

Information Sharing for Source Water Protection in Ontario

Summary of Findings

Prepared for Conservation Ontario



Water
Policy and
Governance
Group

June 20, 2013

Preface

This document presents the results of the survey administered for the study *Information Sharing for Source Water Protection in Ontario*. The study was completed through a partnership between the Water Policy and Governance Group (WPGG) at the University of Waterloo and Conservation Ontario.

Lead Researchers and Authors

Dan Murray, PhD
Research Associate,
Water Policy and Governance Group
Waterloo, ON

Rob de Loë, PhD
University Research Chair in Water Policy and Governance
University of Waterloo
Waterloo, ON

We would like to thank all of the study participants who contributed their time and energy in support of this study. We would also like to thank Sandra Hogan and Charley Worte, our research partners at Conservation Ontario. This report was prepared by the WPGG and responsibility for any omissions or errors remains with the authors.

This report should be cited as

Murray, D. and R.C. de Loë. 2013. *Information Sharing for Source Water Protection in Ontario: Summary of Findings*. Prepared for Conservation Ontario. Waterloo, Ontario: Water Policy and Governance Group.

This study was made possible through the financial support of the Social Sciences and Humanities Research Council, and the Canadian Water Network.

Water Policy and Governance Group: About Us

The Water Policy and Governance Group (WPGG) is a multi-university research collaborative. Our focus is water governance and water policy, primarily – but not exclusively – in Canada. Major themes in our research program include water security, source-water protection, water allocation, and adaptation to climate change. We conduct practical, policy-relevant research that contributes solutions to these problems.

Our success is grounded in our network of researchers and partners across Canada and around the world.

Graduate training is a central part of our mission. We accomplish our goals in large part because of the excellence of our graduate students, post-doctoral fellows, and research associates.

For more information about the WPGG, see www.wpgg.ca

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1. Introduction

As a response to the recommendations of the Walkerton Inquiry¹ the Province of Ontario passed the *Clean Water Act (2006)*. The Act establishes the framework for a watershed-based, participatory approach to protecting drinking water at its source. Under this approach the Act has introduced new stakeholders, organisations and decision-making processes into water-related planning and policy-making in Ontario. At the same time, it has created new challenges for planners and policy makers at the local level.

Building on the watershed-scale approach to water management that has been in existence in southern Ontario for over five decades, Source Protection Regions have been established using the existing boundaries of conservation authorities, as defined under the *Conservation Authorities Act (1946)*. Under the *Clean Water Act (2006)*, conservation authorities (CAs) have been designated as Source Protection Authorities. For administrative efficiency, some of these 36 Source Protection Authorities are grouped together to form larger Source Protection Regions (with one designated as lead authority). In total, there are 16 Source Protection Regions. In cases where a single Source Protection Authority is based on the boundaries of a single CA, the region in which it operates is referred to as a Source Protection Area. In total, there are three Source Protection Areas, for a total of 19 Regions and Areas.

Within each Source Protection Region and Area, the Act provides for the establishment of a Source Protection Committee, and defines the roles and responsibilities of these committees. As representatives of the local community, the Source Protection Committees work with Source Protection Authorities to assess existing and potential threats to drinking water and to establish and implement actions to address these threats. Source Protection Committees are made up of municipal, economic (including agriculture), public interest and First Nations members.

A critical challenge faced in every Source Protection Region and Area is the need to develop policies for addressing identified threats to source water. Two considerations resulted in a unique policy development problem. First, the policy development process began at roughly the same time in each Region/Area. Therefore, it was not possible for some committees to model their policies on long-established ones that existed in other areas. Second, consistency across Source Protection Regions and Areas was a concern. These challenges pointed to an important opportunity. Recognizing the potential benefits that would result from information sharing during the policy development process, all Source Protection Regions and Areas endorsed the suggestion of Conservation Ontario that a network be created for sharing ideas, discussing issues, and collaborating on policy development.

