

2021 Source Protection Annual Progress Report

I. Introduction

This annual progress report outlines the progress made in implementing the source protection plans for the Ausable Bayfield and Maitland Valley Source Protection Areas, as required by the Ontario Clean Water Act, 2006 and its regulations. It highlights actions taken to protect the sources of our drinking water, the groundwater aquifers and Lake Huron.

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 assessment, research, consultation with the community, and collaboration with local stakeholders and the Province.

This is the fifth annual progress report submitted for the Ausable Bayfield Maitland Valley (ABMV) Source Protection Region. It covers the period of April 2015 to December 31st, 2021, and summarizes progress made in the year 2021.



II. A message from your local Source Protection Committee

Overall Score: P – Progressing Well / On Target: The majority of the source protection plan policies have been implemented or are progressing.

We acknowledge and thank the local municipalities, stakeholders, and other implementing bodies for their contribution to this annual progress report, and for their ongoing efforts to implement the Source Protection Plans (SPPs).

Following approval of the SPPs in 2015, the Committee has focused on tasks related to implementation and amendments. This includes assessing progress made by stakeholders in implementing the SPP policies, identifying areas for improvement, and overseeing technical updates and amendments.

The Source Protection Committee for the ABMV Source Protection Region reviewed the recent implementation results, noting that significant progress has been made since the SPPs came into effect in 2015. Although the Covid-19 pandemic has created daunting challenges, implementing bodies continued their efforts to ensure that municipal drinking water is well protected. The majority of the SPP policies have been implemented and 98% of significant drinking water threats have been addressed. For these reasons, the SPC feels confident in their assessment that implementation of the Source Protection Plans is progressing well or on target.

III. Our Watershed

The Ausable Bayfield Maitland Valley (ABMV) Source Protection Region (SPR) is made up of the Ausable Bayfield and Maitland Valley Source Protection Areas (SPA). The two SPAs overlie the same jurisdiction as the Ausable Bayfield and Maitland Valley conservation authorities. Their jurisdictions abut and their major rivers flow into Lake Huron. The combined watersheds are approximately 5,690 square kilometres in size, with a combined population of 105,000. There are six counties and 24 lower-tier municipalities entirely or partly within the SPR. There are no First Nations within the two watershed areas. The Ausable Bayfield Source Protection Area is adjacent to the Chippewas of Kettle and Stony Point First Nation.

Land uses can have a significant impact on water quality and quantity. Agriculture is the major land use in the region, with small urban area scattered throughout. Their watersheds share common patterns of landscapes and natural systems. Their towns are small; their economies are based on the economic driver of a thriving agricultural sector, a significant manufacturing sector as well as the additional economic pillars of tourism, heritage and culture. Lake Huron is a major driver of the tourism industry. In the Ausable Bayfield Maitland Valley Source Protection Region there are 26 municipal groundwater well systems as well as two Lake Huron intakes. Approximately half of the population is served by these systems; the remainder receives their water from private or communal wells and intakes. The Intake Protection Zones for the intakes are: Lake Huron Primary Water Supply System (in Port Blake, near Grand Bend) and the Goderich Water Supply.

The Wellhead Protection Areas for the municipal well systems are: Township of Ashfield-Colborne-Wawanosh: Century Heights, Dungannon, Huron Sands; Municipality of Bluewater: Zurich, Varna; Municipality of Central Huron: Auburn, Benmiller, Clinton, Kelly, McClinchey, SAM, Vandewetering; Municipality of Huron East: Brucefield, Brussels, Seaforth; Township of Huron-Kinloss: Lucknow, Whitechurch, Ripley (well system itself is outside ABMV SPR); Town of Minto: Clifford (well system itself is outside ABMV SPR), Harriston, Palmerston; Municipality of Morris-Turnberry: Belgrave; Township of North Huron: Blyth, Wingham; Municipality of North Perth: Atwood, Gowanstown, Listowel, Molesworth.

The source of water for the wells is typically deep bedrock aquifers, which are protected by a thick overburden. There have been no Issue Contributing Areas identified in the SPR. There have been a number of changes to these well systems since approval of the source protection plans in 2015, triggering the need for amendment under Section 34 of the Clean Water Act, 2006. This amendment was submitted to the Province in February, 2018 following extensive consultation. The amendment was approved by the Province in 2019, with effective date of February, 5, 2019.

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

1. Source Protection Plan Policies

P – Progressing Well

The overall progress score on achieving source protection plan objectives in this reporting period is: P - Progressing Well/On Target

The majority (97 %) of the legally binding policies that address significant drinking water threats are implemented, and the remainder are in progress.

All of the policies that address moderate and low drinking water threats are implemented or have been evaluated with no further action required. Over 80% of policies that are not directly related to drinking water threat activities are implemented, and the remainder have been reviewed and require no further action. Note that these policies are 'non-binding' on implementing bodies.

2. Municipal Progress: Addressing Risks on the Ground

P – Progressing Well

The Region contains almost the full extent of Huron County, plus portions of Bruce, Perth, Wellington, Lambton and Middlesex Counties. Nine lower-tier municipalities and four upper-tier municipalities in our source protection region have vulnerable areas where significant drinking water threat policies apply.

