

HALTON REGION SOURCE PROTECTION AUTHORITY

Meeting Number: 01 17
Date of Meeting: **Thursday, March 23, 2017**
Time of Meeting: **4:00 p.m. Business portion**
Place of Meeting: Mountsberg Conservation Area
Discovery Centre
2259 Milborough Line, Campbellville

Telephone: 905.336.1158 x 2236

LOCATION CHANGE and Agenda of Events:

Mountsberg Conservation Area – For those of you who wish, there will be a Tour and Pancakes prior to the meeting as follows:

- 2:00 – 3:00: Tour of Raptor Centre, new Barn and Mapletown
- 3:00 – 3:45: Pancakes at Mapletown
- 4:00 Discovery Centre for Meeting

Please advise Patricia Vickers (pvickers@hrca.on.ca) if you plan to attend the Tour and Pancakes

AGENDA

- 1.0 **Roll Call & Mileage**
- 2.0 **Acceptance of Agenda as distributed**
- 3.0 **Approval of HRSPA Board of Directors Minutes dated June 23, 2016**
- 4.0 **Disclosure of Pecuniary Interest**
- 5.0 **Action Items**
 - 5.1 Source Protection Authority Annual progress Report on the Implementation of the Source Protection Plans
Report #: HRSPA 01 17 01
- 6.0 **Other Business**
- 7.0 **Adjournment**

**HALTON REGION SOURCE PROTECTION AUTHORITY
CHBD 01 17 01**

REPORT TO: Board of Directors

FROM: Diane Bloomfield, Manager, Source Water Protection
905-854-9229 ext. 223

DATE: March 23, 2017

SUBJECT: **Source Protection Authority Annual Progress Report on the Implementation of the Source Protection Plans**

Recommendations:

THAT the Halton Region Source Protection Authority **receive for information the staff report dated March 23, 2017 outlining the progress made on the implementation of the source protection plans for the Halton Region and Hamilton Region Source Protection Areas;**

AND FURTHER THAT the Halton Region Source Protection Authority, together with the Hamilton Region Source Protection Authority, **endorse the submission of the attached “Annual Progress Report on Implementation of the Source Protection Plans” and the “Annual Progress Reporting Supplemental Form for Source Protection” to the Ministry of the Environment and Climate Change by May 1, 2017.**

Summary

The *Clean Water Act, 2006* requires that source protection authorities prepare and submit a report annually that describes the measures taken to implement the source protection plans. The first such report for the Halton-Hamilton Source Protection Region is due May 1, 2018. The attached report is an interim reporting, undertaken to work through the requirements of reporting with local stakeholders and to establish a streamlined process to follow once formal reporting begins next year.

Implementation of the plan policies is proceeding well with 69 percent of the policies implemented or in process and 51 percent of the identified significant threats addressed.

Background

The *Clean Water Act, 2006* requires the preparation and implementation of source protection plans to safeguard the quality and quantity of sources of drinking water. The local Halton-Hamilton Source Protection Committee developed a plan, which was approved by the Minister of the Environment and Climate Change and took effect on December 31, 2015.

Our stakeholders, listed as implementing bodies in the policies of the plan, have been working to satisfy the intent of each policy. The policies use various tools, such as education and outreach programs, land use planning initiatives, prescribed instruments, risk management plans, and other strategic measures to meet the objectives of the plans – to protect existing and future drinking water sources and to ensure that existing threat activities cease to be significant and that future activities don't become significant threats.

Source protection staff customized reporting templates for each municipality within the source protection region and for the Niagara Escarpment Commission to assist with their understanding of reporting requirements. In addition, source protection staff contacted some businesses and agencies for updates on the implementation of policies that applied to their operations. The Source Protection Programs Branch of the Ministry of the Environment and Climate Change (MOECC) also customized reporting templates for each of the provincial ministries/departments. These templates and other reports were submitted to the source protection authorities through staff by February 1 for compilation and summation on the provincially required forms.

