APPENDIX A Public Consultation Information

Alton Natural Gas Storage L.P. Natural Gas Pipeline Connection to M&NP Project Information Sheet

Project Overview

Alton Natural Gas Storage L.P. (Alton) will be developing an underground natural gas storage facility near Alton, Nova Scotia. The storage facility received an Environmental Assessment Approval from the Nova Scotia Minister of Environment in December 2007 for the development of the storage caverns and associated water pipelines to the Shubenacadie River. To enable the storage of natural gas within the caverns, the facility must be connected to a natural gas transmission system. As such, Alton is proposing to construct and operate a natural gas pipeline to connect the storage facility to the existing Maritimes and Northeast Pipeline Halifax Lateral (the Project), approximately 10 km away (see map).

The proposed gas pipeline will be 16 inches (406 mm) in diameter and approximately 10 km in length. It will be designed, constructed, operated and maintained in accordance with CSA standards (i.e., CSA Z662). The maximum operating pressure will be 1440 psi. Due to the relatively short length of this pipeline, no compressor stations are anticipated along the pipeline route.

A pipeline corridor evaluation study was conducted in 2007 and a preferred corridor was selected. Alton also selected a preferred pipeline route within the corridor which was updated in 2011 based on technical, environmental and economic considerations. This pipeline route selection process involved a number of field surveys, and discussions with property owners and other stakeholders.

Proposed project activities will be consistent with those of other gas transmission pipeline projects in the Nova Scotia. Construction will include clearing, grubbing, topsoil stripping and grading, trenching, pipe installation, backfilling, and clean-up and restoration. Operations and maintenance will be limited to maintenance of the right-of-way, and regular inspections and testing.

There are a number of watercourses that will be crossed by the Project. The current plan is to install the pipeline under the Stewiacke River by way of horizontal directional drilling (HDD) to avoid disturbance to the River. To the extent practical, wetland crossings and others sensitive habitats will be avoided.

The current Project schedule includes construction starting between 2013 and 2015.

Environmental Assessment Process

Alton is required to register this Project as a Class I Undertaking pursuant to the Nova Scotia *Environment Act* and Environmental Assessment Regulations. The environmental assessment registration is currently being prepared by environmental consultants Stantec Consulting Ltd. on behalf of Alton, to fulfill this regulatory requirement.

The environmental assessment registration will evaluate potential environmental effects of the project and identify appropriate mitigation and monitoring to minimize these effects. The environmental assessment registration document will be available for public review and comment once it is filed with the Nova Scotia Environment (NSE). It is anticipated that the draft environmental assessment will be submitted to NSE in late 2011/early 2012. Other public consultation opportunities will also be provided by Alton such as an open house public meeting in November 2011.

Environmental Assessment Components

The environmental registration document focuses on those aspects of the ecological and social environment of most concern. The study team will use available information, dedicated field studies, consultation with stakeholders, and professional judgment and experience to identify issues of concern. A preliminary list of components to be evaluated includes:

- rare and sensitive flora (desktop and field studies);
- birds and other wildlife (desktop and field studies);
- fish and fish habitat (desktop and field studies);
- groundwater resources (desktop);
- wetlands (desktop and field studies);
- archaeological and heritage resources (desktop and field studies):
- atmospheric environment (includes dust & noise) (desktop);
- socio-economic environment (desktop).

A Mi'kmaq Environmental Knowledge Study (MEKS) has also been commissioned by Alton as part of the environmental assessment process.

Potential effects of pipeline construction activities on these components will be addressed in the registration document. Field investigations identified 10 watercourse crossings. Other sensitive features such as vegetation and habitats will be avoided to the extent practical. Industry standards for pipeline design will be followed as will standard all government guidelines and conditions of approval.

Contacts

If you have any questions or concerns please contact:

Mr. Scott McDonald, MBA, P.Eng, Project Manager Alton Natural Gas Storage L.P. 89 Main Street W, 2nd Floor PO Box 70 Stewiacke, NS B0N 2J0 (902) 488-3867 (tel.); (902) 693-0093 (fax)

Ms. Kelley Fraser, MES, Project Manager Stantec Consulting Ltd 40 Highfield Park Drive, Suite 102 Dartmouth, NS B3A 0A3 (902) 468-7777 (tel.); (902) 468-9009 (fax)

Public Open House

Alton Natural Gas Pipeline Project

Wednesday, November 30, 2011 4pm to 8pm Alton Project Office 89 Main Street W, 2nd Floor, Stewiacke NS



The purpose of this public open house will be to present information on:

- Project design and location
- The environmental assessment process
- The studies that will be undertaken as part of the environmental assessment

PROJECT OVERVIEW

Alton Natural Gas Storage L.P. (Alton) will be developing an underground natural gas storage facility near Alton, Nova Scotia. The storage facility received an Environmental Assessment Approval from the Nova Scotia Minister of Environment in December 2007 for the development of the storage caverns and associated water pipelines to the Shubenacadie River. To enable the storage of natural gas within the caverns, the facility must be connected to a natural gas transmission system. Alton is proposing to construct and operate a natural gas pipeline to connect the storage facility to the existing Maritimes and Northeast Pipeline Halifax Lateral (the Project), approximately 10 km away. The current Project schedule includes construction starting between 2013 and 2015.

ENVIRONMENTAL ASSESSMENT PROCESS

Alton is required to register this Project as a Class I Undertaking pursuant to the Nova Scotia *Environment Act* and Environmental Assessment Regulations.

The Environmental Assessment (EA) registration document will focus on key ecological and socio-economic aspects of the Project. The following studies are underway in support of the EA:

- Vascular plant survey and wetlands
- Birds and other wildlife
- Surface and groundwater resources
- Archaeological and heritage resources
- Land and resource use
- Mi'Kmaq Ecological Knowledge Study

As part of the EA process, the Alton Natural Gas Pipeline Project is implementing a public consultation plan including distribution of project information, meetings with various regulatory and elected officials, key stakeholder groups, and a public open house. The objectives are:

- To inform the public and key stakeholders about the project and provide accurate and consistent information
- to obtain input from potentially affected parties/individuals to focus the EA on the issues of concern and identify appropriate mitigation measures to be implemented

The EA report will be available for public review and comment. For more information on how to comment on the EA report, please see http://www.gov.ns.ca/enla/ea/.

SAFETY MEASURES

The health and safety of the community is our highest priority. The natural gas pipeline will be designed, constructed, operated and maintained in accordance with the latest edition of Canada Standards Association (CSA) Standard (CSA) Z662 Oil and Gas Pipeline Systems.

COMMUNITY BENEFITS

We plan to continue contributing to the community by:

- Creating jobs through the construction and operation of the facility
- Bringing gas closer to the communities of Alton, Brookfield, Stewiacke, and Truro through the development of a gas pipeline to the Alton facility
- Decreasing gas price volatility for Heritage Gas customers
- Increasing regional security of supply levels
- Contributing to the tax base (Income, Property, and Sales)
- Allowing for the potential of developing other energy related projects as a result of storage
- Contributing to the overall economic growth of the community. We are committed to using local resources

CONTACTS

If you have any questions or concerns please contact:

Mr. Scott McDonald, MBA, P.Eng, Project Manager Alton Natural Gas Storage L.P. 89 Main Street W, 2nd Floor PO Box 70 Stewiacke, NS B0N 2J0 (902) 488-3867 (tel.); (902) 693-0093 (fax)

Ms. Kelley Fraser, MES, Project Manager Stantec Consulting Ltd 40 Highfield Park Drive, Suite 102 Dartmouth, NS B3A 0A3 (902) 468-7777 (tel.); (902) 468-9009 (fax)



OPEN HOUSE

PROPOSED ALTON NATURAL GAS PIPELINE

ALTON NATURAL GAS STORAGE L.P.

To provide an update on the environmental assessment process of the proposed natural gas pipeline to connect the natural gas storage facilities to the Maritimes and Northeast Halifax Lateral.

Wednesday November 30, 2011

Location: Alton Project Office, 89 Main Street W, 2nd Floor, Stewiacke NS

4:00 p.m. - 8:00 p.m.

The purpose of the open house is to provide information on the project design and location, the environmental assessment process, and the studies that are underway as part of the environmental assessment.

Representatives of Alton Natural Gas Storage L.P. and their consultants will be available to receive information and respond to questions.

Further Information

If you require further information about the study or this open house, please contact: Scott Mcdonald, Alton Natural Gas Storage LP, (scott.mcdonald@altagas.com), 902-488-3867 Kelley Fraser, Stantec Consulting Ltd, (kelley.fraser@stantec.com), 902-468-7777

Sas

AltaGas

Alton Natural as Pipeline Project November 2011

Alton Natural Gas Pipeline Project

In 2007, Alton Natural Gas Storage L.P. (Alton) received the necessary environmental approvals to develop an underground natural gas storage facility near Alton, Nova Scotia. The facility will consist of salt caverns that will store natural gas until it is needed for uses such as gas-fired electrical generation and heating homes, businesses, hospitals and universities.

In order to transport natural gas to and from storage, the facility requires a natural gas transmission pipeline. As such, Alton is proposing to construct and operate a natural gas pipeline to connect the storage facility to the existing Maritimes and Northeast Pipeline Halifax Lateral approximately 10 km away, which connects to a larger network of pipelines that supplies natural gas to the Maritimes.

Alton is actively engaging with you to:

- Provide accurate and consistent information about the project
- Identify concerns early so we can work together to find solutions
- Continue to build good community relations





Alton Natural Gas Pipeline Project

The proposed natural gas pipeline will be 16 inches (406 mm) in diameter and approximately 10 km in length. It will be designed, constructed, operated and maintained in accordance with Canada Standards Association (CSA) Standard (CSA) Z662 – Oil and Gas Pipeline Systems. The maximum operating pressure will be 1440 psi. There are no compressor stations along the pipeline route.

Proposed project activities will be consistent with those of other gas transmission pipeline projects in the Nova Scotia. Construction will include clearing, grubbing, topsoil stripping and grading, trenching, pipe installation, backfilling, and clean-up and restoration. Operations and maintenance will be limited to maintenance of the right-of-way, and regular inspections and testing.

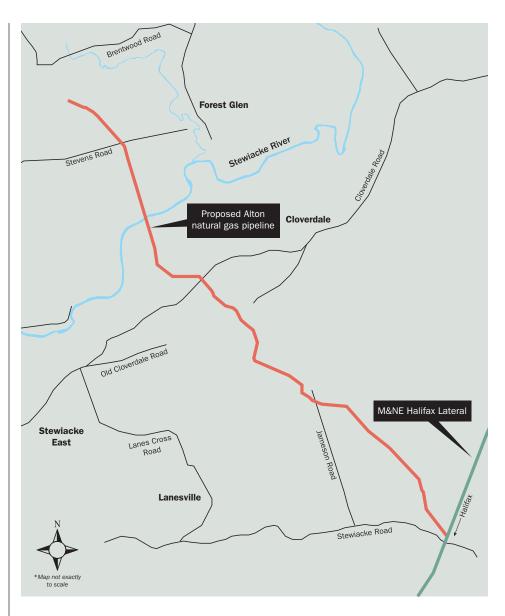
There are a number of watercourses that will be crossed by the pipeline. The current plan is to install the pipeline under the Stewiacke River by way of horizontal directional drilling (HDD) to avoid disturbance to the river. To the extent practical, wetland crossings and other sensitive habitats will be avoided.

Pending regulatory approval, it is anticipated that construction will start between 2013 and 2015.





Above: Existing trail on proposed pipeline route



Route Selection

Pipeline corridor evaluation studies have been ongoing since 2007. Pipeline routes within the proposed corridor were evaluated based on a number of considerations, including but not limited to the following criteria:

- · Existing infrastructure
- · Number of landowners and/or residents in close proximity
- · Environmental factors on the rights-of-way
- Number and expected type of watercourse crossings

Alton has selected a preferred pipeline route within the corridor based on technical, environmental and economic considerations. This pipeline route selection process involved a number of field surveys, and discussions with property owners and other stakeholders.



Permits and Approvals

Like all developments, the proposed Alton Natural Gas Pipeline will require a number of approvals from provincial and municipal authorities before construction can begin. We will meet and strive to exceed all present industry and government standards for pipeline. The health and safety of the community is our highest priority. The natural gas pipeline will be designed, constructed, operated and maintained in accordance with the latest edition of CSA Standard Z662 Oil and Gas Pipeline Systems.

This pipeline will be registered as a Class 1 Undertaking with the Nova Scotia Environment Act and Environmental Regulations.

An Environmental Assessment (EA) is already underway to evaluate the project's potential environmental effects and to identify appropriate mitigation and monitoring to minimize these effects. It focuses on key ecological and socio-economic aspects of the project, such as:

- · Vascular plant survey and wetlands
- · Birds and other wildlife
- · Surface and groundwater resources
- Fish and fish habitat
- Archaeological and heritage resources
- · Land and resource use
- · Atmospheric environment (includes dust and noise)
- · Socio-economic environment
- · Mi'Kmaq Ecological Knowledge Study

The EA will be available for public review and comment once it is filed with the Nova Scotia Environment (NSE). It is anticipated that the draft EA will be submitted to NSE in late 2011/early 2012. For more information on how to comment on the EA report, please see http://www.gov.ns.ca/enla/ea/.

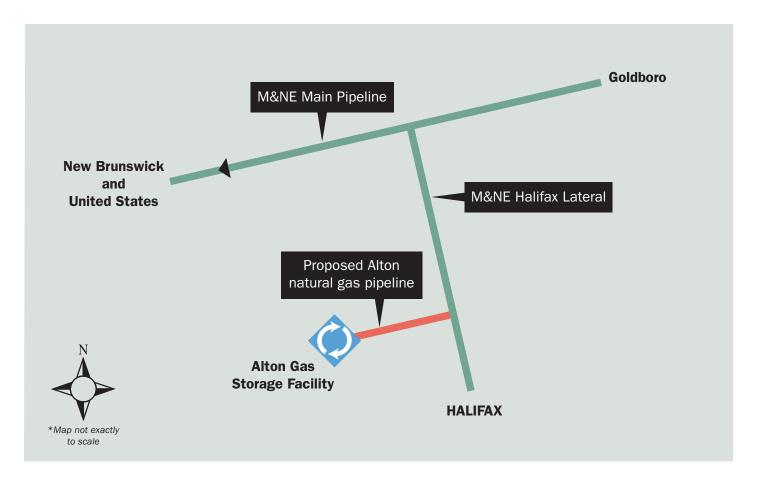
Community Benefits

We plan to continue contributing to the community by:

- Creating jobs through the construction and operation of the facility
- Bringing natural gas closer to the communities of Alton, Brookfield, Stewiacke, and Truro through the development of a natural gas pipeline to the Alton facility
- Decreasing gas price volatility for Nova Scotia consumers
- · Increasing regional security of supply levels
- Contributing to the tax base (Income, Property, and Sales)
- Allowing for the potential of developing other energy related projects as a result of storage
- Contributing to the overall economic growth of the community.



Above: Surveying along proposed pipeline route



CONTACT US:

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About Alton

When developed, the Alton natural gas storage cavern development will be an underground natural gas storage facility with a series of engineered salt caverns. Alton is owned equally through a limited partnership between AltaGas Ltd. and Veresen Inc.

About AltaGas

Founded in 1994, AltaGas's vision is to be a leading North American energy infrastructure company. We focus on natural gas, power and regulated utilities and invest in low-risk, long life energy assets underpinned by contracts or regulated returns.

In our interactions with you, we strive to make our communications:

- Planned so that you know what to expect from us and when to expect it
- Consistent so that information is delivered in a co-ordinated way
- Timely so that relevant information arrives when it is needed
- Two way so that we can listen and respond to your feedback

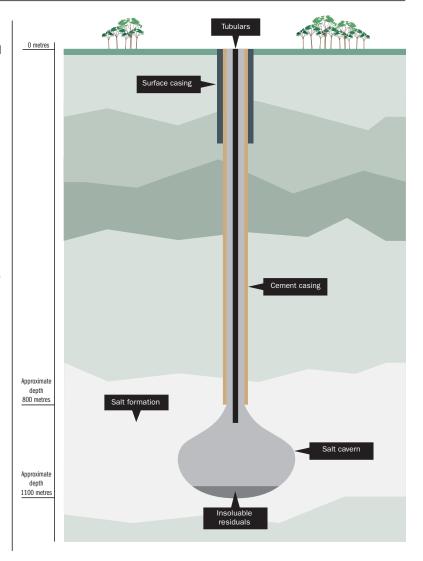


Project overview

- In 2007, Alton Natural Gas Storage L.P. (Alton) received the necessary environmental approvals to develop an underground natural gas storage facility near Alton, Nova Scotia. The facility will consist of salt caverns that will store natural gas until it is needed for uses such as gas-fired electrical generation and heating homes, businesses, hospitals and universities.
- In order to transport natural gas to and from storage, the facility requires a natural gas transmission pipeline.
- Alton is proposing to construct and operate a natural gas pipeline to connect the storage facility to the existing Maritimes and Northeast Pipeline Halifax Lateral approximately 10 km away, which connects to a larger network of pipelines that supply natural gas to the Maritimes.
- Pending regulatory approval, it is anticipated that construction will start between 2013 and 2015.

WHY UNDERGROUND STORAGE?

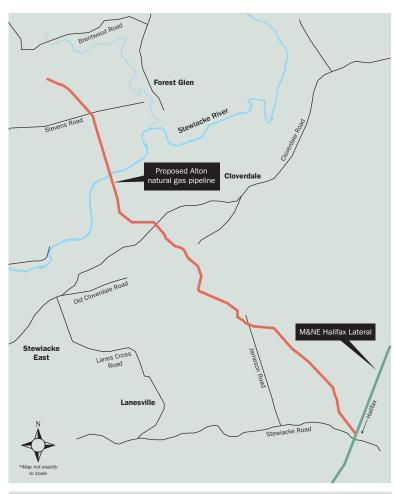
- Underground salt formations are well suited to natural gas storage because they do not allow natural gas to escape from the formation. The walls of a salt cavern also have the structural strength of steel.
- Essentially, salt caverns are formed out of existing salt deposits. These underground salt deposits may exist in two possible forms: salt domes and salt beds.
- Once a suitable salt dome or salt bed deposit is discovered, and deemed suitable for natural gas storage, it is necessary to develop a 'salt cavern' within the formation. This is done by drilling a well down into the formation, and cycling water through the completed well. This water will dissolve the salt in the deposit, and be cycled back up the well, leaving an empty space that the salt used to occupy.
- Natural gas stored in a salt cavern may be more readily (and quickly) withdrawn, and caverns may be replenished with natural gas more quickly than other types of storage facilities.

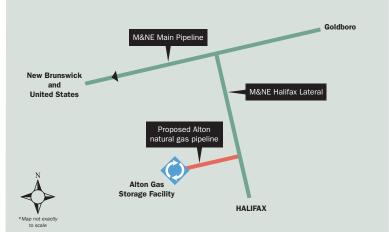




PIPELINE OVERVIEW

- The proposed natural gas pipeline will be 16 inches (406 mm) in diameter and approximately 10 km in length.
- It will be designed, constructed, operated and maintained in accordance with Canada Standards Association (CSA) Standard (CSA) Z662 – Oil and Gas Pipeline Systems. The maximum operating pressure will be 1440 psi. There are no compressor stations along the pipeline route.
- There will be a 20 m wide permanent right-of-way with additional temporary work spaces in all crossing locations.
- Valve stations will be installed at each pipeline end along with facilities for flow control, gas metering and isolation capabilities for maintenance and safety requirements. The valve stations will be fenced for safety and security purposes.



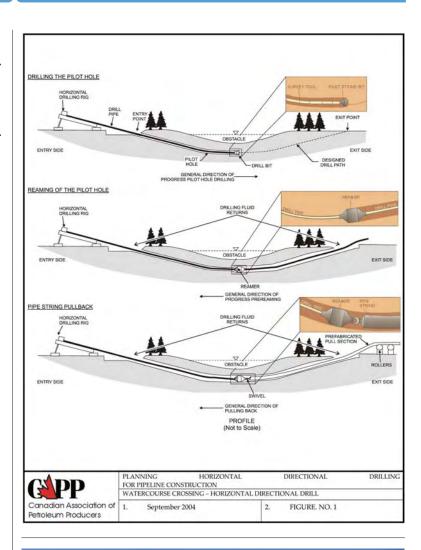


SAFETY AND ENVIRONMENT

THE HEALTH AND SAFETY OF THE COMMUNITY IS OUR HIGHEST PRIORITY.

- The natural gas pipeline will be designed, constructed, operated and maintained in accordance with the latest edition of Canada Standards Association (CSA) Standard (CSA) Z662 – Oil and Gas Pipeline Systems.
- Operational procedures will include monitoring, surveillance, call-before-you-dig, supervisory control, and emergency response plans and procedures.
- Project will be registered as a Class I Undertaking with the Nova Scotia Environment Act and Environmental Regulations.
- An Environmental Assessment (EA) is already underway to evaluate the project's potential environmental effects and to identify appropriate mitigation and monitoring to minimize these effects. It focuses on key ecological and socio-economic aspects of the project, such as:
 - · Vascular plant survey and wetlands
 - · Birds and other wildlife
 - Surface and groundwater resources
 - Fish and fish habitat
 - · Archaeological and heritage resources
 - ·Land and resource use
 - Atmospheric environment (includes dust and noise)
 - · Socio-economic environment
 - · Mi'Kmaq Ecological Knowledge Study

There are a number of watercourses that will be crossed by the natural gas pipeline. The current plan is to install the pipeline under the Stewiacke River by way of horizontal directional drilling (HDD) to avoid disturbance to the River. To the extent practical, wetland crossings and others sensitive habitats will be avoided.





