

**Date:** April 7, 2021  
**Time:** 1 pm  
**Location:** Zoom (see email invitation for instructions)

Welcome and Introductions			
<b>1.0</b>	a. Agenda Review b. Notice of Proxies c. Adoption of the Agenda (D) d. Declarations of Interest e. Approval of Minutes –February 11, 2021 (D) ▶ draft minutes attached as a separate document f. Correspondence – none	<b>Pg.</b>	<i>Chair Graham</i>
Staff Reports, Updates and Presentation			
<b>2.0</b>	<b>Source Protection Program Update</b> —presentation (I) .....		<i>Marika Livingston</i>
<b>3.0</b>	<b>Annual Progress Reporting</b> —staff report attached and presentation (D).....	1-4	<i>Marika Livingston</i>
<b>4.0</b>	<b>Liquid Hydrocarbon Pipeline Threat Policy</b> —staff report attached (D).....	5-13	<i>Marika Livingston</i>
<b>5.0</b>	<b>Climate Change Tool</b> —presentation (I).....		<i>Marika Livingston</i>
Other			
<b>6.0</b>	<b>Other Business</b>		<i>Chair Graham</i>
<b>7.0</b>	<b>Member Inquiries</b>		<i>Chair Graham</i>
<b>8.0</b>	<b>Next Meeting -TBD</b>		<i>Chair Graham</i>
<b>9.0</b>	<b>Adjournment</b>		<i>Chair Graham</i>

**(I) = Information (D) = Decision**

**Delegations:** If you wish to speak to an item on the Agenda please contact Marika Livingston before the meeting ([marika.livingston@mrsourcewater.ca](mailto:marika.livingston@mrsourcewater.ca) or 1-800-267-3504 x 1148)

**If you are a member of the public and would like to join the Zoom meeting please contact the above for remote meeting details.**

### 3.0 2020 Annual Progress Report to MECP

**Date:** April 7, 2021  
**To:** Mississippi-Rideau Source Protection Committee  
**From:** Marika Livingston, Project Manager  
Mississippi-Rideau Source Protection Region

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#### **Recommendation:**

That the Mississippi-Rideau Source Protection Committee receive for review the draft Annual Progress Report for 2020;

And further, that the Mississippi-Rideau Source Protection Committee assess and grade the progress achieved so far, providing a grade achieved through discussion at the meeting of April 7, 2021 to be recorded in the meeting minutes;

And further that the Mississippi-Rideau Source Protection Committee direct staff to summarize the comments, notes, grading and discussion and provide the Annual Progress Report to the Source Protection Authority for their approval.

#### **Annual Reporting Requirements**

The *Clean Water Act* (Section 46) requires the Annual Progress Report to be prepared and:

- Describe measures taken to implement the Plan
- Describe the results of monitoring programs
- Describe extent to which objectives set out in the plan are being achieved
- Contain other information as prescribed by the regulations

Ontario Regulation 287/07 (Section 52) describes other information to be included:

- Description and reasons for policy delays
- Description of steps taken to address deficiencies in information
- Summary of the report prepared and submitted by the RMO each year
- Any other information the SPA considers advisable

#### **Background**

The Source Protection Authorities are required to submit an Annual Progress Report each year, under Section 46 Ontario's *Clean Water Act*. The report is to be submitted to the MECP by May 1 of each year and is to be provided to the SPC for comment at least 30 days prior to this. The report summarizes:

- Measures taken to implement the source protection plan;
- Results of monitoring policies;
- The extent to which objectives of the plan are being achieved; and,
- Other information that might be required by the regulation.

This is the fourth Annual Progress Report since the Source Protection Plan came into effect on January 1, 2015. The first Annual Progress Report was submitted on May 1, 2018, the second on May 1, 2019, and the third on May 1, 2020.

There are two components of the progress reporting, a public facing report document and a supplemental form. The MECP has an electronic reporting tool to summarize responses for the 2020 supplemental form and annual report. Instead of submitting Word documents, responses this year are to be entered online.

The purpose of this staff report is to provide guidance to assist with the interpretation of the Annual Progress Reporting documents, and to outline the process for the SPC review of these documents.

Committee members have been provided with a draft version of both the public facing report and the supplemental reporting form prior to the meeting. Committee members were provided with a comment sheet for written comments and are asked to provide these if desired, by April 7.

Staff will provide a presentation summarizing the reporting information, and the committee will have the chance to verbally discuss and come to a consensus on the report scoring. The discussion and scoring will be summarized in the reports.

