

APPENDIX A

APPENDIX A EBA'S GENERAL CONDITIONS

GEO-ENVIRONMENTAL REPORT – GENERAL CONDITIONS

This report incorporates and is subject to these “General Conditions”.

1.0 USE OF REPORT AND OWNERSHIP

This report pertains to a specific site, a specific development, and a specific scope of work. It is not applicable to any other sites, nor should it be relied upon for types of development other than those to which it refers. Any variation from the site or proposed development would necessitate a supplementary investigation and assessment.

This report and the assessments and recommendations contained in it are intended for the sole use of EBA's client. EBA does not accept any responsibility for the accuracy of any of the data, the analysis or the recommendations contained or referenced in the report when the report is used or relied upon by any party other than EBA's Client unless otherwise authorized in writing by EBA. Any unauthorized use of the report is at the sole risk of the user.

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2.0 ALTERNATE REPORT FORMAT

Where EBA submits both electronic file and hard copy versions of reports, drawings and other project-related documents and deliverables (collectively termed EBA's instruments of professional service), only the signed and/or sealed versions shall be considered final and legally binding. The original signed and/or sealed version archived by EBA shall be deemed to be the original for the Project.

Both electronic file and hard copy versions of EBA's instruments of professional service shall not, under any circumstances, no matter who owns or uses them, be altered by any party except EBA. The Client warrants that EBA's instruments of professional service will be used only and exactly as submitted by EBA.

Electronic files submitted by EBA have been prepared and submitted using specific software and hardware systems. EBA makes no representation about the compatibility of these files with the Client's current or future software and hardware systems.

3.0 NOTIFICATION OF AUTHORITIES

In certain instances, the discovery of hazardous substances or conditions and materials may require that regulatory agencies and other persons be informed and the client agrees that notification to such bodies or persons as required may be done by EBA in its reasonably exercised discretion.

4.0 INFORMATION PROVIDED TO EBA BY OTHERS

During the performance of the work and the preparation of the report, EBA may rely on information provided by persons other than the Client. While EBA endeavours to verify the accuracy of such information when instructed to do so by the Client, EBA accepts no responsibility for the accuracy or the reliability of such information which may affect the report.



APPENDIX B

APPENDIX B EXTENT OF MAPPED ECOSYSTEMS WITHIN THE LSA



ISSUED FOR USE

Source	Generalized Ecosite	Map Unit	Drainage	Area Mapped (ha)
EBA (2010)	Riparian shrub	SW	imperfect-poor	2.3
	Rock	RO	very rapid	2.3
	Sparsely vegetated	RL	very rapid	39.6
	Upland forest	BF	moderate-well	24.4
	Upland forest	SP	moderate-well	43.0
	Upland forest	WA	well	45.7
	Water	LA		61.4
	Water	OW		1.8
	Water	PD		11.2
	Wetland forest	BG	imperfect-poor	71.4
	Wetland forest	BT	poor	18.3
	Wetland herb	WB	very poor	18.0
	Woodland forest	LW	rapid-well	40.1
EBA Total				379.6
Stantec	Anthropogenic	ES		3.0
	Anthropogenic	MI		4.9
	Anthropogenic	RW		1.2
	Anthropogenic	RZ		4.6
	Riparian shrub	SW	imperfect-poor	0.5
	Rock	RO	very rapid	4.5
	Sparsely vegetated	RL	very rapid	75.9
	Upland forest	BF	moderate-well	183.2
	Upland forest	JH	rapid-well	0.6
	Upland forest	PA	well	0.8
	Upland forest	SP	moderate-well	260.5
	Upland forest	WA	well	177.4
	Water	LA		197.6
	Water	OW		14.0
	Water	PD		142.3
	Wetland forest	BG	imperfect-poor	219.8
	Wetland forest	BT	poor	156.9
	Wetland forest	WH	imperfect-poor	1.1
	Wetland herb	SH	very poor	2.0
	Wetland herb	WB	very poor	12.6
	Woodland forest	LW	rapid-well	285.1
	Wetland shrub	LL	poor	13.9
	Wetland shrub	SS	very poor	38.8
Stantec Total				1,801.0
Grand Total				2,180.6



APPENDIX C

APPENDIX C ECOSYSTEMS ASSESSED DURING THE 2010 FIELD SURVEY



Generalized Ecosite	Map Unit ¹	Sites Assessed (Count)
Riparian shrub	SW-closest	1
Sparsely vegetated	RL	7
Upland forest	BF	3
	BF-closest	3
	PA-closest	1
	SP	8
	SP-closest	8
	WA-closest	6
	WA/RL	1
Upland forest Total		30
Water	LA	2
Wetland forest	BG	10
	BG/LW?	1
	BG-closest	6
	BT	7
	BT-closest	4
	WH	1
	treed fen	3
Wetland forest Total		32
Wetland herb	WB	1
	WB-closest	4
Wetland herb Total		5
Wetland shrub	LL	1
	LL-closest	1
	scrub-birch-cottongrass-Carex	1
	scrub-birch-Ledum-Carex	1
	wetter draw	1
	wetland	1
Wetland shrub Total		6
Woodland forest	LW	9
	LW-closest	3
Woodland forest Total		12
Grand Total		95

¹In certain cases, map unit represents closest approximation to those developed by Stantec (2010a)



