

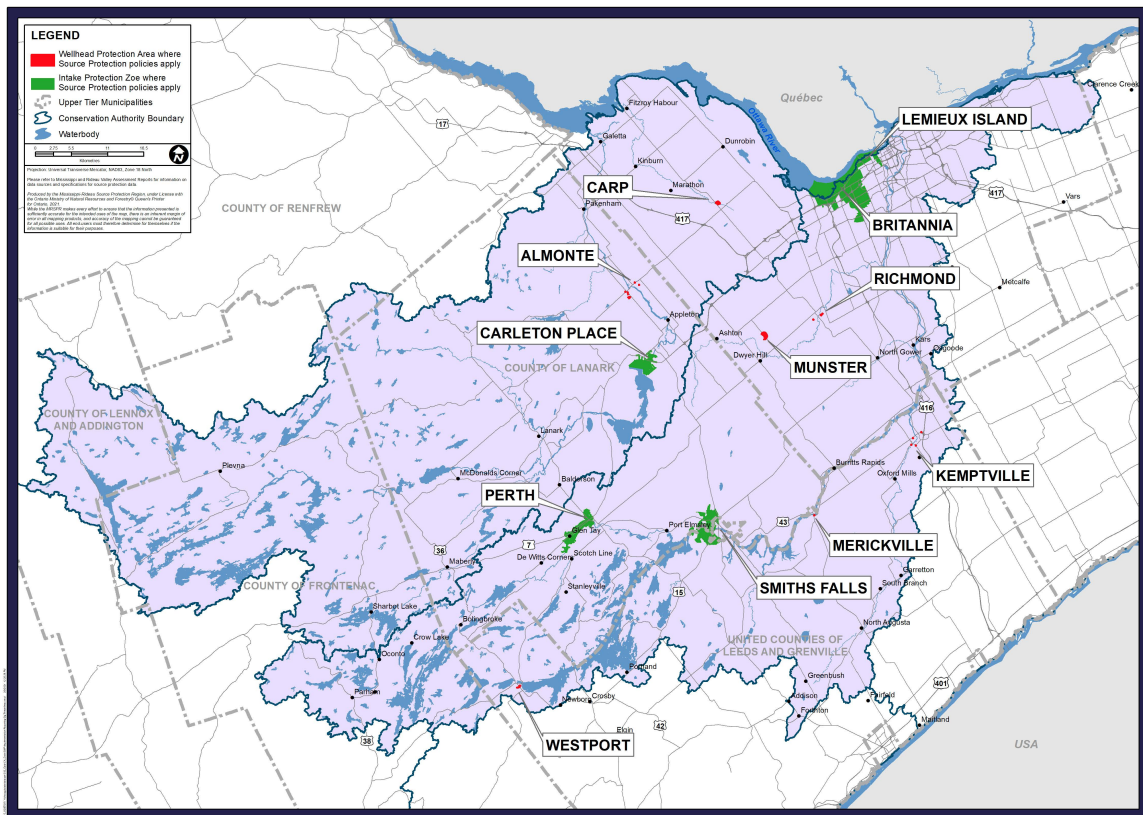
Source Protection Annual Progress Report

I. Introduction

As required by the *Clean Water Act* and its regulations, this report outlines the progress made in implementing the Mississippi-Rideau Source Protection Plan (MRSPP) in 2024. Our Source Protection Region is made up of the Mississippi Valley and the Rideau Valley Source Protection Areas.

Source protection focuses on protecting sources of municipal drinking water such as lakes, rivers or underground aquifers that supply people with drinking water, from contamination and overuse.

About three quarters of the population of the Mississippi-Rideau Region live in an area that is serviced by the 13 municipal drinking water systems that are the focus of the MRSPP. This report highlights progress made towards implementing this plan, which contains policies to protect these 13 local drinking water sources, spread across two watersheds.



II. A message from your local Source Protection Committee

Our progress score on achieving source protection plan objectives this reporting period:

P: Progressing Well/On Target – The majority of the source protection plan policies have been implemented and/or are progressing.

Overall, the Source Protection Committee feels that implementation of Source Protection Plan policies is progressing well in the Mississippi-Rideau Region.

The Source Protection Committee met on April 3, 2025 to discuss the Annual Progress Report, which was provided to them prior to the meeting with the Agenda package. At the meeting, the Committee reviewed each item in the report, and agreed on a grade where needed. Each section was presented and discussed as questions or comments arose. Following the review of each section, the Committee completed the overall progress score for the reporting period. Committee members also had an opportunity to provide written comments, if desired, to staff.

III. Our Watershed

To learn more, please read our assessment report(s) and source protection plan(s).