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

Thirteen municipalities in our source protection region are required to review and amend their Official Plan to ensure it conforms to the local source protection plans. Nine of the municipalities (lower and upper tier) completed the required Official Plan amendment within the five-year timeline specified in the Source Protection Plans. The remainder are in progress. It is anticipated that most of the remaining Official Plan and Zoning Bylaw amendments will be completed within the next year.

3. Septic Inspections

P: Progressing well

In areas where an on-site sewage system (septic system) is considered a significant drinking water threat, inspections are required once every five years in accordance with the Ontario Building Code's mandatory on-site sewage system inspection program.

In the ABMV Source Protection Region, 206 on-site sewage systems are subject to the mandatory inspection program. For the first round of inspections, 99% of these systems were inspected within the five year timeline, in accordance with the Ontario Building Code. The inspection results found the majority are functioning as designed and carrying out regular pump-outs.

The second round of inspections is underway, with 79 systems re-inspected in the second five-year timeline. The mandatory septic system inspection program has been impacted by the Covid-19 pandemic; although all systems have received an initial inspection, there have been delays in completing the second round of septic inspections.

In the ABMV SPR, the inspections were carried out by municipal staff or B.M. Ross and Associates Ltd (for the Township of Huron-Kinloss). Educational materials are reviewed with the landowner at the time of the inspection.

4. Risk Management Plans

P – Progressing Well

In the 2021 reporting period, nine risk management plans (RMP) were established in our source protection region; 6 were new RMPs and 3 were replacements. Since our source protection plans took effect in April 2015, a total of 115 risk management plans have been established, with 91 remaining in effect. Over 92% of the required risk management plans are in place and the remaining eight RMPs are in progress.

Since our Source Protection Plans took effect in 2015, over 330 inspections have been carried out by a Risk Management Official/Inspector for prohibited or regulated activities. In2021, 33 inspections were conducted. This includes inspections required for risk management plans, to ensure compliance with prohibition and to verify current threat activities. To date, 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

The Ontario ministries have reviewed 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 ministries have identified prescribed Instruments that may be subject to significant drinking water threat policies and require further review. The provincial approvals are being amended or revoked where necessary to conform to Source Protection Plan policies. Our policies set out a timeline of three years to complete the review and make any necessary amendments. The ministries have completed this for 100% of previously issued prescribed instruments in our source protection region.

6. Source Protection Awareness and Change in Behaviour

Eighty-eight Drinking Water Protection Zone signs have been installed in our source protection region. The signs are installed on roads near municipal water sources to alert citizens that their actions in these zones can have an impact on a municipal drinking water source. The signs are an effective way to educate and remind everyone of the need to protect our sources of water. Several of the municipalities in this region have included information about the signs and the Drinking Water Source Protection program on their websites.

Significant efforts have been made by source protection authority staff to implement the education and outreach policies for significant threat activities in the Ausable Bayfield Maitland Valley (ABMV) Source Protection Region (SPR). This successful Education and Outreach program - developed in collaboration between municipalities, source protection authorities, and conservation authorities - includes an updated website and active social media presence. Fact sheets were created for specific sectors as well as for individual well systems. This focused outreach results in improved awareness about local sources of water and increased potential for changes in behavior. Education and outreach has ranged from direct tools (site visits; phone calls; open houses; presentations; meetings) to general (print; broadcast; web; electronic; social media; etc.)

7. Source Protection Plan Policies: Summary of Delay

Significant progress has been made on implementing all policies related to significant drinking water threats.

With our Region's Source Protection Plans coming into effect in April of 2015, we are in year six of the established five-year timeline for implementation of our significant drinking water threat policies. Due to the COVID-19 pandemic, several implementing bodies were unable to meet these timelines. An extension of the implementation timeline policies until December 31, 2022 was granted for completion of the eight remaining risk management plans. Several municipalities have encountered delays regarding Official Plan updates and septic re-inspections. However, steady progress has been made, despite the challenges created by the pandemic.

8. Source Water Quality: Monitoring and Actions

In our source protection region, no Issues have been identified in our local science-based assessment reports regarding the quality of the sources of municipal drinking water.

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 our source protection region, visit our Homepage. <u>http://www.sourcewaterinfo.on.ca</u>



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Progress Report for 2021

 Ausable Bayfield Maitland Valley Source Protection Committee Sector and Public Engagement Video Series – 2020-2021 Find the videos here: https://www.sourcewaterinfo.on.ca/news/videos/



Introduction to Source Protection – Matt Pearson, Chair, SPC (March 2021)



Seaforth Well – Alyssa Keller, Public-at-Large Rep., SPC (October 2020)



Goderich Harbour – Rowland Howe, Industry Rep., SPC (January 2021)



Goderich Water Treatment Plant – John Graham, Environment Rep., SPC (March 2021)



Online Mapping Tools – Certified crop advisor Mervyn Erb and SPC Agriculture Rep. Bert Dykstra (October 2021)



Drinking Water Protection Zone Signs – Dave Frayne, Municipal Rep., SPC (May 2021)



Online Mapping Tools for Real Estate, Farming, and You – SPC Agriculture Rep. Mary Ellen Foran. (October 2021)



Protecting Groundwater – Jennette Walker, Environment Rep., SPC (July 2021)



Online Mapping Tools for Real Estate, Farming, and You – Realtor Rick Lobb and colleague Elizabeth McDonald