APPENDIX D

APPENDIX D WILDLIFE SPECIES OCCURRING OR POTENTIALLY OCCURRING WITHIN THE STUDY AREA

Common Name	Scientific Name	Conservation Status		
		NWT	SARA	COSEWIC
Birds ¹				
Canada Goose*	<i>Branta canadensis</i>	Secure	-	Not Assessed
American Wigeon*	<i>Anas americana</i>	Secure	-	Not Assessed
Mallard*	<i>Anas platyrhynchos</i>	Secure	-	Not Assessed
Blue-winged Teal*	<i>Anas discors</i>	Secure	-	Not Assessed
Northern Shoveler	<i>Anas clypeata</i>	Secure	-	Not Assessed
Northern Pintail	<i>Anas acuta</i>	Sensitive	-	Not Assessed
Green-winged Teal	<i>Anas crecca</i>	Secure	-	Not Assessed
Canvasback	<i>Aythya valisineria</i>	Secure	-	Not Assessed
Ring-necked Duck*	<i>Aythya collaris</i>	Secure	-	Not Assessed
Greater Scaup**	<i>Aythya marila</i>	Secure	-	Not Assessed
Lesser Scaup**	<i>Aythya affinis</i>	Sensitive	-	Not Assessed
Surf Scoter*	<i>Melanitta perspicillata</i>	Sensitive	-	Not Assessed
White-winged Scoter*	<i>Melanitta fusca</i>	Sensitive	-	Not Assessed
Bufflehead*	<i>Bucephala albeola</i>	Secure	-	Not Assessed
Common Goldeneye	<i>Bucephala clangula</i>	Secure	-	Not Assessed
Common Merganser*	<i>Mergus merganser</i>	Secure	-	Not Assessed
Red-breasted Merganser*	<i>Mergus serrator</i>	Secure	-	Not Assessed
Ruffed Grouse	<i>Bonasa umbellus</i>	Secure	-	Not Assessed
Spruce Grouse*	<i>Falcapennis canadensis</i>	Secure	-	Not Assessed
Willow Ptarmigan	<i>Lagopus lagopus</i>	Secure	-	Not Assessed
Rock Ptarmigan	<i>Lagopus muta</i>	Secure	-	Not Assessed
Sharp-tailed Grouse	<i>Tympanuchus phasianellus</i>	Secure	-	Not Assessed
Pacific Loon*	<i>Gavia pacifica</i>	Secure	-	Not Assessed
Common Loon*	<i>Gavia immer</i>	Secure	-	Not At Risk
Horned Grebe*	<i>Podiceps auritus</i>	Secure	No Status	Special Concern
Red-necked Grebe*	<i>Podiceps grisegena</i>	Secure	-	Not At Risk
Osprey*	<i>Pandion haliaetus</i>	Secure	-	Not Assessed
Bald Eagle*	<i>Haliaeetus leucocephalus</i>	Secure	-	Not At Risk
Northern Harrier	<i>Circus cyaneus</i>	Secure	-	Not At Risk
Sharp-shinned Hawk	<i>Accipiter striatus</i>	Secure	-	Not At Risk
Northern Goshawk	<i>Accipiter gentilis</i>	Secure	-	Not At Risk
Red-tailed Hawk	<i>Buteo jamaicensis</i>	Secure	-	Not At Risk
Golden Eagle	<i>Aquila chrysaetos</i>	Secure	-	Not At Risk
American Kestrel	<i>Falco sparverius</i>	Secure	-	Not Assessed
Merlin	<i>Falco columbarius</i>	Secure	-	Not At Risk
Peregrine Falcon	<i>Falco peregrinus anatum/tundrius</i>	Sensitive	No Status	Special Concern

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Common Name	Scientific Name	Conservation Status		
		NWT	SARA	COSEWIC
Sora	<i>Porzana carolina</i>	Secure	-	Not Assessed
Sandhill Crane*	<i>Grus canadensis</i>	Secure	-	Not Assessed
Semipalmated Plover	<i>Charadrius semipalmatus</i>	Secure	-	Not Assessed
Lesser Yellowlegs*	<i>Tringa flavipes</i>	Sensitive	-	Not Assessed
Solitary Sandpiper*	<i>Tringa solitaria</i>	Undetermined	-	Not Assessed
Spotted Sandpiper*	<i>Actitis macularius</i>	Secure	-	Not Assessed
Least Sandpiper	<i>Calidris minutilla</i>	Sensitive	-	Not Assessed
Wilson's Snipe*	<i>Gallinago delicata</i>	Undetermined	-	Not Assessed
Red-necked Phalarope	<i>Phalaropus lobatus</i>	Sensitive	-	Not Assessed
Bonaparte's Gull	<i>Larus philadelphia</i>	Secure	-	Not Assessed
Mew Gull	<i>Larus canus</i>	Secure	-	Not Assessed
California Gull	<i>Larus californicus</i>	Secure	-	Not Assessed
Herring Gull*	<i>Larus argentatus</i>	Secure	-	Not Assessed
Arctic Tern	<i>Sterna paradisaea</i>	Secure	-	Not Assessed
Great Horned Owl	<i>Bubo virginianus</i>	Secure	-	Not Assessed
Northern Hawk Owl	<i>Surnia ulula</i>	Secure	-	Not At Risk
Great Grey Owl	<i>Strix nebulosa</i>	Secure	-	Not At Risk
Short-eared Owl	<i>Asio flammeus</i>	Sensitive	Special Concern (Schedule 3)	Special Concern
Boreal Owl	<i>Aegolius funereus</i>	Secure	-	Not At Risk
Common Nighthawk*	<i>Chordeiles minor</i>	At Risk	Threatened (Schedule 1)	Threatened
Belted Kingfisher	<i>Ceryle alcyon</i>	Secure	-	Not Assessed
Yellow-bellied Sapsucker*	<i>Sphyrapicus varius</i>	Secure	-	Not Assessed
Downy Woodpecker	<i>Picoides pubescens</i>	Secure	-	Not Assessed
Hairy Woodpecker*	<i>Picoides villosus</i>	Secure	-	Not Assessed
American Three-toed Woodpecker*	<i>Picoides dorsalis</i>	Secure	-	Not Assessed
Black-backed Woodpecker	<i>Picoides arcticus</i>	Secure	-	Not Assessed
Northern Flicker*	<i>Colaptes auratus</i>	Secure	-	Not Assessed
Olive-sided Flycatcher*	<i>Contopus cooperi</i>	At Risk	Threatened (Schedule 1)	Threatened
Alder Flycatcher*	<i>Empidonax alnorum</i>	Secure	-	Not Assessed
Least Flycatcher*	<i>Empidonax minimus</i>	Secure	-	Not Assessed
Eastern Phoebe*	<i>Sayornis phoebe</i>	Secure	-	Not Assessed
Northern Shrike	<i>Lanius excubitor</i>	Secure	-	Not Assessed
Warbling Vireo	<i>Vireo gilvus</i>	Secure	-	Not Assessed
Red-eyed Vireo	<i>Vireo olivaceus</i>	Secure	-	Not Assessed
Gray Jay*	<i>Perisoreus canadensis</i>	Secure	-	Not Assessed
Common Raven*	<i>Corvus corax</i>	Secure	-	Not Assessed

