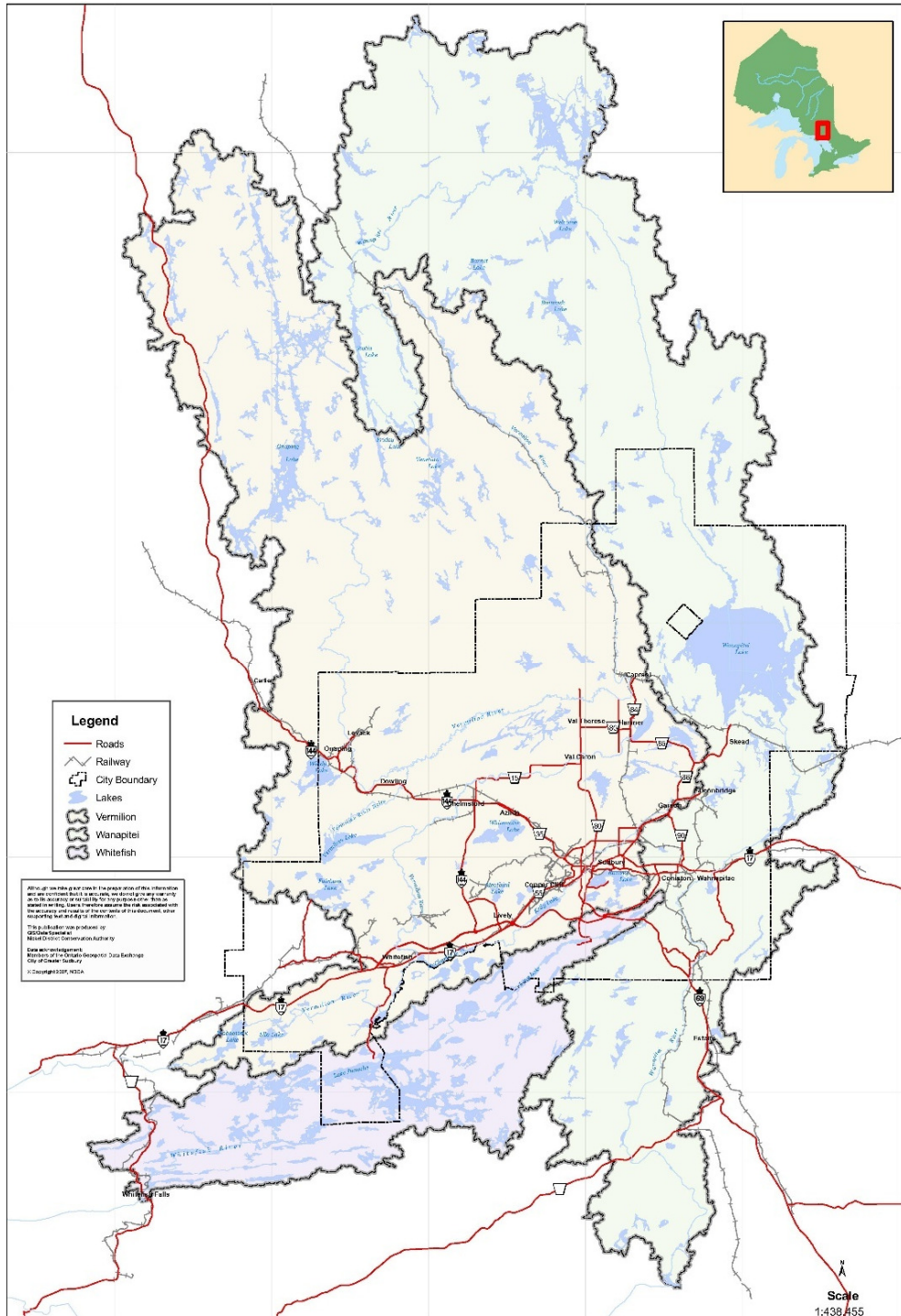


Source Protection Annual Progress Report

I. Introduction

This annual progress report outlines the progress made in implementing our source protection plan for the **Sudbury Source Protection Area**, as required by the Clean Water Act and regulations. The Ninth Annual Progress Report summarizes implementation activities completed in 2025.



