

The Blueprint – Guelph’s One Water Plan

An Integrated Water Management Strategy

Engagement Summary Report & Appendices

	Author	Date	Reviewer/Approver	Date
Name	Hasnaa Maher Community Engagement Specialist (LURA)	2026-08-25	David Van Vliet Principal Water Resources Engineer (Onterris)	2026-08-27
Signature				

The Blueprint – Guelph's One Water Plan

An Integrated Water Management Strategy
Engagement Summary Report



Guelph

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1 Executive Summary

The City of Guelph undertook a series of engagement activities in 2024, 2025 and 2026 to inform the development of The Blueprint: Guelph’s One Water Plan (The Blueprint), an integrated strategy for managing drinking water, wastewater and stormwater resources. Engagement activities were designed to:

- build awareness of the One Water approach,
- gather community perspectives on water conservation initiatives, and
- explore opportunities for innovative water reuse and efficiency programs across residential, institutional and industrial sectors.

A combination of public engagement, targeted sector engagement, and community outreach activities were facilitated, including Indigenous engagement, a public open house, online surveys, pop-ups at major community events, as well as stakeholder and staff workshops. Across these activities, participants expressed strong support for strengthening water conservation initiatives, improving public awareness of existing programs, and exploring opportunities for stormwater reuse, greywater systems, and green infrastructure.

Feedback highlighted several consistent themes, including:

- **Indigenous Knowledge** - Integrate Indigenous perspectives, cultural values, and relationships with water into planning and decision-making.
- **Public Awareness and Engagement** - Improve water literacy, expand outreach, and use clear, interactive messaging to encourage conservation across residents, businesses, and schools.
- **Innovation and Technology** - Advance water efficiency through greywater/purple pipe reuse, decentralized systems, advanced metering (AMI/AMR), AI leak detection, and smart infrastructure.
- **Targeted Programs and Incentives** - Strengthen industrial, commercial, institutional (ICI), and residential programs with tailored support, financial incentives, recognition programs, and simplified processes to increase participation.
- **Sustainability and Operational Alignment** - Optimize water use, support circular systems, and align with climate resilience, environmental protection, asset management, equity, and broader City initiatives for long-term impact.

This report documents the overall project engagement and summarizes the feedback received. It was prepared by LURA Consulting, the independent engagement team retained to deliver community and stakeholder consultation.

Detailed event summaries are included in this memo’s Appendices.

2 Project Overview

2.1 Project Description

The City of Guelph is committed to sustainable water management through the coordinated delivery of drinking water, wastewater and stormwater services. These services are critical to maintaining reliable infrastructure, protecting natural resources and ensuring long-term environmental sustainability.

The Blueprint: Guelph’s One Water Plan applies a One Water approach: developing an integrated water management strategy which considers all water resources as part of a single interconnected system. This approach enables the City to improve water efficiency, reduce consumption and enhance resilience to climate and growth pressures.

Population and employment growth projections under Official Plan Amendment 80 indicate that Guelph is expected to reach approximately 208,000 residents and 116,000 jobs by 2051. As the city grows, managing water resources sustainably becomes increasingly important.

The Blueprint supports the Future Guelph Strategic Plan by identifying opportunities to conserve water resources, reduce system demand and protect the City’s groundwater supply.

2.2 Communications and Engagement Process

The engagement process combined in-person events, such as an Indigenous-led One Water Journey event, a public open house, festival pop-ups and online surveys, as well as targeted stakeholder and staff workshops, to gather input from a diverse range of community participants. This multi-channel approach enabled the project team to engage residents, businesses, organizations and institutional partners.

Engagement activities were designed to support the development of The Blueprint by:

- Raising awareness about the One Water approach;
- Providing information about the City’s existing water conservation programs;
- Gathering community feedback on water conservation initiatives;
- Identifying opportunities for innovative water reuse and efficiency programs;
- Understanding challenges and opportunities related to water management across residential and industrial, commercial, institutional (ICI) sectors; and,
- Strengthening collaboration between the City, community members and external partners.

A summary of engagement activities and feedback collected is presented in the following sections.

