

Source Protection Annual Progress Report

I. Introduction

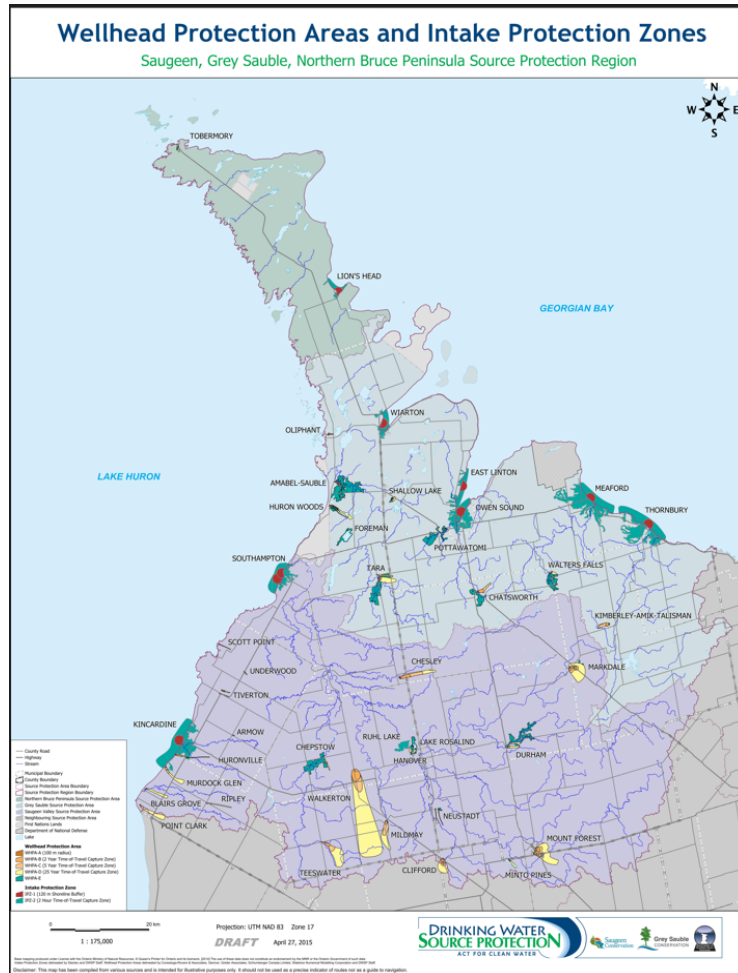
2023 Reporting Year

Saugeen Valley Source Protection Area (SPA)

Grey Sauble SPA

Northern Bruce Peninsula SPA

This annual progress report outlines the progress made implementing the source protection plan for the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region, as required by the Clean Water Act, 2006 and associated regulations. This Region's Source Protection Plan came into effect in July of 2016, we have now completed the established 5-year timeline for implementation of our significant drinking water threat policies. Renewal and replacement of Source Protection Committee members continues with 4 new members appointed and 1 renewed in 2023 as required under the Clean Water Act, 2006.



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 great progress to date on source protection plan implementation was made possible with the strong support and direct involvement of municipalities, agricultural and industry sectors, as well as other environmental and health related stakeholder groups. While the program has reached a major milestone whereby 100% of significant threat policies have been implemented, there is still a need to ensure that any outstanding municipal plan/by-law amendments or renewal of risk management plans are fully implemented as required under the plan. The Committee commends the Ministry for their strong commitment to the program as demonstrated through its 3-year funding allocation, along with recent amendments to the eligible activities that allow for specific technical work to be conducted where warranted. Without the ongoing provision of financial resources, the significant progress achieved in the development and implementation of the source protection plan would be greatly diminished. Support from the province to update technical work is appreciated to manage threats on the landscape especially in areas with Karst features. The Committee would also like to see funding for stewardship to keep pace with new technical rules or new areas affected by plan policies in order to get buy-in from landowners in these areas who may not have been eligible during previous years.