Report

The Source Protection Plans for the Halton Region and Hamilton Region Source Protection Areas include 162 policies to be implemented by 35 implementing bodies. These implementing bodies include provincial ministries, municipalities within the source protection region, the Niagara Escarpment Commission, the two conservation authorities and other landowners, business operators, and agencies. Some of the landowners, business operators and agencies only have one policy to implement and in some cases action is voluntary.

Provincial implementation began prior to when the Halton-Hamilton plan took effect and processes and procedures continue to be modified within some ministries. The province has reviewed and amended their standard operating policies and is applying them province-wide. Thus, they have tried to address the policies included in all 22 source protection plans.

The province is now screening applications they receive for potential significant threats and reviewing existing permits and approvals already granted to ensure they contain terms and conditions to protect the water sources of municipal supplies. The Source Protection Committee set a timeline of three years for full implementation of the prescribed instrument policies and the ministries are working toward that goal. Some ministries have not fully addressed the reporting requirements listed in the Halton-Hamilton policies and source protection staff will follow-up with ministry staff to rectify this for next year.

Of the 12 municipalities within the Halton-Hamilton Source Protection Region, 8 have mapped protection areas within their jurisdiction for municipal wells or Lake Ontario intakes. Policies apply within each of these areas to manage or prohibit certain activities or to inform decision makers and landowners.

Education and outreach policies have a two year timeline and are on-track to be implemented by the end of 2017. Official Plan conformity exercises to bring in land use policy requirements and vulnerable area mapping follows the municipal schedules set out in the *Planning Act*. The City of Hamilton and County of Wellington have completed this exercise and Halton Region's exercise is in process. The local municipalities will amend their Official Plans and develop by-laws, as needed, once Halton Region's process is complete. The municipalities are screening applications made under the *Planning Act* and the Ontario Building Code for location within vulnerable areas and for threat activities. They have not started the negotiation of risk management plans with landowners undertaking significant threat activities but have a timeline of five years to have these documents in place.

The City of Hamilton, Region of Halton, Towns of Milton and Halton Hills, and the Township of Puslinch have been verifying significant threats identified in the source protection plans. The plans identify 201 existing significant threats in the source protection region. The verification process has added four significant threats (handling and storage of fuel and dense non-aqueous phase liquid) and removed eight (septic systems, storage of commercial fertilizer, application of pesticide, and handling and storage of fuel). Once the policies that address a certain significant threat activity are implemented, the threat activity is no longer a threat. Hence, policy implementation has also removed some of the significant threats identified in the source protection plan.

The implementation of the on-site sewage system inspection program required by the Ontario Building Code and implemented by the City of Hamilton and the Town of Milton has been a very effective tool to eliminate significant threats. Following threat verification there were 112 septic system significant threats identified. To date, the inspection program, along with an education and outreach program, has reduced the number of septic system threats by 88 percent. Municipal officials are following-up on the outstanding inspections. Only one other significant threat has been addressed and that being for fuel storage and handling. Plan implementation has addressed 51 percent of the verified significant threats leaving 97 significant threats outstanding at the end of 2016.

The Niagara Escarpment Commission reports that the four land use policies they were to implement have been addressed. Staff also received reports from oil storage and handling companies and some of the agencies to which policies apply. Staff will follow-up with those implementing bodies that did not report to have a more complete assessment for the 2018 progress report.

Provincial Reporting and Comments from the Source Protection Committee

The *Clean Water Act* requires that annual progress reports be submitted to the Director of the Source Protection Programs Branch annually by May 1. Based on the effective date of the Halton-Hamilton plan, the first report for the Halton-Hamilton Source Protection Region is due May 1, 2018. However, an interim progress report for the year 2016 was prepared as we worked through the reporting process with our stakeholders to ensure it was practical and streamlined.

