

DILLON
CONSULTING

BUILD NOVA SCOTIA (BNS)

Former Country Harbour Mine Site

Environmental Screening Report





September 7, 2023

Build Nova Scotia (BNS)
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Attention: Mr. Dan Khan, P.Eng.
Project Manager, Mine Site Reclamation

Environmental Screening Report, Former Country Harbour Mine Site, Country Harbour Mines, Nova Scotia

Dillon Consulting Limited (Dillon) is pleased to submit this Environmental Screening Report in support of a Phase II Environmental Site Assessment to be conducted on Property Identification Designation (PID) Numbers 35091354 and a portion of PID 35094366, located in Country Harbour Mines, Nova Scotia.

Please do not hesitate to contact the undersigned at your convenience should you have any further questions or comments.

Sincerely,

DILLON CONSULTING LIMITED

A handwritten signature in black ink, appearing to read "Olivia Butty".

Olivia Butty, B.Sc.
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1.0

Introduction

The following document has been prepared to present the findings of an environmental screening completed on a planned Phase II Environmental Site Assessment (ESA) field program at the Former Country Harbour Mine Site in Country Harbour Mines, Nova Scotia (herein referred to as the “subject property” or the “site”). Specifically, the areas of the environmental screening will include the access routes to planned drilling locations, and the areas of the planned drilling activities (i.e., five planned monitoring well installations) for the Phase II ESA. The access routes and the proposed monitoring well areas are planned to include tree removal, to be completed by Nova Scotia Department of Natural Resources and Renewables (NS DNRR), prior to the drilling program to facility equipment access.

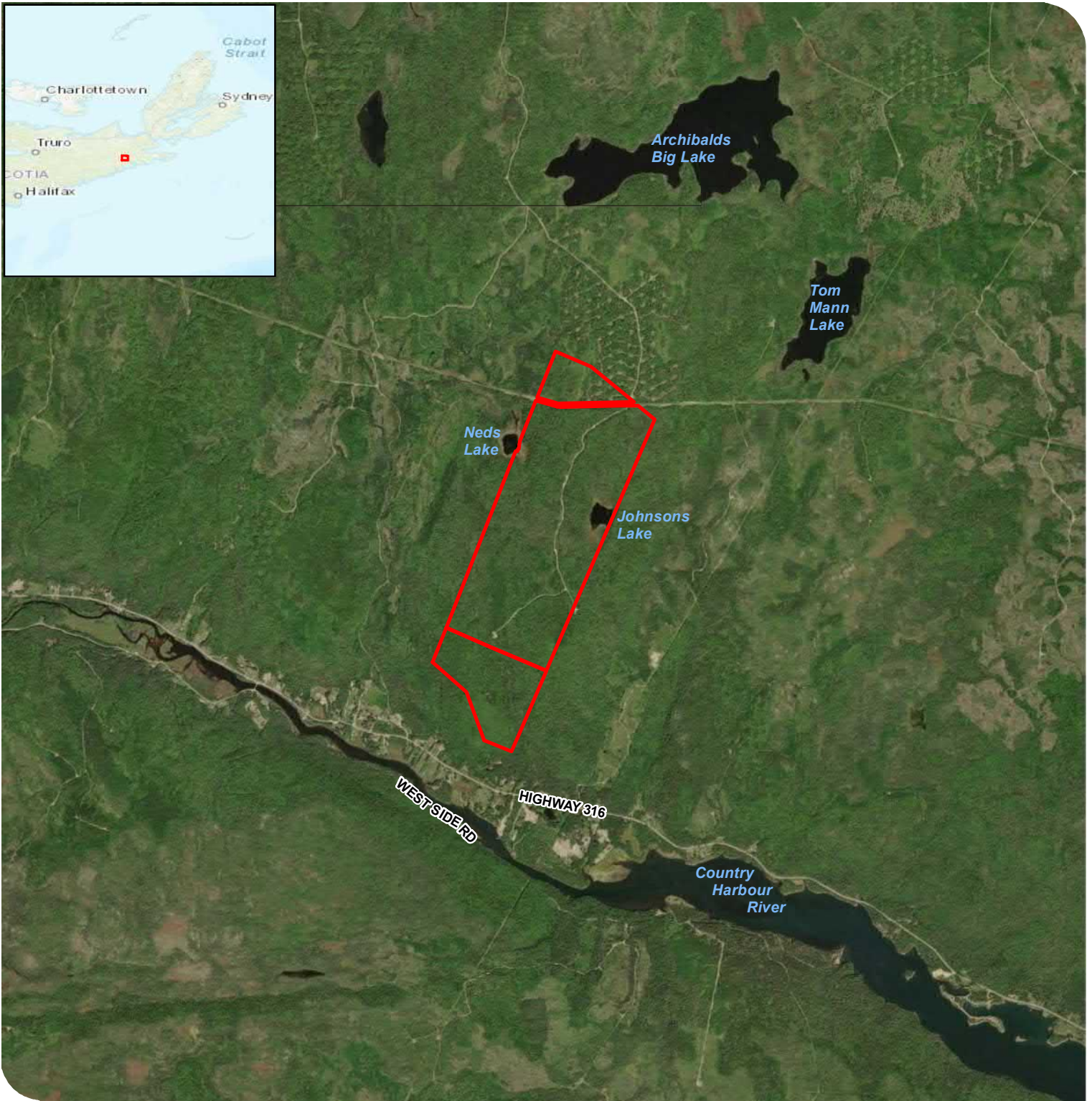
The purpose of this environmental screening report is to present a technical assessment of potential environmental constraints that may affect project activities. Watercourses, wetlands, Species at Risk (SAR) and Species of Conservation Concern (SoCC), which may be impacted by project activities, are identified through this screening. The interaction between these features and proposed project components (e.g., tree clearing, drilling) were assessed, and recommended mitigation measures to limit potential impacts to these species and environmental features are provided in the following sections.

1.1

Project Location and Background Information


The former Country Harbour Mine site is located in Country Harbour Mines, Guysborough County, Nova Scotia. The subject properties (i.e., PID: 35091354 and a portion of 35094366) are owned by the NS DNRR and classified as provincial forest. The former mine site, approximately 42 hectares in size with 46 known abandoned mine openings (AMOs) and one reported tailings area, can be accessed using John Fenton Loop Road off of Highway 316. Surrounding land uses are primarily resource, with some residential properties located south of the site (**Figure 1**).

Known mining operations for gold ore are reported to have occurred at the site between 1862 and 1951. Mine workings were underground and included drifts and stopes, shafts access, and ramp accesses. Approximately 26,301 tons of ore was processed on-site, resulting in an estimated 14,225 tons of tailings. Several stamp mills operated at the site, including the Old Antigonish Mill, the Stuart Mill, and the Robertson Mill. In addition to gold stamp mills, buildings and infrastructure were constructed to support mining operations at the site. These buildings and infrastructure have been removed from the site, although portions of some foundations remain. Due to the number of AMOs, fencing, barricades, berms, and warning signs have been installed at the site.



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Former Country Harbour Mine Site
 Environmental Screening Report

 Subject Parcel

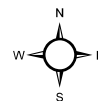
PROJECT LOCATION


FIGURE 1



MAP DRAWING INFORMATION:
 DATA PROVIDED BY: GeoNova, ESRI, Build NS

MAP CREATED BY: SCM
 MAP CHECKED BY: APY
 MAP PROJECTION: NAD 1983 UTM Zone 20N



SCALE 1:40,000

 PROJECT: 236465
 STATUS: DRAFT
 DATE: 2023-09-06

2.0 Existing Conditions

As part of the environmental screening, Dillon completed a desktop environmental review of existing conditions at the former mine site. Observations from the site visits undertaken by Dillon on July 17 and 18, 2023 while undertaking a Phase I ESA were also reviewed. The following sections provide a general description of the results of the desktop review and site visits. Photographs of the site taken during the Phase I ESA are provided in **Appendix A**.

2.1 Species at Risk and Species of Conservation Concern

Special consideration was given to identifying any SAR and SoCC that may be present within the subject properties. For the purposes of this environmental screening, SAR are defined as those species that are listed as “Extirpated”, “Endangered”, “Threatened”, “Special Concern”, or “Vulnerable” on Schedule 1 of the federal *Species at Risk Act* (SARA) or the Nova Scotia *Endangered Species Act* (ESA). SoCC are not protected under legislation, but defined as rare (ranked S1, S2, or S3 by the Atlantic Canada Conservation Data Center (AC CDC)) or assessed as Endangered, Threatened, or Special Concern by Committee on the Status of Endangered Wildlife in Canada (COSEWIC), were also noted for consideration. Historical observations of SAR and SoCC were acquired from the AC CDC. The AC CDC report (2023; **Appendix B**) identified the following SAR and SoCC within 5 kilometres (km) of the former mine site (**Table 1**).

Table 1: SAR and SoCC Identified Within 5 Km of the Former Mine Site

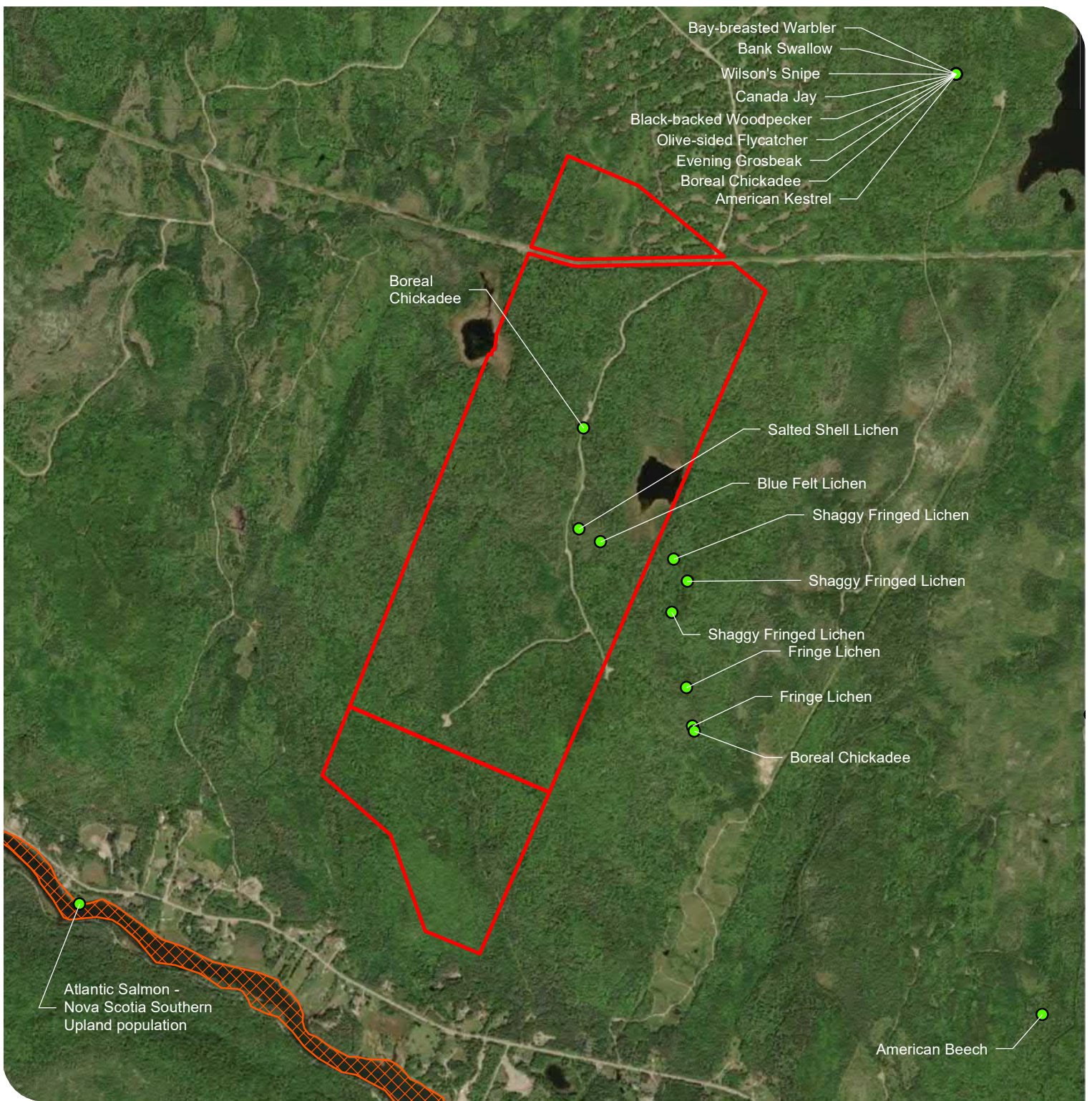
Common Name	Scientific Name	COSEWIC	SARA	NS ESA	S-Rank ¹
Fish					
Atlantic Salmon – Nova Scotia Southern Upland population	<i>Salmo salar</i>	Endangered	-	-	S1
Birds					
Bank Swallow	<i>Riparia riparia</i>	Threatened	Threatened	Endangered	S2B
Canada Warbler	<i>Cardellina canadensis</i>	Special Concern	Threatened	Endangered	S3B
Common Nighthawk	<i>Chordeiles minor</i>	Special Concern	Special Concern	Threatened	S3B
Olive-sided Flycatcher	<i>Contopus cooperi</i>	Special Concern	Special Concern	Threatened	S3B
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	Special Concern	Special Concern	Vulnerable	S3B, S3N, S3M
Common Tern	<i>Sterna hirundo</i>	Not At Risk	-	-	S3B
Canada Jay	<i>Perisoreus canadensis</i>	-	-	-	S3
Boreal Chickadee	<i>Poecile hudsonicus</i>	-	-	-	S3

Common Name	Scientific Name	COSEWIC	SARA	NS ESA	S-Rank ¹
Greater Yellowlegs	<i>Tringa melanoleuca</i>	-	-	-	S3B,S4M
American Kestrel	<i>Falco sparverius</i>	-	-	-	S3B, S4S5M
Wilson's Snipe	<i>Gallinago delicata</i>	-	-	-	S3B,S5M
Black-backed Woodpecker	<i>Picoides arcticus</i>	-	-	-	S3S4
Bay-breasted Warbler	<i>Setophaga castanea</i>	-	-	-	S3S4B, S4S5M
Red-breasted Merganser	<i>Mergus serrator</i>	-	-	-	S3S4B, S5M,S5N
Freshwater mussels					
Eastern Pearlshell	<i>Margaritifera margaritifera</i>	-	-	-	S2
Vascular plants					
American Beech	<i>Fagus grandifolia</i>	-	-	-	S3S4
Woodland Strawberry	<i>Fragaria vesca</i>	-	-	-	S3S4
Lichens					
Boreal Felt Lichen - Atlantic pop.	<i>Erioderma pedicellatum</i> (Atlantic pop.)	Endangered	Endangered	Endangered	S1
Blue Felt Lichen	<i>Pectenia plumbea</i>	Special Concern	Special Concern	Vulnerable	S3
Frosted Glass-whiskers (Atlantic population)	<i>Sclerophora peronella</i> (Atlantic pop.)	Special Concern	Special Concern	-	S3S4
Peppered Moon Lichen	<i>Sticta fuliginosa</i>	-	-	-	S3S4
Acadian Jellyskin Lichen	<i>Leptogium acadense</i>	-	-	-	S3S4
Salted Shell Lichen	<i>Coccocarpia palmicola</i>	-	-	-	S3S4
Shaggy Fringed Lichen	<i>Anaptychia palmulata</i>	-	-	-	S3S4
Fringe Lichen	<i>Heterodermia neglecta</i>	-	-	-	S3S4

Notes:

¹ AC CDC S-Ranks as follows- S1: extremely rare in province; S2: rare in province; S3: uncommon in province; S4: widespread, common, and apparently secure in province; S5: widespread, abundant, and demonstrably secure in province; S#S#: a numeric range rank used to indicate any range of uncertainty about the status of the species or community; B: breeding; N: nonbreeding; M: migrant; U: unrankable (AC CDC 2023).

