



South Georgian Bay Lake Simcoe Source Protection Region

Agenda

Source Protection Committee Meeting No. SPC- 04-2022

Tuesday, July 5, 2022

1:00 to 4:00 pm

To be held virtually by Zoom video conference

Members

Lynn Dollin, Chair

Municipal

Andy Campbell, Chris Gerrits, Jeff Hamelin, Scott Lister, Kyle Mitchell, Katie Thompson, Stan Wells

Economic/Development

Colin Elliott, John Hemsted, Amanda Kellett, David Ketcheson, Jessica Neto, Rick Newlove, David Ritchie

Public Sector

Geoff Allen, Peter Dance, Bob Duncanson, David Greenwood, Stephanie Hobbs, Tom Kurtz, Cate Root

First Nations

Sharday James

Liaisons

Jenee Wallace, Simcoe Muskoka District Health Unit (SMDHU)

Karen Kivilahti, SMDHU

Julie Cayley, Severn Sound Environmental Association (SSEA)

Doug Hevenor, Nottawasaga Valley Conservation Authority (NVCA)

Elizabeth Forrest, Ministry of the Environment, Conservation and Parks

Staff

Bill Thompson, LSRCA

Ryan Post, NVCA

Mike Wilson, LSRCA

Sarah Thompson, NVCA

Mystaya Touw, LSRCA

Melissa Carruthers, SSEA

Kathy Hillis, LSRCA (minutes)

Nicole Stott, SSEA

Regrets

Scott Lister – proxy to Katie Thompson

1. **Welcome & Opening Remarks**
2. **Roll Call**
3. **Acknowledgement of Indigenous Territory**
4. **Declaration of Pecuniary Interest and Conflict of Interest**
5. **Approval of the Agenda**

Pages 1-6

Recommended: **That** the agenda for the Tuesday, July 5, 2022 meeting of the Source Protection Committee be approved as presented.

6. **Adoption of Minutes**

Pages 7-14

Recommended: **That** the minutes of the Tuesday, June 21, 2022 meeting of the Source Protection Committee be approved as circulated.

7. **Announcements**
8. **Deputations**

There are none

9. **Presentations**

- a) A presentation by Mystaya Touw, LSRCA regarding Staff Report SPC2.1 - New Stormwater Management and Stormwater Infiltration Facilities Circumstances and Policy Implications.

Recommended: **That** presentation a) and Staff Report SPC2.1 regarding New Stormwater Management and Stormwater Infiltration Facilities Circumstances and Policy Implications be received for information; and

Further That the Source Protection Committee endorse staff's recommended policies for stormwater management; and

Further That staff be directed to incorporate the new policies for stormwater management and stormwater infiltration facilities as part of the forthcoming amendment to the Source Protection Plan, under Section 36 of the Clean Water Act.

- b) A presentation by Bill Thompson, LSRCA regarding Staff Report SPC2.2 – Change to Circumstances – the Application of Road Salt.

Recommended: **That** presentation b) and Staff Report SPC2.2 regarding the change to circumstances for the application of road salt be received for information; and

Further That staff be directed to update the Assessment Report with new maps of impervious cover within vulnerable areas (rather than within 1 km² area centred on municipal wells); and

Further That a new policy be added to the Source Protection Plan requiring municipalities to maintain a salt management plan, which identifies any municipal drinking water system where the application of road salt could be a Significant Drinking Water Threat as a “salt vulnerable area.” These plans will identify and implement practices to minimize the loss of salt to the environment and the impact of salt on drinking water, in areas where it would be a significant drinking water threat; and

Further That staff be directed to incorporate the new policy text and updated maps as part of the forthcoming amendment to the Source Protection Plan, under Section 36 of the Clean Water Act.

- c) A presentation by Bill Thompson, LSRCA regarding Staff Report SPC2.3 – Change to Circumstances – the Handling and Storage of Road Salt.

Recommended: **That** presentation c) and Staff Report SPC2.3 regarding the change to circumstances for the handling and storage of road salt be received for information; and

Further That Policies which apply to the existing handling and storage of salt be amended such that Risk Management Plans are required in cases where Risk Management Plans are required for the application of salt, and that Education and Outreach apply in all other cases; and

Further That Policies which apply to the future handling and storage of salt be amended to prohibit only volumes larger than 500 tonnes, to maintain the effect of the policies as originally written; and

Further That staff be directed to incorporate the new policy text as part of the forthcoming amendment to the Source Protection Plan, under Section 36 of the Clean Water Act.

- d) A presentation by Bill Thompson, LSRCA regarding Staff Report SPC2.4 – Change to Circumstances – the Storage of Snow.

Recommended: **That** presentation d) and Staff Report SPC2.4 – Change to Circumstances – the Storage of Snow be received for information; and

Further That Policies which apply to the storage of snow be amended such that Risk Management Plans are required in cases where Risk Management Plans are required for the application of salt, and that Education and Outreach apply in all other cases; and

Further That Policies which apply to the future handling and storage of snow be amended to prohibit only areas larger than 1 ha, to maintain the effect of the policies as originally written; and

Further That staff be directed to incorporate the new policy text as part of the forthcoming amendment to the Source Protection Plan, under Section 36 of the Clean Water Act.

10. **Determination of Items Requiring Separate Discussion**

(Reference Agenda Items on pages 5-6 of the Agenda)

11. **Adoption of Items Not Requiring Separate Discussion**

Recommended: **That** the recommendations as set forth in the items not requiring separate discussion be approved, and staff be authorized to take all necessary actions to affect those recommendations.

12. **Consideration of Items Requiring Separate Discussion**

13. **Other Business**

- 13.1 Election of an Acting Chair, for the period from August 20, 2022 until such time as the Minister of the Environment, Conservation and Parks appoints a Chair.

14. **Closed Session**

15. **Next Meeting and Adjournment**

The next meeting of the Source Protection Committee to be scheduled by Poll.

Agenda Items

1. Correspondence

There are none.

2. Staff Reports

SPC2.1 - New Stormwater Management and Stormwater Infiltration Facilities Circumstances and Policy Implications.

Pages 15-19

That presentation a) and Staff Report SPC2.1 regarding New Stormwater Management and Stormwater Infiltration Facilities Circumstances and Policy Implications be received for information; and

Further That the Source Protection Committee endorse staff's recommended policies for stormwater management; and

Further That staff be directed to incorporate the new policies for stormwater management and stormwater infiltration facilities as part of the forthcoming amendment to the Source Protection Plan, under Section 36 of the Clean Water Act.

SPC2.2- Change to Circumstances – the Application of Road Salt.