The MOECC provided a template for the progress report and a supplemental form to summarize the details of the reporting. The progress report is attached and the supplemental form is provided separately on compact disk.

Staff have addressed the requirements of the reporting template with brief discussion and have provided progress scores of satisfactory where required.

The *Clean Water Act* requires that the source protection authorities' annual progress report be given to the source protection committee at least 30 days prior to submission of the report to the Director of the Source Protection Programs Branch of the MOECC. To this end, the Halton-Hamilton Source Protection Committee received a draft of the progress report and supplemental form on February 21 and discussed plan implementation progress at their meeting on February 28. The Act also requires the Committee to provide written comments to the source protection authorities on their opinion on the achievement of the objectives of the source protection plan. Their comments are included as Part II of the annual progress report. The Committee has given a score of satisfactory on achieving source protection plan objectives and note that this is a fair assessment based on the number of policies that have been or are in process of being implemented.

Next Steps

Staff would like to complete the reporting process for 2016 by submitting the interim report and its supplemental form to the Director, Source Protection Programs Branch within the MOECC. The branch's review of our responses to their questions will assist us with our follow-up and goal to have fully compliant reporting.

Source protection staff have identified a need for a more detailed and user-friendly summary report on the status of implementation of the source protection plans for public distribution. This report will highlight the achievements of the implementing bodies on policy implementation and next steps to address the objectives of the plans. The publication will be more detailed than the provincially required source protection authority progress report and more focused than the provincially required supplemental form. This publication will be reviewed by the source protection committee and distributed broadly within the source protection region.

Source protection staff will also be following-up with implementing bodies that did not fully implement policies or provide appropriate reporting to ensure the official source protection authority report in 2018 is our best assessment of progress made.

And finally, staff will work with our municipal partners to further evaluate the reporting process and streamline it where possible. Customized templates will again be produced for our municipal partners for the reporting period of December 31, 2015 through December 31, 2017 to be submitted to the source protection authorities by February 1, 2018.

Prepared by:



Diane L. Bloomfield, Manager
Source Water Protection

Respectfully submitted:



Katherine J. Menyes, Senior Director
Watershed Strategies & Integration

Approved for circulation:



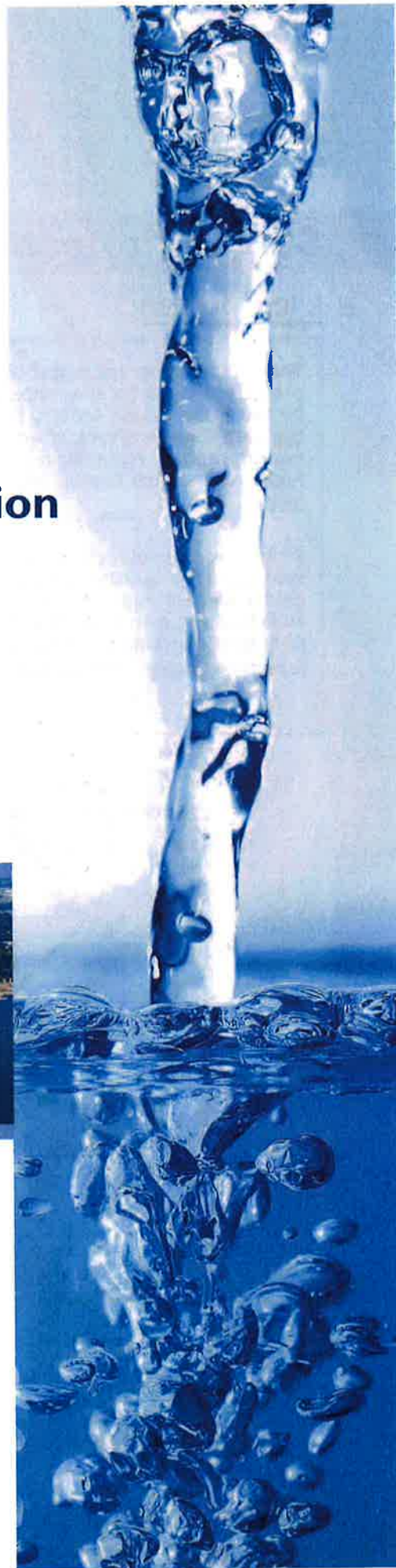
Hassaan Basit
CAO/Secretary-Treasurer

Annual Progress Report on Implementation of the Source Protection Plans for the Halton Region and Hamilton Region Source Protection Areas