Though present on and/or within 5 km from the subject properties, the AC CDC report showed no historical observations within the former mine footprint. The nearest SAR and SoCC records are approximately 1 km away from the approximate center of the former mine site (2023; **Appendix B**). SAR and SoCC near the former mine site are depicted on **Figure 2**.



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- ACCDC Observations
- Atlantic Salmon - Nova Scotia Southern Upland Population Habitat
- Subject Parcel

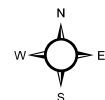
SPECIES AT RISK AND SPECIES OF CONSERVATION CONCERN

FIGURE 2



MAP DRAWING INFORMATION:
 DATA PROVIDED BY

MAP CREATED BY: SCM
 MAP CHECKED BY: OLB
 MAP PROJECTION: NAD 1983 UTM Zone 20N



SCALE 1:20,000

0 100 200 400 m

PROJECT: 236465
 STATUS: DRAFT
 DATE: 2023-09-06

2.2 Fish and Fish Habitat

According to the provincial landscape viewer, one mapped intermittent watercourse, Johnston Brook, flows through the subject properties from northwest to southeast (NS DNRR 2021). Photos from the Phase I ESA site visits confirm the presence of this watercourse. It is noted from the desktop review and site photos that this watercourse has a steep grade and predominantly large substrate. A short waterfall exists at the furthest downstream extent of the watercourse on the site near the southern property line. Another waterfall is also noted from site photos approximately 500 metres (m) upstream of the southern property boundary line. Given these characteristics (i.e., an elevation drop at the entry to the properties, generally steep grade and intermittent nature), the section of Johnston Brook within the subject properties may not provide suitable habitat for aquatic species (i.e., Atlantic Salmon, Eastern Pearshell) to complete their life cycles.

2.3 Vegetation

The subject properties of the former mine site are primarily forested and located on Crown land. Some cleared areas exist where forest roads and old mining infrastructure are located. According to the provincial landscape map, the area is categorized as Tolerant Mixedwood Hills under the Ecological Land Classification system. According to the online mapping, dominant tree species include: balsam fir (*Abies balsamea*), yellow birch (*Betula alleghaniensis*), red maple (*Acer rubrum*) and white spruce (*Picea glauca*) (NS DNRR 2021). These tree species are evident in photos from the site visits along with various species in the shrub and herbaceous layer such as common ferns, grasses and sedges (**Appendix A**).

2.4 Wetlands

There are two mapped wetlands located on the subject properties: one surrounding Johnson's Lake (approximately 1.2 km northeast of the former tailings area) and another approximately 800 m northeast of the tailings area along a site road. These two wetlands are together approximately 4 hectares in area, hydraulically up-gradient from and outside of the former mine footprint. The provincial map viewer classifies these wetlands as low shrub swamp land (NS DNRR 2021).

2.5 Wildlife and Wildlife Habitat

The forested areas of the subject properties likely provide adequate habitat for numerous wildlife species that reside in Nova Scotia. Wildlife SAR or SoCC were recorded within 5 km of the former mine site according to the AC CDC report; however, none were noted in the immediate vicinity (AC CDC 2023; **Appendix B**). While no direct wildlife observations in the Phase I ESA site visit photographs were noted, it was noted from the photos that some dead snags may provide suitable bat maternity roost habitat (**Appendix A**).

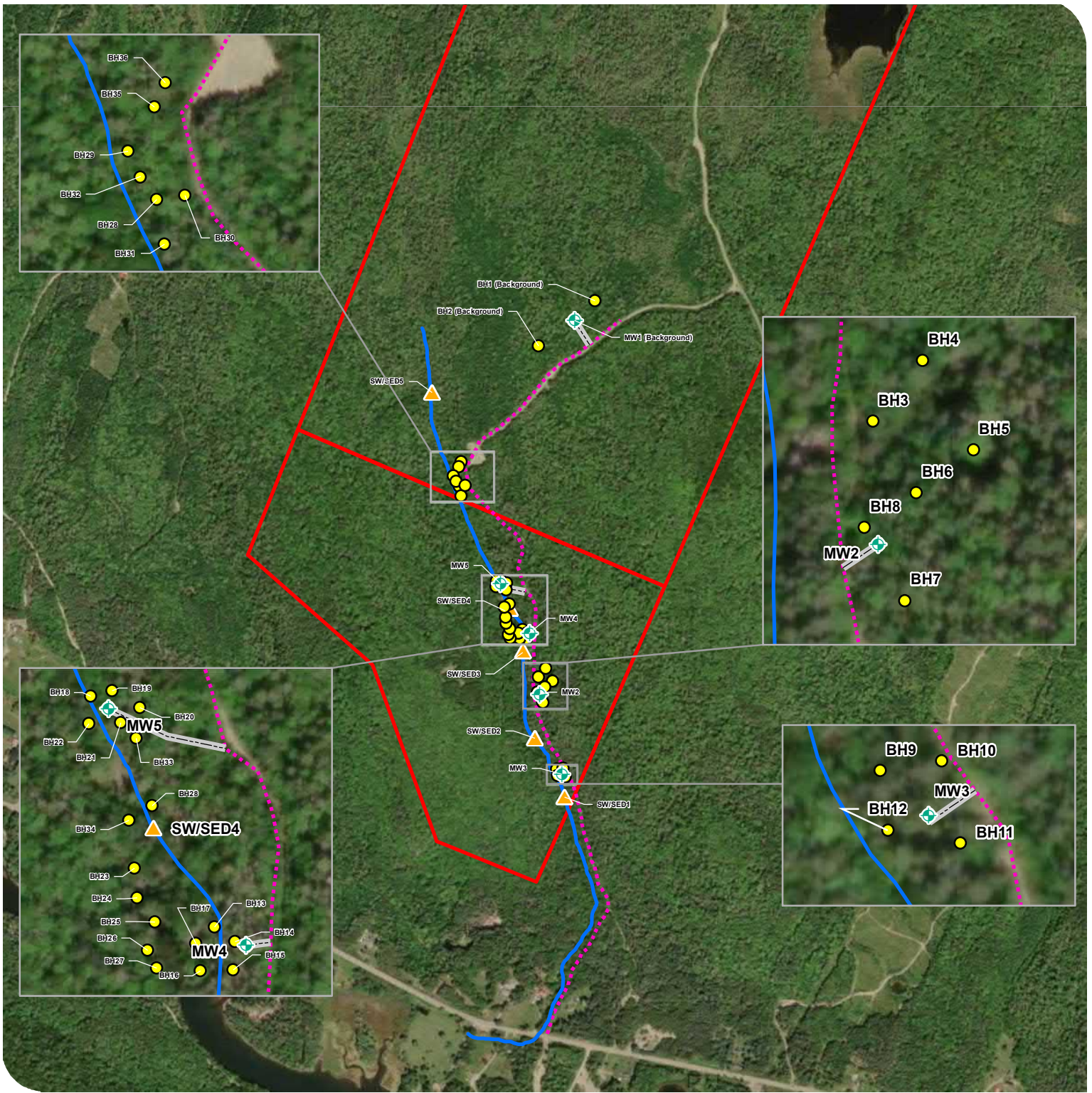
3.0

Environmental Screening

The potential for SAR and SoCC to occur within the planned drilling areas was determined by comparing species habitat requirements to the habitat conditions present on-site, and using the results of the background information review and the site photos to apply the following rankings:








- **Low Probability:** neither species nor suitable habitat observed but there is a known species record in the general area.
- **Moderate Probability:** species not observed; however, potentially suitable habitat on or adjacent to site was identified and there is a known species record in the general area.
- **High Probability:** good quality SAR habitat identified (e.g., sufficiently large areas of suitable vegetation and presence of key features such as nesting sites), and/or known species record in the area.

Figure 3 presents the proposed drilling areas (see proposed monitoring well locations – ‘MW’ on the figure). It should be noted that the proposed borehole locations (‘BH’ on **Figure 3**) will be completed using hand augers, no clearing will be associated with these locations thus no mitigation measures are proposed. **Table 3** provides a brief summary of the likelihood of SAR and SoCC occurring within the proposed clearing areas associated with the monitoring well locations.



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Former Country Harbour Mine Site
Environmental Screening Report

-  Proposed Monitoring Well
-  Proposed Borehole (hand auger)
-  Proposed Surface Water and Sediment Sample Location
-  Watercourse
-  Proposed Access Routes to Monitoring Wells
-  Site Access Road
-  Subject Parcel

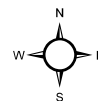
PROPOSED SAMPLING PLAN

FIGURE 3



MAP DRAWING INFORMATION:
DATA PROVIDED BY: GeoNova, ESRI, Build NS

MAP CREATED BY: SCM
MAP CHECKED BY: APY
MAP PROJECTION: NAD 1983 CSRS UTM Zone 20N



0 12.5 25 50 m

SCALE 1:10,844

PROJECT: 236465

STATUS: DRAFT

DATE: 2023-09-06

Table 2: SAR and SoCC Potential to Occur Within the Proposed Clearing Areas

Species	Habitat	Probability Ranking
Fish		
Atlantic Salmon – Nova Scotia Southern Upland population	Streams, rivers with gravel substrate that feature rapids, pools and cool temperatures. ¹	Low – watercourses not anticipated to intersect cleared areas
Birds		
Bank Swallow	Nests within steep embankments along eroding river/ocean shore, but also quarries and gravel pits. ¹	Low – clearing not anticipated to intersect preferred habitat
Canada Warbler	Abundant in moist, mixed coniferous-deciduous forest with a well-developed understory. Nests are built on or near the ground, hidden in mossy hummocks, or beneath root masses, downed wood, base of large wet forest fern species and clumps of grass. ¹	High – habitat likely present within cleared areas
Common Nighthawk	Require open ground or clearings for nesting. Breeds in a wide range of open habitats. Forage in open areas with flying insects during crepuscular periods, although they sometimes forage during the day. Roosting sites consists of tree limbs, ground, fence posts, rooftops. ¹	Moderate – habitat not likely in proposed clearing areas; however, may nest on access roads
Olive-sided Flycatcher	Coniferous or mixed forest, often near water or wetlands. Often associated with natural forest openings and other forest edges or open to semi-open forest stands containing snags. Nests are generally in conifers, towards the tips of branches. Open areas with tall trees or snags for perching are required for foraging. ¹	High – habitat likely present within cleared areas
Evening Grosbeak	Breeding habitat generally includes open, mature mixed wood forests where fir species and/or white spruce are dominant and Spruce Budworm is abundant. Outside of the breeding season the species is dependent on seed crops from various trees such as firs and spruces. Nests are located in the canopy and the preference is to use conifers. ¹	High – habitat likely present within cleared areas
Common Tern	Nest on rocky islands, barrier beaches, and saltmarshes. Forage over open waters. ²	Low – proposed cleared areas do not intersect with preferred habitats
Canada Jay	Boreal forests where black or white spruce trees are common. Nests at low to moderate height, often in trees close to the south-facing edge of a forest patch to take advantage of the extra warmth from sunlight. ²	High – habitat likely present within cleared areas

Species	Habitat	Probability Ranking
Boreal Chickadee	Inhabit mostly mature coniferous forests, usually spruce and balsam fir, often near water. Nests are made inside cavities, usually in dead trees. ²	High – habitat likely present within cleared areas
Greater Yellowlegs	Use a wide variety of fresh and brackish wetlands, including mudflats, marshes, lake and pond edges, wet meadows, sewage ponds, and flooded agricultural fields during migration. Seek out boreal wetlands, wet meadows, and sedge lands for breeding habitat. ²	Low – proposed cleared areas do not intersect with preferred habitats
American Kestrel	Favor open areas with short ground vegetation and sparse trees. Nest in cavities such as old woodpecker holes, natural tree hollows, rock crevices, and nooks in buildings and other human-built structures. ²	Low – proposed cleared areas do not intersect with preferred habitats
Wilson's Snipe	Found in wet, marshy settings, including bogs, fens, alder and willow swamps, wet meadows, and along rivers and ponds. Nest on the ground close to or surrounded by water. The nest is often placed atop or on the edge of a hummock and well hidden by sedges, grass, or sphagnum moss. Willow, alder, or other brush may obscure the nest from above. ²	Low – proposed cleared areas do not intersect with preferred habitats
Black-backed Woodpecker	Inhabit coniferous forests. Highest densities in recently burned areas, occasionally including burned or insect-infested deciduous forest. Nest in usually relatively small, dead tree cavities in areas with a high density of relatively large trees. ²	High – habitat likely present within cleared areas
Bay-breasted Warbler	Breed mostly in mature spruce and fir forests, often near water. Nests are most often in dense spruce or balsam fir, usually on a branch in the lower third of the tree. ²	High – habitat likely present within cleared areas
Red-breasted Merganser	Breed in fresh, brackish, and saltwater wetlands, typically close to the coast. Nest along forested riverbanks, marsh edges, lakeshores, coastal islands, and sandy shores with vegetation. ²	Low – proposed cleared areas do not intersect with preferred habitats
Freshwater mussels		
Eastern Pearlshell	Generally live buried in clean, mixed stable substrate in fast-flowing unpolluted streams and rivers. ³	Low – watercourses not anticipated to intersect cleared areas
Vascular plants		
American Beech	Needs moist, well-drained, rich soils. Shade tolerant species. ⁴	Moderate – Possibly present within planned cleared areas.

Species	Habitat	Probability Ranking
Woodland Strawberry	Abandoned fields, along roads and in open woodlands. ⁵	Moderate – Possibly present along access roads.
Lichens		
Boreal Felt Lichen - Atlantic pop.	Typically in northerly exposed forested slopes where cool and moist conditions prevail throughout most of the year. These mature forest sites are also rich in moisture-loving species such as sphagnum mosses and Cinnamon Fern. In well-lit forests, found predominantly on tree trunks whereas in more shaded habitats it is found mostly on branches. ¹	High – habitat likely present within cleared areas
Blue Felt Lichen	Prefers the trunks of old growth, broad-leaved trees growing in moist habitats or close to streams and lake margins. Cool, humid woodlands that may be mixed/hardwood or dominated by deciduous trees. ¹	High – habitat likely present within cleared areas
Frosted Glass-whiskers (Atlantic population)	Grows on old deciduous trees, usually on the exposed heartwood of living trunks and more rarely on bark, in humid and shaded situations. Often associated with old-growth forests in coastal regions, but it is also found in open forests, in clearings, and on the margins of old deciduous forests. ¹	High – habitat likely present within cleared areas
Peppered Moon Lichen	Found on conifer and hardwood trees in mature, moist forests and bogs. ⁶	High – habitat likely present within cleared areas
Acadian Jellyskin Lichen	According to the AC CDC report, the individual recorded near the former mine site was found on the bark of two mature red maples in an upland forest near a swamp (AC CDC 2023).	High – habitat likely present within cleared areas
Salted Shell Lichen	According to the AC CDC report, the individual recorded near the former mine site was found on the bark of a mature balsam fir in a forested swamp (AC CDC 2023).	High – habitat likely present within cleared areas
Shaggy Fringed Lichen	According to the AC CDC report, the individual recorded near the former mine site was found on the bark of a mature yellow birch in an intermediate upland forest (AC CDC 2023).	High – habitat likely present within cleared areas
Fringe Lichen	According to the AC CDC report, the individuals recorded near the former mine site were found on the bark of a mature red maple in a small ravine and on an immature yellow birch in a mixed upland forest (AC CDC 2023).	High – habitat likely present within cleared areas

Sources:¹GOC 2023;²Cornell University 2023;³WARM Lab 2023;⁴OMNRF 2023;⁵NatureWatch 2023;⁶MNDNR 2023

4.0

Recommended Mitigation

To evaluate and determine the potential environmental impacts based on the proposed project, **Table 3** provides a high-level summary of potential effects and recommended mitigation measures to be used in consideration of the planning process.