These stewardship efforts are often a key element to help manage or remove significant drinking water threats within vulnerable areas.

Finally, with respect to education and outreach on best management practices for areas that fall outside existing source protection areas, our Committee would like to again commend the Ministry for the release of the Best Practices Guidance and funding support to help promote the guidance materials locally. Our Committee, is committed to continuing to work with municipalities and local health authorities across the Region to apply similar approaches to protecting private and non-municipal drinking water systems through these guidance materials.

III. Our Watershed

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

The Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region is comprised of three Source Protection Areas. These areas are the Saugeen Valley Source Protection Area, the Grey Sauble Source Protection Area and the Northern Bruce Peninsula Source Protection Area.

The Region represents approximately 8400 km² and has approximately 163,000 residents. Our Source Protection Region also includes the Chippewas of Saugeen, who have reserve land outside of Southampton, the Chippewas of Nawash, who have the Neyaashiinigmiing reserve in the Cape Croker area and the Métis Nation of Ontario.

The Saugeen Source Protection Area (Saugeen SPA) is comprised of the watershed that represents the jurisdiction of the Saugeen Valley Conservation Authority. The Municipality of West Grey is the most populated municipality in this SPA. Each municipality is comprised of settlement areas surrounded by extensive rural areas. The vast majority of the Saugeen SPA averages less than 20 people per km². The lowest population densities occur in the farmlands away from Lake Huron and in the eastern portions of the SPA. Between the 15 municipalities located in this SPA, there are a total of 21 municipal drinking water systems. These systems include the Arran-Elderslie Drinking Water System (DWS), Walkerton DWS, Chepstow DWS, Lake Rosalind DWS, Markdale Well Supply, Hanover Water Treatment Plant, Lakeshore DWS, Village of Ripley Well Supply, Scott Point DWS, Underwood DWS, Tiverton DWS, Armow DWS, Kincardine DWS, Minto Pines Subdivision DWS, Clifford Well Supply, Southampton Water Treatment Plant, Mildmay Well Supply, Teeswater Well Supply, Mount Forest DWS, Durham Well Supply and the Neustadt Well Supply.

The Grey Sauble Source Protection Area (Grey Sauble SPA) is comprised of the watershed that represents the jurisdiction of the Grey Sauble Conservation Authority. The City of Owen Sound is the most populated municipality in the Grey Sauble SPA, where there are more than 880 people per km². Similar concentrations can be found in the larger urban centres such as Markdale, Meaford and Thornbury. That being said, the vast majority of the Grey Sauble SPA averages less than 20 people per km². Between the 8 municipalities located in this SPA, there are a total of 15 municipal drinking water systems. These systems include the Tara Drinking Water System (DWS), Thornbury DWS, Chatsworth DWS, Walters Falls DWS, Pottawatomi Village Water Treatment Plant, Shallow Lake Water Treatment Plant, East Linton Water Treatment Plant, Kimberly-Amik-Talisman Well Supply, Meaford PUC Water Treatment Plant, R.H. Neath Water Treatment Plant, Amabel-Sauble DWS, Foreman Water Works, Huron Woods Water Supply Works, Oliphant Water System and the Warton Water Treatment Plant.

The Northern Bruce Peninsula Source Protection Area (NBP SPA) is comprised of the area that falls under the jurisdiction of the Municipality of Northern Bruce Peninsula, with the exception of some small areas along the bottom portion of the municipality that are covered under the Grey Sauble SPA. Lion's Head and Tobermory are the largest settlement areas in the NBP SPA. There are extensive rural areas and cottage developments on the Lake Huron and Georgian Bay shorelines and some inland lakes, with an average of five people per km². Within this SPA, there are two drinking water systems, these are the Tobermory Community Centre/ Fire Hall/ Municipal Concession Stand, and the Lion's Head Water Treatment Plant.