The Mississippi-Rideau Source Protection Region is made up of two Source Protection Areas: the Mississippi Valley Source Protection Area; made up of the lands that drain into the Mississippi River (called the Mississippi watershed) and the Rideau Valley Source Protection Area; made up of the lands that drain into the Rideau River (the Rideau watershed). All or part of 31 municipalities fall within the Mississippi-Rideau Source Protection Region. About three-quarters of the population of the Mississippi-Rideau Region live in an area that is serviced by the 13 municipal drinking water systems which are the focus of the Mississippi-Rideau Source Protection Plan. These 13 drinking water systems serve communities across the Region, and are divided into eight municipal wells (taking water from the ground), and five surface water systems (taking water from local rivers):

Groundwater Systems: Almonte, Munster, Carp, Richmond (King's Park), Kemptville, Richmond (W. Dev lands), Merrickville, and Westport.

Surface Water Systems: Carleton Place, Smiths Falls, Perth, Ottawa (Lemieux) and Ottawa (Brittania).

To develop the Source Protection Plan, a local committee with multiple stakeholders was created to oversee the source protection program and to guide its content. This committee includes members representing municipalities in the region, the agricultural community, industry, government and non-governmental organizations, as well as members of the public. It is supported by the Board of Directors of the two Conservation Authorities, which are referred to as the "Source Protection Authorities", when completing source protection work. Source Protection focuses on protecting rivers, lakes and groundwater where they supply drinking water systems that serve villages, towns and cities. This work is going on locally in 19 source protection regions and areas across Ontario. Between 2006 and 2012, studies were completed to help find out where the water for these systems was most vulnerable, by mapping areas around water treatment plant intake pipes (Intake Protection Zones or IPZs) and around municipal wells (Wellhead Protection Areas or WHPAs) to show where water comes from, how quickly it gets there, and how vulnerable it is to contamination or overuse. These areas are the focus of where policies in the Source Protection Plan apply today, to protect the sources of the 13 drinking water systems. Policies include prohibiting a few high-risk activities, requirements for risk management plans, the use of existing or amended approval processes, and education and outreach to encourage voluntary good practices. Highly vulnerable aquifers (HVAs), where soil is thin or absent and underlying bedrock contains large cuts and gaps characterize 89% of the region. Moreover, approximately 13% of the region is characterized as Significant Groundwater Recharge Area, where there are gravel deposits or soil features that allow a significant amount of rain and snowmelt to move down into the groundwater. In these areas, there are policies encouraging the wise use of road salt, promoting best management practices through education and outreach, and policies aimed at managing waste disposal sites.

IV. At a Glance: Progress on Source Protection Plan Implementation

1. Source Protection Plan Policies and Addressing Significant Risks

P: Progressing Well/On Target.

There are 50 significant threat policies in the Mississippi-Rideau Source Protection Plan. These policies either prohibit or manage activities. 47 of the policies that address significant drinking water threats have been implemented (94%); 2 are still in progress(4%); and 1 of the significant threat policies is not applicable (2%). In total, 96% of significant threat policies are in effect when combining implemented and not applicable significant threat policies. In 2024, one additional significant threat policy was implemented when compared to 2023. The outstanding significant threat policies are related to a Risk Management Plan that is still in negotiation.

Of the 226 existing significant drinking water threats in our Region, approximately 99% of the threats have been addressed (i.e., eliminated or managed). We are on track to address all 100% existing significant threats to our sources of drinking water.

2. Municipal Progress: Addressing Risks on the Ground

P: Progressing Well/On Target

In the Mississippi-Rideau Source Protection Region, 15 municipalities have vulnerable areas where significant drinking water threat policies are included in the SPP. Legally binding policies apply to portions of Wellhead Protection Areas or Intake Protection Zones.

Municipalities work to ensure that their day-to-day planning decisions conform with the source protection plan policies. All municipalities in our source protection region have processes in place to ensure that their day-to-day decisions conform with our source protection plans.

Municipalities regulate development through their powers under the Planning Act. Updating the Official Plan and Zoning By-Laws tools will help to ensure that decisions on planning matters are consistent with Source Protection Plan policies.

In our Source Protection Region, municipalities are required to update their Official Plans either before, or during their next five-year review after January 1, 2015. Zoning must be updated within three years of the Official Plan amendments.

In the Mississippi-Rideau Region, all municipalities have completed their Official Plan amendments, and 13 have completed or are in the process of completing their Zoning By-Law amendments (two municipalities are upper tier and do not have Zoning By-Laws).

