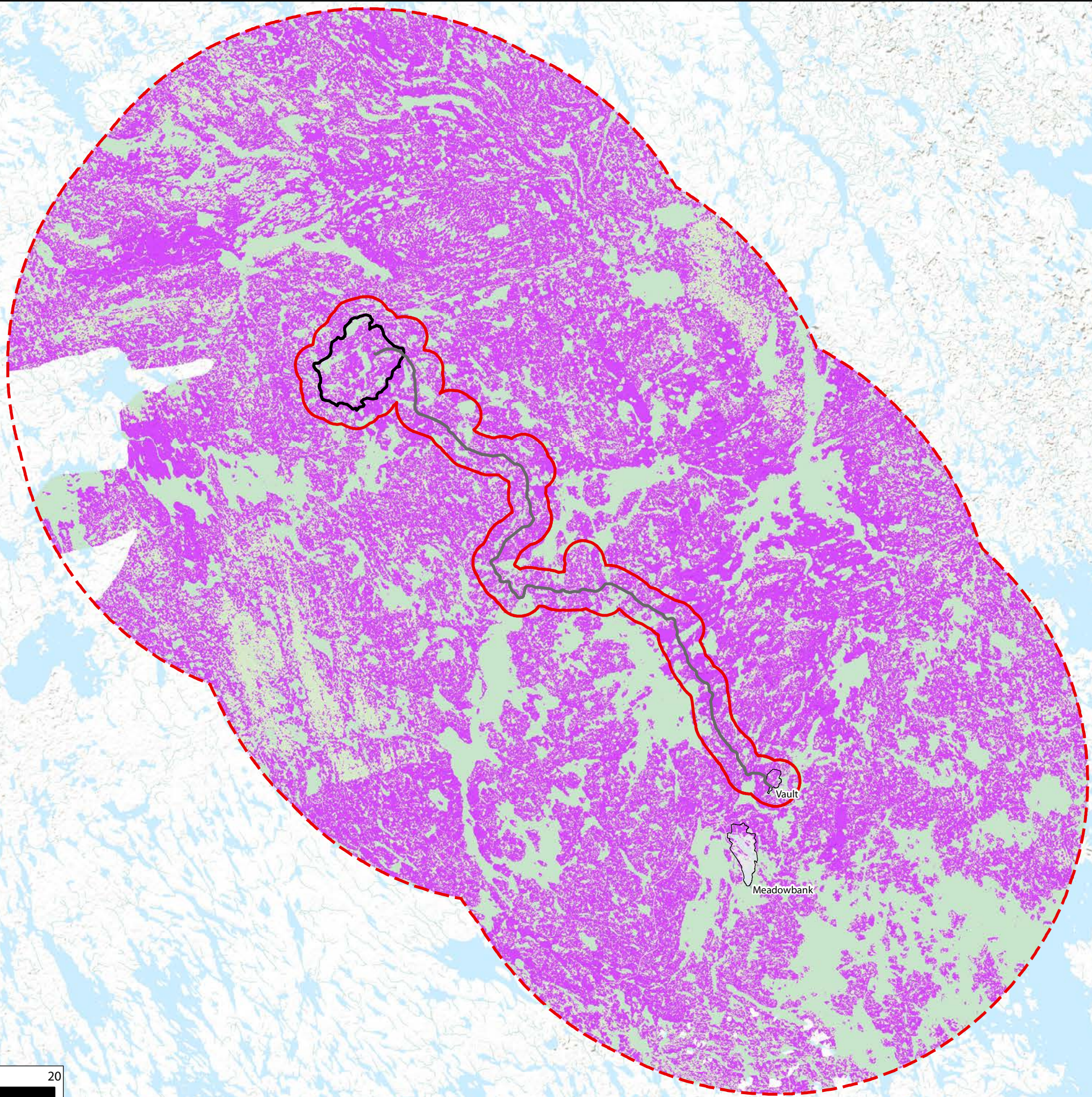


Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Legend

Proposed Haul Road
(AEM, Nov. 2015)

Existing Minesite

Whale Tail Pit Study Area

LSA Boundary

RSA Boundary

Raptors: Growing Season

Habitat Suitability

High

Medium

Nil

Terrestrial Baseline Characterization Report

Habitat Suitability

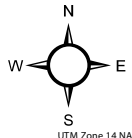
Raptors (including Peregrine Falcon): Growing Season

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DATE: NOVEMBER 2015

SCALE: 1:350,000

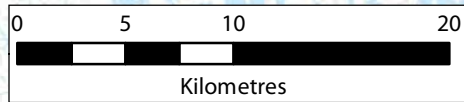
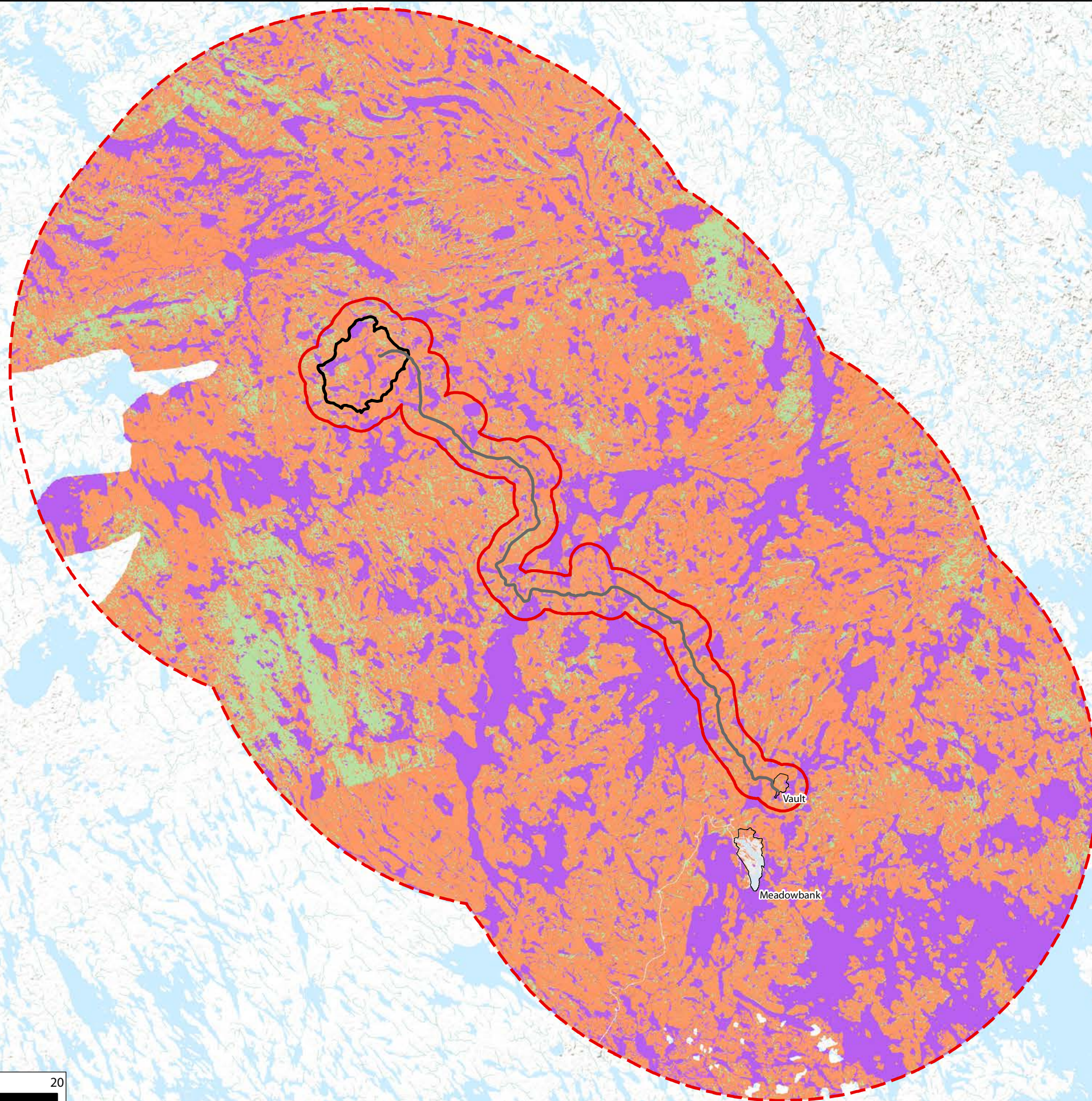
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CHECKED BY: MAY

Figure:

10.9

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Legend

- Proposed Haul Road
(AEM, Nov. 2015)
- Existing Minesite
- Whale Tail Pit Study Area
- LSA Boundary
- RSA Boundary

Waterfowl: Growing Season

Habitat Suitability

- High
- Medium
- Low
- Nil

Terrestrial Baseline Characterization Report

Habitat Suitability Waterfowl: Growing Season

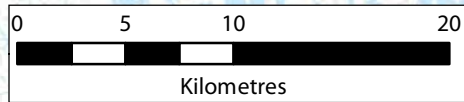
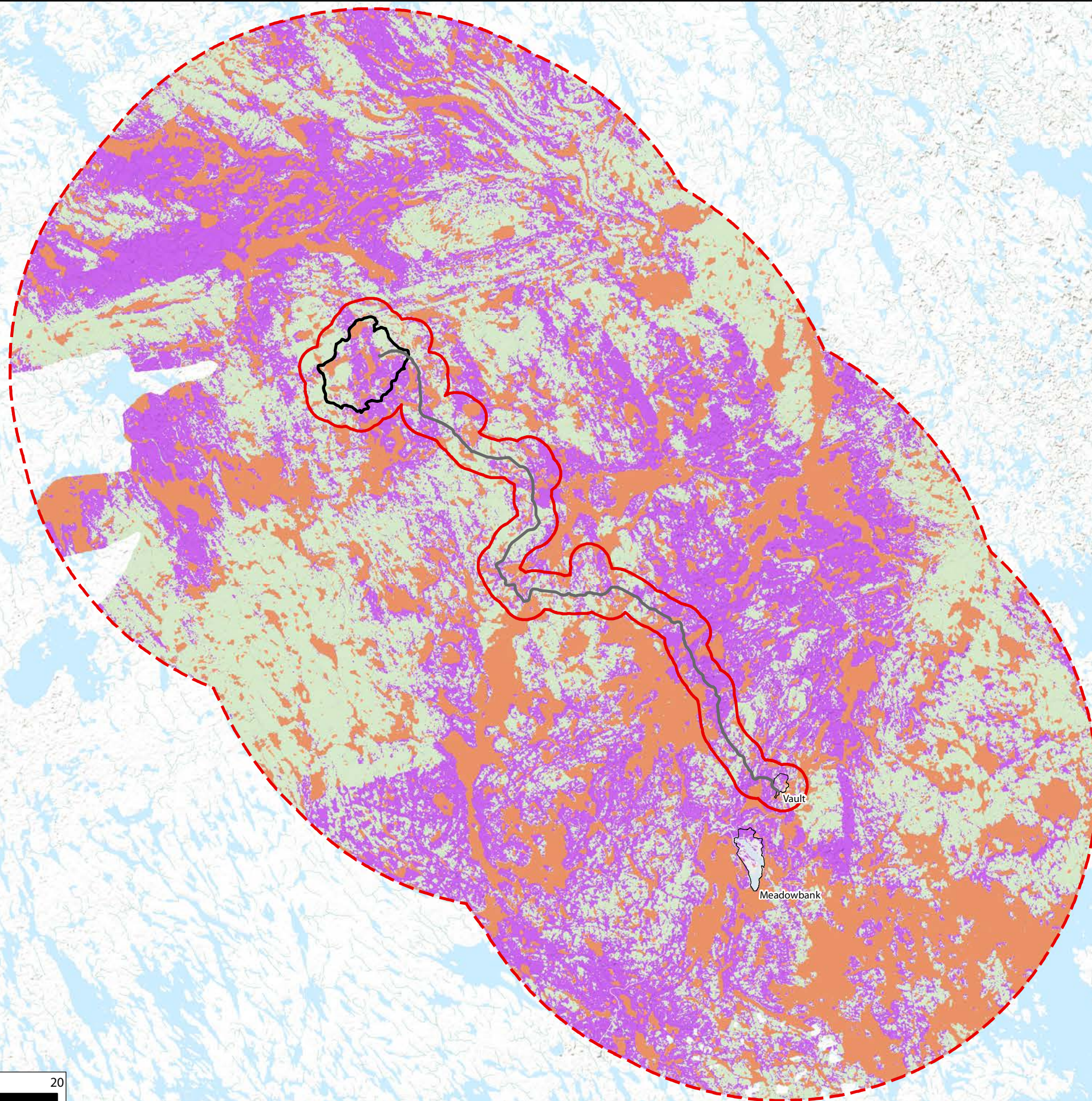


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	DATE: NOVEMBER 2015
	SCALE: 1:350,000
	DRAWN BY: LC
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Figure:
10.10

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Legend

- Proposed Haul Road
(AEM, Nov. 2015)
- Existing Minesite
- Whale Tail Pit Study Area
- LSA Boundary
- RSA Boundary

Upland Breeding Bird: Growing Season Habitat Suitability

- High
- Medium
- Low
- Nil

Terrestrial Baseline Characterization Report

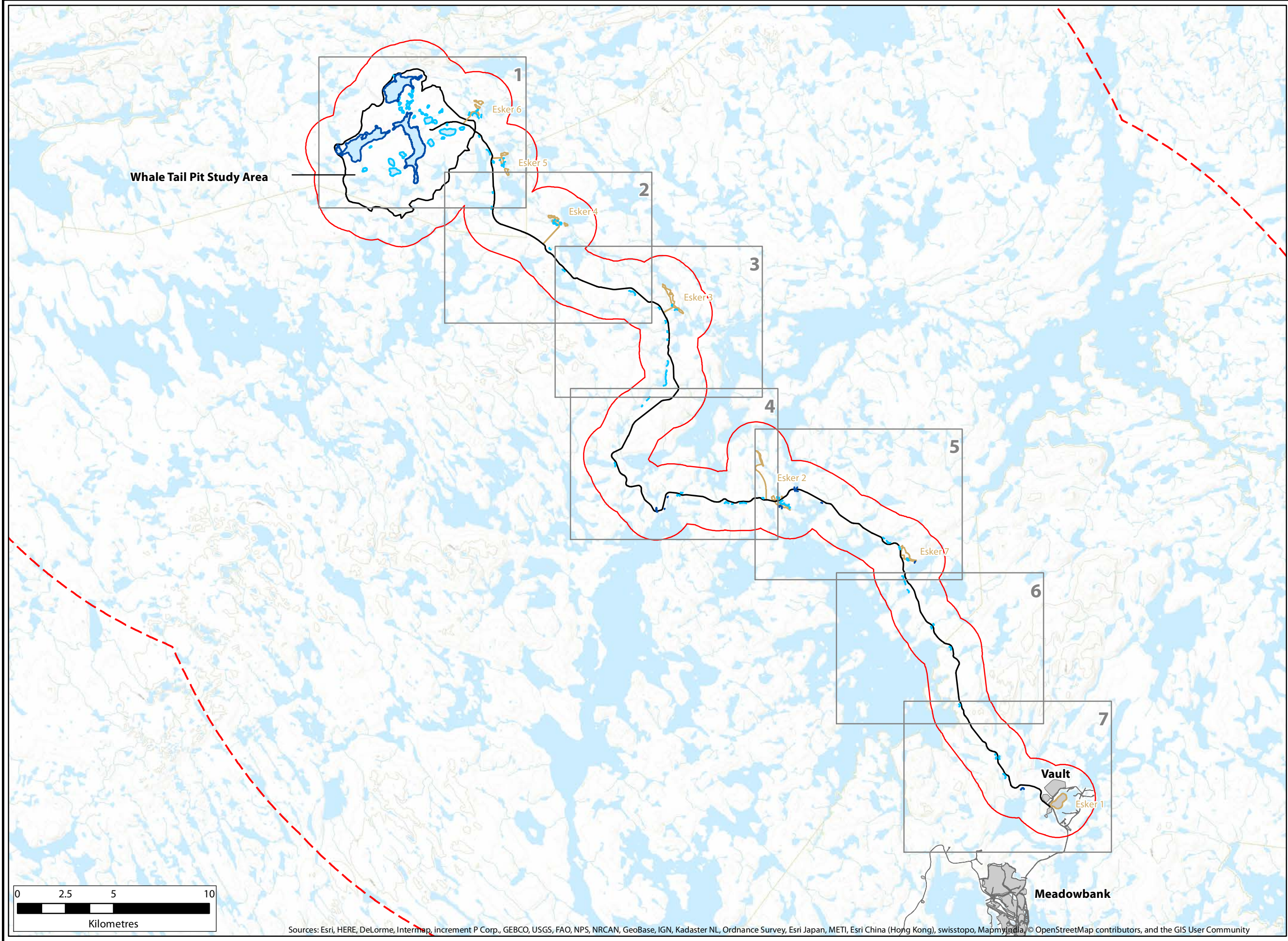
Habitat Suitability Upland Breeding Bird: Growing Season



	DATE: NOVEMBER 2015
	SCALE: 1:350,000
	DRAWN BY: LC
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Figure:
10.11

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Legend

Waterfowl Transect

- Lake
- Pond

Map Base

- Esker or Esker Access Road
- Proposed Haul Road (AEM, Nov. 2015)
- Wildlife Survey Locations
- Figure Extent
- Mine Site
- Road
- LSA Boundary
- RSA Boundary
- Whale Tail Pit Study Area