Table 3: Potential Effects and Recommended Mitigation Measures

Environmental Component	Potential Effect	Mitigation Measures
Vegetation Communities	Damage to adjacent vegetation or as a result of accidental intrusion;	<ul style="list-style-type: none"> Vegetation removal should be kept to a minimum and limited to within the clearing footprint. Vegetation removals should also consider and mitigate potential impacts to sensitive species (e.g., migratory birds and SAR).
	Removal of vegetation communities	
	Increased erosion and sedimentation	<ul style="list-style-type: none"> Brush mats should be used to minimize rutting along cleared trails and left in place where possible to minimize the risk of sedimentation into vegetation communities. Stockpiled materials or equipment should be kept at least 30 metres away from any watercourse.
	Soil or water contamination as a result of spills (e.g., grease and/or fuel) from equipment use.	<ul style="list-style-type: none"> A Spill Prevention and Contingency Plan should be developed and adhered to. Spills will be immediately contained and cleaned up in accordance with provincial regulatory requirements and the contingency plan. Refuelling of equipment should occur at least 30 metres away from any watercourse. All machinery, construction equipment and vehicles arriving on site should be in clean condition (e.g., free of fluid leaks, soils containing seeds of plant material from invasive species) in order to prevent the spread of invasive species to new locations.
Wildlife and Wildlife Habitat	Disturbance, displacement or mortality of wildlife	<ul style="list-style-type: none"> If wildlife is encountered, measures should be implemented to avoid destruction, injury, or interference with the species, and/or its habitat.

Environmental Component	Potential Effect	Mitigation Measures
	Disturbance or destruction of migratory bird nests	<ul style="list-style-type: none"> • All works must comply with the <i>Migratory Birds Convention Act</i> (MBCA), including timing windows for the nesting period. • If activities are proposed to occur during the general nesting period a breeding bird and nest survey should be undertaken prior to required activities. Nest searches by an experienced searcher are required should be completed by a qualified Biologist prior to vegetation removal. • If a nest of a migratory bird is found outside of this nesting period (including a ground nest) it still receives protection.
Fish and Fish Habitat	Removal or impacts to wetland, aquatic and riparian vegetation, erosion and sedimentation to waterbodies from clearing; risk of contamination to waterbodies as a result of spills.	<ul style="list-style-type: none"> • Shorelines or banks disturbed by clearing activities should be immediately stabilized to prevent erosion and/or sedimentation, preferably through re-vegetation with native species suitable for the site. • A Spill Prevention and Response Plan should be developed before work commences to ensure procedures and policies are in place during construction to minimize impacts to wetlands and watercourses.
Species at Risk	Habitat loss, disturbance and/or mortality to SAR.	<ul style="list-style-type: none"> • All requirements of the <i>Endangered Species Act</i> (ESA) and <i>Species at Risk Act</i> (SARA) should be met.

5.0

Summary

This report predominantly documents relevant biodiversity (flora and fauna) and biophysical information pertaining to the proposed clearing and drilling activities associated with a planned Phase II ESA field sampling program at the former Country Harbour Mine site. The following provides a summary of key information presented in the report:

- There is one mapped watercourse (Johnston Brook), and two mapped wetlands located on the subject properties. These fall outside the footprint the proposed clearing areas;
- SAR, SoCC and significant habitats with the potential to occur in the proposed clearing areas were assessed, and habitat suitability was assessed for SAR; and,
- Recommended mitigation measures were outlined for each relevant environmental component.

6.0

Closing

This report was prepared by Dillon on behalf of Build Nova Scotia. Dillon has used the degree of care and skill ordinarily exercised under similar circumstances at the time the work was performed by reputable members of the environmental consulting profession practicing in Canada. Dillon assumes no responsibility for conditions which were beyond its scope of work. There is no warranty expressed or implied by Dillon.

The material in the report reflects Dillon's best judgement in light of the information available to Dillon at the time of preparation. Any use which a third party makes of this report, or any reliance on, or decisions made based on it, are the responsibilities of such third parties. Dillon accepts no responsibilities for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

Respectfully submitted,

DILLON CONSULTING LIMITED



Olivia Butty, B.Sc.
Associate

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Appendix A

Site Photos



access road_cleared area_IMG_8111



garbage_IMG_7968



general habitat_IMG_7978



general habitat_IMG_8047



general habitat_IMG_8070



general habitat_IMG_8103



general habitat_IMG_8122



general habitat_snag trees_IMG_8134



open pit_IMG_7950



open pit_IMG_7996



watercourse_IMG_7914



watercourse_IMG_7989



watercourse_IMG_8029



watercourse_IMG_8088



watercourse_steep grade_IMG_7990



waterfall_southern property line_IMG_8040

Appendix B

AC CDC Report

DATA REPORT 7822: Country Harbour Mines, NS

Prepared 24 August 2023
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Analyst

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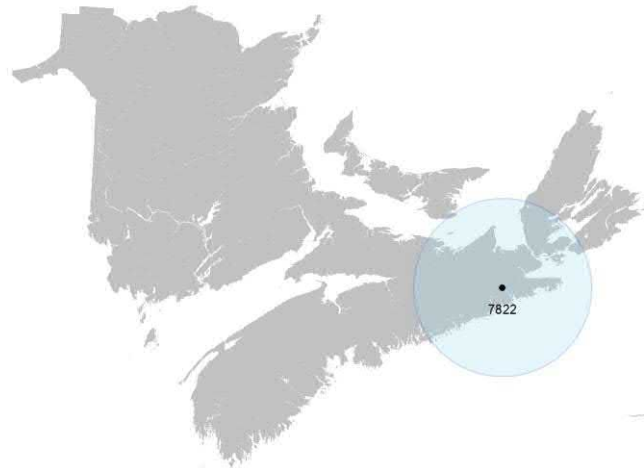
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Map 1. A 100 km buffer around the study area

1.0 PREFACE

The Atlantic Canada Conservation Data Centre (AC CDC; www.accdc.com) is part of a network of NatureServe data centres and heritage programs serving 50 states in the U.S.A, 10 provinces and 1 territory in Canada, plus several Central and South American countries. The NatureServe network is more than 30 years old and shares a common conservation data methodology. The AC CDC was founded in 1997, and maintains data for the jurisdictions of New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador. Although a non-governmental agency, the AC CDC is supported by 6 federal agencies and 4 provincial governments, as well as through outside grants and data processing fees.

Upon request and for a fee, the AC CDC queries its database and produces customized reports of the rare and endangered flora and fauna known to occur in or near a specified study area. As a supplement to that data, the AC CDC includes locations of managed areas with some level of protection, and known sites of ecological interest or sensitivity.

1.1 DATA LIST

Included datasets:

<u>Filename</u>	<u>Contents</u>
CountryHrMinNS_7822ob.xls	Rare or legally-protected Flora and Fauna in your study area
CountryHrMinNS_7822ob100km.xls	A list of Rare and legally protected Flora and Fauna within 100 km of your study area
CountryHrMinNS_7822ff_py.xls	Rare Freshwater Fish in your study area (DFO database)

1.2 RESTRICTIONS

The AC CDC makes a strong effort to verify the accuracy of all the data that it manages, but it shall not be held responsible for any inaccuracies in data that it provides. By accepting AC CDC data, recipients assent to the following limits of use:

- a) Data is restricted to use by trained personnel who are sensitive to landowner interests and to potential threats to rare and/or endangered flora and fauna posed by the information provided.
- b) Data is restricted to use by the specified Data User; any third party requiring data must make its own data request.
- c) The AC CDC requires Data Users to cease using and delete data 12 months after receipt, and to make a new request for updated data if necessary at that time.
- d) AC CDC data responses are restricted to the data in our Data System at the time of the data request.
- e) Each record has an estimate of locational uncertainty, which must be referenced in order to understand the record's relevance to a particular location. Please see attached Data Dictionary for details.
- f) AC CDC data responses are not to be construed as exhaustive inventories of taxa in an area.
- g) The absence of a taxon cannot be inferred by its absence in an AC CDC data response.

1.3 ADDITIONAL INFORMATION

The accompanying Data Dictionary provides metadata for the data provided.

Please direct any additional questions about AC CDC data to the following individuals:

Plants, Lichens, Ranking Methods, All other Inquiries

Sean Blaney
Senior Scientist / Executive Director
(506) 364-2658
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Animals (Fauna)

John Klymko
Zoologist
(506) 364-2660
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Data Management, GIS

James Churchill
Conservation Data Analyst / Field Biologist
(902) 679-6146
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Billing

Jean Breau
Financial Manager / Executive Assistant
(506) 364-2657
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Questions on the biology of Federal Species at Risk can be directed to AC CDC: (506) 364-2658, with questions on Species at Risk regulations to: Samara Eaton, Canadian Wildlife Service (NB and PE): (506) 364-5060 or Julie McKnight, Canadian Wildlife Service (NS): (902) 426-4196.

For provincial information about rare taxa and protected areas, or information about game animals, deer yards, old growth forests, archeological sites, fish habitat etc., in New Brunswick, please contact Hubert Askanas, Energy and Resource Development: (506) 453-5873.

For provincial information about rare taxa and protected areas, or information about game animals, deer yards, old growth forests, archeological sites, fish habitat etc., in Nova Scotia, please contact Donna Hurlburt, NS DLF: (902) 679-6886. To determine if location-sensitive species (section 4.3) occur near your study site please contact a NS DLF Regional Biologist:

Western: Emma Vost
(902) 670-8187
Emma.Vost@novascotia.ca

Western: Sarah Spencer
(902) 541-0081
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Eastern: Harrison Moore
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Eastern: Maureen Cameron-MacMillan
(902) 295-2554
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Eastern: Elizabeth Walsh
(902) 563-3370
Elizabeth.Walsh@novascotia.ca

For provincial information about rare taxa and protected areas, or information about game animals, fish habitat etc., in Prince Edward Island, please contact Garry Gregory, PEI Dept. of Communities, Land and Environment: (902) 569-7595.

2.0 RARE AND ENDANGERED SPECIES

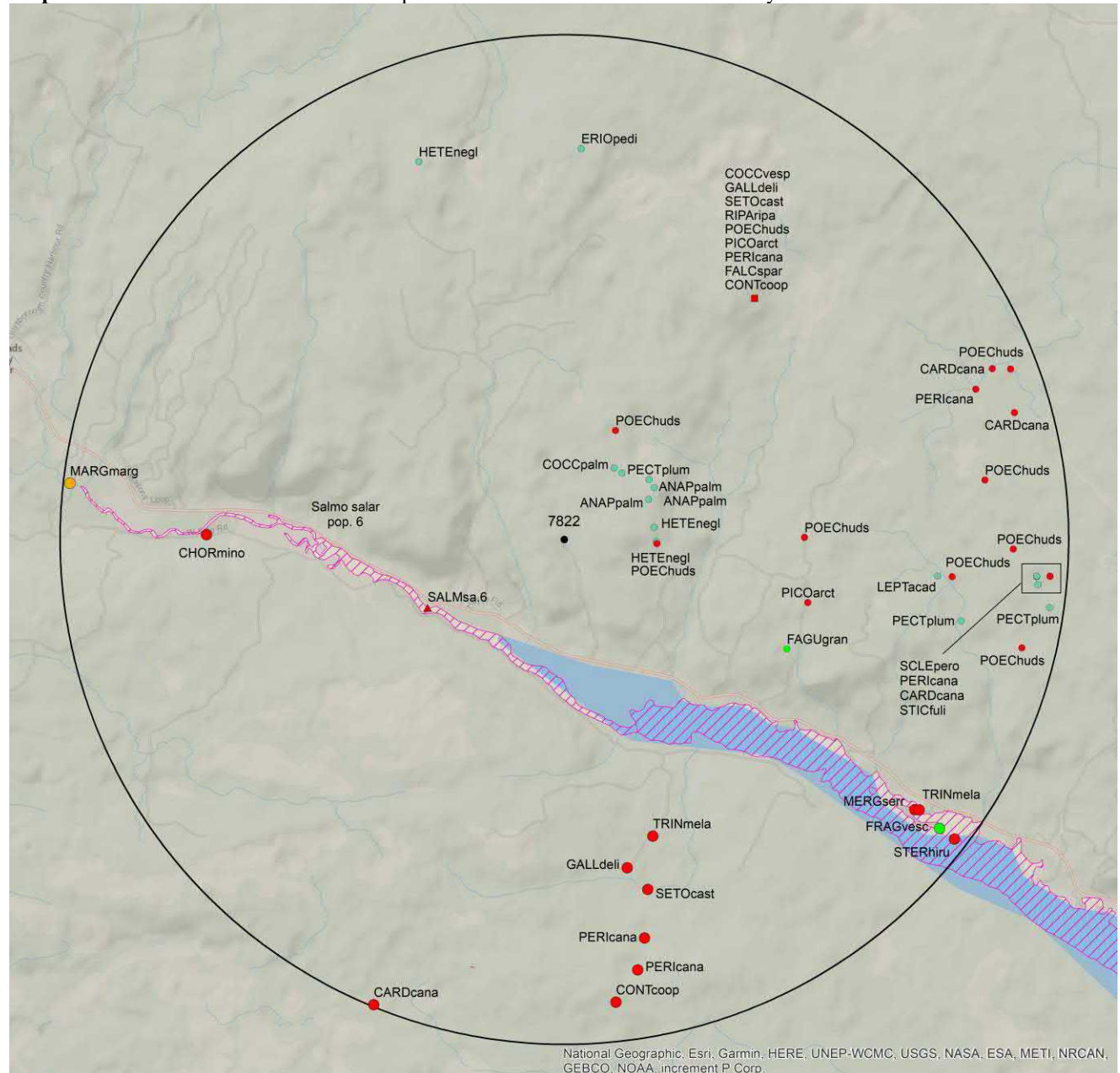
2.1 FLORA

The study area contains 2 records of 2 vascular and 16 records of 8 nonvascular flora (Map 2 and attached: *ob.xls), excluding 'location-sensitive' species.

2.2 FAUNA

The study area contains 41 records of 15 vertebrate and 1 record of 1 invertebrate fauna (Map 2 and attached data files - see 1.1 Data List), excluding 'location-sensitive species'. Please see section 4.3 to determine if 'location-sensitive' species occur near your study site.

Map 2: Known observations of rare and/or protected flora and fauna within the study area.