Pages 20-24

That presentation b) and Staff Report SPC2.2 regarding the change to circumstances for the application of road salt be received for information; and

Further That staff be directed to update the Assessment Report with new maps of impervious cover within vulnerable areas (rather than within 1 km² area centred on municipal wells); and

Further That a new policy be added to the Source Protection Plan requiring municipalities to maintain a salt management plan, which identifies any municipal drinking water system where the application of road salt could be a Significant Drinking Water Threat as a "salt vulnerable area." These plans will identify and implement practices to minimize the loss of salt to the environment and the impact of salt on drinking water, in areas where it would be a significant drinking water threat; and

Further That staff be directed to incorporate the new policy text and updated maps as part of the forthcoming amendment to the Source Protection Plan, under Section 36 of the Clean Water Act.

**SPC2.3 - Change to Circumstances – the Handling and Storage of Road Salt.
Pages 25-29**

That presentation c) and Staff Report SPC2.3 regarding the change to circumstances for the handling and storage of road salt be received for information; and

Further That Policies which apply to the existing handling and storage of salt be amended such that Risk Management Plans are required in cases where Risk Management Plans are required for the application of salt, and that Education and Outreach apply in all other cases; and

Further That Policies which apply to the future handling and storage of salt be amended to prohibit only volumes larger than 500 tonnes, to maintain the effect of the policies as originally written; and

Further That staff be directed to incorporate the new policy text as part of the forthcoming amendment to the Source Protection Plan, under Section 36 of the Clean Water Act.

**SPC2.4- New and Updated Circumstances – the Storage of Snow.
Pages 30-35**

That presentation d) and Staff Report SPC2.4 – Change to Circumstances – the Storage of Snow be received for information; and

Further That Policies which apply to the storage of snow be amended such that Risk Management Plans are required in cases where Risk Management Plans are required for the application of salt, and that Education and Outreach apply in all other cases; and

Further That Policies which apply to the future handling and storage of snow be amended to prohibit only areas larger than 1 ha, to maintain the effect of the policies as originally written; and

Further That staff be directed to incorporate the new policy text as part of the forthcoming amendment to the Source Protection Plan, under Section 36 of the Clean Water Act.



South Georgian Bay Lake Simcoe Source Protection Region

**Source Protection Committee (SPC)
Minutes of Meeting SPC-03-2022
June 21, 2022**

The Chair called the meeting to order at 1:30 pm and Bill Thompson conducted the Roll Call.

Members Present:

Lynn Dollin, Chair

Municipal

Andy Campbell, Chris Gerrits, Jeff Hamelin, Scott Lister, Kyle Mitchell, Katie Thompson

Economic/Development

Colin Elliott, Amanda Kellett, Jessica Neto, Rick Newlove, David Ritchie

Public Sector

Geoff Allen, Peter Dance, Bob Duncanson, David Greenwood, Stephanie Hobbs, Tom Kurtz, Cate Root

Liaisons

Jenee Wallace, Simcoe Muskoka District Health Unit
Julie Cayley, Severn Sound Environmental Association (SSEA)
Elizabeth Forrest, Ministry of the Environment, Conservation and Parks

Staff Present

Bill Thompson, LSRCA	Ryan Post, Nottawasaga Valley Conservation Authority (NVCA), Acting Liaison
Mike Wilson, LSRCA	Melissa Carruthers, SSEA
Mystaya Touw, LSRCA	Kathy Hillis, LSRCA (minutes)
Sarah Thompson, NVCA	Nicole Stott, SSEA

Guest

Greg Padusenko, WSP Golder Associates

Regrets:

Sharday James, First Nations
Stan Wells, Municipal – proxy to Dave Ritchie
Doug Hevenor, Liaison, NVCA
John Hemsted, Economic/Development
David Ketcheson, Economic/Development

1. Welcome & Opening Remarks

2. Land Acknowledgement

The Chair recited the Acknowledgement of Indigenous Territory.

3. Declaration of Pecuniary Interest and Conflict of Interest

None declared.

4. Approval of Agenda

Moved by: Rick Newlove

Seconded by: Chris Gerrits

SPC-20-22 **Resolved That** the agenda for the June 21, 2022 meeting of the Source Protection Committee (SPC) be approved as presented. **Carried**

5. Adoption of Minutes

Moved by: David Greenwood

Seconded by: Andy Campbell

Action Item for Last Meeting: Colin Elliott requested staff investigate with Simcoe County staff why the plume coming from Perkinsfield from the Pauze landfill site and going toward Wyevale was supposedly stopped just north of Wyevale and advise him of the status of this. Melissa Carruthers contacted the County of Simcoe who advised that it is not a County-owned landfill so they have no information. MECP advised that additional monitoring was completed in the fall of 2021 and a report on the monitoring will be produced in the next few months, but to obtain results of that report a Freedom of Information request would need to be made. Anyone seeking further information can speak to Melissa offline.

SPC-21-22 **Resolved That** the minutes of the May 3, 2022 meeting of the Source Protection Committee be approved as amended and circulated. **Carried**

6. Announcements

- a) Lynn Dollin, Bill Thompson and Mike Wilson were invited by the Ogemawahj Tribal Council (joint Council of First Nations) to do a sourcewater 101 session on May 16, 2022. Beausoleil Island has interest in determining what their IPZ would be and how the Clean Water Act can protect their three drinking water systems, even though exempt. Rama has been working on a Council resolution for several years and Beausoleil is interested in exploring a similar pathway with this SPC.

- b) SPC Chairs meeting was held on May 9, 2022 and the Chairs were advised that almost all SPC Chairs terms are up in August 2022, and there may not be reappointments considered by this time due to the new Cabinet being assigned. If anyone is interested in being interim Chair, advise Bill Thompson of your interest. An updated will be provided at the July 5th SPC meeting. Lynn indicated she is interested in reappointment, but there still may be an interim Chair requirement. An Acting Chair must be chosen from among current SPC Members. Beth (MECP) recommends reviewing processes established by other SPCs as the Regulations do not elaborate on this process. **ACTION ITEM:** Bill Thompson to provide an update on the Chair's appointment process at the July 5th SPC Meeting.
- c) Section 34 SPA-led amendments and Section 36 packages are still being reviewed.

7. Deputations

There were none.

8. Presentations

- a) A presentation by Greg Padusenko, WSP Golder Associates and Ryan Post, NVCA regarding Staff Report SPC2.1 - Source Protection Plan and Assessment Report Update - Amendment to Township of Springwater Chapter.

Two new wells (Midhurst Valley Well 1 and Well 2) have been constructed to support the Carson Road development and are required to be incorporated into the Source Protection Plan and associated Assessment Report. This development will be completed in three phases:

- The first (current) phase will include two wells at the Snow Valley Road site (Wilson and Snow Valley; one duty well and one standby well).
- The second phase is to construct one additional well at the same site as phase 1,
- The third phase is to construct two additional wells at the West Snow Valley site.

The total Carson Road development will result in three duty wells and two standby wells for the system which can collectively and cumulatively serve 2,909 units (population 8,720) with pumping up to 76.8 L/s.