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.

S: Satisfactory – Some of the source protection plan policies have been implemented and/or are progressing.

L: Limited progress – A few of source protection plan policies have been implemented and/or are progressing.

The Source Protection Committee recognizes the significant progress made in implementing source protection policies since the Source Protection Plan came into effect. Implementing bodies have met all significant threat policy requirements, to achieve 100 percent implementation. This demonstrates an ongoing commitment to the protection of municipal drinking water sources.

All required Risk Management Plans remain in place, and the City of Greater Sudbury uses established screening procedures to identify and manage any new or expanding significant drinking water threats. Established Risk Management Plans address winter maintenance activities, the handling and storage of chemicals and agricultural activities.

Monitoring programs introduced in previous years, including the expanded Ramsey Lake inflow monitoring program continued throughout 2025. Monitoring of sodium and phosphorus levels provides valuable information to help assess management measures within the Ramsey Lake Issue Contributing Area.

The Committee also acknowledges the continued focus on education and outreach by implementing bodies. Initiatives such as road salt outreach and broader source protection messaging remain an important part of drinking water protection efforts.

III. Our Watershed

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

The Sudbury Source Protection Area (SSPA) includes all of the Vermilion, Wanapitei and Whitefish River watersheds. This is the same jurisdictional area as the Nickel District Conservation Authority (Ontario Regulation 284/07) but also includes the bottom reaches of the Whitefish River and Wanapitei River watersheds.

The SSPA has an area of 9,150 km² and is home to over 160,000 residents. It includes the City of Greater Sudbury and parts of the Town of Espanola, the Municipality of Markstay-Warren, the Municipality of Killarney, the Township of Nairn and Hyman, and the Sudbury East Planning Board.

The policies in the Source Protection Plan only apply to the City of Greater Sudbury and the Municipality of Markstay-Warren because the other communities do not have municipal drinking water systems or the associated vulnerable areas that fall within the SSPA.

There are eight drinking water systems in the SSPA including both surface water and groundwater systems:

- Ramsey Lake (surface water intake)
- Wanapitei River (surface water intake)
- Vermilion River (surface water intake, owned and operated by Vale)

- Valley, including Capreol (13 groundwater wells)
- Garson (3 groundwater wells)
- Falconbridge (3 groundwater wells)
- Onaping (3 groundwater wells)
- Dowling (2 groundwater wells)

Approximately 85% of the City of Greater Sudbury obtains its drinking water from a municipal source.

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

1. Source Protection Plan Policies and Addressing Significant Risks

P: Progressing Well/On Target.

The majority of policies (98%) that address significant drinking water threats have been implemented with one policy marked not applicable. As a result of this policy implementation, all identified existing significant drinking water threats within the area have been addressed through elimination or ongoing management. The implementation of these policies supports the protection of municipal drinking water sources.

2. Municipal Progress: Addressing Risks on the Ground

P: Progressing Well/On Target

Two municipalities within the Sudbury Source Protection Area include vulnerable areas where significant drinking water threat policies are applicable: the City of Greater Sudbury and the Municipality of Markstay-Warren. Of these, the City of Greater Sudbury is the only municipality with responsibilities under Part IV of the Clean Water Act.

The City of Greater Sudbury has well-established screening processes within both Planning Services and Building Services to ensure that potential new drinking water threats are identified at an early stage and appropriately managed. These review processes ensure that applications within vulnerable areas are referred to the Risk Management Office to confirm compliance with applicable source protection policies.

Source protection considerations were incorporated into the City's Official Plan (OP) and Zoning By law at an early stage to ensure conformity with land use planning policies under the Source Protection Plan. The Official Plan is currently undergoing its five-year review cycle in accordance with the Planning Act. Phase One of the review received provincial approval in 2019, and Phase Two of the review is currently underway.