ISSUED FOR USE

Common Name	Scientific Name	Conservation Status		
		NWT	SARA	COSEWIC
Horned Lark	<i>Eremophila alpestris</i>	Secure	-	Not Assessed
Tree Swallow*	<i>Tachycineta bicolor</i>	Secure	-	Not Assessed
Bank Swallow	<i>Riparia riparia</i>	Secure	-	Not Assessed
Cliff Swallow	<i>Petrochelidon (Hirundo) phyrhronota</i>	Secure	-	Not Assessed
Boreal Chickadee*	<i>Poecile hudsonica</i>	Sensitive	-	Not Assessed
Ruby-crowned Kinglet*	<i>Regulus calendula</i>	Secure	-	Not Assessed
Gray-cheeked Thrush	<i>Catharus minimus</i>	Secure	-	Not Assessed
Swainson's Thrush*	<i>Catharus ustulatus</i>	Secure	-	Not Assessed
Hermit Thrush	<i>Catharus guttatus</i>	Secure	-	Not Assessed
American Robin*	<i>Turdus migratorius</i>	Secure	-	Not Assessed
Bohemian Waxwing*	<i>Bombicilla garrulus</i>	Secure	-	Not Assessed
Tennessee Warbler	<i>Vermivora peregrina</i>	Secure	-	Not Assessed
Orange-crowned Warbler*	<i>Vermivora celata</i>	Secure	-	Not Assessed
Yellow Warbler*	<i>Dendroica petechia</i>	Secure	-	Not Assessed
Cape May Warbler*	<i>Dendroica tigrina</i>	Secure	-	Not Assessed
Yellow-rumped Warbler*	<i>Dendroica coronata</i>	Secure	-	Not Assessed
Palm Warbler*	<i>Dendroica palmarum</i>	Secure	-	Not Assessed
Blackpoll Warbler*	<i>Dendroica striata</i>	Sensitive	-	Not Assessed
Black-and-white Warbler	<i>Mniotilta varia</i>	Secure	-	Not Assessed
Northern Waterthrush*	<i>Seiurus noveboracensis</i>	Secure	-	Not Assessed
Common Yellowthroat*	<i>Geothlypis trichas</i>	Secure	-	Not Assessed
Wilson's Warbler	<i>Wilsonia pusilla</i>	Secure	-	Not Assessed
American Tree Sparrow	<i>Spizella arborea</i>	Sensitive	-	Not Assessed
Chipping Sparrow*	<i>Spizella passerina</i>	Secure	-	Not Assessed
Clay-colored Sparrow	<i>Spizella pallida</i>	Undetermined	-	Not Assessed
Savannah Sparrow	<i>Passerculus sandwichensis</i>	Secure	-	Not Assessed
Fox Sparrow	<i>Passerella ilia</i>	Secure	-	Not Assessed
Lincoln's Sparrow*	<i>Melospiza lincolnii</i>	Secure	-	Not Assessed
Swamp Sparrow*	<i>Melospiza georgiana</i>	Secure	-	Not Assessed
White-throated Sparrow*	<i>Zonotrichia albicollis</i>	Sensitive	-	Not Assessed
White-crowned Sparrow*	<i>Zonotrichia leucophrys</i>	Secure	-	Not Assessed
Dark-eyed Junco*	<i>Junco hyemalis</i>	Secure	-	Not Assessed
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	Secure	-	Not Assessed
Rusty Blackbird*	<i>Euphagus carolinus</i>	May Be At Risk	Special Concern (Schedule 1)	Special Concern
Pine Grosbeak*	<i>Pinicola enucleator</i>	Secure	-	Not Assessed
White-winged Crossbill	<i>Loxia leucoptera</i>	Secure	-	Not Assessed
Common Redpoll*	<i>Carduelis flammea</i>	Secure	-	Not Assessed
Hoary Redpoll	<i>Carduelis hornemanni</i>	Undetermined	-	Not Assessed

ISSUED FOR USE

Common Name	Scientific Name	Conservation Status		
		NWT	SARA	COSEWIC
Pine Siskin*	<i>Carduelis pinus</i>	Secure	-	Not Assessed
Amphibians				
Wood Frog	<i>Lithobates sylvatica</i>	Secure	-	Not Assessed
Mammals²				
Moose	<i>Alces americanus</i>	Secure	-	Not Assessed
Barren-ground Caribou	<i>Rangifer tarandus groenlandicus</i>	Sensitive	-	Not Assessed
Gray Wolf	<i>Canis lupus</i>	Secure	-	Not At Risk
Red Fox	<i>Vulpes vulpes</i>	Secure	-	Not Assessed
Arctic Fox	<i>Vulpes lagopus</i>	Secure	-	Not Assessed
Canada Lynx	<i>Lynx canadensis</i>	Secure	-	Not At Risk
Wolverine	<i>Gulo gulo</i>	Sensitive	Special Concern	No Status
North American River Otter	<i>Lontra canadensis</i>	Secure	-	Not Assessed
American Marten	<i>Martes americana</i>	Secure	-	Not Assessed
Ermine	<i>Mustela erminea</i>	Secure	-	Not Assessed
Least Weasel	<i>Mustela nivalis</i>	Secure	-	Not Assessed
American Mink	<i>Neovison vison</i>	Secure	-	Not Assessed
American Black Bear	<i>Ursus americanus</i>	Secure	-	Not At Risk
Snowshoe Hare	<i>Lepus americanus</i>	Secure	-	Not Assessed
Arctic Hare	<i>Lepus arcticus</i>	Secure	-	Not Assessed
Beaver	<i>Castor canadensis</i>	Secure	-	Not Assessed
Cinereus Shrew	<i>Sorex cinereus</i>	Secure	-	Not Assessed
American Water Shrew	<i>Sorex palustris</i>	Secure	-	Not Assessed
Arctic Shrew	<i>Sorex arcticus</i>	Secure	-	Not Assessed
American Pigmy Shrew	<i>Sorex hoyi</i>	Secure	-	Not Assessed
Red Squirrel	<i>Tamiasciurus hudsonicus</i>	Secure	-	Not Assessed
North American Deer Mouse	<i>Peromyscus maniculatus</i>	Secure	-	Not Assessed
Southern Red-backed Vole	<i>Myodes gapperi</i>	Secure	-	Not Assessed
Northern Bog Lemming	<i>Synaptomys borealis</i>	Secure	-	Not Assessed
Eastern Heather Vole	<i>Phenacomys ungava</i>	Secure	-	Not Assessed
Common Muskrat	<i>Ondatra zibethicus</i>	Secure	-	Not Assessed
Meadow Vole	<i>Microtus pennsylvanicus</i>	Secure	-	Not Assessed
Taiga Vole	<i>Microtus xanthognathus</i>	Secure	-	Not Assessed
North American Porcupine	<i>Erethizon dorsata</i>	Secure	-	Not Assessed

(Cornell Lab of Ornithology and the American Ornithologists' Union 2010; COSEWIC 2010; ENR 2010; Government of Canada 2010; Sibley 2003; Banfield 1977)

1. Bird species list does not include those that may flyover or briefly stop within the study area during spring and fall migrations.