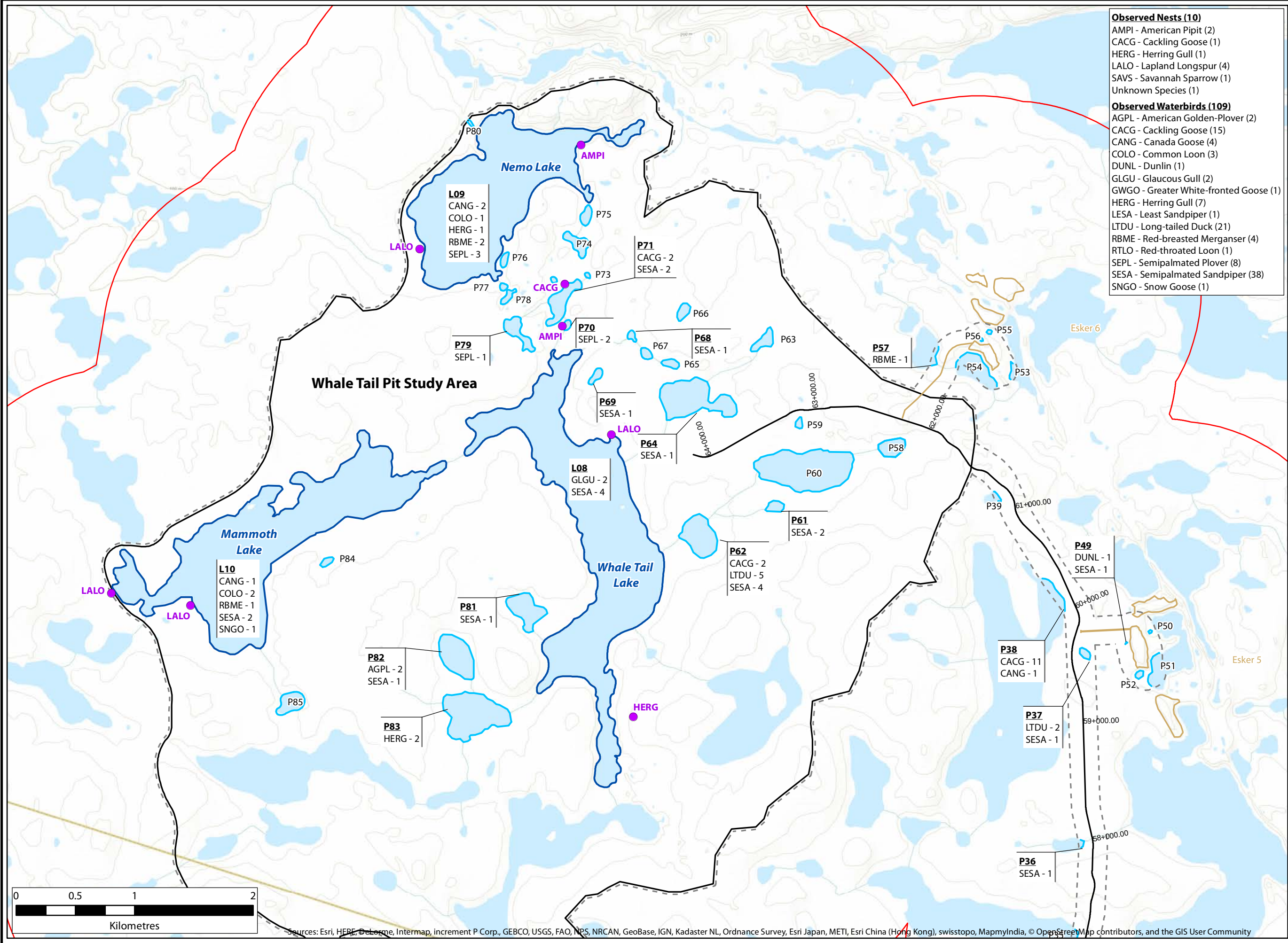
Terrestrial Baseline Characterization Report
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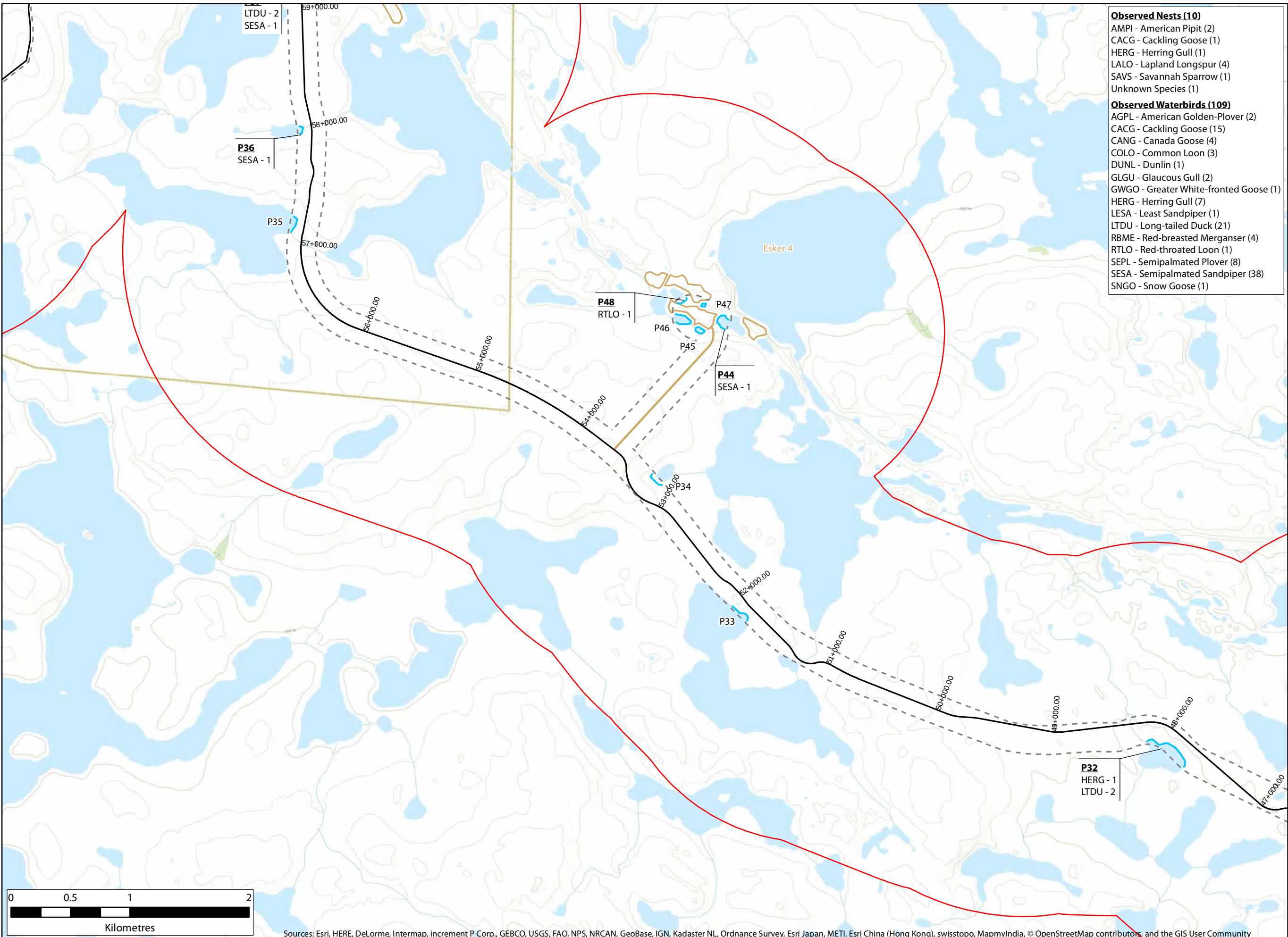


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Figure:
11 - Key Map

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- Observed Nests (10)**
AMPI - American Pipit (2)
CACG - Cackling Goose (1)
HERG - Herring Gull (1)
LALO - Lapland Longspur (4)
SAVS - Savannah Sparrow (1)
Unknown Species (1)
- Observed Waterbirds (109)**
AGPL - American Golden-Plover (2)
CACG - Cackling Goose (15)
CANG - Canada Goose (4)
COLO - Common Loon (3)
DUNL - Dunlin (1)
GLGU - Glaucous Gull (2)
GWGO - Greater White-fronted Goose (1)
HERG - Herring Gull (7)
LESA - Least Sandpiper (1)
LTDU - Long-tailed Duck (21)
RBME - Red-breasted Merganser (4)
RTLO - Red-throated Loon (1)
SEPL - Semipalmated Plover (8)
SESA - Semipalmated Sandpiper (38)
SNGO - Snow Goose (1)

- Legend**
- Waterfowl Transect**
- Pond
- Map Base**
- Esker or Esker Access Road
- Proposed Haul Road
(AEM, Nov. 2015)
- Shoreline Survey Area *
- Whale Tail Pit Study Area
- LSA Boundary
- RSA Boundary

*** Note:**
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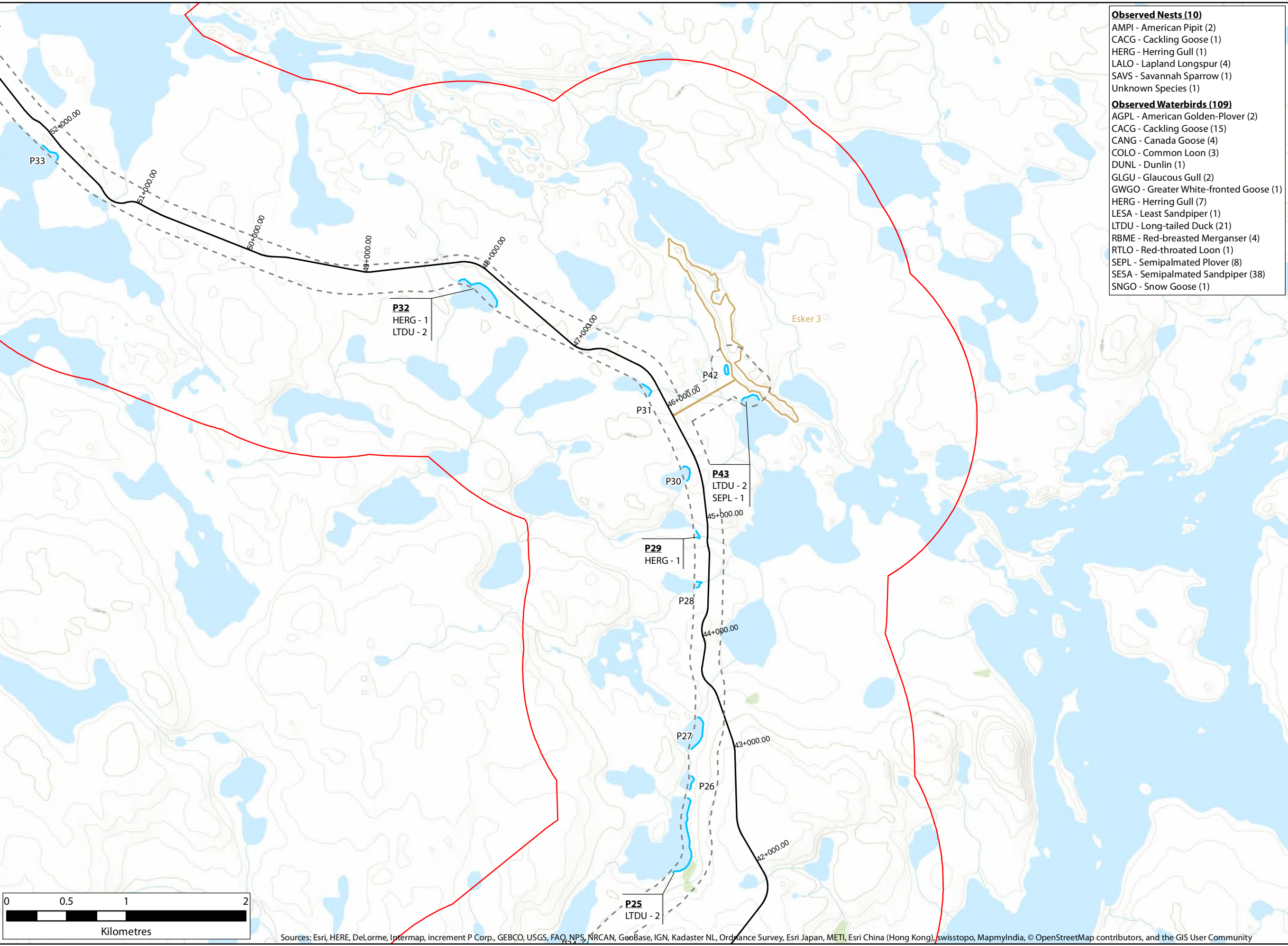
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Figure:
11.2

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SNGO - Snow Goose (1)

- Legend**
- Waterfowl Transect**
- Pond
- Map Base**
- Esker or Esker Access Road
- Proposed Haul Road (AEM, Nov. 2015)
- Shoreline Survey Area *
- LSA Boundary
- RSA Boundary

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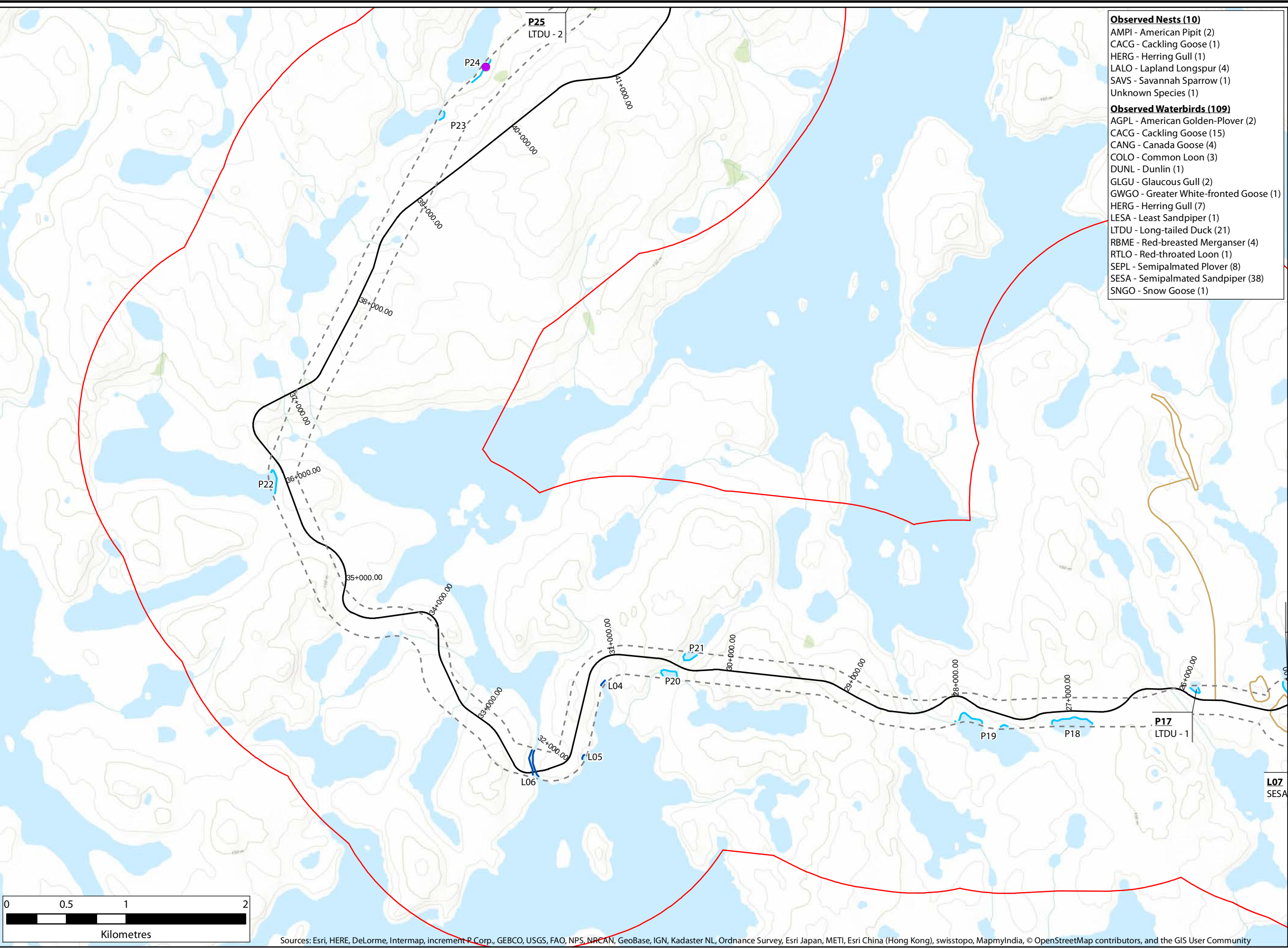
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Figure:
11.3

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- Legend**
- Nest
 - Waterfowl Transect
 - Lake
 - Pond
 - Map Base
 - Esker or Esker Access Road
 - Proposed Haul Road (AEM, Nov. 2015)
 - Shoreline Survey Area *
 - LSA Boundary
 - RSA Boundary

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2015 Shoreline Surveys



PROJECT: Whale Tail Pit & Haul Road

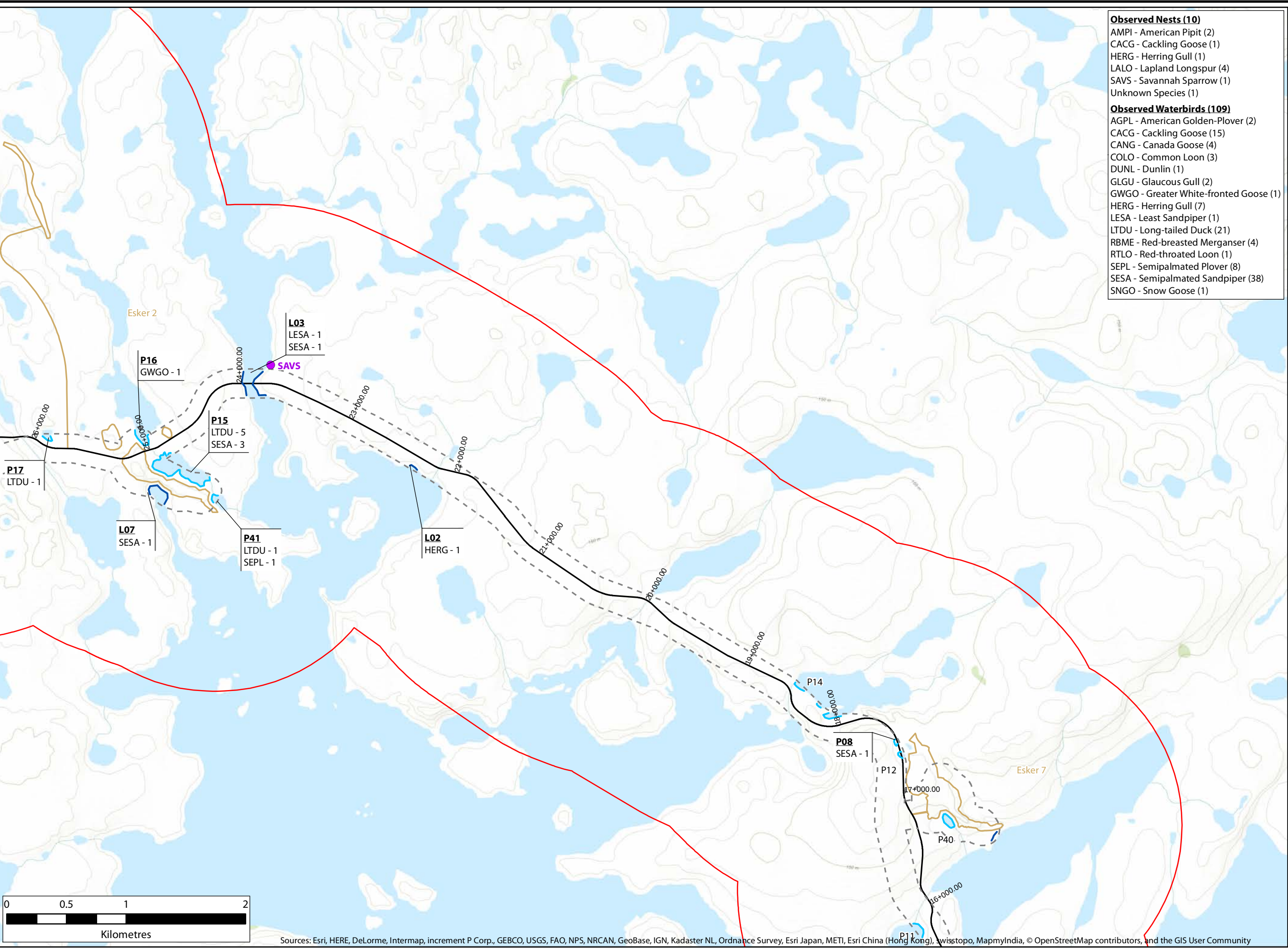
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Figure:
11.4

