

# Canadian Water Network **BLUE** **CITIES** 2023

## Program

Tuesday, October 24

8:00 AM Registration and breakfast

8:45 AM Conference welcome

Nicola Crawhall, CEO, Canadian Water Network

9:30 AM Opening remarks

To be announced

10:00 AM Plenary 1 — National dialogue: Servicing the demand for dense urban growth

The housing affordability crisis, climate change, increased immigration, aging infrastructure and urban densification are forcing a rethink of conventional urban planning and water management. Join us for a candid dialogue with senior decision-makers from the federal government, the development community and a leading municipal utility about forging a shared vision and an aligned approach to urban growth and water servicing in the face of mounting challenges.

11:00 AM Refreshment break

11:30 AM Plenary 2 — National dialogue: The future of wastewater-based surveillance in Canada

During the COVID-19 pandemic, cross-sector partnerships involving academic researchers, labs, governments, wastewater utilities and public health sprang up across Canada to track community infection levels and variants using wastewater-based surveillance. Post-pandemic, there is growing interest in expanding this non-invasive surveillance method for other pathogens and targets like antimicrobial resistance, opioids and illicit drugs. Take a front-row seat as an esteemed panel of experts explores the question: How can we sustain and expand wastewater-based surveillance to benefit public health decision-making?

12:30 PM Lunch

1:30 PM Concurrent Sessions

<i>1A — Innovations in risk management</i>	<i>1B — Servicing cities sustainably through cross-sector collaboration</i>	<i>1C — Workshop: Integrating wastewater-based surveillance into public health systems</i>
Changing climates and financial pressures are real threats faced by municipalities across the country. How are water and wastewater utilities meeting their responsibility to protect communities from such threats? This session will engage municipal water leaders and solution providers to share innovative planning approaches, tools and partnerships that have helped utilities effectively manage risk portfolios in urban and rural communities.	Let’s take a deeper dive into sustainable servicing for densifying cities. Building on perspectives shared in the opening plenary national dialogue, audience members will contribute to this conversation on navigating barriers and identifying opportunities for cross-sector collaboration. Outcomes of the dialogue will be captured in a white paper focused on innovative ways to work across silos to deliver water services more sustainably.	This interactive workshop will examine opportunities to make wastewater-based surveillance a sustainable part of Canada's public health surveillance landscape. Building on the opening plenary national dialogue about the future of wastewater-based surveillance in Canada, discussions will explore partnership models, regulatory requirements and guidance, interpretation and integration with other public health surveillance, and the potential to inform public health interventions. Share your perspective on a roadmap for integrating wastewater-based surveillance into our public health surveillance systems.

3:00 PM Refreshment break

3:30 PM Concurrent Sessions

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<i>2A — Sharing risks and benefits: Moving forward with One Water</i>	<i>2B — Workshop: Building a roadmap to net-zero wastewater</i>	<i>2C — The value and ethics of targeted wastewater surveillance</i>
Municipal water managers face a myriad of complex and evolving challenges to deliver water, wastewater and stormwater services to protect and enhance communities. Shifting our water management approach to reflect its interconnected nature can lead to synergies and efficiencies, such as enabling better coordination of capital investments and opportunities for water reuse. With a One Water approach, the benefits, costs, and risks of municipal water management have the potential to be more effectively shared across the water cycle, and beyond. We will hear from municipal water leaders and experts about their experiences integrating water services and innovative solutions to the organizational and technical challenges encountered.	Wastewater and capital works are among the most significant energy users in municipal operations. To stay in the international #racetozero and ultimately achieve #netzerowater, Canadian municipalities and utilities must rethink their approaches to wastewater system construction, collection, treatment and discharge. This session will highlight domestic and international developments in the net-zero movement. Participants will engage in a workshop-style discussion about incorporating changes in asset management and capital plans, Environmental Assessments, design and procurement specifications, and other systems. These conversations will lay the groundwork for a Canadian roadmap to achieve carbon-neutral wastewater utilities.	Marginalized communities are often disproportionately affected by public health threats. While wastewater-based surveillance might help mitigate the oversized impact of these threats, implementation without considering ethics and equity could cause harm through stigmatization and broken trust in the health system. Community leaders and ethics experts will share best practices for building trust and creating partnerships to ensure that wastewater-based surveillance is undertaken in a spirit of collaboration and cultural competence. Learn ways to ensure that wastewater-based surveillance findings are interpreted with sensitivity and effectively communicated to the communities involved.

5:00 PM Conference break

6:00 PM Welcome Reception | Sponsored by Stantec

8:30 PM Blue Networking (offsite) | Sponsored by Genome Canada

This event is open to the GTA water community – conference attendance is not required.

Sponsored by Genome Canada

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Wednesday, October 25

7:00 AM Optional pre-breakfast workshop: Asset-based climate adaptation planning

Sponsored by Matrix Solutions | Light refreshments will be provided.

