
Percent of RSA	1.1	2.3	0.9	1.1	0.9	2.3

Table D.5: Predatory Mammals – ELC Areas Directly Lost to Mine Development (Footprint) in the Mine Site LSA during the Growing & Winter Seasons

ELC Type	Area Lost in Mine Site LSA during Growing (ha) Habitat Suitability			Area Lost in Mine Site LSA during Winter (ha) Habitat Suitability		
	Low	Moderate	High	Low	Moderate	High
Water	225			225		
Sedge			161		161	
Birch & Riparian Shrub		78			78	
Heath Tundra		49				49
Lichen		67			67	
Lichen-Rock		29			29	
Ridge Crest / Esker / Avens			<0.1			<0.1
Rock & Boulder		94			94	
Disturbed	0			0		
Unmapped	0			0		
Totals	225	317	161	225	429	49
	Low	Moderate	High	Low	Moderate	High
Percent of Mine Site LSA	1.2	1.6	0.8	1.2	2.2	0.3
Percent of RSA	0.04	0.06	0.03	0.04	0.08	0.01

Table D.6: Predatory Mammals – ELC Areas Directly & Effectively Lost to Mine Development (Footprint plus 1,000 m ZOI) in the Mine Site LSA during the Growing & Winter Seasons

ELC Type	Area Lost in Mine Site LSA during Growing (ha) Habitat Suitability			Area Lost in Mine Site LSA during Winter (ha) Habitat Suitability		
	Low	Moderate	High	Low	Moderate	High
Water	1,999			1,999		
Sedge			1,057		1,057	
Birch & Riparian Shrub		497			497	
Heath Tundra		353				353
Lichen		478			478	
Lichen-Rock		278			278	
Ridge Crest / Esker / Avens			1			1
Rock & Boulder		611			611	
Disturbed	0			0		
Unmapped	9			9		
Totals	2,008	2,217	1,058	2,008	2,921	354
	Low	Moderate	High	Low	Moderate	High
Percent of Mine Site LSA	10.4	11.4	5.5	10.4	15.1	1.8
Percent of RSA	0.39	0.43	0.21	0.39	0.57	0.07

Table D.7: Predatory Mammals – ELC Areas Directly Lost to Road Development (Footprint) in the Access Road LSA during the Growing & Winter Seasons

ELC Type	Area Lost in Access Road LSA during Growing (ha) Habitat Suitability			Area Lost in Access Road LSA during Winter (ha) Habitat Suitability		
	Low	Moderate	High	Low	Moderate	High
Water	1			1		
Sedge			21		21	
Birch & Riparian Shrub		42			42	
Heath Tundra		107				107
Lichen		57			57	
Lichen-Rock		15			15	
Ridge Crest / Esker / Avens			9			9
Rock & Boulder		25			25	
Disturbed	3			3		
Unmapped	3			3		
Totals	7	246	30	7	160	116
	Low	Moderate	High	Low	Moderate	High
Percent of Access Road LSA	<0.1	0.9	0.1	<0.1	0.6	0.4
Percent of RSA	<0.01	0.05	<0.01	<0.01	0.03	0.02

Table D.8: Predatory Mammals – ELC Areas Directly & Effectively Lost to Road Development (Footprint plus 1,000 m ZOI) in the Access Road LSA during the Growing & Winter Seasons

ELC Type	Area Lost in Access Road LSA during Growing (ha) Habitat Suitability			Area Lost in Access Road LSA during Winter (ha) Habitat Suitability		
	Low	Moderate	High	Low	Moderate	High
Water	2,240			2,240		
Sedge			1,673		1,673	
Birch & Riparian Shrub		2,983			2,983	
Heath Tundra		6,496				6,496
Lichen		3,556			3,556	
Lichen-Rock		1,095			1,095	
Ridge Crest / Esker / Avens			613			613
Rock & Boulder		1,926			1,926	
Disturbed	234			234		
Unmapped	1,386			1,386		
Totals	3,860	16,056	2,286	3,860	11,233	7,109
	Low	Moderate	High	Low	Moderate	High
Percent of Access Road LSA	14.0	58.2	8.3	14.0	40.7	25.8
Percent of RSA	0.76	3.14	0.45	0.76	2.20	1.39

Table D.9: Small Mammals – ELC Areas Directly (Footprint) & Effectively (Footprint plus 100 m ZOI) Lost to Mine Development in the Mine Site LSA

