

**DRINKING WATER
SOURCE PROTECTION**
ACT FOR CLEAN WATER



**Lake Simcoe
Region
Conservation
Authority**



South Georgian Bay Lake Simcoe Source Protection Region

**SEVERN SOUND SOURCE PROTECTION AUTHORITY
MEETING NO. 01-19-SS SPA
Thursday April 18, 2019 9:30 a.m.
Township of Tay Council Chambers
450 Park Street, Victoria Harbour, Ont. L0K 2A0**

1. **Welcome and call to order**
2. **Adoption of Agenda**
3. **Declaration of Pecuniary Interest**
4. **Source Protection Committee Update.**
Chair, Lynn Dollin
5. **Staff Report No. 03-19-SS SPA from the Project Manager of the Source Protection Region regarding a Source Protection Region Update (under separate file)**
6. **Staff Report No. 01-19-SS SPA from the Risk Management Official/Risk Management Inspector regarding the *Clean Water Act* Section 46 – Severn Sound SPA 2018 Annual Report to the Province.**
7. **Staff Report No. 02-19-SS SPA from the Risk Management Official/Risk Management Inspector regarding the Severn Sound Source Protection Authority (SS SPA) Drinking Water Source Protection Update and SSEA Risk Management Services Update.**
8. **Other Business**

Adjourn

Source Protection Annual Progress Report

South Georgian Bay Lake Simcoe Region



Annual Progress Report on Implementation of
the South Georgian Bay Lake Simcoe Region
Source Protection Plan.

Reporting period | January 1, 2018 - December 31, 2018

ourwatershed.ca

Water
is life.
Protect
Yours.

Source Protection Annual Progress Report | 05/01/2019

I. Introduction

This annual progress 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 2018 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 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.

PROPOSED WORDING IS AS FOLLOWS:

The Source Protection Committee rates progress in the 2018 reporting period as “satisfactory”.

Ninety-eight (2017 - 96%) percent of the policies that address significant drinking water threats in our Plan have been or are being implemented. Approximately 77% (2017 - 71%) of significant drinking water threats that existed at the time of source protection plan approval have been addressed through policy implementation or removed through threats verification.

While 179 (2017 - 106) risk management plans (RMPs) have been established as of December 31, 2018, the rate at which the RMPs are established will need to increase in order to complete all required RMPs by the 2020 deadline.

All municipalities, with the exception of one, submitted their 2018 annual reports to the Source Protection Authority. The majority of municipalities in our source protection region have processes in place to ensure that their day-to-day planning decisions conform to our source protection plan.

Almost all (1,970 of the 2,105) on-site sewage systems have been inspected in accordance with the Ontario Building Code. One municipality has not started their septic inspection program as of December 31, 2018.



III. Our Watershed

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

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
- 275 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.

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

1. Source Protection Plan Policies

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 almost four years ago, much has been accomplished. To date, 38 (39%) legally binding policies that address significant drinking water threat activities have been implemented and 59 (61%) are in the process of being implemented. The plan sets out time lines for policy implementation and many of the policies not already implemented have approximately one year for this process to be completed.

P: Progressing Well/On Target

2. Municipal Progress: Addressing Risks on the Ground

Of the 52 municipalities (upper, lower and single-tier) that have lands within the South Georgian Bay Lake Simcoe Source Protection Region, 42 of these are subject to one or more source protection plan policies. The remaining 10 municipalities do not have vulnerable areas where significant drinking water threat policies apply.

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.

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 42 municipalities that are subject to source protection plan policies, 40 (2017 - 38) have amended or are in the process of amending their Official Plan to conform with the source protection plan for our region. The review and amendment process at the upper tier municipality is required prior to the lower tier completing their process.

P: Progressing Well/On Target

3. Septic Inspections

94% of on-site sewage systems have been inspected in accordance with the Ontario Building Code. Inspection results found the majority of those inspected (98%) were either functioning properly or required only minor, regular maintenance such as a tank pump-out.

One municipality has not started their septic inspection program as of the end of 2018. They have 27 on-site sewage systems requiring inspection and they have indicated that they plan start the inspection program in 2019.

S: Satisfactory

4. Risk Management Plans

179 risk management plans have been established in our source protection region as of December 31, 2018 with 73 of those being completed within the 2018 calendar year.

50 inspections have been carried out in 2018 by a Risk Management Official/Inspector (RMO/I) for prohibited or regulated activities. There is a 92% compliance rate with the risk management plans established in our source protection region.

We have made significant progress in establishing RMPs however it will be challenging to meet the 2020 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). For RMOs representing municipalities that have no RMPs complete - or have begun developing RMPs - the rate of RMP establishment will need to increase.

In 2018 an Assessment Report amendment resulted in additional threats being added in the municipalities of Shelburne and Melanthon. The threats, and any associated RMPs, resulting from this amendment have a deadline of 2023 rather than 2020.

S: Satisfactory

5. Provincial Progress: Addressing Risks on the Ground

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 to plan policies. Our policies set out a timeline of 5 years from the date the source protection plan took effect (July 1, 2015) to complete the review and make any necessary changes. The ministries have completed this for 83% of previously issued provincial approvals in our source protection region.

P : 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 region had previously installed 239 drinking water protection zone signs on municipal roads surrounding vulnerable areas and 14 signs have also been installed on provincial highways.

To further raise awareness about the protection of local water sources, Lake Simcoe & Couchiching Black River Source Protection Authority (LS&CBR SPA) has developed several publications related to the proper management of salt in winter applications, which has been and will continue to be instrumental in encouraging and promoting best practices for winter maintenance within the source protection region. LS&CBR SPA continues to coordinate workshops and working groups related the application of salt for municipalities in the region. The meetings and workshops are a vehicle to share information about pilot projects and new approaches to salt management and have been attended by all municipalities within the LS&CBR SPA where the application of road salt may be a significant threat. To further promote the issues surrounding salt and best practices, LS&CBR SPA also conducted a Facebook Live interview on Salt Reduction which earned several hundred social media views.

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. 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 has developed and implemented a salt optimization strategy and all City contractors are Smart about Salt certified.

Penetanguishene - Robert Street West Supply Well

Issue contributing area for:

- TCE

A decreasing concentration/trend has been observed.

Brock - Cannington Well Supply - Arena Well Field

- TCE

A decreasing concentration/trend has been observed.

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

No change in concentration/trend has been observed.

9. Science-based Assessment Reports: Work Plans

Not applicable

No work plans were required to be implemented for our assessment report(s).

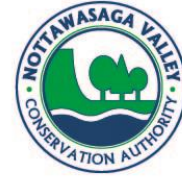
10. More from the Watershed

To learn more about our source protection region/area, visit our Homepage.

<http://ourwatershed.ca/>

Education and outreach is 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 2018 the City of Barrie engaged children in interactive source water activities involving groundwater/surface water models, learning about human impacts on water sources, and brainstorming ideas for how they can help protect water sources. The activities were extremely well received and excited the children who successfully returned home to share that they learned.

Municipalities within the Lake Simcoe Source Protection Authority portion of the York WHPA-Q2 are implementing policy LUP-12 (which requires a water balance study for major developments) by having all applications peer reviewed by a Hydrogeologist. While not required by the policy, current experience demonstrates the value of this peer review especially since application numbers have remained consistent between years, identifying stress to water quantity if not managed.



South Georgian Bay Lake Simcoe Source Protection Region

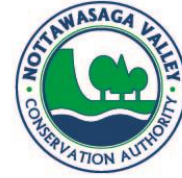
**Annual Report to the
Ministry -
Progress Made in
Protecting Sources of
Drinking Water**

Melissa Carruthers

Risk Management Official/Inspector

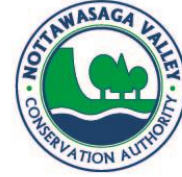
SSEA

April 18, 2019



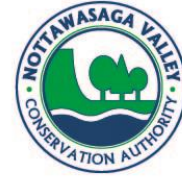
Presentation Outline

- Objectives of Annual Reporting and the Role of the SPC
- Reports Due to the Province May 1, 2019
- Progress update (Risk Management Plans, Official Plan Amendments, Septic Inspections, Land Use Planning Policies)
- Ministry Progress on Prescribed Instruments
- Potential Issues
- Next Steps
- Summary Points
- Recommended Progress Score
- Questions?