RESOLUTION

- 4.7 within 50s of kilometers
- 4.0 within 10s of kilometers
- 3.7 within 5s of kilometers
- △ 3.0 within kilometers
- △ 2.7 within 500s of meters
- ◇ 2.0 within 100s of meters
- ◇ 1.7 within 10s of meters

HIGHER TAXON

- vertebrate fauna
- invertebrate fauna
- vascular flora
- nonvascular flora

3.0 SPECIAL AREAS

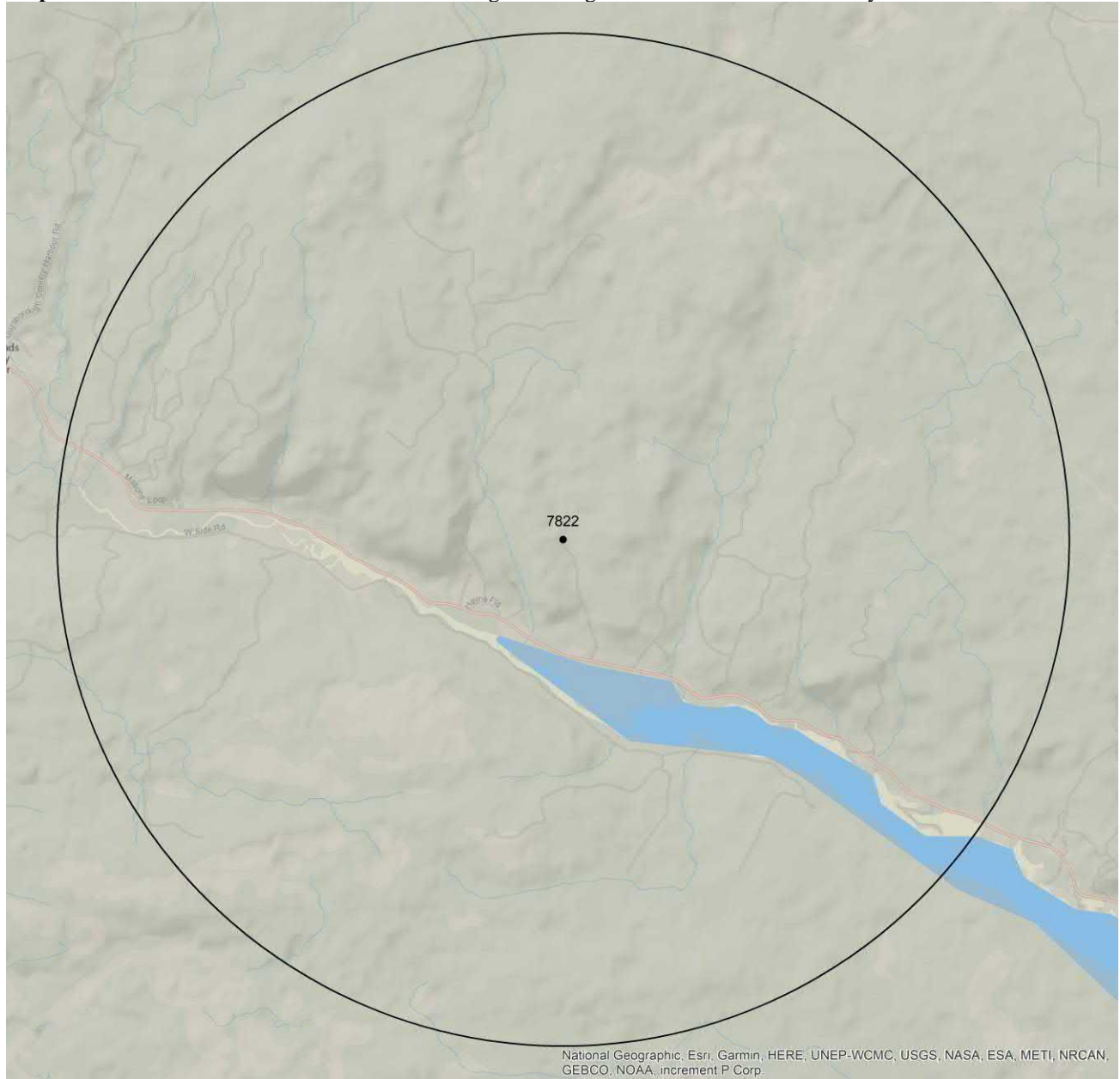
3.1 MANAGED AREAS

The GIS scan identified no managed areas in the vicinity of the study area (Map 3 and attached file: *ma*.xls).

3.2 SIGNIFICANT AREAS

The GIS scan identified no biologically significant sites in the vicinity of the study area (Map 3 and attached file: *sa*.xls).

Map 3: Boundaries and/or locations of known Managed and Significant Areas within the study area.



 Managed Area  Significant Area

4.0 RARE SPECIES LISTS

Rare and/or endangered taxa (excluding “location-sensitive” species, section 4.3) within the study area listed in order of concern, beginning with legally listed taxa, with the number of observations per taxon and the distance in kilometers from study area centroid to the closest observation (\pm the precision, in km, of the record). [P] = vascular plant, [N] = nonvascular plant, [A] = vertebrate animal, [I] = invertebrate animal, [C] = community. Note: records are from attached files *ob.xls/*ob.shp only.

4.1 FLORA

	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)
N	<i>Erioderma pedicellatum</i> (Atlantic pop.)	Boreal Felt Lichen - Atlantic pop.	Endangered	Endangered	Endangered	S1	3	3.9 \pm 0.0
N	<i>Pectenaria plumbea</i>	Blue Felt Lichen	Special Concern	Special Concern	Vulnerable	S3	3	0.9 \pm 0.0
N	<i>Sclerophora peronella</i> (Atlantic pop.)	Frosted Glass-whiskers (Atlantic population)	Special Concern	Special Concern		S3S4	1	4.7 \pm 0.0
N	<i>Sticta fuliginosa</i>	Peppered Moon Lichen				S3S4	1	4.7 \pm 0.0
N	<i>Leptogium acadense</i>	Acadian Jellyskin Lichen				S3S4	1	3.7 \pm 0.0
N	<i>Coccocarpia palmicola</i>	Salted Shell Lichen				S3S4	1	0.9 \pm 0.0
N	<i>Anaptychia palmulata</i>	Shaggy Fringed Lichen				S3S4	3	0.9 \pm 0.0
N	<i>Heterodermia neglecta</i>	Fringe Lichen				S3S4	3	0.9 \pm 0.0
P	<i>Fagus grandifolia</i>	American Beech				S3S4	1	2.5 \pm 0.0
P	<i>Fragaria vesca</i>	Woodland Strawberry				S3S4	1	4.7 \pm 0.0

4.2 FAUNA

	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)
A	<i>Salmo salar</i> pop. 6	Atlantic Salmon - Nova Scotia Southern Upland population	Endangered			S1	1	1.5 \pm 0.0
A	<i>Riparia riparia</i>	Bank Swallow	Threatened	Threatened	Endangered	S2B	1	3.0 \pm 7.0
A	<i>Cardellina canadensis</i>	Canada Warbler	Special Concern	Threatened	Endangered	S3B	5	4.6 \pm 0.0
A	<i>Chordeiles minor</i>	Common Nighthawk	Special Concern	Special Concern	Threatened	S3B	1	3.5 \pm 0.0
A	<i>Contopus cooperi</i>	Olive-sided Flycatcher	Special Concern	Special Concern	Threatened	S3B	2	3.0 \pm 7.0
A	<i>Coccothraustes vespertinus</i>	Evening Grosbeak	Special Concern	Special Concern	Vulnerable	S3B,S3N,S3M	1	3.0 \pm 7.0
A	<i>Sterna hirundo</i>	Common Tern	Not At Risk			S3B	1	4.9 \pm 0.0
A	<i>Perisoreus canadensis</i>	Canada Jay				S3	7	3.0 \pm 7.0
A	<i>Poecile hudsonicus</i>	Boreal Chickadee				S3	11	0.9 \pm 0.0
A	<i>Tringa melanoleuca</i>	Greater Yellowlegs				S3B,S4M	2	3.1 \pm 0.0
A	<i>Falco sparverius</i>	American Kestrel				S3B,S4S5M	1	3.0 \pm 7.0
A	<i>Gallinago delicata</i>	Wilson's Snipe				S3B,S5M	2	3.0 \pm 7.0
A	<i>Picoides arcticus</i>	Black-backed Woodpecker				S3S4	2	2.5 \pm 0.0
A	<i>Setophaga castanea</i>	Bay-breasted Warbler				S3S4B,S4S5M	3	3.0 \pm 7.0
A	<i>Mergus serrator</i>	Red-breasted Merganser				S3S4B,S5M,S5N	1	4.4 \pm 0.0
I	<i>Margaritifera margaritifera</i>	Eastern Pearlshell				S2	1	4.9 \pm 0.0

4.3 LOCATION SENSITIVE SPECIES

The Department of Natural Resources in each Maritimes province considers a number of species “location sensitive”. Concern about exploitation of location-sensitive species precludes inclusion of precise coordinates in this report. Those intersecting your study area are indicated below with “YES”.

Nova Scotia

Scientific Name	Common Name	SARA	Prov Legal Prot	Known within the Study Site?
<i>Fraxinus nigra</i>	Black Ash		Threatened	No
<i>Emydoidea blandingii</i>	Blanding's Turtle - Nova Scotia pop.	Endangered	Endangered	No
<i>Glyptemys insculpta</i>	Wood Turtle	Threatened	Threatened	No
<i>Falco peregrinus</i> pop. 1	Peregrine Falcon - anatum/tundrius pop.		Vulnerable	No
<i>Bat hibernaculum</i> or bat species occurrence		[Endangered] ¹	[Endangered] ¹	No

1 *Myotis lucifugus* (Little Brown Myotis), *Myotis septentrionalis* (Long-eared Myotis), and *Perimyotis subflavus* (Tri-colored Bat or Eastern Pipistrelle) are all Endangered under the Federal Species at Risk Act and the NS Endangered Species Act.

4.4 SOURCE BIBLIOGRAPHY

The recipient of these data shall acknowledge the AC CDC and the data sources listed below in any documents, reports, publications or presentations, in which this dataset makes a significant contribution.

# recs	CITATION
21	Lepage, D. 2014. Maritime Breeding Bird Atlas Database. Bird Studies Canada, Sackville NB, 407,838 recs.
18	Belliveau, A.G. 2018. Atlantic Canada Conservation Data Centre Fieldwork 2017. Atlantic Canada Conservation Data Centre.
5	Neily, T.H. & Pepper, C.; Toms, B. 2018. Nova Scotia lichen database [as of 2018-03]. Mersey Tobeatic Research Institute.
3	Benjamin, L.K. (compiler). 2007. Significant Habitat & Species Database. Nova Scotia Dept Natural Resources, 8439 recs.
3	iNaturalist.ca. 2023. iNaturalist Data Export December 2022. iNaturalist.org; iNaturalist.ca.
2	Neily, T.H. & Pepper, C. 2020. Nova Scotia SMP lichen surveys 2020. Mersey Tobeatic Research Institute.
2	Neily, T.H. & Pepper, C.; Toms, B. 2013. Nova Scotia lichen location database. Mersey Tobeatic Research Institute, 1301 records.
2	Neily, T.H. & Pepper, C.; Toms, B. 2020. Nova Scotia lichen database [as of 2020-03-18]. Mersey Tobeatic Research Institute.
2	Neily, T.H. 2010. Erioderma Pedicellatum records 2005-09. Mersey Tobiatic Research Institute, 67 recs.
2	Pepper, C. 2021. Rare bird, plant and mammal observations in Nova Scotia, 2017-2021.
1	Erskine, A.J. 1992. Maritime Breeding Bird Atlas Database. NS Museum & Nimbus Publ., Halifax, 82,125 recs.
1	Pulsifer, M.D. 2002. NS Freshwater Mussel Fieldwork. Nova Scotia Dept Natural Resources, 369 recs.

5.0 RARE SPECIES WITHIN 100 KM

A 100 km buffer around the study area contains 27398 records of 143 vertebrate and 589 records of 48 invertebrate fauna; 3624 records of 222 vascular and 2860 records of 107 nonvascular flora (attached: *ob100km.xls).

Taxa within 100 km of the study site that are rare and/or endangered in the province in which the study site occurs (including “location-sensitive” species). All ranks correspond to the province in which the study site falls, even for out-of-province records. Taxa are listed in order of concern, beginning with legally listed taxa, with the number of observations per taxon and the distance in kilometers from study area centroid to the closest observation (\pm the precision, in km, of the record).