For more information about the drinking
water source protection program, visit
www.protectingwater.ca



For the reporting period
December 31, 2015 to December 31, 2016

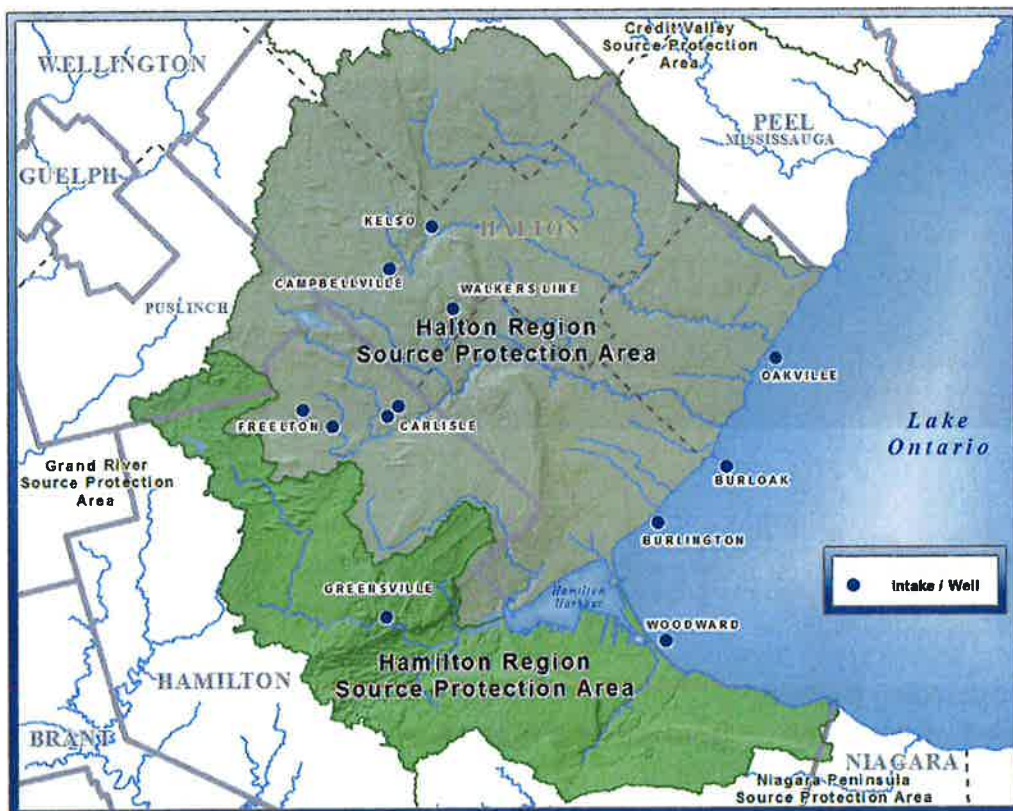


Source Protection Annual Progress Report | 2017-03-09

I. Introduction

This annual progress report briefly summarizes the progress made in implementing the source protection plans for the Halton Region and Hamilton Region Source Protection Areas, as required by the *Clean Water Act* and its regulations. This report covers the period of implementation from the date the plans took effect - December 31, 2015, through to December 31, 2016. This is an interim report. A similar report on plan implementation within the Halton-Hamilton Source Protection Region for the years 2016 and 2017 must be submitted to the province by May 1, 2018.