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- Legend**
- Nest
 - Waterfowl Transect
 - Lake
 - Pond
 - Map Base
 - Esker or Esker Access Road
 - Proposed Haul Road (AEM, Nov. 2015)
 - Shoreline Survey Area *
 - LSA Boundary
 - RSA Boundary

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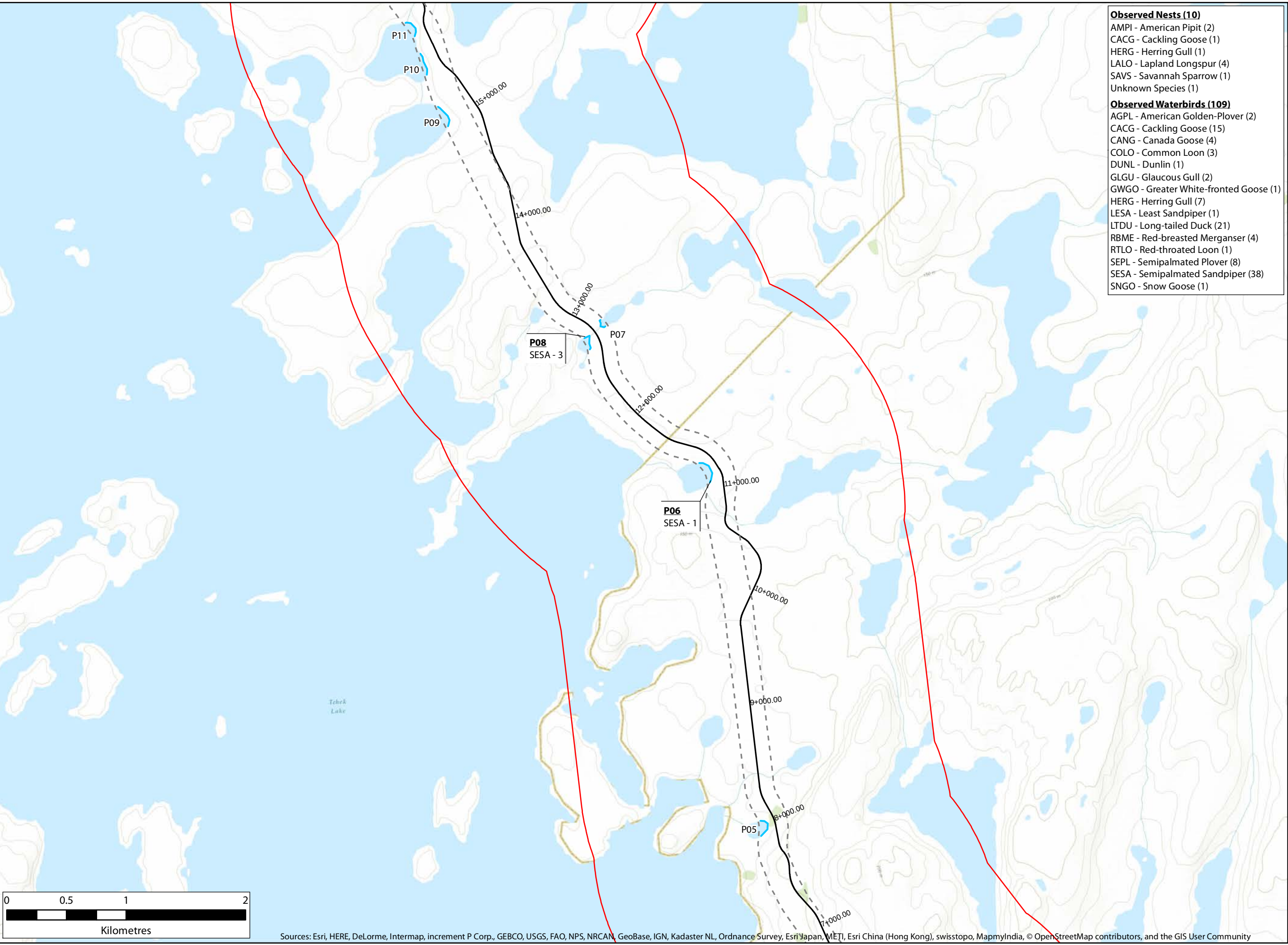
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Figure:
11.5

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- Legend**
- Waterfowl Transect**
- Pond
 - Proposed Haul Road (AEM, Nov. 2015)
 - Shoreline Survey Area *
 - LSA Boundary
 - RSA Boundary

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Terrestrial Baseline Characterization Report
2015 Shoreline Surveys



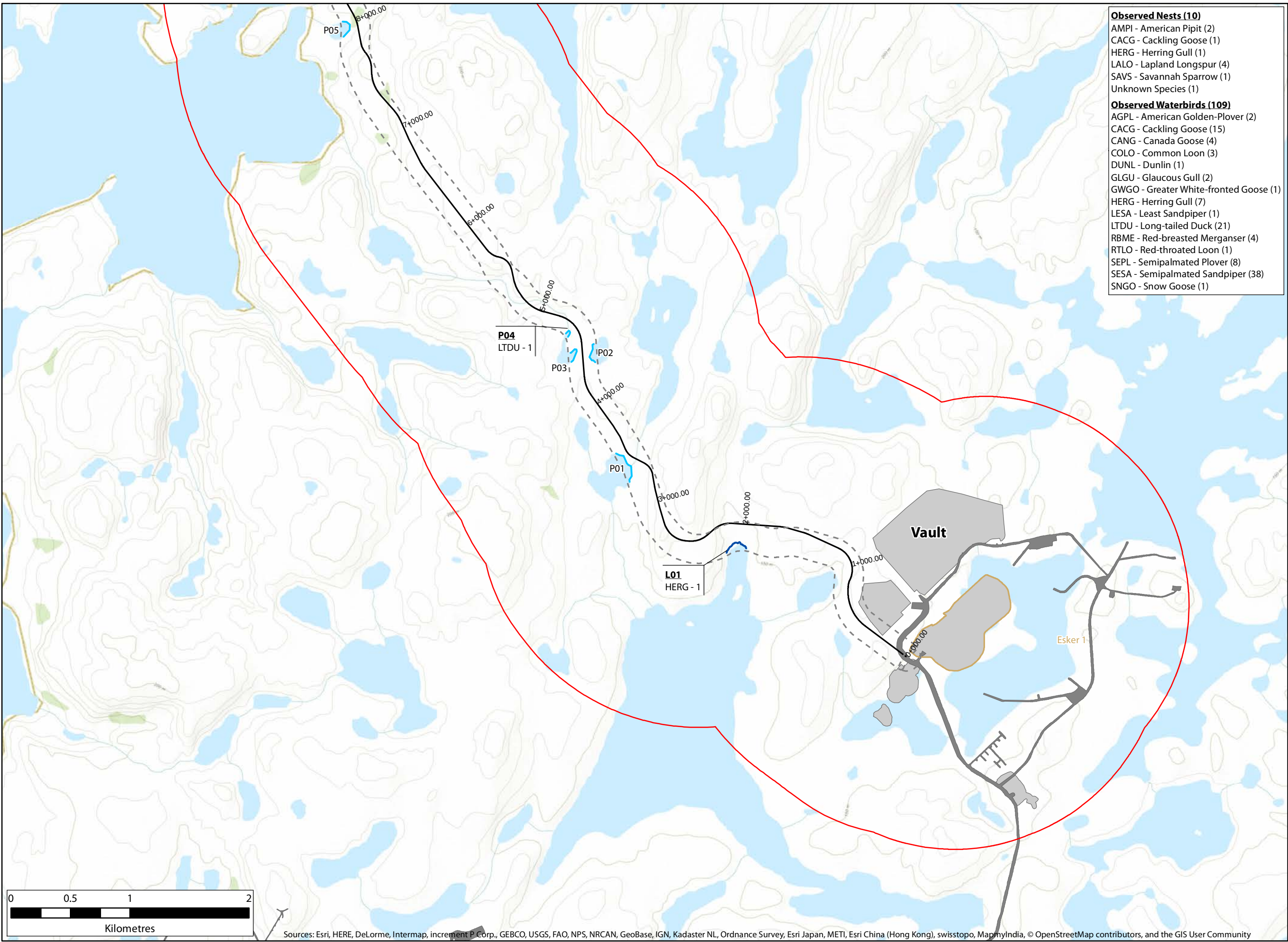
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Figure:
11.6

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- Legend**
- Waterfowl Transect**
- Lake
 - Pond
- Map Base**
- Esker or Esker Access Road
 - Proposed Haul Road (AEM, Nov. 2015)
 - Mine Site
 - Road
 - Shoreline Survey Area *
 - LSA Boundary
 - RSA Boundary

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Terrestrial Baseline Characterization Report
2015 Shoreline Surveys

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PROJECT: Whale Tail Pit & Haul Road

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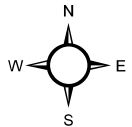
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	DRAWN BY: LC
	CHECKED BY: MAY

Figure:
11.7

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APPENDICES

- Appendix 1: ELC Data Sheet
- Appendix 2: Vascular Plant List
- Appendix 3: Non-Vascular Plant List
- Appendix 4: Accuracy Assessment Confusion Matrix
- Appendix 5: Meadowbank Plant Phenology Results
- Appendix 6: Wildlife Survey Data Sheets
- Appendix 7: Whale Tail PRISM Plots
- Appendix 8: Control PRISM Plots
- Appendix 9: Breeding Bird Transects
- Appendix 10: Shoreline Surveys
- Appendix 11: Ground Reconnaissance
- Appendix 12: Overall Wildlife Species List
- Appendix 13: Plot & Transect Locations

Surveyors:

SITE OBSERVATIONS									
Plot #:									
Quadrat location (lat/long):									
ELC type:									
Photo #:									
SITE: GENERAL	Slope (%)					SITE: SUBSTRATE (% cover)	Bedrock		
	Slope						Boulders (>50 cm)		
	Aspect						Stones (7.5 - 50)		
	Slope						Gravel (0.2- 7.5)		
	Shape						Soil		
	Slope Position						Vegetation		
	Moisture Regime						Water		
	Rooting Depth								
	Other								
VEGETATION COVER (% cover by layer)									
Tall Shrub	Low shrub	Herb	Graminoid	Moss	Lichen	Bare/rock	Overall Cover	Other	
SPECIES DOMINANCE SUMMARY (Species in Order of Decreasing Dominance, include multiple layers if present)									
FAUNA OBSERVATIONS									
May include: sighting, scat, burrows/dens - continue on back of sheet if needed)									

[illegible]

Appendix 2: Vascular Plant List

Count	Scientific Name	Common Name	Plant Status		
			Wild Species 2010 Ranking	Pan Arctic Flora Ranking (CC)	Pan Arctic Flora Ranking (HL)
1	<i>Andromeda polifolia</i>	Bog Rosemary	4	f	f
2	<i>Anemone multifida</i>	Cut-leaved Anemone	3	r	r
3	<i>Anemone</i> sp.	Anemone species			
4	<i>Antennaria friesiana</i>	Fries' Pussytoes	4	s	s
5	<i>Antennaria monocephala</i> ssp. <i>angustata</i>	Narrow-leaved Pygmy Pussytoes	4	s	s
6	<i>Antennaria</i> sp.	Pussytoes species			
7	<i>Anthoxanthum monticola</i> ssp. <i>alpinum</i>	Bent-awned Alpine Sweetgrass	4	f	f
8	<i>Arctagrostis latifolia</i> ssp. <i>latifolia</i>	Wide-leaved Polargrass	4	f	f
9	<i>Arctagrostis</i> sp.	Arctagrostis species			
10	<i>Arctostaphylos alpina</i>	Alpine Bearberry	4	f	f
11	<i>Arnica angustifolia</i>	Narrow-leaved Arnica	4	f	s
12	<i>Arnica</i> sp.	Arnica species			
13	<i>Artemesia borealis</i>	Boreal Wormwood	4	s	f
14	<i>Astragalus alpinus</i> var. <i>alpinus</i>	Alpine Milk-vetch	4	f	f
15	<i>Betula nana</i>	Arctic Dwarf Birch	4	NA	r
16	<i>Bistorta vivipara</i>	Alpine Bistort	4	f	f
17	<i>Calamagrostis purpurascens</i>	Purple Reedgrass	4	f	NA
18	<i>Calamagrostis</i> sp.	Reedgrass species			
19	<i>Calamagrostis stricta</i> ssp. <i>inexpansa</i>	Northern Reedgrass	4	r	r
20	<i>Calamagrostis stricta</i> ssp. <i>stricta</i>	Slim-stemmed Reedgrass	4	s	s
21	<i>Cardamine bellidifolia</i>	Alpine Bittercress	4	s	f
22	<i>Cardamine digitata</i>	Richardson's Bittercress	4		
23	<i>Cardamine</i> sp.	Bittercress species			
24	<i>Carex aquatilis</i>	Water Sedge	4	s	s
25	<i>Carex bigelowii</i> ssp. <i>bigelowii</i>	Bigelow's Sedge	4	s	f
26	<i>Carex capitata</i>	Capitate Sedge	3	r	r
27	<i>Carex chordorrhiza</i>	Creeping Sedge	4	f	s
28	<i>Carex glacialis</i>	Glacier Sedge	4	s	s
29	<i>Carex holostoma</i>	Arctic Marsh Sedge	4	s	s
30	<i>Carex limosa</i>	Mud Sedge	3	r	r
31	<i>Carex membranacea</i>	Fragile Sedge	4	f	f
32	<i>Carex nardina</i>	Nard Sedge	4		
33	<i>Carex oligosperma</i>	Few Seeded Sedge	5	NA	r
34	<i>Carex rariflora</i>	Loose-flowered Alpine Sedge	4	s	f
35	<i>Carex rotundata</i>	Round-fruited Sedge	4	s	r
36	<i>Carex rupestris</i>	Rock Sedge	4	f	f
37	<i>Carex saxatilis</i>	Russet Sedge	4	f	r
38	<i>Carex scirpoidea</i> ssp. <i>scirpoidea</i>	Single-spike Sedge	4	f	f
39	<i>Carex</i> sp.	Sedge species			
40	<i>Carex supina</i> ssp. <i>spaniocarpa</i>	Weak Arctic Sedge	4	s	s
41	<i>Carex vaginata</i>	Sheathed Sedge	4	s	f
42	<i>Cassiope tetragona</i>	Four-angled Mountain Heather	4	f	f
43	<i>Cerastium</i> sp.	Chickweed species			
44	<i>Chamerion latifolium</i>	River Beauty	4	f	f
45	<i>Comarum palustre</i>	Marsh Cinquefoil	4	s	f
46	<i>Diapensia lapponica</i>	Lapland Diapensia	4	r	f
47	<i>Draba lactea</i>	Milky Draba	4	f	f
48	<i>Draba nivalis</i>	Snow Draba	4	f	f
49	<i>Draba</i> sp.	Draba species			
50	<i>Dryas integrifolia</i>	Entire-leaved Mountain Avens	4	f	f
51	<i>Dryopteris fragrans</i>	Fragrant Wood Fern	4	f	f
52	<i>Dupontia fisheri</i>	Fisher's Tundra Grass	4	f	f
53	<i>Empetrum nigrum</i>	Black Crowberry	4	f	f
54	<i>Epilobium</i> sp.	Willowherb species			
55	<i>Equisetum arvense</i>	Field Horsetail	4	NA	s
56	<i>Erigeron</i> sp.	Fleabane species			
57	<i>Eriophorum angustifolium</i>	Narrow-leaved Cottongrass	4	f	f
58	<i>Eriophorum brachyantherum</i>	Closed-sheathed Cottongrass	4	r	s
59	<i>Eriophorum callitrix</i>	Beautiful Cottongrass	4	s	s
60	<i>Eriophorum russeolum</i> Fries ssp. <i>russeolum</i>	Russet Cottongrass	4	NA	r
61	<i>Eriophorum russeolum</i> ssp. <i>leiocarpum</i>	Smooth-fruited Russet Cottongrass	4	s	s
62	<i>Eriophorum scheuchzeri</i>	Scheuchzer's Cottongrass	4	s	f
63	<i>Eriophorum</i> sp.	Cottongrass species			
64	<i>Eriophorum triste</i>	Tall Cottongrass	NA	r	s
65	<i>Eriophorum vaginatum</i> ssp. <i>spissum</i>	Dense Cottongrass	4	s	f
66	<i>Eriophorum vaginatum</i> ssp. <i>vaginatum</i>	Tussock Cottongrass	4	f	NA
67	<i>Eutrema edwardsii</i>	Edwards' Mock Wallflower	4	NA	NA
68	<i>Festuca brachyphylla</i>	Short-leaved Fescue	4	f	f
69	<i>Huperzia selago</i>	Northern Firmoss	4	r	r
70	<i>Huperzia</i> sp.	Firmoss species			
71	<i>Juncus castaneus</i> ssp. <i>castaneus</i>	Chestnut Rush	4	NA	NA
72	<i>Juncus</i> sp.	Rush species			
73	<i>Kalmia procumbens</i>	Alpine Azalea	4	s	f
74	<i>Luzula confusa</i>	Northern Woodrush	4	f	f
75	<i>Luzula multiflora</i>	Many-flowered Woodrush	4	s	s
76	<i>Luzula nivalis</i>	Arctic Woodrush	4	NA	NA
77	<i>Luzula</i> sp.	Woodrush species			
78	<i>Luzula spicata</i>	Spiked Woodrush	3	r	s