* indicates species documented within the study area during the 2010 field events (June 8-13 and July 19-23, 2010).

** Lesser and Greater Scaup not distinguished in the field due to similar appearance, particularly when visual observation is restricted.

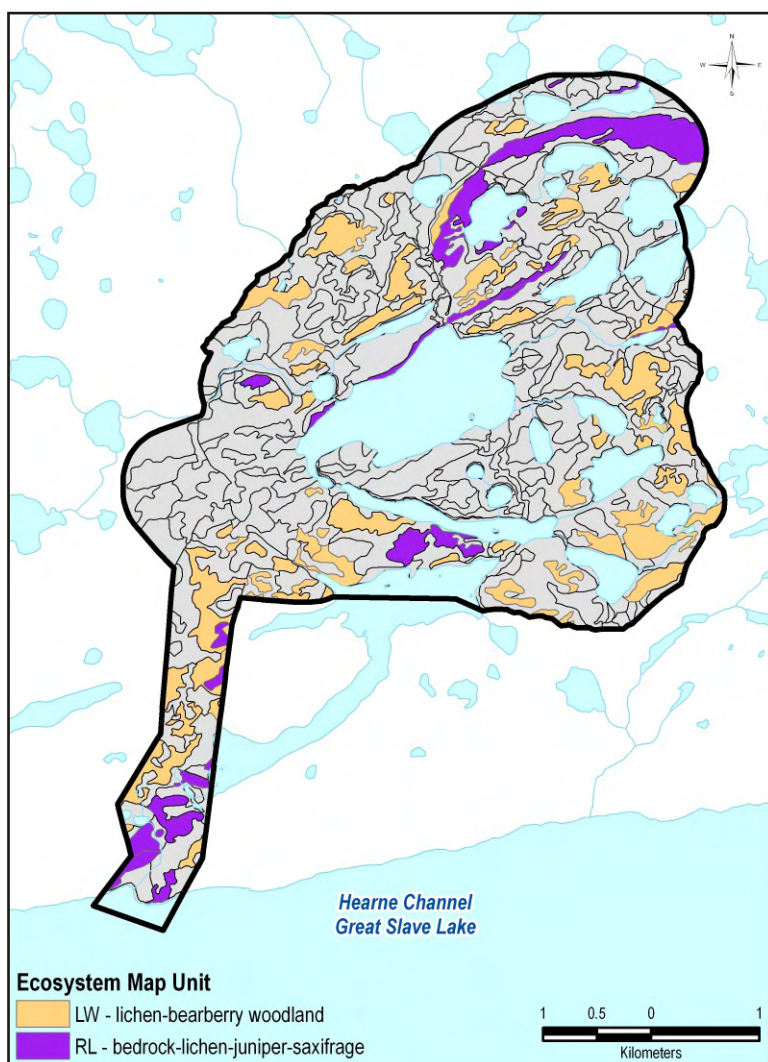
APPENDIX E

APPENDIX E WILDLIFE HABITAT ASSESSMENT

Bedrock - Lichen

- Bedrock-Lichen-Juniper-Saxifrage(RL)
- Lichen-Bearberry-Woodland (LW)

V15101007.007
November 2010
ISSUED FOR USE



Representative Bedrock-Lichen habitat.



Evidence of porcupine feeding on jackpine was commonly observed in this habitat type.

Bedrock – Lichen Wildlife Habitat Assessment

Habitat Description	This broad habitat type includes the following ecosites within the local study area: Lichen-bearberry woodland (LW) and Bedrock-lichen-juniper-saxifrage (RL) and is located on a crest or upper slope position. Soils are shallow with greater than 30% exposed rock or crust lichens and less than 30% tree cover. Vegetation dominated by coniferous and deciduous trees, juniper, Canada buffaloberry, common bearberry, crust and reindeer lichens. (Stantec 2009).				
Species Sign*	Moose, caribou, black bear, red fox, porcupine, snowshoe hare, red squirrel, and ptarmigan species				
Species	Season of Use	Life Requisite Ranking**			Overall Habitat Ranking
		Food Habitat	Security Habitat	Over-Wintering Habitat	
Moose	Spring	L	N	-	L
	Summer	L	L	-	L
	Fall	L	N	-	L
	Winter	L	N	L	L
Caribou	Winter	H	N	H	M
Olive-sided Flycatcher	Non-winter	H	H	-	H
Rusty Blackbird	Non-winter	N	N	-	N
Common Nighthawk	Non-winter	H	H	-	H

* Wildlife sign documented during the June and July 2010 survey events. Evidence of sign in habitat types were not considered during the ranking of broad habitat types.

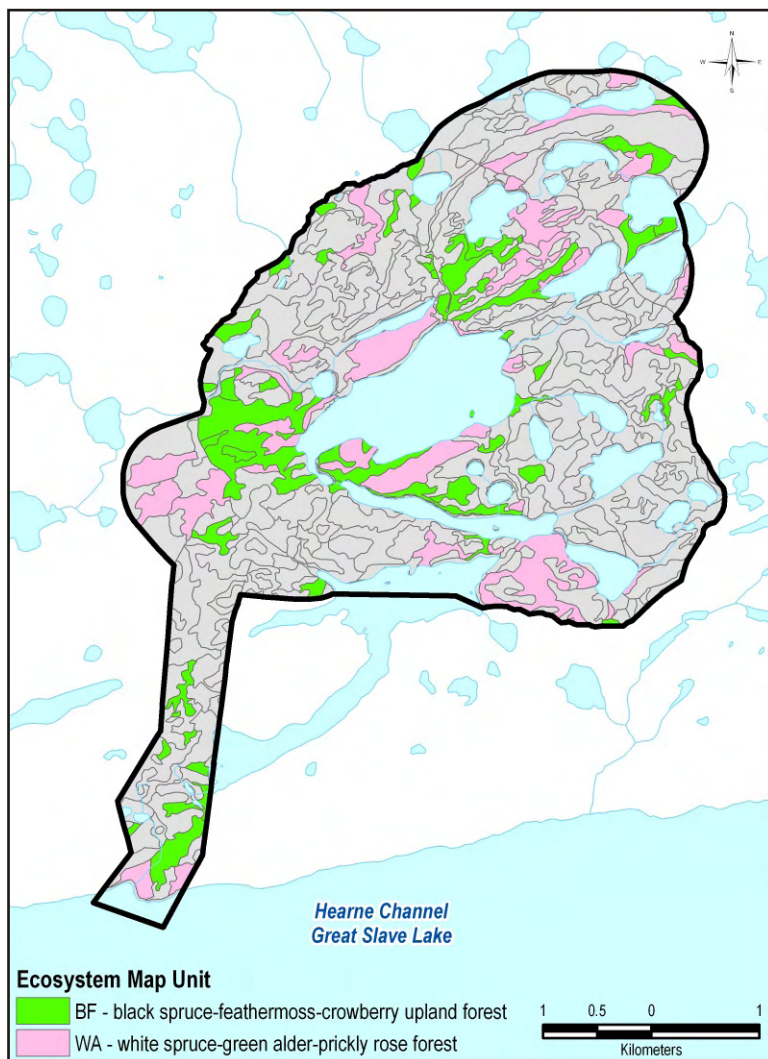
** H = High; M = Moderate; L = Low; and N = Nil.