South Georgian Bay Lake Simcoe Source Protection Region

**Objectives of Annual Reporting and
the Role of the SPC**



South Georgian Bay Lake Simcoe Source Protection Region

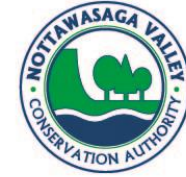
Objectives of Annual Reporting

Primary Goal:

To assess if threats to drinking water supplies were reduced through the implementation of the Source Protection Plan

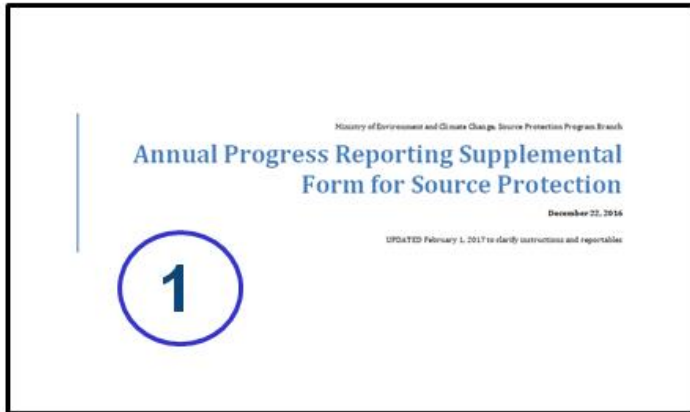
Secondary Goals:

1. Ensure program effectiveness and efficiency
2. Provide accountability and transparency through public reporting
3. Inform future budget requests
4. Reduce uncertainty of plan success or failure
5. Inform decision-making and implementation
6. Enable more effective on-the-ground management of SDWTs

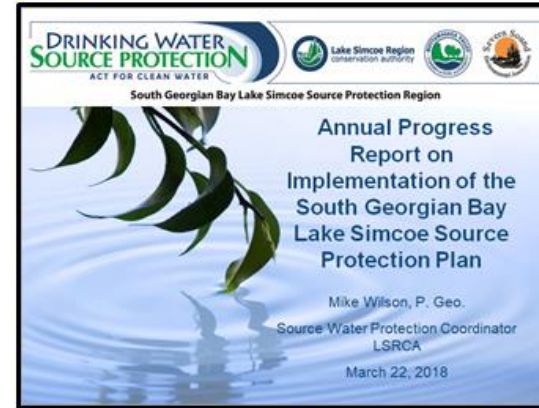


Reports Due to the Province May 1, 2019

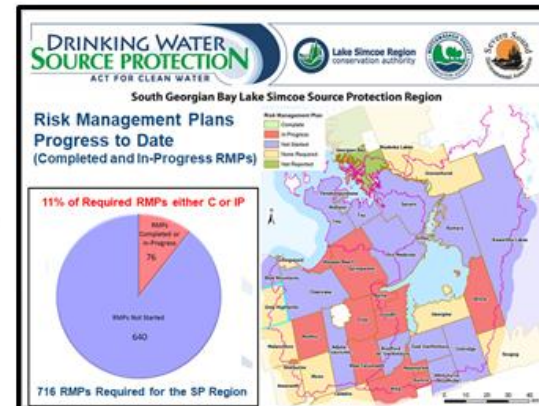
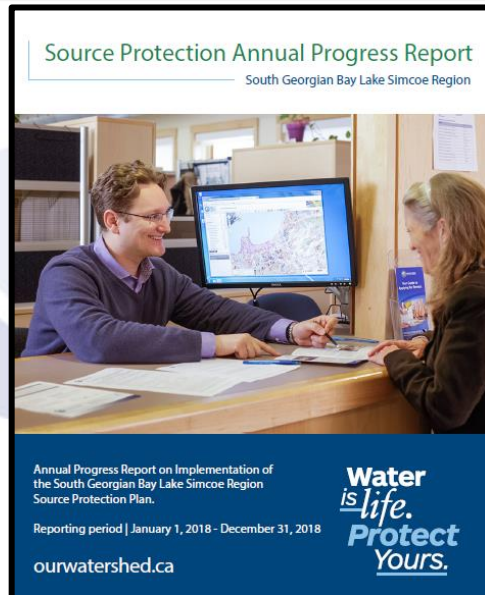
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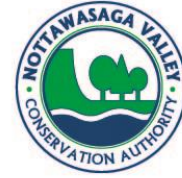


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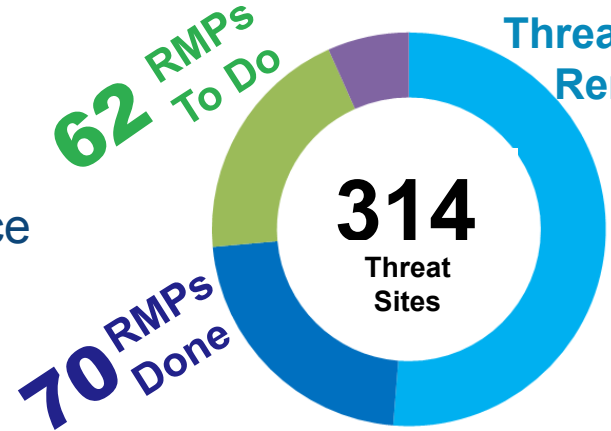




South Georgian Bay Lake Simcoe Source Protection Region

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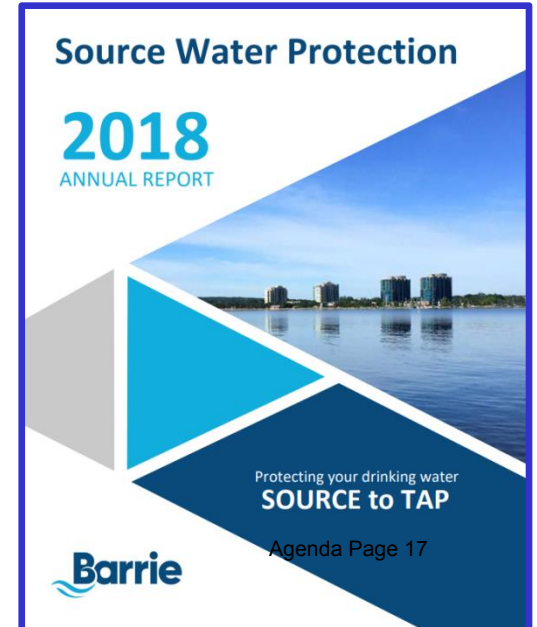
**Threat Sites
Removed**



Annual Reporting Components

Part IV

1. Establishment of a Risk Management Office
2. Number of Risk Management Plans
3. Number of inspections
4. Qualitative assessment of policy effect
5. Status of Official Plan update and Zoning By-law amendment
6. Progress on Septic Inspection Program
7. Ministry Reporting (Prescribed Instruments)

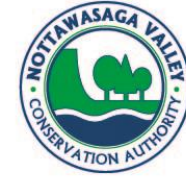


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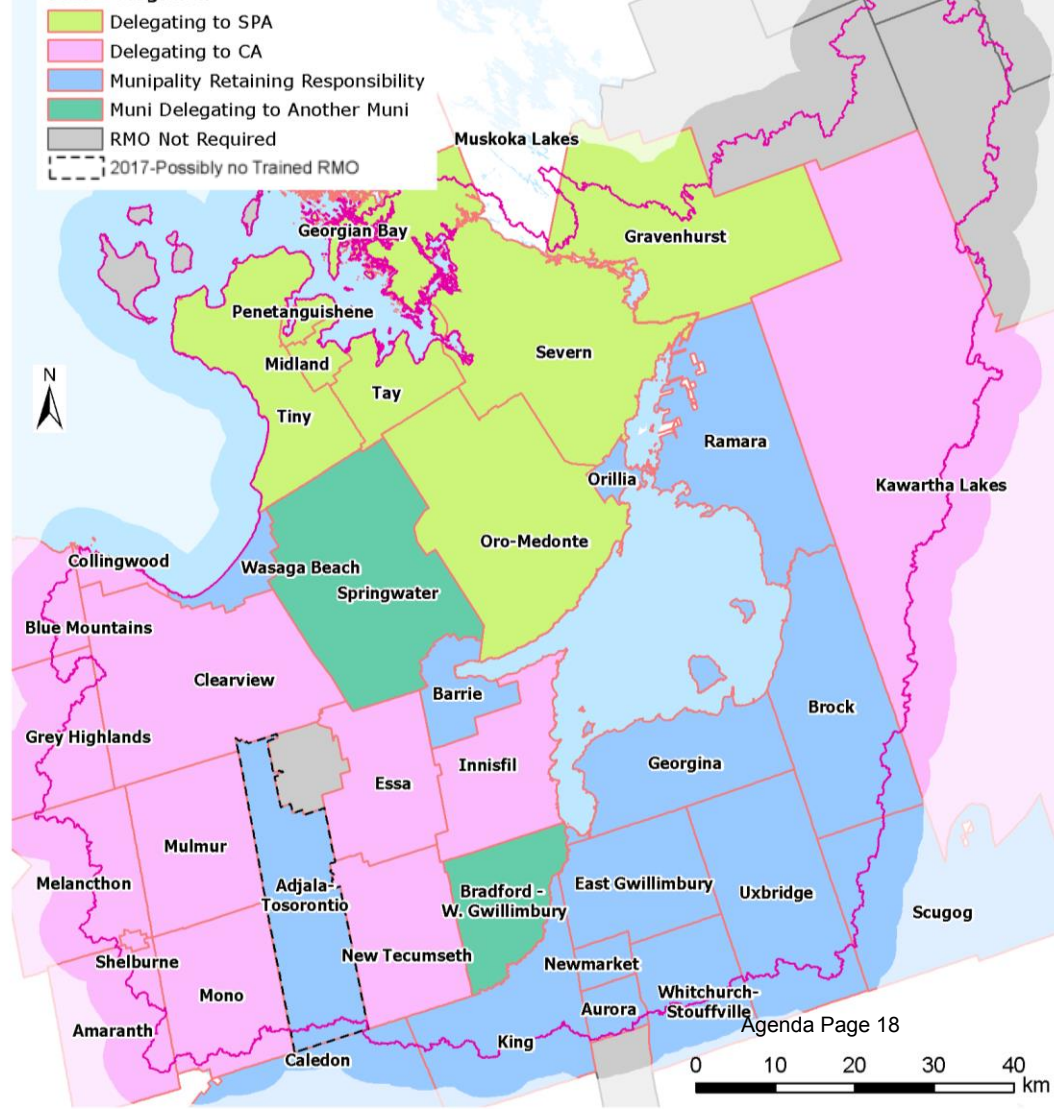