As Canadian infrastructure managers work to identify their community’s climate risks affecting water infrastructure, they must consider the broader context of how climate adaptation fits within existing plans and programs. This workshop will highlight learnings from developing the City of Guelph’s Climate Adaptation Plan, designed to align with the City’s Asset Management Plan. Discussions will focus on water-related assets, cutting across departments responsible for built infrastructure (stormwater, wastewater and water services) and natural infrastructure (parks, planning and building services). Workshop participants

will learn about Guelph’s stakeholder engagement approach and share ideas about integrating climate adaptation within organizational processes and infusing climate risk thinking into all facets of community planning.

8:00 AM Breakfast

8:45 AM Welcome Remarks

Carl Yates, Chair, Canadian Water Network

9:00 AM Lightning talk

Sheila Block, Senior Economist, Canadian Centre for Policy Alternatives

It’s budget planning time! Here’s what you need to know about the economic and fiscal forecast. The past few years have been a period of economic disruption and rapid change. We have moved from a shutdown of the economy, which was required to protect public health, to a rapid recovery period. We have seen higher inflation and interest rates than we have seen in over a decade. We have also seen higher job vacancy rates and lower unemployment rates. As Canada hovers on a razor’s edge of falling into recession, Sheila Block will provide an overview of the current economic conditions and what is expected to come.

9:30 AM Concurrent Sessions

<i>3A — Framework for measuring climate resilience: forging the links between infrastructure and insurance premiums</i>	<i>3B — Water equity: Opportunities and solutions</i>	<i>3C — Water utility and public health decision-making in the face of natural disasters</i>
In 2019 and 2020, CWN worked with IBC to identify a framework needed to recognize municipal investments in flood protection and have them reflected in insurance premiums. Now, with the renewal of federal infrastructure programs and the pending launch of a national high risk flood insurance program, there is greater urgency to implementing this framework. However we’re facing important questions as we design it. How do we create a framework for measuring changes in neighbourhood climate resilience in a way that incentivizes protection. How do we ensure municipalities have ‘ownership’ of the result and aren’t punished for sharing their data? How do we ensure that community resilience measures don’t lead to changes in housing value. Join this session to hear different perspectives on the need for this framework and the pitfalls we need to avoid in creating it.	Water equity includes equitable access to the social, environmental and economic benefits of well-functioning, safe, affordable and climate-resilient water systems. As Canadian utilities move toward full-cost recovery, innovative solutions and other advancements, are we leaving some residents behind? Join the culmination of a conversation on water equity that CWN has hosted among members for the past two years and learn from utility leaders and solution providers working in this space. Takeaways will include approaches for supporting low-income customers, opportunities to collaborate with social service providers, and strategies to protect citizens from threats to water security.	The incidence of forest fires and floods in Canada is increasing due to climate change. Together, water utilities and public health agencies must make decisions quickly with far-reaching implications, often with limited data or information. Join water utility and public health officials and researchers who have been at the forefront of responses to natural disasters. They will reflect on challenges and lessons learned about short-term and longer-term threats to drinking water, as well as gaps in information flow and communication amongst decision-makers.

10:45 AM Refreshment break

11:15 AM Concurrent Sessions

<i>4A — Weaving grey, green and blue infrastructure to build resilience</i>	<i>4B — Facilitated discussion: Engaging Indigenous perspectives in urban water servicing</i>	<i>4C — How can advances in environmental water monitoring support public health decision-making?</i>
The future of municipal water infrastructure is grey, green and blue! The release of Canada’s first National Adaptation Strategy provides a backdrop for this discussion about how collaboration, knowledge mobilization, tools, technologies and frameworks can help municipalities and water utilities adapt to changing climate conditions. Session panellists will share examples where combinations of green, grey and blue infrastructure solutions are being used to build resiliency and provide sustainable water servicing in the face of future climate risks.	In the spirit of reconciliation, Canadian utilities want to build meaningful collaborations with Indigenous peoples. How are utilities engaging with urban Indigenous residents and adjacent Indigenous communities on water-related issues? How can Indigenous perspectives and expertise be incorporated into strategic planning and decision-making? This interactive discussion will bring together municipal and Indigenous perspectives to share best practices for advancing technical and operational utility management in a way that supports Indigenous engagement and reconciliation with Indigenous peoples.	This interactive session will bring together experts to present advances in monitoring methods (e.g., genomic sequencing, spatial analysis, etc.) to track pathogens, contaminants and illicit drugs in water and wastewater. The session will also explore how these methods can be combined with other public health surveillance data to inform public health decision-making and interventions.

12:30 PM Lunch and Closing Keynote

Sponsored by Xylem

1:30 PM – 1:45 PM Closing Remarks