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 it contains will ensure that activities carried out in the vicinity of municipal wells and lake-based water intakes will not pose significant risk to those supplies.



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 in accordance with the timelines specified in the source protection plan.
- S : Satisfactory** – Some of the source protection plan policies have been implemented and/or are progressing in accordance with the timelines specified in the source protection plan.
- L : Limited progress** – A few of source protection plan policies have been implemented and/or are progressing in accordance with the timelines specified in the source protection plan.

The first annual report on implementation of the source protection plans is not due to the Province until May 1, 2018. For this interim annual report, it is the opinion of the Halton-Hamilton Source Protection Committee that the progress score for this reporting period for its source protection plans is considered to be satisfactory. There are 162 policies in the Halton-Hamilton Source Protection Plan dealing with prescribed drinking water threats (140), local threats (4) and other strategic policies (18) pertinent to the two source protection areas. There are approximately 360 actions required by the various implementing bodies consisting of the municipalities within the source protection region, as well as various provincial ministries and other agencies and stakeholders, in order to implement these 162 policies.

As of this reporting period, 51 percent of the existing significant drinking water threats have been addressed. Approximately 36 percent of the policies have been implemented by the implementing bodies while 33 percent are in progress and 31 percent have not been started. It should be noted that a number of the policies are not required to be implemented until two to five years from the effective date of the source protection plan, which is December 31, 2015.

There have been excellent strides made in such areas as inspection of small septic systems and threat verification while progress still needs to be made on implementation of policies relating to monitoring, education and outreach, prescribed instruments, planning and stewardship. Further, significant conservation efforts are underway in the Village of Carlisle to reduce water usage.

Based on the above, a ranking score of satisfactory by the Halton-Hamilton Source Protection Committee is believed to be a fair assessment on the progress of implementing its source protection plans.

III. Our Watershed

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

The Halton-Hamilton Source Protection Region is located at the western end of Lake Ontario and includes portions of the municipalities of the Cities of Hamilton, Burlington and Mississauga, the Regions of Halton, Peel and Niagara, the Towns of Milton, Halton Hills, Oakville and Grimsby, the County of Wellington and the Township of Puslinch. The region covers an area of 1,417 sq km of land and 720 sq km of Great Lakes waters.

Approximately 970,000 people make the source protection region their home and the region is expected to grow substantially over the next decades. The landscape is changing due to this growth and the source protection plan is in place to help guide this growth in a way that protects our vulnerable drinking water sources.

The Regional Municipality of Halton and the City of Hamilton own and operate municipal water systems within the source protection region. These systems include five intakes in Lake Ontario (Woodward, Burlington (2), Burloak and Oakville), three municipal well systems in Hamilton (Carlisle, Freelton and Greensville) and three municipal well systems in Halton Region (Kelso, Campbellville and Walkers Line). In addition, some homes and businesses within the source protection region are supplied water from municipal drinking water systems located in neighbouring areas. In total, these municipal water systems supply about 95 percent of the population within the source protection region with reliable, clean drinking water. About 92 percent of the population receive water from Lake Ontario and 3 percent receive groundwater. Outside the urban area, private wells and cisterns are relied on by the remaining 5 percent of the population. Private well systems and the natural environment use the same sources of water that, under the current program, the government seeks to protect for municipal supplies. In this way, maintaining a sustainable supply of clean water within the aquifers of Halton-Hamilton Source Protection Region and in Lake Ontario will benefit all residents and business operators.

Studies completed over the past few years have assessed the vulnerabilities and risks to the municipal wells and intakes from activities occurring on lands and in waters in their vicinity. Protection areas have been mapped and a plan developed to manage or prohibit certain activities within these areas. The source protection plan contains policies that require or request action from provincial ministries, federal departments, municipalities, conservation authorities, landowners, and stakeholders. This report summarizes actions taken over the past year since the plan took effect on December 31, 2015.