— = Not applicable

Spruce Upland

- Black Spruce-Feathermoss-Crowberry-Upland Forest (BF)
- White Spruce-Green Alder-Prickly Rose-Upland Forest (WA)

V15101007.007
November 2010
ISSUED FOR USE



Representative White Spruce-Green Alder-Prickly Rose-Upland Forest habitat.



Tree cavity likely excavated by a Northern Flicker for possible nesting.

Spruce Upland Wildlife Habitat Assessment

Habitat Description	This broad habitat type includes the following ecosites within the local study area: Black Spruce-Feathermoss-Crowberry-Upland Forest (BF) and White Spruce-Green Alder-Prickly Rose-Upland Forest (WA). These sites are located on lower slope to crest positions, and are characterized by shallow soils, poor to medium soil nutrient regimes, and well to moderately well drainage. Typical vegetation species include black and white spruce, green alder, Labrador tea, low bush cranberry, dwarf scouring rush, lichens, and feathermoss. (Stantec 2009).				
Species Sign*	Black bear, moose, wolf, spruce grouse, red squirrel, and snowshoe hare				
Species	Season of Use	Life Requisite Ranking**			Overall Habitat Ranking
		Food Habitat	Security Habitat	Over-Wintering Habitat	
Moose	Spring	L	L	-	L
	Summer	L	L	-	L
	Fall	L	L	-	L
	Winter	L	L	L	L
Caribou	Winter	L	N	L	L
Olive-sided Flycatcher	Non-winter	L	L	-	L
Rusty Blackbird	Non-winter	N	N	-	N
Common Nighthawk	Non-winter	L	N	-	L

* Wildlife sign documented during the June and July 2010 survey events. Evidence of sign in habitat types were not considered during the ranking of broad habitat types.

** H = High; M = Moderate; L = Low; and N = Nil.

— = Not applicable

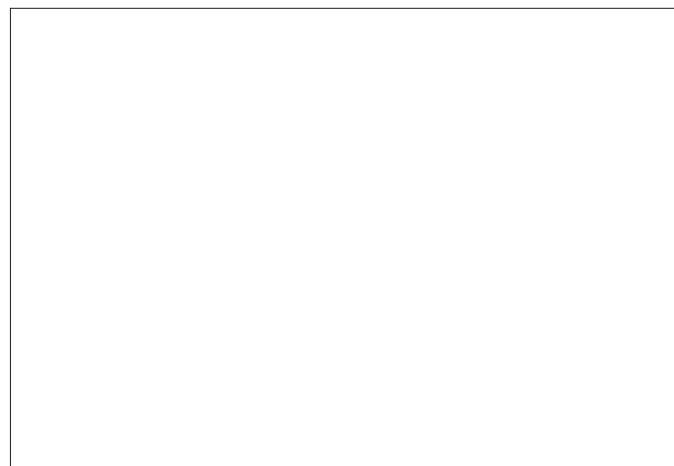
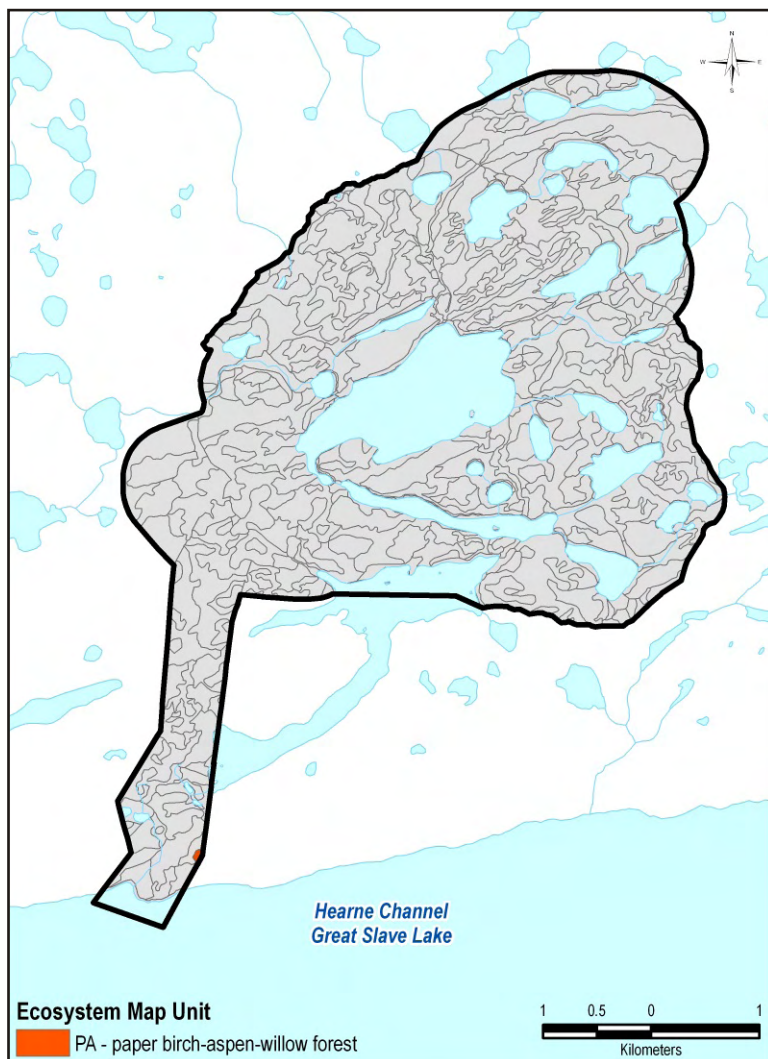
Broadleaf Upland

• Paper Birch-Aspen-Willow-Forest (PA)