Appendix 2: Vascular Plant List

Count	Scientific Name	Common Name	Plant Status		
			Wild Species 2010 Ranking	Pan Arctic Flora Ranking (CC)	Pan Arctic Flora Ranking (HL)
79	<i>Luzula wahlenbergii</i>	Wahlenberg's Woodrush	4	s	s
80	<i>Lycopodium</i> sp.	Clubmoss species			
81	<i>Micranthes</i> sp.	Saxifrage species			
82	<i>Minuartia</i> sp.	Stitchwort species			
83	<i>Oxyria digyna</i>	Mountain Sorrel	4	f	f
84	<i>Oxytropis arctica</i>	Arctic Locoweed	4	f	r
85	<i>Oxytropis maydelliana</i>	Maydell's Locoweed	4	f	f
86	<i>Oxytropis</i> sp.	Locoweed species			
87	<i>Papaver lapponicum</i>	Lapland Poppy	4	f	r
88	<i>Papaver</i> sp.	Poppy species			
89	<i>Pedicularis hirsuta</i>	Hairy Lousewort	4	s	f
90	<i>Pedicularis langsdorffii</i>	Langsdorff's Lousewort	4	f	r
91	<i>Pedicularis lanata</i> ssp. <i>lanata</i>	Wooly Lousewort	4	f	s
92	<i>Pedicularis lapponica</i>	Lapland Lousewort	4	s	f
93	<i>Pedicularis</i> sp.	Lousewort species			
94	<i>Pinguicula villosa</i>	Hairy Butterwort	3	r	s
95	<i>Poa abbreviata</i> ssp. <i>abbreviata</i>	Abbreviated Bluegrass	4	f	f
96	<i>Poa arctica</i> ssp. <i>arctica</i>	Arctic Bluegrass	4	f	f
97	<i>Poa glauca</i>	Glaucous Bluegrass	4	f	f
98	<i>Poa pratensis</i> ssp. <i>alpigena</i>	Alpine Meadow Bluegrass	4	s	f
99	<i>Poa</i> sp.	Bluegrass species			
100	<i>Potentilla hyperborea</i>	Arctic Cinquefoil	NA	f	f
101	<i>Potentilla nivea</i>	Snow Cinquefoil	4	s	s
102	<i>Potentilla pulchella</i>	Pretty Cinquefoil	4	f	f
103	<i>Potentilla</i> sp.	Cinquefoil species			
104	<i>Primula</i> sp.	Primrose species			
105	<i>Pyrola grandiflora</i>	Arctic Pyrola	4	f	f
106	<i>Pyrola</i> sp.	Pyrola species			
107	<i>Ranunculus</i> sp.	Buttercup species			
108	<i>Rhododendron lapponicum</i>	Lapland Rosebay	4	f	f
109	<i>Rhododendron tomentosum</i>	Northern Labrador-tea	4	f	f
110	<i>Rubus chamaemorus</i>	Cloudberry	4	s	f
111	<i>Salix alaxensis</i>	Alaska Willow	4	f	s
112	<i>Salix arbusculoides</i>	Little-tree Willow	4	r	r
113	<i>Salix arctica</i>	Arctic Willow	4	f	f
114	<i>Salix arctophylla</i>	Northern Willow	4	s	f
115	<i>Salix fuscescens</i>	Alaska Bog Willow	4	s	r
116	<i>Salix glauca</i> var. <i>cordifolia</i>	Beautiful Willow	4	r	f
117	<i>Salix herbacea</i>	Dwarf Willow	4	r	f
118	<i>Salix myrtillofolia</i>	Low Blueberry Willow	3	r	r
119	<i>Salix pedicularis</i>	Bog Willow	4	NA	r
120	<i>Salix planifolia</i>	Tea-leaved Willow	4	r	s
121	<i>Salix reticulata</i>	Net-veined Willow	4	f	f
122	<i>Salix richardsonii</i>	Richardson's willow	4	f	s
123	<i>Salix</i> sp.	Willow species			
124	<i>Saussurea angustifolia</i>	Narrow-leaved Sawwort	4	r	NA
125	<i>Saxifraga cespitosa</i>	Tufted Saxifrage	4	f	f
126	<i>Saxifraga rivularis</i>	Alpine Brook Saxifrage	4	r	s
127	<i>Saxifraga</i> sp.	Saxifrage species			
128	<i>Saxifraga tricuspidata</i>	Three-toothed Saxifrage	4	f	f
129	<i>Silene acaulis</i>	Moss Campion	4	f	f
130	<i>Silene involucrata</i>	Arctic Catchfly	4	f	f
131	<i>Silene</i> sp.	Campion species			
132	<i>Stellaria longipes</i>	Long-stalked Starwort	4	r	s
133	<i>Stellaria</i> sp.	Starwort or Chickweed species			
134	<i>Taraxacum</i> sp.	Dandelion species			
135	<i>Tofieldia pusilla</i>	Small Tofieldia	4	f	f
136	<i>Tofieldia</i> sp.	Tofieldia species			
137	<i>Vaccinium uliginosum</i>	Bog Bilberry	4	s	s
138	<i>Vaccinium vitis-idaea</i>	Mountain Cranberry	4	s	f

PLANT STATUS LEGEND

Wild Species 2010 Ranking	Pan Arctic Flora Ranking
From: CCESC 2011	Data adapted from: Elven et al. 2010
0.2 = Extinct	f = Frequent
0.1 = Extirpated	s = Scattered
1 = At Risk	r = Rare
2 = May Be At Risk	X = Present, Frequency Unknown
3 = Sensitive	? = Presence unknown
4 = Secure	b = borderline arctic taxon
5 = Undetermined	* = persistent adventive taxon
6 = Not Assessed	** = casual adventive taxon
7 = Exotic	CC = Central Canada
8 = Accidental	HL = Hudson Bay, Labrador, Southern Baffin

Appendix 3: Non-vascular Plant List

Count	Scientific Name	Authority	Status (Wild Species 2010)	Notes
Bryophytes*				
1	<i>Anastrophyllum minutum</i>	Damsholt 2009	-	2 samples collected & identified
2	<i>Aulacomnium turgidum</i>	FNA 2014	Secure	3 samples collected & identified
3	<i>Cephaloziella</i> sp.	Damsholt 2009	-	
4	<i>Cladopodiella fluitans</i>	Damsholt 2009	-	
5	<i>Dicranum acutifolium</i>	FNA 2007	Secure	2 samples collected & identified
6	<i>Dicranum elongatum</i>	FNA 2007	Secure	2 samples collected & identified
7	<i>Diplophyllum taxifolium</i>	Damsholt 2009	-	
8	<i>Ditrichum</i> sp.	small sample	Sp. not ranked	
9	<i>Lophozia</i> cf. <i>Attenuata</i>	small sample	-	
10	<i>Oncophorus wahlenbergii</i>	FNA 2007	Secure	
11	<i>Pohlia nutans</i>	FNA 2014	Secure	
12	<i>Polytrichum</i> cf. <i>Hyperboreum</i>	FNA 2007	Sensitive	small sample
13	<i>Polytrichum commune</i>	FNA 2007	Not ranked	
14	<i>Polytrichum juniperinum</i>	FNA 2007	Secure	2 samples collected & identified
15	<i>Polytrichum juniperinum</i>	FNA 2007		
15	<i>Polytrichum</i> sp.	FNA 2007	Sp. not ranked	characters most closely match P. <i>Hyperboreum</i> , but no individuals fastigately branched
16	<i>Ptilidium ciliare</i>	Damsholt 2009	-	3 samples collected & identified
17	<i>Ptilidium ciliare</i>	Damsholt 2009		
18	<i>Ptilidium ciliare</i>	Damsholt 2009		
17	<i>Racomitrium lanuginosum</i>	FNA 2007	Secure	3 samples collected & identified
18	<i>Racomitrium lanuginosum</i>	FNA 2007		
19	<i>Racomitrium lanuginosum</i>	FNA 2007		
18	<i>Sanionia uncinata</i>	FNA 2014	Secure	
19	<i>Sarmentypnum sarmentosum</i>	small sample	Secure	
20	<i>Scapania paludicola</i>	Schuster 1954	-	
21	<i>Sphagnum squarrosum</i>	FNA 2007	Sensitive	
Lichens**				
1	<i>Alectoria ochroleuca</i> (Hoffm.) A. Massal.	See "Identified Species"	-	Small sample associated with targeted collection of <i>Cladonia stellaris</i> . Usnic acid confirmed. 3 samples collected & identified
2	<i>Arctocetraria andrejevii</i> (Oksner) Kärnefelt & Thell	See "Identified Species"	Secure	Recent synonym = <i>Cetraria andrejevii</i> .
3	<i>Arctoparmelia centrifuga</i> (L.) Hale	See "Identified Species"	-	Alectronic and usnic acid confirmed.
4	<i>Bryocaulon divergens</i> (Ach.) Kärnefelt	See "Identified Species"	Secure	Olivetoric acid confirmed.
5	<i>Bryoria nitidula</i> (Th. Fr.) Brodo & D. Hawksw.	See "Identified Species"	-	Small sample associated with target collection of <i>Parmelia omphalodes</i> . Fumarprotocetraric acid confirmed.
6	<i>Cetraria islandica</i> (L.) Ach. subsp. <i>islandica</i>	See "Identified Species"	Not ranked	Fumarprotocetraric acid confirmed.
7	<i>Cladonia amaurocraea</i> (Florke) Schaerer	See "Identified Species"	-	Usnic acid confirmed. 2 samples collected & identified
8	<i>Cladonia coccifera</i> (L.) Willd. or <i>Cladonia borealis</i> S. Stenroos	See "Identified Species"	Undetermined	These two species are identical morphologically, but differ chemically. Thin layer chromatography is required to determine these chemicals.
9	<i>Cladonia gracilis</i> subsp. <i>gracilis</i> (L.) Willd.	See "Identified Species"	Undetermined	Fumarprotocetraric acid confirmed
10	<i>Cladonia pleurota</i> (Florke) Schaerer	See "Identified Species"	Secure	Usnic acid confirmed

Appendix 3: Non-vascular Plant List

Count	Scientific Name	Authority	Status (Wild Species 2010)	Notes
11	<i>Cladonia</i> sp.	See "Identified Species"	Sp not ranked	Immature, poorly developed.
12	<i>Cladonia stellaris</i> (Opiz) Pouzar & Vězda	See "Identified Species"	Secure	Usnic acid confirmed.
13	<i>Cladonia stygia</i> (Fr.) Ruoss	See "Identified Species"	Secure	Fumarprotocetraric acid confirmed
14	<i>Cladonia sulphurina</i> (Michaux) Fr.	See "Identified Species"	Sensitive	Usnic and squamatic acids confirmed
15	<i>Cladonia uncialis</i> (L.) Wigg	See "Identified Species"	Secure	Small sample associated with targeted collection of <i>Cladonia gracilis</i> subsp. <i>gracilis</i>
16	<i>Dactylina arctica</i> subsp. <i>arctica</i> (Hook. f.) Nyl.	See "Identified Species"	Secure	Gyrophoric acid confirmed.
17	<i>Flavocetraria cucullata</i> (Bellardi) Karnefelt & Thell	See "Identified Species"	Secure	Small samples associated with targeted collection of <i>Flavocetraria nivalis</i> & <i>Sphaerophorus globosus</i> . Usnic acid confirmed.
18	<i>Flavocetraria nivalis</i> (L.) Kärnefelt & A. Thell	See "Identified Species"	Secure	Usnic acid confirmed.
19	<i>Gowardia nigricans</i> (Ach.) P. Halonen, L. Myllys, S. Velmala, & H. Hyvärinen	See "Identified Species"	-	Small samples associated with targeted collection of <i>Cladonia sulphurina</i> and <i>Cladonia pleurota</i> , and <i>Parmelia omphalodes</i> . Aleoctorialic acid confirmed.
20	<i>Imadophila ericetorum</i> (L.) Zahlbr.	See "Identified Species"	-	Thamnolic acid confirmed
Lichens**				
21	<i>Nephroma expallidum</i> (Nyl.) Nyl.	See "Identified Species"	Secure	Moss collections in the bag as well.
22	<i>Ochrolechia frigida</i> (Sw.) Lynge	See "Identified Species"	-	Gyrophoric acid confirmed
23	<i>Ochrolechia grimmiae</i> Lynge	See "Identified Species"	-	This was in the same packet as <i>Ochrolechia upsaliensis</i> , and of equal size. Gyrophoric acid confirmed.
24	<i>Ochrolechia upsaliensis</i> (L.) A. Massal.	See "Identified Species"	-	This was in the same packet as <i>Ochrolechia grimmiae</i> , and of equal size.
25	<i>Ophioparma lapponica</i> (Räsänen) Hafellner & R. W. Rogers	See "Identified Species"	-	Divaricatic and usnic acids confirmed.
26	<i>Parmelia omphalodes</i> (L.) Ach.	See "Identified Species"	Secure	Small sample associated with targeted collection of <i>Cladonia sulphurina</i> and <i>Cladonia pleurota</i> . Salazinic acid confirmed. 3 samples collected & identified
27	<i>Peltigera</i> sp.	See "Identified Species"	Sp. not ranked	It is either <i>Peltigera aphthosa</i> (L.) Willd. or <i>Peltigera leucophlebia</i> (Nyl.) Gyelnik. The specimen is too young and poorly developed for species level identification.
28	<i>Porpidia flavocaerulescens</i> (Hornem.) Hertel & A. J. Schwab	See "Identified Species"	-	
29	<i>Psoroma hypnorum</i> (Vahl) Gray.	See "Identified Species"	Secure	2 samples collected & identified
30	<i>Rhizocarpon geographicum</i> (L.) DC.	See "Identified Species"	-	Rhizocarpic acid confirmed.
31	<i>Rusavsjia elegans</i> (Link) S. Y. Kondr. & Kärnefelt	See "Identified Species"	-	Recent synonym = <i>Xanthoria elegans</i> (Link) Th. Fr. Anthroquinones confirmed.
32	<i>Siphula ceratites</i> (Wahlenb.) Fr.	See "Identified Species"	-	Fertile, which is rare.
33	<i>Sphaerophorus fragilis</i> (L.) Pers.	See "Identified Species"	Secure	Sphaerophorin confirmed.

Appendix 3: Non-vascular Plant List

Count	Scientific Name	Authority	Status (Wild Species 2010)	Notes
34	<i>Sphaerophorus globosus</i> (Huds.) Vain.	See "Identified Species"	Secure	Sphaerophorin confirmed
35	<i>Stereocaulon arenarium</i> (Savicz) Lambaulon	See "Identified Species"	Secure	
36	<i>Stereocaulon</i> sp.	See "Identified Species"	Sp not ranked	It is either <i>S. grande</i> or <i>S. alpinum</i> but specimen lacks fruiting bodies and is too immature for species level identification.
37	<i>Stereocaulon paschale</i> (L.) Hoffm.	See "Identified Species"	Secure	Abundant fibrous cephalodia
38	<i>Thamnolia vermicularis</i> (Sw.) Ach. ex Schaerer	See "Identified Species"	-	Both chemotypes of this species were in the bag - var. <i>vermicularis</i> (thamnoli acid confirmed, and var. <i>subuliformis</i> (baeomycesic and squamatic acids confirmed). Each variety was placed in its own packet.
39	<i>Umbilicaria proboscidea</i> (L.) Schrader	See "Identified Species"	Secure	This was in the same packet as <i>Umbilicaria torrefacta</i> , both species are equally abundant in the bag.
40	<i>Umbilicaria torrefacta</i> (Lightf.) Schrader	See "Identified Species"	Secure	This was in the same packet as <i>Umbilicaria proboscidea</i> , both species are equally abundant in the bag.

* Bryophyte Identifications completed by Eleanor Edye, September 2015.