TODAY ABOUT 30 PER CENT OF CANADA'S ENTIRE ENERGY NEEDS ARE MET WITH NATURAL GAS.







ABOUT NATURAL GAS

Natural gas is a naturally occurring hydrocarbon consisting primarily of methane, but it may also contain small amounts of ethane, butane and pentanes.

Natural gas is there for Canadians when we need it. About 480,000 kilometres of pipeline help deliver natural gas safely and reliably to more than six million homes, businesses and institutions across Canada.

 Pipelines function as energy highways and Canada has an outstanding pipeline system to transport and deliver natural gas to customers throughout the continent.

DID YOU KNOW?

- Canadians consumed 2.8 trillion cubic feet of natural gas in 2010.
- Natural gas is the single largest form of energy used in Canadian homes. Canadian homes are also enjoying the benefits of increasingly efficient natural gas furnaces and appliances.
- Natural gas also accounts for five per cent of Canada's power generation. Because it can be delivered and scaled quickly, it is an excellent partner for renewable power sources such as wind and solar.
- Pipelines are the safest and most efficient means of transporting natural gas to end-use consumers.
- The single biggest threat to pipeline safety involves the unauthorized digging or activity along pipeline right of ways.

Sources: Canadian Association of Petroleum Producers, Natural Resources Canada, Canadian Gas Association



ONTARIO MICHIGAN Toronto Detroit



ALTAGAS GAS FACILITIES



Extraction Plant



Gas Plant Under Conctruction



Transmission Pipeline



Pipeline



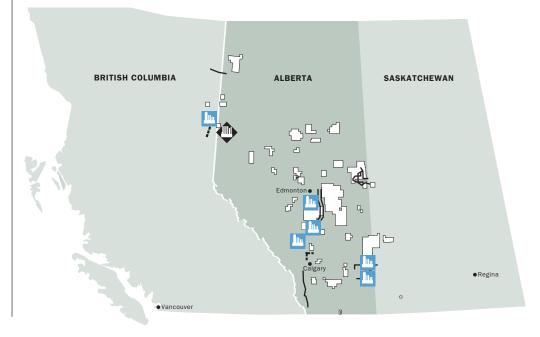
Under Development



Field Gathering & Processing Area



Storage Facility
Under Development



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When developed, the Alton natural gas storage cavern development will be an underground natural gas storage facility with a series of engineered salt caverns. Alton is owned equally through a limited partnership between AltaGas Ltd. and Veresen Inc.

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About Public Consultation

The public consultation plan includes distribution of project information, meetings with various regulatory and elected officials, key stakeholder groups, and a public open house.

The objectives are:

- To inform the public and key stakeholders about the project and provide accurate and consistent information.
- To obtain input from potentially affected parties/individuals so the Environmental Assessment can focus on the issues of concern and appropriate mitigation measures can be identified and implemented.
- To make the he Environmental Assessment document will be available for public review and comment.

ABOUT UNDERGROUND GAS STORAGE

Underground gas storage is a safe and efficient solution to the variable demand for gas.

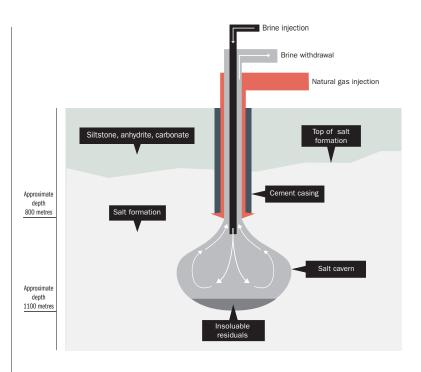
Underground storage facilities are strategically located near market and connected to a pipeline system so that a ready supply of gas is available when needed.

- It is reported that storage of both liquids and gases in solution mined salt caverns first took place in Canada in the early 1940s.
- In the early 1950s, salt caverns were commonly used for liquid petroleum gas (LPG) and other hydrocarbons in Canada and the United States. Salt caverns were then being used a decade later for the storage of natural gas with the first reported cavern located near Marysville, Michigan. Since the 1950s, there has been a significant advancement in the design and construction technology for salt caverns.
- In Canada, the first salt caverns engineered for gas storage were constructed in Saskatchewan in 1963.**

Traditionally, natural gas has been a seasonal fuel. Demand for natural gas is usually higher during the winter, partly because it is used for heat in residential and commercial settings.

 Stored natural gas plays a vital role in ensuring that any excess supply delivered during the summer months is available to meet the increased demand of the winter months.

With the recent trend towards natural gas fired electric generation, demand for natural gas during the summer months is now increasing due to the demand for electricity to power air conditioners and the like.



- Natural gas is injected through a pipeline into underground storage reservoirs such as salt caverns when demand is lower than supply.
- The gas is then withdrawn from the storage reservoir to supplement the steady supply from pipelines when the demand exceeds the supply.
- Natural gas in storage also serves as insurance against any unforeseen accidents, natural disasters, or other occurrences that may affect the production or delivery of natural gas.

(**Source: R.L. Thoms and R.M. Gehle, A Brief History of Salt Cavern Use, College Station, Texas, 2000)

Proposed natural gas storage pipeline 'a really good project for Nova Scotia'



Published on November 30, 2011

Topics: Maritimes and Northeast Pipeline, Department of Environment, Utility and Review Board, Nova Scotia, Stewiacke Road, Alton

STEWIACKE - A proposed natural gas pipeline could bring extra storage for the green fuel to the province.

Alton Natural Gas Storage L.P. held an open house here last night to give the public a chance to ask questions and see where the project is at.

"It's a fascinating concept that probably needs explaining to the general public," said Frank Dominey, who was there with his wife, Yvonne, from Fort Ellis.

"I've been following natural gas since the project started."

The company is proposing a 10-kilometre natural gas pipeline from an underground storage facility near Alton to the existing Maritimes and Northeast Pipeline Halifax Lateral.

David Birkett, president of the Alton project, said the proposal is almost at the stage where the company will submit its environmental assessment to the province.

"Before the end of December we are hoping to submit the environmental assessment for unofficial review," said Birkett. "We've met with the Department of Environment and worked on sensitive areas. We're hoping to file the actual assessment by the end of January."

If the assessment is approved, the next step for the company is to apply to the Utility and Review Board to construct four salt caverns. The company's environmental assessment for the underground caverns was approved in 2007.

The caverns will be able to hold one to two billion cubic feet, or BCF, of natural gas.

"This is a really good project for Nova Scotia," said Birkett. "It will help in the long run. It's a longterm management tool."

Birkett said there are benefits of having natural gas in a storage facility.

"It will help day-to-day. It will help companies, such as Heritage Gas, and large consumers manage their gas supply."

He said most of the gas consumption is over a three-month period in the winter, which is when gas is more expensive.

"If you have it in storage in the summer, you can supply it to your customer then."

While the Domineys don't use natural gas, they have no objections to the proposed pipeline.

"The way it is now with the environmental regulators, they have a good eye on them to make sure things are engineered properly," said Frank.

"It will be good for the economy down the road too once it gets online," added Yvonne.

The proposed pipeline has a selected route from the caverns between Stevens and Brentwood roads, over the Stewiacke River and Cloverdale Road. It crosses the north end of Jameson Road before meeting up with the Maritimes and Northeast Pipeline Halifax Lateral near Stewiacke Road.

rtetanish@trurodaily.com

APPENDIX B Species at Risk Definitions

Committee on the Status of Endangered Wildlife in Canada (COSEWIC)

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC), under direction of the Federal *Species at Risk Act* (SARA), determines whether a wildlife species is "at risk" by virtue of being *Extinct, Extirpated, Endangered, Threatened*, or of *Special Concern*.

- Special Concern: A wildlife species that may become a threatened or an endangered species because of a combination of biological characteristics and identified threats;
- *Threatened*: A wildlife species that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction;
- Endangered: A wildlife species that is facing imminent extirpation or extinction;
- Extirpated: A wildlife species that no longer exists in Canada in the wild, but exists elsewhere in the wild; and
- Extinct: A wildlife species that no longer exists.

Other COSEWIC categories include:

- Data Deficient: A category that applies when the available information is insufficient to resolve a
 wildlife species' eligibility for assessment or to permit an assessment of the wildlife species' risk of
 extinction; and
- Not at Risk: Species that has been evaluated and found to be not at risk of extinction given the current circumstances.

Species at Risk Act (SARA)

The federal *Species at Risk Act* (SARA) provides regulatory protection of species at risk as denoted by the following designations.

- Endangered species: a wildlife species that is facing imminent extirpation or extinction;
- Threatened species: a wildlife species that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction; and
- Special concern species: a wildlife species that may become a threatened or an endangered species because of a combination of biological characteristics and identified threats.

There are three Schedules to the Act:

- Schedule 1: is the official list of species that are classified as extirpated, endangered, threatened, and of special concern;
- Schedule 2: species listed in Schedule 2 are species that had been designated as endangered or threatened, and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1; and
- Schedule 3: species listed in Schedule 3 are species that had been designated as special concern, and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1.

Nova Scotia Endangered Species Act (NS ESA)

Wildlife species at risk are protected in Nova Scotia under the Nova Scotia *Endangered Species Act* (NS ESA). The NS ESA uses the following categories to denote risk:

- Endangered: A species facing imminent extirpation or extinction;
- Threatened: A species likely to become endangered if limiting factors are not reversed;
- Vulnerable: A species of special concern because of characteristics that make it particularly sensitive to human activities or natural events:
- Extirpated: A species that no longer exists in Nova Scotia in the wild, but exists in the wild outside of the Province; and
- Extinct: A wildlife species that no longer exists.

Nova Scotia Department of Natural Resources (NSDNR) General Status Ranks of Wild Species in Nova Scotia

The Nova Scotia Department of Natural Resources (NSDNR) also classifies species of concern using colour codes.

- Red: Wildlife species that known to be or thought to be at risk;
- Yellow: Wildlife species that are sensitive to human activities or natural events; and
- Green: Wildlife species not believed to be sensitive or at risk.

A small percentage of Red and Yellow listed species are also protected under the NS ESA.

Atlantic Canada Conservation Data Centre (ACCDC) Status Ranks

The Atlantic Canada Conservation Data Centre (ACCDC) designates wildlife Status Ranks (S) as follows:

- S1: Extremely Rare;
- S2: Rare:
- S3: Uncommon;
- S4: Fairly Common; and
- S5: Secure (Abundant).

Other categories used by ACCDC include:

- S#S#. A range between two consecutive numeric ranks. Denotes the range of uncertainty about the exact rarity of the element (e.g., S1S2);
- B: Breeding;
- SH: Historical and suspected to be still extant;
- SU: Unrankable. Possibly in peril throughout its range in the province, but status uncertain;
- SX: Extinct/Extirpated. Element is believed to be extirpated within the province;
- S?: Unranked. Element is not yet ranked;
- SZ: Zero occurrences: Not of practical conservation concern in the province because there are no definable occurrences; and
- NZ: Long distance migrants whose occurrences during their migrations are too irregular (in terms of repeated visitation to the same locations) or transitory.

APPENDIX C Terrestrial Data

informatio	n on their population																					
Scientific Name	Common Name	NSDNR Rank	ACCDC S-Rank		2	2	4	5	6	7	0	We	etland 10		12	13	1.4	15	16	17	18	19
Abies balsamea	Balsam Fir	Secure	S5		P	3	4	P	6	Р	8	Р	P	11	P	P	14	13	16	P	P	P
Acer pensylvanicum	Striped Maple	Secure	S5		•	•	•	-		•	•	-	•	•	•					\vdash		H
Acer rubrum	Red Maple	Secure	S5	Р	Р	Р		Р	Р	Р	Р	Р	Р	Р	Р	Р	Р		Р	Р	Р	
Acer saccharum	Sugar Maple	Secure	S5																			
Acer spicatum	Mountain Maple	Secure	S5																			Ш
Achillea millefolium Agalinis neoscotica	Common Yarrow Nova Scotia Agalinis	Secure Secure	S5 S3											Р						$\vdash\vdash\vdash$	$\vdash\vdash$	\vdash
Agropyron sp.	Wheat Grass	na	na																			
Agrostis canina	Velvet Bent Grass Colonial Bent Grass	Exotic Exotic	SNA SNA	P		igwdapprox igwedge														$\vdash \vdash$	igwdapprox	
Agrostis capillaris Agrostis gigantea	Redtop	Exotic	SNA	Р																\vdash	\vdash	
Agrostis perennans	Upland Bent Grass	Secure	S4S5		Р	Р					Р				Р	Р	Р		Р	Р	Р	Р
Agrostis scabra Agrostis stolonifera	Rough Bent Grass Creeping Bent Grass	Secure Secure	S5 S5			$\vdash\vdash\vdash$		Р	Р			Р	Р		Р				Р	Р	Р	Р
Alnus incana	Speckled Alder	Secure	S5	Р		Р	Р	Р	Р	Р	Р	Р	Р	Р		Р	Р		Р	Р	Р	Р
Amelanchier sp.	a Serviceberry	na	na			igwdapprox igwedge							Р							$\vdash \vdash$	igwdapprox	
Amphicarpaea bracteata	American Hog Peanut	Secure	S4																			\square
Anaphalis margaritacea Antennaria howellii ssp.	Pearly Everlasting	Secure	S5												Р							
neodioica	Howell's Pussytoes	Secure	S5																			
Antennaria neglecta	Field Pussytoes	d	SNR			igwdapprox igwedge													$\vdash\vdash\vdash$	$\vdash\vdash$	igwdown	\vdash
Anthoxanthum odoratum	Large Sweet Vernal Grass	Exotic	SNA																			
Apios americana	American Groundnut	Secure	S5																			
Apocynum androsaemifolium	Spreading Dogbane	Secure	S5																			
Aralia hispida	Bristly Sarsaparilla	Secure	S5									Р							Р			
Aralia nudicaulis Arisaema triphyllum	Wild Sarsaparilla Jack-in-the-pulpit	Secure Secure	S5 S4S5	Р	Р		Р	Р		P P	P P		Р			Р	Р			$\vdash\vdash$	H	Р
Aster sp.	an Aster	na	na																			
Athyrium filix-femina Bartonia paniculata	Common Lady Fern Branched Bartonia	Secure Secure	S5 S4S5	Р		$\vdash\vdash$	Р		Р		Р				Р	Р				$\vdash\vdash\vdash$	$\vdash\vdash$	Р
Betula alleghaniensis	Yellow Birch	Secure	S5									Р			Р							Р
Betula papyrifera Betula papyrifera var.	Paper Birch	Secure	S5			$\vdash\vdash$			Р		Р	P -				P	Р			$\vdash\vdash\vdash$	$\vdash\vdash$	Р
cordifolia	Heart-leaved Birch	Secure	S5									Р	Р	Р	Р	Р			Р	Ш	<u> </u>	
Betula populifolia Bidens frondosa	Gray Birch Devil's Beggarticks	Secure Secure	S5 S5			Р			Р						Р				Р	$\vdash\vdash\vdash$	$\vdash \vdash$	Р
Botrychium lanceolatum	Triangle Moonwort	Sensitive	S2S3															Р				
Brachyelytrum septentrionale	Northern Shorthusk	Secure	S5	Р		Р				Р			Р		Р		Р			Р	Р	Р
Bromus ciliatus	Fringed Brome	Secure	S5	Р											Р						Р	
Bromus inermis Calamagrostis	Smooth Brome	Exotic	SNA																\vdash	$\vdash\vdash$	\vdash	\vdash
canadensis	Bluejoint Reed Grass	Secure	S5	Р		Р	Р	Р	Р	Р			Р	Р	Р	Р	Р		Р	Р	Р	Р
Calla palustris Callitriche palustris	Wild Calla Marsh Water-starwort	Secure Secure	S4 S5	Р		igwdapprox									Р				$\vdash\vdash\vdash$	$\vdash\vdash\vdash$	$\vdash \vdash$	\vdash
Callitriche sp.	Water-Starwort	na	na	·																		
Cardamine pensylvanica Cardamine pratensis var. pratensis	Pennsylvania Bittercress Cuckoo Flower	Secure Exotic	S5 SNA	Р																		
Carduus crispus	Curled Plumeless Thistle	Exotic	SNA																			
Carduus sp.	Thistle	na	na S2S3																			
Carex adusta	Lesser Brown Sedge Drooping Woodland	Sensitive Secure	S2S3 S5																	\vdash	\vdash	
Carex atlantias	Sedge Atlantic Sedge	Secure	S4									Р		P						igwdapprox		\square
Carex atlantica Carex brunnescens	Brownish Sedge	Secure	S5			Р	Р					Р		Р						$\vdash \vdash$		
Carex canescens	Silvery Sedge	Secure	S5																			\Box
Carex communis Carex crinita	Fibrous-Root Sedge Fringed Sedge	Secure Secure	S5 S5			\vdash								Р	Р		Р			$\vdash\vdash\vdash$	$\vdash \vdash$	\vdash
Carex cumulata	Dense Sedge	Secure	S4S5		1					1]			
Carex debilis Carex deflexa	White-edged Sedge Northern Sedge	Secure Secure	S5 S4		Р	\vdash				Р									Р	$\vdash\vdash\vdash$	\vdash	
Carex deweyana	Dewey's Sedge	Secure	S5						_													
Carex disperma Carex echinata	Two-seeded Sedge Star Sedge	Secure Secure	S5 S5			\vdash			Р			Р	Р	Р					Р	$\vdash\vdash\vdash$	\vdash	
Carex flava	Yellow Sedge	Secure	S5			Р																
Carex foenea Carex folliculata	Hay Sedge Northern Long Sedge	Secure Secure	S3? S5			\vdash							Р	Р	Р				Р	Р	Р	Р
Carex gracillima	Graceful Sedge	Secure	S4S5																			
Carex gynandra Carex houghtoniana	Nodding Sedge Houghton's Sedge	Secure Sensitive	S5 S2?	Р	Р	Р	Р		Р		Р	Р		Р		Р	Р	Р	Р	Р	Р	Р
Carex intumescens	Bladder Sedge	Secure	S5	Р		Р			Р					Р	Р					Р		Р
Carex leptalea Carex leptonervia	Bristly-stalked Sedge Finely-Nerved Sedge	Secure Secure	S5 S5	Р		Р	Р		Р		Р		Р	Р	Р	Р	Р			$\vdash \vdash \vdash$	Р	\vdash
Carex Iurida	Sallow Sedge	Secure	S5	Р	Р	Р		Р			Р	Р		Р	Р				Р	Р		
Carex magellanica ssp.	Boreal Bog Sedge	Secure	S5																Р			
Carex magellanica ssp. magellanica	Bog Sedge	na	SNA									Р										
Carex novae-angliae	New England Sedge	Secure	S5																			
Carex ovalis Carex pallescens	Oval Sedge Pale Sedge	Exotic Secure	SNA S5			$\vdash\vdash$															$\vdash \vdash$	$\vdash\vdash$
Carex pensylvanica	Pennsylvania Sedge	Undetermine	S1S2												_							口
Carex projecta Carex pseudocyperus	Necklace Sedge Cyperuslike Sedge	Secure Secure	S5 S4S5	Р		$\vdash\vdash$									P P					$\vdash \vdash$	$\vdash \vdash$	$\vdash\vdash$
Carex retrorsa	Retrorse Sedge	Secure	S4																			口
Carex scaprata	Rough Sedge Broom Sedge	Secure Secure	S5 S5	Р		otin oti	Р	Р	Р		Р				Р				Р	Р		H
Carex scoparia Carex sp.	a Sedge	na na	na			Н		P	Ľ	Р			Р									
Carex stipata Carex stricta	Awl-fruited Sedge	Secure	S5 S5	P P				Р							Р		Р		Р	Р	Р	\Box
CONTRACTOR STRUCTS	Tussock Sedge	Secure	S5 S5	۲		$\vdash\vdash$		۲													۲_	\square
Carex torta	Twisted Sedge	Secure																				-
Carex torta Carex trisperma	Three-seeded Sedge	Secure	S5	Р	Р	Р	Р		Р		Р	Р	Р	Р	Р	Р	Р		Р	Р	Р	Р
Carex torta	Three-seeded Sedge Umbellate Sedge			P P	Р	Р	P P	Р	Р		Р	Р	Р	Р	P	Р	Р		P P	Р	Р	P
Carex torta Carex trisperma Carex umbellata	Three-seeded Sedge Umbellate Sedge Northern Beaked Sedge Black Knapweed	Secure Secure	S5 S4	·	P	P		P	P		P	P	P	P	P	P	P			P	P	P

