

Source Protection Annual Progress Report

South Georgian Bay Lake Simcoe Region



On the Implementation of the South Georgian Bay Lake Simcoe Source Protection Plan

Reporting period January 1 to December 31, 2023

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2023 Source Protection Annual Progress Report

I. Introduction

This annual report briefly summarizes the progress made in implementing the source protection plan for the Lakes Simcoe & Couchiching Black River, Nottawasaga Valley and Severn Sound Source Protection Areas for the 2023 calendar year, as required by the Clean Water Act and its regulations.

Protecting the sources of our drinking water is the first step in a multi-barrier approach to safeguard the quality and quantity of our water supplies. The source protection plan is the culmination of extensive science-based assessments, consultation with the community, collaboration with local stakeholders and the province, and research. The implementation of the policies contained in the source protection plan ensure that activities carried out in the vicinity of municipal drinking water supply wells and lake-based drinking water intakes do not pose a significant risk to those supplies.



II. A Message from your local Source Protection Committee

Our source protection committee was asked to provide a progress score on achieving source protection plan objectives this reporting period, with three progress scores to choose from as follows:

- **Progressing Well/On Target** – The majority of the source protection plan policies have been implemented and/or are progressing
- **Satisfactory** – Some of the source protection plan policies have been implemented and/or are progressing
- **Limited progress** – A few of source protection plan policies have been implemented and/or are progressing

The progress score selected for achieving source protection plan objectives this reporting period is progressing well.

All municipalities that had implementation actions to complete have submitted their 2023 annual reports to the Source Protection Authority. Municipalities in our source protection region have processes in place to ensure planning decisions conform to our source protection plan. Ninety-eight percent of the policies that address significant drinking water threats in our Plan have been or are being implemented. Approximately 96% of the 3,313 significant drinking water threats that existed at the time of source protection plan approval have been addressed through policy implementation.

A total of 314 risk management plans have been established as of December 31, 2023, and workplans have been established by Risk Management Officials to complete the estimated 27 outstanding Risk Management Plans by the July 1, 2024 deadline. Progress will be closely monitored on outstanding Plans and reported to the Source Protection Committee until they are all complete.

Twelve percent (250 of the estimated 2,106) of round-three on-site septic system inspections have been completed by municipal staff. Most municipalities in our region have three years left to complete their remaining inspections.

In its role to identify potential threats to drinking water, the South Georgian Bay Lake Simcoe Source Protection Committee is expressing concerns regarding recent proposed changes to Provincial policy: more specifically the proposed Municipal Project Assessment Process and the proposal to streamline environmental permissions for stormwater management under the Environmental Activity and Sector Registry. The Committee is concerned that elements of the proposed policy changes will limit the Committee's ability to identify and minimize future drinking water threats and include effective policies in the Source Protection Plan to protect drinking water sources.

III. Our Watershed

The South Georgian Bay Lake Simcoe source protection region contains four watersheds and spans over 10,000 km², from the Oak Ridges Moraine in the south to the Canadian Shield in the north and is comprised of the Black-Severn, Lake Simcoe, Nottawasaga Valley and Severn Sound watersheds. The region contains portions of the Niagara Escarpment, Oak Ridges Moraine, Oro Moraine, Peterborough Drumlin Fields, Simcoe Uplands and Lowlands and the Canadian Shield. The region includes:

- 4 watersheds
- 52 municipalities
- 3 First Nations communities
- 107 drinking water systems
- 276 municipal supply wells
- 16 municipal surface water intakes
- More than 50,000 private wells

All told, the South Georgian Bay Lake Simcoe region has approximately one third of the municipal drinking water systems in the province.

The region is complex and diverse in terms of geology, physiography, population, and development pressures, with many, often conflicting, water uses including drinking water supply, recreation, irrigation, agriculture, commercial and industrial uses, as well as ecosystem needs.

These differences represent a significant challenge for the development of a source protection plan because of the associated variability of available information upon which to base the technical work, the differing stresses on water resources related to development pressure and population growth, and the differences in the nature, density and locations of threats to the quality and quantity of water resources.

To learn more, please read our assessment reports and source protection plan.

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

1. Source Protection Plan Policies and Addressing Significant Risks

The South Georgian Bay Lake Simcoe Source Protection Committee includes 129 policies in their source protection plan to address 22 prescribed threats, protect sources of drinking water and monitor the progress of policy implementation.

Since the source protection plan took effect over 9 years ago, much has been accomplished. To date, 100% of the legally binding policies that address significant drinking water threat activities have been or are being implemented. 42% have been implemented, 51% are in the process of being implemented, and 7% have been evaluated and determined no further action is required.

The progress score for implementing Plan policies is progressing well/on target.

2. Municipal Progress: Addressing Risks on the Ground

Of the 52 municipalities (upper, lower and single-tier) within the South Georgian Bay Lake Simcoe Source Protection Region, 43 of these are subject to one or more source protection plan policies. The remaining nine municipalities do not have vulnerable areas where policies apply.