** Lichen Identifications completed by R. Troy McMullin, September 18, 2015.

Appendix 4: Accuracy Assessment Confusion Matrix

ELC Community Type		Corrected ELC Community Type																	
		Boulder/Gravel	Graminoid Tundra	Graminoid/Shrub Tundra	Heath Tundra	Heath Upland	Heath Upland/Rock Complex	Lichen Tundra	Lichen/Rock Complex	Sand	Shrub Tundra	Shrub/Heath Tundra	Wet Graminoid	Water	Grand Total	Row Probability	Correctly Assigned	Incorrectly Assigned	Assignment Accuracy
Mapped ELC Community Type	Boulder/Gravel	7							2						9	0.07	7	2	0.78
	Graminoid Tundra		4	1								1	2		8	0.06	4	4	0.50
	Graminoid/Shrub Tundra		1	4			1								6	0.05	4	2	0.67
	Heath Tundra			1	10	2		1			1				15	0.12	10	5	0.67
	Heath Upland				1	12		2							15	0.12	12	3	0.80
	Heath Upland/Rock Complex						6								6	0.05	6	0	1.00
	Lichen Tundra						2	4					1		7	0.05	4	3	0.57
	Lichen/Rock Complex		1					1	15				2		19	0.15	15	4	0.79
	Sand			1	2		1	1		6		1			12	0.09	6	6	0.50
	Shrub Tundra			1							9		1		11	0.09	9	2	0.82
	Shrub/Heath Tundra		2	1		1					2	7			13	0.10	7	6	0.54
	Wet Graminoid		1										5		6	0.05	5	1	0.83
	Water									1				0	1	0.01	0	1	0.00
	Grand Total		7	9	9	13	15	10	9	17	7	12	9	11	0				
Probability		0.05	0.07	0.07	0.10	0.12	0.08	0.07	0.13	0.05	0.09	0.07	0.09	0.00					

Column Total	7	9	9	13	15	10	9	17	7	12	9	11	0	
Row Total	9	8	6	15	15	6	7	19	12	11	13	6	1	
Column Prop	0.05	0.07	0.07	0.1	0.12	0.08	0.07	0.13	0.05	0.09	0.07	0.09	0	
Row Prop	0.07	0.06	0.05	0.12	0.12	0.05	0.05	0.15	0.09	0.09	0.1	0.05	0.01	Sum
Product	0	0	0	0.01	0.01	0	0	0.02	0.01	0.01	0.01	0	0	0.09
Observed Proportion =	0.7	Accuracy												
Expected Proportion =	0.09	Chance Agreement												
Kappa =	0.67													

Appendix 5: Meadowbank Plant Phenology Results

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MEADOWBANK GOLD PROJECT BASELINE TERRESTRIAL ECOSYSTEM REPORT

Table 3.5: Preliminary Results of Phenology Studies

Month	May		June				July				July				August				Sept												
Time period ->	25-31	1 to 7	8 to 14	15 to 21	22 to 28	Jun 29-Jul 5	6 to 12	13 to 19	20 to 26	27-Aug. 2	3 to 9	10 to 16	17 to 23	24 to 30	31-Sept 6	7 to 13															
Checked on ->	27	5	10	17	24	4	9	14	22	29	7	none	21	29	none	11															
Plot #1 Sedge																															
Carex	D	G1	G1	G1		G1		G2		G3	G3	G4	G4	G5	G5	G6	G5	G8	G8							G8	G8				
Cottongrass	G3	G3		G3	G3		G3	F1	G2		G3	G4	G4	G4	G5	G5	G6	G5	G8	G8						G8	G8	G8	G8		
Mountain avens	D	D		L1	L1		L2		L2		F1	L3	F2	L3	F5	L3	F5	L4	F6	L6	F10				L6	F10	L7	F10	L8	D	
Labrador tea	D	D		D	D		L2		L3		F1	L3	F2	L3	F2	L3	F2	L4	F6	L4	F9				L4	F9	L5	F10	L4	F10	
Blueberry	D	D		D	D		D		L1		F1	L2	F2	L3	F3	L3	F4	L4	F6	L5	F7				L5	F8	L5	F8	L8	F10	
Arctic heather	D		L1	L1	D		L3		L1		F1	L3	F2	L3	F5	L4	F6	L4	F6	L4	F6				?	?	L5	F9	L6	F10	
Plot #2 Birch Seep																															
Dwarf birch							L2		F1	L2	F1	L3	F2	L3	F6	L3	F6	L3	F6							L4	F6	L5	F10	L8	D
Labrador tea							L2		F1	L3	F1	L3	F1	L4	F6	L4	F6	L4	F6							L4	F9	L4	F10	L4	F10
Blueberry							L1			L3	F1	L3	F2	L3	F6	L4	F6	L5	F6							L4	F8	L5	F8	L7	D
Lingonberry							L1		F1	L3	F1	L3	F1	L4	F5	L4	F6	L5	F7							L4	F7	L4	F7	L5	F8
Arctic heather							L2		F1	L3	F2	L3	F3	L4	F5	L4	F6	L4	F6							L4	F9	L5	F9	L5	F9
Crowberry							L2		F1	L3	F1	L3	?	L4	F6	L4	F6	L4	F6							L4	F8	L4	F8	L5	F8
Plot #3 Snowbank																															
Least willow							L1	F1	L3		F2	L3	F2	L3	F3	L3	F6	L3	F6	L3	F10					L3	F10	L4	F10	L8	F10
Prickly saxifrage							D		L3		F2	L3	F1	L3	F2	L3	F3	L3	F6	L3	F6					L4	F9	L4	F10	L8	D
Labrador tea							L1		L2		F1	L3	F1	L3	F2	L4	F6	L4	F6	L4	F6					L4	F9	L5	F10	L5	F10
Alpine arnica							D		L2		F1	L3	F3	L3	F2	L3	F5	L3	F5	L3	F6					L4	F6	L4	F10	L5	D
Blueberry							D		L2		F1	L3	F2	L3	F3	L4	F5	L4	F6	L4	F6					L5	F8	L5	F8	L8	F10
Star chickweed							D		L3		F2	L3	F2	?	?	L3	F3	L3	F5	L3	F6					L3	F6	L3	F10	L6	D
Plot #4 Heath Tundra																															
Carex sedges	D	D		D	D		G1		G2			G3		G3		?	?	?	?	G6	G8					G8	G8	?	?	?	?
Blueberry	D	D		D	D		D		L2		F1	L3	F2	L3	F3	L4	F5	L4	F6	L4	F7				L4	F8	L5	F8	L6	F10	
Lingonberry	D	D		L1	L1		L3	D	L3		F2	L3	F1	L3	F2	L3	F5	L4	F6	L4	F7				L4	F7	L4	F7	L5	F8	
Bearberry	D	D		D	L1		L1	D	L2		F1	L3	F1	L3	F1	L3	F6	L4	F6	L4	F7				L5	F8	L5	F8	L6	D	
Dwarf birch	D	D		D	D		D		L3		F2	L3	F2	L3	F3	L3	F6	L3	F6	L3	F6				L4	F6	L5	F10	L8	D	
Labrador tea	D		L1	L1	L1		L1	D	L3		F2	L3	F2	L3	F3	L4	F6	L4	F6	L4	F6				L4	F9	L4	F10	L4	F10	
Arctic heather	D		L1	L1	L1		L1	D	L2		F2	L3	F3	L3	F5	L4	F6	L4	F6	L4	F6				L4	F9	L4	F10	L5	F10	
Plot #5 Lichen-Rock																															
Labrador tea					D		L1	D	L2		F2	L2	F1	L3	F2	L4	F5	L4	F6	L4	F6					L4	F9	L5	F10	L5	F10
Arctic heather					D		D		L2		F1	L3	F3	L3	F3	L4	F6	L4	F6	L4	F6					L4	F9	L5	F9	L5	F10
Lingonberry					D		D		L2		F1	L3	F1	L3	F1	L3	F4	L4	F6	L5	F7					L5	F7	L5	F7	L5	F8
Blueberry					D		D		L2		F1	L3	F1	L3	F2	L4	F5	L4	F6	L5	F6					L5	F8	L5	F8	L6	F10
Crowberry					D		D		L2		F1	L2	F1	L3	F6	L4	F6	L4	F6	L4	F6					L5	F8	L5	F8	L5	F8
Plot #6 Avens Community																															
Carex sedges	D	D		D	D		G2		G2			G3	G3	G3	G3																
Mountain avens	D	D		L1	L3	F1	L3	F1	L3		F2	L3	F3	L3	F5	G5	G5	G6	G5	G6	G8					G8	G8	G8	G8	D	G8
Willow	D		L1	L1	L1	F1	L1	F1	L2		F1	L3	F2	L3	F5	L4	F6	L4	F6	L4	F10					L4	F10	L5	F10	L6	D
Blueberry	D	D		D	D		D		L1		F1	L3	F2	L3	F3	L3	F10	L3	F6	L3	F6					L3	F9	L3	F10	L8	F10
Arctic heather	D	D		L1	L3	F1	L3	F1	L2		F1	L3	F3	?	?	L3	F1	L4	F6	L3	?					L5	F8	L5	?	L6	D

Appendix 5: Meadowbank Plant Phenology Results

CUMBERLAND
RESOURCES LTD.

MEADOWBANK GOLD PROJECT
BASELINE TERRESTRIAL ECOSYSTEM REPORT

Table 3.5 – Continued

TABLE 3.5: COLOUR CODES

The following are the colour codes used in delineating phases of vegetative life cycle and bloom. Charts are attached, following the bloom by plant association and species within an association.

	Dormancy
	Spring greenup
	Foliage full
	Flower buds visible
	First flowers
	Full bloom
	Fall colour, flowers fading, berries developing
	Seeds dispersing/berries ripe
	Dormancy
	Snow cover

GRASS, LEAF, & FLOWER CODES:

Grass/Sedge Codes:

D = Dormant; winter state
G1 = New leaves appear at base
G2 = Flower stalk just visible, no flowers yet
G3 = Stalk elongated, flower structure visible
G4 = Full bloom, stamens present, pollen being shed
G5 = Seeds forming
G6 = Leaves turning brown
G8 = Seeds being released

Leaf Codes:

D = Dormant; winter state
L1 = Leaf buds swelling
L2 = Leaves starting to unfurl
L3 = Fully leafed out
L4 = First leaves changing colour
L5 = Fall colour in most leaves
L6 = Leaves withering or winter colour
L7 = Leaf fall starting (less than 10%)
L8 = Main leaf fall/leaves withering

Flower Codes:

D = Dormant; winter state
F1 = Flower structures barely visible
F2 = First open flowers (less than 10% of flowers open)
F3 = Full bloom; pollen on anthers
F4 = Pollination occurring, pollen on stigmas
F5 = 1st petals (< than 10%) fading/falling
F6 = Fruits/seeds developing
F7 = Berries starting to ripen (<10% are ripe)
F8 = Berries fully ripe
F9 = Seed capsules mature (dry)
F10 = Seeds being released

**Look at individual plants, determine the average condition of each species, and
Record codes under correct column below.**

AMARUQ PROJECT – BREEDING BIRD TRANSECTS – 2015

Temperature:_____ **Wind Speed**_____ **Wind Direction** _____ **Precipitation** _____

[illegible]

Appendix 6: Wildlife Data Sheets

RAPID SURVEY PLOT SUMMARY FORM

Date: _____

AMARUQ MONITORING PROGRAM

Surveyors: _____

Site: _____

Plot: _____

Time: IN _____h OUT _____h

Incidentals¹: _____

Weather:

Estimated Temp: _____ °C

Cloud Cover: ☐ Clear (0 tenths)
☐ Mainly clear (1 to 4 tenths)
☐ Mostly cloudy (5 to 9 tenths)
☐ Cloudy (10 tenths)

Precipitation: ☐ None ☐ Freezing rain
☐ Drizzle ☐ Freezing drizzle
☐ Rain ☐ Snow

Wind: ☐ Calm (<1kph; smoke rises vertically)
☐ Light air (1-5kph; smoke would drift)
☐ Light Breeze (6-11kph; felt on face, leaves rustle)
☐ Gentle Breeze (12-19kph; leaves, small twigs constant motion)
☐ Moderate breeze (20-28kph; raises dust and loose paper)
☐ Fresh Breeze (29-38kph; crested wavelets)
☐ Strong Breeze (39-49kph; umbrella used with difficulty)
☐ Near Gale (50-61kph; inconvenience felt walking into wind) [If this or greater, should not be doing surveys!]

Species	Nests ^{2,3}	Probable Nest ^{2,4}	Pairs ²	Males ²	Females ²	Unknown Sex ³
Comments (Anything that we should know later when estimating no. of territories in plot from the info you have provided)						
Comments (Anything that we should know later when estimating no. of territories in plot from the info you have provided)						
Comments (Anything that we should know later when estimating no. of territories in plot from the info you have provided)						
Comments (Anything that we should know later when estimating no. of territories in plot from the info you have provided)						
Comments (Anything that we should know later when estimating no. of territories in plot from the info you have provided)						
Comments (Anything that we should know later when estimating no. of territories in plot from the info you have provided)						
Comments (Anything that we should know later when estimating no. of territories in plot from the info you have provided)						

¹ Notable species seen off the plot - flybys and off transect birds should also be added.

² If you see both a nest and the pair or a single bird associated with the nest, record just as the nest (i.e. highest breeding code) and note which parent(s) you saw in the comments.

³ Fill out the Nest Information Datasheet (**Nest Information – All Species**) for all nests found, on and off the plot.

⁴ Only used when a nest distraction display is seen or 99% sure has nest and don't have time to look for it.

Appendix 6: Wildlife Data Sheets

AMARUQ PLOT MAP- RAPID SURVEYS

Site:_____ Plot:_____ Date:_____ Time In:_____ Out:_____ Surveyors:_____

NW Corner

NE Corner

400																
350																
300																
250																
200																
150																
100																
50																
	25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400

SW Corner

SE Corner

Coordinates: SW:_____ NW:_____ NE:_____ SE:_____

AGNICO EAGLE MINES LTD. – AMARUQ GROUND RECONNAISSANCE SURVEY - 2015

[illegible]

⁴ **Direction of Travel** = N (North), NE (Northeast), E (East), SE (Southeast), S (South), SW (Southwest), W (West), and NW (Northwest)

AGNICO EAGLE MINES LTD. – AMARUQ WATERBIRD NEST SURVEY - 2015

[illegible]

² **Habitat** = WG (wet graminoid), GT (graminoid tundra), GS (graminoid/shrub tundra), ST (shrub tundra), SH (shrub/heath tundra), HT (heath tundra), HU (heath upland), HR (heath upland/rock complex), LT (lichen tundra), LR (lichen/rock complex), SA (sand), BG (boulder/gravel), DI (disturbance), and WA (water)

Appendix 7 – Whale Tail PRISM Plots

Plot No	Scientific Name	Common Name	No. Observed	Confirmed Nests	Probable Nests
1	<i>Acanthis</i> sp.	Redpoll species	3		
1	<i>Calcarius lapponicus</i>	Lapland Longspur	7		
1	<i>Eremophila alpestris</i>	Horned Lark	1		
2	<i>Calcarius lapponicus</i>	Lapland Longspur	15	1	
2	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1		
2	<i>Eremophila alpestris</i>	Horned Lark	3	1	
2	<i>Passerculus sandwichensis</i>	Savannah Sparrow	2		
2	<i>Pluvialis dominica</i>	American Golden-Plover	2		
4	<i>Acanthis</i> sp.	Redpoll species	4		
4	<i>Calcarius lapponicus</i>	Lapland Longspur	4		1
4	<i>Calidris pusilla</i>	Semipalmated Sandpiper	4		
4	<i>Eremophila alpestris</i>	Horned Lark	2		
4	<i>Lagopus muta</i>	Rock Ptarmigan	1		
5	<i>Acanthis hornemanni</i>	Hoary Redpoll	2	1	
5	<i>Acanthis</i> sp.	Redpoll species	5		
5	<i>Anthus rubescens</i>	American Pipit	1		
5	<i>Calcarius lapponicus</i>	Lapland Longspur	27		
5	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1		
5	<i>Eremophila alpestris</i>	Horned Lark	1		
5	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1		
5	<i>Pluvialis dominica</i>	American Golden-Plover	1		1
6	<i>Acanthis</i> sp.	Redpoll species	3		
6	<i>Calcarius lapponicus</i>	Lapland Longspur	33	3	
6	<i>Calidris pusilla</i>	Semipalmated Sandpiper	3		
6	<i>Eremophila alpestris</i>	Horned Lark	8		
6	<i>Lagopus muta</i>	Rock Ptarmigan	1		
6	<i>Passerculus sandwichensis</i>	Savannah Sparrow	3		
7	<i>Acanthis</i> sp.	Redpoll species	5		
7	<i>Calcarius lapponicus</i>	Lapland Longspur	13		
7	<i>Calidris pusilla</i>	Semipalmated Sandpiper	2		
7	<i>Lagopus muta</i>	Rock Ptarmigan	2		
8	<i>Acanthis hornemanni</i>	Hoary Redpoll	2		
8	<i>Acanthis</i> sp.	Redpoll species	3		
8	<i>Calcarius lapponicus</i>	Lapland Longspur	17		
8	<i>Calidris pusilla</i>	Semipalmated Sandpiper	4		
8	<i>Calidris</i> sp.	Sandpiper species	1		
8	<i>Eremophila alpestris</i>	Horned Lark	4		
8	<i>Lagopus muta</i>	Rock Ptarmigan	1		
8	<i>Pluvialis dominica</i>	American Golden-Plover	1		
9	<i>Acanthis</i> sp.	Redpoll species	1		
9	<i>Calcarius lapponicus</i>	Lapland Longspur	12		
9	<i>Eremophila alpestris</i>	Horned Lark	3		

Appendix 7 – Whale Tail PRISM Plots

Plot No	Scientific Name	Common Name	No. Observed	Confirmed Nests	Probable Nests
9	<i>Lagopus muta</i>	Rock Ptarmigan	1	1	
10	<i>Acanthis</i> sp.	Redpoll species	1		
10	<i>Anthus rubescens</i>	American Pipit	1		
10	<i>Calcarius lapponicus</i>	Lapland Longspur	11		
10	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1		1
10	<i>Eremophila alpestris</i>	Horned Lark	1		
11	<i>Acanthis</i> sp.	Redpoll species	2		
11	<i>Calcarius lapponicus</i>	Lapland Longspur	15		1
11	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1		
11	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1		
12	<i>Acanthis hornemanni</i>	Hoary Redpoll	2		
12	<i>Acanthis</i> sp.	Redpoll species	5		
12	<i>Anthus rubescens</i>	American Pipit	1		1
12	<i>Calcarius lapponicus</i>	Lapland Longspur	4		
12	<i>Eremophila alpestris</i>	Horned Lark	6		
12	<i>Lagopus muta</i>	Rock Ptarmigan	1		
12	<i>Plectrophenax nivalis</i>	Snow Bunting	1		
13	<i>Acanthis</i> sp.	Redpoll species	2		
13	<i>Calcarius lapponicus</i>	Lapland Longspur	8		
13	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1		
13	<i>Eremophila alpestris</i>	Horned Lark	1		
13	<i>Lagopus muta</i>	Rock Ptarmigan	1		
13	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1		
14	<i>Calcarius lapponicus</i>	Lapland Longspur	9		1
14	<i>Eremophila alpestris</i>	Horned Lark	3		
15	<i>Acanthis</i> sp.	Redpoll species	1		
15	<i>Calcarius lapponicus</i>	Lapland Longspur	4		
15	<i>Eremophila alpestris</i>	Horned Lark	3		
15	<i>Grus canadensis</i>	Sandhill Crane	1		
16	<i>Acanthis</i> sp.	Redpoll species	1		
16	<i>Calcarius lapponicus</i>	Lapland Longspur	14		
16	<i>Calidris</i> sp.	Sandpiper species	1		
16	<i>Charadrius semipalmatus</i>	Semipalmated Plover	1		1
16	<i>Lagopus muta</i>	Rock Ptarmigan	1		
17	<i>Acanthis flammea</i>	Common Redpoll	2		
17	<i>Acanthis</i> sp.	Redpoll species	2	1	
17	<i>Calcarius lapponicus</i>	Lapland Longspur	24	1	
17	<i>Eremophila alpestris</i>	Horned Lark	2		
18	<i>Acanthis</i> sp.	Redpoll species	3		
18	<i>Anthus rubescens</i>	American Pipit	1		
18	<i>Calcarius lapponicus</i>	Lapland Longspur	12		
18	<i>Eremophila alpestris</i>	Horned Lark	1		