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Scientific Name	Common Name	NSDNR Rank	ACCDC S-Rank		2	3	1	5	6	7	Я		etland		12	13	1/	15	16	17	18	10
Cerastium arvense	Mouse-Ear Chickweed		SNR			J	7	J	U	'		9	10		12	13		13	10	111	10	19
Characadanhaa	Common Chickweed	Exotic	SNA																			
Chamaedaphne calyculata	Leatherleaf	Secure	S5									Р									Р	
	Fireweed White Turtlehead	Secure Secure	S5 S5	Р					P	Р							Р		P P			
Chelone glabra Cinna latifolia	Drooping Wood Reed	Secure	S5	Г	Р		Р		Г	Г									Г			
Ciriria iatiiolia	Grass Small Enchanter's	Secure	33		Г																	igwdapprox igwedge
Circaea alpina	Nightshade	Secure	S5		Р		Р			Р	Р					Р						
Cirsium arvense Cirsium muticum	Canada Thistle Swamp Thistle	Exotic Secure	SNA S5						P						P P							
	Bull Thistle	Exotic	SNA									Р			'							
Clematis virginiana Clintonia borealis	Virginia Clematis Yellow Bluebead Lily	Secure Secure	S5 S5				Р	Р		Р	Р						Р		Р	Р	Р	Р
Comptonia peregrina	Sweet-fern	Secure	S5									Р			Р				Р			
Conyza canadensis Coptis trifolia	Canada Horseweed Goldthread	Secure Secure	S5 S5	Р		Р	Р		Р	Р		P	Р	Р	Р	Р	P		Р		Р	Р
Cornus alternifolia	Alternate-leaved	Secure	S5																			
	Dogwood Bunchberry	Secure	S5	Р	Р	Р	Р	Р		Р	Р	Р	Р				Р		Р		Р	Р
Cornus rugosa	Round-leaved Dogwood	Secure	S4																			
Cornus sericea Corydalis sempervirens	Red Osier Dogwood Pink Corydalis	Secure Secure	S5 S4						Р													
	Beaked Hazel	Secure	S5	Р		Р		Р					Р							Р		Р
Cypripedium acaule Cystopteris fragilis	Pink Lady's-Slipper Fragile Fern	Secure Secure	S5 S4			Р							Р									
Dactylis glomerata	Orchard Grass	Exotic	SNA																			
Danthonia compressa Danthonia spicata	Flattened Oat Grass Poverty Oat Grass	Secure Secure	S5 S5										Р									
Daucus carota	Queen Anne's Lace	Exotic	SNA																			
Dennstaedtia punctilobula	Eastern Hay-Scented Fern	Secure	S5			Р						Р										
	Wavy Hair Grass Deptford Pink	Secure Exotic	S5 SNA																			
Dianthus armeria Dichanthelium	Woolly Panic Grass	Secure	SNA S5					P							Р							
acuminatum Dichanthelium boreale	Northern Panic Grass	Secure	S5 S5					۲													<u> </u>	
Dichanthelium	Northern Famic Grass	Secure	33																			
villosissimum var. villosissimum	White-hair Witchgrass	na	SNA																			
Diervilla Ionicera	Northern Bush	Secure	S5						Р			Р							Р	Р		
Doellingeria umbellata	Honeysuckle Hairy Flat-top White Aster	Secure	S5	P		Р	Р	Р	P	Р		P	Р	Р		Р	P		P	P	P	P
Drosera intermedia	Spoon-Leaved Sundew	Secure	S5	'			'	'	'	'			·	_		'	'			'		
	Round-leaved Sundew Mountain Wood Fern	Secure Secure	S5 S5									Р	Р								<u> </u>	
Dryopteris carthusiana	Spinulose Wood Fern	Secure	S5	Р	Р	Р	Р		Р	Р						Р			Р	Р		Р
Dryopteris cristata Dryopteris intermedia	Crested Wood Fern Evergreen Wood Fern	Secure Secure	S5 S5	Р	Р	Р		Р	Р	Р	Р		Р	Р	Р	Р	P P		P P	Р	Р	P P
Dryopteris marginalis	Marginal Wood Fern	Secure	S5	_					Р		_											
Dryopteris x boottii Dryopteris x triploidea	a Hybrid Wood-fern a Hybrid Wood-fern			Р		Р					Р						Р				\vdash	
Dulichium arundinaceum	Three-Way Sedge	Secure	S5									Р										
Echinochloa crus-galli Eleocharis acicularis	Large Barnyard Grass Needle Spikerush	Exotic Secure	SNA S5																			
	Blunt Spikerush	Secure	S5					Р								Р						
Eleocharis sp. Eleocharis tenuis	a Spikerush Slender Spikerush	na Secure	na S5																			
Elymus repens	Quack Grass	Exotic	SNA																			
Epigaea repens Epilobium ciliatum	Trailing Arbutus Northern Willowherb	Secure Secure	S5 S5	Р	Р				Р		Р				Р						\vdash	$\vdash\vdash\vdash$
	Bog Willowherb	Secure	S5	<u> </u>	•				•		P			Р	P	Р	Р		Р	Р		\vdash
Epilobium palustre	Marsh Willowherb	Secure	S5	Р		Р					Р											
Equisetum arvense	Field Horsetail	Secure	S5												Р							
Equisetum sylvaticum	Woodland Horsetail	Secure	S5 SNA	P P	Р	Р	Р		Р		Р	Р	Р	Р		Р	Р		Р		Р	Р
Equisetum x litorale Erechtites hieraciifolia	a Hybrid Horsetail Eastern Burnweed	Not Assessed Secure	SNA S5	P					Р			Р			Р				Р		Р	
Erigeron sp.	Fleabane	na	na						·													
Erigeron strigosus	Rough Fleabane	Secure	S5																			
Eriophorum virginicum	Tawny Cottongrass	Secure	S5	_					Р				Р						Р		<u> </u>	
Eupatorium maculatum Eupatorium perfoliatum	Spotted Joe-pye-weed Common Boneset	Secure Secure	S5 S5	P P		Р			Р		Р			Р					Р	Р	Р	
Euphrasia stricta	Stiff Eyebright	Exotic	SNA	Г		Г			Г		Г			Г					Г	Г	_	
Eurybia macrophylla	Large-leaved Aster	Secure	S5	Р									Р			Р						
Eurybia radula	Low Rough Aster	Secure	S5	Р		Р	Р	Р	Р			Р	Р	Р			Р		Р	Р	Р	
Euthamia graminifolia	Grass-leaved Goldenrod	Secure	S5	Р				Р	Р			Р			Р	Р	Р		Р	Р	Р	
Festuca filiformis Fragaria vesca	Hair Fescue Woodland Strawberry	Exotic Secure	SNA S4				P		P		P											
Fragaria virginiana	Wild Strawberry	Secure	S5	Р			Г		Г	Р	Р				Р	Р			Р	Р	Р	Р
Frangula alnus	Glossy Buckthorn	Exotic	SNA	Ė						Ľ	Ė					Ľ			Ė			Ė
Fraxinus americana	White Ash	Secure	S5								Р					Р			Р	Р		Р
Galeopsis tetrahit	Common Hemp-nettle	Exotic	SNA	_				,		_	_					_	<u> </u>				<u> </u>	
Galium asprellum	Rough Bedstraw	Secure	S5	Р				P		Р	Р					Р	Р				Р	
Galium palustre	Common Marsh Bedstraw	Secure	S5					Р													<u> </u>	
Galium sp.	a Bedstraw	na	na	1					,									-			<u> </u>	Р
Galium tinctorium Galium trifidum	Dyer's Bedstraw Three-petaled Bedstraw	Secure Secure	S5 S5	P P	Р	P			Р		P		Р		P	Р				Р		
Galium triflorum	Three-flowered Bedstraw	Secure	S5		1	'			Р				<u> </u>		1.					-		\vdash
Gaultheria hispidula	Creeping Snowberry	Secure	S5			Р						Р	Р						Р		Р	
· ·	Eastern Teaberry	Secure	S5																			
	Black Huckleberry	Secure	S5											Р					Р		<u> </u>	<u> </u>
Geranium bicknellii Geranium sp.	Bicknell's Crane's-bill Crane's-bill	Secure na	S3 na												Р							
Geranium sp.	Oranic 9-NIII	ııa	πα								l							1				<u> </u>

informatio	n on their population		40000									VV-	11	1-*								
Scientific Name	Common Name	NSDNR Rank	ACCDC S-Rank	1	2	3	4	5	6	7	8		tland 10		12	13	14	15	16	17	18	19
Geum aleppicum	Yellow Avens	Secure	S5	'	_		-	Ū	Р	·		J	10			10		10	.0	.,	10	
Geum macrophyllum	Large-Leaved Avens	Secure	S5	Р																		
Geum rivale	Water Avens	Secure	S5	Р																		
Glyceria canadensis	Canada Manna Grass Common Tall Manna	Secure	S5	Р					Р			Р							Р			Р
Glyceria grandis	Grass	Secure	S4S5	Р	Р	Р				Р			Р	Р			Р		Р		Р	Р
Glyceria laxa	Northern Mannagrass	Secure	S4?									Р										
Glyceria striata	Fowl Manna Grass	Secure	S5	Р	Р		Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р			Р	Р	Р
, ,	Marsh Cudweed Checkered Rattlesnake-	Exotic	SNA																			<u> </u>
Goodyera tesselata	Plantain	Secure	S4																			<u> </u>
Gratiola neglecta	Clammy Hedge-Hyssop	Sensitive	S1S2																			<u> </u>
Gymnocarpium dryopteris	Common Oak Fern	Secure	S5						Р	Р												
Hamamelis virginiana	American Witch-Hazel	Secure	S5										Р									
Heracleum sp.	Cow Parsnip	na	na																			<u> </u>
Hieracium aurantiacum Hieracium caespitosum	Orange Hawkweed Field Hawkweed	Exotic Exotic	SNA SNA																			\vdash
	Mouse-ear Hawkweed	Exotic	SNA																			
Hieracium piloselloides	Tall Hawkweed	Exotic	SNA																			
Hieracium scabrum	Rough Hawkweed	Secure	S5												Р							
Hieracium sp.	a Hawkweed	na	na																			<u> </u>
Hieracium x flagellare	Whiplash Hawkweed	Exotic	SNA							D												<u> </u>
Huperzia lucidula	Shining Firmoss American Marsh	Secure	S5							Р	_					_	_				_	<u> </u>
	Pennywort	Secure	S5	Р						Р	Р				Р	Р	Р				Р	Р
Hylotelephium telephium Hypericum boreale	Garden Stonecrop Northern St. John's-Wort	Exotic Secure	SNA S5												Р							\vdash
Hypericum canadense	Canada St. John's-wort	Secure	S5						Р						P				Р		Р	
Hypericum ellipticum Hypericum mutilum	Pale St. John's-Wort Dwarf St. John's-wort	Secure Secure	S5 S4S5	Р																		
Hypericum perforatum	Common St. John's-wort	Exotic	SNA																			
Hypericum sp. Ilex verticillata	a St. John's-wort Common Winterberry	na Secure	na S5	Р	Р	Р	Р		Р		Р	Р	Р	Р		Р			Р		Р	P
Impatiens capensis	Spotted Jewelweed	Secure	S5	Р	P		P		P	Р	P				Р	P						
Iris versicolor Juncus articulatus	Harlequin Blue Flag Jointed Rush	Secure Secure	S5 S5			Р									Р							<u> </u>
Juncus brevicaudatus	Short-tailed Rush	Secure	S5	Р		Р		Р					Р		Р				Р			
Juncus bufonius Juncus canadensis	Toad Rush Canada Rush	Secure Secure	S5 S5																			<u> </u>
Juncus effusus	Soft Rush	Secure	S5	Р		Р		Р	Р		Р	Р			Р				Р	Р	Р	
Juncus filiformis Juncus nodosus var.	Thread Rush	Secure	S5																			<u> </u>
nodosus	Knotted Rush	Secure	S4																			
Juncus pelocarpus Juncus subcaudatus	Brown-Fruited Rush Woodland Rush	Secure Sensitive	S5 S3												Р							<u> </u>
Juncus tenuis	Path Rush	Secure	S5												P				Р			
Kalmia angustifolia Lactuca canadensis	Sheep Laurel Canada Lettuce	Secure Secure	S5 S5	Р		Р	Р	Р				Р	Р	Р			Р		Р	Р	Р	Р
Lactuca sp.	a Lettuce	na	na																			
Larix laricina Lathyrus palustris	Tamarack Marsh Vetchling	Secure Secure	S5 S5	Р		Р	Р	Р				Р		Р					Р		Р	
Ledum groenlandicum	Common Labrador Tea	Secure	S5			Р						Р	Р	Р					Р		Р	
Leersia oryzoides Leontodon autumnalis	Rice Cut Grass Fall Dandelion	Secure Exotic	S5 SNA												Р							<u> </u>
	Oxeye Daisy	Exotic	SNA																			
Lindernia dubia	Yellow-seeded False Pimperel	Secure	S3S4																			
Linnaea borealis	Twinflower	Secure	S5			Р	Р		Р	Р	Р					Р			Р			
Lobelia inflata Lolium pratense	Indian Tobacco Meadow Fescue	Secure Exotic	S5 SNA												Р							_
Lonicera caerulea	Western Honeysuckle	na	na	Р		Р		Р	Р	Р	Р		Р	Р		Р			Р		Р	
Lonicera canadensis	Canada Fly Honeysuckle a Honeysuckle	Secure	S5				Р				Р											
Lonicera sp. Lonicera villosa	Mountain Fly	na	na S4S5																			Р
	Honeysuckle Garden Bird's-foot Trefoil	Secure Exotic	SNA			Р																<u> </u>
Lotus corniculatus Ludwigia palustris	Marsh Seedbox	Secure	S5			Г									Р							
Luzula acuminata Luzula multiflora	Hairy Woodrush Common Woodrush	Secure Secure	S5 S5																			_
Lychnis flos-cuculi	Ragged-Robin	Exotic	SNA																			
Lychnis sp. Lycopodiella inundata	a Campion Northern Bog Clubmoss	na Secure	na S5																			
Lycopodium annotinum	Stiff Clubmoss	Secure	S5			Р	Р					Р	Р	Р					Р	Р		
	Running Clubmoss	Secure	S5										Р								Р	
Lycopodium complanatum	Northern Clubmoss	Secure	S3S4																			
Lycopodium dendroideum	Round-branched Tree- clubmoss	Secure	S5																			
Lycopodium digitatum	Southern Clubmoss	Secure	S5																			
Lycopodium hickeyi Lycopodium laqopus	Hickey's Tree-clubmoss One-cone clubmoss	Secure Secure	S4? S4																			
Lycopodium lagopus Lycopodium obscurum	Flat-branched Tree-	Secure	S4S5									Р										
<u> </u>	clubmoss American Water											1-										<u> </u>
Lycopus americanus	Horehound	Secure	S5	Р						Р					Р							
Lycopus uniflorus	Northern Water Horehound	Secure	S5	Р	Р	Р	Р	Р	Р	Р	Р		Р	Р	Р	Р	Р		Р	Р	Р	Р
Lysimachia ciliata	Fringed Yellow	Secure	S4					Р														
	Loosestrife																					<u> — </u>
	Swamp Yellow Loosestrife	Secure	S5	Р	Р	Р		Р											Р			
Lysimachia terrestris					_	_	. —												_		. —	. —
	Wild Lily-of-The-Valley	Secure	S5	Р	Р	Р	Р	Р		Р		Р	Р			Р	Р		Р	Р	Р	Р
Maianthemum canadense	Wild Lily-of-The-Valley Three-leaved False			Р	Р	Р	Р	Р		Р			_			Р				Р		Р
Maianthemum canadense Maianthemum trifolium	Wild Lily-of-The-Valley Three-leaved False Soloman's Seal	Secure	S5	Р	P	-	Р	Р		Р		P P	Р	ם		Р	P P		P P	Р	P P	P
Maianthemum canadense	Wild Lily-of-The-Valley Three-leaved False			P	P	P P	P	P		P			_	Р		P				P		P

informatio	n on their population																					
Scientific Name	Common Name	NSDNR Rank	ACCDC		0	0		-	•	-	0		etland		40	40	4.4	45	40	47	40	40
Medicago lupulina	Black Medick	Exotic	S-Rank SNA	1	2	3	4	5	ь	1	δ	9	10	11	12	13	14	15	16	17	18	19
Melilotus officinalis	Yellow Sweet-clover	Exotic	SNA			Р																
Mentha arvensis Mitchella repens	Wild Mint Partridgeberry	Secure Secure	S5 S5	Р	Р																	
Mitella nuda	Naked Bishop's-Cap	Secure	S5	Р	Г		Р		Р	Р											-	+-
Moehringia lateriflora	Blunt-leaved Sandwort	Secure	S5																			
Moneses uniflora	One-flowered Wintergreen	Secure	S5																			
	Indian Pipe	Secure	S5			Р					Р	Р	Р	Р		Р	Р		Р		Р	Р
	Mexican Muhly a Muhly	Secure na	S4 na																		 	+
	Bog Muhly	Secure	S5																			
Myosotis laxa	Small Forget-Me-Not	Secure	S5																			<u> </u>
Myosotis sp. Nemopanthus	a Forget-Me-Not	na	na									_		1								\vdash
mucronatus	Mountain Holly	Secure	S5									Р		Р					Р		Р	<u> </u>
	Whorled Wood Aster Bog Aster	Secure Secure	S5 S5	Р	Р		Р				Р	Р	Р	Р		Р	Р		Р		P P	Р
	a hybrid White Panicled		S4S5			Р															<u>'</u>	
	American-Aster	Secure				Г															Ļ—	—
Odontites vernus	Red Bartsia Common Evening	Exotic	SNA																		-	+-
Oenothera biennis	Primrose	Secure	S5																			<u> </u>
Oenothera perennis	Perennial Evening Primrose	Secure	S5																			
Onoclea sensibilis	Sensitive Fern	Secure	S5	Р	Р	Р	Р		Р	Р	Р				Р	Р	Р		Р	Р	Р	Р
Orthilia secunda	One-sided Wintergreen	Secure	S5																			I
Oryzopsis asperifolia	White-grained Mountain Rice	Secure	S5																			
	Cinnamon Fern	Secure	S5	Р	Р	Р	Р		Р	Р	Р	Р	Р	Р		Р			Р		Р	Р
	Interrupted Fern Royal Fern	Secure	S5 S5	Р	Р	Р	Р			Р			Р						Р	<u> </u>	Р	+
Osmunda regalis Ostrya virginiana	Ironwood	Secure Secure	S5			۲													۲			
Oxalis montana	Common Wood Sorrel	Secure	S5		Р				Р	_	Р				Р	Р						
Oxalis stricta Packera aurea	European Wood Sorrel Golden Groundsel	Secure Secure	S5 S4							Р					Р	Р					\vdash	+-
Packera schweinitziana	Schweinitz's Groundsel	Secure	S4	Р		Р		Р			Р											
Panax trifolius	Dwarf Ginseng Common Witch Grass	Secure	S4																		↓	1
Panicum capillare Panicum sp.	a Panic-grass	Exotic na	SNA na																			+-
Petasites frigidus	Northern Sweet Coltsfoot	Secure	S4	Р		Р	Р		Р	Р	Р	Р	Р	Р		Р	Р		Р	Р	Р	Р
Phalaris arundinacea Phegopteris connectilis	Reed Canary Grass Northern Beech Fern	Secure Secure	S5 S5	P				Р	Р							Р					_	P
0 1	Common Timothy	Exotic	SNA	Г												Г						╁╌
	Black Chokeberry	Secure	S5			Р													Р		Р	
Photinia pyrifolia Photinia sp.	Red Chokeberry Chokeberry	Secure na	S4? na										Р								 	Р
Picea glauca	White Spruce	Secure	S5	Р									Р									Р
Picea mariana Picea rubens	Black Spruce	Secure	S5 S5	Р		Р	Р	Р			P P	P P	Р	Р					Р		Р	Р
Picea rubens Pinus resinosa	Red Spruce Red Pine	Secure Secure	S4S5								Р	Р									-	+-
Pinus strobus	Eastern White Pine	Secure	S5											Р					Р	Р		
Piptatherum canadense Plantago major	Canada Rice Grass Common Plantain	Sensitive Exotic	S2 SNA			Р									Р							
	Club Spur Orchid	Secure	S5	Р		P	Р					Р	Р	Р	Р		Р				Р	+
Platanthera dilatata	White Bog Orchid	Secure	S4S5			Р																<u> </u>
Platanthera grandiflora	Large Purple Fringed Orchid	Secure	S3										Р			Р	Р		Р		Р	
Platanthera hookeri	Hooker's Orchid	Secure	S3																			
Platanthera lacera	Ragged Fringed Orchid Small Purple Fringed	Secure	S4S5															Р			├	₩
Platanthera psycodes	Orchid	Secure	S4										Р					Р			Р	
Platanthera sp.	an Orchid	na	na	Р		Р					Р											
Poa alsodes Poa annua	Grove Blue Grass Annual Blue Grass	Secure Exotic	S4 SNA																		├─	+-
Poa compressa	Canada Blue Grass	Exotic	SNA																			<u>t </u>
Poa palustris	Fowl Blue Grass	Secure	S5			Р		Р													-	
Poa pratensis Poa saltuensis	Kentucky Blue Grass Weak Blue Grass	Secure Secure	S5 S4S5								\vdash	 								 	\vdash	+
Polygonum amphibium	Water Smartweed	Secure	S4S5																			1
var. stipulaceum Polygonum aviculare	Prostrate Knotweed	Secure	S5																	-	\vdash	+-
Polygonum careyi	Carey's Smartweed	na	na																			
Polygonum cilinode	Fringed Black Bindweed	Secure	S5								Р	Р									<u> </u>	
Polygonum hydropiper Polygonum	Marshpepper Smartweed	Exotic	SNA								\vdash	 								 	\vdash	+
hydropiperoides	False Waterpepper	Secure	S5																		<u> </u>	<u> </u>
Polygonum persicaria Polygonum punctatum	Spotted Lady's-thumb Dotted Smartweed	Exotic Secure	SNA S5		P						P				Р							-
		Secure	S5	Р	Г						Р				Р	Р			Р		Р	+
Polygonum sp.	Bindweed	na	na																			
Polystichum acrostichoides	Christmas Fern	Secure	S5																			
Populus balsamifera	Balsam Poplar	Secure	S4																			二
Populus grandidentata Populus tremuloides	Large-toothed Aspen Trembling Aspen	Secure Secure	S5 S5	Р				P	P		Р									Р	\vdash	
	a Pondweed	na	na					r	r												l –	\pm
Potentilla norvegica	Rough Cinquefoil	Secure	S5	Р																		
Potentilla recta Potentilla simplex	Sulphur Cinquefoil Old Field Cinquefoil	Exotic Secure	SNA S5								\vdash	-	Р		Р		Р	1		\vdash	\vdash	+-
Prenanthes altissima	Tall Rattlesnakeroot	Secure	S5										Ė									
Prenanthes trifoliolata	Three-leaved	Secure	S5	Р	Р								Р	Р	Р				Р			
Prunella vulgaris	Rattlesnakeroot Common Self-heal	Secure	S5	P					Р	Р	Р				Р						\vdash	+
Prunus pensylvanica	Pin Cherry	Secure	S5						•		Ė	Р				Р			Р			
Prunus serotina Prunus virginiana	Black Cherry Chokecherry	Secure Secure	S5 S5					Р													\vdash	1
	Bracken Fern	Secure Secure	S5									Р	Р	Р	Р	Р	Р		Р		Р	t^{-}
Pyrola americana	Round-leaved Pyrola	Secure	S5																			
Pyrola elliptica Quercus rubra	Shinleaf Northern Red Oak	Secure Secure	S5 S5		Р														Р	Р	 	\vdash
Ranunculus acris	Common Buttercup	Exotic	SNA																	Ė		
Ranunculus gmelinii	Gmelin's Water Buttercup	Secure	S3	Р											Р							
- 5	1	-									<u> </u>	<u> </u>						1			Ц	1