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
A	<i>Myotis lucifugus</i>	Little Brown Myotis	Endangered	Endangered	Endangered	S1	46	19.2 \pm 5.0	NS
A	<i>Salmo salar pop. 1</i>	Atlantic Salmon - Inner Bay of Fundy population	Endangered	Endangered		S1	1	81.1 \pm 0.0	NS
A	<i>Salmo salar pop. 4</i>	Atlantic Salmon - Eastern Cape Breton population	Endangered			S1	7	60.0 \pm 0.0	NS
A	<i>Salmo salar pop. 6</i>	Atlantic Salmon - Nova Scotia Southern Upland population	Endangered			S1	35	1.5 \pm 0.0	NS
A	<i>Charadrius melodus melodus</i>	Piping Plover melodus subspecies	Endangered	Endangered	Endangered	S1B	803	32.8 \pm 7.0	NS
A	<i>Sterna dougallii</i>	Roseate Tern	Endangered	Endangered	Endangered	S1B	79	19.9 \pm 0.0	NS
A	<i>Dermodochelys coriacea pop. 2</i>	Leatherback Sea Turtle - Atlantic population	Endangered	Endangered		S1S2N	2	52.2 \pm 0.0	NS
A	<i>Lamna nasus</i>	Porbeagle Shark	Endangered			SNR	1	42.9 \pm 1.0	NS
A	<i>Catharus bicknelli</i>	Bicknell's Thrush	Threatened	Threatened	Endangered	S1B	1	83.5 \pm 7.0	NS
A	<i>Asio flammeus</i>	Short-eared Owl	Threatened	Special Concern		S1B	4	14.1 \pm 7.0	NS
A	<i>Glyptemys insculpta</i>	Wood Turtle	Threatened	Threatened	Threatened	S2	7845	11.1 \pm 10.0	NS
A	<i>Riparia riparia</i>	Bank Swallow	Threatened	Threatened	Endangered	S2B	695	3.0 \pm 7.0	NS
A	<i>Chaetura pelagica</i>	Chimney Swift	Threatened	Threatened	Endangered	S2S3B,S1M	592	12.5 \pm 7.0	NS
A	<i>Limosa haemastica</i>	Hudsonian Godwit	Threatened			S2S3M	9	37.3 \pm 0.0	NS
A	<i>Hydrobates leucorhous</i>	Leach's Storm-Petrel	Threatened			S3B	70	27.6 \pm 0.0	NS
A	<i>Tringa flavipes</i>	Lesser Yellowlegs	Threatened			S3M	271	17.2 \pm 0.0	NS
A	<i>Anguilla rostrata</i>	American Eel	Threatened			S3N	14	17.2 \pm 0.0	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
A	<i>Sturnella magna</i>	Eastern Meadowlark	Threatened	Threatened		SHB	2	37.6 ± 0.0	NS
A	<i>Hylocichla mustelina</i>	Wood Thrush	Threatened	Threatened		SUB	13	22.0 ± 7.0	NS
A	<i>Salmo salar pop. 12</i>	Atlantic Salmon - Gaspé - Southern Gulf of St. Lawrence population	Special Concern			S1	26	31.7 ± 50.0	NS
A	<i>Antrostomus vociferus</i>	Eastern Whip-Poor-Will	Special Concern	Threatened	Threatened	S1?B	2	46.1 ± 7.0	NS
A	<i>Passerculus sandwichensis princeps</i>	Ipswich Sparrow	Special Concern	Special Concern		S1B	10	17.1 ± 0.0	NS
A	<i>Bucephala islandica</i>	Barrow's Goldeneye	Special Concern	Special Concern		S1N,SUM	20	29.9 ± 0.0	NS
A	<i>Euphagus carolinus</i>	Rusty Blackbird	Special Concern	Special Concern	Endangered	S2B	204	7.0 ± 0.0	NS
A	<i>Phalaropus lobatus</i>	Red-necked Phalarope	Special Concern	Special Concern		S2S3M	2	19.6 ± 0.0	NS
A	<i>Morone saxatilis pop. 1</i>	Striped Bass - Southern Gulf of St. Lawrence population	Special Concern			S2S3N	1	42.4 ± 1.0	NS
A	<i>Histrionicus histrionicus pop. 1</i>	Harlequin Duck - Eastern population	Special Concern	Special Concern	Endangered	S2S3N,SUM	45	19.0 ± 0.0	NS
A	<i>Chelydra serpentina</i>	Snapping Turtle	Special Concern	Special Concern	Vulnerable	S3	61	16.4 ± 0.0	NS
A	<i>Hirundo rustica</i>	Barn Swallow	Special Concern	Threatened	Endangered	S3B	755	7.8 ± 7.0	NS
A	<i>Cardellina canadensis</i>	Canada Warbler	Special Concern	Threatened	Endangered	S3B	796	4.6 ± 0.0	NS
A	<i>Chordeiles minor</i>	Common Nighthawk	Special Concern	Special Concern	Threatened	S3B	328	3.5 ± 0.0	NS
A	<i>Contopus cooperi</i>	Olive-sided Flycatcher	Special Concern	Special Concern	Threatened	S3B	1040	3.0 ± 7.0	NS
A	<i>Dolichonyx oryzivorus</i>	Bobolink	Special Concern	Threatened	Vulnerable	S3B	462	12.5 ± 7.0	NS
A	<i>Coccothraustes vespertinus</i>	Evening Grosbeak	Special Concern	Special Concern	Vulnerable	S3B,S3N,S3M	543	3.0 ± 7.0	NS
A	<i>Podiceps auritus</i>	Horned Grebe	Special Concern	Special Concern		S3N,SUM	18	17.3 ± 0.0	NS
A	<i>Contopus virens</i>	Eastern Wood-Pewee	Special Concern	Special Concern	Vulnerable	S3S4B	493	7.8 ± 7.0	NS
A	<i>Phocoena phocoena</i>	Harbour Porpoise	Special Concern			S4	17	50.6 ± 0.0	NS
A	<i>Phocoena phocoena pop. 1</i>	Harbour Porpoise - Northwest Atlantic Population	Special Concern			S4	2	52.0 ± 0.0	NS
A	<i>Chrysemys picta</i>	Painted Turtle	Special Concern	Special Concern		S4	4	67.4 ± 0.0	NS
A	<i>Chrysemys picta picta</i>	Eastern Painted Turtle	Special Concern	Special Concern		S4	4	31.0 ± 1.0	NS
A	<i>Accipiter cooperii</i>	Cooper's Hawk	Not At Risk			S1?B,SUN,SUM	8	42.6 ± 0.0	NS
A	<i>Fulica americana</i>	American Coot	Not At Risk			S1B	5	19.6 ± 0.0	NS
A	<i>Chlidonias niger</i>	Black Tern	Not At Risk			S1B	3	27.6 ± 0.0	NS
A	<i>Falco peregrinus pop. 1</i>	Peregrine Falcon - anatum/tundrius	Not At Risk		Vulnerable	S1B,SUM	8	20.6 ± 0.0	NS
A	<i>Aegolius funereus</i>	Boreal Owl	Not At Risk			S2?B,SUM	6	11.2 ± 0.0	NS
A	<i>Lynx canadensis</i>	Canada Lynx	Not At Risk		Endangered	S2S3	6	71.5 ± 1.0	NS
A	<i>Globicephala melas</i>	Long-finned Pilot Whale	Not At Risk			S2S3	1	97.7 ± 100.0	NS
A	<i>Hemidactylium scutatum</i>	Four-toed Salamander	Not At Risk			S3	12	24.1 ± 0.0	NS
A	<i>Megaptera novaeangliae</i>	Humpback Whale	Not At Risk			S3	12	52.0 ± 0.0	NS
A	<i>Sterna hirundo</i>	Common Tern	Not At Risk			S3B	466	4.9 ± 0.0	NS
A	<i>Sialia sialis</i>	Eastern Bluebird	Not At Risk			S3B	20	7.8 ± 7.0	NS
A	<i>Buteo lagopus</i>	Rough-legged Hawk	Not At Risk			S3N	11	29.2 ± 4.0	NS
A	<i>Accipiter gentilis</i>	Northern Goshawk	Not At Risk			S3S4	83	17.5 ± 0.0	NS
A	<i>Glaucomys volans</i>	Southern Flying Squirrel	Not At Risk			S3S4	1	83.2 ± 0.0	NS
A	<i>Lagenorhynchus acutus</i>	Atlantic White-sided Dolphin	Not At Risk			S3S4	4	52.6 ± 0.0	NS
A	<i>Ammospiza nelsoni</i>	Nelson's Sparrow	Not At Risk			S3S4B	115	17.7 ± 7.0	NS
A	<i>Calidris canutus rufa</i>	Red Knot rufa subspecies	E,SC	Endangered	Endangered	S2M	22	27.6 ± 0.0	NS
A	<i>Calidris canutus</i>	Red Knot	E,SC	E,T		S2M	10	61.4 ± 0.0	NS
A	<i>Morone saxatilis</i>	Striped Bass	E,SC			S2S3B,S2S3N	4	42.3 ± 0.0	NS
A	<i>Salmo salar</i>	Atlantic Salmon	E,T,SC			S1B,S1N	4	19.5 ± 0.0	NS
A	<i>Alces alces americana</i>	Moose			Endangered	S1	127	10.5 ± 0.0	NS
A	<i>Alces alces</i>	Moose				S1	11	7.5 ± 0.0	NS
A	<i>Picoides dorsalis</i>	American Three-toed Woodpecker				S1?	4	12.5 ± 7.0	NS
A	<i>Uria aalge</i>	Common Murre				S1?B	2	85.7 ± 0.0	NS
A	<i>Passerina cyanea</i>	Indigo Bunting				S1?B,SUM	16	19.4 ± 0.0	NS
A	<i>Nycticorax nycticorax</i>	Black-crowned Night-heron				S1B	1	53.0 ± 7.0	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
A	<i>Oxyura jamaicensis</i>	Ruddy Duck				S1B	7	37.1 ± 7.0	NS
A	<i>Myiarchus crinitus</i>	Great Crested Flycatcher				S1B	1	84.6 ± 7.0	NS
A	<i>Mimus polyglottos</i>	Northern Mockingbird				S1B	19	17.7 ± 7.0	NS
A	<i>Toxostoma rufum</i>	Brown Thrasher				S1B	6	41.2 ± 0.0	NS
A	<i>Charadrius semipalmatus</i>	Semipalmated Plover				S1B,S4M	347	17.1 ± 0.0	NS
A	<i>Calidris minutilla</i>	Least Sandpiper				S1B,S4M	207	16.9 ± 1.0	NS
A	<i>Anas acuta</i>	Northern Pintail				S1B,SUM	7	33.0 ± 7.0	NS
A	<i>Vireo gilvus</i>	Warbling Vireo				S1B,SUM	7	43.2 ± 7.0	NS
A	<i>Vespertilionidae sp.</i>	bat species				S1S2	68	16.5 ± 0.0	NS
A	<i>Pooecetes gramineus</i>	Vesper Sparrow				S1S2B,SUM	7	12.5 ± 7.0	NS
A	<i>Vireo philadelphicus</i>	Philadelphia Vireo				S2?B,SUM	24	18.9 ± 0.0	NS
A	<i>Alca torda</i>	Razorbill				S2B	8	19.8 ± 0.0	NS
A	<i>Fratercula arctica</i>	Atlantic Puffin				S2B	4	27.6 ± 0.0	NS
A	<i>Empidonax traillii</i>	Willow Flycatcher				S2B	4	33.0 ± 7.0	NS
A	<i>Molothrus ater</i>	Brown-headed Cowbird				S2B	59	12.5 ± 7.0	NS
A	<i>Spatula clypeata</i>	Northern Shoveler				S2B,SUM	5	42.5 ± 1.0	NS
A	<i>Mareca strepera</i>	Gadwall				S2B,SUM	12	40.1 ± 0.0	NS
A	<i>Piranga olivacea</i>	Scarlet Tanager				S2B,SUM	12	14.9 ± 0.0	NS
A	<i>Calidris alba</i>	Sanderling				S2N,S3M	170	17.1 ± 0.0	NS
A	<i>Asio otus</i>	Long-eared Owl				S2S3	22	14.1 ± 7.0	NS
A	<i>Rallus limicola</i>	Virginia Rail				S2S3B	9	34.5 ± 7.0	NS
A	<i>Rissa tridactyla</i>	Black-legged Kittiwake				S2S3B	5	27.9 ± 0.0	NS
A	<i>Petrochelidon pyrrhonota</i>	Cliff Swallow				S2S3B	125	8.5 ± 7.0	NS
A	<i>Phalacrocorax carbo</i>	Great Cormorant				S2S3B,S2S3N	117	20.8 ± 1.0	NS
A	<i>Cathartes aura</i>	Turkey Vulture				S2S3B,S4S5M	11	15.5 ± 0.0	NS
A	<i>Setophaga pinus</i>	Pine Warbler				S2S3B,S4S5M	13	19.3 ± 0.0	NS
A	<i>Bucephala clangula</i>	Common Goldeneye				S2S3B,S5N,S5M	160	15.5 ± 12.0	NS
A	<i>Icterus galbula</i>	Baltimore Oriole				S2S3B,SUM	55	15.5 ± 0.0	NS
A	<i>Pluvialis dominica</i>	American Golden-Plover				S2S3M	25	44.0 ± 0.0	NS
A	<i>Numenius phaeopus</i>	Whimbrel				S2S3M	11	20.9 ± 0.0	NS
A	<i>Numenius phaeopus hudsonicus</i>	Whimbrel				S2S3M	61	27.6 ± 0.0	NS
A	<i>Phalaropus fulicarius</i>	Red Phalarope				S2S3M	1	19.9 ± 0.0	NS
A	<i>Perisoreus canadensis</i>	Canada Jay				S3	486	3.0 ± 7.0	NS
A	<i>Poecile hudsonicus</i>	Boreal Chickadee				S3	992	0.9 ± 0.0	NS
A	<i>Spinus pinus</i>	Pine Siskin				S3	407	7.8 ± 7.0	NS
A	<i>Salvelinus fontinalis</i>	Brook Trout				S3	60	11.3 ± 1.0	NS
A	<i>Salvelinus namaycush</i>	Lake Trout				S3	1	67.5 ± 0.0	NS
A	<i>Pekania pennanti</i>	Fisher				S3	7	27.9 ± 7.0	NS
A	<i>Calcarius lapponicus</i>	Lapland Longspur				S3?N,SUM	7	37.7 ± 4.0	NS
A	<i>Spatula discors</i>	Blue-winged Teal				S3B	86	8.5 ± 7.0	NS
A	<i>Charadrius vociferus</i>	Killdeer				S3B	247	12.5 ± 7.0	NS
A	<i>Tringa semipalmata</i>	Willet				S3B	710	17.7 ± 7.0	NS
A	<i>Sterna paradisaea</i>	Arctic Tern				S3B	106	17.7 ± 7.0	NS
A	<i>Coccyzus erythrophthalmus</i>	Black-billed Cuckoo				S3B	59	12.5 ± 7.0	NS
A	<i>Tyrannus tyrannus</i>	Eastern Kingbird				S3B	112	11.1 ± 7.0	NS
A	<i>Pheucticus ludovicianus</i>	Rose-breasted Grosbeak				S3B	352	12.5 ± 7.0	NS
A	<i>Alosa pseudoharengus</i>	Alewife				S3B	21	18.3 ± 1.0	NS
A	<i>Somateria mollissima</i>	Common Eider				S3B,S3M,S3N	649	14.1 ± 7.0	NS
A	<i>Tringa melanoleuca</i>	Greater Yellowlegs				S3B,S4M	406	3.1 ± 0.0	NS
A	<i>Falco sparverius</i>	American Kestrel				S3B,S4S5M	286	3.0 ± 7.0	NS
A	<i>Gallinago delicata</i>	Wilson's Snipe				S3B,S5M	465	3.0 ± 7.0	NS
A	<i>Setophaga striata</i>	Blackpoll Warbler				S3B,S5M	141	14.1 ± 7.0	NS
A	<i>Cardellina pusilla</i>	Wilson's Warbler				S3B,S5M	123	8.5 ± 7.0	NS
A	<i>Pinicola enucleator</i>	Pine Grosbeak				S3B,S5N,S5M	107	12.5 ± 7.0	NS
A	<i>Setophaga tigrina</i>	Cape May Warbler				S3B,SUM	209	7.8 ± 7.0	NS
A	<i>Branta bernicla</i>	Brant				S3M	1	45.9 ± 16.0	NS
A	<i>Pluvialis squatarola</i>	Black-bellied Plover				S3M	254	21.0 ± 0.0	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
A	<i>Arenaria interpres</i>	Ruddy Turnstone				S3M	149	20.5 ± 1.0	NS
A	<i>Calidris pusilla</i>	Semipalmated Sandpiper				S3M	280	17.2 ± 0.0	NS
A	<i>Calidris melanotos</i>	Pectoral Sandpiper				S3M	35	21.8 ± 0.0	NS
A	<i>Limnodromus griseus</i>	Short-billed Dowitcher				S3M	146	20.4 ± 0.0	NS
A	<i>Chroicocephalus ridibundus</i>	Black-headed Gull				S3N	59	19.5 ± 0.0	NS
A	<i>Picoides arcticus</i>	Black-backed Woodpecker				S3S4	119	2.5 ± 0.0	NS
A	<i>Loxia curvirostra</i>	Red Crossbill				S3S4	115	12.5 ± 0.0	NS
A	<i>Botaurus lentiginosus</i>	American Bittern				S3S4B,S4S5M	231	8.5 ± 7.0	NS
A	<i>Setophaga castanea</i>	Bay-breasted Warbler				S3S4B,S4S5M	500	3.0 ± 7.0	NS
A	<i>Actitis macularius</i>	Spotted Sandpiper				S3S4B,S5M	654	7.8 ± 7.0	NS
A	<i>Leiothlypis peregrina</i>	Tennessee Warbler				S3S4B,S5M	459	7.8 ± 7.0	NS
A	<i>Passerella iliaca</i>	Fox Sparrow				S3S4B,S5M	127	10.5 ± 0.0	NS
A	<i>Mergus serrator</i>	Red-breasted Merganser				S3S4B,S5M,S5N	162	4.4 ± 0.0	NS
A	<i>Calidris maritima</i>	Purple Sandpiper				S3S4N	39	21.9 ± 13.0	NS
A	<i>Lanius borealis</i>	Northern Shrike				S3S4N	3	23.1 ± 0.0	NS
A	<i>Morus bassanus</i>	Northern Gannet				SHB	127	19.3 ± 0.0	NS
A	<i>Aythya americana</i>	Redhead				SHB	8	17.0 ± 0.0	NS
A	<i>Leucophaeus atricilla</i>	Laughing Gull				SHB	4	27.6 ± 0.0	NS
A	<i>Progne subis</i>	Purple Martin				SHB	5	20.5 ± 0.0	NS
A	<i>Eremophila alpestris</i>	Horned Lark				SHB,S4S5N,S5M	8	62.7 ± 0.0	NS
I	<i>Bombus bohemicus</i>	Ashton Cuckoo Bumble Bee	Endangered	Endangered	Endangered	S1	5	35.4 ± 5.0	NS
I	<i>Danaus plexippus</i>	Monarch	Endangered	Special Concern	Endangered	S2?B,S3M	163	9.9 ± 0.0	NS
I	<i>Alasmidonta varicosa</i>	Brook Floater	Special Concern	Special Concern	Threatened	S3	8	23.4 ± 0.0	NS
I	<i>Bombus terricola</i>	Yellow-banded Bumble Bee	Special Concern	Special Concern	Vulnerable	S3	48	12.6 ± 0.0	NS
I	<i>Coccinella transversoguttata richardsoni</i>	Transverse Lady Beetle	Special Concern		Endangered	SH	4	87.6 ± 2.0	NS
I	<i>Euphyes bimacula</i>	Two-spotted Skipper				S1S2	2	6.0 ± 0.0	NS
I	<i>Haematopota rara</i>	Shy Cleg				S1S3	1	94.6 ± 0.0	NS
I	<i>Tharsalea dorcas</i>	Dorcas Copper				S2	20	85.5 ± 0.0	NS
I	<i>Tharsalea doxipassosi</i>	Maritime Copper				S2	12	90.3 ± 0.0	NS
I	<i>Satyrium acadica</i>	Acadian Hairstreak				S2	5	84.8 ± 2.0	NS
I	<i>Neurocordulia michaeli</i>	Broad-tailed Shadowdragon				S2	26	16.3 ± 0.0	NS
I	<i>Margaritifera margaritifera</i>	Eastern Pearlshell				S2	67	4.9 ± 0.0	NS
I	<i>Pantala hymenaea</i>	Spot-Winged Glider				S2?B	1	23.4 ± 1.0	NS
I	<i>Nymphalis l-album</i>	Compton Tortoiseshell				S2S3	2	68.9 ± 0.0	NS
I	<i>Aglais milberti</i>	Milbert's Tortoiseshell				S2S3	1	74.9 ± 2.0	NS
I	<i>Lanthus vernalis</i>	Southern Pygmy Clubtail				S2S3	8	27.8 ± 0.0	NS
I	<i>Alasmidonta undulata</i>	Triangle Floater				S2S3	7	20.0 ± 0.0	NS
I	<i>Psephenus herricki</i>	Herrick's Water Penny Beetle				S3	1	96.6 ± 0.0	NS
I	<i>Chrysochus auratus</i>	Dogbane Leaf Beetle				S3	1	15.5 ± 0.0	NS
I	<i>Naemia seriata</i>	Seaside Lady Beetle				S3	3	20.9 ± 0.0	NS
I	<i>Chilocorus stigma</i>	Twice-stabbed Lady Beetle				S3	2	69.7 ± 0.0	NS
I	<i>Iphthiminus opacus</i>	Cloudy Darkling Beetle				S3	2	86.7 ± 0.0	NS
I	<i>Monochamus marmorator</i>	Balsam Fir Sawyer				S3	2	16.6 ± 0.0	NS
I	<i>Satyrium calanus</i>	Banded Hairstreak				S3	1	74.5 ± 2.0	NS
I	<i>Callophrys lanoraieensis</i>	Bog Elfin				S3	3	53.3 ± 0.0	NS
I	<i>Strymon melinus</i>	Gray Hairstreak				S3	2	78.3 ± 1.0	NS
I	<i>Phanogomphus descriptus</i>	Harpoon Clubtail				S3	16	69.2 ± 0.0	NS
I	<i>Ophiogomphus aspersus</i>	Brook Snaketail				S3	5	69.2 ± 0.0	NS
I	<i>Ophiogomphus mainensis</i>	Maine Snaketail				S3	14	39.6 ± 0.0	NS
I	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail				S3	36	16.3 ± 0.0	NS
I	<i>Enallagma vernale</i>	Vernal Bluet				S3	4	63.3 ± 0.0	NS
I	<i>Polygonia interrogationis</i>	Question Mark				S3B	23	16.2 ± 0.0	NS
I	<i>Cecropterus pylades</i>	Northern Cloudywing				S3S4	24	20.8 ± 0.0	NS
I	<i>Amblyscirtes hegon</i>	Pepper and Salt Skipper				S3S4	10	11.6 ± 0.0	NS
I	<i>Cupido comyntas</i>	Eastern Tailed Blue				S3S4	1	59.0 ± 0.0	NS
I	<i>Argynnis aphrodite</i>	Aphrodite Fritillary				S3S4	4	31.3 ± 100.0	NS