Wells 1 and 2 are screened in regional Aquifer A4 and are deeper than the existing Midhurst and Del trend wells which are completed in regional aquifer A3. The water quality of both wells meets the Ontario Drinking Water Quality Standards (ODWS) except for hardness. Neither well is considered a GUDI.

Numerical groundwater modelling was conducted using an updated version of the pre-existing Barrie (or Kempenfelt Bay) groundwater model that was originally constructed and approved in the early 2000's in support of the South Simcoe Groundwater Study. The refined model (2018 Kempenfelt Bay model) was calibrated in transient mode to monthly baseflow estimates along

Willow Creek. Future Conditions scenario showed drawdown of 0.2 m to 1.5 m at private wells, indicating no significant impact to these wells. Loss in baseflow shown to be 5%. In addition, the groundwater vulnerability classified as Low Vulnerability.

No drinking water issues identified in Wells 1 and 2. Nine significant threats identified on seven properties:

- one threat for the establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage – for the proposed effluent main;
- one threat for the handling and storage of fuel – water treatment plant;
- seven threats for the handling and storage of a DNAPL – generally associated with companies on Snow Valley Road.

Percent Managed Lands, Livestock Density, and Impervious surfaces were modelled using the 2021 Director technical Rules.

No anticipated policy changes required to the SPP. Targeted submission to MECP for approval is in mid-September.

QUESTIONS AND COMMENTS

Peter Dance: What are the proposed amendments?

They will focus on the additional maps to be included in Chapter 16 and the text to incorporate these new wells into the document.

Dave Ritchie: When the well starts to draw down, and contaminants may start to show up from the chemical plant in the area of the Snow Valley Road plume, will it have an affect on the well?

The NVCA has some provincial groundwater monitoring wells in the area. The plume does not migrate to the area of the wells, and they are at considerable depth and the plume is in the shallow aquifer.

Geoff Allen: Are there plans to ask the industries with significant threats from DNAPLs to do RMPs?

WSP Golder completed a windshield survey but a full review has not been done, but this will be done by the Springwater RMO.

Chris Gerrits: How long does the conceptual model to modelling report take to complete? How long is it expected for the Ministry to approve it, so in general how long does it take for approval of new wells?

This is partly based on how much of a push is there to complete the work. The source protection work alone is approximately one year. Permits, drilling and testing can be done in a year, but Ministry approvals prolongs this process.

Colin Elliot: Would like a map of exactly where these wells are? What are the nitrate levels? What is the flow of Willow Creek?

They are located at the northeast corner of Snow Valley Road and Wilson Road. Reduction in baseflow to Willow Creek would be approximately 5%, and acceptable reduction is 10%. Did not do nitrate isotope work to isolate the source of the nitrates. The nitrate level is 8 mg/L and will be treated at the water treatment plant, and the plant has been designed for this.

Peter Dance: Where is the sewage going, being treated, and discharged? Has there been any consultation with people who will experience well draw down or industries who will need RMPs?

Treated within the subwatershed, discharged to a watercourse at County Road 27 and Wilson Road. Drawn down on shallow wells is less than 1 m so no real impact. The drawn down of 1.5 m in wells that have significant drawdown available, so it is almost within the seasonal impact range. Public consultation would have occurred during the EA and during the aquifer tests. There will be public consultation during the s.34 process. Peter would like to see a policy for this development requiring a 10-year review of the WHPAs. Ryan believes that the modelling will look at the existing pumping rates and see how they influence the WHPAs before the 10-year period is up. There is a Tier 2 water budget in place for this area but will start to be concerned about water quantity in this area in the next 10-15 years. Midhurst's threshold is based on taking vs availability and there is a threshold that they are still below, but when they start to approach this threshold, we will need to look at a Tier 3 water budget. Currently there is not a quantity issue as per the Technical Rules.

Amanda Kellett: Is there any mechanism for monitoring the baseflow affects from a new well?

NVCA has a stream gauge on Willow Creek and can do a baseflow evaluation. There is a recommendation for the permit to take water application to study stream flows and stream levels at the closest creek, Black Creek.

Chris Gerrits: The SPC role is not to review the technical data of the report, but rather to protect sourcewater. The SPC's job is quality and quantity, and there must be a threshold for us to write policies on quantity.

Andy Campbell: There will be continued pressure from development, but the SPC is to deal with the wells before u. With the evidence provided there is reason to support the application.

Cate Root: Whenever building a facility you need to have a stormwater plan, and is this something we should hear about?

If SWM pond is deemed a significant drinking water threat it would have been flagged. Within the WHPA-A there is no SWM pond planned so there is not a threat. Stormwater was reviewed through the development process.

Rick Newlove: If MECP is concerned about water quality, they will deal with it the permit to take water.

Moved by: Andy Campbell

Seconded by: Rick Newlove

SPC-22-22 **Resolved That** presentation a) and Staff Report SPC2.1 regarding Source Protection Plan and Assessment Report Update - Amendment to Township of Springwater Chapter be received for information; and

Further That the South Georgian Bay Lake Simcoe Source Protection Committee agree that the proposed amendments to the Source Protection Plan and the Springwater Chapter of the Nottawasaga Valley Assessment Report are advisable.
Carried

b) A presentation by Mike Wilson, LSRCA regarding Staff Report SPC2.2 – Proposed Amendment to Policy DNAPL-2 (Prohibition Policy).

The staff report recommended lowering the DNAPL prohibition volume threshold from 617 L to 250 L. The rationale is that this is a small enough threshold to prevent businesses proposing to use a significant volume of DNAPL from opening in a vulnerable area, but is large enough to allow non-retail businesses to continue to store several small containers of products that contain some DNAPL.

QUESTIONS AND COMMENTS

Cate Root: Recommends that the SPC send a copy of this recommendation to other SPCs to get their agreement.

CTC has a similar volume threshold of 250 L in their new DNAPL policy, but they kept a prohibition at any volume in WHPA-A.

Moved by: Peter Dance

Seconded by: Cate Root

SPC-23-22 **Resolved That** presentation b) and Staff Report SPC2.2 regarding proposed new dense, non-aqueous phase liquid (DNAPL) prohibition policies be received for information; and

Further That the Source Protection Committee endorse the removal of policy DNAPL-2 which prohibits the future handling and storage of DNAPLs, in any quantity, where they would be a significant drinking water threat; and

Further That the Source Protection Committee endorse the addition of two new DNAPL policies: a prohibition policy for the future handling and storage of DNAPLs (at any concentration) in a quantity greater than or equal to 250 L, except when that DNAPL is stored for the purpose of retail sale; and a Risk Management Plan policy for the future handling and storage of DNAPLs (at any concentration) in a quantity less than 250 L or when stored for the purpose of retail sale; and

Further That staff be directed to incorporate the new policy text as part of the forthcoming amendment to the Source Protection Plan, under Section 36 of the Clean Water Act; and

Further That staff be directed to send a letter, on behalf of the Source Protection Committee, to Environment and Climate Change Canada recommending the prohibition of the use of DNAPLs. **Carried**

- c) A presentation by Mystaya Touw, Hydrogeology Assistant, LSRCA regarding Staff Report SPC2.3 - New Stormwater Management and Stormwater Infiltration Facilities Circumstances and Policy Implications.