3. Septic Inspections

P: Progressing Well/On Target

When an on-site sewage system is functioning properly, contaminants from the system are greatly reduced or eliminated. A key part of protecting drinking water is therefore accomplished through the Mandatory On-Site Sewage System Maintenance Inspection Program. Through inspections, this program ensures that on-site sewage systems are functioning properly where they are considered a significant drinking water threat.

100% of on-site sewage systems identified as a significant threat have been inspected in the first 5 year cycle in accordance with the Ontario Building Code, and minor maintenance work was completed where required. 2021 began the second 5 year cycle and 1 of 2 mandatory on-site sewage systems inspections were completed. The remaining inspection was completed in 2022 and found the system to be functioning as required.

4. Risk Management Plans

S: Satisfactory

A Risk Management Plan (RMP) is a document that outlines the actions required to address an activity that has the potential to contaminate drinking water. These actions manage the risk associated with the activity so that drinking water is better protected. A Risk Management Official/Inspector works with the person to decide on the components of the RMP. There are currently four Risk Management Officials/Inspectors in the Mississippi-Rideau Region; three of these work at the Conservation Authorities and one works at the City of Ottawa. In the Region, all municipalities except for the City of Ottawa have delegated risk management responsibilities to the Conservation Authorities. Since the SPP took effect, a total of 50 RMPs have been established in the Mississippi-Rideau Region, with no RMPs being established this reporting period. However, 11 RMPs were revoked (no longer valid) in 2024. These RMPs were revoked because site visits in 2023 and 2024 proved that the threats were no longer present. This is because some businesses moved locations or homeowners removed their fuel oil tank and now use an alternative source of heat for their home. There have been no cases of non-compliance with established Risk Management Plans observed to date.

There is 1 remaining parcel which requires a Risk Management Plan. The outstanding Risk Management Plan is for a small agricultural operation. We are in the final stages of working out an agreement with the landowner. When doing Risk Management for agricultural sites, we look to document existing best management practices, or work with persons to implement best management practices in a practical way.

5. Provincial Progress: Addressing Risks on the Ground

P: Progressing Well/On Target

Ontario Ministries are reviewing previously issued provincial approvals (i.e. prescribed instruments, such as environmental compliance approvals under the Environmental Protection Act) where they have been identified as a tool in our plan to address existing activities that pose a significant risk to sources of drinking water. The provincial approvals are being amended or revoked where necessary to conform with plan policies. Our policies set out a timeline of three years to complete the review and make any necessary changes. The Ministries have completed this review for previously issued provincial approvals. Processes have been developed and implemented to screen new provincial approvals within vulnerable areas and are reported on annually.

In the Mississippi-Rideau Region, there were 95 previously issued provincial approvals identified that required review. All of these have been reviewed for conformity to our Source Protection Plan. Only 2 Prescribed Instruments were amended or replaced because of the conformity exercises as described above. In 2024, 4 wastewater and sewage works applications were screened in our Region for Source Water Protection Policies. None were determined to be significant drinking water threats.

6. Source Protection Awareness and Change in Behaviour

A total of 63 Drinking Water Protection Zone signs have been installed in the Mississippi-Rideau Source Protection Region along municipal and county roads to mark the 13 drinking water systems in the Source Protection Plan. A total of 9 Drinking Water Protection Zone signs have been installed in the Mississippi-Rideau Source Protection Region along provincial roads. These signs alert travelers to the vulnerable areas and some direct them to our website for more information. The signs are intended to encourage good stewardship practices and prompt spill reporting and response. They increase local knowledge of the wellhead protection areas and intake protection zones and can act to raise general awareness of the vulnerable areas by pointing travelers to the source protection region website.

In 2024, significant effort was put into advancing the Section 36 Update as committed to in our submitted Section 36 Workplan to the Ministry in 2018. Additionally, Mississippi-Rideau Source Protection staff reviewed the 2021 Technical Rule Changes and consulted with Municipal Working Group members to discuss proposed policy changes to align with the updates. When consultation on proposed changes commenced in 2024, comments received were minimal and minor, and were generally supportive of this important work and program.

In 2023, the City of Ottawa, a municipality in our Source Protection Region, launched a Fuel Oil Tank Replacement Rebate Program. The bulk of the work to administer this program was done in 2023, however in 2024, we met with a handful of landowners who were still eligible for the program and wished to take part before the funding expired. The program offers financial incentives to remove existing fuel oil tanks that are located near municipal wells and replace them with an alternate heating source (air source heat pump or natural gas), that are not considered a significant drinking water threat. The goal of the fuel tank incentive program is to eliminate existing fuel threats and protect rural communal drinking water resources. This is a great local success story to protect our drinking water by providing financial incentives for risk management measures.