2.3 Engagement Methods

The following engagement methods were undertaken:

- One Indigenous-led One Water Journey event;
- One in-person Public Open House (POH);

- Two large local community event pop-ups;
- Two online surveys;
- Two innovator stakeholder meetings; and
- Three staff workshops.

Over 200 participants contributed to The Blueprint by providing input on water management goals, risks, promising practices, and strategies for conservation and engagement.

2.4 Indigenous Feedback

On May 31, 2025, the City of Guelph hosted an Indigenous-led One Water Journey event along the Eramosa River near *Where the Rivers Meet*. The event was led by Gimaa Stacey Laforme, with support from Kelly Laforme from Mississaugas of the Credit First Nation (MCFN), and Wendy Jocko, and Cassidy Herman of Innovation 7. Sixty-eight community members attended, participating in a water honouring ceremony and a tobacco offering, followed by an Indigenous-catered meal at Guelph City Hall. The event provided an opportunity to integrate Indigenous perspectives, histories and cultural practices into the project, while allowing attendees to learn about the strategy and share their insights on water stewardship.

Prior to the Indigenous-led One Water Journey, the City issued project notices to the MCFN, Six Nations of the Grand River (SNGR) and the general public, informing them of project milestones and opportunities to participate. Both MCFN and SNGR expressed interest in the strategy’s development and requested a review of the final drafts of Technical Memo 3: Strategic Direction and Technical Memo 4: implementation plan.

The City sent the final draft of Technical Memo 3 to MCFN and SNGR for review on July 10, 2026. Feedback received through this review will be incorporated into the City-produced final report for The Blueprint. The final report will include the strategy’s implementation plan. A final draft of the implementation plan will also be sent to both treaty partners for a 60-day review. The City will review and consider all feedback provided on the implementation plan and incorporate it into the final version of the final report.

2.5 Public Feedback

2.5.1 Public Open House and Online Survey

On February 5, 2025, a Public Open House for The Blueprint was held at Guelph City Hall. Seven (7) participants attended in person. The event provided an opportunity for participants to learn about the City’s integrated water management strategy, explore project materials and engage directly with the project team through displays and one-on-one discussions. The Open House aimed to generate awareness of the One Water concept and allow the community to ask questions in an interactive setting.

Following the Open House, the City of Guelph hosted an online survey via the Have Your Say page from February 5 to 26, 2025. Eighteen (18) participants submitted responses.

2.5.2 Community Pop-Ups and Online Survey

On June 14 and August 23, 2025, pop-up engagements were held at the Guelph Multicultural Festival and Guelph Ribfest to raise awareness for The Blueprint and to gauge community comfort with various water reuse and fit-for-purpose applications. Approximately eighty (80) participants visited the pop-up displays, where they could learn about Guelph’s water system, explore project materials and provide informal feedback through conversations with the project team. The pop-ups were designed to engage the public in an accessible, interactive format, allowing participants to ask questions, share perspectives and explore the concept of water reuse and conservation in a hands-on setting.

Following the pop-ups, an online survey was hosted on the City’s Have Your Say platform from June 27 to July 21, 2025. Twenty-six (26) participants submitted responses, taking the opportunity to review project information and provide input on their comfort levels with potential water reuse and repurposing applications.

2.6 Stakeholder Feedback

2.6.1 Innovators Workshops

On January 28, 2025, the first Innovators Workshop took place at Guelph City Hall. It brought together representatives from the ICI and multi-residential sectors, alongside City staff. The session combined a presentation on the One Water approach, existing programs and water conservation strategies with facilitated discussions exploring challenges, pressures and opportunities for water management in ICI settings. Fifteen (15) participants engaged in small-group discussions and shared insights on sector-specific needs, potential incentives and collaboration opportunities.

The group met again on October 29, 2025, virtually via Zoom, where the project team presented the draft recommendations. The session included a project refresher, an overview of proposed strategies and facilitated discussions on refining programs such as the Water Smart Business program and high-volume user engagement. Eight (8) participants actively contributed to the discussion, offering insights to improve program design, customer engagement approaches and recognition strategies.