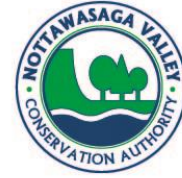
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South Georgian Bay Lake Simcoe Source Protection Region

Risk Management Official Status





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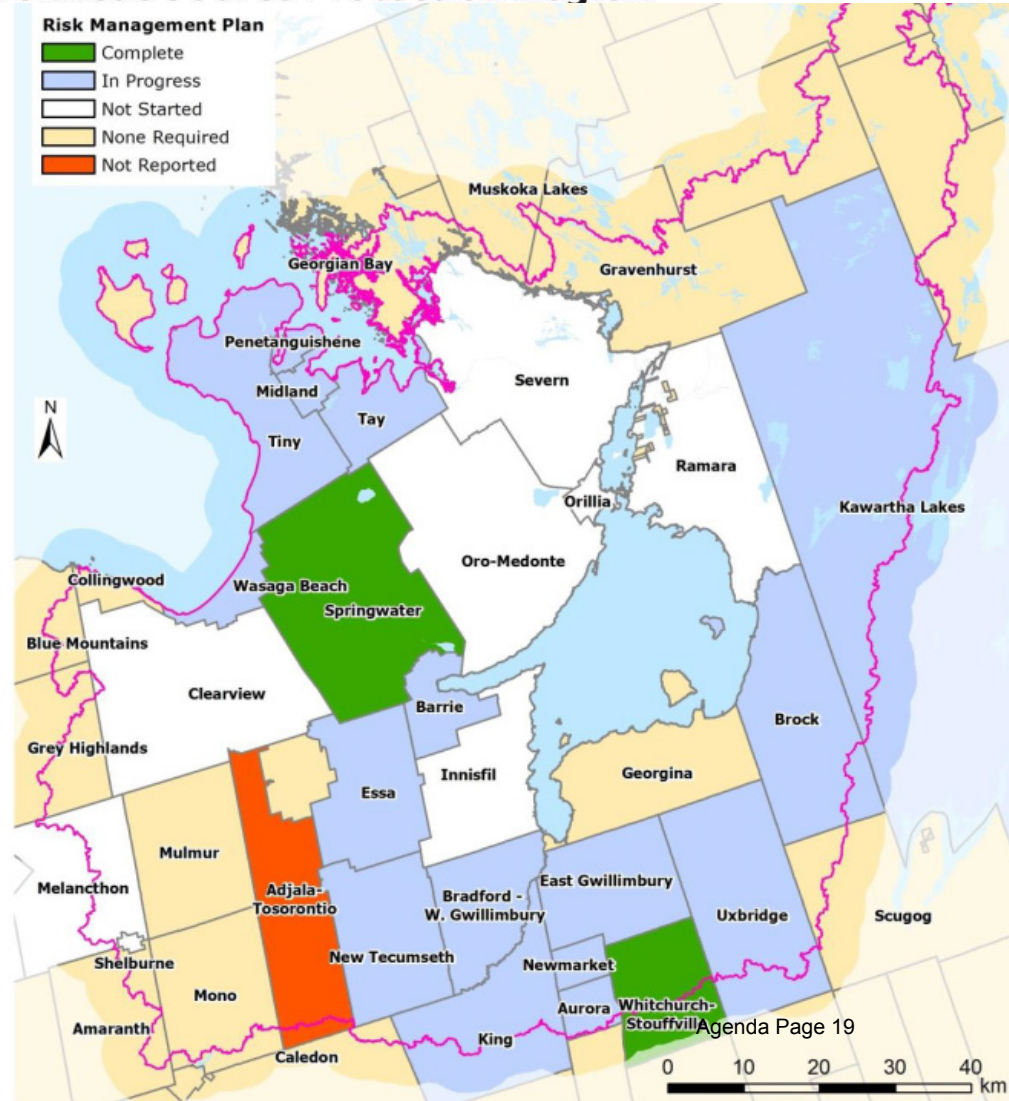
Risk Management Plans Progress to Date (Completed RMPs)

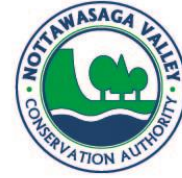
REPORTING PERIOD	Estimated # of RMPs Required	# of RMPs Completed
July-Dec. 31, 2015	No Data	25
2016	691	32
2017	476	49
2018	360	73

360 - 73 = 287

We likely have less-than 287 RMPs remaining to negotiate in the next 15 months.

Some RMPs estimated to be required for Fertilizer Application have been removed.



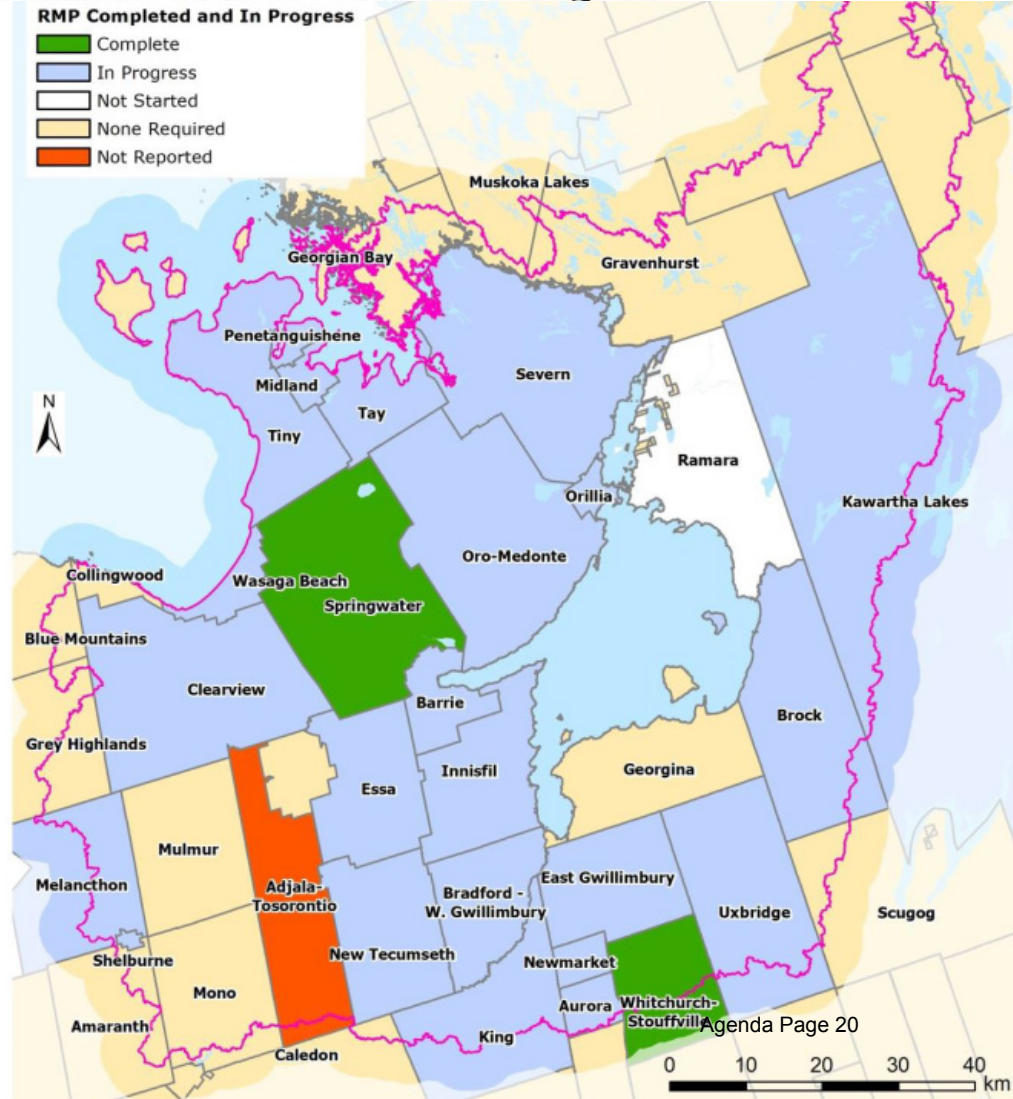


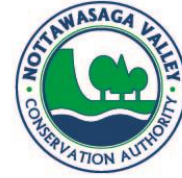
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Risk Management Plans Progress to Date (Completed and In-Progress RMPs)

How many RMPs were considered in-progress as of December 31, 2018?