¹ See O'Connor, D. R. 2002. *Report of the Walkerton Inquiry: Part Two, A Strategy for Safe Drinking Water*. Toronto, Ontario: Ontario Ministry of the Attorney General, Queen's Printer for Ontario.

Committee Chairs, Project Managers and some CA planning staff in all 19 Source Protection Regions and Areas were given access to multiple information sharing tools that included the following:

- Regular teleconference calls to discuss opportunities for collaboration and common issues/questions;
- Access to a *Catalogue of Existing Work*, a password protected website, that allowed users to post Source Protection Plan documents, background research, work plan/timelines, processes for policy development, and criteria for policy evaluation;
- The *Policy Web Forum*, a password protected website that allowed users to enter their source protection policy concepts to facilitate sharing of policies and collaboration among users. Users could enter the text of policies (including rationales for policy approaches selected), search policies, and comment on policies; and,
- A *Policy Database*, a password protected website that allowed users to post completed policies for review by peers.

This represented an innovative approach to information sharing that took advantage of the distinct circumstances facing the people and organizations involved in protecting Ontario's sources of drinking water. The strategic, collaborative approach adopted offered considerable potential to achieve efficiencies in policy development for source protection planning.

In partnership with Conservation Ontario, the Water Policy and Governance Group completed an evaluation of this approach to policy development and information sharing. The evaluation had two major objectives:

- To determine how well this approach to information sharing has worked to date; and,
- To determine if this approach is a tool that can be applied in other contexts where local organizations are faced with the challenge of developing consistent policies to respond to a common problem.

The evaluation involved an online survey of individuals who played a key role in the source protection policy development process.

1.1. Study Approach

An invitation to participate in the survey was sent to at least two individuals from each Source Protection Region and Area. Invited participants were identified by Conservation Ontario using three criteria: (1) they played a key role in the Source Protection Planning process, (2) they had access to the online tools through having been assigned a username and password, and (3) they were familiar with the information sharing tools developed and administered by Conservation Ontario (i.e., they had used them). Twenty-two surveys were completed by participants representing 16 of the 19 Source Protection Regions and Areas (see Table 1). In some cases, multiple individuals from the same organisation collaborated to complete a single survey.

In the survey itself, participants were asked to draw upon their experiences in responding to a range of questions designed to investigate the source protection policy development process. Questions explored the extent to which participants had adopted and adapted policies made available through the online tools; the benefits and limitations of sharing policies in this fashion; key influences on the policy development process; and the extent to which they had used the tools.

Responses were collated and analyzed using QSR Nvivo 8 (a tool that facilitates sophisticated coding and analysis of qualitative data). No predetermined categories were applied to the survey results. Instead, themes and findings emerge from the responses through a process that involved reviewing each response, grouping similar responses, and developing conclusions based on the outcomes.

Table 1: Participants by Source Protection Region/Area

Source Protection Region/Area	Number of Completed Surveys
Ausable Bayfield Maitland Valley	1
CTC	1
Cataraqui	1
Essex	2
Halton-Hamilton	1
Lake Erie	1
Mattagami	1
Mississippi-Rideau	3
Niagara Peninsula	1
North Bay-Mattawa	1
Quinte	1
Raison Region South Nation	2
South Georgian Bay Lake Simcoe	3
Sudbury	1
Thames, Sydenham and Region	1
Trent Conservation Coalition	1
<i>Total</i>	22

2. Results

2.1. Adapting and Adopting Source Protection Policies

One of the objectives of the evaluation was to determine the extent to which policies were shared between Source Protection Regions and Areas. Survey results revealed that a majority of participants were able to transfer policies from other Source Protection Regions and Areas. When asked if they were able to adapt or adopt policies written by other Source Protection Regions and Areas, 17 participants stated that they were able to transfer policies. Five participants indicated that they were unable to adapt or adopt policies for their Source Protection Region or Area.

To determine why these five participants were unable to adapt or adopt policies from other Source Protection Regions and Areas, they were asked an open-ended follow-up question. Two noted that they were unable to adapt or adopt policies from other regions because of the unique nature of their area and three indicated that the policy development process had started early, meaning that there was little opportunity to compare with or to learn from others.