Moved by: David Greenwood

Seconded by: Jessica Neto

SPC-24-22 **Resolved That** presentation c) and Staff Report SPC2.3 regarding New Stormwater Management and Stormwater Infiltration Facilities Circumstances and Policy Implications be deferred to SPC Meeting SPC-04-2022 scheduled to be held on July 5, 2022. **Carried**

9. Determination of Items Requiring Separate Discussion

No items were identified under items requiring separate discussion.

10. Adoption of Items Not Requiring Separate Discussion

No items were identified under items requiring separate discussion.

11. Consideration of Items Requiring Separate Discussion

No items were identified under items requiring separate discussion.

12. Other Business

None.

13. Closed Session

None.

14. Next Meeting and Adjournment

Moved by: Bob Duncanson

Seconded by: Rick Newlove

SPC-25-22 **Resolved That** the next meeting of the Source Protection Committee scheduled to be held on July 5, 2022 from 1-4 pm via Zoom; and

Further that the June 21, 2022 meeting of the Source Protection Committee be adjourned at 3:28 pm. **Carried**

Source Protection Committee Meeting SPC-04-2022

Staff Report Number: SPC2.1

To: South Georgian Bay Lake Simcoe Source Protection Committee
From: Mystaya Touw, Hydrogeology Assistant, LSRCA
Date: July 5, 2022
Subject: **New Stormwater Management and Stormwater Infiltration Facilities Circumstances and Policy Implications**

Recommendations:

That presentation a) and Staff Report SPC2.1 regarding New Stormwater Management and Stormwater Infiltration Facilities Circumstances and Policy Implications be received for information; and

Further That the Source Protection Committee endorse staff's recommended policies for stormwater management; and

Further That staff be directed to incorporate the new policies for stormwater management and stormwater infiltration facilities as part of the forthcoming amendment to the Source Protection Plan, under Section 36 of the Clean Water Act.

Purpose of Staff Report:

The purpose of this staff report is to provide an overview of the change to Circumstances where stormwater management could be a Significant Drinking Water Threat and to propose revisions to policies SEWG(a)-1 and SEWG(a)2, resulting from changes to the Director's Technical Rules (2021).

Background:

The Ministry of Environment, Conservation and Parks announced changes to the Director's Technical Rules on December 3, 2021. These changes include changes to the Circumstances wherein some activities can be deemed a Significant Drinking Water Threat.

Stormwater is a subcategory of wastewater. Wastewater is one of 22 activities outlined as a potential threat to drinking water by the *Clean Water Act*. Stormwater refers to runoff generated from rain and snowmelt events that flows over land and impervious surfaces, rather than soaking into the ground. Stormwater can be a significant threat to drinking water because

Item SPC2.1

runoff can contain pollutants from the surrounding land and land uses such as chemicals related to vehicles, fertilizers, etc. There is currently one Significant Drinking Water Threat associated with stormwater in our Source Protection Region, and one ECA has been amended.

Issues:

Stormwater threats are now divided into two subcategories: Stormwater Management Facilities, and Stormwater Infiltration Facilities. A **stormwater management facility** is defined as a facility for the treatment, retention, or control of stormwater (i.e. stormwater management ponds). Stormwater management facilities' threat potential is now based on the percent imperviousness of the drainage basin, rather than by the size of the drainage basin. They are considered more of a concern for IPZs, as they discharge to surface water.

Stormwater Management Facilities & Drainage Systems: Outfall from a Storm Water Management Facility or Storm Water Drainage System - Circumstances and Vulnerability Score Needed for a Significant Threat

Drainage Area	WHPA: Vulnerability Score for Rural	WHPA: Vulnerability Score for Residential	WHPA: Vulnerability Score for Commercial	IPZ/WHPA-E: Vulnerability Score for Rural	IPZ/WHPA-E: Vulnerability Score for Residential	IPZ/WHPA-E: Vulnerability Score for Commercial
<20% of Drainage Area is Impervious (Excluding Roofs)	-	-	-	-	10	10
20% to 50% of Drainage Area is Impervious (Excluding Roofs)	-	-	10	10	9-10	9-10
>50% of the Drainage Area is Impervious (Excluding Roofs)	10	10	10	9-10	9-10	8-10

A **stormwater infiltration facility** temporarily collects runoff and discharges via infiltration into the subsurface soil and eventually to groundwater. Examples include pervious paving, bioswales, and infiltration trenches. This type of development is also often known as Low Impact Development (LID). Stormwater infiltration facility threats are determined by land use

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type and the size of the impervious area of the drainage basin. They are considered more of a concern for WHPAs as they discharge to groundwater.

Storm Water Management Facilities and Drainage Systems: Storm Water Infiltration Facility - Circumstances and Vulnerability Score Needed for a Significant Threat

Drainage Area	WHPA: Vulnerability Score for Rural	WHPA: Vulnerability Score for Residential	WHPA: Vulnerability Score for Commercial	IPZ/WHPA-E: Vulnerability Score for Rural	IPZ/WHPA-E: Vulnerability Score for Residential	IPZ/WHPA-E: Vulnerability Score for Commercial
<200 m ² of Drainage Area is Impervious (Excluding Roofs)	-	-	10	-	-	-
200 to 2000 m ² of Drainage Area is Impervious (Excluding Roofs)	10	10	10	-	-	10
>2000 m ² of the Drainage Area is Impervious (Excluding Roofs)	10	10	10	10	10	8-10

Based on an assessment of data from the Lake Simcoe watershed, these changes have the possibility to add two 'existing' threats: one stormwater pond (Cross St, Barrie), and one set of LID features (Aurora Community Centre). However, our storm water database is not a complete representation of every facility, so it is possible there are other threats. A similar number of threats may be possible in the Nottawasaga Valley and Severn Sound watersheds, where data on stormwater facilities is less available. 'Future' threats are also possible, particularly as LID becomes more prevalent.

Concurrent with this change, there is also a recently approved regulatory amendment to the exemptions for Environment Compliance Approvals as they relate to the Ontario *Water Resources Act* including the removal of the requirement for Environmental Compliance Approvals for stormwater infiltration facilities at residential properties.