122





South Georgian Bay Lake Simcoe Source Protection Region

Status of Risk Management Plans in the Severn Sound Area

	Parcels impacted by SPP policies	RMPs outstanding	RMPs agreed to
Tiny	506	62*	1
Tay	4	1	1
Severn	171	23	0
Georgian Bay	57	0	0
Penetanguishene	22	3	2
Midland	28	21	2
Oro-Medonte	144	3	0
Total	875	113	6

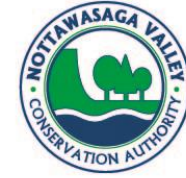
*62 RMPs – 17 Agricultural = 45 residential fertilizer threats

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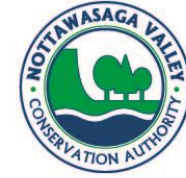
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Progress Made Addressing Threats

77% of SDWTs that existed at the time of SPP approval have been addressed through policy implementation

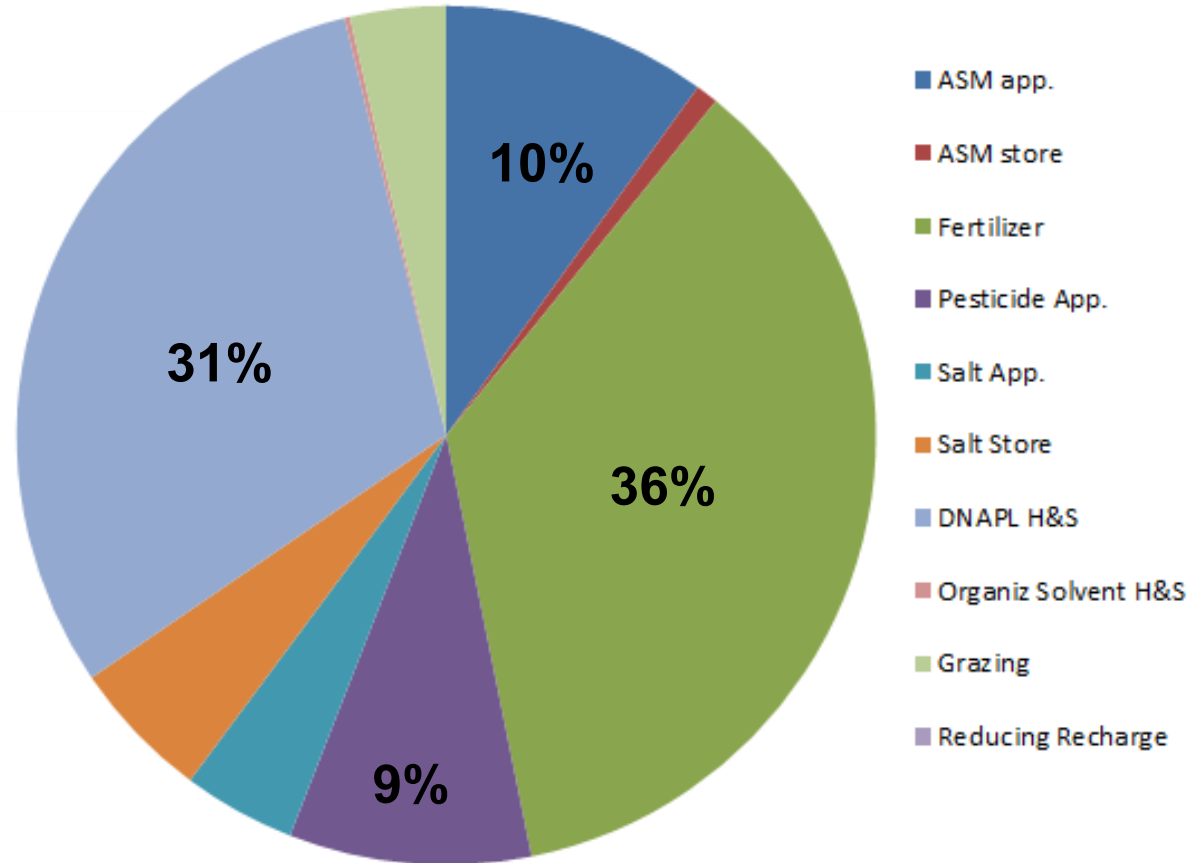
Threat ID	Prescribed Drinking Water Threat / Local Threat / Condition	A (# SDWT at SPP approval)	B (# SDWT added after approval)	C (# SDWT removed via verification)	D (SDWT addressed via policy)	Still to be Addressed
1	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the EPA.	66	11	63	5	9
2	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	1804	345	71	1947	131
3	The application of agricultural source material to land.	113	6	69	3	47
4	The storage of agricultural source material.	26	3	24	1	4
5	The management of agricultural source material	0	0	0	0	0
6	The application of non-agricultural source material to land	7	0	7	0	0
7	The handling and storage of non-agricultural source material	3	0	3	0	0
8	The application of commercial fertilizer to land	256	16	96	6	170
9	The handling and storage of commercial fertilizer	21	2	22	1	0
10	The application of pesticide to land	105	13	68	7	43
11	The handling and storage of pesticide	15	2	16	1	0
12	The application of road salt	2	39	0	21	20
13	The handling and storage of road salt	3	44	0	22	25
14	The storage of snow	1	41	0	21	21
15	The handling and storage of fuel	277	8	145	81	59
16	The handling and storage of a dense non-aqueous phase liquid	557	298	562	148	145
17	The handling and storage of an organic solvent	52	3	50	4	1
18	The management of runoff that contains chemicals used in the de-icing of aircraft	0	0	0	0	0
19	The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard.	32	3	17	1	17
20	Water taking from an aquifer without returning the water to the same aquifer or surface water body	0	0	0	0	0
21	Reducing recharge of an aquifer	0	1	1	0	0
22	Establishment and operation of a liquid hydrocarbon pipeline	0	0	0	0	0
TOTAL		3340	835	1214	2269	692

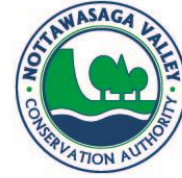


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Factors Contributing to Delays in Establishing RMPs

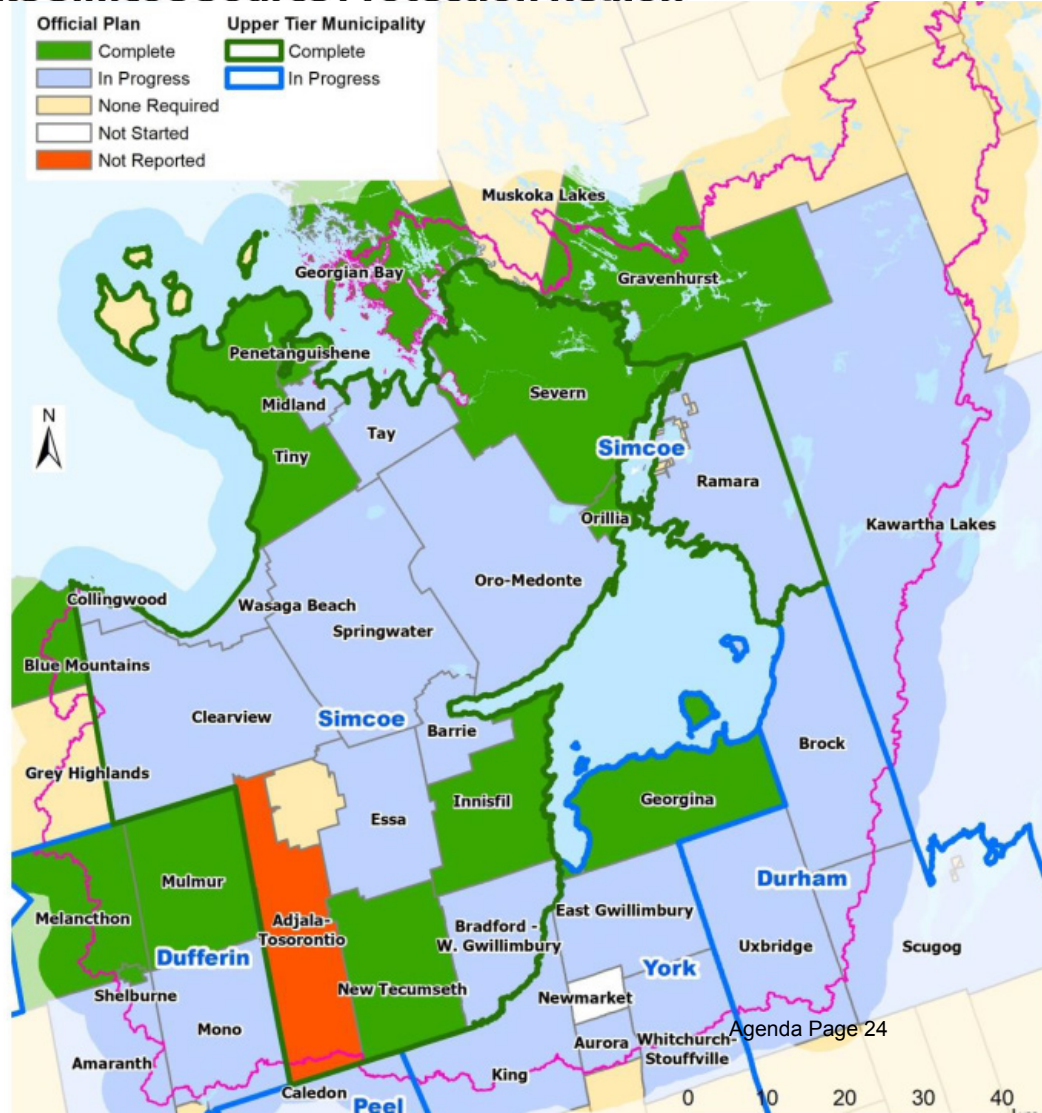
- **RMOs hesitant to establish RMPs for DNAPLs as there may be changes to policies in the future**
- **On average it took 22 months to complete Agricultural-based RMPs in our region (based on 11 completed RMPs in 2016-2018)**