For more information about the drinking water source protection program in the Halton-Hamilton Source Protection Region, please visit our website at www.protectingwater.ca

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

1. Source Protection Plan Policies

The Halton-Hamilton Source Protection Committee included 162 policies in their source protection plan to address 21 prescribed threats, 1 local threat, actions thought to be necessary to protect sources of drinking water, and the monitoring of policy implementation. Some policies are implemented by one body, while others are to be implemented by many. Since the source protection plan took effect one year ago, much has been accomplished. To date, 58 policies (36 %) have been implemented and 54 (33 %) are in process. The plan sets out timelines for policy implementation and many policies not already implemented have two to five years for this process to be completed.

Based on the good effort realized this year, the progress score given for overall plan implementation status is S: Satisfactory.

2. Municipal Progress: Addressing Risks on the Ground

Of the 12 municipalities that have lands within the Halton-Hamilton Source Protection Region, 8 have mapped protection areas for municipal wells or Great Lakes intakes in their jurisdiction. Policies apply in each of these areas to manage or prohibit certain activities or to inform decision makers and landowners. The source protection plan also includes general policies that all municipalities were requested to implement to protect the quality and/or quantity of source water.

The municipalities are at various stages of policy implementation and incorporating source protection planning and knowledge into their day-to-day activities. Risk management officials and inspectors have been appointed and are enforcing the requirements of the source protection plan and the *Clean Water Act* with risk management plans not required to be produced for another four years. Planning departments and building officials are screening applications for location within vulnerable areas where threats to drinking water sources are possible and policies may apply. And furthermore, Official Plans have either been amended or are being reviewed for inclusion of source protection requirements. The review and amendment process at the upper tier municipality is required prior to the lower tier initiating their process. Municipal education and outreach policies have a two-year timeframe for implementation and are scheduled for completion in 2017.

Given the level of effort to date, the score for municipal progress is S: Satisfactory.

3. Septic Inspections

The Ontario Building Code requires that small septic systems be re-inspected every five years through a mandatory minimal program or a discretionary more advanced program. These inspection programs were carried out by two municipalities within the Halton-Hamilton Source Protection Region. All property owners received letters to have third party contractors complete the inspection and to submit the required certificate to the municipality following completion of any required works. 88 percent of participants have complied and the municipal inspectors have followed-up with those outstanding. Only one major repair has been required to date. Minor repairs were required in one municipality, as all septic tanks were required by the municipality to be pumped out as part of the inspection.

The inspection program included outreach materials about proper use of septic systems that also satisfied the requirements of another source protection policy.

A progress score of S: Satisfactory is given to the septic inspection programs.

4. Risk Management Plans

Risk management officials and inspectors were appointed and tasked in 2016 with verifying the threats to the municipal drinking water sources identified in the assessment reports. This process is mostly complete with some landowner contacts to be made in 2017. Screening processes are in place within the planning and building departments of the municipalities to ensure applications for future development are reviewed appropriately for potential threat activities and source protection policy application. The negotiation of risk management plans for existing significant drinking water threats has not begun; however, the source protection plan sets a timeframe of five years for completion.

A progress score of S: Satisfactory is given to the development of risk management plans.

5. Provincial Progress: Addressing Risks on the Ground

Many provincial ministries and departments within those ministries are called on to implement policies within the Halton-Hamilton Source Protection Plan. The ministries include MOECC, MNRF, MMA, MTO and OMAFRA and the policies are included to reduce the risk of significant threat activities or to inform decision makers, collect and share data and lessons learned with others, or provide incentives to advance policy implementation.

The integration of source protection planning into their standard operating practices began prior to this reporting year, however, for some departments it is still ongoing. Plan policies require a review of previously issued prescribed instruments where significant threats are possible and the completion of this task varies between not started and 100 percent complete. In one case no report was received.

