

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 – December 31, 2021

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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, as required by the Clean Water Act and its regulations for the 2021 calendar year.

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 will ensure that activities carried out in the vicinity of municipal drinking water supply wells and lake-based drinking water intakes will 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 satisfactory.

The COVID-19 pandemic has impacted progress made in achieving source protection plan objectives in 2021 and will continue to have an impact into the future. Despite that, all municipalities submitted their 2021 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 92% of the 3,313 significant drinking water threats that existed at the time of source protection plan approval have been addressed through policy implementation.

While 265 risk management plans (RMPs) have been established as of December 31, 2021, it is unlikely that the estimated 103 outstanding RMPs will be completed by the July 2022 deadline. A RMP deadline extension will be sought, and progress will be monitored on outstanding RMPs until they are all complete.

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 about 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 water 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 included 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 six years ago, much has been accomplished. To date, 100% of the legally binding policies that address significant drinking water threat activities have been addressed: have been implemented (42%); are in the process of being implemented (51%); or have been evaluated and determined no further action is required (7%).

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 take the next step 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. Official Plans have either been amended or are being reviewed for inclusion of source protection requirements. Of the 43 municipalities that are subject to source protection plan policies, 42 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, 2,095 septic systems are required to be inspected as part of the 5-year inspection cycle. To date, 1,603 (77%) of on-site sewage systems have been inspected in accordance with the Ontario Building Code in the second round.

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

4. Risk Management Plans

265 risk management plans have been established in our source protection region as of December 31, 2021 with 14 of those being completed within the 2021 calendar year.

45 inspections have been carried out in 2021 by a Risk Management Official/Inspector (RMO/I) for prohibited or regulated activities. There is a greater than 99% compliance rate with the risk management plans established in our source protection region.

We have made significant progress in establishing RMPs however it is unlikely that we will meet the July 2022 deadline. It is difficult to gauge exactly how many significant drinking water threats will be removed through threats verification work (and therefore not require an RMP). Source protection authority staff plan to seek an extension to the current RMP deadline.

The progress score for establishing risk management plans is satisfactory.

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

To raise awareness about the protection of local drinking water sources, municipalities across the South Georgian Bay Lake Simcoe source protection region have installed a total of 334 drinking water protection zone signs on municipal roads surrounding vulnerable areas. In addition, 14 signs have been installed on provincial highways.

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 Chloride

An increasing concentration/trend has been observed.

The City of Barrie is developing Risk management plans based on the Threat Based Approach and all City contractors are Smart about Salt certified.

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

TCE

A decreasing concentration/trend has been observed.

Township of Brock – Cannington Well Supply – Arena Well Field

TCE

A decreasing concentration/trend has been observed.

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

TCE

A decreasing concentration/trend has been observed.

Tiny Township - Lafontaine Well Supply Issue contributing area for:

Nitrate

A decreasing concentration/trend has been observed.

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

Nitrate

An increasing concentration/trend has been observed.

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 RMOs within the region continue to engage the community through site visits, media, workshops, etc.

In 2021 the Lake Simcoe & Couchiching Black River Source Protection Authority teamed-up with the Ontario Petroleum Transporters and Technicians Association to deliver source water protection education and outreach to fuel providers. We are taking a personalized approach to deepen the understanding and level of engagement about source water protection by meeting with key personnel at the largest fuel distribution companies in our region. The meeting provides fuel distributors with an introduction to source water protection concepts, informs them of where the vulnerable areas are located, and discusses ways fuel providers can protect sources of drinking water. We are looking to them to help educate their staff and build simple steps into their existing health and safety practices that will prevent spills in vulnerable areas around municipal water wells.