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

1. Source Protection Plan Policies and Addressing Significant Risks

The Source Protection Plan is comprised of 66 policies that address significant drinking water threats directly, and 57 policies that address other areas such as the general, transport pathways and monitoring policies. 100% of the policies that address significant drinking water threats are implemented or have been evaluated and determined that no further action is required. Of these, 86% of the policies have been fully implemented, and 6% require no further action, which includes Policy 02-06 Building Code Changes Related to On-site Sewage Systems (addressed through existing Building Code requirements), 01-05 Siting of PCB Waste Storage, 02-10 Sewer Locating Program, 02-14 Design Principles for New Development. As of 2023, Policy 06-02 NASM Plan Approvals is now implemented. The remainder are in-progress (8%), which are salt related activities that were recently amended in the Source Protection Plan due to 2021 Technical Rule changes.

Of the policies not specifically associated with significant drinking water risks, the following policy has not been fully implemented - G-04 Amend Official Plan and Zoning By-Law, as there remains a couple municipalities that have yet to complete their amendments. These amendments are underway but were delayed due to pandemic restrictions which affected public consultations efforts. There has been good interest and participation so far on recently amended salt related policies from municipal staff.

2. Municipal Progress: Addressing Risks on the Ground

P: Progressing Well/On Target

The Region contains almost the full extents of Grey County and Bruce County, as well as small portions of the Counties of Wellington and Huron. There are 25 municipalities (including upper-, lower, and single-tier), within our source protection region, 21 of which have vulnerable areas where significant drinking water threat policies apply.

100% of the municipalities in our source protection region have processes in place to ensure that their day-to-day planning decisions conform with our source protection plans.

Municipalities in our source protection region are also required to take the next step to review and update their Official Plans and Zoning By-Laws, where applicable, to ensure that they conform with the local source protection plans. This is to be done the next time they undertake an Official Plan review under the Planning Act. Of the 21 municipalities required to complete the Official Plan conformity exercise, 100% have amended or are in the process of amending their Official Plans (19 fully implemented and 2 in-progress). Of the 17 municipalities required to complete the Zoning by-law conformity exercise, 100% have amended or are in the process of amending their Zoning by-laws. Due to recent impacts affecting consultation processes due to the COVID-19 pandemic, a few municipalities have extended their Official Plan/Zoning by-law amendments into 2024. In 2023, West Grey completed their Official Plan/Zoning By-law amendments.

Bruce County is still outstanding for their Official Plan updates, thus Northern Bruce Peninsula and Brockton are still pending for their Zoning By-law amendments as they fall under Bruce County's Official Plan. Staff have been working with municipalities to ensure that all required Official Plan and Zoning by-law amendments are completed.

3. Septic Inspections

P: Progressing Well/On Target

100% of on-site sewage systems have been inspected in accordance with the Ontario Building Code, within vulnerable source protection areas. In 2023, 23 septic systems were inspected, 6 of which required minor maintenance and 1 required major maintenance.

All municipalities within our source protection region are aware of the requirements to implement a mandatory on-site sewage maintenance inspection program within vulnerable source protection areas as specified under the Building Code (Ontario Regulation 332/12 under the Building Code Act). Septics are required to be inspected once every 5 years within vulnerable source protection areas.

4. Risk Management Plans

P: Progressing Well/On Target

As of December 31, 2023, 174 risk management plans were established in our source protection region. In 2023, staff continued with 5-year renewals of existing risk management plans, with a total of 55 plans renewed or transferred to new owners/tenants. In 2024, there are additional risk management plans required to address salt application and storage threats for municipal roads and private parking lots.

In 2023, new risk management plans were established for salt storage and handling threats, as well as fuel handling and storage threats due to the 2021 Technical Rule changes.

There have been 331 inspections carried out by a Risk Management Inspectors for prohibited or regulated activities (85 completed in 2023). There is a 100% compliance rate with the risk management plans established in our source protection region.

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 3 years to complete the review and make any necessary changes.