3. Septic Inspections

P: Progressing Well/On Target

In accordance with Section 1.10, Division C of the Ontario Building Code (OBC), mandatory maintenance inspections of on site sewage systems are conducted annually on properties located within vulnerable areas where septic systems may pose a significant drinking water threat. Public Health Sudbury and Districts (PHSD) acts as the Principal Authority responsible for administering and conducting these inspections. Inspection priority is based on several risk based factors, including proximity to municipal drinking water sources, the age of the septic system, and any documented history of septic system failure within the area.

Each identified property is requires re-inspection on a five-year cycle. The year 2025 marked the fourteenth year of implementation of the septic system inspection program. During 2025, a total of 36 properties were inspected, including 28 properties within the Ramsey Lake Drinking Water System and eight properties within the Valley East Drinking Water System. All inspected properties were found to be in compliance with Section 8.9, Division B of the OBC, with no evidence of sewage discharging onto the ground surface.

The second full cycle of inspections was completed between 2017 and 2021, during which 205 on site sewage systems were assessed. Results from this inspection cycle indicated that 100 percent of the systems were functioning as designed.

4. Risk Management Plans

P: Progressing Well/On Target

Risk Management Plans (RMPs) are site specific tools used to manage significant drinking water threat activities near municipal wells or intakes. RMPs are developed by the person engaged in the activity and the Risk Management Official at the City of Greater Sudbury. An RMP includes measures and best practices to reduce the risk of the activity.

Since the Source Protection Plan came into effect, a total of 51 sites have been investigated to determine whether a Risk Management Plan was required. To date, 20 Risk Management Plans have been established, while 29 identified threat sites have been removed as they did not meet the criteria for a significant threat. An additional three sites are being managed under provincial instruments. The Risk Management Plans established to date represent 100 percent of the plans required to address all existing significant drinking water threats within the Source Protection Area.

In 2025, the Risk Management Official/Inspector conducted a total of 65 inspections to ensure the compliance of Section 58 Risk Management Plans. These inspections confirmed 100 percent compliance with all established Risk Management Plans across the Source Protection Area.

Regular inspections were also conducted in 2025 to monitor activities prohibited under Section 57 of the Clean Water Act. None of the inspections identified prohibited activities occurring on the landscape, indicating compliance with source protection policies.

5. Provincial Progress: Addressing Risks on the Ground

P: Progressing Well/On Target

There are nine prescribed instrument policies in place that address significant drinking water threats related to water quantity, fuel storage, pesticide application, transportation of septage, waste disposal sites, and sewage-related activities. All prescribed instrument policies that apply to significant drinking water threats have been implemented.

Ontario ministries have reviewed previously issued provincial approvals to confirm alignment with the policies of the Sudbury Source Protection Plan. Since the plan came into effect, all existing approvals have been reviewed to ensure appropriate measures are in place to protect municipal drinking water sources. Pesticide approvals are issued on a seasonal basis and expire annually therefore all new and renewed applications are screened to ensure compliance with prescribed instrument policy requirements.

Provincial ministries also maintain established screening and review processes for new applications to identify and manage potential drinking water threats. Applications located within vulnerable areas require additional review to ensure that conditions are incorporated into permits.

6. Source Protection Awareness and Change in Behaviour

Public education, outreach, and awareness initiatives continued throughout 2025 to support drinking water source protection within the Sudbury Source Protection Area. 127 Drinking Water Protection Zone signs were previously installed across the area, including municipal roads within the City of Greater Sudbury and the Municipality of Markstay-Warren, as well as provincial highways managed by the Ministry of Transportation. These signs continue to raise public awareness of vulnerable areas.

The City of Greater Sudbury continued delivering its Road Salt Campaign in 2025, building on materials introduced in 2022 to promote responsible winter salt use. Educational materials developed through the campaign were distributed and support ongoing outreach to residents, businesses, and contractors on best practices for winter maintenance and protection of drinking water sources.

Environmental messaging was delivered through the City's "EarthCare Minute" segments on MCTV. This program highlights municipal environmental initiatives and provides practical tips to help residents reduce their environmental footprint. Source protection topics such as road salt use, hazardous waste disposal, stormwater management, and agriculture were featured, with an estimated reach of approximately 80,000 viewers.

The City of Greater Sudbury also supported water education initiatives, including the annual Children's Water Festival, which educates Grade 3 students and teachers on water conservation, protection, science, and technology.