informatio	n on their population																					
Scientific Name	Common Name	NSDNR	ACCDC										etland									
Ranunculus repens	Creeping Buttercup	Rank Exotic	S-Rank	1 P	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Rhamnus alnifolia	Alder-leaved Buckthorn	Sensitive	S3	'		Р																
Rhododendron	Rhodora	Secure	S5									Р										
canadense Rhynchospora alba	White Beakrush	Secure	S5																		\vdash	
Rhynchospora capitellata	Small-headed Beakrush	Secure	S4																			
Ribes glandulosum Ribes hirtellum	Skunk Currant Smooth Gooseberry	Secure Secure	S5 S5	P					Р	Р	Р								Р		$\vdash\vdash$	
Ribes lacustre	Bristly Black Currant	Secure	S5			Р					Р									Р		Р
Ribes triste	Swamp Red Currant	Secure	S4							Р												
Rorippa nasturtium- aquaticum	Watercress	Exotic	SNA																			1
Rosa nitida	Shining Rose	Secure	S4			Р	Р	Р		Р		Р	Р	Р			Р		Р	Р	Р	Р
Rosa sp. Rosa virginiana	a Rose Virginia Rose	na Secure	na S5	P P				Р													igwdapprox	
Rubus allegheniensis	Allegheny Blackberry	Secure	S5	Г				Г													\vdash	
Rubus canadensis	Smooth Blackberry	Secure	S5			Р		Р						Р					Р			
Rubus hispidus Rubus idaeus	Bristly Dewberry Red Raspberry	Secure Secure	S5 S5	Р		P P	P P	Р	P P	P	Р	P P	Р	Р	Р		Р		P P	P P	Р	P P
Rubus pubescens	Dwarf Red Raspberry	Secure	S5	P	Р	P	P	Р	P	P	P	•	Р	Р		Р	Р		P	P	Р	
Rubus setosus	Bristly Blackberry	Secure	S4?					Р)	2			Р)			
Rubus sp. Rumex acetosa	a Blackberry Garden Sorrel	na Exotic	na SNA											Р	Р				Р		Р	
Rumex acetosella	Sheep Sorrel	Exotic	SNA																			
Salix bebbiana Salix discolor	Bebb's Willow Pussy Willow	Secure Secure	S5 S5					Р							Р					Р	igwdapprox	
Salix discolor Salix humilis	Upland Willow	Secure	S5																		\vdash	
Salix lucida	Shining Willow	Secure	S5					-														
Salix pyrifolia Salix sp.	Balsam Willow a Willow	Secure na	S5 na					Р													$\vdash\vdash\vdash$	\vdash
Sambucus nigra ssp.	Black Elderberry	Secure	S5	Р				Р		Р	Р								Р			\Box
canadensis	-			۲				۲		۲	۲								۲			
Sambucus racemosa Schoenoplectus	Red Elderberry	Secure	S5	\vdash			\vdash					Р										\vdash
subterminalis	Water Bulrush	Secure	S5																			Ш
Scirpus atrocinctus Scirpus atrovirens	Black-girdled Bulrush Woolgrass Bulrush	Secure na	S5 SNA					Р							P					P	igsqcut	\square
Scirpus atrovirens Scirpus cyperinus	Common Woolly Bulrush	Secure	S5	Р				Р	Р			Р		Р	Р				Р	Р	Р	
Scirpus microcarpus	Small-fruited Bulrush	Secure	S5	Р																		
	Marsh Skullcap Mad-dog Skullcap	Secure Secure	S5 S5		Р					Р	Р				Р	P					$\vdash\vdash\vdash$	\vdash
Senecio jacobaea	Tansy Ragwort	Exotic	SNA		'					'	'					•						
Senecio sp.	a Ragwort	na	na																			
	a Catchfly	na	na																		$\vdash\vdash\vdash$	
Sisyrinchium montanum	Mountain Blue-eyed-grass	Secure	S5																			
Sium suave	Common Water Parsnip	Secure	S5 SNA					Р														
Solanum dulcamara Solidago bicolor	Bittersweet Nightshade White Goldenrod	Exotic Secure	SNA S5					Р													$\vdash \vdash$	
Solidago canadensis	Canada Goldenrod	Secure	S5	Р				Р	Р				Р			Р				Р	Р	Р
Solidago flexicaulis Solidago gigantea	Zigzag Goldenrod Giant Goldenrod	Secure Secure	S5 S5	P				Р			P		Р						Р		P	\vdash
Solidago gigaritea Solidago macrophylla	Large-leaved Goldenrod	Secure	S4	Г				Г			Г		Г						Г		Р	$\overline{}$
Solidago puberula	Downy Goldenrod	Secure	S5																			
Solidago rugosa	Rough-stemmed Goldenrod	Secure	S5	Р			Р	Р	Р	Р	Р	Р			Р		Р		Р	Р	Р	Р
Solidago sp.	a Goldenrod	na	na																			
Solidago uliginosa	Northern Bog Goldenrod	Secure	S5					Р				1	Р	Р		J	Р		Р		Р	
Sorbus americana Sparganium americanum	American Mountain Ash American Burreed	Secure Secure	S5 S5									Р			Р	Р					$\vdash\vdash$	\vdash
Sparganium fluctuans	Floating Burreed	Secure	S4												·							
Sparganium sp. Spartina pectinata	a Bur-reed Prairie Cord Grass	na Secure	na S5	Р				Р													igwdapprox	
Spiraea alba	White Meadowsweet	Secure	S5	Р		Р	Р	Р	Р			Р	Р	Р		Р			Р	Р	Р	Р
Spiraea tomentosa	Steeplebush	Secure	S5					Р								Р			Р			
Spiranthes cernua Spiranthes lacera	Nodding Ladies'-Tresses Slender Ladies'-tresses	Secure Secure	S5 S5			Р															$\vdash\vdash$	\vdash
Spiranthes ochroleuca	Yellow Ladies'-tresses	Sensitive	S2S3																			
Spiranthes sp.	Ladies'-Tresses Little Starwort	na Exotic	na SNA																		igwdown	\vdash
Stellaria graminea Streptopus lanceolatus	Rose Twisted-stalk	Secure	S5																			
Symphyotrichum	Heart-leaved Aster	Secure	S4S5																			
cordifolium Symphyotrichum																					$\vdash\vdash$	\vdash
lanceolatum	Lance-leaved Aster	Secure	S4S5																			Р
Symphyotrichum lateriflorum	Calico Aster	Secure	S5		Р	Р	Р			Р	Р	Р	Р		Р	Р			Р		1	1
Symphyotrichum novi-	Now Yards A-1-	Conver	85																		\Box	
belgii	New York Aster	Secure	S5																			Р
Symphyotrichum	Purple-stemmed Aster	Secure	S5	Р			Р	Р	Р		Р					Р	Р		Р		Р	
puniceum Taraxacum officinale	Common Dandelion	Exotic	SNA																			
Thalictrum pubescens	Tall Meadow-Rue	Secure	S5	Р		Р	Р			Р	Р				Р	Р						Р
Thelypteris noveboracensis	New York Fern	Secure	S5	Р	Р					Р		Р	Р		Р	Р	Р		Р		Р	
Thelypteris palustris	Eastern Marsh Fern	Secure	S5	Р		Р			Р					Р		Р	Р		Р			
	Bog Fern	Secure	S4S5			Р																
, ,	Northern Poison Oak Fraser's Marsh St. John's-	Secure	S5	-		_	-								_		_					\vdash
Triadenum fraseri	wort	Secure	S5	Р		Р	Р								Р		Р	Р			Ш	
Trientalis borealis	Northern Starflower Rabbit's-foot Clover	Secure Exotic	S5 SNA	Р	Р	Р	Р		Р		Р		Р	Р		Р	Р		Р		Р	Р
Trifolium arvense Trifolium aureum	Yellow Clover	Exotic	SNA	\vdash			\vdash														$\vdash\vdash$	\vdash
Trifolium campestre	Low Hop Clover	Exotic	SNA																			
Trifolium dubium Trifolium hybridum	Small Hop Clover Alsike Clover	Exotic Exotic	SNA SNA																		$\vdash\vdash\vdash$	$\vdash\vdash\vdash$
Trifolium nybriaum Trifolium pratense	Red Clover	Exotic	SNA												Р						$\vdash \vdash$	\square
Trifolium repens	White Clover	Exotic	SNA																			
Trifolium sp. Trillium erectum	a Clover Red Trillium	na Secure	na S4																		$\vdash\vdash\vdash$	\vdash
Trillium undulatum	Painted Trillium	Secure	S5																			
Tsuga canadensis	Eastern Hemlock	Secure	S4S5		Р										,							
Tussilago farfara Typha latifolia	Coltsfoot Broad-leaved Cattail	Exotic Secure	SNA S5												Р					Р	$\vdash\vdash$	\vdash
. Jpa idinona	our lourou Oulian	200010	,																			

Scientific Name	NSDNR	ACCDC		Wetlands*																		
Scientific Name	Rank	S-Rank	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Uvularia sessilifolia	Sessile-leaved Bellwort	Secure	S4S5																			
Vaccinium angustifolium	Late Lowbush Blueberry	Secure	S5				Р					Р									Р	Р
Vaccinium myrtilloides	Velvet-leaved Blueberry	Secure	S5			Р						Р	Р						Р			
Vaccinium oxycoccos	Small Cranberry	Secure	S5									Р							Р		Р	
Verbena hastata	Blue Vervain	Secure	S3																			
Veronica officinalis	Common Speedwell	Exotic	S5																			
Veronica scutellata	Marsh Speedwell	Secure	S5		Р																	
Veronica serpyllifolia	Thyme-Leaved Speedwell	Secure	S5																			
Viburnum nudum	Northern Wild Raisin	Secure	S5			Р	Р	Р	Р			Р		Р					Р		Р	Р
Vicia cracca	Tufted Vetch	Exotic	SNA																			
Viola blanda	Sweet White Violet	Secure	S5																			
Viola cucullata	Marsh Blue Violet	Secure	S5	Р		Р	Р	Р	Р		Р	Р		Р	Р	Р	Р		Р	Р	Р	Р
Viola macloskeyi	Small White Violet	Secure	S5	Р		Р	Р		Р		Р	Р	Р		Р	Р	Р		Р		Р	
Viola sororia	Woolly Blue Violet	Secure	S5			Р																
Viola sp.	a Violet	na	na							Р	Р											
Number of species recor	ded in wetlands			101	39	80	54	60	66	49	67	70	67	55	81	60	53	6	98	51	75	59

Table C2 Number of Birds Observed by Habitat during the Breeding Bird Surveys

Table C2 Number of Birds Ob	serve	за ву пак	ntat ut	iring t	ne bre	eamg	DII U S	urvey	<u> </u>				
Species	Clear-cut	Coniferous Treed Swamp	Flew Over	Habitat Unknown	Immature Mixedwood	Immature Softwood	Mature Hardwood	Mature Mixedwood	Mature Softwood	Mixedwood Treed Swamp	Tall Shrub Swamp	Tall shrub Thicket	Total
Alder Flycatcher	7							3				1	11
American Crow	<u>'</u>			3				1				'	4
American Goldfinch	3		6	3				1					10
American Kestrel	3		1					'		1			2
American Redstart			'					1		'			1
American Redstart American Robin	-		4		4	4	4						
	5		1		4	1	1	14					26
American Woodcock					1								1
Bald Eagle			1	4									1
Barred Owl				1				4		4			1
Bay-breasted Warbler	_					_		1	_	1			2
Black-and-white Warbler	2	1				3		8	1				15
Black-backed Woodpecker								5					5
Blackburnian Warbler								7					7
Black-capped Chickadee								8	4				12
Black-throated Green Warbler	2				10	2		49	13				76
Blue Jay	1		2	1	2	2	1	9	1				19
Blue-headed Vireo								3	1				4
Boreal Chickadee		3						2					5
Brown Creeper								3					3
Canada Warbler		3			1					4	1		9
Cedar Waxwing			2					2					4
Common Nighthawk			5										5
Common Raven			1	5			1	5					12
Common Yellowthroat	16							3					19
Dark-eyed Junco	48	1			1	2		12	1				65
Downy Woodpecker								1	2				3
Eastern Wood Pewee								2	1				3
Evening Grosbeak			4										4
Golden-crowned Kinglet								14	1				15
Gray Jay					2	1							3
Great Blue Heron			1										1
Hairy Woodpecker				1	1			8					10
Hermit Thrush	5	2		3	3	2		31	4	1			51
Killdeer	6	_	3		Ū								9
Lincoln's Sparrow	7		Ť										7
Magnolia Warbler	 	1			9	1		20	1				32
Mourning Dove	5			1	Ü	·		9	·				15
Nashville Warbler	<u> </u>	1		i i	2	1		4	1				9
Northern Flicker				1		<u> </u>		3	•	1			5
Northern Parula				'				6	1	- '			7
Olive-sided Flycatcher				2				3	'	2			7
Ovenbird				1	10		2	34	1				49
	_				10		3		'				
Palm Warbler	3			2	4	2		3		4			10
Parula Warbler	1				1			3 2		1			5
Pileated Woodpecker	<u> </u>												2
Purple Finch	<u> </u>				4			1					1
Red-breasted Nuthatch	<u> </u>				1			6					7
Red-eyed Vireo	<u> </u>				3			35	2	1			41
Red-tailed Hawk	1		2	_									3
Ring-necked Pheasant				2									2
Ruby-crowned Kinglet					3	2		13	1	1			20

Table C2 Number of Birds Observed by Habitat during the Breeding Bird Surveys

		,						, .	-				
Species	Clear-cut	Coniferous Treed Swamp	Flew Over	Habitat Unknown	Immature Mixedwood	Immature Softwood	Mature Hardwood	Mature Mixedwood	Mature Softwood	Mixedwood Treed Swamp	Tall Shrub Swamp	Tall shrub Thicket	Total
Ruby-throated Hummingbird								1					1
Ruffed Grouse													
Sharp-shinned Hawk			2							1			3
Solitary Vireo					2	2		5					9
Song Sparrow	6												6
Spotted Sandpiper								1					1
Spruce Grouse									1				1
Swainson's Thrush						1		6	1				8
Swamp sparrow		1		1							3		5
White-breasted Nuthatch								1					1
White-throated Sparrow	37			2				7					46
Wilson's Snipe	2							2					4
Winter Wren		1			1	1		5	1				9
Yellow-bellied Flycatcher	2	1		1		2		12	1	1			20
Yellow-bellied Sapsucker								3	1				4
Yellow-rumped Warbler		2			1			9	3				15
Total	158	17	31	27	58	25	6	387	44	15	4	1	773

Table C3 Breeding and Population Statuses of Recorded Bird Species

Common Name	Scientific Name	COSEWIC Rank	ACCDC Rank	NSESA Rank	NSDNR Rank	MBBA Breeding Status	Field Survey Breeding Status
Alder Flycatcher	Empidonax alnorum		S5B		Secure	Confirmed	Possible Possible
American Bittern	Botaurus lentiginosus		S3S4B		Secure	Observed	N/A
American Black Duck	Anas rubripes		S5		Secure	Possible	N/A
American Crow	Corvus brachyrhynchos		S5		Secure	Confirmed	Possible
American Goldfinch	Carduelis tristis		S5		Secure	Confirmed	Possible
American Kestrel	Falco sparverius		S5B		Secure	Confirmed	Probable
American Redstart	Setophaga ruticilla		S5B		Secure	Confirmed	Possible
American Robin	Turdus migratorius		S5B		Secure	Confirmed	Possible
American Woodcock	Scolopax minor		S4S5B		Secure	Confirmed	Possible
Bald Eagle	Haliaeetus leucocephalus	Not at Risk	S4		Secure	Confirmed	Observed
Barn Swallow	Hirundo rustica		S3B		Sensitive	Confirmed	N/A
Barred Owl	Strix varia		S5		Secure	Possible	Possible
Bay-breasted Warbler	Dendroica castanea		S3S4B		Sensitive	Confirmed	Possible
Belted Kingfisher	Megaceryle alcyon		S5B		Secure	Confirmed	Observed
Black-and-white Warbler	Mniotilta varia		S4S5B		Secure	Confirmed	Possible
Black-backed Woodpecker	Picoides arcticus		S3S4B		Sensitive	Possible	Confirmed
Blackburnian Warbler	Dendroica fusca		S4B		Secure	Possible	Possible
Black-capped Chickadee	Poecile atricapilla		S5		Secure	Confirmed	Confirmed
Black-throated Green Warbler	Dendroica virens		S4S5B		Secure	Confirmed	Possible
Blue Jay	Cyanocitta cristata		S5		Secure	Confirmed	Probable
Blue-headed Vireo	Vireo solitarius		S5B		Secure	Confirmed	Probable
Bobolink	Dolichonyx oryzivorus		S3S4B		Sensitive	Confirmed	N/A
Boreal Chickadee	Poecile hudsonica		S3		Sensitive	Confirmed	Possible
Brown Creeper	Certhia americana		S5		Secure	N/A	Confirmed
Canada Goose	Branta canadensis		SNAB, S4N		Secure	Confirmed	N/A
Canada Warbler	Wilsonia canadensis	Threatened	S3B		At Risk	Confirmed	Possible
Cedar Waxwing	Bombycilla cedrorum		S5B		Secure	Confirmed	Possible
Chestnut-sided Warbler	Dendroica pensylvanica		S5B		Secure	Confirmed	N/A
Chipping Sparrow	Spizella passerina		S4S5B		Secure	Confirmed	N/A
Cliff Swallow	Petrochelidon pyrrhonota		S3B		May Be At Risk	Confirmed	N/A
Common Grackle	Quiscalus quiscula		S5B		Secure	Confirmed	N/A
Common Loon	Gavia immer	Not at Risk	S3B,S4N		May Be At Risk	Observed	N/A
Common Merganser	Mergus merganser		S5		Secure	Confirmed	N/A
Common Nighthawk	Chordeiles minor	Threatened	S3B	Threatened	At Risk	Possible	Possible
Common Raven	Corvus corax		S5		Secure	Confirmed	Possible
Common Yellowthroat	Geothlypis trichas		S5B		Secure	Confirmed	Possible
Dark-eyed Junco	Junco hyemalis		S4S5		Secure	Confirmed	Possible
Double-crested Cormorant	Phalacrocorax auritus		S5B		Secure	Observed	N/A
Downy Woodpecker	Picoides pubescens		S5		Secure	Confirmed	Probable
Eastern Wood-Pewee	Contopus virens		S3S4B		Sensitive	Confirmed	Possible
European Starling	Sturnus vulgaris		SNA		Exotic	Confirmed	N/A
Evening Grosbeak	Coccothraustes vespertinus		S4B, S5N		Secure	Possible	Possible
Golden-crowned Kinglet	Regulus satrapa		S4		Sensitive	Confirmed	Confirmed