Therefore, staff recommend the following policy revisions:

- SEWG(a)-1:

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- Where the existing and future establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of stormwater is or would be a significant drinking water threat, and the activity requires an approval under the Ontario Water Resources Act, the MOE shall ensure that the Environmental Compliance Approval that governs the establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of stormwater include appropriate terms and conditions to ensure that the activity ceases to be or does not become a significant drinking water threat. Such conditions may include:
 - 1) permitting the expansion of an existing facility where the expansion does not pose a significant drinking water threat.
 - 2) permitting retrofits to existing facilities where the retrofit will discharge the stormwater outside of the significant drinking water threat area.
 - **[ADD]** 3) An operations and maintenance plan, and monitoring plan, which ensure that the facility does not become a significant drinking water threat through insufficient maintenance.
- SEWG(a)-2
 - ~~**[REMOVE]** The MOE is encouraged to consider conducting research to identify risks from infiltration ponds to aquifers used as a drinking water source, and to review contemporary technology for the design and operation of stormwater management facilities that can protect municipal drinking water systems. The research outcome should update stormwater management planning and design guidelines, the Tables of Circumstances, and be applied within vulnerable areas where the activity is a significant drinking water threat.~~
 - **[ADD]** Where the Ontario Water Resources Act does not require an approval, existing and future stormwater infiltration facilities, where the activity would be a significant threat to drinking water, shall require a Risk Management Plan that includes appropriate terms and conditions to ensure that the activity ceases to be or does not become a significant drinking water threat.

Summary:

The threat circumstances for stormwater activities have been updated through amendments to the Director's Technical Rules [December 3, 2021]. There are estimated to be 2 new stormwater management or stormwater infiltration system threats in the Lake Simcoe watershed associated with the changed circumstances, and similar numbers are possible in the other two watersheds. Staff recommend the above policy changes be adopted and approved to reflect the updated circumstances.

Item SPC2.1

Recommendations:

It is therefore Recommended That presentation a) and Staff Report SPC2.1 regarding New Stormwater Management and Stormwater Infiltration Facilities Circumstances and Policy Implications be received for information; and

Further That the Source Protection Committee endorse staff's recommended policies for stormwater management; and

Further That staff be directed to incorporate the new policies for stormwater management and stormwater infiltration facilities as part of the forthcoming amendment to the Source Protection Plan, under Section 36 of the Clean Water Act.

Prepared by:

Mystaya Touw, Hydrogeology Assistant

Recommended by:

Bill Thompson, Manager, Watershed Plans and Strategies

Source Protection Committee Meeting SPC-04-2022

Staff Report Number: SPC2.2

To: South Georgian Bay Lake Simcoe Source Protection Committee

From: Bill Thompson, Project Manager, LSRCA

Date: July 5, 2022

Subject: Change to Circumstances – the Application of Road Salt

Recommendations:

That presentation b) and Staff Report SPC2.2 regarding the change to circumstances for the application of road salt be received for information; and

Further That staff be directed to update the Assessment Report with new maps of impervious cover within vulnerable areas (rather than within 1 km² area centred on municipal wells); and

Further That a new policy be added to the Source Protection Plan requiring municipalities to maintain a salt management plan, which identifies any municipal drinking water system where the application of road salt could be a Significant Drinking Water Threat as a “salt vulnerable area.” These plans will identify and implement practices to minimize the loss of salt to the environment and the impact of salt on drinking water, in areas where it would be a significant drinking water threat; and

Further That staff be directed to incorporate the new policy text and updated maps as part of the forthcoming amendment to the Source Protection Plan, under Section 36 of the Clean Water Act.

Purpose of Staff Report:

The purpose of this Staff Report is to provide an overview of the changes to Circumstances wherein the application of road salt could be a Significant Drinking Water Threat resulting from changes to the Director’s Technical Rules (2021), and to propose a policy change to address expected new Threats.

Item SPC2.2

Background:

The Ministry of Environment, Conservation and Parks announced changes to the Director's Technical Rules on December 3, 2021. These changes include changes to the Circumstances wherein the application of road salt can be deemed a Significant Drinking Water Threat.

The circumstances in place at the time the South Georgian Bay – Lake Simcoe Source Protection Plan was written were based on both vulnerability score, and an assessment of the extent of impervious cover (i.e., roads, parking lots, and sidewalks) in a 1 km² area around municipal wells and intake protection zones. Circumstances were such that that the application of road salt was a Significant Drinking Water Threat in a wellhead protection area with a vulnerability score of 10 and more than 80% impervious cover, or within an intake protection zone with a vulnerability score of 10 and more than 8% impervious.

There were no wellhead protection areas or intake protection zones where these circumstances were met in our Source Protection Region, and thus no Threats associated with the application of salt identified in our Assessment Report.

There was however an Issue Contributing Area associated with sodium and chloride identified for municipal wells in the City of Barrie. The Source Protection Program identifies Issues when there are trends in drinking water quality that might lead to a source of drinking water no longer meeting Drinking Water Quality Standards. In such cases an Issue Contributing Area is delineated, and Source Protection Committees are empowered to create policies to manage activities within that area which might be contributing to this Issue. Under the Source Protection Program, any threats that might be contributing to the Issue are “promoted” to being Significant. As such, there are Significant Drinking Water Threats associated with the application of road salt in the City of Barrie, but not elsewhere in our Source Protection Region.

Other Source Protection Regions had similar situations, with municipalities experiencing increasing trends of sodium or chloride in their wells, but no salt application threats identified through the Circumstances. As such, it became clear that the Circumstances as originally written were insufficient. MECP reviewed wells where Issues had been identified, and found that they tended to have at least 30% impervious areas within their wellhead protection areas. As such, the circumstances have changed, to reduce the impervious thresholds, as follows:

Circumstances and vulnerability score needed for a significant threat		
Circumstance	WHPA	IPZ / WHPA-E
	Vulnerability score	
Application area is 6-8% impervious surface		10
Application area is 8-30%		9-10
Application area is >30%	10	9-10

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Further, MECP has now made the use of the 1 km² grid for calculating impervious cover optional.

Issues:

With the reduction of the impervious cover needed to trigger a significant drinking water threat dropping from 80% to 30%, it is expected that additional significant drinking water threats associated with salt application will be found outside the City of Barrie. Similarly, with the reduction in the threshold, it is expected that the way in which impervious cover is calculated may influence the number (and location) of such threats.

Source Protection Authority staff have conducted an initial GIS analysis of impervious cover within vulnerable areas within our Source Protection Region. When calculated within the 1 km² grid (as is the case currently in our Assessment Report), four municipal drinking water systems are believed to meet the circumstances, associated with 7 parking lots:

- York Region PW15 in Newmarket
- Innisfil Heights Drinking Water System in Innisfil
- Alcona Drinking Water System in Innisfil
- Orillia Water Treatment Plant

However, calculating threats over a 1 km² square grid is unique to this threat type. In all other situations, the threats to drinking water are calculated based on the vulnerable areas themselves. For example, threats associated with agricultural activities are determined (in part) based on an assessment of the percent of “managed lands” which occur within vulnerable areas; with these activity types, a 1 km² grid is not used. Similarly, where impervious cover is used to determine the significance of stormwater threats, it is not based on a 1 km² grid.