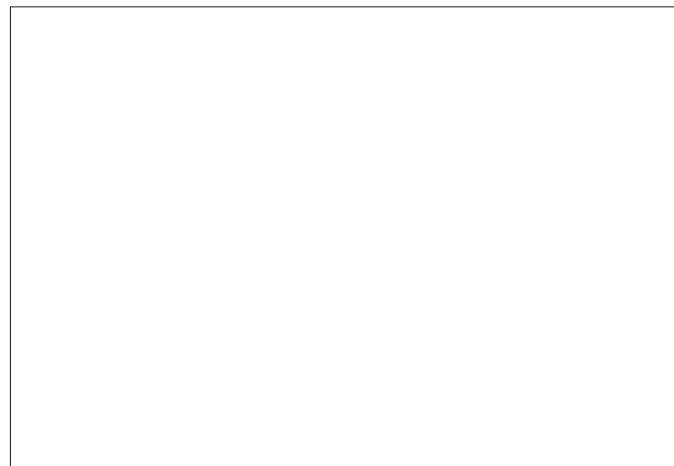
V15101007.007

November 2010

ISSUED FOR USE



No photo available.



No photo available.

Broadleaf Upland Wildlife Habitat Assessment

Habitat Description	This broad habitat type includes the Paper Birch-Aspen-Willow-Forest (PA) ecosite. This ecosite occurs as a single small polygon inside the local study area. It is found on mid to upper slope positions with well drained shallow soils. Paper birch or aspen dominate the tree cover, with some white spruce (crown closure ranging from 50-80%). Willow, juniper, and black current present within the understory. The forb and ground cover species not documented. (Stantec 2009).				
Species Sign*	Not surveyed due to its restricted distribution and access within the local study area				
Species	Season of Use	Life Requisite Ranking**			Overall Habitat Ranking
		Food Habitat	Security Habitat	Over-Wintering Habitat	
Moose	Spring	H	L	-	M
	Summer	H	L	-	M
	Fall	H	L	-	M
	Winter	H	L	H	M
Caribou	Winter	N	N	N	N
Olive-sided Flycatcher	Non-winter	N	N	-	N
Rusty Blackbird	Non-winter	N	N	-	N
Common Nighthawk	Non-winter	N	N	-	N

* Wildlife sign documented during the June and July 2010 survey events. Evidence of sign in habitat types were not considered during the ranking of broad habitat types.

** H = High; M = Moderate; L = Low; and N = Nil.

— = Not applicable

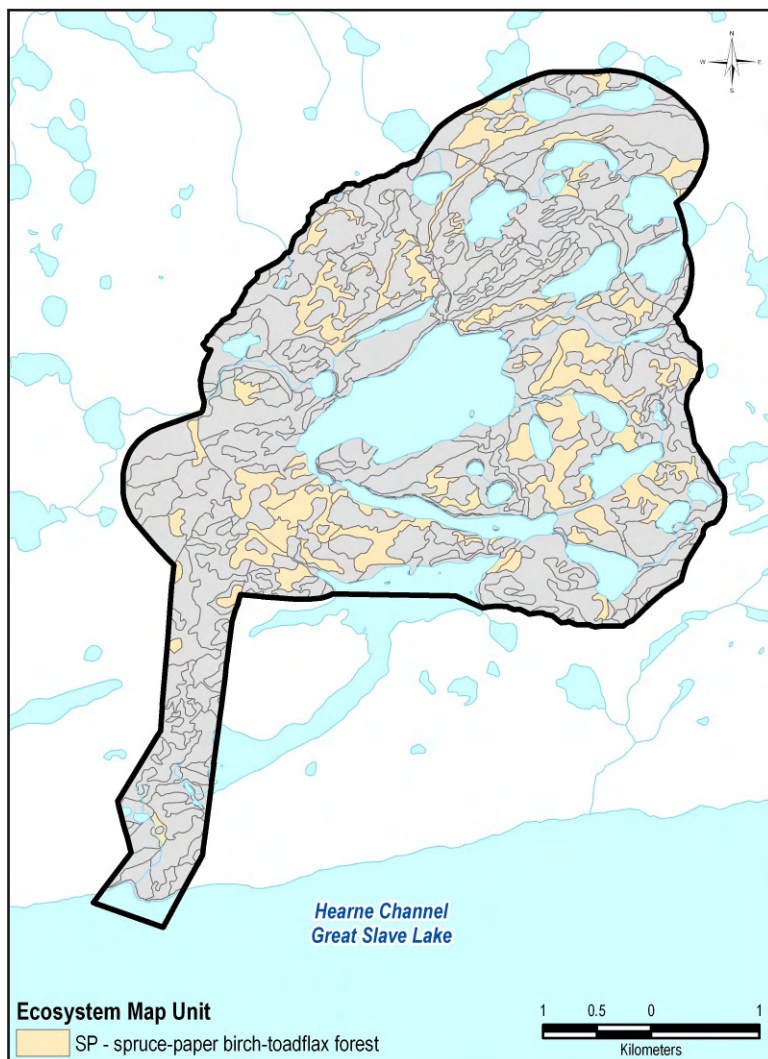
Mixed Upland

• Spruce-Paper Birch-Toadflax-Forest (SP)

V15101007.007

November 2010

ISSUED FOR USE



Representative Mixed Upland habitat.



Evidence of Yellow-bellied Sapsucker feeding on paper birch was common in this habitat type.

Mixed Upland Wildlife Habitat Assessment

Habitat Description	This broad habitat type includes the Spruce-Paper Birch-Toadflax-Forest (SP) ecosite, which is typically found on mid to lower slopes and have moderately well drained shallow soils. White and black spruce and paper birch trees are present. The understory layer consists of green alder, Labrador tea, northern bastard toadflax, alpine bearberry, mosses, and reindeer lichens. (Stantec 2009).				
Species Sign*	Black bear, moose, spruce grouse, red squirrel, porcupine, and snowshoe hare				
Species	Season of Use	Life Requisite Ranking**			Overall Habitat Ranking
		Food Habitat	Security Habitat	Over-Wintering Habitat	
Moose	Spring	M	N	-	L
	Summer	M	N	-	L
	Fall	L	N	-	L
	Winter	L	N	L	L
Caribou	Winter	N	N	N	N
Olive-sided Flycatcher	Non-winter	N	N	-	N
Rusty Blackbird	Non-winter	N	N	-	N
Common Nighthawk	Non-winter	N	N	-	N

* Wildlife sign documented during the June and July 2010 survey events. Evidence of sign in habitat types were not considered during the ranking of broad habitat types.