2.6.2 Staff Workshops

On October 31, 2024, at Guelph City Hall, the first staff workshop brought together City of Guelph staff from water, wastewater, environmental, engineering, planning, communications and finance divisions. The session provided a project overview, vision and goal setting, and an introduction to One Water principles emphasizing sustainability, equity and Indigenous knowledge. Eighteen (18) participants discussed project goals, identified risks to successful implementation and established criteria for evaluating potential initiatives.

The group met again on November 26, 2024, to review feedback from the first workshop, discuss current conservation and efficiency initiatives, and explore new water demand reduction opportunities. Twenty-four (24) staff participants analyzed existing ICI programs, rebates, leak detection and sub-metering initiatives, identifying improvements such as sector-specific approaches, enhanced outreach, sustainable funding and simplified engagement tools.

The third and final workshop was held on October 10, 2025, and focused on refining the strategic direction for One Water implementation. Twenty-four (24) staff participants reviewed lessons from leading municipalities and local trades, emphasizing integrated governance, data-driven decision-making, and social and regulatory considerations.

2.7 Communication and Reach

2.7.1 Communication Methods

The City of Guelph used various methods to advertise the project. The communication component of the engagement plan was led by City staff and informed by key messages and content prepared by the consultant team.

The following is an overview of the communication channels that were used to promote participation:

- **Digital Channels**
 - City websites: Information shared on the City’s webpages on guelph.ca and the Have Your Say subsite.
 - Social media: Information shared on the City’s accounts on Facebook, Instagram, X and LinkedIn.
 - Direct emails: Sent to the City’s email contact list and project subscribers.
- **Print and Out-of-Home**
 - Posters: Displayed at City facilities and community spaces.

These combined channels were intended to ensure broad community awareness of the plan and provide multiple avenues for residents to participate in the engagement process.

2.7.2 Engagement and Reach

Table 1: Summary of engagement activities.

Engagement Activity	Date	Location or Format	Attendance/ Response
Indigenous Feedback			
Indigenous-led One Water Journey Event (1)	May 31, 2025	Eramosa River near <i>Where the Rivers Meet</i>	68
Public Feedback			
Public Open House (1)	February 5, 2025	Guelph City Hall	7
Community Pop-Ups (2)	June 14, 2025	Guelph Multicultural Festival	50
	August 23, 2025	Guelph Ribfest	30
Online Surveys (2)	February 5 to 26, 2025		18

Engagement Activity	Date	Location or Format	Attendance/ Response
	June 27 to July 21, 2025	Guelph’s Have Your Say page	26
Stakeholder Feedback			
Innovators Workshops (2)	January 28, 2025	Guelph City Hall, Meeting Room C	15
	October 29, 2025	Online via Zoom Meeting	8
Staff Workshops (3)	October 31, 2024	Guelph City Hall, Meeting Room C	18
	November 26, 2024	Guelph City Hall, Meeting Room C	24
	October 10, 2025	Guelph City Hall, Meeting Room C	24
TOTAL			288

**Individuals may have contributed through multiple channels, and as such, counts may include overlapping participants and should be considered approximate.*

3 What We Heard

This section summarizes the key themes heard throughout the different engagement methods. The summary reflects the main points shared and is not intended to be a verbatim transcript.

3.1 Indigenous Engagement and Indigenous-led One Water Journey Event

Engagement with Indigenous communities through the Indigenous-led One Water Journey event emphasized the importance of integrating Indigenous knowledge, values and relationships with water into Guelph’s water management planning. Participants highlighted the spiritual, cultural and ecological significance of local waterways, noting that rivers, wetlands and groundwater are considered living entities. They recommended incorporating traditional teachings into water conservation and watershed protection programs and ensuring ongoing consultation with Indigenous communities in planning decisions.

3.2 Public Feedback

3.2.1 In-Person Public Open House and Survey

Participants shared feedback on existing City water conservation programs and ideas for improving water sustainability in Guelph. Overall, participants were most familiar with programs such as the Water Wagon, the Outside Water Use program, the Healthy Landscapes program and the Royal Flush Toilet Rebate program, with about half reporting that they had participated in some of these initiatives. Participants suggested increasing outreach and public education to improve awareness of available programs and emphasized the importance of incentives to encourage sustainable

water use, such as promoting drought-resistant landscaping and reducing outdoor water consumption. Many participants also supported expanding innovative approaches to water management, including stormwater capture, greywater reuse, rain gardens, permeable surfaces and advanced water monitoring systems. Additional feedback highlighted the need for stronger partnerships with organizations such as the Grand River Conservation Authority, greater collaboration with developers to incorporate water-efficient infrastructure in new developments and policies that support long-term water conservation. Participants also expressed interest in additional residential, business and school-based programs that encourage water reuse, green infrastructure and water conservation education.