### **Implementing Bodies**

The policies in the Source Protection Plan are implemented by “implementing bodies”, who report to the Source Protection Authority each year, usually by February 1, according to the monitoring policies in the Source Protection Plan:

- Municipalities (15 with legally binding responsibilities, 16 with only non-legally binding responsibilities)
- Risk Management Staff
- Principal Authority – approval agency for septic systems – Health Unit, municipality or Conservation Authority depending on location
- Ontario Ministries (OMAFRA, MECP, MNRF, MTO, MGCS/TSSA and MMAH)
- Source Protection Authority (SPA) – the Conservation Authority in its legislated role under the *Clean Water Act*

Reports were received from most implementing bodies, compiled and analyzed by Source Protection staff to respond to the reportable items in the public facing and supplementary Annual Progress Reporting forms.

### **Reportable Themes**

The public and supplemental reporting forms are grouped into themes, corresponding to the reporting that was provided by implementing bodies. Themes include overall progress (implementation status) of policies, monitoring policy implementation, municipal progress, septic inspections, risk management plans, provincial progress, and source protection awareness. There are ten general sections in the public facing annual report, and 67 reportable items included in the supplemental reporting form for the MECP.

## Public Facing Annual Progress Report

The public portion of the Annual Progress Report includes an introductory section which includes Source Protection Committee comments, information about the Mississippi-Rideau Source Protection Region, and an overall 'grade' for the region in achieving source protection plan objectives. Where the form asks for grading, there are three options for the SPC:

- P: Progressing Well/On Target, meaning that the majority of the source protection plan policies have been implemented and/or are progressing
- S: Satisfactory, meaning that some of the source protection plan policies have been implemented and/or are progressing
- L: Limited progress, meaning that a few of the source protection plan policies have been implemented and/or are progressing

It has nine general sections, that pull information from the MECP supplemental reporting form, and include:

1. **Source Protection Plan Policies:** this section reports a percentage of the policies that are considered to be 'implemented' and 'in progress' in the region. It requires the SPC to grade the overall plan implementation progress, based on information gathered from the implementing bodies. Progress has been made in implementing many policies in the Source Protection Plan according to the timelines set out in the plan. There are 56 policies addressing drinking water threat activities, 50 of which address significant drinking water threat activities, and 6 that address moderate-low drinking water threat activities. There are 16 policies that are not directly associated with addressing specific drinking water threat activities, such as administrative policies, education-outreach, transportation corridors and transport pathways and 15 monitoring policies. Most of the policies are either in progress or are considered implemented.
2. **Municipal Progress:** this section summarizes information on municipal implementation progress for land-use planning and asks the committee to grade the overall progress towards implementing these policies. It also includes information on day to day planning decisions from the municipal progress reports.
3. **Septic Inspections:** there are two on-site sewage systems that require inspection every five years, according to the Building Code. These two systems were inspected by the Principal Authority. The committee is asked to grade the overall progress towards implementing these policies.
4. **Risk Management Plans:** there are several plans required at sites throughout the Mississippi-Rideau Region. Several plans have been negotiated and agreed to, and several are under negotiation currently or have had a site visit by a Risk Management Official or Inspector. In 2020, additional drinking water threats were added due to the new municipal well in North Grenville. Some drinking water threats were removed in other areas of the Region due to threats verification. More detailed information is provided in the supplemental form outlining the number of

inspections, and information is available outlining delays in implementing risk management policies. The committee is asked to grade the overall progress towards implementing these policies.

5. **Provincial Progress:** this section gives a general summary of information on the reviews by provincial implementing bodies and reports on the progress reviewing previously issued provincial approvals and asks the committee to grade the overall progress.
6. **Awareness and Change in Behaviour:** this report section provides information on road signs in the region and on education and outreach programs and tools in use. No grading is required.
7. **Source Protection Plan Policies: Summary of Delays:** this section discusses policy tools where there are delays in implementation, causing the policy to not meet the dates specified in the source protection plan. In the Mississippi-Rideau Region, this section focuses on discussing a few risk management policies for existing activities, some non-legally binding policies, and a few others.
8. **Source Water Quality: Monitoring and Actions:** no issues have been identified in our assessment reports regarding the quality of municipal drinking water sources, so this section has not been completed.
9. **More from the Watershed:** this section highlights some of the feedback received during the annual reporting process from municipalities with legally binding policy responsibilities.