The 2007 and 2009 Mississippi-Rideau Source Protection Region (MRSPR) water budget studies were completed over 15 years ago and are now considered to be somewhat out of date. On-going community growth in the MRSPR will put additional demand on drinking water supplies, so up-to-date water budget studies are considered important. Climate change is also a major driver in the need to update the water budget studies due to its effect on precipitation, evapotranspiration, and surface water and groundwater resources. In 2023, the MRSPR initiated a conceptual water budget update and in 2024 staff worked to advance this by creating a draft workplan outlining necessary steps to complete the update and cataloging updated data and information to support this work.

A comprehensive education and outreach program, 'Living in the Zone', has been developed. This includes resources on the Source Protection Region website. There is a public mapping tool available on the website to help the public learn where vulnerable areas are and link them to policy information and regular email updates are provided to subscribers to our Mississippi-Rideau Source Protection Region. Social media campaigns are frequently posted by the Rideau Valley Conservation Authority to raise awareness on protecting drinking water.

7. Source Protection Plan Policies: Summary of Delays

Overall, policy implementation is Progressing Well in our region. Some policy tools are challenging to implement, and require significant time to build relationships with landowners, business operators, and other key individuals across the region. In particular, the policies that require negotiation of Risk Management Plans with individuals have been challenging to implement. Progress has been made to identify properties that require risk management plans, refine threat numbers and identify sites that do not require plans at this time. Some Risk Management Plans for existing activities are not yet complete, and staff are working hard to finish all required plans across the Region at identified properties, however additional time is required to complete this work. The risk management program is still new and managing activities in this way requires trust and relationship building between staff and affected landowners. There must be consideration for the type and extent of risk management measures asked for, as well as their feasibility for individuals to complete. Provincial funding previously offered assistance with implementing risk management programs. However, this funding was not renewed, resulting in additional pressures on our small municipalities to fund the Risk Management Office. Fortunately, we have had success leveraging existing incentive programs offered by our Conservation Authorities.

Risk management staff have worked to implement policies, and 39 Risk Management Plans are in place. Over the last few years, staff developed a practical and straightforward approach to implement Risk Management Plans, focusing on best management practices and spills response. As of 2024, 1 parcel still requires a Risk Management Plan.

For the outstanding agricultural Risk Management Plan, risk management staff have made progress in 2024 towards coming to an agreement. Staff will rely on existing incentive programs to help offset the costs of implementing Risk Management measures.

8. Source Water Quality: Monitoring and Actions

In our source protection region/area, no issues have been identified in our local science-based assessment reports regarding the quality of the sources of municipal drinking water.

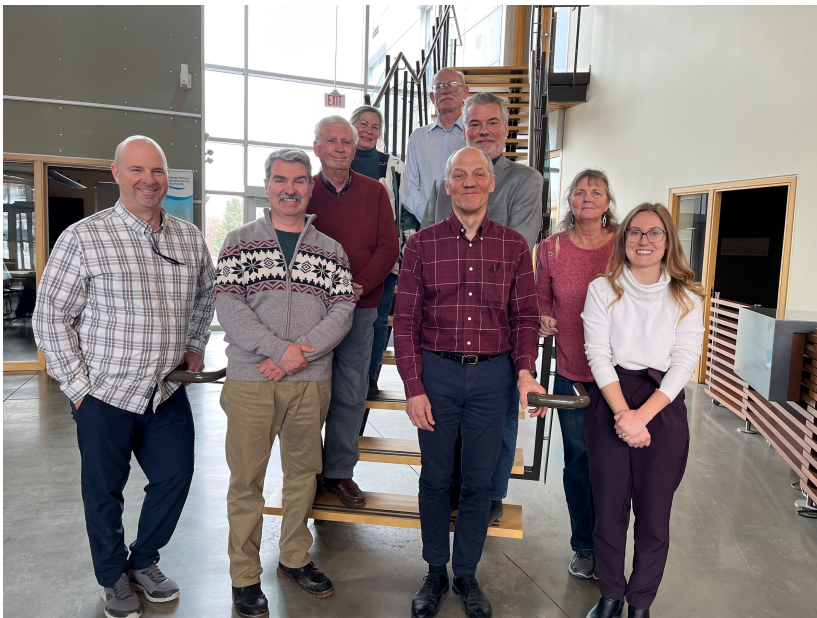
9. Science-based Assessment Reports: Work Plans

No work plans were required to be implemented for our assessment reports.

10. More from the Watershed

To learn more about our source protection region/area, visit our website at:

www.mrsourcewater.ca



Top left photo:
2024 SPC Membership
(missing some members)



Top right photo:
May 2024 Smiths Falls Water Treatment
Plant Open House

Bottom right photo:
Staff presenting at the Latornell
Conservation Symposium in Vaughn

