



Summary of Key Takeaways from Roundtable Discussion on Water Resources and Hydrological Systems to inform the potential 10-Year Coordinated Land Use Plan Review and the future success of Ontario's Greenbelt

Introduction

On November 6, 2024, the Greenbelt Foundation hosted a 2-hour roundtable session to explore emerging trends, pressures and policy opportunities impacting water resources and hydrological systems. The session aimed to inform the Greenbelt Foundation's priorities for the upcoming 10-Year Coordinated Land Use Plan Review and the long-term success of the Greenbelt, ensuring it remains effective and resilient for years to come and contributes to the sustainability of Ontario.

The following sections summarize the major themes and issues discussed, reflecting participants' collective input and providing an initial basis for further exploration and strategic considerations in preparation for the Review.

Participants

Participants included experts from Conservation Ontario, Conservation Halton, Rescue Lake Simcoe Coalition, Oak Ridges Moraine Groundwater Program, Save the Oak Ridges Moraine Coalition, Region of Peel, City of Toronto, Ontario Federation of Agriculture, and the Ontario Headwaters Institute, providing a comprehensive understanding of the challenges and opportunities facing water resource systems in the Greenbelt. Additional written feedback and review was provided by Ducks Unlimited, Queen's University, and Simcoe County Greenbelt Coalition.

Trends & Pressures

Trends and pressures shared during the discussion highlighted the growing implications of inconsistent management practices for water and hydrological systems, climate change impacts, development pressures, legislative changes, and the potential for more (and better) data and science-driven solutions.

An Urgency to Address Climate Change & Intensified Water System Impacts

The health of water resource systems directly impacts the level of erosion and flooding in Ontario communities. Climate change and the loss of wetlands is compounding this risk and creating a sense of urgency in the province's largest urban centre. Maintaining permeable landscapes, wetlands and water storage capabilities, and natural systems are the foundations on which to build resilience. The Greenbelt sets the example, protecting intact ecosystems and functions in the region's upper watersheds, urban river valleys that flow through cities, and supporting intensification.

Development Pressures & Legislative Changes

Ontario's updated land use planning framework and policies focus on pressing housing needs, but unintentionally and unnecessarily are leading to a deterioration in understanding water resource systems and enforcement of existing policies. The diminished role of conservation authorities, impending loss of regional planning and a shift to a reactionary planning approach, has resulted in concerns about



insufficient studies and environmental assessments related to development approvals, including settlement boundary area expansions and new infrastructure projects, and the impact on water resources. Consequences include a loss of features and functions and an increase in pollution.

Participants also expressed concerns that the cumulative impacts of these pressures are leading to a "death by a thousand cuts" for water systems, as piecemeal decisions fail to account for the interconnectedness of these resources. In addition, enforcement of water-related violations stemming from poor development practices, particularly in hazard areas, is becoming increasingly costly and resource-intensive for communities, diverting funds and attention away from restoration and enhancement efforts.

Fragmented Systems Management & Erosion of Institutional Knowledge

The lack of a unified approach to watershed management across jurisdictions, coupled with the loss of institutional memory within local and regional planning departments is leaving municipalities ill-equipped to address increasingly complex water management challenges. This fragmented approach has weakened system-level perspectives, with decisions increasingly being driven by short-term growth and development priorities rather than long-term environmental sustainability.

Participants highlighted the need for watershed planning that goes beyond municipal boundaries, focusing instead on integrated systems that consider both upstream and downstream impacts. The removal of regional planning authority was identified as a significant issue, with sub-watershed plans often lacking alignment with broader watershed management objectives. Additionally, the weakening of 'checks and balances', such as those previously enforced under the Municipal Comprehensive Review process, has led to reduced oversight and accountability at a local level. Conservation Authorities have traditionally led the development of watershed management plans in collaboration with municipalities since the 1970s. However, available capacity, expertise, and funding to develop and update these plans varies across the province. While the 2024 Provincial Planning Statement encourages municipalities to collaborate with applicable conservation authorities, there is no requirement to do so. Without financial support to undertake watershed management planning through local conservation authorities, many jurisdictions are unable to justify or enforce decisions that conserve and protect the environment or have conflicting local approaches leading to an inconsistent approach within watersheds.