** H = High; M = Moderate; L = Low; and N = Nil.

— = Not applicable

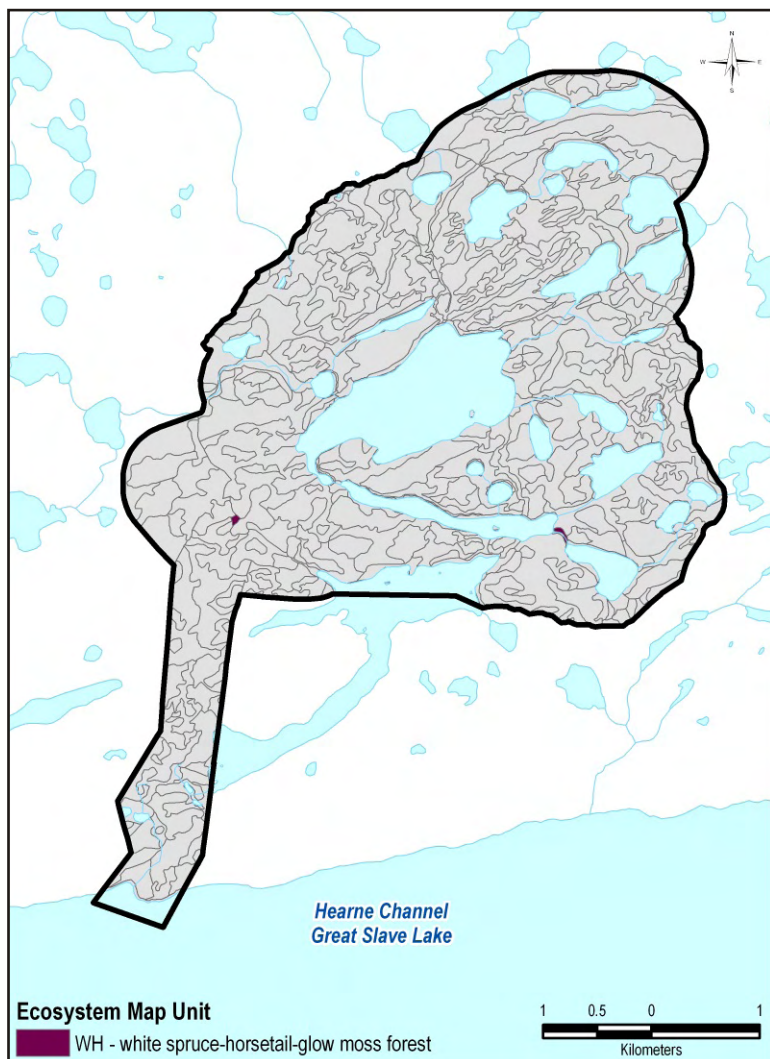
Spruce Wet

• White Spruce-Horsetail-Glow Moss-Forest (WH)

V15101007.007

November 2010

ISSUED FOR USE



Representative Spruce Wet habitat.



The abundance of common horsetail in this habitat type provides good food resources for moose and black bears in the spring.

Spruce Wet Wildlife Habitat Assessment

Habitat Description	This broad habitat type includes White Spruce-Horsetail-Glow Moss-Forest (WH) ecosite. It is described as having imperfect to poorly drained soils with medium to rich nutrient regimes. The slope position is typically depressional or level. White spruce is the dominant tree, but small amounts of black spruce and paper birch may be present. The shrub layer is poorly developed, and includes Labrador tea. A high cover of common horsetail, sedges, stair-step moss and glow moss is also present. (Stantec 2009).				
Species Sign*	Moose and microtine species				
Species	Season of Use	Life Requisite Ranking**			Overall Habitat Ranking
		Food Habitat	Security Habitat	Over-Wintering Habitat	
Moose	Spring	M	N	-	L
	Summer	L	N	-	L
	Fall	N	N	-	N
	Winter	N	N	N	N
Caribou	Winter	L	N	L	L
Olive-sided Flycatcher	Non-winter	L	L	-	L
Rusty Blackbird	Non-winter	N	N	-	N
Common Nighthawk	Non-winter	L	N	-	L

* Wildlife sign documented during the June and July 2010 survey events. Evidence of sign in habitat types were not considered during the ranking of broad habitat types.

** H = High; M = Moderate; L = Low; and N = Nil.

— = Not applicable

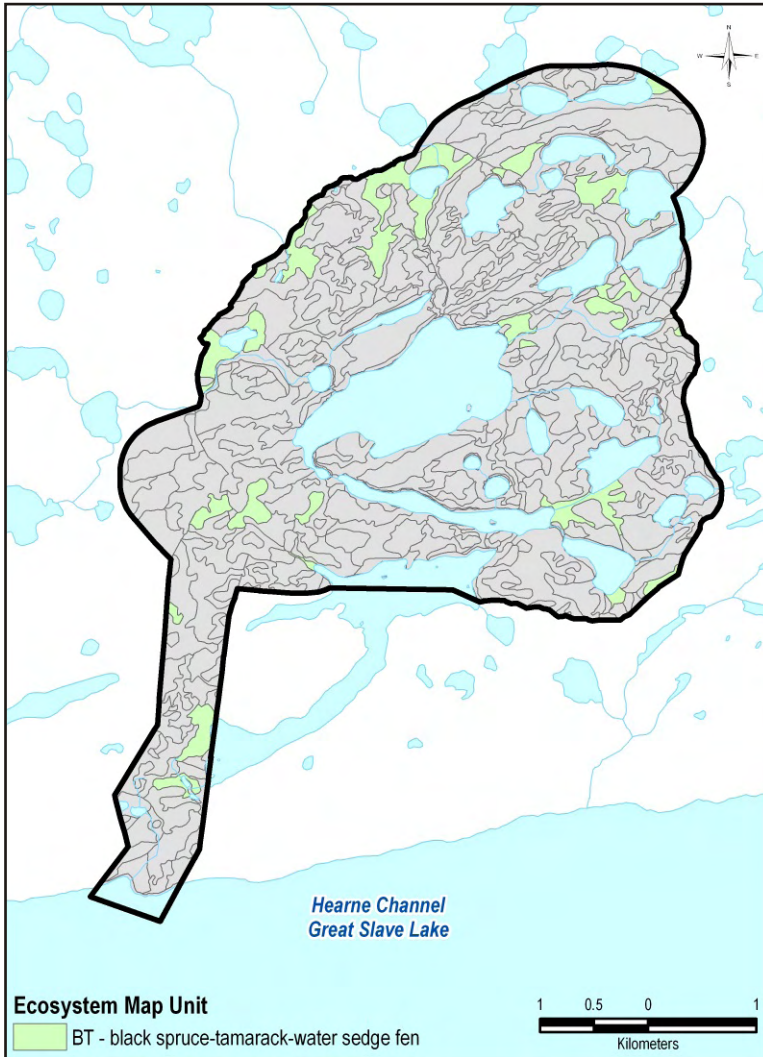
Treed Fen

• Black Spruce-Tamarack-Water Sedge-Fen (BT)

V15101007.007

November 2010

ISSUED FOR USE



Representative Treed Fen habitat.