ELC Type	Area Lost in Mine Site LSA – Footprint Only (ha) Habitat Suitability			Area Lost in Mine Site LSA – Footprint and Effective (ha) Habitat Suitability		
	Low	Moderate	High	Low	Moderate	High
Water	225			602		
Sedge		161			479	
Birch & Riparian Shrub		78			244	
Heath Tundra			49			165
Lichen		67			209	
Lichen-Rock			29			90
Ridge Crest / Esker / Avens			<0.1			<0.1
Rock & Boulder			94			277
Disturbed		0			0	
Unmapped	0			0		
Totals	225	306	172	602	932	532
	Low	Moderate	High	Low	Moderate	High
Percent of Mine Site LSA	1.2	1.6	2.5	3.1	4.8	2.7
Percent of RSA	0.04	0.06	0.03	0.12	0.18	0.10

Table D.10: Small Mammals – ELC Areas Directly (Footprint) & Effectively (Footprint plus 100 m ZOI) Lost to Road Development in the Access Road LSA

ELC Type	Area Lost in Access Road LSA – Footprint Only (ha) Habitat Suitability			Area Lost in Access Road LSA – Footprint and Effective (ha) Habitat Suitability		
	Low	Moderate	High	Low	Moderate	High
Water	1			13		
Sedge		21			194	
Birch & Riparian Shrub		42			391	
Heath Tundra			107			925
Lichen		57			487	
Lichen-Rock			15			144
Ridge Crest / Esker / Avens			9			84
Rock & Boulder			25			243
Disturbed		3			25	
Unmapped	3			40		
Totals	4	123	156	53	1,097	1,396
	Low	Moderate	High	Low	Moderate	High
Percent of Access Road LSA	<0.1	0.4	0.6	0.2	4.0	5.1
Percent of RSA	<0.01	0.02	0.03	0.01	0.21	0.27

Table D.11: Raptors – ELC Areas Directly Lost to Mine Development (Footprint) in the Mine Site LSA during the Growing & Winter Seasons

ELC Type	Area Lost in Mine Site LSA during Growing (ha) Habitat Suitability			Area Lost in Mine Site LSA during Winter (ha) Habitat Suitability		
	Low	Moderate	High	Low	Moderate	High
Water		225		225		
Sedge		161		161		
Birch & Riparian Shrub		78		78		
Heath Tundra			49			49
Lichen		67		67		
Lichen-Rock			29			29
Ridge Crest / Esker / Avens		<0.1			<0.1	
Rock & Boulder		94			94	
Disturbed	0			0		
Unmapped	0			0		
Totals	0	625	78	531	94	78
	Low	Moderate	High	Low	Moderate	High
Percent of Mine Site LSA	0	3.2	0.4	2.7	0.5	0.4
Percent of RSA	0	0.12	0.02	0.10	0.02	0.02

Table D.12: Raptors – ELC Areas Directly & Effectively Lost to Mine Development (Footprint plus 200 m ZOI) in the Mine Site LSA during the Growing & Winter Seasons

ELC Type	Area Lost in Mine Site LSA during Growing (ha) Habitat Suitability			Area Lost in Mine Site LSA during Winter (ha) Habitat Suitability		
	Low	Moderate	High	Low	Moderate	High
Water		750		750		
Sedge		573		573		
Birch & Riparian Shrub		295		295		
Heath Tundra			201			201
Lichen		259		259		
Lichen-Rock			117			117
Ridge Crest / Esker / Avens		<1			<1	
Rock & Boulder		327			327	
Disturbed	0			0		
Unmapped	0			0		
Totals	0	2,204	318	1877	327	318
	Low	Moderate	High	Low	Moderate	High
Percent of Mine Site LSA	0	11.4	1.6	9.7	1.7	1.6
Percent of RSA	0	0.43	0.06	3.7	0.06	0.06

Table D.13: Raptors – ELC Areas Directly Lost to Road Development (Footprint) in the Access Road LSA during the Growing & Winter Seasons

ELC Type	Area Lost in Access Road LSA during Growing (ha) Habitat Suitability			Area Lost in Access Road LSA during Winter (ha) Habitat Suitability		
	Low	Moderate	High	Low	Moderate	High
Water		1		1		
Sedge		21		21		
Birch & Riparian Shrub		42		42		
Heath Tundra			107			107
Lichen		57		57		
Lichen-Rock			15			15
Ridge Crest / Esker / Avens		9			9	
Rock & Boulder		25			25	
Disturbed	3			3		
Unmapped	3			3		
Totals	6	155	122	127	34	122
	Low	Moderate	High	Low	Moderate	High
Percent of Access Road LSA	<0.1	0.6	0.4	0.5	0.1	0.4
Percent of RSA	<0.01	0.03	0.02	0.02	<0.01	0.02

Table D.14: Raptors – ELC Areas Directly & Effectively Lost to Road Development (Footprint plus 200 m ZOI) in the Access Road LSA during the Growing & Winter Seasons