When percent impervious is calculated based on WHPA boundaries, ten municipal well fields or intakes are believed to meet the circumstances, associated with 22 parking lots, as follows:

- York Region PW1, 2, 3 and 4 in Aurora
- York Region PW 6 in Aurora
- York Region PW1 and 2 in Newmarket
- York Region PW15 in Newmarket
- Innisfil Heights Drinking Water System in Innisfil
- Alliston Well 5 in New Tecumseth
- Alliston Well 8 in New Tecumseth
- Wells 1-3 in the Jenetta Street Well Field in Wasaga Beach

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- Alcona Drinking Water System in Innisfil
- Orillia Water Treatment Plant

Policies currently in the Source Protection Plan would require a risk management plan be developed to manage each of these newly identified threats (policy SALT (App)-1). Staff are of the opinion that this policy remains appropriate in the light of these new threats; no unique situations have been identified which would require a different approach, and we are of the opinion that Risk Management Plans would work as well in these municipalities as they currently are in Barrie.

Staff are also of the opinion that a new policy should be added, directed at municipal roads managers. The application of salt on roads is similarly a threat to municipal drinking water, however only for that length of road which passes through the vulnerable area (typically less than 200 m long). Providing a different level of service for such a short stretch of road can be very challenging for roads managers. In the Barrie ICA, policy SALT(ICA)-3 required the City to optimize its use and management of salt throughout the ICA; staff have found that to be an effective approach, as it allowed them to review their salt usage holistically, rather than on a site-specific basis. As such, the following new policy is proposed for inclusion in the Source Protection Plan:

SALT (App)-3: To manage the existing and future application of road salt, municipalities shall maintain a salt management plan, which identifies any municipal drinking water system where the application of road salt could be a Significant Drinking Water Threat as a “salt vulnerable area” These plans will identify and implement practices to minimize the loss of salt to the environment and the impact of salt on drinking water, in areas where it would be a Significant Drinking Water Threat.

Summary:

The newly updated Circumstances for the application of road salt have changed substantially, through a reduction in the extent of impervious cover needed to trigger a Significant Drinking Water Threat. Preliminary analysis suggests that this will introduce new existing threats in municipalities where such threats did not exist under the previous Circumstances.

Despite this, policies in the Source Protection Plan remain appropriate for protecting sources of municipal drinking water, however it is recommended that a specific policy aimed at municipal roads authorities be added to the Source Protection Plan.

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Recommendations:

It is therefore Recommended That presentation b) and Staff Report SPC2.2 regarding the change to circumstances for the application of road salt be received for information; and

Further That staff be directed to update the Assessment Report with new maps of impervious cover within vulnerable areas (rather than within 1 km² area centred on municipal wells); and

Further That a new policy be added to the Source Protection Plan requiring municipalities to maintain a salt management plan, which identifies any municipal drinking water system where the application of road salt could be a Significant Drinking Water Threat as a “salt vulnerable area.” These plans will identify and implement practices to minimize the loss of salt to the environment and the impact of salt on drinking water, in areas where it would be a significant drinking water threat; and

Further That staff be directed to incorporate the new policy text and updated maps as part of the forthcoming amendment to the Source Protection Plan, under Section 36 of the Clean Water Act.

Prepared by:

Bill Thompson, Project Manager

Source Protection Committee Meeting SPC-04-2022

Staff Report Number: SPC2.3

To: South Georgian Bay Lake Simcoe Source Protection Committee

From: Bill Thompson, Project Manager, LSRC

Date: July 5, 2022

Subject: Change to Circumstances – the Handling and Storage of Road Salt

Recommendations:

That presentation c) and Staff Report SPC2.3 regarding the change to circumstances for the handling and storage of road salt be received for information; and

Further That Policies which apply to the existing handling and storage of salt be amended such that Risk Management Plans are required in cases where Risk Management Plans are required for the application of salt, and that Education and Outreach apply in all other cases; and

Further That Policies which apply to the future handling and storage of salt be amended to prohibit only volumes larger than 500 tonnes, to maintain the effect of the policies as originally written; and

Further That staff be directed to incorporate the new policy text as part of the forthcoming amendment to the Source Protection Plan, under Section 36 of the Clean Water Act.

Purpose of Staff Report:

The purpose of this Staff Report is to provide an overview of the changes to Circumstances wherein the handling and storage of road salt could be a Significant Drinking Water Threat resulting from changes to the Director's Technical Rules (2021), and to propose a policy change to address expected new Threats.

Background:

The Ministry of Environment, Conservation and Parks announced changes to the Director's Technical Rules on December 3, 2021. These changes include changes to the Circumstances wherein the handling and storage of road salt can be deemed a Significant Drinking Water Threat.

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The Circumstances in place at the time the South Georgian Bay – Lake Simcoe Source Protection Plan was written was based on the volume of salt stored, and the vulnerability score of the area where it is stored, as shown in Table 1 below.

Table 1. Circumstances in which the handling and storage of salt is a Significant Drinking Water Threat (at time of Plan development)

Circumstances and Vulnerability Score Needed for a Significant Threat		
Quantity Stored	WHPA	IPZ & WHPA-E
	Vulnerability Score	
500 – 5,000 tonnes		10
> 5,000 tonnes	10	9 – 10

Given increasing concerns with chloride in groundwater and municipal aquifers throughout Ontario, MECP revisited the Circumstances. The Circumstances in place now are similarly based on the volume of salt stored and vulnerability score of where it is stored, however MECP has introduced a factor related to how the salt is stored, and the volumes have been reduced substantially, as shown in Table 2 below.

Table 2. Circumstances in which the handling and storage of salt is a Significant Drinking Water Threat (as of December 2021)

Circumstances and vulnerability score needed for a significant threat		
Quantity stored	WHPA	1PZ / WHPA-E
	Vulnerability Score	
10-20 kg, if exposed to precipitation		10
> 20 kg, if exposed to precipitation	10	9 – 10
> 100 kg, if stored in an outdoor enclosure	10	10

Issues:

These change in Circumstances shift the focus of salt storage and application from what had been essentially a municipal-scale storage facility, to now being essentially all forms of salt stored, except that stored in a roofed building with an impermeable floor. In fact, because all threats are promoted to being Significant in Issue Contributing Areas, the storage of any volume of salt (indoors or outdoors) is a Significant Drinking Water Threat in the Barrie ICA.

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Policies currently in the Source Protection Plan are shown in Table 3. SALT (H&S)-1, which applies to Existing threats, does not currently provide an exemption for residential uses. If such an exemption were included, there would still be an estimated 1342 properties where the storage of salt could be a Significant Drinking Water Threat. While not all properties would store salt (or store it in a way that would be a Significant Threat), the workload to do site visits for threats verification would be much larger than that required for all other Risk Management Plans in our Region combined.