3.2.2 Community Pop-Ups and Survey

Feedback gathered through the pop-up engagements provided insight into community awareness of Guelph’s water system and comfort with potential water reuse applications. Many participants were unaware that Guelph relies on groundwater as its primary water source. There was general support for using treated stormwater or greywater for non-potable applications such as street cleaning, dust control, fire hydrant supply and cooling systems in large buildings. However, some concerns were noted for household uses where residents could make direct contact with treated stormwater or greywater, such as laundry or dishwashing, noting they were adverse or would need more information about water treatment processes before feeling comfortable.

3.3 Stakeholder Feedback

3.3.1 Innovators Workshops

The purpose of the first workshop was to understand challenges, pressures and motivators for the ICI sectors related to water management. Participants included facilities and sustainability managers and representatives from local businesses, institutions, school boards, post-secondary schools, and multi-residential property management companies; representatives from energy and hydro utilities; entrepreneurs working locally in water and energy sustainability capacities; and from the Conservation Authority. The event was supported by City representatives from Energy and Climate, Economic Development, Communications and Community Engagement, and Environmental Services; as well as consulting project team members.

These participants highlighted a mix of holistic and fragmented approaches to managing water, wastewater and stormwater. Some organizations are moving toward integrated sustainability strategies that overlap with and incorporate some One Water aspects including sub-metering and efficiency initiatives, while others still manage water separately due to operational, financial or regulatory constraints. Participants identified several pressures affecting water conservation efforts, including funding limitations, aging infrastructure, regulatory barriers and limited awareness of available programs. Key challenges included difficulty demonstrating return on investment for water initiatives, lack of accessible data and technology tools, and navigating City services. Participants suggested improving support through clearer information, ROI tools, centralized resources and targeted programs for different sectors. Incentive opportunities included financial rebates, public recognition programs, comparative water-use data and stronger collaboration between the City and businesses. Overall, participants emphasized the importance of integrating water management into broader sustainability and business strategies, strengthening

partnerships and prioritizing retrofits and innovative solutions to improve water efficiency across sectors.

The aim of the second workshop was to review and gather insights on proposed recommendations. Participants generally supported the proposed customer engagement approach and the expansion of the Water Smart Business Program, emphasizing the importance of a more integrated and data-informed strategy to support water conservation in ICI sectors. Participants recommended linking water efficiency with energy and waste reduction initiatives, providing stronger financial incentives and simplifying application processes to encourage participation—particularly among high-volume water users. They highlighted barriers such as upfront costs, regulatory and administrative challenges, limited building-level data and coordination across departments. Participants also supported expanding the Water Smart Business program to include ongoing audits, customized assessments and continued engagement after initial evaluations to ensure recommendations are implemented. Additionally, participants noted the value of recognition programs, such as case studies, awards and public acknowledgment, which could help showcase best practices, strengthen corporate sustainability narratives and encourage broader participation in water conservation efforts.

3.3.2 Staff Workshops

At the first staff workshop, participants discussed the project’s goals, risks, evaluation criteria and promising practices for the plan. Overall, participants noted that the proposed goals were broad and recommended refining them to better distinguish between overarching objectives and implementation strategies, while strengthening priorities such as education and communication, internal and external collaboration, and awareness among Council and decision-makers about the importance of water as a foundational resource. Participants emphasized the need to align the plan with related City initiatives, including asset management, climate adaptation, housing growth and equity considerations, while also adopting a more customer-centric approach to water conservation and exploring opportunities for water reuse, circular systems and Indigenous ways of Knowing–Being–Doing. Key risks identified included limited resources, competing priorities, regulatory barriers, misalignment between housing growth and water supply, and potential public misunderstanding if the purpose and benefits of the plan are not clearly communicated. Participants identified environmental protection, water savings and long-term sustainability as the most important criteria for evaluating initiatives and highlighted several promising practices for further exploration, including expanded water reuse opportunities, innovative stormwater management approaches, stronger asset management practices, enhanced public education programs, and investments in technologies such as advanced metering infrastructure and leak detection systems to improve water efficiency and monitoring.