Appendix 7 – Whale Tail PRISM Plots

Plot No	Scientific Name	Common Name	No. Observed	Confirmed Nests	Probable Nests
18	<i>Passerculus sandwichensis</i>	Savannah Sparrow	2		
19	<i>Acanthis</i> sp.	Redpoll species	1		
19	<i>Anthus rubescens</i>	American Pipit	7	1	
19	<i>Calcarius lapponicus</i>	Lapland Longspur	4		
19	<i>Eremophila alpestris</i>	Horned Lark	3		
20	<i>Acanthis</i> sp.	Redpoll species	1		
20	<i>Calcarius lapponicus</i>	Lapland Longspur	8	1	

Appendix 8 – Control PRISM Plots

Plot	Scientific Name	Common Name	No. Observed	Confirmed Nests	Probable Nests
1	<i>Acanthis</i> sp.	Redpoll species	2		
1	<i>Calcarius lapponicus</i>	Lapland Longspur	10	2	1
1	<i>Calidris alpina</i>	Dunlin	1		
1	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1		
1	<i>Eremophila alpestris</i>	Horned Lark	2		
1	<i>Grus canadensis</i>	Sandhill Crane	2		
1	<i>Mergus serrator</i>	Red-breasted Merganser	1		
1	<i>Passerculus sandwichensis</i>	Savannah Sparrow	2		
1	<i>Phalaropus lobatus</i>	Red-necked Phalarope	1		
2	<i>Acanthis</i> sp.	Redpoll species	5		
2	<i>Calcarius lapponicus</i>	Lapland Longspur	11	1	
2	<i>Calidris pusilla</i>	Semipalmated Sandpiper	2	1	1
2	<i>Clangula hyemalis</i>	Long-tailed Duck	2		
2	<i>Lagopus muta</i>	Rock Ptarmigan	2		
2	<i>Passerculus sandwichensis</i>	Savannah Sparrow	2		
3	<i>Acanthis hornemanni</i>	Hoary Redpoll	3		
3	<i>Acanthis</i> sp.	Redpoll species	1		
3	<i>Calcarius lapponicus</i>	Lapland Longspur	21	1	
3	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1		
3	<i>Clangula hyemalis</i>	Long-tailed Duck	2		
3	<i>Eremophila alpestris</i>	Horned Lark	4		
3	<i>Lagopus muta</i>	Rock Ptarmigan	1		
3	<i>Passerculus sandwichensis</i>	Savannah Sparrow	2		
4	<i>Acanthis</i> sp.	Redpoll species	2		
4	<i>Calcarius lapponicus</i>	Lapland Longspur	13		
4	<i>Eremophila alpestris</i>	Horned Lark	2		
4	<i>Lagopus muta</i>	Rock Ptarmigan	2		
5	<i>Acanthis</i> sp.	Redpoll species	1		
5	<i>Calcarius lapponicus</i>	Lapland Longspur	18	1	
5	<i>Calidris pusilla</i>	Semipalmated Sandpiper	2		
5	<i>Eremophila alpestris</i>	Horned Lark	2		
5	<i>Grus canadensis</i>	Sandhill Crane	2		
5	<i>Lagopus muta</i>	Rock Ptarmigan	1		
5	<i>Passerculus sandwichensis</i>	Savannah Sparrow	2		
6	<i>Acanthis hornemanni</i>	Hoary Redpoll	1		
6	<i>Acanthis</i> sp.	Redpoll species	1		
6	<i>Calcarius lapponicus</i>	Lapland Longspur	14		
6	<i>Eremophila alpestris</i>	Horned Lark	3		
6	<i>Lagopus muta</i>	Rock Ptarmigan	1		
7	<i>Acanthis</i> sp.	Redpoll species	1		

Appendix 8 – Control PRISM Plots

Plot	Scientific Name	Common Name	No. Observed	Confirmed Nests	Probable Nests
7	<i>Anthus rubescens</i>	American Pipit	1		
7	<i>Calcarius lapponicus</i>	Lapland Longspur	8		
7	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1		
7	<i>Eremophila alpestris</i>	Horned Lark	1		
7	<i>Passerculus sandwichensis</i>	Savannah Sparrow	2		
8	<i>Acanthis hornemanni</i>	Hoary Redpoll	2		
8	<i>Acanthis</i> sp.	Redpoll species	2		
8	<i>Calcarius lapponicus</i>	Lapland Longspur	15	1	
8	<i>Calidris pusilla</i>	Semipalmated Sandpiper	2	1	
8	<i>Eremophila alpestris</i>	Horned Lark	3		
8	<i>Lagopus muta</i>	Rock Ptarmigan	2		
8	<i>Passerculus sandwichensis</i>	Savannah Sparrow	4		
8	<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	2		
9	<i>Acanthis</i> sp.	Redpoll species	1		
9	<i>Calcarius lapponicus</i>	Lapland Longspur	12	1	
9	<i>Eremophila alpestris</i>	Horned Lark	2		
10	<i>Acanthis</i> sp.	Redpoll species	1		
10	<i>Anthus rubescens</i>	American Pipit	1		
10	<i>Calcarius lapponicus</i>	Lapland Longspur	8		
10	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1		
10	<i>Clangula hyemalis</i>	Long-tailed Duck	2		
10	<i>Passerculus sandwichensis</i>	Savannah Sparrow	3		
11	<i>Acanthis hornemanni</i>	Hoary Redpoll	5		
11	<i>Acanthis</i> sp.	Redpoll species	1		
11	<i>Anthus rubescens</i>	American Pipit	1		
11	<i>Calcarius lapponicus</i>	Lapland Longspur	11		1
11	<i>Passerculus sandwichensis</i>	Savannah Sparrow	3		
12	<i>Acanthis</i> sp.	Redpoll species	0	1	
12	<i>Anthus rubescens</i>	American Pipit	1		
12	<i>Calcarius lapponicus</i>	Lapland Longspur	10		
12	<i>Eremophila alpestris</i>	Horned Lark	6		
12	<i>Lagopus muta</i>	Rock Ptarmigan	1		
13	<i>Acanthis</i> sp.	Redpoll species	4		
13	<i>Calcarius lapponicus</i>	Lapland Longspur	16		
13	<i>Calidris pusilla</i>	Semipalmated Sandpiper	2		
13	<i>Lagopus muta</i>	Rock Ptarmigan	4		
13	<i>Passerculus sandwichensis</i>	Savannah Sparrow	3		
14	<i>Acanthis</i> sp.	Redpoll species	1		
14	<i>Anthus rubescens</i>	American Pipit	1		
14	<i>Calcarius lapponicus</i>	Lapland Longspur	9		

Appendix 8 – Control PRISM Plots

Plot	Scientific Name	Common Name	No. Observed	Confirmed Nests	Probable Nests
14	<i>Eremophila alpestris</i>	Horned Lark	2		
14	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1		
15	<i>Calcarius lapponicus</i>	Lapland Longspur	12	1	
15	<i>Eremophila alpestris</i>	Horned Lark	1		
15	<i>Lagopus muta</i>	Rock Ptarmigan	1		
16	<i>Acanthis</i> sp.	Redpoll species	1		1
16	<i>Anthus rubescens</i>	American Pipit	1		
16	<i>Calcarius lapponicus</i>	Lapland Longspur	4		1
16	<i>Eremophila alpestris</i>	Horned Lark	1		
16	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1		1
17	<i>Acanthis</i> sp.	Redpoll species	3		
17	<i>Anthus rubescens</i>	American Pipit	1		
17	<i>Calcarius lapponicus</i>	Lapland Longspur	10		
17	<i>Calidris pusilla</i>	Semipalmated Sandpiper	2		
17	<i>Eremophila alpestris</i>	Horned Lark	4		
18	<i>Anthus rubescens</i>	American Pipit	1		1
18	<i>Calcarius lapponicus</i>	Lapland Longspur	12	1	
18	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1		
18	<i>Eremophila alpestris</i>	Horned Lark	3		
18	<i>Passerculus sandwichensis</i>	Savannah Sparrow	3		
18	<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	1		
19	<i>Acanthis</i> sp.	Redpoll species	2		
19	<i>Calcarius lapponicus</i>	Lapland Longspur	12		
19	<i>Calidris minutilla</i>	Least Sandpiper	2	1	
19	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1		
19	<i>Eremophila alpestris</i>	Horned Lark	1		
19	<i>Lagopus muta</i>	Rock Ptarmigan	1		
19	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1		
20	<i>Acanthis</i> sp.	Redpoll species	1		
20	<i>Anthus rubescens</i>	American Pipit	1		
20	<i>Calcarius lapponicus</i>	Lapland Longspur	4	2	1
20	<i>Charadrius semipalmatus</i>	Semipalmated Plover	1		1
20	<i>Eremophila alpestris</i>	Horned Lark	2		
20	<i>Lagopus muta</i>	Rock Ptarmigan	1		

Appendix 9 – Breeding Bird Transects

Transect	Scientific Name	Common Name	No. Observed
1	<i>Acanthis hornemanni</i>	Hoary Redpoll	1
1	<i>Acanthis</i> sp.	Redpoll species	13
1	<i>Anthus rubescens</i>	American Pipit	4
1	<i>Calcarius lapponicus</i>	Lapland Longspur	54
1	<i>Calidris minutilla</i>	Least Sandpiper	1
1	<i>Eremophila alpestris</i>	Horned Lark	19
1	<i>Grus canadensis</i>	Sandhill Crane	1
1	<i>Lagopus muta</i>	Rock Ptarmigan	3
1	<i>Lepus arcticus</i>	Arctic Hare	3
1	<i>Passerculus sandwichensis</i>	Savannah Sparrow	5
1	<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	2
2	<i>Acanthis flammea</i>	Common Redpoll	1
2	<i>Acanthis hornemanni</i>	Hoary Redpoll	8
2	<i>Acanthis</i> sp.	Redpoll species	5
2	<i>Anthus rubescens</i>	American Pipit	2
2	<i>Calcarius lapponicus</i>	Lapland Longspur	70
2	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
2	<i>Eremophila alpestris</i>	Horned Lark	15
2	<i>Lagopus muta</i>	Rock Ptarmigan	6
2	<i>Passerculus sandwichensis</i>	Savannah Sparrow	8
2	<i>Pluvialis dominica</i>	American Golden-Plover	2
2	<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	5
3	<i>Acanthis hornemanni</i>	Hoary Redpoll	1
3	<i>Acanthis</i> sp.	Redpoll species	9
3	<i>Anthus rubescens</i>	American Pipit	4
3	<i>Branta canadensis</i>	Canada Goose	1
3	<i>Calcarius lapponicus</i>	Lapland Longspur	45
3	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
3	<i>Clangula hyemalis</i>	Long-tailed Duck	2
3	<i>Eremophila alpestris</i>	Horned Lark	8
3	<i>Gavia immer</i>	Common Loon	1
3	<i>Lagopus muta</i>	Rock Ptarmigan	4
3	<i>Lepus arcticus</i>	Arctic Hare	1
3	<i>Mustela erminea</i>	Ermine	1
3	<i>Passerculus sandwichensis</i>	Savannah Sparrow	7
3	<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	8
4	<i>Acanthis hornemanni</i>	Hoary Redpoll	5
4	<i>Acanthis</i> sp.	Redpoll species	10
4	<i>Anthus rubescens</i>	American Pipit	1
4	<i>Branta canadensis</i>	Canada Goose	1
4	<i>Calcarius lapponicus</i>	Lapland Longspur	36
4	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
4	<i>Eremophila alpestris</i>	Horned Lark	13

Appendix 9 – Breeding Bird Transects

Transect	Scientific Name	Common Name	No. Observed
4	<i>Lagopus muta</i>	Rock Ptarmigan	3
4	<i>Passerculus sandwichensis</i>	Savannah Sparrow	4
4	<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	1
5	<i>Acanthis hornemanni</i>	Hoary Redpoll	4
5	<i>Acanthis</i> sp.	Redpoll species	5
5	<i>Anthus rubescens</i>	American Pipit	4
5	<i>Branta canadensis</i>	Canada Goose	1
5	<i>Calcarius lapponicus</i>	Lapland Longspur	25
5	<i>Cricetidae</i>	Mammal species	1
5	<i>Eremophila alpestris</i>	Horned Lark	9
5	<i>Lagopus muta</i>	Rock Ptarmigan	2
5	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
5	<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	3
6	<i>Acanthis hornemanni</i>	Hoary Redpoll	2
6	<i>Acanthis</i> sp.	Redpoll species	11
6	<i>Branta canadensis</i>	Canada Goose	1
6	<i>Calcarius lapponicus</i>	Lapland Longspur	34
6	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
6	<i>Eremophila alpestris</i>	Horned Lark	4
6	<i>Lagopus muta</i>	Rock Ptarmigan	3
6	<i>Passerculus sandwichensis</i>	Savannah Sparrow	2
6	<i>Vulpes lagopus</i>	Arctic Fox	2

Appendix 10 – Shoreline Surveys

Shoreline Feature (L – Lake; P – Pond)	Scientific Name	Common Name	No. Observed
L01	<i>Calcarius lapponicus</i>	Lapland Longspur	1
L01	<i>Larus argentatus</i>	Herring Gull	1
L02	<i>Acanthis hornemanni</i>	Hoary Redpoll	1
L02	<i>Larus argentatus</i>	Herring Gull	1
L03	<i>Calcarius lapponicus</i>	Lapland Longspur	4
L03	<i>Calidris minutilla</i>	Least Sandpiper	1
L03	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
L03	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
L04	<i>Acanthis</i> sp.	Redpoll species	2
L04	<i>Calcarius lapponicus</i>	Lapland Longspur	2
L04	<i>Eremophila alpestris</i>	Horned Lark	2
L05	<i>Acanthis</i> sp.	Redpoll species	1
L05	<i>Calcarius lapponicus</i>	Lapland Longspur	1
L06	<i>Lagopus muta</i>	Rock Ptarmigan	1
L07	<i>Acanthis</i> sp.	Redpoll species	1
L07	<i>Calcarius lapponicus</i>	Lapland Longspur	1
L07	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
L07	<i>Spermophilus parryii</i>	Arctic Ground Squirrel	1
L08	<i>Acanthis hornemanni</i>	Hoary Redpoll	2
L08	<i>Acanthis</i> sp.	Redpoll species	6
L08	<i>Calcarius lapponicus</i>	Lapland Longspur	20
L08	<i>Calidris pusilla</i>	Semipalmated Sandpiper	4
L08	<i>Eremophila alpestris</i>	Horned Lark	2
L08	<i>Lagopus muta</i>	Rock Ptarmigan	1
L08	<i>Larus hyperboreus</i>	Glaucous Gull	1
L08	<i>Passerculus sandwichensis</i>	Savannah Sparrow	4
L08	<i>Spermophilus parryii</i>	Arctic Ground Squirrel	4
L08	<i>Vulpes lagopus</i>	Arctic Fox	1
L09	<i>Acanthis hornemanni</i>	Hoary Redpoll	3
L09	<i>Anthus rubescens</i>	American Pipit	4
L09	<i>Branta canadensis</i>	Canada Goose	1
L09	<i>Calcarius lapponicus</i>	Lapland Longspur	14
L09	<i>Charadrius semipalmatus</i>	Semipalmated Plover	2
L09	<i>Eremophila alpestris</i>	Horned Lark	4
L09	<i>Gavia immer</i>	Common Loon	1
L09	<i>Larus argentatus</i>	Herring Gull	1
L09	<i>Mergus serrator</i>	Red-breasted Merganser	1
L09	<i>Ovibos moschatus</i>	Muskox	1
L09	<i>Passerculus sandwichensis</i>	Savannah Sparrow	2

Appendix 10 – Shoreline Surveys

Shoreline Feature (L – Lake; P – Pond)	Scientific Name	Common Name	No. Observed
L09	<i>Spermophilus parryii</i>	Arctic Ground Squirrel	8
L10	<i>Acanthis</i> sp.	Redpoll species	5
L10	<i>Anthus rubescens</i>	American Pipit	1
L10	<i>Branta canadensis</i>	Canada Goose	1
L10	<i>Calcarius lapponicus</i>	Lapland Longspur	12
L10	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
L10	<i>Chen caerulescens</i>	Snow Goose	1
L10	<i>Eremophila alpestris</i>	Horned Lark	4
L10	<i>Gavia immer</i>	Common Loon	2
L10	<i>Lagopus muta</i>	Rock Ptarmigan	3
L10	<i>Mergus serrator</i>	Red-breasted Merganser	1
L10	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
L10	<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	1
P01	<i>Acanthis</i> sp.	Redpoll species	3
P01	<i>Anthus rubescens</i>	American Pipit	1
P01	<i>Calcarius lapponicus</i>	Lapland Longspur	3
P01	<i>Spermophilus parryii</i>	Arctic Ground Squirrel	1
P01	<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	1
P02	<i>Acanthis</i> sp.	Redpoll species	1
P02	<i>Calcarius lapponicus</i>	Lapland Longspur	2
P02	<i>Eremophila alpestris</i>	Horned Lark	1
P02	<i>Spermophilus parryii</i>	Arctic Ground Squirrel	1
P02	<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	1
P03	<i>Anthus rubescens</i>	American Pipit	1
P03	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P04	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P04	<i>Clangula hyemalis</i>	Long-tailed Duck	1
P05	<i>Acanthis hornemanni</i>	Hoary Redpoll	1
P05	<i>Anthus rubescens</i>	American Pipit	1
P05	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
P06	<i>Calcarius lapponicus</i>	Lapland Longspur	2
P06	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
P07	<i>Acanthis hornemanni</i>	Hoary Redpoll	1
P07	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P08	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P08	<i>Calidris pusilla</i>	Semipalmated Sandpiper	2
P09	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P09	<i>Passerculus sandwichensis</i>	Savannah Sparrow	3
P10	<i>Calcarius lapponicus</i>	Lapland Longspur	1