Red squirrel sign, such as this midden was commonly observed in many of the spruce tree dominated habitats.

Treed Fen Wildlife Habitat Assessment

Habitat Description	This broad habitat type includes the Black Spruce-Tamarack-Water Sedge-Fen (BT) ecosite. It is typically located on level, depressional, lower, or toe slope positions, commonly adjacent to water bodies or riparian areas. Poorly drained soils with nutrient regime ranging from poor to medium. Stunted black spruce and tamarack are the dominant tree species. The understory vegetation commonly includes willow, Labrador tea, scrub birch, sedge, common horsetail, and glow moss. (Stantec 2009).				
Species Sign*	Black bear, moose, red fox, and red squirrel				
Species	Season of Use	Life Requisite Ranking**			Overall Habitat Ranking
		Food Habitat	Security Habitat	Over-Wintering Habitat	
Moose	Spring	L	L	-	L
	Summer	L	L	-	L
	Fall	L	L	-	L
	Winter	L	L	L	L
Caribou	Winter	N	N	N	N
Olive-sided Flycatcher	Non-winter	L	L	-	L
Rusty Blackbird	Non-winter	H	H	-	H
Common Nighthawk	Non-winter	M	N	-	M

* Wildlife sign documented during the June and July 2010 survey events. Evidence of sign in habitat types were not considered during the ranking of broad habitat types.

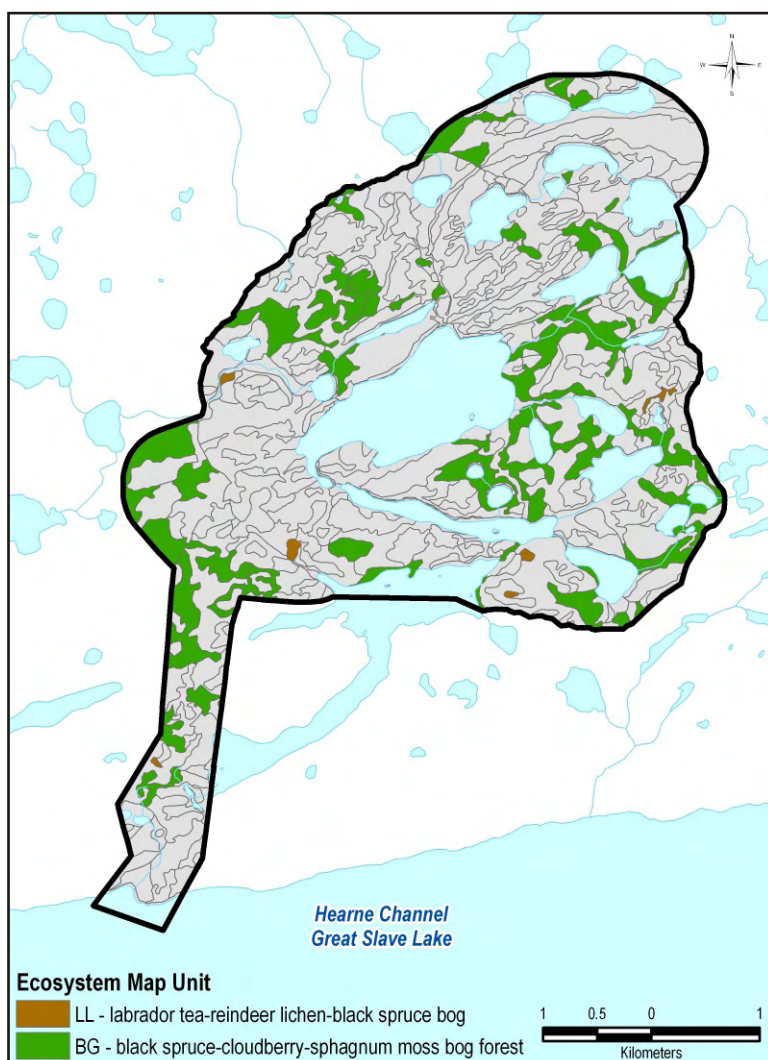
** H = High; M = Moderate; L = Low; and N = Nil.

— = Not applicable

Shrub Wet

- Labrador Tea-Black Spruce-Bog (LL)
- Black Spruce-Cloudberry-Sphagnum Moss-Bog-Forest (BG)

V15101007.007
November 2010
ISSUED FOR USE



Representative Labrador Tea-Black Spruce-Bog habitat.



Arboreal lichen found in the Black Spruce-Cloudberry-Sphagnum Moss-Bog-Forest provides winter forage for barren-ground caribou, particularly when terrestrial lichens are inaccessible after unseasonable thaw or freezing rain.

Shrub Wet Wildlife Habitat Assessment

Shrub Wet Wildlife Habitat Assessment					
Habitat Description	This broad habitat type includes the Labrador Tea-Black Spruce-Bog (LL) and the Black Spruce-Cloudberry-Sphagnum Moss-Bog-Forest (BG) ecosites. It is characterized by poorly drained, nutrient poor soils located on lower slopes or depressions. This is an open community with sparse and stunted black spruce, Labrador tea, scrub birch, water sedge, cloudberry, sphagnum moss, and reindeer lichen. (Stantec 2009).				
Species Sign*	Black bear, moose, grouse species, and snowshoe hare				
Species	Season of Use	Life Requisite Ranking**			Overall Habitat Ranking
		Food Habitat	Security Habitat	Over-Wintering Habitat	
Moose	Spring	N	N	-	N
	Summer	N	N	-	N
	Fall	N	N	-	N
	Winter	N	N	N	N
Caribou	Winter	H	L	H	M
Olive-sided Flycatcher	Non-winter	H	H	-	H
Rusty Blackbird	Non-winter	N	N	-	N
Common Nighthawk	Non-winter	H	N	-	M

* Wildlife sign documented during the June and July 2010 survey events. Evidence of sign in habitat types were not considered during the ranking of broad habitat types.

** H = High; M = Moderate; L = Low; and N = Nil.

— = Not applicable