The seventeen participants who indicated that they were able to adapt or adopt policies were asked to note approximately how many policies written by other Source Protection Regions and Areas were adapted or adopted a) with minor or no modifications, or b) with significant modifications. Responses varied widely. Thus, it was difficult to ascertain any clear trend in the results, particularly given that six participants were unable to identify the number of policies they adapted or adopted (Table 2). The fact that no participants indicated that they adapted or adopted more than ten policies, and only two participants adapted or adopted more than seven policies, indicate that the transfer of policies from one Region/Area to another was limited in number.

Similar results were achieved when participants were asked to identify how many policies written by other Source Protection Regions and Areas were adapted with significant modifications. Seven participants selected “Can’t Remember/Don’t Know” and the remaining participants indicated that they were able to adapt a limited number of policies after significant modification from other Source Protection Regions and Areas (Table 3).

These results indicate that while the transfer of policies among Source Protection Regions and Areas was widespread (i.e., many Source Protection Regions and Areas adapted and adopted policies from others) each Region/Area were only able to adapt and adopt a limited number of policies. The reasons for this are examined below in the section titled ‘*Factors Affecting Policy Adaption and Adoption*’. Unfortunately, many participants were unable to approximate the number of policies they adapted and adopted, making it difficult to make a stronger case to support this identified trend. Resolution of this question would require careful analysis of the final policies themselves.

While the results suggest that a limited number of policies were able to be adapted and adopted from other Source Protection Regions and Areas the survey did investigate whether other benefits may have resulted from the information sharing approach. These are discussed in the next section.

Table 2: Policies transferred with minor or no modifications

Approximately how many policies written by other Source Protection Regions/Areas were adopted for your Region/Area with minor or no modifications?	Number of Participants selecting this answer
1-3	5
4-6	4
7-10	2
>10	
Can't Remember / Don't Know	6
Total	17

Table 3: Policies transferred with significant modifications

Approximately how many policies written by other Source Protection Regions/Areas were adopted for your Region/Area with significant modifications?	Number of Participants selecting this answer
1-3	5
4-6	4
7-10	
>10	
Can't Remember / Don't Know	7
Total	16

Benefits of Policy Sharing

The seventeen participants who indicated that they were able to adapt or adopt policies were asked an open ended follow-up question to identify what benefits they experienced from drawing on policies developed by other Source Protection Regions and Areas. Several clear themes emerged from the analysis of these responses.

Within these responses increased consistency was identified six times. Increased efficiency was identified nine times. The exposure to new ideas was identified six times and the ability to share expertise and knowledge with others was identified twice:

Many members on the SPC were concerned with having consistent source protection policies across the Province, so drawing on policies developed in other Source Protection Regions enabled staff to confirm that every effort was being made to ensure consistency with other SPR's, and demonstrated the commitment to use resources as effectively as possible while preparing the Source Protection plans. (Participant 15)

It saved us time as we could build on the work already done by other regions. It led to better policies because we could take the best parts of other region's policies and incorporate them into ours. It led to more policies because sometimes we saw policies developed by other regions that we had not thought of. (Participant 22)

These results strongly support the objectives of the information sharing approach, which was to encourage consistency and efficiency in the source protection policy development process across all 19 Source Protection Regions and Areas. The results also suggest that reviewing the policies of other Source Protection Regions and Areas led to the development of new ideas. This finding indicates a wider benefit to information sharing beyond the transfer of specific policies.