Appendix 10 – Shoreline Surveys

Shoreline Feature (L – Lake; P – Pond)	Scientific Name	Common Name	No. Observed
P11	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P11	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
P11	<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	1
P12	<i>Acanthis</i> sp.	Redpoll species	1
P12	<i>Anthus rubescens</i>	American Pipit	1
P12	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P13	<i>Acanthis</i> sp.	Redpoll species	1
P13	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
P13	<i>Eremophila alpestris</i>	Horned Lark	1
P14	<i>Acanthis</i> sp.	Redpoll species	3
P14	<i>Anthus rubescens</i>	American Pipit	1
P14	<i>Calcarius lapponicus</i>	Lapland Longspur	3
P14	<i>Eremophila alpestris</i>	Horned Lark	3
P14	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
P14	<i>Spermophilus parryii</i>	Arctic Ground Squirrel	2
P15	<i>Calcarius lapponicus</i>	Lapland Longspur	2
P15	<i>Calidris pusilla</i>	Semipalmated Sandpiper	2
P15	<i>Clangula hyemalis</i>	Long-tailed Duck	1
P15	<i>Eremophila alpestris</i>	Horned Lark	1
P16	<i>Anser albifrons</i>	Greater White-fronted Goose	1
P16	<i>Calcarius lapponicus</i>	Lapland Longspur	2
P16	<i>Spermophilus parryii</i>	Arctic Ground Squirrel	1
P17	<i>Clangula hyemalis</i>	Long-tailed Duck	1
P18	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P18	<i>Lagopus muta</i>	Rock Ptarmigan	1
P19	<i>Calcarius lapponicus</i>	Lapland Longspur	2
P21	<i>Acanthis hornemanni</i>	Hoary Redpoll	1
P21	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P22	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P22	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
P22	<i>Rangifer tarandus</i>	Barren-ground Caribou	1
P23	<i>Acanthis</i> sp.	Redpoll species	1
P24	<i>Calcarius lapponicus</i>	Lapland Longspur	2
P24	<i>Eremophila alpestris</i>	Horned Lark	1
P25	<i>Acanthis</i> sp.	Redpoll species	1
P25	<i>Anthus rubescens</i>	American Pipit	1
P25	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P25	<i>Clangula hyemalis</i>	Long-tailed Duck	1
P25	<i>Eremophila alpestris</i>	Horned Lark	1

Appendix 10 – Shoreline Surveys

Shoreline Feature (L – Lake; P – Pond)	Scientific Name	Common Name	No. Observed
P26	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
P27	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P29	<i>Larus argentatus</i>	Herring Gull	1
P32	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P32	<i>Clangula hyemalis</i>	Long-tailed Duck	1
P32	<i>Larus argentatus</i>	Herring Gull	1
P35	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P36	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
P37	<i>Calcarius lapponicus</i>	Lapland Longspur	2
P37	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
P37	<i>Clangula hyemalis</i>	Long-tailed Duck	1
P37	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
P38	<i>Acanthis</i> sp.	Redpoll species	1
P38	<i>Branta canadensis</i>	Canada Goose	1
P38	<i>Branta hutchinsii</i>	Cackling Goose	1
P38	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P38	<i>Eremophila alpestris</i>	Horned Lark	1
P38	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
P40	<i>Acanthis</i> sp.	Redpoll species	1
P40	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P41	<i>Anthus rubescens</i>	American Pipit	1
P41	<i>Calcarius lapponicus</i>	Lapland Longspur	2
P41	<i>Charadrius semipalmatus</i>	Semipalmated Plover	1
P41	<i>Clangula hyemalis</i>	Long-tailed Duck	1
P41	<i>Eremophila alpestris</i>	Horned Lark	1
P43	<i>Charadrius semipalmatus</i>	Semipalmated Plover	1
P43	<i>Clangula hyemalis</i>	Long-tailed Duck	1
P43	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
P44	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
P44	<i>Lagopus muta</i>	Rock Ptarmigan	1
P44	<i>Spermophilus parryii</i>	Arctic Ground Squirrel	1
P46	<i>Acanthis</i> sp.	Redpoll species	1
P48	<i>Cricetidae</i>	Mammal species	1
P48	<i>Eremophila alpestris</i>	Horned Lark	1
P48	<i>Gavia stellata</i>	Red-throated Loon	1
P48	<i>Spermophilus parryii</i>	Arctic Ground Squirrel	1
P49	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P49	<i>Calidris alpina</i>	Dunlin	1
P49	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1

Appendix 10 – Shoreline Surveys

Shoreline Feature (L – Lake; P – Pond)	Scientific Name	Common Name	No. Observed
P50	<i>Eremophila alpestris</i>	Horned Lark	1
P53	<i>Anthus rubescens</i>	American Pipit	1
P57	<i>Calcarius lapponicus</i>	Lapland Longspur	2
P57	<i>Mergus serrator</i>	Red-breasted Merganser	1
P58	<i>Calcarius lapponicus</i>	Lapland Longspur	2
P58	<i>Eremophila alpestris</i>	Horned Lark	1
P60	<i>Calcarius lapponicus</i>	Lapland Longspur	3
P60	<i>Eremophila alpestris</i>	Horned Lark	1
P60	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
P61	<i>Calidris pusilla</i>	Semipalmated Sandpiper	2
P61	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
P62	<i>Branta hutchinsii</i>	Cackling Goose	1
P62	<i>Calcarius lapponicus</i>	Lapland Longspur	2
P62	<i>Calidris pusilla</i>	Semipalmated Sandpiper	4
P62	<i>Clangula hyemalis</i>	Long-tailed Duck	2
P62	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
P63	<i>Calcarius lapponicus</i>	Lapland Longspur	5
P64	<i>Calcarius lapponicus</i>	Lapland Longspur	3
P64	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
P65	<i>Acanthis</i> sp.	Redpoll species	1
P65	<i>Anthus rubescens</i>	American Pipit	1
P65	<i>Calcarius lapponicus</i>	Lapland Longspur	2
P66	<i>Acanthis hornemanni</i>	Hoary Redpoll	1
P66	<i>Calcarius lapponicus</i>	Lapland Longspur	2
P67	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
P68	<i>Acanthis</i> sp.	Redpoll species	1
P68	<i>Anthus rubescens</i>	American Pipit	1
P68	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P68	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
P68	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
P69	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
P70	<i>Anthus rubescens</i>	American Pipit	1
P70	<i>Calcarius lapponicus</i>	Lapland Longspur	2
P70	<i>Charadrius semipalmatus</i>	Semipalmated Plover	1
P71	<i>Branta hutchinsii</i>	Cackling Goose	1
P71	<i>Calcarius lapponicus</i>	Lapland Longspur	3
P71	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
P71	<i>Eremophila alpestris</i>	Horned Lark	1
P72	<i>Calcarius lapponicus</i>	Lapland Longspur	1

Appendix 10 – Shoreline Surveys

Shoreline Feature (L – Lake; P – Pond)	Scientific Name	Common Name	No. Observed
P72	<i>Calidris pusilla</i>	Semipalmated Sandpiper	2
P72	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
P74	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P75	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P75	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
P76	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P76	<i>Eremophila alpestris</i>	Horned Lark	1
P77	<i>Acanthis</i> sp.	Redpoll species	1
P77	<i>Eremophila alpestris</i>	Horned Lark	1
P78	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P78	<i>Eremophila alpestris</i>	Horned Lark	2
P79	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P79	<i>Charadrius semipalmatus</i>	Semipalmated Plover	1
P80	<i>Acanthis hornemanni</i>	Hoary Redpoll	2
P80	<i>Anthus rubescens</i>	American Pipit	1
P80	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P81	<i>Acanthis hornemanni</i>	Hoary Redpoll	1
P81	<i>Calcarius lapponicus</i>	Lapland Longspur	2
P81	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
P81	<i>Passerculus sandwichensis</i>	Savannah Sparrow	2
P82	<i>Acanthis</i> sp.	Redpoll species	1
P82	<i>Calcarius lapponicus</i>	Lapland Longspur	2
P82	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
P82	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
P82	<i>Pluvialis dominica</i>	American Golden-Plover	2
P83	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P83	<i>Larus argentatus</i>	Herring Gull	1
P84	<i>Calcarius lapponicus</i>	Lapland Longspur	1
P85	<i>Calcarius lapponicus</i>	Lapland Longspur	1

Appendix 11 – Ground Reconnaissance

Survey Date	Scientific Name	Common Name	No. Observed
19/06/2015	<i>Acanthis</i> sp.	Redpoll species	5
19/06/2015	<i>Anas acuta</i>	Northern Pintail	4
19/06/2015	<i>Anser albifrons</i>	Greater White-fronted Goose	2
19/06/2015	<i>Anthus rubescens</i>	American Pipit	3
19/06/2015	<i>Branta canadensis</i>	Canada Goose	8
19/06/2015	<i>Calcarius lapponicus</i>	Lapland Longspur	28
19/06/2015	<i>Calidris pusilla</i>	Semipalmated Sandpiper	5
19/06/2015	<i>Charadrius semipalmatus</i>	Semipalmated Plover	1
19/06/2015	<i>Clangula hyemalis</i>	Long-tailed Duck	4
19/06/2015	<i>Eremophila alpestris</i>	Horned Lark	5
19/06/2015	<i>Lagopus muta</i>	Rock Ptarmigan	1
19/06/2015	<i>Passerculus sandwichensis</i>	Savannah Sparrow	4
19/06/2015	<i>Pluvialis dominica</i>	American Golden-Plover	1
19/06/2015	<i>Spermophilus parryii</i>	Arctic Ground Squirrel	1
20/06/2015	<i>Acanthis hornemanni</i>	Hoary Redpoll	2
20/06/2015	<i>Acanthis</i> sp.	Redpoll species	14
20/06/2015	<i>Anas acuta</i>	Northern Pintail	3
20/06/2015	<i>Anthus rubescens</i>	American Pipit	2
20/06/2015	<i>Branta canadensis</i>	Canada Goose	16
20/06/2015	<i>Calcarius lapponicus</i>	Lapland Longspur	78
20/06/2015	<i>Calidris pusilla</i>	Semipalmated Sandpiper	13
20/06/2015	<i>Charadrius semipalmatus</i>	Semipalmated Plover	1
20/06/2015	<i>Chen caerulescens</i>	Snow Goose	1
20/06/2015	<i>Clangula hyemalis</i>	Long-tailed Duck	7
20/06/2015	<i>Corvus corax</i>	Common Raven	3
20/06/2015	<i>Eremophila alpestris</i>	Horned Lark	29
20/06/2015	<i>Gavia immer</i>	Common Loon	4
20/06/2015	<i>Gavia stellata</i>	Red-throated Loon	3
20/06/2015	<i>Grus canadensis</i>	Sandhill Crane	5
20/06/2015	<i>Lagopus lagopus</i>	Willow Ptarmigan	2
20/06/2015	<i>Lagopus muta</i>	Rock Ptarmigan	24
20/06/2015	<i>Larus argentatus</i>	Herring Gull	3
20/06/2015	<i>Lepus arcticus</i>	Arctic Hare	1
20/06/2015	<i>Passerculus sandwichensis</i>	Savannah Sparrow	7
20/06/2015	<i>Phalaropus lobatus</i>	Red-necked Phalarope	1
20/06/2015	<i>Pluvialis dominica</i>	American Golden-Plover	2
20/06/2015	<i>Rangifer tarandus</i>	Barren-ground Caribou	1
20/06/2015	<i>Spermophilus parryii</i>	Arctic Ground Squirrel	1
20/06/2015	<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	4
01/07/2015	<i>Acanthis</i> sp.	Redpoll species	17

Appendix 11 – Ground Reconnaissance

Survey Date	Scientific Name	Common Name	No. Observed
01/07/2015	<i>Buteo lagopus</i>	Rough-legged Hawk	1
01/07/2015	<i>Calcarius lapponicus</i>	Lapland Longspur	18
01/07/2015	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
01/07/2015	<i>Charadrius semipalmatus</i>	Semipalmated Plover	1
01/07/2015	<i>Eremophila alpestris</i>	Horned Lark	4
01/07/2015	<i>Gavia immer</i>	Common Loon	2
01/07/2015	<i>Grus canadensis</i>	Sandhill Crane	2
01/07/2015	<i>Lagopus muta</i>	Rock Ptarmigan	1
01/07/2015	<i>Passerculus sandwichensis</i>	Savannah Sparrow	3
01/07/2015	<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	1
02/07/2015	<i>Acanthis hornemanni</i>	Hoary Redpoll	1
02/07/2015	<i>Acanthis</i> sp.	Redpoll species	3
02/07/2015	<i>Anthus rubescens</i>	American Pipit	1
02/07/2015	<i>Branta canadensis</i>	Canada Goose	2
02/07/2015	<i>Calcarius lapponicus</i>	Lapland Longspur	16
02/07/2015	<i>Eremophila alpestris</i>	Horned Lark	5
02/07/2015	<i>Larus argentatus</i>	Herring Gull	1
02/07/2015	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
02/07/2015	<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	2
03/07/2015	<i>Acanthis</i> sp.	Redpoll species	2
03/07/2015	<i>Anthus rubescens</i>	American Pipit	1
03/07/2015	<i>Calcarius lapponicus</i>	Lapland Longspur	2
03/07/2015	<i>Calidris pusilla</i>	Semipalmated Sandpiper	1
03/07/2015	<i>Eremophila alpestris</i>	Horned Lark	3
03/07/2015	<i>Grus canadensis</i>	Sandhill Crane	2
03/07/2015	<i>Larus argentatus</i>	Herring Gull	1
03/07/2015	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
03/07/2015	<i>Pluvialis dominica</i>	American Golden-Plover	1
04/07/2015	<i>Calcarius lapponicus</i>	Lapland Longspur	6
04/07/2015	<i>Eremophila alpestris</i>	Horned Lark	1
06/07/2015	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
07/07/2015	<i>Acanthis</i> sp.	Redpoll species	4
07/07/2015	<i>Calcarius lapponicus</i>	Lapland Longspur	2
07/07/2015	<i>Eremophila alpestris</i>	Horned Lark	4
07/07/2015	<i>Passerculus sandwichensis</i>	Savannah Sparrow	1
08/07/2015	<i>Calcarius lapponicus</i>	Lapland Longspur	3
08/07/2015	<i>Eremophila alpestris</i>	Horned Lark	1

Appendix 12 – Overall Wildlife Species List

Scientific Name	Common Name	No. Observed
Mammals		
<i>Canis lupus</i>	Arctic Wolf	3
Cricetidae	Lemming or Vole	4
<i>Gulo gulo</i>	Wolverine	5
<i>Lepus arcticus</i>	Arctic Hare	8
<i>Mustela erminea</i>	Ermine	1
<i>Ovibos moschatus</i>	Muskox	30
<i>Rangifer tarandus</i>	Barren-ground Caribou	38
<i>Spermophilus parryii</i>	Arctic Ground Squirrel	18
<i>Ursus arctos</i>	Barren-ground Grizzly Bear	1*
<i>Vulpes lagopus</i>	Arctic Fox	3
Birds		
<i>Acanthis flammea</i>	Common Redpoll	5
<i>Acanthis hornemanni</i>	Hoary Redpoll	71
<i>Acanthis</i> sp.	Redpoll species	232
<i>Anas acuta</i>	Northern Pintail	7
<i>Anser albifrons</i>	Greater White-fronted Goose	6
<i>Anthus rubescens</i>	American Pipit	54
<i>Branta canadensis</i>	Canada Goose	122
<i>Branta hutchinsii</i>	Cackling Goose	16
<i>Buteo lagopus</i>	Rough-legged Hawk	2
<i>Calcarius lapponicus</i>	Lapland Longspur	895
<i>Calidris alpina</i>	Dunlin	2
<i>Calidris minutilla</i>	Least Sandpiper	2
<i>Calidris pusilla</i>	Semipalmated Sandpiper	79
<i>Calidris</i> sp.	Sandpiper species	2
<i>Charadrius semipalmatus</i>	Semipalmated Plover	11
<i>Chen caerulescens</i>	Snow Goose	2
<i>Clangula hyemalis</i>	Long-tailed Duck	36
<i>Corvus corax</i>	Common Raven	3
<i>Cygnus columbianus</i>	Tundra Swan	2
<i>Eremophila alpestris</i>	Horned Lark	209
<i>Gavia immer</i>	Common Loon	10
<i>Gavia stellata</i>	Red-throated Loon	4
<i>Grus canadensis</i>	Sandhill Crane	13
<i>Haliaeetus leucocephalus</i>	Bald Eagle	2
<i>Lagopus lagopus</i>	Willow Ptarmigan	2
<i>Lagopus muta</i>	Rock Ptarmigan	75
<i>Larus argentatus</i>	Herring Gull	15
<i>Larus hyperboreus</i>	Glaucous Gull	2
<i>Mergus serrator</i>	Red-breasted Merganser	4
<i>Passerculus sandwichensis</i>	Savannah Sparrow	94
<i>Phalaropus lobatus</i>	Red-necked Phalarope	1

Appendix 12 – Overall Wildlife Species List

Scientific Name	Common Name	No. Observed
<i>Plectrophenax nivalis</i>	Snow Bunting	1
<i>Pluvialis dominica</i>	American Golden-Plover	15
<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	37
<i>Zonotrichia querula</i>	Harris' Sparrow	1
*Observed by Agnico Eagle staff only		

Appendix 13: Plot Transect Locations

ELC Plot Locations 2014, 2015

Plot #	Year Surveyed	Plot Location			
		NAD 83 UTM Zone 14N		WGS 1984	
		X Coordinate	Y Coordinate	Latitude	Longitude
3	2014	636116	7224231	65.113515	-96.100421
9	2014	635987	7224238	65.113627	-96.103166
12	2014	635952	7224584	65.116743	-96.103571
15	2014	635985	7224373	65.114844	-96.103084
16	2014	635936	7224472	65.115746	-96.104018
24	2014	632509	7233688	65.199732	-96.168131
40	2014	632601	7233564	65.198586	-96.166270
44	2014	632073	7233502	65.198241	-96.177593
45	2014	631984	7233486	65.198135	-96.179528
46	2014	631912	7233473	65.198045	-96.181065
50	2014	626140	7236082	65.223692	-96.301871
51	2014	626133	7236123	65.224055	-96.301970
53	2014	626216	7235984	65.222781	-96.300334
55	2014	626192	7235681	65.220077	-96.301108
72	2014	626285	7235713	65.220330	-96.299097
73	2014	626230	7235857	65.221641	-96.300141
83	2014	621031	7246082	65.315245	-96.402190
84	2014	620394	7245663	65.311723	-96.416216
92	2014	620606	7245598	65.311057	-96.411737
93	2014	620507	7245811	65.313010	-96.413681
94	2014	620904	7246146	65.315861	-96.404856
95	2014	620699	7246271	65.317056	-96.409147
96	2014	620712	7246000	65.314623	-96.409114
97	2014	621065	7245399	65.309104	-96.402068
98	2014	620579	7246043	65.315055	-96.411921
100	2014	614432	7251410	65.365379	-96.539208
110	2014	614960	7250450	65.356584	-96.528680
111	2014	614835	7250782	65.359605	-96.531083
113	2014	608859	7254657	65.396388	-96.656335
117	2014	608435	7254467	65.394821	-96.665620
128	2014	608776	7254419	65.394281	-96.658318
129	2014	609379	7254810	65.397581	-96.645022
130	2014	609114	7254624	65.396004	-96.650873
131	2014	614700	7250404	65.356262	-96.534303
139	2014	614887	7250321	65.355453	-96.530356
142	2014	618178	7237583	65.240103	-96.470684
143	2014	618247	7237534	65.239637	-96.469243
146	2014	618165	7238233	65.245932	-96.470398
152	2014	618065	7238193	65.245607	-96.472576
154	2014	617873	7238057	65.244462	-96.476794
155	2014	618044	7238021	65.244078	-96.473159
159	2014	618161	7237681	65.240982	-96.470962
171	2014	631882	7233718	65.200249	-96.181468
172	2014	626397	7235487	65.218258	-96.296907

