GREAT LAKES AND ST. LAWRENCE
CITIES INITIATIVE
L'ALLIANCE DES VILLES
DES GRANDS LACS ET DU SAINT-LAURENT

MAYORS COMMISSION ON WATER EQUITY

What We Heard Report

Ontario Member Staff Consultation on Water Infrastructure and Source Water Protection – July 2024

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EXECUTIVE SUMMARY

The Great Lakes and St. Lawrence Cities Initiative (Cities Initiative) recently consulted with staff among its municipal Members in Ontario as part of the mandate of the Mayors Commission on Water Equity. This consultation will serve to inform the policy agenda of this Mayors Commission – but more importantly, will help inform the Cities Initiative as it works to update its services and explores program funding opportunities, to further support its Ontario Members.

For the consultation, both water infrastructure and source water protection were identified as the anchor issues to discuss, given their impact on Ontario municipalities' ability to continue delivering clean, safe and affordable water.

Through this consultation, it became clear that source water protection and sound water infrastructure are inherently tied together. Although Ontario municipalities continue to effectively deliver drinking water for their communities, several challenges loom. Fundamentally, water infrastructure investments by all levels of government are not keeping pace with population growth, climate change and emerging pollution issues, including more frequent algae blooms and PFAS. Moreover, legacy infrastructure and existing policies and procedures are not equipped to handle today's challenges.

When money is made available by other levels of government, municipalities struggle to tap into those opportunities. Provincial and federal funding programs often come with onerous application and cost-share requirements. It should be noted that community organizations and associations, like the Cities Initiative, face similar challenges when it comes to accessing federal and provincial funding.

With this consultation, it is clear that Ontario municipalities will require support to effectively address their water infrastructure and source water protection issues. It is also evident that there is a role for the Cities Initiative to play, whether it be as a convener, an educational resource or through more direct intervention with its Members.

We thank those who participated in our consultation and we look forward to continuing our work with the Mayors Commission to refine our service delivery and take these concerns to Parliament Hill and Queens Park.

I. BACKGROUND

The Great Lakes and St. Lawrence Cities Initiative (Cities Initiative) is a multinational coalition of local leaders working collaboratively to advance the environmental and socioeconomic health of communities in the Great Lakes and St. Lawrence River Basin. The Cities Initiative represents over 260 municipalities across the region.

Through its Mayors Commissions, the Cities Initiative brings municipal leaders together around common issues to identify solutions and make recommendations to guide policy and program development. The Mayors Commission on Water Equity, launched in 2022 and co-chaired by Mayor Andrea Matrosovs (Town of the Blue Mountains, Ontario), is currently focused on addressing issues related to **water infrastructure** and **source water protection**.

The Cities Initiative strives to provide tangible benefits to all members. This report focuses on needs and opportunities for Ontario municipalities specifically. In undertaking this consultation, the Cities Initiative identified two goals:

1. Outline a plan for supporting Cities Initiative Member municipalities in Ontario through new programs and improving our existing Member services; and
2. Share opportunities to leverage federal and provincial funding resources available for municipal projects, including the Ontario Great Lakes Local Action Fund (deadline to apply: September 2024) and the federal Great Lakes Freshwater Ecosystem Initiative (next estimated application intake: January 2025).

This report outlines key findings, opportunities and next steps. Input was provided to the Cities Initiative staff through an in-person consultation and a follow-up survey in July 2024. Further information about our Methods for completing this report are outlined in the Annex at the end of this document.

II. KEY FINDINGS

Source Water Protection

Issues

The top three concerns identified by participants related to protecting source water in larger population and urban members were: **erosion/extreme weather event flooding**, **agricultural pollution** and **road salt**. **Harmful algal blooms** were noted as a direct result of phosphorous and increasing temperatures due to climate change. As impervious surface area is increasing due to development, erosion in headwaters was equally noted.

Participants' comments also touched on **emerging contaminants**: including PFAS, microplastics, pharmaceuticals, fuel/oil from roads and storage sites and aggregate extraction materials.

Source water issues were **often tied to water infrastructure concerns**, particularly regarding the condition of those systems and the ability for municipalities to plan for growth. This has become particularly acute in a period where rural communities are growing much more quickly than had been anticipated. Finally, municipalities raised concerns around the **installation, monitoring and management of septic systems**, which can have negative impacts on source water quality.

Solutions

A variety of solutions are currently being implemented by those who participated, including:

- Comprehensive **planning**
- Pollution **prevention measures and rules** with dedicated funding sources
- **Public education**
- Technical solutions, including:
    - **Green infrastructure** and smaller scale stormwater management approaches (sponge city elements, rain gardens)
    - **Upgrades/improvements** to existing grey infrastructure
    - Incorporation of **low impact development** technologies like oil grit separators

A few communities are implementing innovative and blended approaches, specifically targeting landowners for nature-based solutions, through **demonstration projects** and **landowner incentive programs**.