Table C3 Breeding and Population Statuses of Recorded Bird Species

Common Name	Scientific Name	COSEWIC Rank	ACCDC Rank	NSESA Rank	NSDNR Rank	MBBA Breeding Status	Field Survey Breeding Status
Gray Jay	Perisoreus canadensis		S3S4B		Sensitive	Possible	Possible
Great Blue Heron	Ardea herodias		S4B		Secure	Observed	Observed
Green-winged Teal	Anas carolinensis		S4S5B		Secure	Observed	N/A
Hairy Woodpecker	Picoides villosus		S5		Secure	Confirmed	Possible
Hermit Thrush	Catharus guttatus		S5B		Secure	Confirmed	Confirmed
Herring Gull	Larus argentatus		S4S5		Secure	Possible	N/A
House Sparrow	Passer domesticus		SNA		Exotic	Possible	N/A
Killdeer	Charadrius vociferus		S3S4B		Sensitive	Possible	Probable
Least Flycatcher	Empidonax minimus		S4B		Secure	Confirmed	N/A
Lincoln's Sparrow	Melospiza lincolnii		S4B		Secure	Possible	Possible
Magnolia Warbler	Dendroica magnolia		S5B		Secure	Confirmed	Possible
Mallard	Anas platyrhynchos		S5		Secure	Possible	N/A
Merlin	Falco columbarius		S5B		Secure	Confirmed	N/A
Mourning Dove	Zenaida macroura		S5		Secure	Confirmed	Possible
Nashville Warbler	Vermivora ruficapilla		S5B		Secure	Confirmed	Possible
Northern Flicker	Colaptes auratus		S5B		Secure	Confirmed	Possible
Northern Harrier	Circus cyaneus		S5B		Secure	Possible	N/A
Northern Parula	Parula americana,		S5B		Secure	Confirmed	Possible
Northern Saw-whet Owl	Aegolius acadicus		S4		Secure	Possible	N/A
Olive-sided Flycatcher	Contopus cooperi	Threatened	S3B		At Risk	Possible	Possible
Ovenbird	Seiurus aurocapillus		S5B		Secure	Possible	Possible
Palm Warbler	Dendroica palmarum		S5B		Secure	Confirmed	Possible
Peregrine Falcon	Falco peregrinus	Vulnerable	S1B		At Risk	Probable	N/A
Pileated Woodpecker	Dryocopus pileatus		S5		Secure	Confirmed	Observed
Pine Siskin	Carduelis pinus		S3S4B, S5N		Sensitive	Possible	N/A
Purple Finch	Carpodacus purpureus		S4S5		Secure	Confirmed	Possible
Red-breasted Nuthatch	Sitta canadensis		S4S5		Secure	Confirmed	Possible
Red-eyed Vireo	Vireo olivaceus		S5B		Secure	Confirmed	Possible
Red-tailed Hawk	Buteo jamaicensis	Not at Risk	S5		Secure	Confirmed	Confirmed
Red-winged Blackbird	Agelaius phoeniceus		S4S5B		Secure	Confirmed	N/A
Ring-necked Pheasant	Phasianus colchicus		SNA		Exotic	Confirmed	Possible
Rock Pigeon	Columba livia		SNA		Exotic	Confirmed	N/A
Rose-breasted Grosbeak	Pheucticus Iudovicianus		S3S4B		Sensitive	Possible	N/A
Ruby-crowned Kinglet	Regulus calendula		S4B		Sensitive	Possible	Possible
Ruby-throated Hummingbird	Archilochus colubris		S5B		Secure	Confirmed	Possible
Ruffed Grouse	Bonasa umbellus		S4S5		Secure	N/A	Confirmed
Savannah Sparrow	Passerculus sandwichensis		S4B		Secure	Confirmed	N/A
Sharp-shinned Hawk	Accipiter striatus		S4S5		Secure	Confirmed	Possible
Solitary Sandpiper	Tringa solitaria		S1?B, S4S5M		Secure	N/A	Observed
Song Sparrow	Melospiza melodia		S5B		Secure	Confirmed	Probable
Spotted Sandpiper	Actitis macularius		S3S4B		Sensitive	Possible	Observed
Spruce Grouse	Dendragapus canadensis		S5		Secure	N/A	Possible
Swainson's Thrush	Catharus ustulatus		S4S5B		Secure	Possible	Possible

Table C3 Breeding and Population Statuses of Recorded Bird Species

Common Name	Scientific Name	COSEWIC Rank	ACCDC Rank	NSESA Rank	NSDNR Rank	MBBA Breeding Status	Field Survey Breeding Status
Swamp Sparrow	Melospiza georgiana		S5B		Secure	Confirmed	Possible
Tree Swallow	Tachycineta bicolor		S4B		Sensitive	Confirmed	N/A
White-throated Sparrow	Zonotrichia albicollis		S5B		Secure	Confirmed	Possible
White-winged Crossbill	Loxia leucoptera		S4S5		Secure	Confirmed	N/A
Wilson's Snipe	Gallinago delicata		S3S4B		Sensitive	Probable	N/A
Wilson's Warbler	Wilsonia pusilla		S3S4B		Sensitive	Possible	N/A
Winter Wren	Troglodytes hiemalis		S5B		Secure	Possible	Possible
Wood Duck	Aix sponsa		S4S5B		Secure	Confirmed	N/A
Yellow Warbler	Dendroica petechia		S5B		Secure	Confirmed	N/A
Yellow-bellied Flycatcher	Empidonax flaviventris		S3S4B		Sensitive	Possible	Possible
Yellow-bellied Sapsucker	Sphyrapicus varius		S4S5B		Secure	Confirmed	Possible
Yellow-rumped Warbler	Dendroica coronata		S5B		Secure	Confirmed	Possible

Table C4 Wetland habitat descriptions (percent cover estimates for dominant plant species) Wetlands ID and Habitats 10 11 12 Coniferous Treed Swamp Cut-over Treed Swa Cut-over Treed Sv Mixedwood Tre Swamp Common Name Tall Shrub Sw Strata **Scientific Name** Cut-over Treed Tall Shrub Mixedwoo Swa Wet me 10 15 Balsam Fir 15 na Abies balsamea na 30 8 Acer rubrum Red Maple Betula papyrifera Paper Birch Gray Birch Betula populifolia Larix laricina American Larch White Spruce Picea glauca 0.5 Picea mariana Black Spruce Pinus strobus Eastern White Pine Tsuga canadensis Eastern Hemlock Abies balsamea Balsam Fir 5 5 Acer rubrum Red Maple Alnus incana Speckled Alder Betula papyrifera var. cordifolia Heart-leaved Birch Chamaedaphne calyculata Leatherleaf Gaylussacia baccata Black Huckleberry 40 25 llex verticillata Common Winterberry 0.5 0.5 Kalmia angustifolia Sheep Laurel Larix laricina American Larch Ledum groenlandicum Common Labrador Tea Lonicera caerulea Western Honeysuckle Nemopanthus mucronatus Mountain Holly Picea mariana Black Spruce Prunus pensylvanica Pin Cherry Rhododendron canadense Rhodora Rosa nitida Shining Rose Rosa virginiana Virginia Rose Rubus hispidus Bristly Dewberry Rubus idaeus Red Raspberry Salix pyrifolia Balsam Willow Spiraea alba White Meadowsweet 40 18 Viburnum nudum Northern Wild Raisin Agrostis scabra Rough Bent Grass Athyrium filix-femina Common Lady Fern 40 35 Calamagrostis canadensis Bluejoint Reed Grass Lesser Brown Sedge Carex adusta Star Sedge Carex echinata Northern Long Sedge Carex folliculata Carex gynandra Nodding Sedge Bristly-stalked Sedge Carex leptalea Carex lurida Sallow Sedge 25 25 Carex stricta Tussock Sedge Carex trisperma Three-seeded Sedge Carex utriculata Northern Beaked Sedge Bunchberry Cornus canadensis Hairy Flat-top White Aster Doellingeria umbellata Crested Wood Fern Dryopteris cristata Woodland Horsetail

25 10

Equisetum sylvaticum

Eriophorum virginicum

Galium asprellum

Glyceria grandis

Glyceria canadensis

Tawny Cottongrass

Canada Manna Grass

Common Tall Manna Grass

Rough Bedstraw

															Wetla	nds ID a	nd Ha	bitats												
		1	2	3		4		5		6	7	8		9		10 11	1 12	13	14	15		16		17		1	18		19	20
Scientific Name	Common Name	Deciduous Treed Swamp	Tall Shrub Swamp	Coniferous Treed Swamp	Tall Shrub Swamp	Coniferous Treed	Swamp Mixedwood Treed	Swanip Low Shrub Swamp	Tall Shrub Swamp Cut-over Treed Swamp	Mixedwood Treed Swamp	Coniferous Treed Swamp	Coniferous Treed Swamp	Coniferous Treed Swamp	Cut-over Treed Swamp	Mixedwood Treed Swamp	Tall Shrub Swamp Tall Shrub Swamp	Fresh Marsh	Mixedwood Treed Swamp	Mixedwood Treed Swamp	Mixedwood Treed Swamp	Coniferous Treed Swamp (1)	Coniferous Treed Swamp (2)	Mixedwood Treed Swamp	Wet meadow Mixedwood Treed		Cut-over Treed Swamp	Deciduous Treed Swamp	Mixedwood Treed Swamp	Mixedwood Treed Swamp	Tall Shrub Swamp
Glyceria striata	Fowl Manna Grass					2	0		50	5																		1		_
Hydrocotyle americana	American Marsh Pennywort	1									3																			
Impatiens capensis	Spotted Jewelweed		20														45	10			İ									
Juncus effusus	Soft Rush			1		1								5												İ	1		i i	1
Lycopodium annotinum	Stiff Clubmoss																						2							
Lycopus uniflorus	Northern Water Horehound				5				5							15 5			2	8			10				5			1
Maianthemum trifolium	Three-leaved False Soloman's Seal												5			10														1
na	Misc Bryophytes		15																											1
Oclemena acuminata	Whorled Wood Aster																						2							1
Onoclea sensibilis	Sensitive Fern	13	40							15	8	10						20										1	1	+
Osmunda cinnamomea	Cinnamon Fern		15	1		5	5			15					5	2			2	5		15		10 8				†		+
Packera schweinitziana	Schweinitz's Groundsel							15	25																					1
Petasites frigidus	Northern Sweet Coltsfoot	5									20	5																		1
Phegopteris connectilis	Northern Beech Fern																													+
Polygonum sp.	Bindweed																15													1
Pteridium aquilinum	Bracken Fern													10														 		1
Rubus pubescens	Dwarf Red Raspberry	10		10		1	5		5	5	10	10														10	15	†	5	+
Scirpus cyperinus	Common Woolly Bulrush	1								<u> </u>	1	1		15												1	1	+		1
Scutellaria lateriflora	Mad-dog Skullcap		3											1				10										+		+
Solidago gigantea	Giant Goldenrod									1							+			10							10	†		+
Solidago rugosa	Rough-stemmed Goldenrod	8	+						5	1	3						+			5								†		+
Solidago uliginosa	Northern Bog Goldenrod	—	+		2				-	1							+										1	†		+
Sphagnum spp.	Peatmoss	80	70	85	95					1	70	80				65 80)	80	90	90	90	90	80	95 90	35	85	80	95	40	+
Symphyotrichum puniceum	Purple-stemmed Aster	2	+	- 50		1		+			1.0			1	1											1	1 20			+
Thalictrum pubescens	Tall Meadow-Rue	 -	+	1		1		+			2			1	1		+									1	1	 		+
Thelypteris noveboracensis	New York Fern		+	1		1		+			_			1	1		+			10						1	1	 		+
Thelypteris palustris	Eastern Marsh Fern		+	t	3	-								†	†		+	2										†		+
Trientalis borealis	Northern Starflower		+	t	-	-								†	†		+	<u> </u>										1		+
Vaccinium oxycoccos	Small Cranberry		+	t		-								†	†		+								15			†		+
Viola cucullata	Marsh Blue Violet								10									5		5			5			5	15	1		1
Viola macloskeyi	Small White Violet		+							1				1	1		+										1	†		+
Viola sp.	a Violet	10	+							+	10	3															1	 		+

Table C5 Birds, mammals and herpetiles recorded in or near wetlands in the Proposed Corridor during 2007-2008 field surveys and information on their population statuses

		Transm popul											W	etlan	ds									
Group	Common Name	NSDNR Rank	ACCDC S-Rank	1	2	3	4	5	6	7	8	q				13	14	15	16	17	18	19	20	21
	American Kestrel			Р			_	-			U	3	10		12	13		10	10		10	13	20	21
	Barred Owl	Secure	S5	-											Р									
	Bay-breasted Warbler	Sensitive	S3S4B												Г			Р					$\overline{}$	
	Belted Kingfisher	Secure	S5B												Р			-					$\overline{}$	
	Blackburnian Warbler	Secure	S4B												Г								$\overline{}$	
	Black-and-White Warbler	Secure	S4S5B			Р																	$\overline{}$	
	Black-backed	Sensitive	S3S4B			Г															Р			
	Woodpecker																						<u> </u>	
	Black-capped Chickadee	Secure	S5								Р		Р	Р					Р			Р	<u> </u>	-
	Black-throated Green Warbler	Secure	S4S5B																					
	Blue-headed Vireo	Secure	S5B															Р						
	Blue Jay	Secure	S5													Р		Р	Р			Р		
	Boreal Chickadee	Sensitive	S3								Р													
	Canada Warbler	At Risk	S3B			Р	Р				Р			Р				Р						
	Cedar Waxwing	Secure	S5B												Р	Р								
	Common Nighthawk	At Risk	S3B																					
	Common Yellowthroat	Secure	S5B										Р						Р					
Sp	Dark-eyed Junco	Secure	S4S5			Р												Р						
Birds	Gray Jay	Sensitive	S3S4																					
	Hermit Thrush	Secure	S5B	Р		Р															Р			
	Magnolia Warbler	Secure	S5B			Р								Р				Р						
	Nashville Warbler	Secure	S5B			Р																		
	Northern Flicker	Secure	S5B	Р									Р											
	Northern Parula	Secure	S5B	P																				
	Olive-sided Flycatcher	At Risk	S3B	Р																				
	Ovenbird	Secure	S5B															Р						
	Red-breasted Nuthatch	Secure	S4S5										Р	Р		Р		P						
	Ruby-crowned Kinglet	Sensitive	S4B	Р													Р							
	Ruffed Grouse	Secure	S4S5								Р													
	Sharp-shinned Hawk	Secure	S4S5	Р																			_	
	Solitary Sandpiper	Secure	S1?, S4S5M												Р									
	Spruce Grouse	Secure	S5											Р	-									
	Swamp Sparrow	Secure	S5B			Р		Р											Р					
	Wilson's Snipe	Sensitive	S3S4B			<u> </u>		•											•					
	Winter Wren	Secure	S5B			Р																		
	Yellow-bellied Flycatcher	Sensitive	S3S4B			P	Р					Р						Р						
	Yellow-rumped Warbler		S5B			P						<u>'</u>		Р										
	American Black Bear	Secure	S5			-		Р									Р		Р		Р		$\overline{}$	
(0	American Red Squirrel	Secure	S5										Р	Р		Р	Г	Р			Р		$\overline{}$	
Jak	Muskrat	Secure	S5	Р		 							<u> </u>	r		r		r			r			
L L			S5	Г														Р					$\overline{}$	
Mammals	Northern Racoon Snowshoe Hare	Secure Secure	S5										Р	Р			Р	٢	Р	Р	Р			├
_	White-tailed Deer	Secure	S5					Р					P	P	Р	Р	P	Р	P	P	P			
			S5	Р	Р			P					P	P	٢	P	P	٢	P	P -	Р			├
Se	Green Frog	Secure		۲	۲	 				Р			۲	۲		۲	۲		۲					<u> </u>
) ţijk	Maritime Garter Snake	Secure	S5	_				Р			<u> </u>			_			_		_	<u> </u>				
Herpetiles	Northern Spring Peeper	Secure	S5	Р	_			Р		Р	Р			Р	Р	Р	Р	Р	Р	Р			<u> </u>	—
Ŧ	Red-backed Salamander	Secure	S5	_	Р					_			_	_	_			_			_		<u> </u>	<u> </u>
	Wood Frog	Secure	S5	Р				Р		Р	Р		Р	Р	Р	Р	Р	Р			Р			<u> </u>

Table C6 Locations of plant species of conservation concern encountered within the Proposed Corridor during 2007-2008 field surveys

during 2007-2	2008 field surveys				
Scientific Name	Common Name	ACCDC S- Rank	NSDNR Rank	Northing	Easting
			. المستحد المستحد المستحد المستحد المستحد المستحد المستحد المستحد المستحد المستحد المستحد المستحد المستحد المستحد	Northing	Easting
Agalinis neoscotica	Nova Scotia Agalinis	\$3 \$2\$3	Secure Sensitive	5000495.0 5000201.5	482442.0 483455.2
Botrychium lanceolatum	Triangle Moonwort Lesser Brown Sedge	\$2\$3 \$2\$3		5000201.5	480194.9
Carex adusta Carex adusta		\$2\$3 \$2\$3	Sensitive Sensitive	5003642.9	481283.0
	Lesser Brown Sedge	\$233 \$3?	Secure	5002100.0	480461.0
Carex foenea	Hay Sedge	S2?		5005265.0	478907.5
Carex houghtoniana	Houghton's Sedge Houghton's Sedge	S2?	Sensitive Sensitive	5003618.2	480030.1
Carex houghtoniana		\$2? \$2?	Sensitive		480044.2
Carex houghtoniana Carex houghtoniana	Houghton's Sedge Houghton's Sedge	S2?	Sensitive	5003569.3 5003578.9	480045.4
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5003575.2	480045.4
		S2?		5003560.4	480047.0
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive		480051.0
Carex houghtoniana Carex houghtoniana	Houghton's Sedge	\$2? \$2?	Sensitive	5003486.3 5003478.1	480051.0
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive Sensitive	5003476.1	480057.3
×	Houghton's Sedge	S2?	Sensitive	5003497.6	480059.3
Carex houghtoniana	Houghton's Sedge	\$2? \$2?			
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive Sensitive	5003614.8 5003599.0	480107.7 480131.5
Carex houghtoniana	Houghton's Sedge				
Carex houghtoniana Carex houghtoniana	Houghton's Sedge Houghton's Sedge	S2? S2?	Sensitive Sensitive	5003640.1 5003093.4	480142.1 480159.4
Carex houghtoniana Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5003093.4	480166.3
Carex houghtoniana Carex houghtoniana	Houghton's Sedge	\$2? \$2?	Sensitive	5003090.6	480168.5
Carex noughtoniana Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5003082.5	480173.6
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5003630.1	480187.7
Carex houghtoniana	Houghton's Sedge	\$2? \$2?	Sensitive	5003644.4	480203.2
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002980.1	480210.0
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5003031.1	480216.3
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002912.5	480266.1
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5003602.1	480267.2
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5003596.7	480285.6
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5003600.7	480286.3
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5003599.2	480310.6
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5003586.4	480320.4
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5003386.4	480320.4
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002662.0	480400.4
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002641.9	480423.6
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002639.7	480425.0
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002641.6	480425.0
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5003285.0	480461.0
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5003203.0	480545.1
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5003016.1	480561.3
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002943.7	480574.6
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002407.8	480657.6
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002406.6	480663.7
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002397.0	480707.1
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002395.3	480738.5
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002333.3	481041.6
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002322.3	481076.5
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002294.1	481121.5
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002221.7	481133.3
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002211.7	481156.6
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002191.6	481180.7
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002191.0	481184.8
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002103.7	481241.3
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5002120.8	481543.4
Carex houghtoniana	Houghton's Sedge	S2?	Sensitive	5001054.7	481762.5
Carex pensylvanica	Pennsylvania Sedge	S1S2	Undetermined	5000262.9	484456.4
Geranium bicknellii	Bicknell's Crane's-bill	S3	Secure	5005332.9	478999.2
Geranium bicknellii	Bicknell's Crane's-bill	S3	Secure	5005332.5	479039.2
Geranium bicknellii	Bicknell's Crane's-bill	S3	Secure	5005337.6	479041.3
Geranium bicknellii	Bicknell's Crane's-bill	S3	Secure	5003339.0	480439.9
Geranium bicknellii	Bicknell's Crane's-bill	S3	Secure	5003303.2	481074.6
Geranium bicknellii	Bicknell's Crane's-bill	S3	Secure	5002264.8	481105.1
Geranium bicknellii	Bicknell's Crane's-bill	S3	Secure	5002264.6	481106.4
Geranium bicknellii	Bicknell's Crane's-bill	S3	Secure	5002239.3	481128.7
Geranium bicknellii	Bicknell's Crane's-bill	S3	Secure	5002239.1	481129.4
· aa 2101010111	0 01a110 0 biii		2000.0	0002200.1	.01120.7