### **Annual Progress Reporting Supplemental Form for Source Protection**

This form (now online) is meant to provide a standardized form across the province for sharing critical information from the source protection authorities on implementation progress. It is to be completed and provided to the MECP by May 1, 2021.

The report has been provided along with the agenda for committee information and discussion, and to support the information provided in the public facing annual progress report. This report, along with the public facing report, is for submission directly to the MECP to provide additional detail they require to assess plan implementation progress.

### **Attachments**

1. Source Protection Annual Progress Report – Draft for SPC review (public facing report) – attached as a separate document
2. Annual Progress Reporting Supplemental Form for Source Protection – Draft for SPC information (MECP report) – attached as a separate document

## 4.0 Liquid Hydrocarbon Pipeline Threat Policy

**Date:** April 7, 2021  
**To:** Mississippi-Rideau Source Protection Committee  
**From:** Marika Livingston, Project Manager  
Mississippi-Rideau Source Protection Region

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### **Recommendation:**

That the Source Protection Committee receive this report for information;

Further that the Source Protection Committee support the proposed liquid hydrocarbon pipeline policy;

Further that staff be directed to pre-consult on the proposed draft policy with implementing bodies and the Ministry of Environment, Conservation and Parks; and,

Further that staff be directed to incorporate the proposed policy as part of the forthcoming amendment to the Source Protection Plan, under Section 36 of the *Clean Water Act*.

### **Purpose of Staff Report**

This Staff Report is to provide the Source Protection Committee an update on policy work related to liquid hydrocarbon pipelines and propose a revised draft policy.

### **Background**

On July 1, 2018, Ontario Regulation 287/07 “General” under the Clean Water Act, 2006 was amended to add liquid hydrocarbon pipelines to the list of prescribed drinking water threats. Specifically, as part of the amended Regulation the table of circumstances, that lists the prescribed drinking water threats, was amended to include “the establishment and operation of a liquid hydrocarbon pipeline” that is designated for transmitting or distributing to terminals and distribution centres (i.e. trunk liquid hydrocarbon pipelines).

The vulnerability scores for which the pipeline circumstances would be a significant drinking water threat are summarized as follows:

1. Pipelines above ground – intake protection zones scoring 9 or 10 and wellhead protection areas scoring 10.
2. Pipelines below ground – wellhead protection areas scoring 10.
3. Pipelines within or under a water body – intake protection zones scoring 9 or 10 and wellhead protection areas scoring 10.

Source protection authority staff have evaluated if liquid hydrocarbon pipelines, that meet the circumstances, currently exist within the Mississippi-Rideau Source Protection Region. Staff have concluded that there are no significant threat circumstances are

triggered but there is one liquid hydrocarbon pipeline in the Mississippi-Rideau Source Protection Region. The Trans-Northern pipeline is a 850 kilometer pipeline built in 1952 that transports refined petroleum products such as gasoline, diesel fuel, aviation fuel and heating fuel west from Montreal, Quebec to Toronto, Ontario, and from the Imperial Oil Limited refinery at Nanticoke, Ontario east, to Toronto. There are delivery points along both stretches, including Oakville, Toronto, Ottawa, Maitland, Belleville, Cornwall and Kingston in Ontario, as well as Montreal and Dorval in Quebec.

Source Protection staff met with and had follow-up discussions with a representative from Trans Northern Pipelines Inc. during the development of the pipeline policy work. The attached map shows the location of the Trans-Northern pipeline in the Mississippi-Rideau Source Protection Region together with all the municipal drinking water systems and associated vulnerability scores (8 or higher) for each wellhead protection area and intake protection zone.

Future liquid hydrocarbon pipelines are still a possibility within the Region therefore a liquid hydrocarbon pipeline policy related to Future threats is recommended.

The governing authorities over pipeline development are the Canada Energy Regulator and the Ontario Energy Board. Source Protection Committees do not have legislative authority to develop policies that would be legally binding on federal or provincial agencies. The legal effect of the proposed policy is non legally binding and wording is framed around encouraging these agencies to inform the Source Protection Authority of proposed liquid hydrocarbon pipelines and to follow industry best management practices.