Other communities have offered **incentives and/or management guidelines** to mitigate pollution, such as specifications for road salt application or requirements for buildings to include source water retention elements (nature-based solutions or rainwater capture into tanks), with the provincial government having direct control over how and where new buildings are located. It was noted that these programs are outdated and could benefit from strengthening, which can only be done at the provincial level. **Lack of local capacity to enforce existing rules** was noted.

Finally, it was noted that municipalities would appreciate **a more proactive approach by developers** in going above the stated standards, which could be rewarded by shorter processing times. This would nonetheless have to be coupled with increased oversight.

Barriers

Several barriers were identified when it comes to municipalities' role in managing source water, including the need for improved communication with various stakeholders, such as industry and residential users and between local and regional municipalities. Conversely, the lack of clarity on provincial and federal rules, including the Provincial Policy Statement and *Clean Water Act*, was raised.

Others noted the complexity of federal and provincial funding applications for source water protection projects compared to the amount of funding available oftentimes make those funding programs unviable for

municipalities that have limited grant writing support and several competing priorities. The cost-chare requirement can also be onerous, particularly when application windows are not predictable. In some instances, municipalities are not made aware of funding programs that are available. Predictable funding and streamlined applications (for example, with a list of pre-approved projects from which a municipality can select) would improve their ability to implement projects and budget for them.

Water Infrastructure (Water, Wastewater and Stormwater)

Issues

Aging water infrastructure and its **limited capacity to accommodate a growing population** was the most pressing issue raised by participants. This reflects the need for enhanced government investments to replace, repair, upgrade or augment current systems. **Climate change** was noted as a contributor to capacity issues given more frequent and intense rainfall and flooding events.

Other issues raised included:

- **Stormwater management**: participants acknowledged that both increasing system capacity and decreasing stormwater quantity are needed
- **Private infrastructure** (i.e., septic systems): participating municipalities indicated having a hands–off enforcement approach due to capacity constraints, relying on individual landowners to manage their systems, creating concerns over quality control
- System stress due to **combined sewer/stormwater systems** (CSOs)
- **Inflow and infiltration** (I&I)
- **Invasive species**
- **Inter-jurisdictional conflicts**
- **Lead service lines**

There was also consensus for the need to **limit water consumption**. For example, in agricultural lands where farms tap into the municipal system, untreated or partially treated water could be a solution. Some municipalities highlighted their work in getting raw (untreated) water to agricultural lands.

The **need for households and industries to reduce consumption** were also noted, although it was highlighted that these objectives are harder to achieve without proper incentives (ex: rebates or grants for rain barrels, low flow toilets).

Ultimately, existing infrastructure is not keeping up with development demands.

Solutions

Respondents shared some innovative solutions currently underway. For example, one large municipality is testing out a building code change for new developments, requiring water savings and the inclusion of natural features on site. Others are taking on asset mapping to prioritize infrastructure upgrades. The decoupling of

combined sewers has also been identified as a solution, albeit a costly and time-consuming one for municipalities.

To date, nature-based solutions have been small in scale (ex: sponge parks / sidewalks) relative to the problem. Large municipalities noted that comprehensive green infrastructure solutions are lacking to address increasing stormwater management needs.

Barriers

Boosting water system capacity is complex and requires solutions for many aspects of water infrastructure, including treatment, pumping, electrification and new pipes. It is therefore not surprising that the most common barrier mentioned was costs associated with upgrading and building new infrastructure. Investments to date are simply not keeping up with the magnitude of associated costs.

The water equity issues at hand require huge investments, often not fundable through property taxes and other local funding sources alone. Grant funding is highly competitive and applications are lengthy and complex. If funding is approved for a project, the grant funds are often highly restrictive in terms of activities and time frame. It is also challenging for municipalities to keep match funds on hand while awaiting grant decisions and nearly all government funding requires match.

It was noted that technical expertise and knowledge of environmental issues varies widely among municipalities. PFAS was specifically mentioned as an example of an important emerging issue.

A few respondents pointed to weak, insufficient and/or unclear policies governing land use, pollution and water intake protection zones as an area for improvement. A specific example raised was cities' inability to use existing green space (ex: public parks) to temporarily store rainwater during heavy precipitation events. Lack of authority over making policy that impacts local water management was also raised as a concern.