Factors Affecting Policy Adaptation and Adoption

In order to examine what characteristics facilitate and hinder the adaption and adoption of policies, participants were asked why some policies were able to be adapted from other Source Protection Regions and Areas and others were not. The question format was open-ended, so that respondents could provide as much or as little detail as they desired. Coding of the responses to this question identified three main themes. The most recognized determinant of whether policies could be adapted or adopted from another Source Protection Region or Area was the underlying objective or approach that each Source Protection Region and Area adopted towards how they would view and address threats:

Each Source Protection Committee took a different approach to addressing drinking water threats (some were very restrictive and relied heavily on prohibition, others were softer and used more education). This meant our Committee could only adopt/adapt policies from regions with a similar approach. (Participant 22)

Six participants said that biophysical/geographical attributes were influential in determining whether or not policies could be adapted or adopted. They indicated that differences in land use, nature of the source water (e.g., inland lake versus groundwater), and nature of the threat were key determinants of the transferability of policies.

Four participants suggested that institutional and political structures in their area were a determinant of policy transferability. They suggested that the number of Municipalities within Source Protection Regions and Area, whether there were Local or Regional Municipalities, and the number of Source Protection Authorities, were influential because this determined the number of implementing bodies and the complexity of the policy development process.

Previous research by the Water Policy and Governance Group² identified and synthesized key concepts from the policy transfer literature that influence the transferability, or “fit”, of policies. The key themes

² Swainson, B. and de Loë, R.C. 2010. *Exploring the Role of Policy Transfer in Water Governance*. Water Policy and Governance Group, University of Waterloo: Waterloo, ON. Report available at www.wpgg.ca

identified by survey participants (in other words, biophysical/geographical, institutional and governance structures, and the approach/objectives) closely mirrored the factors identified in the literature. This indicates that participants have a clear and detailed knowledge of the key attributes that influence transferability, or “fit”, of policies from other Source Protection Regions and Areas.

2.2. Key Influences on the Policy Development Process

Evidence from the survey demonstrates the key role that Source Protection Committees played in the policy development process. When asked how much impact the Source Protection Committee had on the final policies developed for the Source Protection Regions and Areas, thirteen participants noted that they had a significant impact and nine participants stated that the Source Protection Committee had a moderate impact (Table 4). No participant selected little impact or no impact as an answer.

Table 4: Impact of Source Protection Committees on final policies

How much impact did the Source Protection Committee have on the final policies	Number of Participants selecting this answer
Significant Impact	13
Moderate Impact	9
Little Impact	0
No Impact	0
Total	22

As a follow-up question, participants were asked an open-ended question asking why they chose the rating for the level of impact the Source Protection Committee had on final policies. Twenty-one responses were collected to this question. The responses to this question revealed that Source Protection Committees played two distinct roles in the policy development process.

In total, five (of the sixteen Source Protection Committees represented in the survey) were categorised as working in partnership with Source Protection Authorities (those tasked with the responsibility for preparing and drafting policies in support of the Source Protection Committees), where the Source Protection Committees and Source Protection Authorities worked together to understand and develop source protection policies. Such relationships are characterised from the quotations from three different participants in Box 1. Eleven (of the sixteen Source Protection Committees represented in the survey) were categorised by participants as predominately participating in the policy development process by setting the agenda or policy direction and making the final decision on policies that were selected, as evidenced by the quotations in Box 2.

Box 1: Source Protection Committee as a ‘partner’

The Source Protection Committee was highly involved in source protection plan policy development. (Participant 13)

The Source Protection Committee reviewed all policies and provided input throughout the process, so they played a significant role in developing the final policies that were included in the Proposed Source Protection Plans. (Participant 15)

We had an extremely engaged committee that really took the time to understand underlying issues, science, potential impacts around each and every policy. (Participant 16)

Box 2: Source Protection Committee as a ‘manager’

The Committee relied heavily on the recommendations of the staff, MOE and municipal planners. They played an important role in approving policy direction. (Participant 4)

Our policy development process involved staff drafting initial policy ideas in collaboration with sector experts and municipal staff. ... The Committee usually tweaked policy wording or added or revised details in the policy. They rarely deleted a policy or created a new one. (Participant 22)

Municipalities (and CA staff) played a strong role in development of the policies locally. Generally the Source Protection Committee was supportive of most of the policies brought forward and minor changes were made in response to their comments ... (Participant 17)

2.3. Information Sharing Tools

Catalogue of Existing Work

The *Catalogue of Existing Work* allowed users to post background research, work plan/timelines, processes for policy development, and criteria for policy evaluation. The intent of the website was that users would post information that was being used to develop the policy development process and to identify the context and the approach that Source Protection Regions and Areas were adopting (i.e., what threats were relevant to that Region or Area and whether a regulatory or other approach was thought most appropriate to address the threat). Such information was expected to generate ideas about how other Source Protection Regions and Areas were approaching the source protection planning process, and how they might be applied to other Regions and Areas.