## Updates and New Information

Original Policy <b>Pipe-1-NLB</b>	Comments/Feedback	Received From	Response to Address Comment/Feedback
The Canada Energy Regulator, the Ontario Energy Board and the pipeline proponent are encouraged to provide the Source Protection Authority the location of any new proposed liquid hydrocarbon pipeline within the Source Protection Region and are encouraged to ensure that liquid hydrocarbon pipeline applications, where this activity would be a significant drinking water threat, include appropriate design standards, monitoring, and maintenance practices that when implemented will prevent such a pipeline from becoming a significant drinking water threat.	Generalize names for federal and provincial approval authorities for energy projects.	MECP Source Water Protection Liaison	We removed the names of the Canada Energy Regulator and the Ontario Energy Board and replaced these titles with a generic naming convention that would withstand future name changes.
	Determine what the design standards, monitoring, and maintenance practices are.	SPC Member	Attached is a table that addresses the different roles of each of the regulators. It has been suggested to not name the specific regulations and codes that apply for these standards.
	Committee members wanted another opportunity to look at the draft hydrocarbon pipeline policy	SPC Members	Draft revised policy and information is included in this staff report



## Justification and More Background

Tried and True	<p>Staff researched and sought information from regulatory bodies and industry experts on requirements applicable to liquid hydrocarbon pipelines.</p> <p>Moreover, staff at the Halton-Hamilton Source Protection Region sought confirmation that current regulatory requirements for liquid hydrocarbon pipeline companies ensure the protection of drinking water sources.</p> <p>Both the federal and provincial energy bodies include the protection of drinking water sources in their role in assessments.</p> <p>See attached Appendix 1 created by staff at Halton-Hamilton describing the role of each of the approval authorities for energy projects and the applicable Codes and Regulations.</p>
Non-Prescriptive Policy	<p>The industry appears to be subject to numerous regulations, codes and standards that speak to the elements of design, construction, operation, abandonment, leak detection, integrity management, safety valve placement, emergency response planning, consideration of high impacts areas and environmentally sensitive areas, etc. Certain regulations adopt stringent codes of the Canadian Standards Association (CSA) many of which are relevant to environmental considerations.</p> <p>Additionally, pipeline companies are raising concerns over the implementation of policies that would be redundant with the current regulatory requirements they already are subject to, policies that do this will cause administrative burden. As such, it is suggested that we refrain from requiring specific measures.</p>
Consistency	<p>Pipeline companies and the energy regulators have expressed concern over the implementation of different policies across the Province. Instead, they are recommending consistency across Ontario.</p> <p>The below policy was adopted from the South Georgian Bay Lake Simcoe Source Protection Region which was brought to their SPC in July 2020.</p>

	The policy is identical to a policy proposed in the neighbouring Raisin-South Nation Source Protection Region which was brought to their SPC in February 2020.
Generic	There was a recent name change from the National Energy Board to the Canada Energy Regulator. Maintaining generic naming conventions for policy implementors will prevent us from needing to do a S. 51 minor revision to Plan policies in the future.

### Proposed Amended Draft Policy

Policy Implications						
Policy Id	Threat	Tool	Implementor	Legal Effect	Where Policy Applies	When Policy Applies
PIPE-1-NLB	The Establish ment of Liquid Hydrocarb on Pipelines	Specify action	Provincial and Federal energy regulators and;  Liquid hydrocarbon pipeline owners	Non-legally binding	WHPA V. score 10  and IPZ-V. score 9 and 10	Future: Immediately

### **Policy PIPE-1-NLB**

The federal and provincial regulators for energy projects and the pipeline proponent are encouraged to provide the Source Protection Authority the location of any new proposed liquid hydrocarbon pipeline within the Source Protection Region and are encouraged to ensure that liquid hydrocarbon pipeline applications, where this activity would be a significant drinking water threat, include appropriate federal and provincial requirements as per applicable Code and Regulations including design standards, monitoring, and maintenance practices that when implemented will prevent such a pipeline from becoming a significant drinking water threat.

## **Next Steps**

Pre-consult with pipeline owners, the federal and provincial energy regulators and MECP to get comments and feedback on the proposed policy.