The second staff workshop allowed participants to discuss opportunities to strengthen both existing and new water conservation initiatives. Discussions highlighted several current practices, including targeted programs for ICI users, leak detection initiatives and sub-meter installations, while identifying opportunities to improve rebate programs such as Royal Flush and Blue Built Homes through stronger incentives, streamlined access and integration with water audits. Participants emphasized the importance of sustainable funding, improved partnerships with contractors and trades, and more effective marketing and outreach to expand program awareness

and participation. They also highlighted the need for stronger engagement with residents, including renter-friendly programs, improved water literacy and proactive approaches to identifying residential leaks. In terms of new initiatives, participants discussed innovative approaches such as decentralized water systems for new developments, expanded water reuse through purple pipe systems and the use of smart technologies, including advanced metering, AI-powered leak detection and pressure management to improve monitoring and reduce water loss. Additional ideas included tiered rate structures to incentivize conservation, in-person engagement strategies to drive behavioural change, enhanced bylaw enforcement and partnerships with developers to support water-efficient infrastructure in affordable housing.

At the third and final staff workshop, the discussion focused on greywater and purple pipe systems, indirect conservation programs and AMI/AMR smart metering. Conversations about greywater reuse highlighted both opportunities and barriers to implementing decentralized reuse systems, including regulatory constraints, developer concerns regarding maintenance and ownership responsibilities, and the need for clearer policy frameworks. Staff identified opportunities to integrate reuse strategies into master planning and green development standards, explore pilot projects such as cooling tower reuse, conduct feasibility studies on recycled water volumes, and position the City as a leader by implementing reuse systems in municipal facilities. Discussions on indirect programs emphasized the importance of improving water literacy and public engagement through clearer messaging, expanded outreach and partnerships with schools, community organizations and businesses, while recognizing challenges related to communication capacity, equity considerations and limited data to measure behavioural change. Participants also highlighted opportunities to use targeted engagement strategies, surveys and educational tools to reach new audiences and improve awareness of water conservation practices. Finally, discussions on AMI/AMR smart metering focused on the potential for advanced data systems to improve leak detection, demand management and system integration across water and wastewater services. While participants identified concerns related to privacy, equity, staff capacity and securing council support for infrastructure investments, they also noted opportunities to expand smart metering coverage, integrate data platforms within a broader “One Water” framework and enhance customer engagement through apps, alerts and data visualization tools that promote water and cost savings.

4 Next Steps

With the technical memos comprising The Blueprint now complete, the City will produce a final report articulating an implementation plan and summarizing memos 1, 2, 3, and 5. When the final report is complete, it will be presented to Guelph City Council for consideration.

The Blueprint – Guelph's One Water Plan

An Integrated Water Management Strategy
Engagement Appendices

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1. Indigenous Engagement Summary

The Blueprint embedded Indigenous engagement as a core principle of the project's development. The City notified, informed and engaged Mississaugas of the Credit First Nation (MCFN), Six Nations of the Grand River (SNGR) and local residents throughout the project, announcing the launch, key milestones and project conclusion. The City hosted an Indigenous-led Water Walk-styled event to bring Indigenous voices, perspectives, histories and cultural elements into the project.

Engagement with Treaty Partners

The City sent letters to MCFN and SNGR on December 19, 2024, advising of the project's launch. These letters acknowledged deeply rooted Indigenous relationships to the water, provided a summary of deliverables and ensured that they would be kept informed and have opportunities to meaningfully engage throughout the project. Both SNGR and MCFN acknowledged their interest in the strategy's development, requesting final draft review of Technical Memo 3: Strategic Direction and Technical Memo 4: Implementation Plan.