Participants were asked how much they used the *Catalogue of Existing Work*. Only three participants indicated that they used the site ‘A Lot’, with the majority of participants indicating that they used the website ‘A Little’ (fourteen participants) or ‘Not at All’ (five) (Table 5). The results suggest that the

website was not well used and did not form a significant foundation for the transfer of ideas, lessons, or policies among Source Protection Regions and Areas.

Table 5: Participants' use of the Catalogue of Existing Work

How much did you use the Catalogue of Existing Work?	Number of Participants selecting this answer
Not at All	5
A Little	14
A Lot	3
Total	22

Participants were asked an open-ended follow-up question to explain their response. This question elicited valuable information regarding why the information sharing tool was or was not used, including the benefits and constraints of the tool. Analysis of responses revealed two clear perspectives (Box 3). Some suggested that the website facilitated ‘soft’ rather than ‘hard’ information transfer in that ideas rather than formal policy approached and processes were transferred. Participants noted that they gained ideas from other Source Protection Regions and Areas and then sought to find opportunities to apply these ideas within their Region or Areas where an appropriate fit. Those participants who did not utilize the website suggested that they preferred contacting colleagues on other Source Protection Regions and Areas directly.

Box 3: Participants' perception of the of the Catalogue of Existing Work.

<p>Benefits:</p> <p><i>Used this for the "generic Background Documents" and then input our own local information (Participant 7)</i></p> <p><i>This was handy to see what other Source Protection Authorities were doing and their timelines for source protection policy development. (Participant 8)</i></p> <p><i>When we first started developing policies we used this website a lot to get ideas, collect background information and to get new staff up to speed. (Participant 22)</i></p> <p>Constraints:</p> <p><i>Although the idea was good, in reality I used direct contact more often with the people developing background studies and reports (Personal contact, emails etc.) (Participant 4)</i></p> <p><i>On a couple of occasions we with collaborated directly with a Source Protection Area that has a common concern. (Participant 5)</i></p>

Policy Web Forum

The *Policy Web Forum* permitted users to enter policies (including the rationale for the policy approach), to search policies, and to comment on posted policies. The intent of the website was to facilitate the sharing of complete policies and policy wording. When surveyed, participants identified that they used the *Policy Web Forum* less than the *Catalogue of Existing Work*. Half (eleven) of the participants identified that they did not use the *Policy Web Forum* at all (Table 6). Ten participants noted that they used the website ‘A Little’ and only one participant identified that they used the website ‘A Lot’.

Table 6: Participants’ use of the Policy Web Forum

How much did you use the Policy Web Forum?	Number of Participants selecting this answer
Not at All	11
A Little	10
A Lot	1
Total	22

A follow-up open-ended question was asked seeking details about participant choices. Time constraints and the way in which the website was structured were identified as key reasons as to why the website was not used more (Box 4). Personal connections also were important. For example, Participant 13 observed “[w]e have good relations with our neighbouring regions and kept each other regularly informed on developments”. This example indicates that information sharing was happening informally between colleagues, even if formal information through the website was not occurring.

Additionally, the distinctive nature of some of the areas and threats meant that unique policies were sometimes required. This observation led one participant to observe that “[w]e needed a made in XXXX solution” to explain why the *Policy Web Forum* was not used more effectively. These themes emerge again in the findings to later survey questions (see section 2.4).