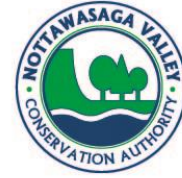




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**Official Plan Updates
Progress to Date**

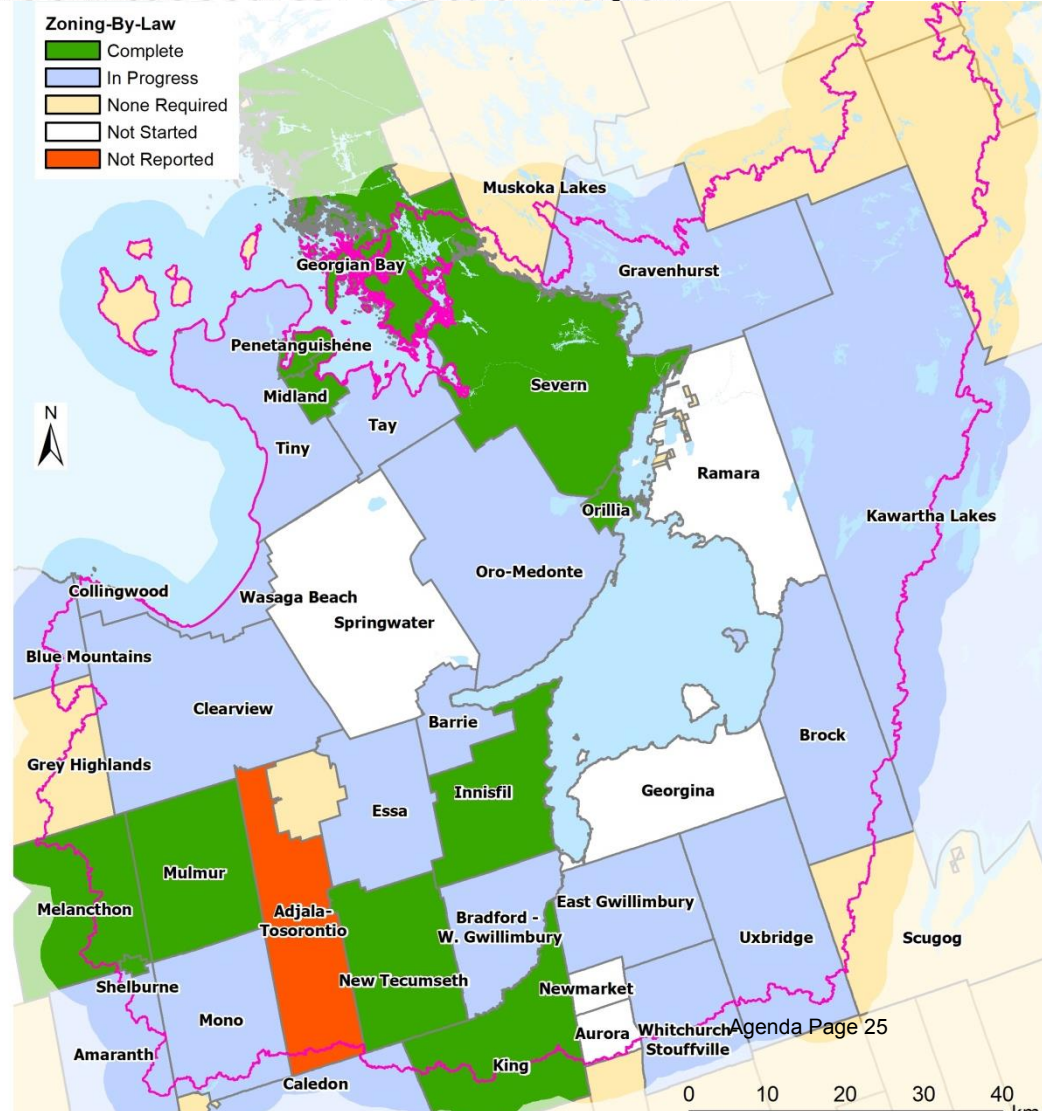


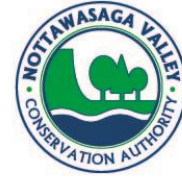


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Zoning Bylaw Amendments Progress to Date

- Zoning-By-Law
- Complete
 - In Progress
 - None Required
 - Not Started
 - Not Reported

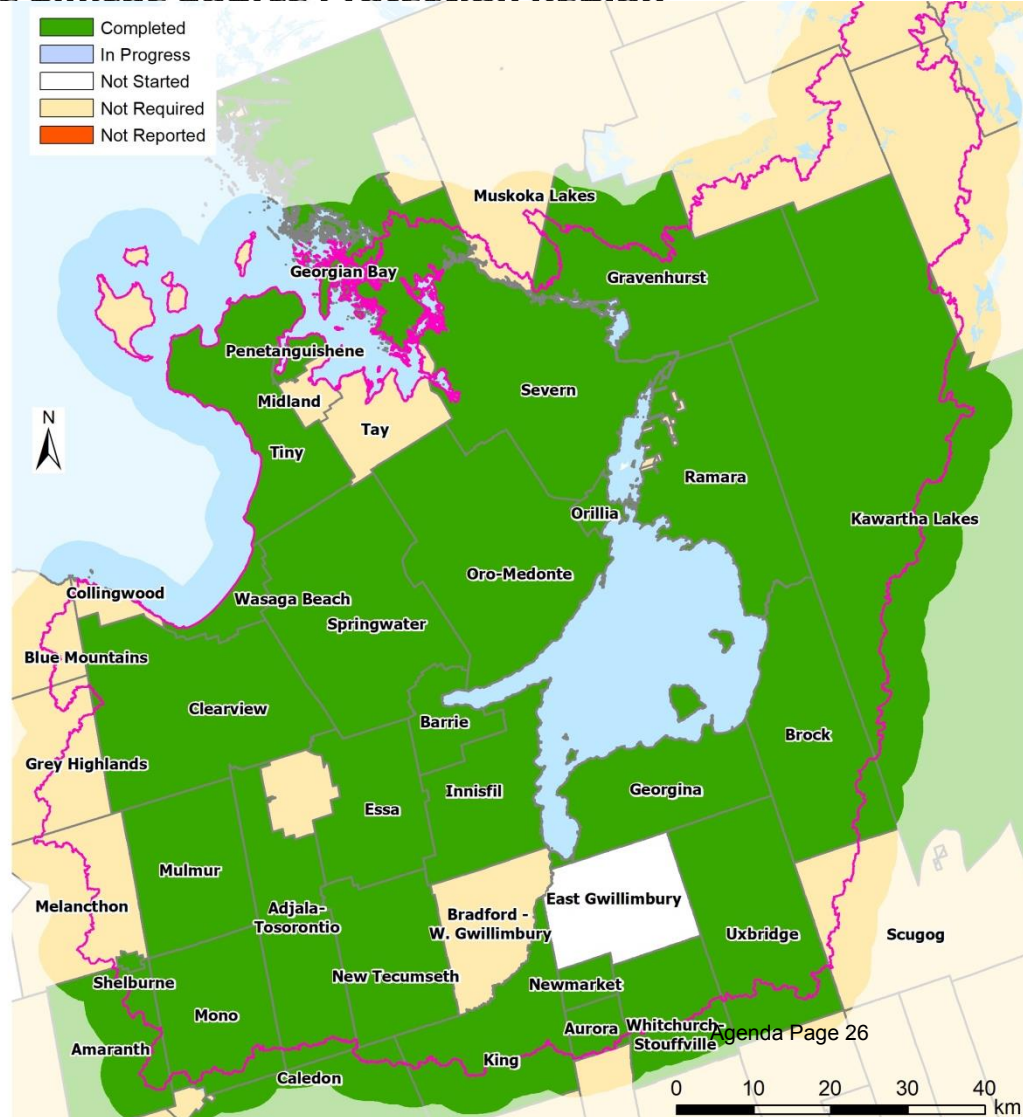




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**Septic Inspections
Progress to Date**