The ministries have completed this for 100% of previously issued provincial approvals in our source protection region. In 2023, detailed reviews were completed by Ministry of the Environment, Conservation and Parks staff for 2 wastewater/sewage works, 1 Waste Disposal Site-landfilling and storage facility and determined these to not be significant drinking water threats. Furthermore, 4 hauled sewage permits, and 1 nutrient management strategy were reviewed but determined to not be a Significant Drinking Water Threat (SDWT). Also, OMAFRA identified 1 storage of ASM/OCA/yard for this Region that required a prescribed instrument.

6. Source Protection Awareness and Change in Behaviour

There are a total of 152 Drinking Water Protection Zone signs that have been installed in our source protection region. 138 signs were installed by Municipalities and Counties, as well as 14 by the Ministry of Transportation on provincial highways.

The installation of these road signs have greatly increased public awareness of source protection zones across the region and have resulted in increased communications from the public regarding clarification on source protection areas and related source protection policies. They have also increased notifications of potential activities that could affect vulnerable source water protection areas.

Additionally, the risk management process has greatly increased awareness across the region. Through direct interactions with affected landowners, understanding of the program is growing along with an understanding of the need to protect drinking water sources.

7. Source Protection Plan Policies: Summary of Delays

Not applicable to our source protection region/area.

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.

Under monitoring policy M-29 the municipality of Brockton continues to monitor nitrate levels for wells 7 and 9. Results of this monitoring have shown a general trend in nitrate levels decreasing over the past 5 years and continue to decrease below the Maximum Allowable Concentration of 10 mg/L as per O. Reg. 169/03: Ontario Drinking Water Quality Standards (ODWQS).

Nitrate results for 2023 are as follows: Well #7 average of 1.32mg/l and Well #9 average of 2.53mg/l.

9. Science-based Assessment Reports: Work Plans

In 2022 and 2023 staff participated in meetings with the Lake Rosalind/ Marl Lake Cottagers Association to discuss local studies showing high E.coli and Total Coliform results for raw water samples in the lakes and nearby streams. As part of proposed Sec.34 Source Protection Plan review and 2021 Technical Rule changes, staff reviewed WHPA-E delineation and vulnerability scores associated with unique soil and drainage conditions around these lakes. The Lake Rosalind WHPA-E zone surrounds the lakes which would enable an amendment to septic policies to apply to Moderate/Low risk threats in these areas.

With respect to Technical Rule 30.1, a Tier 3 Water Budget was completed for the Lake Rosalind and Ruhl Lake systems in the municipality of Brockton. There was sufficient information available to complete the Tier 3 Water Budget and resulting WHPA-Q protection zone for the Lake Rosalind drinking water system.

10. More from the Watershed

To learn more about our source protection region/area, visit our website at:
home.waterprotection.ca

Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region

In 2023 staff engaged with municipal staff, councils and landowners across the Region. Through council meetings, site visits, risk management related activities and public events, there were opportunities to assess source protection plan implementation successes and challenges including policy effectiveness. Support materials supplied by Conservation Ontario have resulted in increased engagement on social media platforms. Visit the link to learn more: <https://conservationontario.ca/conservation-authorities/source-water-protection/>



Drinking Water Source Protection

Training Session with First Responders in Grey Highlands

Drinking Water Source Protection staff attended a training session with first responders in the Municipality of Grey Highlands on September 12, 2023. Information was shared about how fire departments can help protect drinking water during emergencies:

- Stock spill containment supplies (absorbent materials, spill kits, drain cover mats) to keep contaminants from entering nearby drains/waterways wherever possible.
- Consider the type and quantity of products used to suppress fire, as certain firefighting foams contain harmful chemicals that could impact local drinking water sources.
- Contact the municipal water operator to shut down intake if necessary to prevent contaminants from entering the drinking water system.
- Get chemical product lists from industries/business in vulnerable areas to better prepare for potential hazards on-site.

Source: GSCA Fall Member Newsletter