Table C6 Locations of plant species of conservation concern encountered within the Proposed Corridor during 2007-2008 field surveys

during 2007-20	008 field surveys				
Scientific Name	Common Name	ACCDC S- Rank	NSDNR Rank	Northing	Easting
Geranium bicknellii	Bicknell's Crane's-bill	S3	Secure	5002191.8	481186.6
Geranium bicknellii	Bicknell's Crane's-bill	S3	Secure	5002191.2	481186.9
Geranium bicknellii	Bicknell's Crane's-bill	S3	Secure	5002179.1	481192.3
Geranium bicknellii	Bicknell's Crane's-bill	S3	Secure	5002170.6	481204.0
Geranium bicknellii	Bicknell's Crane's-bill	S3	Secure	5002051.8	481316.5
Geranium bicknellii	Bicknell's Crane's-bill	S3	Secure	5001840.3	481563.6
Geranium bicknellii	Bicknell's Crane's-bill	S3	Secure	5001060.8	481762.9
Geranium bicknellii	Bicknell's Crane's-bill	S3	Secure	5000646.1	482007.4
Geranium bicknellii	Bicknell's Crane's-bill	S3	Secure	5000530.0	482814.0
Gratiola neglecta	Clammy Hedge-Hyssop	S1S2	Sensitive	5005018.4	479670.6
Gratiola neglecta	Clammy Hedge-Hyssop	S1S2	Sensitive	5005029.6	479678.2
Gratiola neglecta	Clammy Hedge-Hyssop	S1S2	Sensitive	5004982.0	479684.1
Gratiola neglecta	Clammy Hedge-Hyssop	S1S2	Sensitive	5005008.5	479684.8
Gratiola neglecta	Clammy Hedge-Hyssop	S1S2	Sensitive	5004979.8	479687.7
Gratiola neglecta	Clammy Hedge-Hyssop	S1S2	Sensitive	5004982.4	479689.6
Gratiola neglecta	Clammy Hedge-Hyssop	S1S2	Sensitive	5004991.3	479690.3
Gratiola neglecta	Clammy Hedge-Hyssop	S1S2	Sensitive	5004963.1	479692.4
Juncus subcaudatus	Woodland Rush	S3	Sensitive	5000530.0	482814.0
	Yellow-seeded False				
Lindernia dubia	Pimperel	S3S4	Secure	5004977.2	479683.7
Lycopodium complanatum	Northern Clubmoss	S3S4	Secure	5000414.1	482401.6
Piptatherum canadense	Canada Rice Grass	S3	Sensitive	5002611.2	480801.7
Piptatherum canadense	Canada Rice Grass	S2	Sensitive	5002615.2	480804.8
Piptatherum canadense	Canada Rice Grass	S2	Sensitive	5002575.0	480815.0
Piptatherum canadense	Canada Rice Grass	S2	Sensitive	5002575.0	480815.4
Piptatherum canadense	Canada Rice Grass	S2	Sensitive	5002412.5	480924.4
Piptatherum canadense	Canada Rice Grass	S2	Sensitive	5002409.0	480926.4
Piptatherum canadense	Canada Rice Grass	S2	Sensitive	5002408.7	480930.4
Piptatherum canadense	Canada Rice Grass	S2	Sensitive	5002407.1	480932.3
Piptatherum canadense	Canada Rice Grass	S2	Sensitive	5002407.1	480932.3
<i>p</i>	Large Purple Fringed	_			
Platanthera grandiflora	Orchid	S3	Secure	5000554.0	482307.0
g and an an an an an an an an an an an an an	Large Purple Fringed				
Platanthera grandiflora	Orchid	S3	Secure	5000251.0	483018.0
g and an an an an an an an an an an an an an	Large Purple Fringed				
Platanthera grandiflora	Orchid	S3	Secure	5000340.0	483408.0
g	Large Purple Fringed				
Platanthera grandiflora	Orchid	S3	Secure	4999869.0	483728.0
g and an an an an an an an an an an an an an	Large Purple Fringed				
Platanthera grandiflora	Orchid	S3	Secure	4999650.5	483858.8
r lataritiona granianiona	Large Purple Fringed	- 00	Cocaro	1000000.0	100000.0
Platanthera grandiflora	Orchid	S3	Secure	4998722.0	484481.0
Platanthera hookeri	Hooker's Orchid	S4	Secure	4999650.5	483858.8
Ranunculus gmelinii	Gmelin's Water Buttercup	S3	Secure	5004958.7	479282.6
Ranunculus gmelinii	Gmelin's Water Buttercup	S4	Secure	5004866.2	479407.3
Ranunculus gmelinii	Gmelin's Water Buttercup	S3	Secure	5004791.5	479485.9
Ranunculus gmelinii	Gmelin's Water Buttercup Gmelin's Water Buttercup	S3 S4	Secure	5004791.5 5004787.8	479486.0
Ranunculus gmelinii		S4 S3	Secure	5004787.8 5000530.0	479488.3
Ranunculus gmelinii Ranunculus gmelinii	Gmelin's Water Buttercup Gmelin's Water Buttercup	S3	Secure Secure	5000530.0 5000500.8	482814.0 482814.8
9					
Rhamnus alnifolia	Alder-leaved Buckthorn	S3 S2S3	Sensitive	5002770.7	480792.9 479675.4
Spiranthes ochroleuca	Yellow Ladies'-tresses Yellow Ladies'-tresses	S2S3 S2S3	Sensitive	5005006.1 5005017.8	479675.4 479676.6
Spiranthes ochroleuca Spiranthes ochroleuca			Sensitive		
	Yellow Ladies'-tresses Yellow Ladies'-tresses	\$2\$3 \$2\$3	Sensitive Sensitive	5004348.9 4999854.7	479829.7 485505.0
Spiranthes ochroleuca Spiranthes ochroleuca		\$2\$3 \$2\$3		4999876.2	
	Yellow Ladies'-tresses		Sensitive		485507.5
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999865.8	485509.2
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999869.9	485512.8
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999847.8	485512.9
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3 S2S3	Sensitive	4999833.7	485514.2
Spiranthes ochroleuca	Yellow Ladies'-tresses		Sensitive	4999841.9	485514.4
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999868.8	485515.8
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999813.9	485519.8
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999845.8	485520.3
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999867.7	485521.2

Table C6 Locations of plant species of conservation concern encountered within the Proposed Corridor during 2007-2008 field surveys

		ACCDC S-	NSDNR		
Scientific Name	Common Name	Rank	Rank	Northing	Easting
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999872.7	485526.9
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999496.8	485527.3
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999503.8	485528.1
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999503.3	485529.1
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999871.8	485529.2
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999494.6	485533.3
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999773.9	485535.3
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999727.4	485546.5
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999512.3	485547.4
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999519.1	485549.5
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999512.8	485551.0
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999497.5	485552.4
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999508.8	485552.6
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999520.4	485554.7
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999525.8	485556.3
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999645.2	485556.3
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999646.9	485558.4
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999511.2	485558.8
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999568.5	485563.0
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999503.5	485565.8
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999506.0	485566.1
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999532.1	485567.9
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999503.4	485568.0
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999498.7	485568.3
Spiranthes ochroleuca	Yellow Ladies'-tresses	S2S3	Sensitive	4999496.1	485570.0
Verbena hastata	Blue Vervain	S3	Secure	5004679.7	479661.3
Verbena hastata	Blue Vervain	S3	Secure	5004684.2	479697.0

Scientific Name	Common Name	Habitat	Flowering Season	Likely our		NSDNR Rank	NSDNR Rank	COSEWIC	NS ESA	Distance
				Unlikely to Occur on	Rank		(New)		Rank	Recorded from Site
				Site?						Hom Site
Erioderma pedicellatum (Atlantic	Boreal Felt Lichen (Atlantic pop.)	Generally, most habitats are found on northerly	-	Unlikely	S1S2	RED	1 At Risk	Endangered	Endangered	100 ±1
pop.)		exposed slopes where cool and moist habitat								
Daniela danie	Object Author Lieber	conditions prevail, throughout much of the year.		I I a l'I a la c	0000		0.0	0	_	40 . 0
Pseudevernia cladonia	Ghost Antler Lichen	Occurs on twigs of conifers in cool montane and coastal spruce-fir forests in eastern North America.		Unlikely	S2S3	-	3 Sensitive	Special Concern	-	40 ±0
		It is very patchily distributed in New Brunswick and						Concern		
		Nova Scotia, probably owing to dispersal limitations.								
Isoetes prototypus	Prototype Quillwort	Deep water in nutrient poor, acidic lakes.	Summer. Megaspores required for	Unlikely	S2	RED	3 Sensitive	Special	Vulnerable	54 ±0.1
			identification.					Concern		
Clethra alnifolia	Coastal Sweet Pepperbush	The shores of lake headwaters, swamps, damp thickets, and sandy woods.	Late September to October	Unlikely	S1	YELLOW	3 Sensitive	Special Concern	Vulnerable	65 ±0.1
Lilaeopsis chinensis	Eastern Lilaeopsis	Muddy and rocky tidal banks, in estuaries.	July and August	Unlikely	S2	YELLOW	3 Sensitive	Special	Vulnerable	81 ±0
		maday and roony take same, in collection	Januariagasi	J		. ====		Concern		0.10
Floerkea proserpinacoides	False Mermaidweed	Deciduous ravine slopes, river margins, and intervale forests.	Late May to late June. Can be identified when not in flower.	Possible	S2	YELLOW	3 Sensitive	Not at Risk	-	24 ±10
Osmorhiza depauperata	Blunt Sweet Cicely	Moist woods and clearings.	Late June and July	Possible	S1	GREEN	2 May Be At Risk	-	-	90 ±5
Chamaesyce polygonifolia	Seaside Spurge			Unlikely	S2	GREEN	4 Secure	-	-	96 ±1
Ranunculus flammula var. flammula	Lesser Spearwort	Semi-aquatic, in bogs and cold streams.	July to September.	Possible	S2	GREEN	3 Sensitive	-	-	24 ±10
Asclepias incarnata ssp. pulchra	Swamp Milkweed	Swamps, thickets and on shores.	Flowers in early August	Possible	S2S3	GREEN	5 Undetermined	-	-	100 ±1
Suaeda calceoliformis	Horned Sea-blite	Saline or alkaline flats and marshes.	Not given for NS	Unlikely	S2S3	GREEN	4 Secure	-	-	62 ±10
Sanicula odorata	Clustered Sanicle	Rich , alluvial woods and along intervales.	July to August	Possible	S1	RED	2 May Be At Risk	-	-	25 ±10
Antennaria parlinii	Parlin's Pussytoes	Dry pine and oak forest, pastures, old fields, and rocky banks.	June and July	Possible	S1	RED	2 May Be At Risk	-	-	37 ±10
Cynoglossum virginianum var. boreale	Wild Comfrey	Open beech woods, on dryish soils or on gypsum. Woods and thickets.	May and June	Unlikely	S1	RED	2 May Be At Risk	-	-	67 ±1
Cardamine maxima	Large Toothwort	Rich most often calcareous moist rocky slopes and deciduous woods.	May but identifiable at least into June and July	Unlikely	S1	RED	2 May Be At Risk	-	-	98 ±0
Cochlearia tridactylites	Limestone Scurvy-grass	Calcareous or brackish soils, Halophytic, known only from a few Atlantic coast islands.	Flowers in Summer,	Unlikely	S1	RED	2 May Be At Risk	-	-	87 ±10
Draba glabella	Rock Whitlow-Grass	Crevices in rock cliffs, ledges and talus slopes, known fom a dry sand and gravel spit in NB.	June and July but can be identified year round above snow	Unlikely	S1	RED	2 May Be At Risk	-	-	100 ±10
Lobelia spicata	Pale-Spiked Lobelia	Dry fields.	Not given for NS.	Unlikely	S1	RED	2 May Be At Risk	-	-	36 ±10
Helianthemum canadense	Long-branched Frostweed	Sand barrens.	June to early July	Unlikely	S1	RED	2 May Be At Risk	-	Endangered	71 ±1
Hudsonia tomentosa	Woolly Beach-heath	Sandy dunes and shores.	Flowers May to June. Identifiable year round	Unlikely	S1	RED	2 May Be At Risk	-	-	76 ±10
Hypericum majus	Large St. John's-wort	Wet or dry open soil.	July to September	Unlikely	S1	RED	2 May Be At Risk	-	-	62 ±10
Cuscuta cephalanthi	Buttonbush Dodder	Low-lying ground near seashore, often parasitic on Asters.	August and September	Unlikely	S1	RED	2 May Be At Risk	-	-	66 ±1
Desmodium canadense	Canada Tick-trefoil	Typically around river banks and exposed adjacent flood plain area including open woods and thickets.	Late July(August) to early September, can be identified when not in flower.	Possible	S1	RED	2 May Be At Risk	-	-	23 ±5
Desmodium glutinosum	Large Tick-Trefoil	Rich deciduous woods or intervales.	June and July	Possible	S1	RED	2 May Be At Risk	-	-	59 ±0
Fraxinus pennsylvanica	Red Ash	Near lakes or ponds, or in other low-lying areas.	Flowers in May	Unlikely	S1	RED	2 May Be At Risk	-	-	57 ±0.5
Montia fontana	Water Blinks	Springy or seepy slopes, wet shores and brackish spots, coastal.	Flowers June to September when most noticable	Unlikely	S1	RED	2 May Be At Risk	-	-	66 ±1
Ranunculus pensylvanicus	Pennsylvania Buttercup	Typically in Rich damp alluvial areas or in rich seepage areas in more open conditions, a relatively recent addition to NS flora but widespread in NB.	late June-August	Possible	S1	RED	2 May Be At Risk	-	-	63 ±0
Amelanchier nantucketensis	Nantucket Serviceberry	Pine barrens, pond margins, fields, edges, and thickets. Old fields /roadsides.	May	Unlikely	S1	RED	2 May Be At Risk	-	-	90 ±1

Scientific Name	Common Name	Habitat	Flowering Season	Likely our Unlikely to Occur on		NSDNR Rank	NSDNR Rank (New)	COSEWIC	NS ESA Rank	Distance Recorded from Site
Dirca palustris	Eastern Leatherwood	Rich deciduous or mixed woods.	On or about May 20, appearing before the	Site? Unlikely	S1	RED	2 May Be At Risk	-	-	18 ±10
Pilea pumila	Dwarf Clearweed	Moist rich deciduous or mixed woods along streams to often intermittant water courses, seepage slopes rich calcareous basin marsh/swaps with summer draw down.		Unlikely	S1	RED	2 May Be At Risk	-	-	12 ±0
Carex garberi	Garber's Sedge	Moist shores and meadows on calcareous soils.	Seeds (perigynia) required for identification. Can be identified from June through September.	Unlikely	S1	RED	2 May Be At Risk	-	-	32 ±0
Carex haydenii	Hayden's Sedge	Swamps.	July to September	Possible	S1	RED	2 May Be At Risk	-	-	25 ±1
Carex pellita	Woolly Sedge	Swamps and bogs, often in wooded areas.	May to July	Possible	S1	RED	2 May Be At Risk	-	-	24 ±10
Carex livida var. radicaulis	Livid Sedge	Calcareous bogs and meadows.	Seeds (perigynia) required for identification. Can be identified from June through September.	Unlikely	S1	RED	2 May Be At Risk		-	74 ±10
Carex plantaginea	Plantain-Leaved Sedge	Dry, hardwood hillsides.	April to June	Unlikely	S1	RED	2 May Be At Risk	-	-	26 ±0.1
Carex tuckermanii	Tuckerman's Sedge	Swale.	June to August	Unlikely	S1	RED	2 May Be At Risk	-	-	59 ±0
Iris prismatica	Slender Blue Flag	Wet ground near the coast.	Mid-July.	Unlikely	S1	RED	2 May Be At Risk	-	-	94 ±10
Allium tricoccum	Wild Leek	Rich deciduous forests and intervales.	Late July	Unlikely	S1	RED	2 May Be At Risk	-	-	37 ±0.1
Cypripedium arietinum	Ram's-Head Lady's-Slipper	The rough country of gypsum sinkholes.	Late May	Unlikely	S1	RED	2 May Be At Risk	-	Endangered	64 ±0.5
Malaxis brachypoda	White Adder's-Mouth	Moss cushions and wet, mossy cliff-edges, where there is little competition from other plant species.	Late May and June.	Unlikely	S1	RED	2 May Be At Risk	-	-	70 ±1
Spiranthes casei var. casei	Case's Ladies'-Tresses	Acid, sandy soils, roadsides and open barrens.	September	Unlikely	S1	RED	2 May Be At Risk	-	-	98 ±0.1
Bromus latiglumis	Broad-Glumed Brome	Rich soils along Rivers.	recently described from NS	Possible	S1	RED	2 May Be At Risk	-	-	81 ±0
Elymus wiegandii	Wiegand's Wild Rye	Rich streambanks and meadows.	Flowers July and August, not readily noticable untill bloom	Possible	S1	RED	2 May Be At Risk	-	-	58 ±0
Elymus hystrix var. bigeloviana	Spreading Wild Rye	Rich deciduous woodland, wooded bottomlands.	Flowers June to August, not readily noticable untill bloom	Unlikely	S1	RED	2 May Be At Risk	-	-	9 ±10
Festuca subverticillata	Nodding Fescue	Rich deciduous forested slopes and alluvial woods.	June and July (early)	Unlikely	S1	RED	2 May Be At Risk	-	-	31 ±5
Adiantum pedatum	Northern Maidenhair Fern	In fertile or quite alkaline soils. Under oak-birch- sugar maple-elm trees on intervales.	Summer	Unlikely	S1	RED	2 May Be At Risk	-	-	25 ±1
Cryptogramma stelleri	Steller's Rockbrake	Shaded limestone cliffs, and shaded crevices in conglomerate cliff-face.	Late May to September. Can be identified when sporangia are not present.	Unlikely	S1	RED	2 May Be At Risk	-	-	61 ±0
Botrychium lunaria	Common Moonwort	Open, turfy or gravelly slopes, shores, and meadows. Usually on basic soils.	June to August	Unlikely	S1	RED	2 May Be At Risk	-	-	58 ±5
Solidago hispida	Hairy Goldenrod	Woods and forest edges.	Summer and fall	Possible	S1?	RED	2 May Be At Risk	-	-	53 ±10
Chenopodium rubrum	Red Pigweed	Salt marshes, seashores, and saline soils.	August to November	Unlikely	S1?	RED		-	-	69 ±10
Suaeda rolandii	Roland's Sea-Blite	Salt marshes and saline shores.	September	Unlikely	S1?	RED	2 May Be At Risk	-	-	77 ±10
Arabis hirsuta var. pycnocarpa	Western Hairy Rockcress	Dry cliffs, crevices, ledges, talus slopes, and gravels.	May and June	Unlikely	S1S2	RED	2 May Be At Risk	-	-	72 ±0.1
Conopholis americana	American Cancer-root	Associated with oaks and other decidous trees.	April to July	Unlikely	S1S2	RED	2 May Be At Risk	-	-	98 ±1
Hepatica nobilis var. obtusa	Round-lobed Hepatica	Dry, usually mixed deciduous forest.	Early May	Possible	S1S2	RED	2 May Be At Risk	-	-	6 ±10
Ranunculus sceleratus	Cursed Buttercup	Marshes, ditches, swampy meadows.	Not given for NS	Possible	S1S2	RED	2 May Be At Risk	-	-	64 ±1
Thuja occidentalis	Eastern White Cedar	Lakesides and swamps or old pastures.	Can be identified throughout the year	Unlikely	S1S2	RED	1 At Risk	-	Vulnerable	23 ±0.5
Carex bebbii	Bebb's Sedge	Northern alkaline regions in poorly drained soils.	June to August	Unlikely	S1S2	RED	2 May Be At Risk	-	-	64 ±0
Juncus greenei	Greene's Rush	Coastal sandy soils and dune hollows.	June to September	Unlikely	S1S2	RED	2 May Be At Risk	-	-	64 ±10
Caulophyllum thalictroides	Blue Cohosh	Deciduous and intervale forest.	April to early June, can be identified when not in flower	Possible	S2	RED	2 May Be At Risk	-	-	18 ±10
Vaccinium boreale	Northern Blueberry	Exposed headlands and barrens, has been found by JW teams in drier open bog near Moose River Gold Mines.		Unlikely	S2	RED	2 May Be At Risk	-	-	51 ±10