Box 4: Participants' Perception of the Policy Web Forum

We started using this but I found that it was hard to use. People were loading in early drafts and some were using policy numbers to identify policies instead of titles. I got frustrated with it. (Participant 4)

Draft policies were not posted in a timely manner because of the extremely short time frame to get the work done. Everyone was working on policies at almost the same time. (Participant 6)

Unfortunately this website was underused by everyone, including our region. Few policies got posted during the policy development process so there was very little information to peruse. Our understanding is staff were too busy to post policies given the enormous time constraints we were all under and some regions/committees were concerned about posting draft policies before they had undertaken consultation on them. (Participant 22)

Policy Database

The *Policy Database* developed out of the *Policy Web Forum*, allowing users to post completed policies for review. The idea was that the website would form a catalogue of final policies in a single, navigable place to allow users to review, compare, and contrast policies. As this site was used by stakeholders external to the policy development process to review policies participation (i.e., the posting of all completed policies) was mandatory for all Source Protection Regions and Areas.

The mandatory nature of participation confounds the results of the question relating to use of this website. Participants stated that they used the site, but also identified in the open-ended questions that it was not used for information sharing but to comply with requirements. For this reason the responses related to use (Table 7) are perhaps less useful than the comments to the open-ended questions related to this website. The open-ended question seeking explanation of how participants used the website revealed that users found the website cumbersome and therefore it was not used for searching and comparing policies (Box 5). The results indicate that formal, structured approaches to information sharing that required excess time and attention were not valued by participants and subsequently were underutilized.

Table 7: Participants' use of the Policy Database

How much did you use the Policy Database?	No. of Participants
Not at All	7
A Little	13
A Lot	2
Total	22

Box 5: Participants' Perception of the Policy Database

[W]as used to manage policy drafting and ultimately printing the policy sections of the Source Protection Plan (Participant 18).

The policy database was only used to input the policies as was required for consultation. We found the database to be extremely slow (~approximately 3 mins to reload) every time a button was clicked. In addition, the database was not overly user friendly and internal documents were faster to work with. Also, we had good partnerships with our neighbouring regions and policy inconsistencies were regularly flagged. (Participant 13)

Database was a lot of effort to populate, for little benefit to us. I hope it was a lot of benefit to provincial staff considering the work involved. (Participant 16)

We posted our preliminary, draft and proposed policies as required but the database itself was complicated to use and did not return search results that were useful. Our policies had to be cut up and dismantled to enter them into the fields which left them unusable for other regions. (Participant 22)

2.4. An Overall Assessment of the Information Sharing Tools

To ensure that all the benefits and constraints of the information sharing tools were captured, participants were asked to consider all three tools as a package and to provide an overall assessment of the approach to information sharing for Source Water Protection policy development. One clear finding emerged from the responses to this question: *direct communication with colleagues was the preferred way to share information.*

Nine participants identified conference calls and traditional means of communicating with peers (conferences, teleconferences, emails, meetings and phone calls) as a more beneficial way to share information. Their perspective is captured in these responses:

The policy coordination work by Conservation Ontario was appreciated and helpful. In the end, the simple sharing of ideas via meetings, teleconferences and e-mail exchanges proved more user-friendly than any of the web-enabled tools. (Participant 2)

I found working in smaller groups (neighbouring regions) face to face to be more effective and beneficial. (Participant 4)

Face to face meetings are always the best way to share information and we always got a lot of value out of meetings organized by CO and MOE. Other tools have to be kept simple so people are inclined to post and retrieve information from them. (Participant 22)

This result points to the importance of traditional communication forums for information sharing. Even when provided with formal, technical tools to assist communication, policy planners clearly still preferred to share and gain insights into the policy development process via colleague to colleague exchanges.