Letters were also sent to MCFN and SNGR to notify them of the One Water Journey public engagement event in April 2025, and upon completion and publishing of Technical Memos 1: Situational Analysis.

The City will be sending the final draft of Technical Memo 3 to MCFN and SNGR for a 60-day review. Feedback received through this review will be considered for the City-produced Final Report for The Blueprint. The final report will include the strategy's implementation plan, which will be sent to both Treaty Partners for review. The City will review and consider feedback provided on the implementation plan and incorporate it into the final version of the final report.

One Water Journey Event Overview

The City hosted a Water Walk-inspired event on the banks of the Eramosa River near Where the Rivers Meet on the morning of May 31, 2025, engaging interested members of the public in a water honouring ceremony and, informing them of the strategy's development. The event also helped identify traditional knowledge and perspectives of water stewardship that can be adapted and incorporated into modern municipal water management.

Gimaa Stacey Laforme led the event with support from Kelly Laforme, Wendy Jocko and Cassidy Herman of Innovation 7. They provided historical and cultural background and context for event attendees and led a tobacco offering ceremony. In all, a combination of 68 urban Indigenous and settler community members attended the event and shared an Indigenous catered meal at Guelph City Hall after the water honouring ceremony. The event was well-received by community attendees, project team members and City staff. The City thanks all community members who attended the event, Gimaa Laforme, Kelly Laforme, Wendy Jocko, Cassidy Herman, C&A Culinary Services, Maxwell Dickomeit, the project team members and City staff who assisted in the planning and realization of the event.

2. Public Open House and Online Survey Summary

The City of Guelph hosted a Public Open House on February 5, 2025, from 4:30 to 6:30 p.m. at City Hall. The purpose of the Public Open House was to

- generate awareness and inform the public about The Blueprint project;
- develop a common understanding of the One Water concept;
- gather feedback on existing programs;
- collect ideas for innovative programs; and
- respond to questions or concerns.

The Public Open House shared information about the project and allowed the community to ask the project team questions. The [Have Your Say page](#) allowed the community to share additional feedback between February 5 and 26, 2025.

Seven people attended the Public Open House and 18 completed the online survey.

What we Heard

The following is a summary of feedback from participants who attended the Public Open House or completed the online survey. The results should be considered qualitative and not representative of all residents' perspectives. There is a low likelihood that the same individuals provided duplicate responses through both the Public Open House and the Have Your Say survey.

City Water-Related Programs

Participants were asked which City water conservation programs they were familiar with. The following feedback was received:

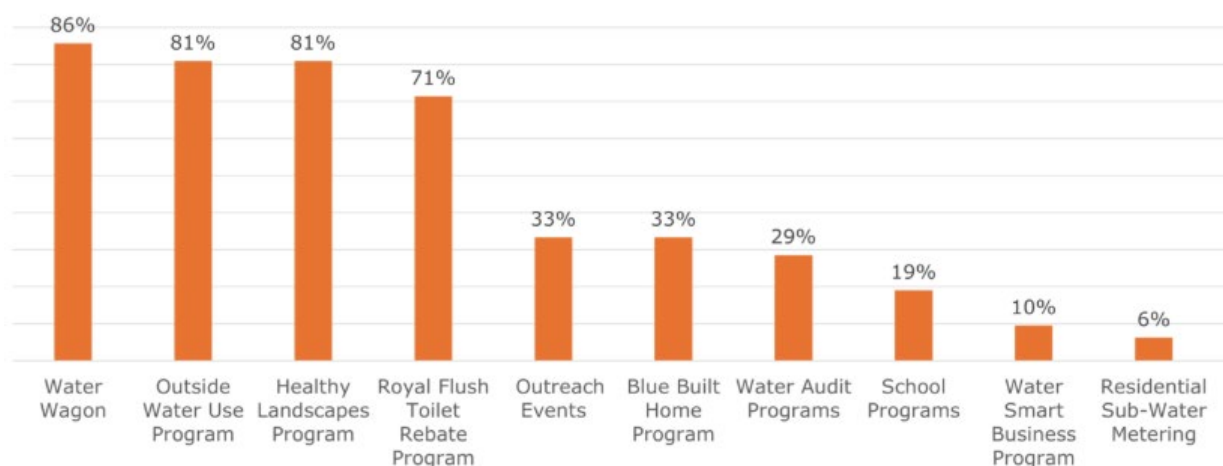


Figure 1 - Summary of City water conservation programs familiar to participants. (N = 21)

Figure 1 shows that most participants were familiar with “Water Wagon” (86%). Most participants were also familiar with the “Outside Water Use Program” (81%), “Healthy Landscapes Program” (81%) and “Royal Flush Toilet Rebate Program” (71%).