7. Source Protection Plan Policies: Summary of Delays

Not applicable to our source protection area.

8. Source Water Quality: Monitoring and Actions

The Ramsey Lake (David St.) drinking water system has 2 identified drinking water issues: Microcystin LR (Blue Green Algae) and Sodium.

Microcystin LR

The City of Greater Sudbury monitors phosphorus levels in Ramsey Lake each spring through the Lake Water Quality Program, due to the known relationship between phosphorus concentrations and algal blooms. The lake is monitored weekly for blue green algae from June to October.

A Standard Operating Procedure is in place in Water/Wastewater Treatment and Compliance Services to guide drinking water treatment and response measures when algal activity is identified within Intake Protection Zone 1. During the 2025 monitoring season, no microcystins were detected in drinking water samples. Regular shoreline observations and sampling were carried out as part of the monitoring program.

Phosphorus data are collected annually during spring turnover. Long term monitoring results show a decreasing trend in phosphorus concentrations in Ramsey Lake, consistent with previous years. The Committee notes the role of measures implemented to reduce phosphorus inputs, including the City of Greater Sudbury's city-wide ban on the application of phosphorus containing fertilizers on established lawns.

Education and outreach remain an important component of phosphorus management efforts. Through initiatives such as the Love Your Lake program, shoreline properties on Ramsey Lake have been inspected and landowners provided with information on the relationship between phosphorus and water quality. Public messaging on phosphorus free lawn care is shared through the City's EarthCare Minute programming, and informational materials on blue green algae are available to the public.

8. Source Water Quality: Monitoring and Actions

Sodium

The Water/Wastewater Division of the City of Greater Sudbury (CGS) monitors sodium levels in Ramsey Lake using samples collected at the David Street Water Treatment Plant. Raw water samples are collected twice each year, in the spring and fall, to support the assessment of sodium concentrations in the lake.

Data included in the original Assessment Report was collected through the Drinking Water Surveillance Program by the Ministry of the Environment, Conservation and Parks in partnership with the City of Greater Sudbury. CGS has built on this dataset since 2017. Long-term monitoring indicates that sodium levels have increased since 1991. Since the Source Protection Plan came into effect in 2015, no statistically significant trend was observed in sodium concentrations, indicating concentrations have remained generally stable during the period of 2015-2025. Chloride data collected through the Drinking Water Surveillance Program was analyzed, from 1991-2019 chloride concentrations have increased at a rate of 1.46mg/L per year. Data collected since 2022 through the Lake Partnership Program will be analyzed in the future to determine more recent trends in chloride concentration in Ramsey Lake. Ongoing sodium and chloride monitoring supports the assessment of salt and snow management practices and informs future source protection initiatives.

As part of the Frobisher Depot Salt Dome Risk Management Plan, the City's Risk Management Office conducts sodium and chloride sampling in Frobisher Creek in the spring and fall. Monitoring inflows to Ramsey Lake helps to evaluate the effectiveness of road salt management measures within the Ramsey Lake Issue Contributing Area.

The City of Greater Sudbury has operated with a comprehensive Salt Management Plan since 2005, which is reviewed and updated every three years. The most recent update was finalized in 2024. Best management practices included in the plan are being applied, such as pre-wetting salt to reduce application rates, minimizing runoff to environmentally sensitive areas, and providing training to snowplow operators. In 2025, the City of Greater Sudbury mandated that training with Smart About Salt® Winter Salt Management Program be a requirement for winter maintenance contracts on certain municipal properties.

The Road Salt Campaign continued in 2025. The campaign conducted by the City of Greater Sudbury aims to educate winter maintenance contractors and homeowners on the importance of responsible salt application.

The Committee emphasizes the importance of continued improvements and the implementation of best management practices for winter maintenance operations in both the municipal and private sectors to protect water quality in Ramsey Lake and ensure it continues to be a reliable source of drinking water into the future.

9. Science-based Assessment Reports: Work Plans

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

10. More from the Watershed

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

<https://www.conservationsudbury.ca/watershed-management/source-protection/>