Table 3. Policies which address the Handling and Storage of Salt

Policy Number	Tool	Legal Effect	Implementer	Existing /Future	Policy Text	Policy Monitoring Requirement
SALT(H&S)-1	RMP	MC	RMO	E	The existing handling and storage of road salt is designated for the purposes of Section 58 of the Clean Water Act, and therefore requires a risk management plan where the activity is a significant drinking water threat. The risk management plan, at a minimum, will include terms and conditions that mirror a salt management plan, and comply with contemporary standards to ensure the handling and storage of road salt ceases to be a significant drinking water threat.	MON-6
SALE(H&S)-2	Pro	MC	MUN	F	Future handling and storage of road salt is designated for the purposes of Section 57 of the Clean Water Act, and is therefore prohibited where the activity would be a significant drinking water threat.	MON-6

Current policy SALT (H&S)-2 Prohibits the Future handling and storage of salt, where it would be a Significant Drinking Water Threat. Staff are of the opinion that this Prohibition has become untenable at such low volumes; it does not seem reasonable to prohibit businesses from maintaining a small bin of salt for spot application on their sidewalks.

Further, it should be noted that unlike the Circumstances related to the application of road salt (as described in staff report number 2.2), the extent of impervious cover does not play a role in determining if the handling and storage of salt is a significant drinking water threat. In our Source Protection Region, most vulnerable areas are below 30% impervious cover. This creates a situation in some of our Wellhead Protection Areas wherein the storage of salt could be a significant drinking water threat in some properties, but the use of that salt on a parking lot or sidewalk on that property would not be. As such, with the policies written as they currently are, Risk Management Officials would be tasked with writing an RMP for the storage of salt, but not its use. Most of those engaged in negotiating a Risk Management Plan would likely find such an approach illogical.

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Staff recommend that the Source Protection Committee endorse a policy approach which would see Risk Management Officials negotiating Risk Management Plans for the handling and storage of salt when they are required to negotiate a plan for its application, and a policy approach based on Education and Outreach in all other situations, as follows:

- Proposed revision to SALT (H&S)-1 [revisions in **bold**]
 - **With the exception of personal domestic use**, the existing **and future** handling and storage of road salt **in Wellhead Protection Areas with greater than 30% impervious surface, or Intake Protection Zones with greater than 8% impervious surface**, is designated for the purposes of Section 58 of the Clean Water Act, and therefore requires a risk management plan where the activity is a significant drinking water threat. The risk management plan, at a minimum, will include terms and conditions that mirror a salt management plan, and comply with contemporary standards to ensure the handling and storage of road salt ceases to be a significant drinking water threat
- Proposed revision to SALT (H&S)-2 [revisions in **bold**]:
 - Future handling and storage of road salt **in quantities equal to or greater than 500 tonnes** is designated for the purposes of Section 57 of the Clean Water Act, and is therefore prohibited where the activity would be a significant drinking water threat
- EDU-3 [no revisions proposed]:
 - The local SPA, in collaboration with municipalities, shall undertake an education and outreach program, and use materials developed by the MOE where possible to target municipalities, property managers, and the salt application industry, applying, handling and storing road salt and snow within vulnerable areas where the activity would be a significant drinking water threat. The program will promote pollution prevention by explaining the importance of proper salt application, storage and run-off management of salt and snow to safeguard water supplies. The program will be carried out in consultation with AMO and OGRA

The proposed revision to SALT (H&S)-2 simply introduces the volume threshold that was in place in the Circumstances at the time the policy was written. This would maintain the effect of the original policy, yet provide the ability for businesses to store small volumes of salt as 'future' activities. Similar changes would be required in policy LUP-1, which requires Planning Approval Authorities to implement these prohibitions through their planning documents.

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Summary:

The newly amended Circumstances for the handling and storage of salt have changed considerably, and are estimated to apply to over 5000 threat properties. In the vast majority of these properties Risk Management Plans will not be required for the application of salt. Staff are of the opinion that developing Risk Management Plans for such properties is not an effective use of time of Risk Management Officials, and that the current policy should be amended to ensure that Risk Management Plans for salt storage are only required in those situations where they are also required for salt application.

Recommendations:

It is therefore Recommended That presentation c) and Staff Report SPC2.3 regarding the change to circumstances for the handling and storage of road salt be received for information; and

Further That Policies which apply to the existing handling and storage of salt be amended such that Risk Management Plans are required in cases where Risk Management Plans are required for the application of salt, and that Education and Outreach apply in all other cases; and

Further That Policies which apply to the future handling and storage of salt be amended to prohibit only volumes larger than 500 tonnes, to maintain the effect of the policies as originally written; and

Further That staff be directed to incorporate the new policy text as part of the forthcoming amendment to the Source Protection Plan, under Section 36 of the Clean Water Act.

Prepared by:

Bill Thompson, Project Manager

Source Protection Committee Meeting SPC-04-2022

Staff Report Number: SPC2.4

To: South Georgian Bay Lake Simcoe Source Protection Committee

From: Bill Thompson, Project Manager, LSRC

Date: July 5, 2022

Subject: **Change to Circumstances – the Storage of Snow**

Recommendations:

That presentation d) and Staff Report SPC2.4 regarding the change to circumstances for the storage of snow be received for information; and

Further That Policies which apply to the storage of snow be amended such that Risk Management Plans are required in cases where Risk Management Plans are required for the application of salt, and that Education and Outreach apply in all other cases; and

Further That Policies which apply to the future handling and storage of snow be amended to prohibit only areas larger than 1 ha, to maintain the effect of the policies as originally written; and

Further That staff be directed to incorporate the new policy text as part of the forthcoming amendment to the Source Protection Plan, under Section 36 of the Clean Water Act.

Purpose of Staff Report:

The purpose of this Staff Report is to provide an overview of the changes to Circumstances wherein the storage of snow could be a Significant Drinking Water Threat resulting from changes to the Director's Technical Rules (2021), and to propose a policy change to address expected new Threats.

Background:

The Ministry of Environment, Conservation and Parks announced changes to the Director's Technical Rules on December 3, 2021. These changes include changes to the Circumstances wherein the storage of snow can be deemed a Significant Drinking Water Threat.

The Circumstances in place at the time the South Georgian Bay – Lake Simcoe Source Protection Plan was written was based on the size of the area where the snow is stored, the vulnerability

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score of the area where it is stored, and whether storage is at or below grade, as shown in Table 1 below.