- Completed
- In Progress
- Not Started
- Not Required
- Not Reported

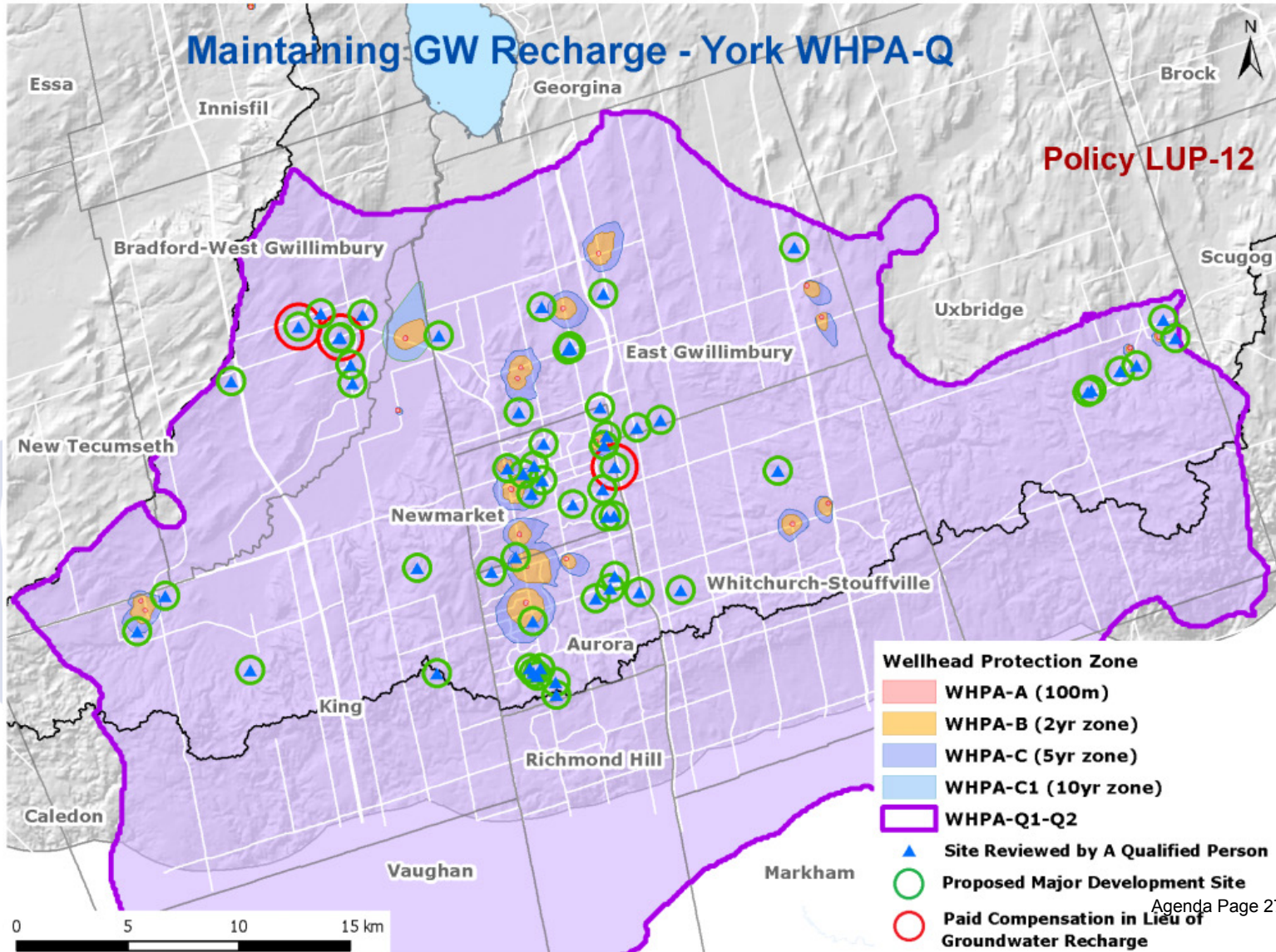
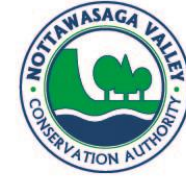


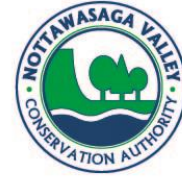
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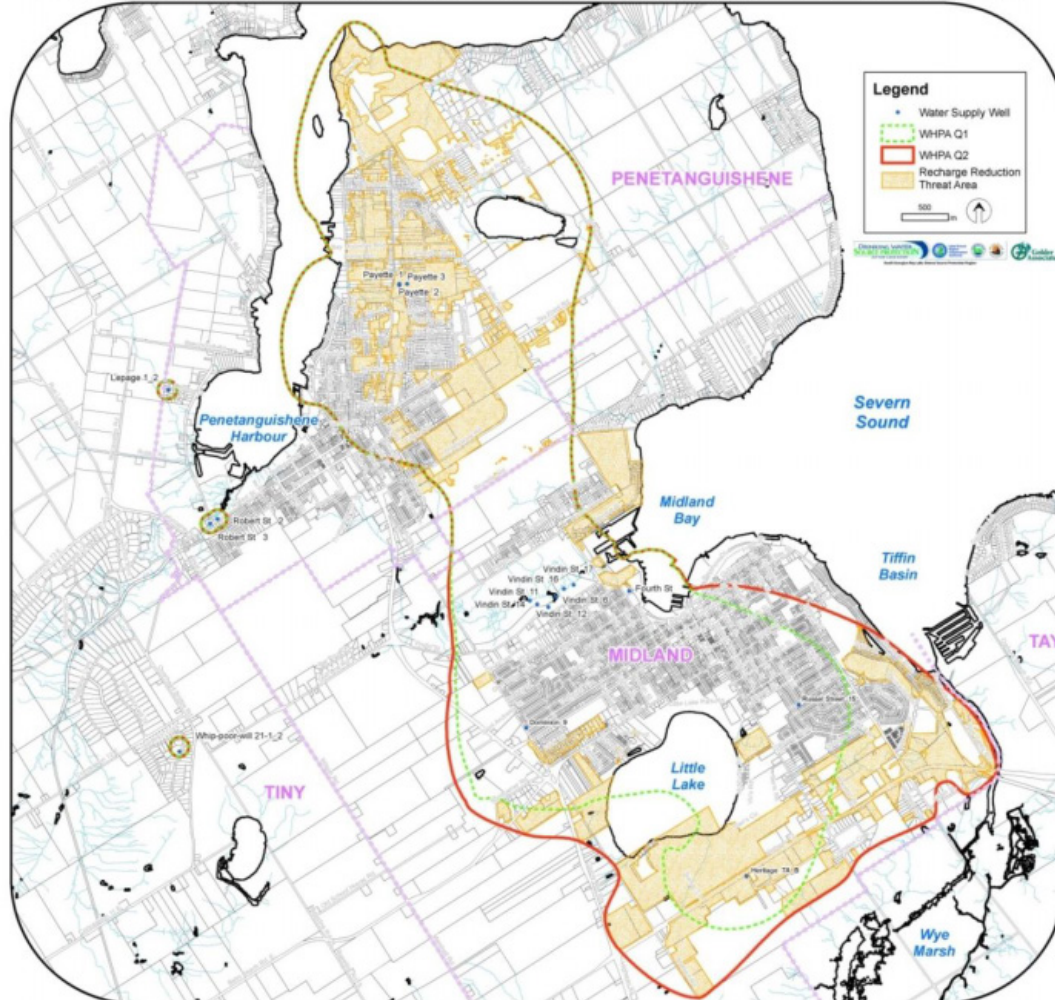
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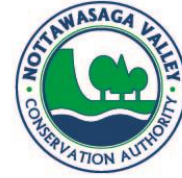




South Georgian Bay Lake Simcoe Source Protection Region

Midland, Penetanguishene and Tiny Wellhead Protection Areas Q1 and Q2 with Recharge Reduction Threat Areas





South Georgian Bay Lake Simcoe Source Protection Region

Ministry Reporting (SGBLS Region)

- **Ministry Progress in Addressing Existing Threats**
- **Non-Agricultural Source Material Plans**