The best indication for this preference for direct communication is that six participants identified that time constraints of the policy development process meant that they were unable to engage more fully with the information sharing tools. This sentiment is captured well in the responses of two of these people:

Conservation Ontario tried very hard to provide these tools. I think the problem was that there were so many people using them at many different levels and times that they didn't work as well as expected. Also there were so many pressures with deadlines etc. that people didn't have much time to use these tools. (Participant 4)

One of the challenges was that all of the CA's were working on the same thing at the same time, so it was difficult to post things for others to review, as none of us had completed them in advance of anyone else. We all did our best to share resources as much as possible, but timing did make this difficult. (Participant 15)

3. Conclusions

The results from this study paint a clear picture of how participants engaged in information sharing, and how they used the online information sharing tools. Additionally, the research provided valuable information to guide future approaches to information sharing. One of the key results to take away from this study is that participants derived value from information sharing, particularly in the initial visioning and preliminary phase of the policy development process. Participants independently argued that information sharing resulted in greater efficiencies in the policy development process and increased consistency of policies among Source Protection Regions and Areas. It can be concluded that the objectives of the information sharing approach were met.

Participants clearly indicated how, and at which stages of the policy development process, they preferred to share information. Use of the *Catalogue of Existing Work* was quite good. Participants noted that they were able to gain ideas from what other Source Protection Regions and Areas were doing and to consider how to apply similar approaches to their own context. As the policy process developed participants indicated that they were less likely to look for ideas or examples from other places. The *Policy Web Forum* was not noted as being well used and the *Policy Database* was predominately used for organizing complete policies, not for reviewing the examples from other areas.

Information sharing in the context of source protection planning appears to be most useful in the initial policy development phase. Once Source Protection Regions and Areas ‘locked in’ their approach to policy development (i.e., whether they took a regulatory stance to a particular threat) information sharing through the formal website tools became less desirable as the pool of similar contexts (i.e., Regions and Areas that adopted the same approach) became smaller. Similarly, even though all Source Protection Regions and Areas were all located in Ontario, contextual differences brought on by biophysical (e.g., different land use and types of source water result in different threats) and institutional (e.g., number of municipalities within the Region or Area) meant that policies that were applicable in one Source Protection Region or Area were not appropriate for implementation in another.

Participants indicated that they were able to identify which Source Protection Regions and Areas had similar contexts and adopted similar policy approaches and noted that they preferred to contact colleagues from these areas directly rather than review information they had posted online. The study was not able to identify why this may be, though perhaps it is related to the ability to gain more information from talking to people directly through the ability to ask questions or because direct communication offered fast, immediate responses (e.g., no need to spend time in inputting policies and searching databases for appropriate policy examples). This finding was further reiterated through the comments from participants who suggested that they found the conference calls to be very valuable sources of information sharing, with many even indicating that these calls were more valuable than the information sharing website tools. Further research into why the more interactive mediums were more valued for information sharing may be worthwhile if future information sharing approaches are considered.

These findings have ramifications for future approaches to information sharing. The study reveals that information sharing is valuable for source protection policy development, particularly when changing legislative conditions require rapid policy development. When faced with short timelines the information sharing approach has resulted in more efficient and consistent source protection policies. The study indicates that policy planners prefer interactive mediums for information sharing, biasing direct contact with colleagues over formal online information sharing tools and this preference should inform future information sharing approaches. Finally, policy planners have demonstrated that they possess the knowledge and skills to identify contextual differences among Source Protection Regions and Areas and have shown that they can determine what information and policies are appropriate for their own contexts and what is not, demonstrating that practitioners have a clear understanding of concepts of policy 'fit'.

These findings offer insights into the future direction of information sharing for source water protection planning in Ontario. Actively encouraging information sharing among Source Water Protection Regions and Areas achieved a more efficient policy development process and policy consistency. It is a practice that should be encouraged to continue. As monitoring, evaluation, and adjusting source protection policies continues into the future there is much that each Source Protection Regions and Areas and the implementing bodies within them (e.g., municipalities) can continue to learn from each other. Facilitating the sharing of such information may encourage increased efficiency and consistency in the implementation and ongoing monitoring and reporting phase. Participants clearly articulated a preference for the tools and approach that should support such information sharing. Teleconferences, meetings and direct communication with colleagues were the preferred approaches.