Greenbelt and Rural Communities

There is concern that weakened policies and approaches to sustaining healthy water resource systems will result in similar pressures in the Greenbelt. Participants noted that even if Greenbelt policies remain strong, a lack of oversight or enforcement will render the Plans ineffective. The current planning framework is also likely to increase development pressures on rural communities in the Greenbelt, with concerns about a loss of permeability, increased use of septic infrastructure and pollution of critical groundwater supplies for the region, and greater road infrastructure and use of road salt and toxicity levels affecting water quality. Participants also emphasized the need to address emerging toxicants of concern in future Greenbelt water policies or management strategies.



Data & Science-Driven Solutions

Despite these challenges Ontario has a wealth of hydrological data available that can inform and support critical decisions to sustain future growth projected for the region. Participants stressed the importance of using the data in the *Oak Ridges Moraine Groundwater Program*, and other resources to better understand water systems holistically, including the value of wetlands and their role in water balance. Some municipalities may lack the 'in-house' technical expertise to leverage this data effectively, resulting in missed opportunities for proactive planning.

Plan Effectiveness

Participants agreed that the Greenbelt is essential for protecting critical water resource systems that millions of people and the region's economy relies on in the Greater Golden Horseshoe. Principles underlying the Plans remain sound but require updates to adequately reflect current (and often complex) challenges. It was also noted that sections of the Plans use dated or insufficient language that doesn't adequately reflect current challenges or contexts. Protections for water resources outside the Greenbelt require similar consideration. Several key recommendations to strengthen the effectiveness of the Plans were suggested, including the following:

- Strengthen policies in the Greenbelt Plan to protect and manage **urban river valleys**.
- Stronger requirements are needed for **watershed management planning** both inside and outside the Greenbelt to approve developments and mitigate erosion and pollution while supporting sustainable growth. Subwatershed-scale analysis is inadequate to understand impacts upstream and downstream and impacts on Greenbelt water systems from adjacent developments.
- Require **water quality monitoring** before, during and post construction to improve knowledge about the water resource system and inform decisions.
- Adopt requirements or provide guidance for municipalities to use the **best available data** on water resource systems during development approvals and take advantage of Ontario's robust databases and systems.
- Review and update **water resource policies in the Oak Ridges Moraine Conservation Plan** to reflect current understanding and regional development pressures.

Process & Implementation Opportunities

Participants suggested several opportunities to enhance implementation and support the Greenbelt's long-term success:

- Increase education about the value of the Greenbelt and intent of Plan policies and enforcement.



- Address challenges in maintaining watershed health and approving Official Plans by lower-tier governments.
- Enhance municipal capacity to meet obligations to protect and enhance water and hydrological systems through training, resources, and technical support as essential for effective water management.
- Support data-driven planning through a centralized monitoring system that tracks the Greenbelt's health and generates data-driven feedback to improve implementation over time.
- To improve protections of critical water resource systems, strengthen the environmental assessments and enforcement measures to mitigate risks. Stronger accountability mechanisms are needed in areas experiencing rapid growth.
- Support and provide resources for municipalities to model climate change scenarios and impacts on water resources.
- Establish policies to rehabilitate watersheds, with clear targets for metrics such as tree cover, riparian buffers, and wetland health. Provincial funding could be allocated to municipalities to implement these measures as part of a broader flood prevention and watershed quality strategy.
- Explore carbon offset programs, including opportunities for municipalities to assess and register natural heritage systems as carbon credits. This could link to future provincial or federal carbon trading mechanisms and support long-term conservation financing.

Next Steps

The Foundation would like to extend our appreciation for participants' time in attending the roundtable session and sharing your views and experiences. We look forward to continuing to collaborate and build on these initial discussions to refine priorities for the Review and address broader issues that are critical to the long-term success of the Greenbelt.