Agency Name	Year	Number of PIs that may be a SDWT and need to be reviewed	Number of PIs where review has been completed	Number of PIs determined to be a SDWT	Number of PIs determined not to be a SDWT	Number of PIs amended or replaced	Number of PIs - no additional conditions were needed	Number of PIs revoked	Number of PIs where Final decision is pending	Total number of PIs reviewed and on which actions taken (columns 2-10)	Cumulative Progress Made (%) on PIs reviewed and actioned
MOECC – MRDWS – Fuel Handling & Storage	2016	100	7	7	0	0	0	0	7		
	2017	0	9	5	95	5	0	0	0		
	2018	0	0	0	0	0	0	0	0		
	Total	100	16	12	95	5	0	0	0	100	100.00%
MOECC – Permit to Take Water	2016	1	0	0	0	0	0	0	0		
	2017	0	0	0	0	0	0	0	0		
	2018	0	1	1	0	0	1	0	0		
	Total	1	1	1	0	0	1	0	0	1	100.00%
MOECC - Wastewater/Sewage Works	2016	47	1	1	0	0	0	0	1		
	2017	72	41	16	25	0	0	0	16		
	2018	48	29	4	25	2	19	0	0		
	Total	167	71	21	50	2	19	0	0	71	100.00%
MOECC - WDS - Landfilling and Storage	2016	5	2	2	0	0	0	0	2		
	2017	6	3	1	2	1	0	0	0		
	2018	4	2	0	2	1	0	0	0		
	Total	15	7	3	4	3	0	0	0	7	100.00%
OMAFRA - NASM Plans	2016	3	0	0	0	0	0	0	0		
	2017	1	4	0	4	0	0	0	0		
	2018	0	0	0	0	0	0	0	0		
	Total	4	4	0	4	0	0	0	0	4	100.00%
OMAFRA - NMS	2016	0	0	0	0	0	0	0	0		
	2017	0	0	0	0	0	0	0	0		
	2018	0	0	0	0	0	0	0	0		
	Total	0	0	0	0	0	0	0	0	0	100.00%

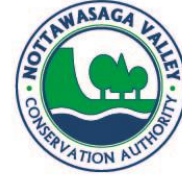
Overall Average = 100.00%

South Georgian Bay Lake Simcoe Source Protection Region

Non-Agricultural Source Material Plans – Existing Threats

Table 1. ACTIONS TAKEN ON Non-Agricultural Source Material Plans (NASM)

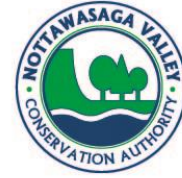
Source Protection Region/Area	Year	6.1 Number of NASM that need to be reviewed	6.2 Number of NASM that <i>completed</i> detailed review	6.3 Number of NASM determined to be a SDWT	6.4 Number of NASM determined <i>not</i> to be a SDWT	ACTIONS TAKEN ON PIs determined to be a SDWT			
						6.5 Number of NASM amended or replaced	6.6 Number of NASM - no additional conditions required	6.7 Number of NASM revoked	6.8 Number of NASM - decision pending
South Georgian Bay-Lake Simcoe (<i>Effective date: July 1, 2015</i>)	2016	3	0	0	0	0	0	0	0
	2017	1	4	0	4	0	0	0	0
	2018	0	0	0	0	0	0	0	0
	Total	4	4	0	4	0	0	0	0
Ontario (All SPRs combined)	Total	18	18	7	11	2	0	0	2



South Georgian Bay Lake Simcoe Source Protection Region

Potential Issues

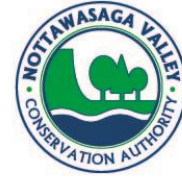




South Georgian Bay Lake Simcoe Source Protection Region

Potential Issues

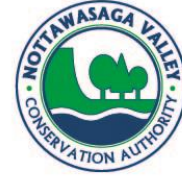
- RMPs – Some Risk Management Officials will need to increase the rate of Risk Management Plan establishment to complete all required RMPs by the 2020 deadline
- Septic Inspections – January 2017 was the deadline to complete mandatory septic inspections. As of Dec. 31, 2018 one municipality has not started their septic inspections.
- For the second consecutive year the same municipality has failed to report to the SPA by the deadline.



South Georgian Bay Lake Simcoe Source Protection Region

Next Steps





Next Steps - RMPs

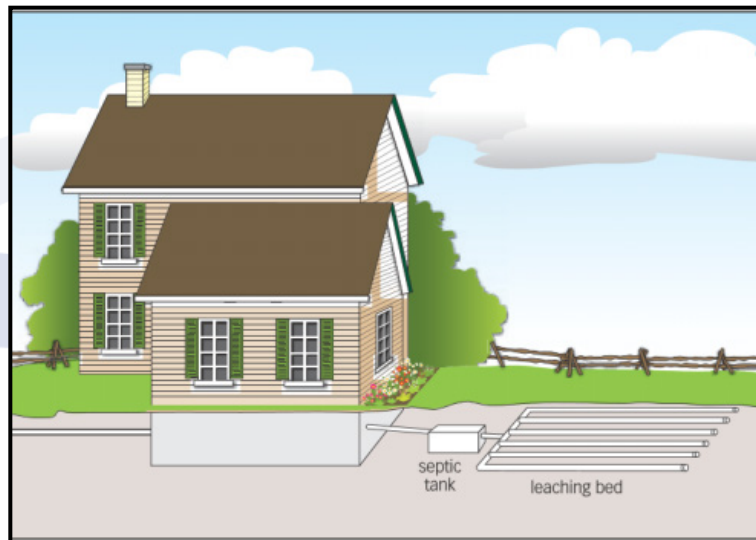
- Determine if Risk Management Officials (RMOs) have a plan in-place to meet the deadline to establish Risk Management Plans (RMPs). The Source Protection Authority (SPA) will assist RMOs in finding efficiencies in RMP development where appropriate.
- The SPA will seek clarification on policy direction and circumstances required for SDWT for the DNAPL threat category.

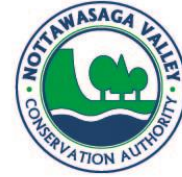


South Georgian Bay Lake Simcoe Source Protection Region

Next Steps – Septic Inspections

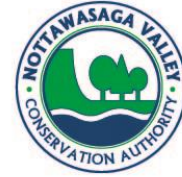
- The SPA will work with Part 8 sewage system inspectors and Chief Building Officials who have not completed their mandatory septic inspections to complete the inspections in a timely manner.
- We plan to undertake a review of the septic inspection methodologies used by our municipal partners during the initial inspections for SWP and determined a consistent, effective approach for the next round of inspections.





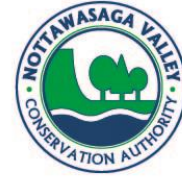
Summary Points

1. 98% of the policies that address significant drinking water threats have been or are being implemented.
2. Approximately 77% of SDWT that existed at the time of SPP approval have been addressed through policy implementation or removed through threats verification.
3. While 179 RMPs have been established as of December 31, 2018, the rate at which the RMPs are established will need to increase to complete all required RMPs by the 2020 deadline.
4. A number of municipalities with many SDWTs requiring a RMP have not yet started negotiating these RMPs. These municipalities may require assistance to complete RMPs by the deadline*
5. Almost all (1,970 of the 2,105) on-site sewage systems have been inspected in accordance with the Ontario Building Code. One municipality has not started their septic inspection program as of the end of 2018



Summary Points (continued)

6. All municipalities, with the exception of one, submitted their 2018 annual reports to Source Protection Authority staff.
7. All local municipalities within the Lake Simcoe Source Protection Authority portion of the York WHPA-Q2 are implementing policy LUP-12 (which requires a water balance study for all major developments) by having all applications peer reviewed by a Hydrogeologist.*



South Georgian Bay Lake Simcoe Source Protection Region

Recommended Progress Score

- The SPA recommends that the SPC give themselves a score of

S: Satisfactory

on achieving source protection plan objectives this reporting period.

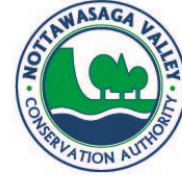
(Satisfactory = Some of the source protection plan policies have been implemented and/or are progressing in accordance with the timelines specified in the source protection plan)

DRINKING WATER SOURCE PROTECTION

ACT FOR CLEAN WATER



Lake Simcoe Region
conservation authority



South Georgian Bay Lake Simcoe Source Protection Region

Thank you! Questions?

Melissa Carruthers

Risk Management Official/Risk Management Inspector

Severn Sound Environmental Association

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South Georgian Bay Lake Simcoe Source Protection Region

Severn Sound Source Protection Authority (SPA)
April 18, 2019 meeting

STAFF REPORT

No: 01-19-SS SPA
Date: April 18th, 2019
To: Chair and Members of the SS SPA Board of Directors
From: Melissa Carruthers, Risk Management Official / Risk Management Inspector

SUBJECT: *Clean Water Act* Section 46 – Severn Sound SPA 2018 Annual Report to the Province

APPLICABLE STRATEGIC PLAN GOALS:

Goal 1: Sound Science

- Continue to offer exceptional services as the Source Protection Authority for Severn Sound

RECOMMENDATION:

RESOLVED THAT: Staff Report No. 01-19-SS SPA regarding *Clean Water Act* Section 46 – Severn Sound SPA 2018 Annual Report to the Province be received for information.