Planning departments and building officials are screening applications for locations within vulnerable areas where threats to drinking water sources are possible and policies may apply.

Municipalities in our source protection region are also required to review and update their Official Plan to ensure it conforms with the local source protection plans the next time they undertake an Official Plan review under the Planning Act. All 43 of the municipalities that are subject to source protection plan policies have amended or are in the process of amending their Official Plan to conform with the source protection plan for our region.

The municipal progress score is progressing well/on target.

3. Septic Inspections

Within our source protection region, 2,106 septic systems are required to be inspected as part of the 5-year inspection cycle. We are 2 years into the 5-year inspection cycle and approximately 250 (12%) on-site sewage systems have been inspected in accordance with the Ontario Building Code.

The progress score for the septic inspection program is progressing well/on target.

4. Risk Management Plans

314 risk management plans were established in our source protection region as of December 31, 2023 with 43 of those being completed within the 2023 calendar year. This represents 92% of the risk management plans required to manage existing significant threat activities.

73 inspections were carried out in 2022 by a Risk Management Official/Inspector for regulated activities. 14 of these inspections demonstrated non-compliance with the contents of a risk management plan. 12 of the 14 inspections that demonstrated non-compliance were the result of businesses not training all staff on source water protection principals, while the other inspections were in response to new businesses opening at an existing threat property and therefore requiring a new risk management plan. RMOs are working with business owners to facilitate source water training in the future.

Workplans have been established by Risk Management Officials to complete the 27 outstanding Risk Management Plans by the July 2024 deadline. Progress will be closely monitored on outstanding Plans and reported to the Source Protection Committee until they are all complete.

The progress score for establishing risk management plans is progressing well/on target.

5. Provincial Progress: Addressing Risks on the Ground

Ontario ministries are reviewing applications for new or amended and 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 activities that pose a significant risk to sources of drinking water. The provincial approvals are being issued, denied, amended or revoked, where necessary, to conform to plan policies. Our policies set out a timeline of five years from the date the source protection plan took effect (July 1, 2015) to complete the review of existing activities and make any necessary changes to previously issued approvals. The timeline for new or amended prescribed instruments is outlined in the Plan as the day the Source Protection Plan took effect. The Ministries have reported 100% completion of previously issued provincial approvals in our source protection region and have a review protocol in place to screen all new applicable approval applications.

The progress score for the addressing risks using prescribed instruments is progressing well/on target.

6. Source Protection Awareness and Change in Behaviour

Staff from Lake Simcoe Source Protection Authority met with Fire Chiefs from local municipalities in York Region and Simcoe County with a goal of increasing awareness of source water protection and exploring ways fire services staff can assist in preventing contamination of municipal water sources. As a result of these meetings, Central York Fire Services plans to include source water protection in their staff training program, add a source water protection geographic information system (GIS) layer to their mapping system, and add known DNAPL and organic solvent threat sites to their Pre-Plan and Dispatch notification system.

7. Source Protection Plan Policies: Summary of Delays

Of the 129 policies included in the Source Protection Plan, all (with the exception of one) are currently being implemented or are in the process of being implemented. The only policy that has had no progress made to date is the non-legally binding policy on transport pathways (TP-1). This policy only applies to one municipality in the Severn Sound Source Protection Area. Within this area there are numerous significant drinking water threats and managing these threats through the use of legally binding policies has been the main priority to date. This policy will continue to be considered in future work plans.

8. Source Water Quality: Monitoring and Actions

City of Barrie - Barrie Well Supply - Central Well Field Issue contributing area for:

Sodium and Chloride

An increasing concentration/trend has been observed.

Risk management plans have been established for large users of salt to ensure best management practices are implemented for storage and application. The City of Barrie staff follow Smart About Salt best practices for salt application on municipal parking lots.

Town of Penetanguishene - Robert Street West Supply Well Issue contributing area for:

Trichloroethylene

Not enough data is available to determine changes in concentration/trend. No water quality data was collected in 2023 at this decommissioned well location. However, a decreasing concentration has been observed in the long-term data.

Township of Brock – Cannington Well Supply – Arena Well Field

Trichloroethylene

A decreasing concentration/trend has been observed.

Township of Severn - Coldwater Well Supply Issue contributing area for:

Trichloroethylene

No change in concentration/trend.

Tiny Township - Lafontaine Well Supply Issue contributing area for:

Nitrate

No change in concentration/trend.

Tiny Township - Georgian Sands Well Supply Issue contributing area for:

Nitrate

No change in concentration/trend.

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 the South Georgian Bay-Lake Simcoe Protection Region, visit:

www.ourwatershed.ca

Education and outreach are an important part of implementing Source Protection. Source Protection Authorities, municipalities and Risk Management Officials within the region continue to engage the community through site visits, social media, and workshops.