

# Watershed Governance or Intake Governance? Implications of Ontario's *Clean Water Act* on Collaborative Watershed Governance in Rural Areas

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## Executive Summary

The inquiry report, following the Walkerton tragedy, found that a lack of source water protection was a key contributor to the contamination of Walkerton, Ontario's municipal drinking water supply (Christensen, 2011). This finding led to stricter source water protection legislation and new governance structures for source water supplies in Ontario through the *Clean Water Act, 2006* (Murray & de Loe, 2012). Source water protection under Ontario's Act was designed to be an integrated, science-based approach, using multi-level governance structures to create source protection plans on a watershed basis (Ontario Ministry of Environment, 2006). The governance structures under the *Clean Water Act, 2006* can be seen to be an example of collaborative watershed governance. Particularly, through the source protection committees, there was a bringing together of various actors on a watershed basis to produce source protection plans.

It was found through this research that the source protection planning process under the *Clean Water Act, 2006* improved communication, collaboration, transparency, integration, knowledge sharing and trust at the watershed level. However, there are still improvements to be made to make this process a model example of collaborative watershed governance. As found in previous research, governance arrangements are often considered important for promoting watershed protection. However, factors such as uncertainty, complexity, fragmentation, lack of incentives to cooperate, knowledge gaps, and inclusion issues can prove to be challenges to watershed governance (Booher & Innes, 2010; Memon & Weber, 2010). These are all elements that need to be considered moving forward with source protection planning and implementation under the *Clean Water Act, 2006*. Communities and individuals who are located within the watersheds contributing to source water supplies need to better see their role in source protection efforts. Factors such as the inflexibility for local concerns in the legislated planning process, unknown future funding for implementation efforts and a lack of public interest, have all negatively impacted the effectiveness of the collaborative watershed governance of source water supplies in Ontario. In the case study source protection areas used in this research (the Cataraqui Source Protection Area and the North Bay-Mattawa Source Protection Area), it was found there was a lack of ownership of the source protection plans for those communities within the source protection areas who were not impacted by binding policies. There is a need for the source protection process under the *Clean Water Act, 2006* to better involve the entire watershed in future planning efforts.

## Why is Collaborative Watershed Governance Important?

**Table 1: Elements of Collaborative Watershed Governance**

Elements
Legislated process/organized structure
Integration
Right actors at the table
Shared ownership and accountability
Knowledge sharing and learning
Public participation
Trust building and transparency
Fairness
Adequate resources and capacity
Common benefit evident
Evaluation, adaptability, and flexibility

Cohen (2012) explains that governance is the act of decision-making, opposed to management, which refers to the day-to-day technical actions taken on what is being governed. Collaborative governance brings together public and private stakeholders in collective forums to engage in consensus-oriented decision making (Ansell & Gash, 2008). Polycentric systems created by collaborative governance have been found to enhance innovation, learning, adaptation, trustworthiness, levels of cooperation among participants, and the achievement of more effective, equitable, and sustainable outcomes (Pahl-Wostl, Becker, Knieper, & Sendzimir, 2013). Collaborative governance arrangements improve the ability to resolve collective action problems, help scholars develop understanding of elements associated with institutional durability, and make policies more robust and effective (Weber, 2012). Bidwell and Ryan (2006) outline a growing preference for new governance strategies in collaborative watershed partnerships that are decentralized, participatory, and involve consensus-based problem solving in conjunction with traditional bureaucratic institutions. Authors such as Vodden (2014) and Reed & Bruyneel (2010), suggest that solutions for water problems must involve interaction between both governmental and non-governmental actors and that collaboration between these actors enhances the effectiveness of water policies and plans.

## Challenges and Successes for Collaborative Watershed Governance

The elements of collaborative watershed governance (see Table 1) were assessed looking at specific indicators of each element. Many of the indicators found related to these individual elements of collaborative watershed governance overlapped during analysis. Therefore, main overall findings are outlined below in Table 2. Key findings represent the most frequently expressed challenges/successes noted by key informants in relation to collaborative watershed governance in rural areas under the *Clean Water Act, 2006*.