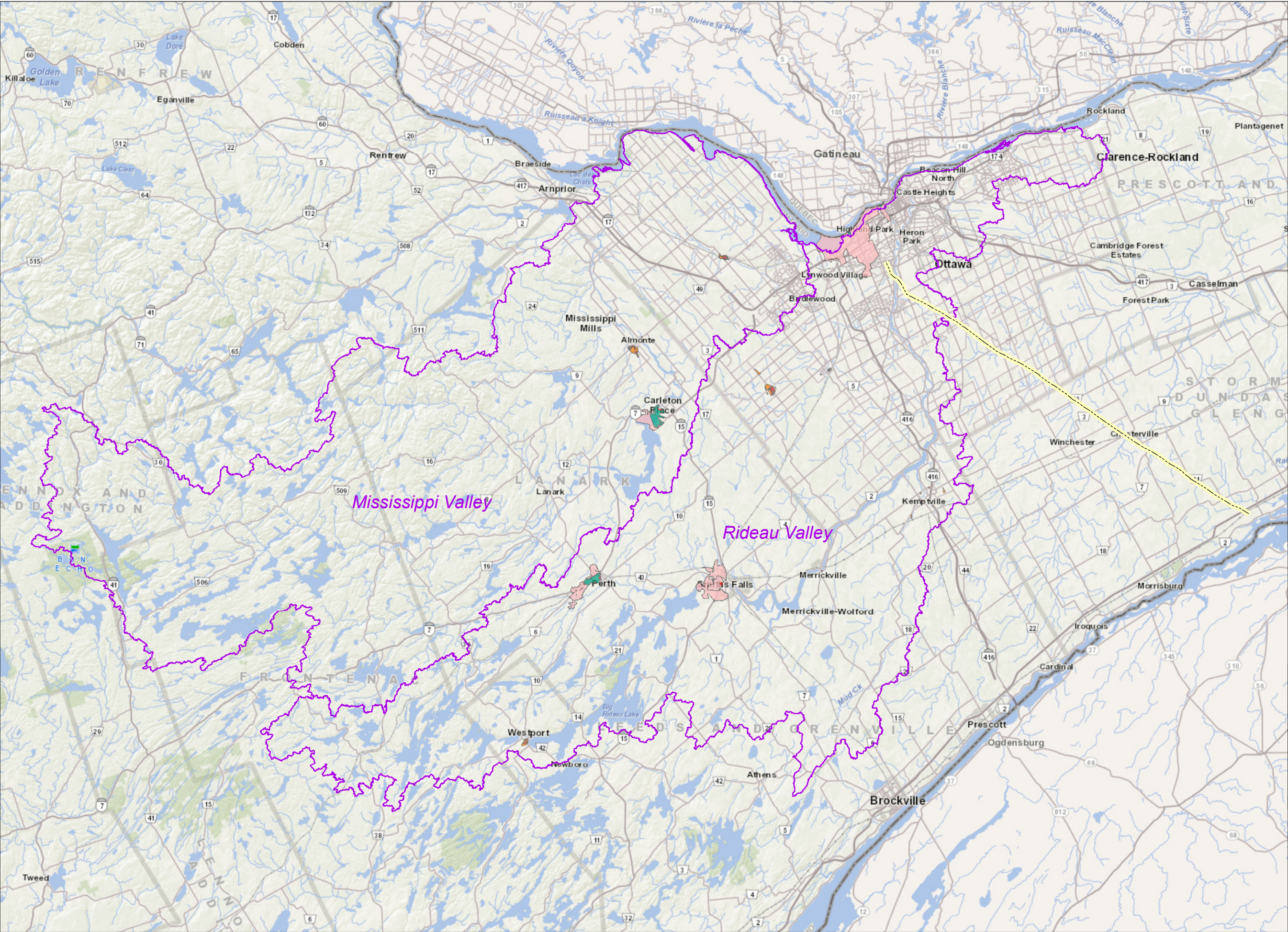
**Attachments:**      Trans-Northern Pipeline Overview Vulnerable Areas  
                         Overview of Liquid Hydrocarbon Pipeline Regulatory Agencies