Table 1. Circumstances in which the storage of snow is a Significant Drinking Water Threat (at time of Plan development)

Circumstances and Vulnerability Score Needed for a Significant Threat				
Storage Area	WHPA		IPZ & WHPA-E	
	At or Above Grade	Below Grade	At or Above Grade	Below Grade
	Vulnerability Score			
0.01 – 0.5 hectares		10	10	
.5 - 1 hectares		10	10	
1 - 5 hectares	10	10	9 - 10	
> 5 hectares	10	10	9 - 10	

Given increasing concerns with chloride in groundwater and municipal aquifers throughout Ontario, MECP revisited the Circumstances. The Circumstances in place now are similarly based on the size of the area where the snow is stored, and the vulnerability score of the area where it is stored, however MECP have now introduced separate circumstances for situations where the discharge occurs from snow storage on-site and from outfalls of stormwater drainage systems, and have reduced the areas substantially, as shown in Table 2 below. They have also now also restricted these Circumstances to only apply in areas where the predominant land use is commercial or industrial. Note as well, that these Circumstances make the storage of snow (on commercial or industrial sites) a Significant Drinking Water Threat throughout the Barrie Issue Contributing Area, regardless of vulnerability score.

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Table 2. Circumstances in which the storage of snow is a Significant Drinking Water Threat (as of December 2021)

Circumstances and Vulnerability Score Needed for a Significant Threat				
Storage Area	WHPA		IPZ & WHPA-E	
	Storage On-site	Snow Disposal Outfall	Storage On-site	Snow Disposal Outfall
	Vulnerability Score			
< 200 m ²	10		10	10
200 – 2000 m ²	10	10	9 - 10	9 - 10
> 2000 m ²	10	10	8 – 10	8 – 10

Issues:

These change in Circumstances shift the focus on snow storage from what had been essentially municipal-scale storage, to now being any storage of snow in industrial and commercial sites. In correspondence on May 26 2022, MECP staff have clarified what that storage is intended to be that which occurs in a designated area (e.g., an area at a mall where snow is stored) and not intended to capture snowbanks nor temporary snowbanks. In that same correspondence they confirmed that the Circumstances are intended to apply to commercial and industrial sites, but not institutional nor residential, as they believed that commercial and industrial sites tend to have greater impervious cover and tend to have chemicals with higher toxicity associated with

Policies currently in the Source Protection Plan are shown in Table 3. It is estimated that there are over 900 commercial and industrial properties in vulnerable areas where policies would apply. Under policy SNOW-1, these properties would require a Risk Management Plan, if they stored snow in designated areas.

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Table 3. Policies which apply to the storage of snow

Policy Number	Tool	Legal Effect	Implementer	Existing /Future	Policy Text	Policy Monitoring Requirement
SNOW-1	RMP	MC	RMO	E	The existing storage of snow is designated for the purposes of Section 58 of the Clean Water Act, and therefore requires a risk management plan, where the activity is a significant drinking water threat. The risk management plan, at a minimum, will be based on contemporary standards and shall ensure that the storage of snow and associated run-off ceases to be a significant drinking water threat.	MON-6
SNOW-2	Pro	MC	MUN	F	Future storage of snow is designated for purposes of Section 57 of the Clean Water Act, and is therefor prohibited where the activity would be a significant drinking water threat. Except in emergency situations as determined by the risk management official and the public works department, emergency snow storage will be permitted only outside of WHPA-A.	MON-6

Similar to the Circumstances related to salt handling and storage (as described in staff report number 2.3 the extent of impervious cover does not play a role in determining if the storage of snow is a significant drinking water threat. As such, many of the properties above would require a Risk Management Plan for the storage of snow (under current SPP policies), but would not require a Risk Management Plan for the application of salt to the parking lot, despite the fact that snow storage is deemed a threat in part due to the risk of sodium and chloride being discharged as the snow melts. Most of those engaged in negotiating a Risk Management Plan would likely find such an approach illogical.

As such, staff recommend that the Source Protection Committee endorse a policy approach which would see Risk Management Officials negotiating Risk Management Plans for the storage of snow when they are required to negotiate a plan for salt application, and a policy approach based on Education and Outreach in all other situations.

Policy SNOW-2 currently Prohibits the Future storage of snow, where it would be a significant drinking water threat. Staff are of the opinion that this policy is no longer tenable with the lower snow storage thresholds now in place in the Director Technical Rules. As written, this would prohibit future commercial and industrial sites from storing any volume of snow in designated areas. In many cases, this would require transporting snow off site, which would substantially increase the cost of winter maintenance for these businesses, which staff feel is unnecessary for small volumes of snow being stored.

As such, proposed policy revisions are as follows:

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- Proposed revision to SNOW-1 [revisions in **bold**]
 - The existing **and future** storage of snow in **Wellhead Protection Areas with greater than 30% impervious surface, or Intake Protection Zones with greater than 8% impervious surface** is designated for the purposes of Section 58 of the Clean Water Act, and therefore requires a risk management plan, where the activity is a significant drinking water threat. The risk management plan, at a minimum, will be based on contemporary standards and shall ensure that the storage of snow and associated run-off ceases to be a significant drinking water threat
- Proposed revision to SNOW-2 [revisions in **bold**]
 - Future storage of snow **in areas one hectare or larger** is designated for purposes of Section 57 of the Clean Water Act, and is therefore prohibited where the activity would be a significant drinking water threat. Except in emergency situations as determined by the risk management official and the public works department, emergency snow storage will be permitted only outside of WHPA-A
- EDU-3 [no revisions proposed]:
 - The local SPA, in collaboration with municipalities, shall undertake an education and outreach program, and use materials developed by the MOE where possible to target municipalities, property managers, and the salt application industry, applying, handling and storing road salt and snow within vulnerable areas where the activity would be a significant drinking water threat. The program will promote pollution prevention by explaining the importance of proper salt application, storage and run-off management of salt and snow to safeguard water supplies. The program will be carried out in consultation with AMO and OGRA

The proposed revision to SNOW-2 simply introduces the same area threshold that was in place in the Circumstances at the time the policy was written. This would maintain the effect of the original policy, yet provide the ability for businesses to store small amounts of snow onsite as ‘future’ activities. Similar changes would be required in policy LUP-1, which requires Planning Approval Authorities to implement these prohibitions through their planning documents.

Summary:

The newly amended Circumstances for the storage of snow have changed considerably, and are estimated to apply to over 900 threat properties. In the vast majority of these properties Risk Management Plans will not be required for the application of salt. Staff are of the opinion that developing Risk Management Plans for such properties is not an effective use of time of Risk Management Officials, and that the current policy should be amended to ensure that Risk

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Management Plans for snow storage are required in those situations where they are also required for salt application, thus allowing RMOs to deal with parking lots in vulnerable areas in a holistic way.

Recommendations:

It is therefore Recommended That presentation d) and Staff Report SPC2.4 regarding the change to circumstances for the storage of snow be received for information; and

Further That Policies which apply to the storage of snow be amended such that Risk Management Plans are required in cases where Risk Management Plans are required for the application of salt, and that Education and Outreach apply in all other cases; and

Further That Policies which apply to the future handling and storage of snow be amended to prohibit only areas larger than 1 ha, to maintain the effect of the policies as originally written; and

Further That staff be directed to incorporate the new policy text as part of the forthcoming amendment to the Source Protection Plan, under Section 36 of the Clean Water Act.

Prepared by:

Bill Thompson, Project Manager