Scientific Name	Common Name	Habitat	Flowering Season	Likely our	ACCDC	NSDNR Rank	NSDNR Rank	COSEWIC	NS ESA	Distance
				Unlikely to Occur on Site?	Rank		(New)		Rank	Recorded from Site
Galium boreale	Northern Bedstraw	The edges of woods and in grassy places, such as pastures.	Flowers June to August	Unlikely	S2	RED	2 May Be At Risk	-	-	100 ±10
Saxifraga paniculata ssp. neogaea	White Mountain Saxifrage	Pockets in cliffs, mossy hillsides, dripping cliffs, and limestone ledges	•	Unlikely	S2	RED	3 Sensitive	-	-	87 ±10
Carex castanea	Chestnut Sedge	Swamps and wet meadows, cliff crevices and ledges.	Not given for NS, Summer. Seeds (perigynia) required for identification	Unlikely	S2	RED	2 May Be At Risk	-	-	56 ±0
Carex hystericina	Porcupine Sedge	Swamps, swales, and along brooks.	June to October	Possible	S2	RED	2 May Be At Risk	-	-	63 ±1
Vallisneria americana	Wild Celery	Quiet waters.	Flowers July to October	Possible	S2	RED	2 May Be At Risk	-	-	10 ±1
Cypripedium reginae	Showy Lady's-Slipper	Alkaline swamps and bogs.	Flowers June through August., Can be identified some weeks prior to bloom and at least to early October.	Unlikely	S2	RED	2 May Be At Risk	-	-	14 ±10
Goodyera pubescens	Downy Rattlesnake-Plantain	Woodland and thickets. Usually found in dry or moist coniferous or mixed woods, often in a sandy substrate with oak or white pine.	July and August	Possible	S2	RED	2 May Be At Risk	-	-	20 ±1
Listera australis	Southern Twayblade	Among the shaded sphagnum moss of bogs or damp woods.	June. Quickly senesces after flowering.	Unlikely	S2	RED	2 May Be At Risk	-	-	40 ±0.1
Spiranthes lucida	Shining Ladies'-Tresses	Alluvial soils and rocky shores. Thickets and meadows.	Flowers early July	Possible	S2	RED	2 May Be At Risk	-	-	20 ±1
Carex peckii	Peck's Sedge	Treated as varients of C. nigromargiata in the N.S. Flora. With C. nigromarginata claimed as abundant in Yarmouth and Shelburne Co.'s and scattered northwards despite the paucity of herbarium collections, and habitats characterized as dry to moist acidic soils, even drier knolls amid sphagnum bogs. In NB the species is known as C. peckii and is recorded as common on rocky slopes, clearings and dry woods, often on calcareous soils.	Late March to May	Unlikely	S2?	RED	2 May Be At Risk	-	-	26 ±0.5
Carex laxiflora var. laxiflora	Loose-Flowered Sedge	Fens, calcareous coastal heaths, bogs.	Summer	Unlikely	S1	UNDETERMINED	2 May Be At Risk	-	-	91 ±1
Scirpus pedicellatus	Stalked Bulrush	Lowland marshes in stream valleys, edges of bogs, boggy meadows, and wet sandy shorelines.	Mid or late July		S1	UNDETERMINED	5 Undetermined	-	-	20 ±1
Juncus vaseyi	Vasey's Rush	Damp shores, thickets, etc. (Open wetland, not coastal nor rivershore, non-forested, wetland).	July to August	Unlikely	S1		2 May Be At Risk	-	-	84 ±10
Potamogeton nodosus	Long-leaved Pondweed	Ponds and streams.	August and September	Unlikely	S1	UNDETERMINED	2 May Be At Risk	-	-	98 ±5
Najas gracillima	Thread-Like Naiad	Muddy, peaty, or sandy ponds, pools, and shores.	Flowers July to October	Unlikely	S1S2	UNDETERMINED	2 May Be At Risk	-	-	60 ±0.1
Iva frutescens	Big-leaved Marsh-elder	Roadside embankments and salt marshes, always near the seashore.	August to September	Unlikely	S2	UNDETERMINED		-	-	82 ±0
Iva frutescens ssp. oraria	Big-leaved Marsh-elder	Roadside embankments and salt marshes, always near the seashore.	August to September	Unlikely	S2	UNDETERMINED		-	-	81 ±1
Lactuca hirsuta var. sanguinea	Hairy Lettuce	Dry open woods and cut-over areas.	July to September	Possible	S2	UNDETERMINED	3 Sensitive	-	-	46 ±10
Allium schoenoprasum var. sibiricum	Wild Chives	Wet lowlands near the sea.	Flowers late June and July	Unlikely	S2		2 May Be At Risk	-	-	25 ±10
Potamogeton friesii	Fries' Pondweed	Quiet waters of ponds and streams.	Flowers July and September	Possible	S2	UNDETERMINED	2 May Be At Risk	-		24 ±10
Juncus subcaudatus	Woodland Rush	Wet boggy woods and openings in spruce swamps.	Flowers July to October	Possible	S3	UNDETERMINED		-	-	100 ±10
Potamogeton praelongus	White-stemmed Pondweed	Usually in deep water.	Flowers June and July, rarely found fruiting	Unlikely	S3?	UNDETERMINED	3 Sensitive	-	-	100 ±1
Potamogeton richardsonii	Richardson's Pondweed	Lakes and rivers, in brackish or alkaline waters.	Flowers July to September	Unlikely	S3?	UNDETERMINED	2 May Be At Risk	-	-	92 ±5
Zizia aurea	Golden Alexanders	Meadows, shores, damp thickets, and wet woods. Sometimes on roadsides.	May and June	Possible	S1	YELLOW	2 May Be At Risk	-	-	22 ±1
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Bidens hyperborea	Estuary Beggarticks	Esturarine, on tidal mudflats.	August	Unlikely	S1	YELLOW	2 May Be At Risk	-	-	81 ±0

Scientific Name	Common Name	Habitat	Flowering Season	Likely our	ACCDC	NSDNR Rank	NSDNR Rank	COSEWIC	NS ESA	Distance
				Unlikely to Occur on Site?	Rank		(New)		Rank	Recorded from Site
Gratiola neglecta	Clammy Hedge-Hyssop	Usually in wet or muddy places.	May to October (fruit in August)	Possible	S1S2	YELLOW	3 Sensitive	-	-	10 ±0.1
Carex tenera	Tender Sedge	Meadows, woodlands, and moist, dry openings.	Late May to August	Possible	S1S2	YELLOW	3 Sensitive	-	-	50 ±5
Calamagrostis stricta var. stricta	Slim-stemmed Reed Grass	Around lakes and bogs, wet cliff faces, and landward edges of saltmarshes.	Flowering time not given, summer	Unlikely	S1S2	YELLOW	3 Sensitive	-	-	89 ±10
Conioselinum chinense	Chinese Hemlock-parsley	Swamps, mossy coniferous woods or swales, and seepy slopes near the coast.	August to October	Unlikely	S2	YELLOW	3 Sensitive	-	-	40 ±0.1
Osmorhiza longistylis	Smooth Sweet Cicely	Rich deciduous forests, intervales.	Flowers late June to July.	Unlikely	S2	YELLOW	2 May Be At Risk	-	-	57 ±0
Erigeron philadelphicus	Philadelphia Fleabane	Old fields, meadows, and springy slopes.	Flowers June to August	Unlikely	S2	YELLOW	3 Sensitive	-	-	22 ±1
Hieracium robinsonii	Robinson's Hawkweed	Rock crevices and cliffs, cobble shores, and along streams.	Flowers July and August	Unlikely	S2	YELLOW	3 Sensitive	-	-	22 ±1
Rudbeckia laciniata	Cut-Leaved Coneflower	Swales, the edges of swamps, or in gullies - in small colonies.	August, can be identified when not in flower.	Possible	S2	YELLOW	3 Sensitive	-	-	32 ±0
Rudbeckia laciniata var. gaspereauensis	Cut-Leaved Coneflower	Swales, the edges of swamps, or in gullies - in small colonies.		Possible	S2	YELLOW	5 Undetermined	-	-	28 ±10
Senecio pseudoarnica	Seabeach Ragwort	Gravelly to somewhat sandy sea beaches.	Late July to August	Unlikely	S2	YELLOW	3 Sensitive	-	-	25 ±10
Symphyotrichum undulatum	Wavy-leaved Aster	Old fields and the edges of thickets.	August and September	Possible	S2	YELLOW	3 Sensitive	-		59 ±10
Impatiens pallida	Pale Jewelweed	Rich alluvial soils, damp thickets, and along intervales.	July and August.	Unlikely	S2	YELLOW	3 Sensitive	-	-	87 ±1
Betula michauxii	Newfoundland Dwarf Birch	Peat and sphagnous bogs.	June and July (later than most birches), can be identified when not in flower.	Unlikely	S2	YELLOW	3 Sensitive	-	-	28 ±0.5
Arabis drummondii	Drummond's Rockcress	Usually on dry slopes and talus, but occassionally in more fertile locations at lower elevations.	May to July	Unlikely	S2	YELLOW	3 Sensitive	-	-	54 ±1
Cardamine parviflora var. arenicola	Small-flowered Bittercress	Dry woods, shaded or exposed ledges, and in sandy soils.	April to August	Unlikely	S2	YELLOW	3 Sensitive	-	-	88 ±1
Draba arabisans	Rock Whitlow-Grass	Muddy soils or on calcareous rocks, in cliff crevices and ledges.		Unlikely	S2	YELLOW	3 Sensitive	-	-	87 ±1
Minuartia groenlandica	Greenland Stitchwort	Granitic ledges and gravel, on coasts at higher elevations.	June to August	Unlikely	S2	YELLOW	3 Sensitive	-	-	30 ±0.1
Stellaria humifusa	Saltmarsh Starwort	Around salt marshes.	Flowers June to August	Unlikely	S2	YELLOW	3 Sensitive	-	-	47 ±0.1
Hudsonia ericoides	Pinebarren Golden Heather	Dry, rocky, and sandy barrens. Recently disturbed areas or on open sandy soils.	Late May to early July	Unlikely	S2	YELLOW	3 Sensitive	-	-	62 ±10
Triosteum aurantiacum	Coffee Tinker's-Weed	Rich soils of river intervales, or rich forest on limestone.	Flowers in July but identifiable from at least June to October	Unlikely	S2	YELLOW	3 Sensitive	-	-	24 ±10
Crassula aquatica	Water Pygmyweed	Brackish, muddy shores and sandy flats. The borders of muddy ponds near the coast.	July to September	Unlikely	S2	YELLOW	3 Sensitive	-	-	92 ±0.1
Shepherdia canadensis	Soapberry	Gypsum or talus slopes and along the coast within reach of salt spray.	April to June. Can be identified when not in flower.	Unlikely	S2	YELLOW	3 Sensitive	-	-	63 ±10
Vaccinium caespitosum	Dwarf Bilberry	Rocky cliffs and rock crevices. Dry or wet acidic sites.	Not given for NS. Likely identifiable in early summer on to October	Unlikely	S2	YELLOW	3 Sensitive	-	-	23 ±1
Vaccinium uliginosum	Alpine Bilberry	Cool coastal bogs and on subalpine summits. Dry or wet organic and inorganic soils, tolerant of high copper concentrations.	Not given for NS. Likely identifiable from early summer to October	Unlikely	S2	YELLOW	3 Sensitive	-	-	71 ±10
Myriophyllum farwellii	Farwell's Water Milfoil	Ponds and slow-moving streams.	Flowers June to September	Unlikely	S2	YELLOW	3 Sensitive	-	-	9 ±10
Myriophyllum verticillatum	Whorled Water Milfoil	Shallow waters, mainly in fine, muddy, sediment, or calcareous regions.	Flowers late June to September	Unlikely	S2	YELLOW	3 Sensitive	-	-	47 ±10
Polygonum arifolium	Halberd-leaved Tearthumb	Rich alluvial thickets and swamps.	Likely mid July to October but this annual is detectable with or without flowers	Possible	S2	YELLOW	3 Sensitive	-	-	69 ±0.1
Polygonum scandens	Climbing False Buckwheat	Low alluvial thickets along river intervales.	Flowers late August to October. Lacks ocrea without ring of bristles like P. convolvulus, fruit best for ID	Possible	S2	YELLOW	3 Sensitive	-	-	25 ±10
Rumex salicifolius var. mexicanus	Triangular-valve Dock	Beaches or along rivers.	Not Given, Summer	Unlikely	S2	YELLOW	3 Sensitive	-	-	100 ±0.1
Primula mistassinica	Mistassini Primrose	Springy stream banks and dripping ledges.	Flowers May to August	Unlikely	S2	YELLOW	3 Sensitive	-	-	20 ±1

Scientific Name	Common Name	Habitat	Flowering Season	Likely our Unlikely to		NSDNR Rank	NSDNR Rank	COSEWIC	NS ESA Rank	Distance Recorded
				Occur on Site?	Kalik		(New)		Ralik	from Site
Samolus valerandi ssp. parviflorus	Seaside Brookweed	Brackish meadows, tidal banks and the edge of salt marshes.	July to September.	Unlikely	S2	YELLOW	3 Sensitive	-	-	75 ±0
Anemone canadensis	Canada Anemone	Damp thickets, meadows and gravelly shores, on calacareous or alluvial soils.	May to July.	Unlikely	S2	YELLOW	2 May Be At Risk	-	•	63 ±10
Anemone quinquefolia	Wood Anemone	Wooded riverbanks and shaded intervales.	Late May to early June.	Possible	S2	YELLOW	3 Sensitive	-	-	9 ±10
Anemone virginiana	Virginia Anemone	Intervales and stream sides. Calcareous and slaty ledges, shores and thickets.	Early July.	Unlikely	S2	YELLOW	3 Sensitive	-	-	22 ±10
Anemone virginiana var. virginiana	Virginia Anemone	Intervales and streamsides. Calcareous and slaty ledges, shores and thickets.	Early July.	Unlikely	S2	YELLOW	3 Sensitive	-	-	16 ±10
Caltha palustris	Yellow Marsh Marigold	Relatively rich swamps wet meadows and wet woods. In damp seepage areas and along creeks.	Flowers in early June but can be identified fro early May to late October	Unlikely	S2	YELLOW	3 Sensitive	-	-	81 ±0.1
Salix pedicellaris	Bog Willow	Acid bogs and sphagnous lake shores.	May to July.	Unlikely	S2	YELLOW	3 Sensitive	-	-	17 ±0
Salix sericea	Silky Willow	Low thickets and stream banks.	Late March to early May	Unlikely	S2	YELLOW	2 May Be At Risk	-	-	37 ±1
Tiarella cordifolia	Heart-leaved Foamflower	Rich deciduous and mixed woodsa.	Flowers mid -May to mid-June. Identifiable year round	Unlikely	S2	YELLOW	3 Sensitive	-	-	9 ±10
Viola nephrophylla	Northern Bog Violet	Cool mossy bogs, the borders of streams, and damp woods.	May to July.	Possible	S2	YELLOW	3 Sensitive	-	1	22 ±1
Carex atratiformis	Scabrous Black Sedge	Along riverbanks, moist cliffs, and associated rock crevices.	Summer	Unlikely	S2	YELLOW	3 Sensitive	-	-	86 ±1
Carex comosa	Bearded Sedge	Swamps and shallow water.	June to August	Possible	S2	YELLOW	3 Sensitive	-	-	30 ±0.1
Eleocharis olivacea	Yellow Spikerush	Peaty muck of bogs, wet sandy shores, and swales.	June to October. Mature achenes required for identification.	Unlikely	S2	YELLOW	3 Sensitive	-	-	53 ±10
Eriophorum gracile	Slender Cottongrass	Wet peat and inundated shores.	Flowers and fruits early summer	Unlikely	S2	YELLOW	3 Sensitive	-	•	100 ±0.1
Cypripedium parviflorum var. pubescens	Yellow Lady's-slipper	Rich calcareous woodlands, also in drier sections of seepage fed wetlands or old beaver pond woodland.		Unlikely	S2	YELLOW	3 Sensitive	-	-	44 ±1
Cypripedium parviflorum var. makasin	Yellow Lady's-slipper	Calcareous rocky river banks.	Flowers in June. Plant identifiable from late May to October	Unlikely	S2	YELLOW	3 Sensitive	-	-	70 ±0.1
Platanthera flava var. flava	Tubercled Orchid	Sand or gravelly beaches, wet peat, and lake or river margins. Bogs, swamps, and meadows.	May to August.	Unlikely	S2	YELLOW	3 Sensitive	-	1	87 ±10
Platanthera macrophylla	Large Round-Leaved Orchid	Rich old deciduous or mixed woods.	August	Unlikely	S2	YELLOW	3 Sensitive	-	•	35 ±1
Piptatherum canadense	Canada Rice Grass	Dry sandy soils.	Not provided	Possible	S2	YELLOW	3 Sensitive	-	-	31 ±0.5
Asplenium trichomanes	Maidenhair Spleenwort	Damp shaded cliffs, and talus slopes. Acidic rock such as granite, basalt and sandstone.	Can be identified without sprangia.	Unlikely	S2	YELLOW	3 Sensitive	-	-	86 ±0.1
Asplenium trichomanes-ramosum	Green Spleenwort	Shaded cliffs along streams, on limestone or other basic rocks.	Can be identified without sprangia.	Unlikely	S2	YELLOW	3 Sensitive	-	-	58 ±10
Dryopteris fragrans var. remotiuscula	Fragrant Wood Fern	Dry, overhanging cliffs, and in cliff crevices along streams or near waterfalls.	June to September. Can be identified without sporangia.	Unlikely	S2	YELLOW	3 Sensitive	-	-	34 ±10
Woodsia glabella	Smooth Cliff Fern	Shaded vertical cliffs, and along streams in northern Cape Breton.	Spores form June to August. Can be identified without sporangia.	Unlikely	S2	YELLOW	3 Sensitive	-	-	44 ±10
Equisetum pratense	Meadow Horsetail	Open woods and wet meadows, usually in circumneutral soils.	Identifiable throughout the growing season	Unlikely	S2	YELLOW	3 Sensitive	-	-	12 ±0
Symphyotrichum boreale	Boreal Aster	Gravelly soil of lake beaches, along streams and the edges of bogs.	August and September	Unlikely	S2?	YELLOW	3 Sensitive	-	-	25 ±10
Epilobium coloratum	Purple-veined Willowherb	Low-lying ground, springy slopes and similar locations.	July and October. Seeds required for identification.	Possible	S2?	YELLOW	3 Sensitive	-	-	47 ±0.1
Carex houghtoniana	Houghton's Sedge	Sandy soils and roadside banks.	Seeds (perigynia) required for identification. Can be identified from May through September.	Possible	S2?	YELLOW	3 Sensitive	-	-	7 ±5
Eleocharis ovata	Ovate Spikerush	Muddy shores and ditches.	Flowers/Fruit May to October	Unlikely	S2?	YELLOW	3 Sensitive	-	-	100 ±0.5
Juncus dudleyi	Dudley's Rush	Marshy ground.	June to September	Unlikely	S2?	YELLOW	3 Sensitive	-	-	100 ±0

Scientific Name	Common Name	Habitat	Flowering Season	Likely our Unlikely to Occur on Site?		NSDNR Rank	NSDNR Rank (New)	COSEWIC	NS ESA Rank	Distance Recorded from Site
Dichanthelium linearifolium	Narrow-leaved Panic Grass	Dry sandy soils.	July to October.	Possible	S2?	YELLOW	3 Sensitive	-	-	62 ±10
Symphyotrichum ciliolatum	Fringed Blue Aster	Open fields, lawns and the edges of woods.	August and September	Unlikely	S2S3	YELLOW	3 Sensitive	-	-	10 ±1
Hypericum dissimulatum	Disguised St John's-wort	On shores and damp open areas.	Not provided	Unlikely	S2S3	YELLOW	3 Sensitive	-	-	52 ±0.5
Empetrum eamesii ssp. atropurpureum	Pink Crowberry	Exposed sand dunes, infrequently around bogs, and occasionally in rocky habitat.	July to November	Unlikely	S2S3	YELLOW	3 Sensitive	-	-	72 ±0.5
Empetrum eamesii ssp. eamesii	Pink Crowberry	Exposed often coastal headlands and on shallow soil rock outcrops.	July to September	Unlikely	S2S3	YELLOW	3 Sensitive	-	-	72 ±0.5
Halenia deflexa	Spurred Gentian	Bleak, exposed headlands.	July to September	Unlikely	S2S3	YELLOW	3 Sensitive	-	-	97 ±1
Hedeoma pulegioides	American False Pennyroyal	Stony till and upland pastures, throughout northern part of NS. Near seashores occasionally.	August	Unlikely	S2S3	YELLOW	3 Sensitive	-	-	25 ±5
Fraxinus nigra	Black Ash	Low ground, damp woods and swamps.	May and June. Can be identified without flowers.	Possible	S2S3	YELLOW	3 Sensitive	-	-	8 ±10
Polygala sanguinea	Blood Milkwort	Poor or acidic fields, damp slopes, and open woods or bush.	Late June to October.	Possible	S2S3	YELLOW	3 Sensitive	-	-	16 ±5
Carex adusta	Lesser Brown Sedge	Dry, open places. Rocky coastal, nonforested, upland.	June to September	Possible	S2S3	YELLOW	3 Sensitive	-	-	5 ±10
Carex hirtifolia	Pubescent Sedge	Calcareous regions, in meadows and thickets, forest slopes.	Seeds (perigynia) required for identification. Can be identified from May through September.	Unlikely	S2S3	YELLOW	3 Sensitive	-	-	11 ±10
Lilium canadense	Canada Lily	Rich river or stream intervale meadows and forest.	Flowers in July but identifiable from May to October	Possible	S2S3	YELLOW	3 Sensitive	-	-	9 ±10
Coeloglossum viride var. virescens	Long-bracted Frog Orchid	Boggy spots, damp mature woods, and fir or floodplain forests.	May to August	Unlikely	S2S3	YELLOW	2 May Be At Risk	-	-	52 ±0.1
Cypripedium parviflorum	Yellow Lady's-slipper	Most often associated with gypsum or open calcareous soils.	Flowers in June. Plant identifiable from late May to October	Unlikely	S2S3	YELLOW	3 Sensitive	-	-	100 ±1
Spiranthes ochroleuca	Yellow Ladies'-tresses	Characteristic of the driest sand barrens in southwestern counties. Also near rivers and in dry habitats such as roadsides and fields.	September to October	Possible	S2S3	YELLOW	3 Sensitive	-	-	44 ±1
Alopecurus aequalis	Short-awned Foxtail	Muddy margins of rivers and shallow ponds, and gravel margins where competitor species are few.	Summer	Unlikely	S2S3	YELLOW	3 Sensitive	-	-	100 ±0.5
Panicum tuckermanii	Tuckerman's Panic Grass	Floodplains, sandy shores (further west), cranberry bogs.	June to October	Unlikely	S2S3	YELLOW	3 Sensitive	-	-	58 ±0
Poa glauca	Glaucous Blue Grass	Cliff crevices, on shelves, and talus slopes.	July and August. Can be identified post flowering until early October.	Unlikely	S2S3	YELLOW	3 Sensitive	-	-	58 ±1
Potamogeton obtusifolius	Blunt-leaved Pondweed	Ponds, lakes, and slow-moving streams, often on a substrate of deep muck.	Flowers July to September	Unlikely	S2S3	YELLOW	3 Sensitive	-	-	74 ±0
Potamogeton zosteriformis	Flat-stemmed Pondweed	Lakes and deep rivers in less acid regions.	July to September. Can be identified when not in flower.	Possible	S2S3	YELLOW	3 Sensitive	-	-	10 ±5
Botrychium lanceolatum var. angustisegmentum	Triangle Moonwort	Rich, wooded hillsides.	July and August. Can be identified until early October if sporophore is present.	Possible	S2S3	YELLOW	3 Sensitive	-	-	52 ±1
Botrychium simplex	Spoon-Leaf Moonwort	Usually on lakeshores or the mossy edges of streams or waterfalls although it has been reported in a wide variety of habitats.	Late May and June	Unlikely	S2S3	YELLOW	3 Sensitive	-	-	52 ±0.1
Ophioglossum pusillum	Northern Adder's-tongue	Sterile meadows, grassy swamps, and damp, sandy, or cobbly beaches of lakes.	Late May to August. Can beidentified until early October if stipe and sporangia are present.	Unlikely	S2S3	YELLOW	3 Sensitive	-	-	51 ±10
Erigeron hyssopifolius	Hyssop-leaved Fleabane	Exposed gypsum outcrops, damp stream banks between flood levels, banks ledges and cliffs. Calcareous and low competition.	Flowers July and August but identifiable though less noticeable from May to October	Unlikely	S3	YELLOW	3 Sensitive	-	-	26 ±0.5
Megalodonta beckii	Water Beggarticks	Shallow, quiet waters, slow-moving streams, and ponds.	August and September	Unlikely	S3	YELLOW	3 Sensitive	-	-	10 ±10
Campanula aparinoides	Marsh Bellflower	Meadows, ditches and river banks.	August	Possible	S3	YELLOW	3 Sensitive	-	-	29 ±0.1