### Attachment 1: Overview of Liquid Hydrocarbon Pipeline Regulatory Agencies

Regulator	Description
<p><b>Canada Energy Regulator</b></p> <p><a href="https://bit.ly/3bw99LH">https://bit.ly/3bw99LH</a></p>	<p>Regulates the full life cycle of pipeline systems that cross provincial or international boundaries. This includes: design, pre-application, application, construction, operation and abandonment. Pipeline companies are required to have emergency management programs. Works with the Transportation Safety Board. Investigates pipeline incidents to determine whether its regulations have been followed.</p> <p>Regulation and codes include:</p> <ul style="list-style-type: none"> <li>• Canadian Energy Regulator Act - Onshore Pipeline Regulations (SOR/99-294)</li> <li>• Canadian Standards Association (CSA).</li> </ul> <p>Per email dated Nov. 26, 2020 to the HHSPR Senior Manager, “the CER requires potential threats to <b>drinking water sources</b> to be considered by our regulated companies, beginning at the applications phase of pipeline construction/planning, through the full lifecycle of the pipeline in the operational and abandonment phase.... When a company applies for approval to construct a pipeline, the company is required to provide the CER with any potential drinking water interactions that may occur during both the construction phase and during the operation phase in the event that a spill could occur. The company’s proposed mitigation is assessed, and should the Commission of the CER deem it to be required, additional conditions may be included as part of the approval itself to provide additional protection measures.... During the operational phase of pipelines, the CER provides specific oversight to potential threats to drinking water sources, such as conducting compliance verification meetings, field inspections and incident reviews”. See Attachment 2.</p>
<p><b>Canadian Standards Association (CSA)</b></p>	<ul style="list-style-type: none"> <li>• <b>CSA Z662 “Oil and Gas Pipeline Systems”</b>: design, construction, operation, abandonment, leak detection, safety valve location, integrity management program, high impact/consequence areas, designated geographical area for new pipelines as of June 2019. Additional information from Sarah McQuaig, HHSPC member (Feb. 2021): <b>The standard requires that valves be placed on both sides of the major water crossings</b> and at other locations appropriate for the terrain in order to limit damage from accidental discharge. Based on industry experience, the valves are placed as close as possible, considering geomorphology, power, communication and proximity of other landmarks (houses, roads, floodplains). Some of the other factors considered when selecting valve locations include (but are not limited to): <ul style="list-style-type: none"> <li>○ Space required for valve site.</li> <li>○ Terrain restrictions (i.e. does one or both sides of the river abut up to a steep valley slope and therefore no room to place valve right beside water).</li> <li>○ Outside the high-water mark for the river/water body, ideally out of the flood plain area, but sometimes on flat stretches that is unavoidable.</li> <li>○ Any ice dam hazards from the river.</li> <li>○ Ease of access to site in emergency and for routine maintenance.</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ Cost to get power to the site.</li> <li>● <b>CSA Z246.2-18</b> “Emergency Preparedness and Response for Petroleum and Natural Gas Industry Systems”: these require the development of Emergency Planning Zones (EPZs) and consideration of environmentally significant areas. Information from Ryan Shearwater (Shearwater Environmental Emergency Solutions Inc.), Feb. 2021.</li> <li>● Other CSAs.</li> </ul>
<b>Ontario Energy Board</b> <a href="https://bit.ly/3pBTn6Z">https://bit.ly/3pBTn6Z</a>	<p>Regulates pipeline systems located entirely within the province. Governs the construction of new pipelines, conditional upon also meeting the TSSA requirements (see next row). <b>Pipeline operators in Ontario are required to have an integrity management program.</b></p> <p>Regulations and Codes include:</p> <ul style="list-style-type: none"> <li>● Oil and Gas Pipeline Systems Code Adoption Document (published by TSSA and adopts national technical standards with some Ontario-specific adjustments)</li> <li>● CSAs including CSA-Z662, etc.</li> </ul> <p>Guidelines include: Environmental Guidelines for Hydrocarbon Pipelines and Facilities in Ontario (2016).</p>
<b>Technical Standards and Safety Authority (TSSA)</b> <a href="https://bit.ly/3dIY9x4">https://bit.ly/3dIY9x4</a>	<p><b>Enforces</b> technical standards in Ontario. Audits oil and other types of transmission pipelines and distribution pipelines approximately every five years. Investigates incidents in Ontario as required by regulation (i.e. involving death, injuries, fire, explosion, or substantial damage), and releases a follow-up report. Technical Standards and Safety Act - <b>Ontario Regulation 210/01</b> “Oil and Gas Pipeline Systems” sets the requirements for the design, operation, maintenance, safety, and integrity of the pipelines. The regulation is supplemented by the Oil and Gas Pipeline Systems Code Adoption Document.</p>
<b>Ministry of the Environment, Conservation and Parks</b>	<p>Through the Ontario Environmental Protection Act Part X “Spills”, <b>requires</b> companies to develop and implement plans to prevent/reduce the risk of spills and remediate any adverse effects from spills.</p>





**Trans-Northern Pipeline:  
Overview inside  
Mississippi-Rideau SPR**

**Legend**

Trans-Northern Pipeline  
Ottawa Lateral

**Groundwater Vulnerability Scoring**

10  
8

**Surface Water Vulnerability Scoring**

8, 8.1  
9  
10

Source Protection Area



Map Scale: 1:550,000

Projection note: NAD 1983 UTM Zone 18N

File Location: (M:\projects\GIS\GIS\_Data\CA\_Data\SPR\TransNorthernPipeline\SPR\TransNorthernAreas.mxd)

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