Appendix 13: Plot Transect Locations

ELC Plot Locations 2014, 2015

Plot #	Year Surveyed	Plot Location			
		NAD 83 UTM Zone 14N		WGS 1984	
		X Coordinate	Y Coordinate	Latitude	Longitude
173	2014	618027	7238128	65.245037	-96.473446
174	2014	621314	7245635	65.311129	-96.396530
175	2014	614761	7250209	65.354494	-96.533164
176	2014	614404	7251531	65.366465	-96.539720
177	2014	613909	7251243	65.364063	-96.550587
178	2014	608575	7254471	65.394814	-96.662606
179	2014	609131	7254087	65.391183	-96.650937
180	2014	609116	7253871	65.389253	-96.651433
201	2015	634260	7229047	65.157428	-96.135265
204	2015	635019	7228841	65.155281	-96.119287
205	2015	633443	7229052	65.157807	-96.152650
206	2015	633420	7229345	65.160448	-96.152875
207	2015	633955	7228856	65.155845	-96.141946
208	2015	633613	7229241	65.159429	-96.148844
211	2015	629487	7234950	65.212243	-96.231440
212	2015	629225	7235704	65.219103	-96.236327
214	2015	629692	7235465	65.216779	-96.226581
216	2015	629890	7235401	65.216127	-96.222392
217	2015	629317	7235614	65.218263	-96.234444
218	2015	628977	7235827	65.220302	-96.241494
219	2015	628896	7235843	65.220476	-96.243217
220	2015	629408	7235123	65.213822	-96.232948
222	2015	619943	7235708	65.222654	-96.434572
225	2015	619736	7235775	65.223329	-96.438943
227	2015	619932	7235103	65.217234	-96.435329
228	2015	619797	7235171	65.217894	-96.438151
231	2015	619870	7241328	65.273055	-96.431251
232	2015	620494	7242018	65.279010	-96.417274
233	2015	619733	7241718	65.276601	-96.433844
235	2015	619142	7241103	65.271307	-96.447026
237	2015	620518	7241578	65.275058	-96.417149
239	2015	619279	7240832	65.268828	-96.444314
240	2015	617330	7246808	65.323096	-96.480924
241	2015	617547	7246713	65.322165	-96.476353
242	2015	617416	7246727	65.322337	-96.479155
243	2015	617448	7246646	65.321600	-96.478535
246	2015	618041	7246633	65.321269	-96.465828
249	2015	620441	7241345	65.272997	-96.418997
250	2015	611832	7253285	65.383084	-96.593525
251	2015	611805	7253435	65.384438	-96.593981
252	2015	612166	7253230	65.382478	-96.586403
255	2015	611913	7253919	65.388734	-96.591259
256	2015	612217	7252863	65.379171	-96.585598
258	2015	611920	7253883	65.388416	-96.591151

Appendix 13: Plot Transect Locations

ELC Plot Locations 2014, 2015

Plot #	Year Surveyed	Plot Location			
		NAD 83 UTM Zone 14N		WGS 1984	
		X Coordinate	Y Coordinate	Latitude	Longitude
260	2015	619594	7235805	65.223648	-96.441942
266	2015	607306	7256261	65.411280	-96.688479
273	2015	605712	7254610	65.397000	-96.724067
277	2015	606047	7255888	65.408352	-96.715857
281	2015	607220	7256032	65.409259	-96.690510
282	2015	605569	7254761	65.398403	-96.727016
284	2015	607342	7256094	65.409770	-96.687842
286	2015	605263	7254653	65.397532	-96.733696
289	2015	607055	7256319	65.411883	-96.693830
293	2015	607493	7256413	65.412580	-96.684336
300	2015	609132	7255503	65.403877	-96.649796
303	2015	606684	7255738	65.406793	-96.702280
308	2015	605809	7254797	65.398648	-96.721820
309	2015	605465	7255691	65.406772	-96.728542
311	2015	605613	7255455	65.404604	-96.725532
319	2015	606881	7253896	65.390221	-96.699487
329	2015	606876	7253946	65.390668	-96.699539
333	2015	619557	7234979	65.216259	-96.443460
335	2015	619538	7235345	65.219544	-96.443538
336	2015	619011	7241387	65.273900	-96.449568
337	2015	617995	7246457	65.319713	-96.466964
338	2015	606642	7255787	65.407249	-96.703128
339	2015	606950	7254012	65.391235	-96.697908
340	2015	605226	7255222	65.402643	-96.734043
341	2015	604920	7255110	65.401737	-96.740713
342	2015	604747	7254915	65.400044	-96.744582
343	2015	606653	7253064	65.382833	-96.705030
344	2015	606900	7253205	65.384016	-96.699624
345	2015	607244	7253108	65.383037	-96.692291
346	2015	607556	7252939	65.381419	-96.685730
347	2015	607654	7253733	65.388502	-96.682993
348	2015	607772	7254635	65.396550	-96.679728
349	2015	633141	7232829	65.191780	-96.155462
350	2015	610616	7256139	65.409078	-96.617336
351	2015	610682	7256005	65.407856	-96.616029
352	2015	606527	7258172	65.428670	-96.703734
353	2015	606986	7258040	65.427336	-96.693949
355	2015	633019	7232850	65.192012	-96.158045
356	2015	605805	7256329	65.412377	-96.720720
357	2015	628699	7235770	65.219898	-96.247489

Appendix 13: Plot Transect Locations

Breeding Bird Transect Locations, 2015

Road Transect #	Road Transect Point*	Road Chainage Number	Transect Location			
			NAD 83 UTM Zone 14N		WGS 1984	
			X Coordinate	Y Coordinate	Latitude	Longitude
1	1E		638400	7223500	65.106016	-96.052579
	1C	5+900.00	636853	7223500	65.106660	-96.085473
	1W		635400	7223500	65.107258	-96.116369
2	2E		636000	7229100	65.157195	-96.098134
	2C	12+500.00	634445	7229100	65.157832	-96.131263
	2W		633000	7229100	65.158418	-96.162049
3	3N		622300	7237600	65.238745	-96.382547
	3C	29+325.00	622300	7236106	65.225354	-96.383872
	3S		622300	7234600	65.211856	-96.385206
4	4E		619600	7238600	65.248703	-96.439393
	4C	37+200.00	618155	7238600	65.249225	-96.470293
	4W		616600	7238600	65.249781	-96.503547
5	5E		622100	7242800	65.285428	-96.382206
	5C	42+850.00	620588	7242800	65.285987	-96.414583
	5W		619100	7242800	65.286531	-96.446447
6	6E		613000	7250600	65.358612	-96.570647
	6C	56+550.00	611531	7250600	65.359116	-96.602195
	6W		610000	7250600	65.359635	-96.635075

*Road transection point legend

E = End of Transect East of Road

C = Transect Centre where transect intersects with the proposed road alignment (at the time of the survey)

W = End of Transect West of Road

N = End of Transect North of Road

S = End of the Transect South of the Road

Notes:

1. All transects are perpendicular with the road alignment & run East to West with the exception of Transect 3 which runs North to South.
2. Due to a change in the proposed road alignment post-survey (Nov. 2015), the midpoint of transect 4 (4C) is now 19.5 m SE of the proposed road alignment.
3. Due to a change in the proposed road alignment post-survey (Nov. 2015), the midpoint of transect 5 (5C) is now 269 m W of the proposed road alignment.

Appendix 13: Plot Transect Locations

Breeding Bird PRISM Plot Locations, 2015

Amaruq PRISM Plots

Amaruq PRISM Plot #	Amaruq PRISM Plot Corner	Plot Location			
		NAD83 UTM Zone 14N		WGS 1984	
		X Coordinante	Y Coordinate	Longitude	Latitude
1	1NE	605900	7252300	-96.721816	65.376230
	1NW	605500	7252300	-96.730412	65.376359
	1SE	605900	7251900	-96.722126	65.372644
	1SW	605500	7251900	-96.730722	65.372773
2	2NE	606700	7252700	-96.704309	65.379556
	2NW	606300	7252700	-96.712907	65.379686
	2SE	606700	7252300	-96.704622	65.375970
	2SW	606300	7252300	-96.713219	65.376100
3	3NE	608300	7252700	-96.669919	65.379029
	3NW	607900	7252700	-96.678516	65.379161
	3SE	608300	7252300	-96.670237	65.375443
	3SW	607900	7252300	-96.678833	65.375575
4	4NE	605900	7253500	-96.720882	65.386988
	4NW	605500	7253500	-96.729483	65.387118
	4SE	605900	7253100	-96.721194	65.383402
	4SW	605500	7253100	-96.729793	65.383532
5	5NE	607900	7253500	-96.677882	65.386333
	5NW	607500	7253500	-96.686482	65.386465
	5SE	607900	7253100	-96.678199	65.382747
	5SW	607500	7253100	-96.686798	65.382879
6	6NE	609100	7252700	-96.652724	65.378763
	6NW	608700	7252700	-96.661321	65.378896
	6SE	609100	7252300	-96.653045	65.375177
	6SW	608700	7252300	-96.661641	65.375310
7	7NE	611900	7253500	-96.591889	65.384987
	7NW	611500	7253500	-96.600488	65.385124
	7SE	611900	7253100	-96.592218	65.381401
	7SW	611500	7253100	-96.600816	65.381538
8	8NE	609500	7253900	-96.643162	65.389387
	8NW	609100	7253900	-96.651763	65.389521
	8SE	609500	7253500	-96.643484	65.385801
	8SW	609100	7253500	-96.652083	65.385935
9	9NE	609500	7254700	-96.642518	65.396558
	9NW	609100	7254700	-96.651121	65.396692
	9SE	609500	7254300	-96.642840	65.392972
	9SW	609100	7254300	-96.651442	65.393106
10	10NE	611100	7251900	-96.610392	65.370917
	10NW	610700	7251900	-96.618986	65.371053
	10SE	611100	7251500	-96.610718	65.367331
	10SW	610700	7251500	-96.619311	65.367467

Appendix 13: Plot Transect Locations

Breeding Bird PRISM Plot Locations, 2015

Amaruq PRISM Plots

Amaruq PRISM Plot #	Amaruq PRISM Plot Corner	Plot Location			
		NAD83 UTM Zone 14N		WGS 1984	
		X Coordinante	Y Coordinate	Longitude	Latitude
11	11NE	610300	7255100	-96.624988	65.399875
	11NW	609900	7255100	-96.633592	65.400010
	11SE	610300	7254700	-96.625313	65.396289
	11SW	609900	7254700	-96.633915	65.396424
12	12NE	604300	7255900	-96.753444	65.409020
	12NW	603900	7255900	-96.762051	65.409148
	12SE	604300	7255500	-96.753751	65.405434
	12SW	603900	7255500	-96.762357	65.405562
13	13NE	609900	7256300	-96.632622	65.410767
	13NW	609500	7256300	-96.641229	65.410902
	13SE	609900	7255900	-96.632945	65.407181
	13SW	609500	7255900	-96.641552	65.407316
14	14NE	603900	7256700	-96.761439	65.416320
	14NW	603500	7256700	-96.770050	65.416448
	14SE	603900	7256300	-96.761745	65.412734
	14SW	603500	7256300	-96.770354	65.412861
15	15NE	610700	7256700	-96.615081	65.414083
	15NW	610300	7256700	-96.623690	65.414218
	15SE	610700	7256300	-96.615407	65.410497
	15SW	610300	7256300	-96.624014	65.410632
16	16NE	611900	7256700	-96.589256	65.413673
	16NW	611500	7256700	-96.597864	65.413810
	16SE	611900	7256300	-96.589585	65.410087
	16SW	611500	7256300	-96.598192	65.410224
17	17NE	612300	7251900	-96.584609	65.370507
	17NW	611900	7251900	-96.593203	65.370644
	17SE	612300	7251500	-96.584939	65.366921
	17SW	611900	7251500	-96.593532	65.367058
18	18NE	605900	7257500	-96.717766	65.422849
	18NW	605500	7257500	-96.726378	65.422979
	18SE	605900	7257100	-96.718078	65.419263
	18SW	605500	7257100	-96.726689	65.419393
19	19NE	607100	7258300	-96.691299	65.429629
	19NW	606700	7258300	-96.699913	65.429760
	19SE	607100	7257900	-96.691615	65.426043
	19SW	606700	7257900	-96.700228	65.426174
20	20NE	605900	7258700	-96.716829	65.433607
	20NW	605500	7258700	-96.725445	65.433737
	20SE	605900	7258300	-96.717141	65.430021
	20SW	605500	7258300	-96.725756	65.430151

Appendix 13: Plot Transect Locations
Breeding Bird PRISM Plot Locations, 2015
Control PRISM Plots

Control PRISM Plot #	Control PRISM Plot Corner	Plot Location			
		NAD83 UTM Zone 14N		WGS 1984	
		X Coordiante	Y Coordinate	Longitude	Latitude
1	1NW	623000	7218600	65.068183	-96.38442
	1NE	623400	7218600	65.068035	-96.375925
	1SE	623400	7218200	65.064449	-96.376278
	1SW	623000	7218200	65.064598	-96.384772
2	2NW	623600	7218200	65.064375	-96.372031
	2NE	624000	7218200	65.064225	-96.363537
	2SE	624000	7217800	65.06064	-96.363892
	2SW	623600	7217800	65.060789	-96.372384
3	3NW	622600	7217600	65.059368	-96.393792
	3NE	623000	7217600	65.05922	-96.385299
	3SE	623000	7217200	65.055635	-96.385651
	3SW	622600	7217200	65.055783	-96.394142
4	4NW	624600	7217400	65.05683	-96.351509
	4NE	625000	7217400	65.056679	-96.343018
	4SE	625000	7217000	65.053094	-96.343375
	4SW	624600	7217000	65.053244	-96.351865
5	5NW	625000	7218000	65.062057	-96.342482
	5NE	625400	7218000	65.061906	-96.333989
	5SE	625400	7217600	65.058321	-96.334347
	5SW	625000	7217600	65.058472	-96.342839
6	6NW	623600	7216400	65.048241	-96.373621
	6NE	624000	7216400	65.048092	-96.365132
	6SE	624000	7216000	65.044506	-96.365486
	6SW	623600	7216000	65.044656	-96.373974
7	7NW	624600	7216800	65.051452	-96.352043
	7NE	625000	7216800	65.051301	-96.343553
	7SE	625000	7216400	65.047716	-96.343911
	7SW	624600	7216400	65.047867	-96.352399
8	8NW	624600	7216000	65.044281	-96.352755
	8NE	625000	7216000	65.044131	-96.344267
	8SE	625000	7215600	65.040546	-96.344624
	8SW	624600	7215600	65.040696	-96.353111
9	9NW	625600	7215400	65.038526	-96.332075
	9NE	626000	7215400	65.038375	-96.323589
	9SE	626000	7215000	65.034789	-96.323949
	9SW	625600	7215000	65.034941	-96.332433
10	10NW	626200	7215400	65.038299	-96.319347
	10NE	626600	7215400	65.038146	-96.310861
	10SE	626600	7215000	65.034561	-96.311223
	10SW	626200	7215000	65.034713	-96.319707

Appendix 13: Plot Transect Locations
Breeding Bird PRISM Plot Locations, 2015
Control PRISM Plots

Control PRISM Plot #	Control PRISM Plot Corner	Plot Location			
		NAD83 UTM Zone 14N		WGS 1984	
		X Coordinante	Y Coordinate	Longitude	Latitude
11	11NW	624500	7214400	65.029978	-96.356298
	11NE	624900	7214400	65.029827	-96.347815
	11SE	624900	7214000	65.026242	-96.348171
	11SW	624500	7214000	65.026393	-96.356653
12	12NW	625000	7214400	65.02979	-96.345694
	12NE	625400	7214400	65.029639	-96.337212
	12SE	625400	7214000	65.026054	-96.337569
	12SW	625000	7214000	65.026205	-96.346051
13	13NW	626200	7214800	65.032921	-96.319887
	13NE	626600	7214800	65.032768	-96.311403
	13SE	626600	7214400	65.029183	-96.311764
	13SW	626200	7214400	65.029336	-96.320247
14	14NW	624600	7213700	65.023666	-96.354799
	14NE	625000	7213700	65.023516	-96.346318
	14SE	625000	7213300	65.01993	-96.346674
	14SW	624600	7213300	65.020081	-96.355154
15	15NW	625200	7213400	65.020751	-96.342345
	15NE	625600	7213400	65.0206	-96.333866
	15SE	625600	7213000	65.017015	-96.334223
	15SW	625200	7213000	65.017166	-96.342702
16	16NW	626100	7213400	65.020411	-96.323266
	16NE	626500	7213400	65.020259	-96.314786
	16SE	626500	7213000	65.016673	-96.315147
	16SW	626100	7213000	65.016825	-96.323625
17	17NW	627000	7214000	65.025445	-96.303644
	17NE	627400	7214000	65.025292	-96.295163
	17SE	627400	7213600	65.021707	-96.295526
	17SW	627000	7213600	65.02186	-96.304006
18	18NW	624600	7213200	65.019184	-96.355243
	18NE	625000	7213200	65.019034	-96.346763
	18SE	625000	7212800	65.015449	-96.347119
	18SW	624600	7212800	65.015599	-96.355598
19	19NW	625600	7213000	65.017015	-96.334223
	19NE	626000	7213000	65.016863	-96.325745
	19SE	626000	7212600	65.013278	-96.326104
	19SW	625600	7212600	65.01343	-96.334581
20	20NW	626000	7212400	65.011486	-96.326283
	20NE	626400	7212400	65.011334	-96.317807
	20SE	626400	7212000	65.007748	-96.318166
	20SW	626000	7212000	65.0079	-96.326642