**Table 2: Key Findings- Challenges and Successes for Collaborative Watershed Governance**

Key Findings	
<b>Successes</b>	<ul style="list-style-type: none"> <li>The legislated and organized governance structure of the <i>Clean Water Act, 2006</i> was beneficial for watershed collaboration, providing clear formalized responsibilities and rules related to governance, data collection and implementation. This clarity enhanced trust, transparency, integration and knowledge sharing amongst watershed actors.</li> <li>The planning process under the <i>Clean Water Act, 2006</i> increased communication at the watershed level about water quality issues in general.</li> <li>The planning process under the <i>Clean Water Act, 2006</i> was designed to foster knowledge sharing and learning amongst watershed stakeholders.</li> <li>Science based policies aided in watershed stakeholders' buy in of source protection plans and related policies.</li> </ul>

## Challenges and Successes Continued...

### Key Findings

- Successes**
- The *Clean Water Act, 2006* and related decision-making processes integrated other related legislation to fill in identified policy gaps.
  - The increase of capacity at the Conservation Authority level during the planning process under the *Clean Water Act, 2006* has provided important local, context specific guidance to decision makers and implementers at the watershed level.
  - The source protection committees were the right mix of actors needed for collaborative watershed governance and aided in the balancing of social, economic, and environmental considerations within the source protection plans. The diverse source protection committees also engaged diverse stakeholders.
  - The consensus-oriented decision-making process at the source protection committee table allowed for healthy debate and room for productive conflict.
  - Data sharing amongst provincial, regional and municipal government departments and local non-governmental organizations was high during the assessment and planning stages of the source protection plans under the *Clean Water Act, 2006*.
- Challenges**
- The assessment work, planning process and final source protection plans were focused on protecting public water systems' wellhead protection areas/intake protection zones, rather than utilizing a true watershed approach.
  - Much of the technical information presented at public events was not fully understood by the intended audience. This impacted the level and quality of public engagement.
  - Inflexibility for local concerns and innovations impacted feelings of ownership and common benefit towards the plan amongst the source protection committees and other stakeholders within the source protection areas.
  - Better engagement techniques are needed to involve participants, including incentives for all watershed stakeholders to become active in the planning and implementation process.
  - Unknown and diminished implementation funding will impact the overall commitment and quality of implementation, evaluation, and adaptation of plans into the future
  - The planning process under the *Clean Water Act, 2006* was noted as not being designed for privately-serviced rural areas. For example, the only binding mechanism for protection of their systems was elevating clusters of private wells into the source protection plan. This was discouraged by provincial staff and seen as an unfair process by the one privately-serviced community that was elevated into their local source protection plan.
  - The missions, objectives, and scope of the planning process under the *Clean Water Act, 2006* did not always stay constant.
  - Privately-serviced municipalities within the source protection areas lacked ownership and feelings of common benefit related to the planning process and the policies under the source protection plans.
  - There was a lack of representation of First Nation communities and limited feelings of ownership of the source protection plans by First Nation communities within the source protection areas.

## Recommendations

- There is a need for the source protection process under the *Clean Water Act, 2006* to better involve the entire watershed in future source water protection planning efforts. This approach would involve meaningful inclusion of all communities within the source protection areas, especially those who may be located outside of a wellhead protection area and/or intake protection zone and those relying on private drinking water systems.
- More research needs to be given into ways to achieve greater flexibility within the planning process under the *Clean Water Act, 2006* to better allow for consideration of local concerns and approaches related to source water protection.
- There is a need for better translation of technical information to the general public in order to achieve true stakeholder engagement, opposed to stakeholder consultation.
- Consideration for periodically different locations for source protection committee meetings so that committee members located far away from urban centres are not consistently having to travel long distances. Also, the option of electronic participation in these meetings could be beneficial, especially during winter months.

## The Research Project

This research was part of an Interdisciplinary PhD dissertation exploring the role of governance and capacity building in source water protection for rural regions. This research employed a case study approach using two source protection areas in Ontario (the Cataraqui Source Protection Area and the North Bay-Mattawa Source Protection Area). Field research began for this project in Spring 2016 and ended in Winter 2017. Data collection consisted of 30 key informant interviews in the case study regions and provincially, using a semi-structured interview guide. Further literature review, legislation review, document review, and meetings to discuss findings with a select number of key informants were also conducted.

For more information please see the academic article for this research:

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Disclaimer: This literature review was not peer-reviewed by the NRDN and does not necessarily reflect the position of the RPLC, the NRDN co-leads or their institutions.

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