Scientific Name	Common Name	Habitat	Flowering Season	Likely our Unlikely to Occur on Site?		NSDNR Rank	NSDNR Rank (New)	COSEWIC	NS ESA Rank	Distance Recorded from Site
Stellaria longifolia	Long-leaved Starwort	Damp or wet grassy places, in sandy or mucky soils.	May to June	Possible	S3	YELLOW	3 Sensitive	-	-	10 ±0.5
Viburnum edule	Squashberry	In cold woods and along streams. Characteristic of climax coniferous forest.	May to early August.	Unlikely	S3	YELLOW	3 Sensitive	-	-	50 ±0
Empetrum eamesii	Pink Crowberry	Exposed headlands, on top of lichen-bearing rocks with thin soil. Found on the northern tip of Cape Breton and near Halifax.	July to November	Unlikely	S3	YELLOW	3 Sensitive	-	-	62 ±10
Teucrium canadense	Canada Germander	Gravelly seashores, generally at crest of beach, above direct tidal influence.	Flowers July to September when easiest to identify but identifiable from June to October	Unlikely	S3	YELLOW	3 Sensitive	-	-	47 ±5
Epilobium strictum	Downy Willowherb	Wet meadows, boggy swales and marshes.	July to September	Unlikely	S3	YELLOW	3 Sensitive	-	-	85 ±1
Rhamnus alnifolia	Alder-leaved Buckthorn	Calcareous bogs , swamps, swampy woods and meadows, marl bogs in rich aluvial soils.	Flowers mid -May to June. Identifiable from May to October and potentially year round.	Possible	S3	YELLOW	3 Sensitive	-	-	20 ±1
Geocaulon lividum	Northern Comandra	Sterile soils and damp sands, in acid or peaty locations, drier bog areas and mesic lichen barrens.	Late May to early August. Identifiable from May into October	Unlikely	S3	YELLOW	3 Sensitive	-	-	65 ±0.1
Limosella australis	Southern Mudwort	Low areas by ponds, gravel lakeshores, the muddy edges of ponds behind barrier beaches and muddy river margins.	Late June to October.	Possible	S3	YELLOW	3 Sensitive	-	-	46 ±5
Laportea canadensis	Canada Wood Nettle	Alluvial woods of mixed or deciduous trees. Floodplains on the Cape Breton plateau. Only in the most fertile locations.	July to September. Can be identified without flowers.	Unlikely	S3	YELLOW	3 Sensitive	-	-	12 ±0
Carex eburnea	Bristle-leaved Sedge	Cliffs and talus slopes, under conifers, particularly on Calcareous substrates.	Flowering time not given, summer	Unlikely	S3	YELLOW	3 Sensitive	-	-	22 ±0.1
Juncus marginatus	Grass-leaved Rush	Coastal sandy soils and dune hollows.	June to September.	Unlikely	S3	YELLOW	3 Sensitive	-	-	59 ±10
Goodyera repens	Lesser Rattlesnake-plantain	Under conifers, growing with very few other plants.	Flowers July and August	Possible	S3	YELLOW	3 Sensitive	-	-	72 ±0.1
Isoetes acadiensis	Acadian Quillwort	Water up to 1 m deep, bordering lakes or ponds, and occassionally along rivers.	Megaspores required for identification.	Unlikely	S3	YELLOW	3 Sensitive	-	-	49 ±1
Utricularia gibba	Humped Bladderwort	Shallow lake margins, small pools and small ponds in quagmires or peaty situations.	Late June to September. Can be identified without flowers, but is very cryptic.	Unlikely	S3S4	YELLOW	4 Secure	-	-	16 ±10
Platanthera flava	Tubercled Orchid	Sandy or gravelly beaches, wet peat, and lake or river margins. Bogs, swamps, and Meadows.	May to August	Unlikely	S2	YELLOW	3 Sensitive	-	-	37 ±10
Cuscuta pentagona	Five-angled Dodder	Parasitic on many herbaceous or woody plants on dry, open soil.	Flowers June to October		S1		5 Undetermined	-	-	90 ±1

Table C8 Mammal, Bi Scientific Name	rd, Fish and Herpertile Sp Common Name	ecies of Conservation Concerr	Recorded W	ithin 100 km	of the Alton Natu NSDNR Rank		orridor COSEWIC	NS ESA Rank	Distance
Scientific Name	Common Name	Habitat	Unlikely to Occur on Site?	Rank	NSDNK KANK	NSDNR Rank (New)	COSEWIC	NS ESA RANK	Recorded from Site
Sterna dougallii	Roseate Tern	Few islands off the Atlantic coast of Nova Scotia. Found in colonies.	Unlikely	S1B	RED	1 At Risk	Endangered	Endangered	54 ±1
Calidris canutus rufa	Red Knot rufa ssp	Breeds in drier tundra areas, such as sparsely vegetated hillsides. Outside of breeding season, it is found primarily in intertidal, marine habitats, especially near coastal inlets, estuaries, and bays.	Unlikely	S2S3M	YELLOW	1 At Risk	Endangered	Endangered	27 ±0.5
Fulica americana	American Coot	Lakes and ponds.	Unlikely	S1B	GREEN	5 Undetermined	Not at Risk	-	27 ±5
Aegolius funereus	Boreal Owl	Lives in boreal forests with spruce, aspen, poplar, birch, and	Unlikely	S1B	GREEN	5 Undetermined	Not at Risk	-	27 ±5
Sterna hirundo	Common Tern	balsam fir. Coastal and freshwater islands, coastal beaches and salt marshes.	Unlikely	S3B	YELLOW	3 Sensitive	Not at Risk	-	27 ±5
Sialia sialis	Eastern Bluebird	Open woodlands, clearings, farmlands, parks, orchards, gardens, fields, along roadsides on utility wires and fences.	Possible	S3B	YELLOW	3 Sensitive	Not at Risk	-	100 ±5
Accipiter gentilis	Northern Goshawk	Various forest types, especially mature forest	Possible	S3S4B	YELLOW	4 Secure	Not at Risk	-	8 ±5
Passerculus sandwichensis princeps	Savannah Sparrow princeps ssp		Unlikely	S1B	GREEN	3 Sensitive	Special Concern	=	66 ±0.1
Bucephala islandica (Eastern pop.)	Barrow's Goldeneye (Eastern pop.)	Breeds along lakes in parkland, especially alkaline lakes. Winters along rocky coasts.	Unlikely	S1N	YELLOW	1 At Risk	Special Concern	-	77 ±0.1
Asio flammeus	Short-eared Owl	Nests on the ground in open country. An open hayfield is often chosen as a nest site.	Unlikely	S1S2	YELLOW	2 May Be At Risk	Special Concern	-	76 ±10
Histrionicus histrionicus pop. 1	Harlequin Duck - Eastern pop.	Mountain streams and rivers, usually in forested regions; in winter, primarily turbulent coastal waters, especially in rocky regions.	Unlikely	S2N	YELLOW	1 At Risk	Special Concern	Endangered	79 ±10
Euphagus carolinus	Rusty Blackbird	Boreal forest; forest wetlands, such as slowmoving streams, peat bogs, sedge meadows, marshes, swamps, beaver ponds and pasture edges.	Unlikely	S2S3B	YELLOW	2 May Be At Risk	Special Concern	-	8 ±5
Falco peregrinus anatum	Peregrine Falcon anatum ssp	In North America they breed in open landscapes with cliffs (or skyscrapers) for nest sites.	Unlikely	S1B			Special Concern	Vulnerable	100 ±10
Caprimulgus vociferus	Whip-Poor-Will	Breeds in deciduous or mixed forests with little or no underbrush.	Unlikely	S1?B	GREEN	1 At Risk	Threatened	-	16 ±5
Sturnella magna	Eastern Meadowlark	Grasslands, pastures, and hayfields, as well as croplands, golf courses, and other open habitat.	Unlikely	S1B	GREEN	3 Sensitive	Threatened	-	77 ±5
Catharus bicknelli	Bicknell's Thrush	Breeds in montane fir and spruce forests, usually associated with recently disturbed areas.	Unlikely	S1S2B	YELLOW	1 At Risk	Threatened	Vulnerable	97 ±5
Dolichonyx oryzivorus	Bobolink	Fields with dense grass cover, particularly hay fields.	Unlikely	S3S4B	YELLOW	3 Sensitive	Threatened	-	5 ±5
Empidonax traillii	Willow Flycatcher	Breeds in moist, shrubby areas, often with standing or running water. Winters in shrubby clearings and early successional growth.	Possible	S2B	ACCIDENTAL	3 Sensitive	-	-	56 ±5
Toxostoma rufum	Brown Thrasher	Breeds in brushy open country, thickets, shelter belts, riparian areas, and suburbs.	Unlikely	S1?B	GREEN	5 Undetermined	-	-	62 ±5
Vireo gilvus	Warbling Vireo	Riparian woodlands.	Possible	S1?B	GREEN	5 Undetermined	-	-	38 ±5
Tringa solitaria	Solitary Sandpiper	Along the banks of ponds and creeks.	Unlikely	S1?B,S4S5 M	GREEN	4 Secure	-	-	46 ±0.5
Gallinula chloropus	Common Moorhen	Freshwater or brackish marshes with tall emergent vegetation, ponds.	Unlikely	S1B	GREEN	5 Undetermined	-	-	62 ±5
Hylocichla mustelina	Wood Thrush	Interior as well as the edges of deciduous and mixed forests, often near water.	Unlikely	S1B	GREEN	5 Undetermined	-	-	33 ±0.1
Calidris minutilla	Least Sandpiper	Breeds in mossy or wet grassy tundra, occasionally in drier areas with scattered scrubby bushes. Migrates and winters in wet meadows, mudflats, flooded fields, shores of pools and lakes, and, less frequently, sandy beaches.	Unlikely	S1B,S5M	GREEN	4 Secure	-	-	27 ±5

Scientific Name	Common Name	pecies of Conservation Concerr Habitat	Likely our Unlikely to Occur on	ACCDC Rank	NSDNR Rank	NSDNR Rank (New)	COSEWIC	NS ESA Rank	Distance Recorded from Site
Picoides dorsalis	American Three-toed Woodpecker	Boreal and montane coniferous forests, especially mature forests with abundance of insect-infested snags or dying trees, and spruce forests. Uses forests disturbed by disease, fire, or other disasters.	Site? Unlikely	\$1\$2	GREEN	5 Undetermined	-	-	94 ±5
Passerina cyanea	Indigo Bunting	Breeds in brushy and weedy areas along edges of cultivated land, woods, roads, power line rights-of-way, and in open deciduous woods and old fields. Winters in weedy fields, citrus orchards, and weedy cropland.	Unlikely	S1S2B	GREEN	5 Undetermined	-	-	30 ±5
Eremophila alpestris	Horned Lark	Open, barren country. Prefers bare ground to short grasses.	Unlikely	S1S2B,S4 N	GREEN	4 Secure	-	-	31 ±5
Charadrius semipalmatus	Semipalmated Plover	Frequents sandy beaches and mudflats.	Unlikely	S1S2B,S5 M	GREEN	4 Secure	-	-	62 ±5
Asio otus	Long-eared Owl	Various woodland habitats as well as open habitats.	Possible	S2	GREEN	2 May Be At Risk	-	-	47 ±0.1
Vireo philadelphicus	Philadelphia Vireo	Young deciduous woods.	Unlikely	\$2?B	GREEN	5 Undetermined	-	-	27 ±0.1
Anas acuta	Northern Pintail	Salt and freshwater marshes, occasionally on Sable Island and most frequently in the Amherst region.	Unlikely	S2B	GREEN	2 May Be At Risk	-	-	18 ±5
Anas clypeata	Northern Shoveler	Breeds in open, shallow wetlands. In winter, inhabits both freshwater	Unlikely	S2B	GREEN	2 May Be At Risk	-	-	100 ±5
Anas strepera	Gadwall	and saline marshes. Marsh	Unlikely	S2B	GREEN	2 May Be At Risk	-	-	100 ±5
Rallus limicola	Virginia Rail	Freshwater marshes; occasionally inhabits salt marshes. Lives in dense emergent vegetation.	Unlikely	S2B	GREEN	5 Undetermined	-	-	18 ±5
Myiarchus crinitus	Great Crested Flycatcher	Found in open deciduous forest.	Unlikely	S2B	GREEN	2 May Be At Risk	-	-	18 ±5
Piranga olivacea	Scarlet Tanager	Common in deciduous or mixed forests.	Unlikely	S2B	GREEN	5 Undetermined	-	-	14 ±5
Bucephala clangula	Common Goldeneye	Clear water lakes and ponds without submergent and emergent vegetation. Forested habitat with mature trees (deciduous or coniferous) suitable nesting	Unlikely	S2B,S5N	GREEN	4 Secure	-	-	100 ±10
Icterus galbula	Baltimore Oriole	cavities. Edges of deciduous and mixed wood forests.	Unlikely	S2S3B	GREEN	2 May Be At Risk	-	-	18 ±5
Phalaropus lobatus	Red-necked Phalarope	Along edges of major ocean currents.	Unlikely	S2S3M	GREEN	3 Sensitive	-	-	34 ±0.5
Phalaropus fulicaria	Red Phalarope	Usually found at sea. Rarely found on fresh water, but when it is, these are typically small bodies of water, such as sewage ponds.	Unlikely	\$2\$3M	GREEN	3 Sensitive	-	-	86 ±0.5
Coccyzus erythropthalmus	Black-billed Cuckoo	Moist thickets in low overgrown pastures and orchards; also occurs in thicker undergrowth and sparse woodlands.	Unlikely	\$3?B	GREEN	2 May Be At Risk	-	-	6 ±5
Tringa melanoleuca	Greater Yellowlegs	Freshwater ponds and tidal marshes.	Unlikely	S3B,S5M	GREEN	3 Sensitive	-	-	18 ±0.1
Pluvialis dominica	American Golden-Plover	Breeds on Arctic tundra, especially in low vegetation on rocky slopes. Winters in grazed grasslands. On migration found in prairie, pastures, tilled farmland, golf courses, airports, mudflats, shorelines, and beaches.	Unlikely	S3M	GREEN	3 Sensitive	-	-	31 ±0.5
Numenius phaeopus	Whimbrel	Breeds in various tundra habitat, from wet lowlands to dry heath. In migration, frequents various coastal and inland habitats, including fields and beaches. Winters in tidal flats and shorelines, occasionally visiting in	Unlikely	S3M	GREEN	3 Sensitive	-	-	44 ±0.5
Sayornis phoebe	Eastern Phoebe	Found in woodlands and along forest edges, often near water.	Possible	S3S4B	GREEN	3 Sensitive	-	-	17 ±5
Progne subis	Purple Martin	Breeds near human settlements where nest houses are provided, especially near water and large open areas.	Unlikely	S1B	RED	2 May Be At Risk	-	-	100 ±5
Limosa haemastica	Hudsonian Godwit	Breeds near treeline, where tundra, open woods, and ponds come together. Typically found on marshy lakes, wet pastures, and mudflats around ponds.	Unlikely	S3M	UNDETERMINED	3 Sensitive	-	-	27 ±0.5

Table C8 Mammal, Bird, Fish and Herpertile Species of Conservation Concern Recorded Within 100 km of the Alton Natural Gas Study Corridor

Table C8 Mammal, B Scientific Name	ird, Fish and Herpertile Sp Common Name	pecies of Conservation Concerr Habitat	Recorded Wi	thin 100 kn	of the Alton Natu	ral Gas Study Co	orridor COSEWIC	NS ESA Rank	Distance
Scientific Name	Common Name	nabitat	Unlikely to Occur on Site?	Rank	NSDNK KANK	(New)	COSEWIC	NS ESA RAIIK	Recorded from Site
Pooecetes gramineus	Vesper Sparrow	Grasslands.	Unlikely	S2S3B	YELLOW	2 May Be At Risk	-	-	100 ±5
Sterna paradisaea	Arctic Tern	Coastal islands, beaches and salt marshes. May occasionally nest on islands in lakes.	Unlikely	S3B	YELLOW	2 May Be At Risk	-	-	56 ±5
Calidris maritima	Purple Sandpiper	Breeds along low tundra near shorelines, as well as gravel beaches along rivers. Winters along rocky coastlines and man- made jetties.	Unlikely	S3N	YELLOW	3 Sensitive	-	-	53 ±10
Salmo salar pop. 1	Atlantic Salmon - inner Bay of Fundy pops	Anadromous fish that spawn in fresh water, but spends much of its life at sea (Bay of Fundy).	-	S2	RED	-	Endangered	-	18 ±10
Morone saxatilis	Striped Bass	Estuaries and coastal waters.		S1	RED	-	Threatened	-	23 ±10
Alces americanus	Moose	Woodlands providing both mature softwood cover and young hardwood browse. Also swamps, bogs and lakeshores, generally remote from human habitation.	Unlikely	S1	RED	7 Exotic	-	Endangered	43 ±10
Lasiurus cinereus	Hoary Bat	Hoary bats are thought to prefer trees at the edge of clearings, but have been found in trees in heavy forests, open wooded glades, and shade trees along urban streets and in city parks.	Possible	S2?	UNDETERMINED	-	-	-	36 ±10
Sorex dispar	Long-tailed Shrew	Prefer talus slopes and rock slides in both deciduous and coniferous forests. They also inhabit the subterranean tunnels that occur in the rocky crevices between boulders and sometimes have been taken beneath moss-covered logs in damp coniferous forests.	Unlikely	S1	YELLOW	-	-	-	50 ±10
Perimyotis subflavus	Eastern Pipistrelle	They are not often found in buildings or in deep woods, seeming to prefer edge habitats near areas of mixed agricultural use.	Unlikely	S1?	YELLOW	-	-	-	23 ±10
Myotis septentrionalis	Northern Long-eared Bat	The little brown bat lives along streams and lakes. It forms nursery colonies in buildings. In the winter it hibernates in caves and mines.	Possible	S2	YELLOW	-	-	-	23 ±10
Glaucomys volans	Southern Flying Squirrel	Pine and hardwood trees provide suitable foraging and nesting habitat, and dead trees are also important nest sites.	Unlikely	S2S3	YELLOW	-	Not at Risk	-	87 ±10
Glyptemys insculpta	Wood Turtle	Found along streams and wetlands. Gravel bars, tall shrub swamps, deep pools in wetlands.	Possible	S3	YELLOW	-	Threatened	Vulnerable	5 ±10