

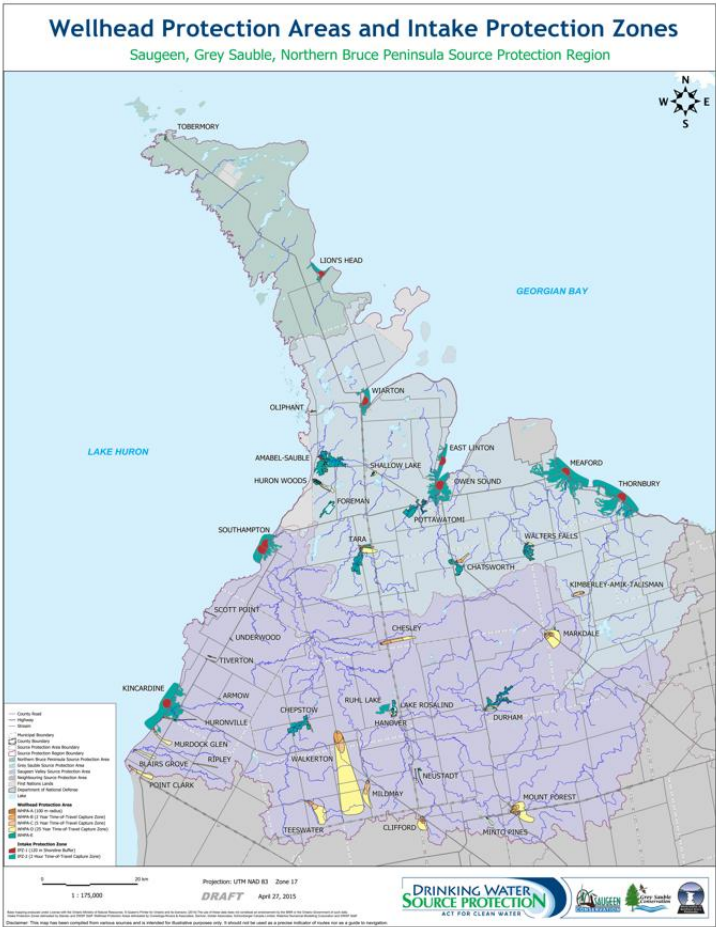
Source Protection Annual Progress Report

I. Introduction

2024 Reporting Year

Saugeen Valley Source Protection Area (SPA)
 Grey Sauble SPA
 Northern Bruce Peninsula SPA

This annual progress report outlines the progress made in 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 2 members renewed and 1 new member in 2024 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.

Over the last 25 years, protection of municipal drinking water sources in Ontario has improved dramatically. However, as the landscape and the climate changes, we must remain vigilant and continue with drinking water source protection measures to ensure that there continues to be safe water available for public consumption. Across Ontario, since the *Clean Water Act*, 2006 and the *Safe Drinking Water Act*, 2002 came into effect this legal foundation has been strengthened by the actions of Source Protection Committees and other source protection/ water professionals. The great progress to date has been made possible with the strong support and direct involvement of landowners, municipalities, agricultural and industry sectors, as well as other environmental and health related stakeholder groups.

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.

Furthermore, 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 Provincial best management guidance materials.

In 2025, we should take time to reflect and acknowledge the success of the drinking water source protection activities achieved to date and look forward to continued progress and enhancements to the protection of our water sources.

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. Each municipality is comprised of settlement areas surrounded by extensive rural areas. 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. 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 Wiarton 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. There are extensive rural areas and cottage developments on the Lake Huron and Georgian Bay shorelines and some inland lakes. 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. 94% of the policies that address significant drinking water threats are implemented or progressing well and 6% have been evaluated and determined that no further action is required.

86% of the policies have been fully implemented, while 8% are in-progress, which are salt related activities that were recently amended in the Source Protection Plan due to 2021 Technical Rule changes. There has been good interest and participation so far on recently amended salt related policies, with the completion of 9 Municipal Salt Management Plans to-date.

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 anticipated to be completed in 2025.

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 (20 fully implemented and 1 in-progress).

Bruce County has completed a new draft Official Plan amendment in 2024, with plans to finalize the document this year. 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. In 2024, Kincardine completed their Zoning By-law amendments.

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 2024, 3 septic systems were inspected, one which required major maintenance. Staff have connected with the municipality to ensure the noted deficiencies are addressed. An increased number of inspections scheduled for 2025 as part of the second round.

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.

There is the potential for an increased number of septic inspections to be completed in the Municipality of Brockton, upon approval of the proposed discretionary septic inspection policy for properties around Lake Rosalind's WHPA-E area.

4. Risk Management Plans

P: Progressing Well/On Target

As of December 31, 2024, 214 risk management plans were established in our source protection region. In 2024, staff continued with 5-year renewals of existing risk management plans, with a total of 40 plans renewed or transferred to new owners/ tenants. In 2025, there are additional risk management plans required to address salt application and storage threats for municipal roads and private parking lots.