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I	<i>Polygonia faunus</i>	Green Comma				S3S4	7	22.7 ± 0.0	NS
I	<i>Oeneis jutta</i>	Jutta Arctic				S3S4	4	24.3 ± 0.0	NS
I	<i>Aeshna clepsydra</i>	Mottled Darner				S3S4	3	39.3 ± 1.0	NS
I	<i>Aeshna constricta</i>	Lance-Tipped Darner				S3S4	3	84.2 ± 1.0	NS
I	<i>Boyeria grafiana</i>	Ocellated Darner				S3S4	9	17.5 ± 0.0	NS
I	<i>Gomphaeschna furcillata</i>	Harlequin Darner				S3S4	4	57.6 ± 0.0	NS
I	<i>Erythrodiplax berenice</i>	Seaside Dragonlet				S3S4	4	63.2 ± 0.0	NS
I	<i>Nannothemis bella</i>	Elfin Skimmer				S3S4	7	43.6 ± 0.0	NS
I	<i>Sympetrum danae</i>	Black Meadowhawk				S3S4	7	14.9 ± 1.0	NS
I	<i>Amphiagrion saucium</i>	Eastern Red Damsel				S3S4	5	86.5 ± 0.0	NS
I	<i>Icaricia saepiolus</i>	Greenish Blue				SH	1	74.6 ± 2.0	NS
I	<i>Polygonia gracilis</i>	Hoary Comma				SH	1	74.9 ± 2.0	NS
N	<i>Erioderma mollissimum</i>	Graceful Felt Lichen	Endangered	Endangered	Endangered	S1	21	36.1 ± 0.0	NS
N	<i>Erioderma pedicellatum</i> (Atlantic pop.)	Boreal Felt Lichen - Atlantic pop.	Endangered	Endangered	Endangered	S1	470	3.9 ± 0.0	NS
N	<i>Peltigera hydrothyria</i>	Eastern Waterfan	Threatened	Threatened	Threatened	S1	8	38.2 ± 0.0	NS
N	<i>Pannaria lurida</i>	Wrinkled Shingle Lichen	Threatened	Threatened	Threatened	S2S3	60	85.6 ± 0.0	NS
N	<i>Anzia colpodes</i>	Black-foam Lichen	Threatened	Threatened	Threatened	S3	20	33.8 ± 0.0	NS
N	<i>Fuscopannaria leucosticta</i>	White-rimmed Shingle Lichen	Threatened			S3	7	56.6 ± 0.0	NS
N	<i>Heterodermia squamulosa</i>	Scaly Fringe Lichen	Threatened			S3	7	38.0 ± 0.0	NS
N	<i>Pectenia plumbea</i>	Blue Felt Lichen	Special Concern	Special Concern	Vulnerable	S3	674	0.9 ± 0.0	NS
N	<i>Sclerophora peronella</i> (Atlantic pop.)	Frosted Glass-whiskers (Atlantic population)	Special Concern	Special Concern		S3S4	23	4.7 ± 0.0	NS
N	<i>Pseudevernia cladonia</i>	Ghost Antler Lichen	Not At Risk			S2S3	8	7.7 ± 0.0	NS
N	<i>Fissidens exilis</i>	Pygmy Pocket Moss	Not At Risk			S3	6	32.3 ± 0.0	NS
N	<i>Chaenotheca servitii</i>	Flexuous Golden Stubble	Data Deficient			S1	1	64.1 ± 1.0	NS
N	<i>Cinclidium stygium</i>	Sooty Cupola Moss				S1	2	89.4 ± 0.0	NS
N	<i>Cyrto-hypnum minutulum</i>	Tiny Cedar Moss				S1	1	64.0 ± 0.0	NS
N	<i>Cladonia brevis</i>	Short Peg Lichen				S1	1	95.0 ± 0.0	NS
N	<i>Lichina confinis</i>	Marine Seaweed Lichen				S1	2	81.4 ± 2.0	NS
N	<i>Polychidium muscicola</i>	Eyed Mossthorns Woollybear Lichen				S1	2	48.7 ± 0.0	NS
N	<i>Sticta limbata</i>	Powdered Moon Lichen				S1	2	76.1 ± 2.0	NS
N	<i>Hypogymnia hultenii</i>	Powdered Honeycomb Lichen				S1	16	18.5 ± 0.0	NS
N	<i>Jubula pennsylvanica</i>	a liverwort				S1?	2	19.1 ± 0.0	NS
N	<i>Conardia compacta</i>	Coast Creeping Moss				S1?	1	97.8 ± 2.0	NS
N	<i>Tortula obtusifolia</i>	a Moss				S1?	1	89.5 ± 0.0	NS
N	<i>Scytinium intermedium</i>	Forty-five Jellyskin Lichen				S1?	1	48.7 ± 4.0	NS
N	<i>Peltigera malacea</i>	Veinless Pelt Lichen				S1?	1	75.9 ± 0.0	NS
N	<i>Pseudotaxiphyllum distichaceum</i>	a Moss				S1S2	1	96.8 ± 0.0	NS
N	<i>Hamatocaulis vernicosus</i>	a Moss				S1S2	1	91.5 ± 0.0	NS
N	<i>Placidium squamulosum</i>	Limy Soil Stipplescale Lichen				S1S2	1	90.9 ± 6.0	NS
N	<i>Cladonia labradorica</i>	Labrador Lichen				S1S2	1	9.0 ± 0.0	NS
N	<i>Peltigera ponojensis</i>	Pale-bellied Pelt Lichen				S1S2	1	79.0 ± 0.0	NS
N	<i>Parmotrema reticulatum</i>	Netted Ruffle Lichen				S1S2	1	26.5 ± 0.0	NS
N	<i>Solorina spongiosa</i>	Blinking Owl Lichen				S1S2	7	42.1 ± 0.0	NS
N	<i>Parmeliella parvula</i>	Poor-man's Shingles Lichen				S1S2	18	14.7 ± 0.0	NS
N	<i>Peltigera neckeri</i>	Black-saddle Pelt Lichen				S1S3	4	12.7 ± 0.0	NS
N	<i>Anacamptodon splachnoides</i>	a Moss				S2	1	44.8 ± 0.0	NS
N	<i>Scorpidium scorpioides</i>	Hooked Scorpion Moss				S2	2	84.5 ± 0.0	NS
N	<i>Sphagnum platyphyllum</i>	Flat-leaved Peat Moss				S2	2	85.2 ± 0.0	NS
N	<i>Scorpidium cossonii</i>	Cosson's Hook Moss				S2	5	85.4 ± 0.0	NS
N	<i>Nephroma resupinatum</i>	a lichen				S2	1	24.3 ± 0.0	NS
N	<i>Riccardia multifida</i>	Delicate Germanderwort				S2?	1	16.7 ± 0.0	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
N	<i>Anomodon viticulosus</i>	a Moss				S2?	2	97.0 ± 1.0	NS
N	<i>Atrichum angustatum</i>	Lesser Smoothcap Moss				S2?	1	42.8 ± 3.0	NS
N	<i>Drepanocladus polygamus</i>	Polygamous Hook Moss				S2?	1	46.3 ± 0.0	NS
N	<i>Pseudocampyllum radicale</i>	Long-stalked Fine Wet Moss				S2?	1	84.5 ± 0.0	NS
N	<i>Platydictya jungermannioides</i>	False Willow Moss				S2?	5	48.7 ± 0.0	NS
N	<i>Scorpidium revolvens</i>	Limprichtia Moss				S2S3	5	84.8 ± 0.0	NS
N	<i>Moelleropsis nebulosa</i>	Blue-gray Moss Shingle Lichen				S2S3	46	9.0 ± 0.0	NS
N	<i>Moelleropsis nebulosa ssp. frullaniae</i>	Blue-gray Moss Shingle Lichen				S2S3	2	39.3 ± 0.0	NS
N	<i>Ramalina thrausta</i>	Angelhair Ramalina Lichen				S2S3	12	18.2 ± 1.0	NS
N	<i>Collema leptaleum</i>	Crumpled Bat's Wing Lichen				S2S3	44	41.8 ± 0.0	NS
N	<i>Usnea rubicunda</i>	Red Beard Lichen				S2S3	4	16.6 ± 0.0	NS
N	<i>Ahtiana aurescens</i>	Eastern Candlewax Lichen				S2S3	6	55.8 ± 0.0	NS
N	<i>Cetraria muricata</i>	Spiny Heath Lichen				S2S3	1	20.1 ± 1.0	NS
N	<i>Cladonia incrassata</i>	Powder-foot British Soldiers Lichen				S2S3	1	39.0 ± 0.0	NS
N	<i>Scytinium tenuissimum</i>	Birdnest Jellyskin Lichen				S2S3	15	10.9 ± 0.0	NS
N	<i>Parmelia fertilis</i>	Fertile Shield Lichen				S2S3	8	39.3 ± 0.0	NS
N	<i>Parmeliopsis ambigua</i>	Green Starburst Lichen				S2S3	4	11.8 ± 0.0	NS
N	<i>Usnea mutabilis</i>	Bloody Beard Lichen				S2S3	1	83.0 ± 0.0	NS
N	<i>Fuscopannaria soreliata</i>	a Lichen				S2S3	13	14.4 ± 0.0	NS
N	<i>Stereocaulon condensatum</i>	Granular Soil Foam Lichen				S2S3	6	47.1 ± 0.0	NS
N	<i>Cladonia coccifera</i>	Eastern Boreal Pixie-cup Lichen				S2S3	3	36.9 ± 0.0	NS
N	<i>Fissidens taxifolius</i>	Yew-leaved Pocket Moss				S3	4	85.0 ± 0.0	NS
N	<i>Anomodon tristis</i>	a Moss				S3	1	46.0 ± 0.0	NS
N	<i>Sphagnum contortum</i>	Twisted Peat Moss				S3	7	83.8 ± 0.0	NS
N	<i>Tetraplodon angustatus</i>	Toothed-leaved Nitrogen Moss				S3	3	32.0 ± 0.0	NS
N	<i>Tetraplodon mnioides</i>	Entire-leaved Nitrogen Moss				S3	1	64.0 ± 0.0	NS
N	<i>Rostania occultata</i>	Crusted Tarpaper Lichen				S3	3	19.9 ± 0.0	NS
N	<i>Collema nigrescens</i>	Blistered Tarpaper Lichen				S3	6	50.2 ± 0.0	NS
N	<i>Solorina saccata</i>	Woodland Owl Lichen				S3	5	43.0 ± 0.0	NS
N	<i>Fuscopannaria ahlneri</i>	Corrugated Shingles Lichen				S3	79	11.9 ± 0.0	NS
N	<i>Scytinium lichenoides</i>	Tattered Jellyskin Lichen				S3	14	39.3 ± 0.0	NS
N	<i>Leptogium milligranum</i>	Stretched Jellyskin Lichen				S3	1	75.3 ± 0.0	NS
N	<i>Nephroma bellum</i>	Naked Kidney Lichen				S3	5	41.2 ± 0.0	NS
N	<i>Placynthium nigrum</i>	Common Ink Lichen				S3	2	48.2 ± 10.0	NS
N	<i>Platismatia norvegica</i>	Oldgrowth Rag Lichen				S3	4	12.4 ± 0.0	NS
N	<i>Punctelia appalachensis</i>	Appalachian Speckleback Lichen				S3	1	81.3 ± 0.0	NS
N	<i>Epebe lanata</i>	Waterside Rockshag Lichen				S3	2	40.6 ± 0.0	NS
N	<i>Phaeophyscia pusilloides</i>	Pompom-tipped Shadow Lichen				S3	6	45.7 ± 0.0	NS
N	<i>Peltigera collina</i>	Tree Pelt Lichen				S3	82	8.6 ± 45.0	NS
N	<i>Sphagnum lindbergii</i>	Lindberg's Peat Moss				S3?	4	49.6 ± 0.0	NS
N	<i>Sphagnum riparium</i>	Streamside Peat Moss				S3?	1	81.2 ± 0.0	NS
N	<i>Cladonia stygia</i>	Black-footed Reindeer Lichen				S3?	5	38.6 ± 0.0	NS
N	<i>Dicranum leioneuron</i>	a Dicranum Moss				S3S4	1	65.6 ± 0.0	NS
N	<i>Encalypta ciliata</i>	Fringed Extinguisher Moss				S3S4	1	34.3 ± 2.0	NS
N	<i>Encalypta procera</i>	Slender Extinguisher Moss				S3S4	9	45.6 ± 0.0	NS
N	<i>Splachnum ampullaceum</i>	Cruet Dung Moss				S3S4	2	55.1 ± 0.0	NS
N	<i>Schistidium agassizii</i>	Elf Bloom Moss				S3S4	1	17.9 ± 3.0	NS
N	<i>Enchylium tenax</i>	Soil Tarpaper Lichen				S3S4	3	43.0 ± 0.0	NS
N	<i>Sticta fuliginosa</i>	Peppered Moon Lichen				S3S4	30	4.7 ± 0.0	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
N	<i>Arctoparmelia incurva</i>	Finger Ring Lichen				S3S4	15	11.7 ± 0.0	NS
N	<i>Scytinium teretiusculum</i>	Curly Jellyskin Lichen				S3S4	4	48.7 ± 0.0	NS
N	<i>Leptogium acadense</i>	Acadian Jellyskin Lichen				S3S4	26	3.7 ± 0.0	NS
N	<i>Scytinium subtile</i>	Appressed Jellyskin Lichen				S3S4	10	43.0 ± 0.0	NS
N	<i>Cladonia floerkeana</i>	Gritty British Soldiers Lichen				S3S4	1	95.3 ± 0.0	NS
N	<i>Vahliella leucophaea</i>	Shelter Shingle Lichen				S3S4	6	46.0 ± 0.0	NS
N	<i>Heterodermia speciosa</i>	Powdered Fringe Lichen				S3S4	18	14.6 ± 0.0	NS
N	<i>Leptogium corticola</i>	Blistered Jellyskin Lichen				S3S4	27	35.6 ± 0.0	NS
N	<i>Melanohalea olivacea</i>	Spotted Camouflage Lichen				S3S4	2	59.6 ± 0.0	NS
N	<i>Parmeliopsis hyperopta</i>	Gray Starburst Lichen				S3S4	2	34.1 ± 0.0	NS
N	<i>Parmotrema perlatum</i>	Powdered Ruffle Lichen				S3S4	1	38.1 ± 0.0	NS
N	<i>Peltigera hymenina</i>	Cloudy Pelt Lichen				S3S4	3	68.9 ± 0.0	NS
N	<i>Sphaerophorus fragilis</i>	Fragile Coral Lichen				S3S4	3	65.3 ± 0.0	NS
N	<i>Sclerophora peronella</i>	Frosted Glass-whiskers Lichen				S3S4	1	43.3 ± 0.0	NS
N	<i>Coccocarpia palmicola</i>	Salted Shell Lichen				S3S4	724	0.9 ± 0.0	NS
N	<i>Physcia tenella</i>	Fringed Rosette Lichen				S3S4	1	40.2 ± 3.0	NS
N	<i>Anaptychia palmulata</i>	Shaggy Fringed Lichen				S3S4	91	0.9 ± 0.0	NS
N	<i>Evernia prunastri</i>	Valley Oakmoss Lichen				S3S4	8	29.9 ± 0.0	NS
N	<i>Heterodermia neglecta</i>	Fringe Lichen				S3S4	69	0.9 ± 0.0	NS
P	<i>Fraxinus nigra</i>	Black Ash	Threatened		Threatened	S1S2	307	28.6 ± 0.0	NS
P	<i>Juncus caesariensis</i>	New Jersey Rush	Special Concern	Special Concern	Vulnerable	S3	60	92.6 ± 0.0	NS
P	<i>Floerkea proserpinacoides</i>	False Mermaidweed	Not At Risk			S2S3	9	33.2 ± 1.0	NS
P	<i>Arnica lonchophylla</i>	Northern Arnica				S1	1	75.0 ± 7.0	NS
P	<i>Betula minor</i>	Dwarf White Birch				S1	1	16.9 ± 0.0	NS
P	<i>Cardamine dentata</i>	Toothed Bittercress				S1	1	82.8 ± 0.0	NS
P	<i>Cochlearia tridactylites</i>	Limestone Scurvy-grass				S1	12	42.5 ± 0.0	NS
P	<i>Stellaria crassifolia</i>	Fleshy Stitchwort				S1	1	90.6 ± 2.0	NS
P	<i>Hudsonia tomentosa</i>	Woolly Beach-heath				S1	6	42.9 ± 1.0	NS
P	<i>Bistorta vivipara</i>	Alpine Bistort				S1	1	84.5 ± 1.0	NS
P	<i>Montia fontana</i>	Water Blinks				S1	2	53.1 ± 3.0	NS
P	<i>Agalinis tenuifolia</i>	Slender Agalinis				S1	1	96.2 ± 0.0	NS
P	<i>Scrophularia lanceolata</i>	Lance-leaved Figwort				S1	1	30.8 ± 1.0	NS
P	<i>Carex alopecoidea</i>	Foxtail Sedge				S1	3	41.8 ± 0.0	NS
P	<i>Carex garberi</i>	Garber's Sedge				S1	1	99.2 ± 0.0	NS
P	<i>Carex granularis</i>	Limestone Meadow Sedge				S1	1	85.1 ± 0.0	NS
P	<i>Carex plantaginea</i>	Plantain-Leaved Sedge				S1	2	82.4 ± 0.0	NS
P	<i>Carex tenuiflora</i>	Sparse-Flowered Sedge				S1	3	35.8 ± 1.0	NS
P	<i>Carex tinctoria</i>	Tinged Sedge				S1	2	41.8 ± 0.0	NS
P	<i>Carex viridula</i> var. <i>saxillitoralis</i>	Greenish Sedge				S1	4	83.2 ± 0.0	NS
P	<i>Carex viridula</i> var. <i>elatior</i>	Greenish Sedge				S1	21	82.6 ± 0.0	NS
P	<i>Carex grisea</i>	Inflated Narrow-leaved Sedge				S1	6	38.5 ± 0.0	NS
P	<i>Cyperus lupulinus</i> ssp. <i>macilentus</i>	Hop Flatsedge				S1	18	42.6 ± 0.0	NS
P	<i>Eleocharis erythropoda</i>	Red-stemmed Spikerush				S1	1	94.7 ± 0.0	NS
P	<i>Iris prismatica</i>	Slender Blue Flag				S1	2	18.3 ± 7.0	NS
P	<i>Malaxis monophyllos</i> var. <i>brachypoda</i>	North American White Adder's-mouth				S1	1	39.1 ± 7.0	NS
P	<i>Calamagrostis stricta</i> ssp. <i>inexpansa</i>	Slim-stemmed Reed Grass				S1	3	75.7 ± 0.0	NS
P	<i>Elymus hystrix</i>	Spreading Wild Rye				S1	1	63.4 ± 1.0	NS
P	<i>Potamogeton nodosus</i>	Long-leaved Pondweed				S1	1	32.5 ± 5.0	NS
P	<i>Sparganium androcladum</i>	Branching Bur-Reed				S1	1	64.1 ± 1.0	NS
P	<i>Equisetum palustre</i>	Marsh Horsetail				S1	8	91.3 ± 0.0	NS
P	<i>Solidago hispida</i>	Hairy Goldenrod				S1?	1	58.6 ± 7.0	NS
P	<i>Allium schoenoprasum</i> var.	Wild Chives				S1?	1	69.9 ± 7.0	NS