A primary issue was revealed through this annual reporting process - that the collection of policy implementation data by ministries or departments is not necessarily aligned with source protection areas/regions, nor with our reporting period. One ministry also indicated that a policy was not implementable because it was asking for something that they did not do. Unfortunately, this was not brought forward during previous consultation with this ministry.

Much has been accomplished by the province to date and a score of S: Satisfactory is given.

6. Source Protection Awareness and Change in Behaviour

Municipalities and conservation authorities within the Halton-Hamilton Source Protection Region have been consulting with and working to increase the awareness of residents and business owners about source protection planning and the safeguarding of our drinking water sources.

Halton Region, in collaboration with Ontario Soil and Crop Improvement Association, hosted successful Environmental Farm Plan meetings for the agricultural community working within wellhead protection areas to promote funding opportunities through the Growing Forward 2 program and policy implementation.

The City of Hamilton is collecting data and leading discussion on water use and conservation within the village of Carlisle, trying to decrease demand. They are engaging the community through a dedicated website, roadside signs and mailouts.

To raise awareness about the protection of local drinking water sources, the City of Hamilton has also placed 20 local source protection signs on roadways surrounding municipal wells with contact details for information inquiries.

The two conservation authorities within the source protection region have updated/issued disposal of fill guidance and policies to raise awareness about proper quality monitoring and placement of fill. This aligns with a strategic policy in the source protection plan.

7. Source Protection Plan Policies: Summary of Delays

As indicated previously, 69 percent of the policies in the source protection plan have been or are being implemented. This leaves 31 percent not started.

One policy, and its associated monitoring policy, has been determined to be not implementable by OMAFRA as it asks them to do something they don't do. If the policy remains in place it will always be reported as not started.

Other policies are not started for a variety of reasons. The threat verification process has removed some threats and, therefore, the policies do not need to be implemented. Education and outreach policies are to be implemented within two years of the effective date of the plan and implementation is scheduled for 2017. Prescribed instrument policies have a three-year implementation period and will proceed over the next two years. Risk management plans must be in place within five-years of the effective date of the plan and will proceed as time permits.

Some policies are not started because lower tier municipalities are waiting for the planning process at the upper tier municipality to finish. They understand the requirements placed on them by the source protection plan policies and will proceed when they can.

Similarly, some policies are not implemented because they depend on the implementation of another policy first, for example, the implementation of a stewardship program following the establishment of a provincial funding program.

Other policies are not implemented because they don't have to be. The plan includes 22 policies that are optional for implementation. Seven of these have not been started.

And finally, some monitoring policies were not implemented as no report was received from the implementing body. These bodies will be contacted and the policies made clear before the next reporting deadline.

8. Source Water Quality: Monitoring and Actions

The Cedarvale well field is located in Georgetown, part of Halton Hills, and its protection areas for quality and quantity extend slightly into the Halton Region Source Protection Area. Well numbers 1A, 4 and 4A in this well field have rising trends in chloride concentrations and an issue contributing area has been delineated. The CTC Source Protection Committee identified the need for chloride management measures and the Halton-Hamilton Source Protection Committee included policies in their plan to manage or prohibit the storage and application of road salt and the storage of snow.

Halton Region reported that during 2016, the chloride concentration trends at the wells did not change. However, the associated policies are not yet implemented.

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/area, visit our Homepage.

<http://www.protectingwater.ca>

The source protection plan for the Halton-Hamilton Source Protection Region includes policies to be implemented by other stakeholders in addition to those mentioned above. This includes agencies, businesses, landowners, and Environment Canada. Some of the policies have been implemented, some are in process, and some have not been started. Most of these policies are optional for implementation and it is good to see the engagement of the local community.

Fuel storage and handling businesses have been engaged throughout the planning process and policy development and have, or are in the process of implementing their policies.

Other agencies have indicated a desire to comply with policy requirements and will proceed with implementation in 2017.

And still others need to be contacted and encouraged to improve programs or regulatory requirements for activities within vulnerable areas. This outreach will be completed in 2017.