In 2024, 4 new risk management plans were established for salt storage and handling threats due to the 2021 Technical Rule changes.

There have been 400 inspections carried out by Risk Management Inspectors for prohibited or regulated activities (69 completed in 2024). 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 within the source protection region. In 2024, detailed reviews were completed by Ministry of the Environment, Conservation and Parks staff for 1 fuel handling and storage, and 7 hauled sewage permits and determined these to not be significant drinking water threats.

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 protections 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 2024 are as follows: Well #7 average of 1.54mg/l and Well #9 average of 1.25mg/l.

9. Science-based Assessment Reports: Work Plans

In 2024 staff initiated a study in the Kimberley and Shallow Lake areas to review existing Wellhead Protection Areas (WHPA) due to highly vulnerable karst features, resulting in significant surface water/groundwater connections (e.g. sinking streams). The aim of this study is to collect improved water quality and flow data from the field, that can then be incorporated into updated groundwater models and potential changes to the WHPA-E delineations for 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:

homewaterprotection.ca

Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region

In 2024, staff continue to engage 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>

PHOTOS FROM 2024

September issue of Rural Voice, "What is Karst" submitted article via local Federation of Agriculture office. (see below)



**Grey County Federation
of Agriculture**

519-364-3050 or 1-800-275-9551

Email: grey@ofa.on.ca Website: greyfederation.ca

* The Rural Voice is provided to OFA Members in Grey County by the GCFA

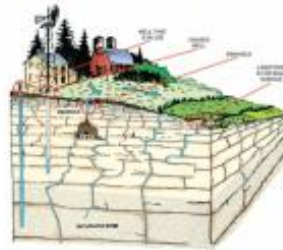
What is Karst?

By: Karen Gillan

Karst is a term used to describe landscapes with distinct bedrock features known as carbonates (e.g. limestone and dolostone), which are prone to weathering by water. According to the Ontario Geological Survey, the Niagara Escarpment areas around Grey and Bruce Counties constitute one of the most regionally extensive and significant dolostone karst plains in North America if not the world.

For example, if large applications of chemicals or manure occur in areas where there is very little soil cover or fractured bedrock, contaminants can move rapidly from surface to groundwater sources. Private septic systems can also pose a risk to groundwater wells in these areas and should be monitored for proper function.

The following graphic shows surface features and the soil profile in a karst areas:



Karst regions have bedrock with complex cracks and openings that can allow water to move through the ground.

Why is it a concern?

Karst areas have a lot of cracks and fissures and are often characterized with shallow soils or low overburden. The fractures in karst areas can allow contaminants to travel to groundwater aquifers with minimal to no soil filtration. This groundwater can be the source of drinking water for rural residents; therefore the increased speed of travel and lack of filtration means that contaminants pose a higher risk to landowners in these areas.

Below, centre, is an example from Grey Highlands of a sinkhole and second image is the Wodehouse Creek that becomes a sinking stream and leads to springs in Kimberley-Talisman area.

What can landowners do in these areas?

Areas with high potential for groundwater contamination exist especially in areas where there is bedrock within one metre of the surface. The following best management practices should be considered in areas of higher vulnerability:

- Conduct an assessment of your property and farm practices to counteract the potential for groundwater contamination, following OMAF guidelines: <https://www.ontario.ca/page/assessing-potential-ground-water-contamination-your-farm#section-5>
- Use Environmental Farm Plans & Nutrient Management Plans promoting the '4-Rs' best management practices.
- Ensure proper containment of manure, yard runoff, and any wash water to reduce leaching to groundwater.
- Consider the use of less intensive practices in higher risk areas, such as pasture, cover crops, reduced tillage and soil disturbance.
- Routinely clean out and inspect septic systems to ensure proper functioning.
- Conduct private well testing, as a routine practice.

Using care to consider how your actions on a property can impact water quality below the surface is key to managing risks in karst areas across the region.

Glossary:
Karst - landscape made of limestone.
Landscape - the geographic features of a region.
Limestone - type of sedimentary rock mostly made of calcium carbonate from shells and skeletons of marine organisms.
Sinkhole - hole formed in a rock or other solid material by the weight or movement of water.
Springs - An opening at or near the surface of the earth through which water from underground sources emerges.

NOV 27th

9 AM - 4 PM

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GUARDIAN NETWORK TRAINING

FREE SUICIDE PREVENTION TRAINING FOR THE AGRICULTURE COMMUNITY

BECOME A GUARDIAN IN GREY COUNTY

HOSTED BY: GREY AGRICULTURAL SERVICES

LUNCH WILL BE PROVIDED

LIMITED SPOTS AVAILABLE REGISTER HERE!



Photo by Kate Lazier
Taken in Grey Highlands



Photo by Grey Sauble Conservation
Taken at Wodehouse Creek

2024 Directors Meetings

September 11
October 18 - AGM
November 13



If you require a new SMV sign for your equipment before heading out on the road, contact our office we have some available to members.

* The Rural Voice is provided to OFA Members in Grey County by the GCFA.

September 2024 61