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P	<i>Sibiricum</i>								
P	<i>Sanicula odorata</i>	Clustered Sanicle				S1S2	5	77.4 ± 0.0	NS
P	<i>Ageratina altissima</i>	White Snakeroot				S1S2	2	43.2 ± 7.0	NS
P	<i>Cornus suecica</i>	Swedish Bunchberry				S1S2	1	66.6 ± 6.0	NS
P	<i>Anemone virginiana</i> var. <i>alba</i>	Virginia Anemone				S1S2	4	93.9 ± 0.0	NS
P	<i>Parnassia parviflora</i>	Small-flowered Grass-of-Parnassus				S1S2	11	62.0 ± 1.0	NS
P	<i>Carex haydenii</i>	Hayden's Sedge				S1S2	3	47.7 ± 5.0	NS
P	<i>Platanthera huronensis</i>	Fragrant Green Orchid				S1S2	4	42.9 ± 10.0	NS
P	<i>Selaginella selaginoides</i>	Low Spikemoss				S1S2	2	90.0 ± 0.0	NS
P	<i>Carex vacillans</i>	Estuarine Sedge				S1S3	4	41.8 ± 0.0	NS
P	<i>Zizia aurea</i>	Golden Alexanders				S2	23	18.2 ± 0.0	NS
P	<i>Rudbeckia laciniata</i>	Cut-Leaved Coneflower				S2	3	21.7 ± 0.0	NS
P	<i>Desmodium canadense</i>	Canada Tick-trefoil				S2	10	72.8 ± 0.0	NS
P	<i>Anemonastrum canadense</i>	Canada Anemone				S2	2	50.7 ± 1.0	NS
P	<i>Hepatica americana</i>	Round-lobed Hepatica				S2	1	95.8 ± 0.0	NS
P	<i>Comandra umbellata</i>	Bastard's Toadflax				S2	36	42.3 ± 5.0	NS
P	<i>Carex gynocrates</i>	Northern Bog Sedge				S2	11	85.6 ± 0.0	NS
P	<i>Carex pellita</i>	Woolly Sedge				S2	8	72.9 ± 0.0	NS
P	<i>Carex livida</i>	Livid Sedge				S2	34	37.5 ± 0.0	NS
P	<i>Juncus greenii</i>	Greene's Rush				S2	1	43.0 ± 1.0	NS
P	<i>Juncus alpinoarticulatus</i> ssp. <i>americanus</i>	Northern Green Rush				S2	8	63.9 ± 5.0	NS
P	<i>Luzula spicata</i>	Spiked Woodrush				S2	1	38.8 ± 0.0	NS
P	<i>Lilium canadense</i>	Canada Lily				S2	62	15.8 ± 1.0	NS
P	<i>Cypripedium parviflorum</i> var. <i>pubescens</i>	Yellow Lady's-slipper				S2	30	39.4 ± 0.0	NS
P	<i>Cypripedium parviflorum</i> var. <i>makasin</i>	Small Yellow Lady's-Slipper				S2	2	38.9 ± 0.0	NS
P	<i>Cypripedium reginae</i>	Showy Lady's-Slipper				S2	137	51.0 ± 0.0	NS
P	<i>Platanthera flava</i> var. <i>herbiola</i>	Pale Green Orchid				S2	1	32.2 ± 1.0	NS
P	<i>Platanthera macrophylla</i>	Large Round-Leaved Orchid				S2	3	29.9 ± 0.0	NS
P	<i>Bromus latiglumis</i>	Broad-Glumed Brome				S2	36	63.6 ± 0.0	NS
P	<i>Cinna arundinacea</i>	Sweet Wood Reed Grass				S2	42	63.6 ± 0.0	NS
P	<i>Elymus wiegandii</i>	Wiegand's Wild Rye				S2	11	64.5 ± 0.0	NS
P	<i>Sparganium hyperboreum</i>	Northern Burreed				S2	3	18.6 ± 0.0	NS
P	<i>Cryptogramma stelleri</i>	Steller's Rockbrake				S2	17	95.4 ± 0.0	NS
P	<i>Cuscuta cephalanthi</i>	Buttonbush Dodder				S2?	9	38.7 ± 0.0	NS
P	<i>Crataegus submollis</i>	Quebec Hawthorn				S2?	2	50.9 ± 7.0	NS
P	<i>Thuja occidentalis</i>	Eastern White Cedar			Vulnerable	S2S3	1	33.8 ± 0.0	NS
P	<i>Osmorhiza longistylis</i>	Smooth Sweet Cicely				S2S3	16	28.6 ± 0.0	NS
P	<i>Bidens hyperborea</i>	Estuary Beggarticks				S2S3	1	44.0 ± 1.0	NS
P	<i>Erigeron philadelphicus</i>	Philadelphia Fleabane				S2S3	5	46.1 ± 7.0	NS
P	<i>Impatiens pallida</i>	Pale Jewelweed				S2S3	8	14.8 ± 7.0	NS
P	<i>Caulophyllum thalictroides</i>	Blue Cohosh				S2S3	41	28.5 ± 0.0	NS
P	<i>Draba arabisans</i>	Rock Whitlow-Grass				S2S3	3	97.5 ± 1.0	NS
P	<i>Stellaria humifusa</i>	Saltmarsh Starwort				S2S3	5	30.9 ± 0.0	NS
P	<i>Oxybasis rubra</i>	Red Goosefoot				S2S3	5	53.0 ± 7.0	NS
P	<i>Hypericum x dissimulatum</i>	Disguised St. John's-wort				S2S3	1	26.3 ± 1.0	NS
P	<i>Empetrum atropurpureum</i>	Purple Crowberry				S2S3	1	64.7 ± 3.0	NS
P	<i>Euphorbia polygonifolia</i>	Seaside Spurge				S2S3	11	42.7 ± 0.0	NS
P	<i>Myriophyllum farwellii</i>	Farwell's Water Milfoil				S2S3	6	8.2 ± 0.0	NS
P	<i>Hedeoma pulegioides</i>	American False Pennyroyal				S2S3	3	61.8 ± 5.0	NS
P	<i>Oenothera fruticosa</i> ssp. <i>tetragona</i>	Narrow-leaved Evening Primrose				S2S3	1	85.9 ± 7.0	NS
P	<i>Polygonum aviculare</i> ssp.	Box Knotweed				S2S3	1	75.2 ± 0.0	NS