ELC Type	Area Lost in Access Road LSA during Growing (ha) Habitat Suitability			Area Lost in Access Road LSA during Winter (ha) Habitat Suitability		
	Low	Moderate	High	Low	Moderate	High
Water		64		64		
Sedge		371		371		
Birch & Riparian Shrub		738		738		
Heath Tundra			1,666			1,666
Lichen		889		889		
Lichen-Rock			282			282
Ridge Crest / Esker / Avens		150			150	
Rock & Boulder		463			463	
Disturbed	48			48		
Unmapped	131			131		
Totals	179	2,675	1,948	2,241	613	1,948
	Low	Moderate	High	Low	Moderate	High
Percent of Access Road LSA	0.6	9.7	7.1	8.1	2.2	7.1
Percent of RSA	0.04	0.52	0.38	0.44	0.12	0.38

Table D.15: Waterfowl – ELC Areas Directly (Footprint) & Effectively (Footprint plus 200 m ZOI) Lost to Mine Development in the Mine Site LSA

ELC Type	Area Lost in Mine Site LSA – Footprint Only (ha) Habitat Suitability			Area Lost in Mine Site LSA – Footprint and Effective (ha) Habitat Suitability		
	Low	Moderate	High	Low	Moderate	High
Water			225			750
Sedge			161			573
Birch & Riparian Shrub		78			295	
Heath Tundra		49			201	
Lichen	67			259		
Lichen-Rock	29			117		
Ridge Crest / Esker / Avens		<1			<1	
Rock & Boulder	94			327		
Disturbed	0			0		
Unmapped	0			0		
Totals	190	127	386	703	496	1323
	Low	Moderate	High	Low	Moderate	High
Percent of Mine Site LSA	1.0	0.7	2.0	3.6	2.6	6.8
Percent of RSA	0.04	0.02	0.08	0.14	0.10	0.26

Table D.16: Waterfowl – ELC Areas Directly (Footprint) & Effectively (Footprint plus 200 m ZOI) Lost to Road Development in the Access Road LSA

ELC Type	Area Lost in Access Road LSA – Footprint Only (ha) Habitat Suitability			Area Lost in Access Road LSA – Footprint and Effective (ha) Habitat Suitability		
	Low	Moderate	High	Low	Moderate	High
Water			1			64
Sedge			21			371
Birch & Riparian Shrub		42			738	
Heath Tundra		107			1666	
Lichen	57			889		
Lichen-Rock	15			282		
Ridge Crest / Esker / Avens		9			150	
Rock & Boulder	25			463		
Disturbed	3			48		
Unmapped	3			131		
Totals	103	158	22	1,813	2,554	435
	Low	Moderate	High	Low	Moderate	High
Percent of Access Road LSA	0.4	0.6	0.1	6.6	9.3	1.6
Percent of RSA	0.02	0.03	<0.01	0.35	0.50	0.09

Table D.17: Other Breeding Birds – ELC Areas Directly (Footprint) & Effectively (Footprint plus 100 m ZOI) Lost to Mine Development in the Mine Site LSA

ELC Type	Area Lost in Mine Site LSA – Footprint Only (ha) Habitat Suitability			Area Lost in Mine Site LSA – Footprint and Effective (ha) Habitat Suitability		
	Low	Moderate	High	Low	Moderate	High
Water	225			602		
Sedge			161			479
Birch & Riparian Shrub			78			244
Heath Tundra			49			165
Lichen		67			209	
Lichen-Rock		29			90	
Ridge Crest / Esker / Avens		<1			<1	
Rock & Boulder		94			277	
Disturbed	0			0		
Unmapped	0			0		
Totals	225	190	288	602	576	888
	Low	Moderate	High	Low	Moderate	High
Percent of Mine Site LSA	1.2	1.0	1.5	3.1	3.0	4.6
Percent of RSA	0.04	0.04	0.06	0.11	0.11	0.17

Table D.18: Other Breeding Birds – ELC Areas Directly (Footprint) & Effectively (Footprint plus 100 m ZOI) Lost to Road Development in the Access Road LSA

ELC Type	Area Lost in Access Road LSA – Footprint Only (ha) Habitat Suitability			Area Lost in Access Road LSA – Footprint and Effective (ha) Habitat Suitability		
	Low	Moderate	High	Low	Moderate	High
Water	1			13		
Sedge			21			194
Birch & Riparian Shrub			42			391
Heath Tundra			107			925
Lichen		57			487	
Lichen-Rock		15			144	
Ridge Crest / Esker / Avens		9			84	
Rock & Boulder		25			243	
Disturbed	3			25		
Unmapped	3			40		
Totals	7	106	170	78	958	1,510
	Low	Moderate	High	Low	Moderate	High
Percent of Access Road LSA	<0.1	0.4	0.6	0.3	3.5	5.5
Percent of RSA	<0.01	0.02	0.03	0.02	0.19	0.30