III. Gaps and Opportunities

Based on this initial research, there are several opportunities for the Cities Initiative to support its Ontario Members with the issues identified through its policy and programming efforts.

Policy opportunities include continued engagement with the federal and provincial governments regarding funding for source water protection and water infrastructure. Further, there is an opportunity to relay the challenges members are facing with the grant application process, including simplifying and expediting the process for allocating project funding. Finally, more research is needed on problematic and unclear policies governing source water protection, water pollution, stormwater management and local authorities' capacity to impose rules on developers and industries.

Program opportunities are grouped into five themes below and include education, direct interventions, referrals, small grants and communication campaigns. Most opportunities relate to source water protection. The Cities Initiative's ability to deliver on some of the programming outlined will depend on grant funding made available by governments and other funders.

1. **Education:**
   - Government relations coaching/training
   - Development and sharing of best management practices, innovation collaboration, etc.
   - Educational resources, including around PFAS, holistic green infrastructure and road salt
   - Resources to support municipalities in navigating the current grant application and management processes

2. **Direct interventions:**
   - Providing letters of support to municipalities applying for water infrastructure and source water protection funding programs
   - Supporting on-the-ground projects, through collaboration, planning and/or implementation, for example:
     - Serving as the lead applicant on a federal or provincial grant and supporting a bundle of members directly. Some initial ideas include technology development (e.g. low cost PFAS detection), asset mapping, source water planning, small-scale nature-based source water protection (e.g. plastic cleanups) or stormwater management (e.g. GSI designs).
     - Working with municipalities on public stewardship and water management on private lands (e.g. wells, pollution reduction incentives)
     - Bundling municipalities working on similar projects for joint requests around funding

3. **Referrals:**
   - There are various models for this, but the primary goal would be to connect municipalities needing a specific water protection or infrastructure service with service providers

4. **Small grants:**
   - Launching a fundraising campaign to develop a small grants program, to which members could apply for start-up project funds or match funds for a grant
   - Raising awareness of the current Wege Small Cities Sustainability Best Practices Award, already offered on an annual basis to Cities Initiative Members with a population of less than 100,000

5. **Communication campaigns:**
   - Raising public awareness of the value of clean water, including municipal efforts to deliver these essential services and how Ontarians can protect source water by diminishing pollution sources or adapting their homes to contribute to stormwater absorption on their property
   - Showcasing innovative local efforts to address water equity issues

IV. Next Steps

The Cities Initiative greatly appreciates the contributions of staff and mayors who participated in this consultation. Based on the feedback received, we will:

a. **Promote public funding opportunities to Cities Initiative Members** and explore ways to support municipalities' own applications – including educational webinars and letters of support.
b. Leverage this consultation to **apply for upcoming grant opportunities**, given Member interest in programming that supports their challenges and ambitions around source water protection and water infrastructure modernization. Upcoming funding opportunities include the Government of Ontario's Great Lakes Local Action Fund, due this September and the next intake of the federal Great Lakes Freshwater Ecosystem Initiative, expected in early 2025. Cities Initiative Members may be approached to become candidate cities for project implementation, for letters of support and/or funding matching.
c. **Convene the Mayors Commission on Water Equity** to discuss the findings of this consultation and further refine Cities Initiative recommendations to the federal and provincial governments in the context of pre-Budget consultations, ongoing negotiations around the next Long-Term Infrastructure Plan and upcoming election campaign commitments.
d. **Develop additional program and education resources**, including webinars and guides and explore additional fundraising opportunities to support enhanced programming in these critical areas.
e. **Further engage Cities Initiative Members at the staff level** to gather technical information, refine policy recommendations and consult on our ongoing program development.
f. **Build and update best practices resources** around source water protection, water infrastructure, stormwater management and project applications

ANNEX

METHODS

The Cities Initiative solicited input from Ontario Members through a virtual roundtable and follow-up web survey, targeting municipal staff who work in water, environmental and infrastructure departments and are knowledgeable of local priorities, grant history and municipal project developments. The roundtable, on July 18, 2024, hosted more than 60 municipal staff and three mayors. Cities Initiative staff facilitated four breakout discussions by topic (source water protection and water infrastructure) and municipality size (cities with populations under 100,000 and greater than 100,000). Facilitators spent up to 70 minutes with participants, asking a series of questions. Participants were invited to respond verbally and/or by writing and posting sticky notes using the Jamboard interface. Facilitators took notes live and consulted recordings to fill in any gaps. Facilitators grouped responses and notes by themes/topics for analysis.

Following the roundtable, the Cities Initiative circulated a short survey to participants and other relevant municipal staff in the region. The survey had 10 respondents. Responses from the survey were analyzed in conjunction with data collected from the roundtable.