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P	<i>buxiforme</i> <i>Polygonum oxyspermum</i> <i>ssp. raii</i>	Ray's Knotweed				S2S3	3	28.4 ± 1.0	NS
P	<i>Rumex triangulivalvis</i>	Triangular-valve Dock				S2S3	4	64.1 ± 6.0	NS
P	<i>Primula mistassinica</i>	Mistassini Primrose				S2S3	2	88.1 ± 7.0	NS
P	<i>Anemone quinquefolia</i>	Wood Anemone				S2S3	8	16.5 ± 0.0	NS
P	<i>Caltha palustris</i>	Yellow Marsh Marigold				S2S3	3	41.2 ± 0.0	NS
P	<i>Amelanchier fernaldii</i>	Fernald's Serviceberry				S2S3	1	35.1 ± 1.0	NS
P	<i>Potentilla canadensis</i>	Canada Cinquefoil				S2S3	1	58.9 ± 2.0	NS
P	<i>Salix pellita</i>	Satiny Willow				S2S3	1	49.6 ± 1.0	NS
P	<i>Tiarella cordifolia</i>	Heart-leaved Foamflower				S2S3	4	58.6 ± 3.0	NS
P	<i>Agalinis purpurea</i> var. <i>parviflora</i>	Small-flowered Purple False Foxglove				S2S3	4	60.2 ± 0.0	NS
P	<i>Carex adusta</i>	Lesser Brown Sedge				S2S3	2	35.2 ± 5.0	NS
P	<i>Carex hystericina</i>	Porcupine Sedge				S2S3	29	42.2 ± 0.0	NS
P	<i>Eleocharis ovata</i>	Ovate Spikerush				S2S3	1	15.3 ± 0.0	NS
P	<i>Scirpus pedicellatus</i>	Stalked Bulrush				S2S3	6	64.3 ± 0.0	NS
P	<i>Spiranthes casei</i>	Case's Ladies'-Tresses				S2S3	1	18.7 ± 1.0	NS
P	<i>Spiranthes casei</i> var. <i>novaescotiae</i>	Case's Ladies'-Tresses				S2S3	2	59.2 ± 0.0	NS
P	<i>Spiranthes lucida</i>	Shining Ladies'-Tresses				S2S3	32	69.1 ± 1.0	NS
P	<i>Potamogeton friesii</i>	Fries' Pondweed				S2S3	6	66.7 ± 0.0	NS
P	<i>Cystopteris laurentiana</i>	Laurentian Bladder Fern				S2S3	5	97.4 ± 10.0	NS
P	<i>Woodsia glabella</i>	Smooth Cliff Fern				S2S3	2	97.4 ± 7.0	NS
P	<i>Botrychium lanceolatum</i> ssp. <i>angustisegmentum</i>	Narrow Triangle Moonwort				S2S3	6	64.4 ± 0.0	NS
P	<i>Botrychium simplex</i>	Least Moonwort				S2S3	3	64.4 ± 0.0	NS
P	<i>Potamogeton pulcher</i>	Spotted Pondweed			Vulnerable	S3	3	90.5 ± 2.0	NS
P	<i>Angelica atropurpurea</i>	Purple-stemmed Angelica				S3	13	63.1 ± 0.0	NS
P	<i>Conioselinum chinense</i>	Chinese Hemlock-parsley				S3	1	90.2 ± 5.0	NS
P	<i>Senecio pseudoarnica</i>	Seabeach Ragwort				S3	23	20.9 ± 0.0	NS
P	<i>Symphyotrichum boreale</i>	Boreal Aster				S3	44	82.6 ± 0.0	NS
P	<i>Symphyotrichum ciliolatum</i>	Fringed Blue Aster				S3	3	21.9 ± 7.0	NS
P	<i>Betula michauxii</i>	Michaux's Dwarf Birch				S3	25	14.2 ± 0.0	NS
P	<i>Betula pumila</i>	Bog Birch				S3	1	83.9 ± 0.0	NS
P	<i>Cardamine parviflora</i>	Small-flowered Bittercress				S3	4	87.2 ± 0.0	NS
P	<i>Palustricodon aparinoides</i>	Marsh Bellflower				S3	13	19.9 ± 0.0	NS
P	<i>Lobelia kalmii</i>	Brook Lobelia				S3	71	79.9 ± 0.0	NS
P	<i>Sagina nodosa</i>	Knotted Pearlwort				S3	8	31.4 ± 1.0	NS
P	<i>Sagina nodosa</i> ssp. <i>borealis</i>	Knotted Pearlwort				S3	5	81.8 ± 0.0	NS
P	<i>Stellaria longifolia</i>	Long-leaved Starwort				S3	5	66.1 ± 0.0	NS
P	<i>Ceratophyllum echinatum</i>	Prickly Hornwort				S3	2	96.8 ± 0.0	NS
P	<i>Triosteum aurantiacum</i>	Orange-fruited Tinker's Weed				S3	162	28.4 ± 0.0	NS
P	<i>Viburnum edule</i>	Squashberry				S3	3	96.7 ± 0.0	NS
P	<i>Crassula aquatica</i>	Water Pygmyweed				S3	2	83.5 ± 7.0	NS
P	<i>Halenia deflexa</i>	Spurred Gentian				S3	23	19.4 ± 1.0	NS
P	<i>Myriophyllum verticillatum</i>	Whorled Water Milfoil				S3	2	82.7 ± 0.0	NS
P	<i>Epilobium strictum</i>	Downy Willowherb				S3	7	31.9 ± 0.0	NS
P	<i>Polygala sanguinea</i>	Blood Milkwort				S3	14	12.4 ± 0.0	NS
P	<i>Persicaria arifolia</i>	Halberd-leaved Tearthumb				S3	10	23.9 ± 0.0	NS
P	<i>Plantago rugelii</i>	Rugel's Plantain				S3	3	80.0 ± 0.0	NS
P	<i>Samolus parviflorus</i>	Seaside Brookweed				S3	13	38.7 ± 0.0	NS
P	<i>Pyrola minor</i>	Lesser Pyrola				S3	1	97.8 ± 2.0	NS
P	<i>Anemone virginiana</i>	Virginia Anemone				S3	31	39.3 ± 0.0	NS
P	<i>Galium kamtschaticum</i>	Northern Wild Licorice				S3	6	92.8 ± 0.0	NS
P	<i>Galium labradoricum</i>	Labrador Bedstraw				S3	60	82.1 ± 0.0	NS
P	<i>Salix pedicellaris</i>	Bog Willow				S3	52	83.0 ± 0.0	NS

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P	<i>Saxifraga paniculata</i> ssp. <i>laestadii</i>	Laestadius' Saxifrage				S3	1	92.4 ± 7.0	NS
P	<i>Lindernia dubia</i>	Yellow-seeded False Pimperel				S3	11	36.1 ± 0.0	NS
P	<i>Laportea canadensis</i>	Canada Wood Nettle				S3	18	28.2 ± 3.0	NS
P	<i>Pilea pumila</i>	Dwarf Clearweed				S3	1	59.4 ± 6.0	NS
P	<i>Viola nephrophylla</i>	Northern Bog Violet				S3	7	67.3 ± 0.0	NS
P	<i>Carex bebbii</i>	Bebb's Sedge				S3	9	33.4 ± 10.0	NS
P	<i>Carex castanea</i>	Chestnut Sedge				S3	15	83.9 ± 0.0	NS
P	<i>Carex cryptolepis</i>	Hidden-scaled Sedge				S3	8	42.4 ± 1.0	NS
P	<i>Carex eburnea</i>	Bristle-leaved Sedge				S3	23	43.0 ± 0.0	NS
P	<i>Carex hirtifolia</i>	Pubescent Sedge				S3	23	28.5 ± 0.0	NS
P	<i>Carex lupulina</i>	Hop Sedge				S3	17	34.6 ± 6.0	NS
P	<i>Carex rosea</i>	Rosy Sedge				S3	8	20.7 ± 4.0	NS
P	<i>Carex tenera</i>	Tender Sedge				S3	5	47.2 ± 1.0	NS
P	<i>Carex tribuloides</i>	Blunt Broom Sedge				S3	11	17.9 ± 5.0	NS
P	<i>Carex tuckermanii</i>	Tuckerman's Sedge				S3	1	87.3 ± 0.0	NS
P	<i>Carex atratiformis</i>	Scabrous Black Sedge				S3	2	97.4 ± 7.0	NS
P	<i>Eleocharis flavescens</i> var. <i>olivacea</i>	Bright-green Spikerush				S3	5	32.0 ± 0.0	NS
P	<i>Eleocharis quinqueflora</i>	Few-flowered Spikerush				S3	10	85.8 ± 0.0	NS
P	<i>Eriophorum gracile</i>	Slender Cottongrass				S3	8	21.6 ± 1.0	NS
P	<i>Schoenoplectus americanus</i>	Olney's Bulrush				S3	1	38.8 ± 0.0	NS
P	<i>Juncus stygius</i> ssp. <i>americanus</i>	Moor Rush				S3	26	89.8 ± 1.0	NS
P	<i>Cypripedium parviflorum</i>	Yellow Lady's-slipper				S3	59	38.3 ± 0.0	NS
P	<i>Neottia bifolia</i>	Southern Twayblade				S3	47	8.1 ± 0.0	NS
P	<i>Platanthera grandiflora</i>	Large Purple Fringed Orchid				S3	100	15.4 ± 0.0	NS
P	<i>Platanthera hookeri</i>	Hooker's Orchid				S3	3	48.6 ± 0.0	NS
P	<i>Dichanthelium linearifolium</i>	Narrow-leaved Panic Grass				S3	1	75.4 ± 7.0	NS
P	<i>Poa glauca</i>	Glaucous Blue Grass				S3	8	97.5 ± 1.0	NS
P	<i>Stuckenia filiformis</i>	Thread-leaved Pondweed				S3	8	64.1 ± 0.0	NS
P	<i>Potamogeton praelongus</i>	White-stemmed Pondweed				S3	11	14.8 ± 10.0	NS
P	<i>Potamogeton richardsonii</i>	Richardson's Pondweed				S3	5	19.1 ± 0.0	NS
P	<i>Potamogeton zosteriformis</i>	Flat-stemmed Pondweed				S3	4	86.7 ± 7.0	NS
P	<i>Asplenium viride</i>	Green Spleenwort				S3	20	61.5 ± 0.0	NS
P	<i>Dryopteris fragrans</i>	Fragrant Wood Fern				S3	3	18.9 ± 0.0	NS
P	<i>Polystichum lonchitis</i>	Northern Holly Fern				S3	4	80.5 ± 5.0	NS
P	<i>Sceptridium dissectum</i>	Dissected Moonwort				S3	3	33.9 ± 1.0	NS
P	<i>Polypodium appalachianum</i>	Appalachian Polypody				S3	7	11.2 ± 0.0	NS
P	<i>Persicaria amphibia</i> var. <i>emersa</i>	Long-root Smartweed				S3?	1	36.0 ± 0.0	NS
P	<i>Spiranthes ochroleuca</i>	Yellow Ladies'-tresses				S3?	33	16.2 ± 0.0	NS
P	<i>Diphasiastrum x sabinifolium</i>	Savin-leaved Ground-cedar				S3?	3	43.6 ± 5.0	NS
P	<i>Bidens vulgata</i>	Tall Beggarticks				S3S4	1	64.8 ± 0.0	NS
P	<i>Erigeron hyssopifolius</i>	Hyssop-leaved Fleabane				S3S4	20	39.1 ± 0.0	NS
P	<i>Hieracium paniculatum</i>	Paniced Hawkweed				S3S4	5	56.8 ± 0.0	NS
P	<i>Bidens beckii</i>	Water Beggarticks				S3S4	6	31.2 ± 0.0	NS
P	<i>Packera paupercula</i>	Balsam Groundsel				S3S4	64	39.3 ± 0.0	NS
P	<i>Atriplex glabruscula</i> var. <i>franktonii</i>	Frankton's Saltbush				S3S4	1	49.4 ± 0.0	NS
P	<i>Shepherdia canadensis</i>	Soapberry				S3S4	11	89.9 ± 0.0	NS
P	<i>Vaccinium boreale</i>	Northern Blueberry				S3S4	8	35.1 ± 2.0	NS
P	<i>Vaccinium cespitosum</i>	Dwarf Bilberry				S3S4	46	16.0 ± 0.0	NS
P	<i>Fagus grandifolia</i>	American Beech				S3S4	226	2.5 ± 0.0	NS
P	<i>Bartonia virginica</i>	Yellow Bartonia				S3S4	1	85.8 ± 0.0	NS
P	<i>Proserpinaca pectinata</i>	Comb-leaved Mermaidweed				S3S4	2	73.8 ± 1.0	NS
P	<i>Decodon verticillatus</i>	Swamp Loosestrife				S3S4	1	86.0 ± 7.0	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
P	<i>Nuphar microphylla</i>	Small Yellow Pond-lily				S3S4	1	80.5 ± 2.0	NS
P	<i>Persicaria pensylvanica</i>	Pennsylvania Smartweed				S3S4	18	38.6 ± 0.0	NS
P	<i>Fallopia scandens</i>	Climbing False Buckwheat				S3S4	36	16.4 ± 0.0	NS
P	<i>Rumex pallidus</i>	Seabeach Dock				S3S4	1	44.8 ± 0.0	NS
P	<i>Pyrola asarifolia</i>	Pink Pyrola				S3S4	4	43.8 ± 0.0	NS
P	<i>Endotropis alnifolia</i>	alder-leaved buckthorn				S3S4	345	38.2 ± 0.0	NS
P	<i>Amelanchier spicata</i>	Running Serviceberry				S3S4	6	19.9 ± 0.0	NS
P	<i>Fragaria vesca</i> ssp. <i>americana</i>	Woodland Strawberry				S3S4	23	43.0 ± 0.0	NS
P	<i>Fragaria vesca</i>	Woodland Strawberry				S3S4	2	4.7 ± 0.0	NS
P	<i>Galium aparine</i>	Common Bedstraw				S3S4	17	39.1 ± 0.0	NS
P	<i>Geocaulon lividum</i>	Northern Comandra				S3S4	78	15.3 ± 0.0	NS
P	<i>Limosella australis</i>	Southern Mudwort				S3S4	3	90.7 ± 5.0	NS
P	<i>Ulmus americana</i>	White Elm				S3S4	49	19.9 ± 0.0	NS
P	<i>Verbena hastata</i>	Blue Vervain				S3S4	54	28.3 ± 0.0	NS
P	<i>Viola selkirkii</i>	Great-Spurred Violet				S3S4	1	50.4 ± 1.0	NS
P	<i>Triglochin gaspensis</i>	Gasp – Arrowgrass				S3S4	23	62.1 ± 0.0	NS
P	<i>Juncus acuminatus</i>	Sharp-Fruit Rush				S3S4	3	38.1 ± 0.0	NS
P	<i>Juncus subcaudatus</i>	Woods-Rush				S3S4	6	22.1 ± 0.0	NS
P	<i>Luzula parviflora</i> ssp. <i>melanocarpa</i>	Black-fruited Woodrush				S3S4	3	31.7 ± 0.0	NS
P	<i>Goodyera repens</i>	Lesser Rattlesnake-plantain				S3S4	8	67.4 ± 0.0	NS
P	<i>Liparis loeselii</i>	Loesel's Twayblade				S3S4	8	43.4 ± 0.0	NS
P	<i>Platanthera obtusata</i>	Blunt-leaved Orchid				S3S4	6	18.3 ± 10.0	NS
P	<i>Platanthera orbiculata</i>	Small Round-leaved Orchid				S3S4	6	34.8 ± 0.0	NS
P	<i>Alopecurus aequalis</i>	Short-awned Foxtail				S3S4	5	42.3 ± 1.0	NS
P	<i>Dichanthelium clandestinum</i>	Deer-tongue Panic Grass				S3S4	87	15.9 ± 0.0	NS
P	<i>Panicum philadelphicum</i>	Philadelphia Panicgrass				S3S4	1	80.3 ± 0.0	NS
P	<i>Koeleria spicata</i>	Narrow False Oats				S3S4	1	72.9 ± 0.0	NS
P	<i>Asplenium trichomanes</i>	Maidenhair Spleenwort				S3S4	4	48.7 ± 0.0	NS
P	<i>Equisetum pratense</i>	Meadow Horsetail				S3S4	14	78.8 ± 0.0	NS
P	<i>Diphasiastrum complanatum</i>	Northern Ground-cedar				S3S4	4	60.6 ± 0.0	NS
P	<i>Diphasiastrum sitchense</i>	Sitka Ground-cedar				S3S4	18	20.7 ± 1.0	NS
P	<i>Huperzia appressa</i>	Mountain Firmoss				S3S4	1	90.6 ± 1.0	NS
P	<i>Sceptridium multifidum</i>	Leathery Moonwort				S3S4	4	20.7 ± 0.0	NS
P	<i>Botrychium matricariifolium</i>	Daisy-leaved Moonwort				S3S4	3	55.9 ± 0.0	NS
P	<i>Viola canadensis</i>	Canada Violet				SH	1	95.6 ± 0.0	NS

5.1 SOURCE BIBLIOGRAPHY (100 km)

The recipient of these data shall acknowledge the AC CDC and the data sources listed below in any documents, reports, publications or presentations, in which this dataset makes a significant contribution.

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