Purpose of Staff Report:

The purpose of this Staff Report No.01-19-SS SPA is to provide the South Georgian Bay Lake Simcoe source protection plan annual implementation progress report, submitted under Section 46 of the *Clean Water Act*.

Background:

The South Georgian Bay Lake Simcoe Source Protection Plan (SPP) has been in effect since July 1, 2015. The local Source Protection Authorities (SPAs) are required to

monitor and report on the implementation of the SPP policies. A primary objective of monitoring and reporting is to assess if threats to municipal drinking water sources (municipal systems) are being reduced through the implementation of the SPP policies. This information will help support any future amendments to the SPP and provide accountability and transparency to stakeholders.

The *Clean Water Act* (Section 46) requires that the SPA report to the Director (MECP) on the implementation of all policies by May 1st of each year. The Source Protection Committee (SPC) will review and comment on the SPA report prior to the May 1st deadline (for the Draft Report Card see **Appendix A**). Source Protection Authority staff, in conjunction with the Source Protection Committee, MECP, and municipalities, have prepared a reporting framework for this annual report. Risk Management Officials (RMOs) and municipal staff in our region used the secure online survey/database known as SPAR (Source Protection Annual Reporting) for the third consecutive year to provide data on the current progress of policy implementation.

An analysis of the annual reports from the various implementing bodies demonstrates that implementation of the South Georgian Bay Lake Simcoe Source Protection Plan is progressing well. Essential implementation actions, such as establishing a Risk Management Office, have been completed across the source protection region. Restricted Land Use policies are being implemented and most municipalities have started preparing risk management plans (RMPs). Ontario ministries have made significant progress reviewing previously issued provincial approvals (prescribed instruments such as Nutrient Management Plans) where they have been identified as a tool in our plan to address existing activities that may pose a risk to sources of drinking water. The reports are also helping identify areas where SPA staff can further assist in supporting implementation efforts, such as: providing educational materials and workshops to municipalities and identifying policies that could be more effective in reducing risk.

Issues:

Key findings of the 2018 annual report to the province are summarized below for the source protection region:

- Most of the policies (98%) that address significant drinking water threats have been or are in the process of being implemented in accordance with the timelines set out in our source protection plan.
- Great progress has been made in addressing significant threats since the source protection plan came into effect on July 1, 2015. It is estimated that through the on-site sewage system inspection program, amendment of existing prescribed instruments by ministry agencies, and threats verification work and establishment of RMPs by Risk Management Officials/Inspectors, that 77% of the existing significant drinking water threats have been mitigated.

- 179 RMPs have been established across the source protection region. However, there are a number of municipalities where it is estimated that a significant number of RMPs will be required and yet very few, or in some instances zero, RMPs have been completed to date.
- Despite completing 179 RMPs, there are an estimated 287 RMPs remaining to be negotiated across the Source Protection Region. In order to achieve the July 2020 deadline the rate of RMP establishment will need to increase significantly.
- The majority of municipalities in our source protection region have processes in place to ensure that their day-to-day planning decisions conform to our source protection plans. Municipalities have collaborated with each other and the SPA to ensure all of the education and outreach needs are being adequately addressed.
- The section 59 policy captured only 6 development proposals requiring an RMP for a future activity that would be a significant drinking water threat in 2018. These potential future threats were brought to the RMO's attention through the s.59 Restricted Land Use screening process.
- All local municipalities within the Lake Simcoe Source Protection Authority portion of the York WHPA-Q2 are implementing policy LUP-12 (which requires a water balance study for all major developments) by having all applications peer reviewed by a Hydrogeologist at LSRCA. Since implementation of the plan 125 (63 in the 2018 calendar year) hydrogeological studies have been reviewed for proposed major developments in the York WHPA-Q2. Only 7 (4 in the 2018 calendar year) of the 125 proposed developments required off-site compensation to maintain groundwater recharge.
- One municipality had not started their mandatory septic inspection program as of December 31, 2018. This municipality needs to be encouraged to complete these inspections as soon as possible.
- All municipalities, with the exception of one, submitted their annual reports to Source Protection Authority staff. The municipality which did not report is aware that they are required to submit an annual report to the SPA.

With only 15 months remaining until the deadline to complete all of the required RMPs, RMOs will focus efforts on negotiating RMPs. Based on the estimated number of RMPs still needed to be negotiated a significant increase in the rate of RMP establishment is required to meet the 2020 deadline. The SPA will continue to work with RMOs, particularly those who may have limited time and resources to dedicate to source water protection, to assist them where possible. This may include: facilitating the sharing of RMP templates, guidelines and standard operating procedures, making annual reporting a more efficient process, and providing workshops for certain threat types (such as agricultural threats). Although the onus is on the RMOs to implement the necessary RMPs, the SPA will work with RMOs to assist as needed, and facilitate information sharing.

The upper tier municipalities and SPA staff will work with Part 8 sewage system inspectors and Chief Building Officials to make it a priority to complete the initial round of required septic inspections. The SPA may be able to facilitate the sharing of information and tactics used by those municipalities that have been successful in getting the required septic inspection completed in a timely fashion.

Summary and Recommendation:

The various implementers of policies within the South Georgian Bay Lake Simcoe Source Protection Region have submitted their 2018 annual reports to the SPA, as required under the *Clean Water Act*. The reports show that the transition to implementation of policies is currently progressing at a satisfactory rate. Most of the source protection plan policies are progressing in accordance with the timelines specified in the source protection plan. Significant focus and effort on RMP establishment is required in 2019 to meet the Provinces July 2020 deadline.

Attachments:

Appendix A: 2018 Source Protection Draft Annual Progress Report

Prepared by:

Original signed by

Melissa Carruthers, Risk Management
Official / Risk Management Inspector

Approved for Submission by:

Original signed by

Julie Cayley, Executive Director



South Georgian Bay Lake Simcoe Source Protection Region

**Severn Sound Source Protection Authority (SPA)
April 18, 2019 meeting**

STAFF REPORT

No: 02-19-SS SPA
Date: April 18th, 2019
To: Chair and Members of the SS SPA Board of Directors
From: Melissa Carruthers, Risk Management Official / Risk Management Inspector

SUBJECT: Severn Sound Source Protection Authority (SS SPA) Drinking Water Source Protection Update and SSEA Risk Management Services Update

APPLICABLE STRATEGIC PLAN GOALS:

Goal 1: Sound Science

- Continue to offer exceptional services as the Source Protection Authority for Severn Sound

Goal 2: Supportive Partnerships

- Strengthen & build relationships for the implementation of Part IV of the Clean Water Act
-

RECOMMENDATION:

RESOLVED THAT: Staff Report No. 02-19-SS SPA regarding an update as to the activities that have been undertaken by Severn Sound Source Protection Authority staff during Q3 be received for information

Purpose of Staff Report

The purpose of this report is to provide an update on the activities that Severn Sound Source Protection Authority staff and SSEA Risk Management staff have completed during the first quarter of 2019.

Background

Under the *Clean Water Act, 2006* the SSEA is one of the Source Protection Authorities within the South Georgian Bay Lake Simcoe Source Protection Region (SGBLS SPR) and work with our member municipalities as well as the District Municipality of Muskoka to implement the Drinking Water Source Protection (DWSP) Program.

Authority to perform risk management services on behalf of their municipality under Part IV of the *Clean Water Act* has been delegated to SSEA staff (RMO/RMI Melissa Carruthers) by 8 municipalities (District Municipality of Muskoka, Townships of Georgian Bay, Severn, Oro-Medonte, Tay, Tiny, and Towns of Midland and Penetanguishene). To date that work has included verifying significant drinking water threats (SDWTs) via phone calls, surveys, and site visits and if a SDWT was found, staff started the process of negotiating risk management plans. This has been done for a few properties. Answering inquiries from the general public or municipal staff and commenting on development proposals is also a large part of what the risk management staff does.

Analysis:

During the first quarter of 2019 Source Protection Authority staff has been completing the following tasks:

- Submitted a draft 2019/20 workplan and funding application; currently pending negotiation with the Province
- Assisted municipalities in meeting their February 1st annual reporting requirements
- Ongoing communication with Oro-Medonte regarding changes to municipal water supplies
- Attended 2 regional meetings, 1 provincial teleconference, and 1 provincial webinar

During the first quarter of 2019 Risk Management staff has been completing the following tasks:

- Commented on 20 development applications, answered 8 inquiries, attended 2 pre-consultation meetings, and signed 1 Risk Management Plan
-

Prepared by:

Approved for Submission by:

Original signed by _____
Melissa Carruthers, Risk Management
Official / Risk Management Inspector

Original signed by _____
Julie Cayley, Executive Director