Survey participants were asked which City water conservation programs they participated in. The following feedback was received:

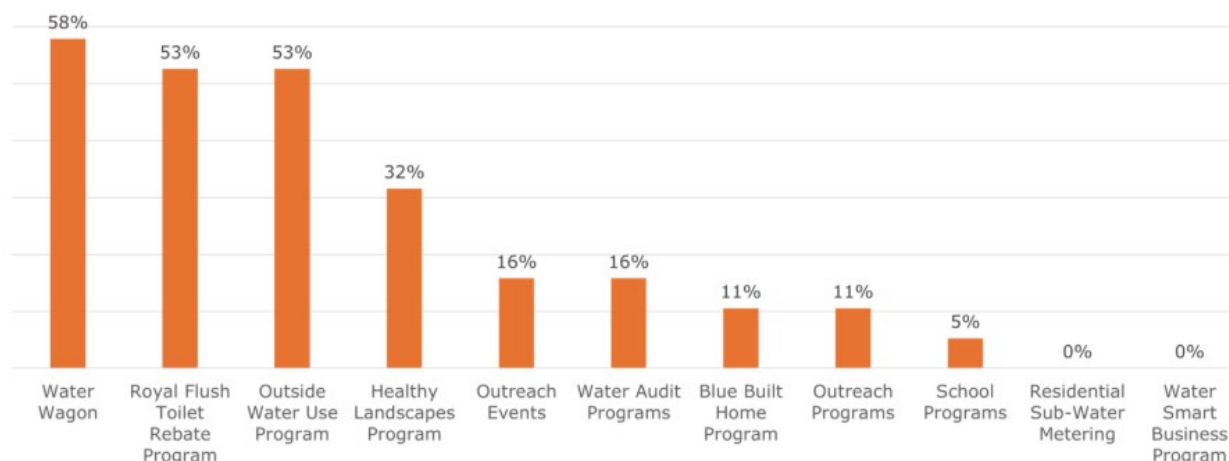


Figure 2 - Summary of City water conservation programs participants participated in. (N = 19)

Figure 2 shows that about half of the participants participated in “Water Wagon” (58%), “Royal Flush Toilet Rebate Program” (53%) and “Outside Water Use Program” (53%). About one-third had participated in the “Healthy Landscapes Program”.

Participants shared the following suggestions to improve these programs and encourage more participation:

- **Outreach and Education**
 - Increase advertising and public awareness efforts.
 - Use multiple communication channels, including City mailings, water bills, door-to-door brochures and prominent signboards in high water-use areas.
 - Ensure messaging considers the entire Grand River watershed, not just Guelph, to be more inclusive of surrounding municipalities.
 - Launch an information campaign to discourage bottled water purchases, especially given large-scale retail sales.
- **Incentivizing Sustainable Water Use**
 - Emphasize that these programs are free to encourage participation.
 - Introduce more programs to reduce lawn and garden watering needs, such as free mulch or drought-resistant grass seed.
 - Further reduce or eliminate outdoor water use (e.g., pressure-washing driveways, watering lawns during rain, automatic sprinklers, etc.).
- **Policy Updates**
 - Advocate for policies to limit bottled water extraction in the county (e.g., former plant in Aberfoyle).
 - Review and assess the impact of programs and consider making them mandatory for new buildings.

Innovative Ways to Reduce Municipal Water Consumption

Examples from New York City, Los Angeles and Denver were provided as examples of other cities taking innovative approaches to reducing their municipal water consumption.

Participants were asked which programs they believe will benefit Guelph's water systems. The following feedback was received:

- **Incentivizing sustainable water use**
 - Reward homeowners who actively reduce stormwater runoff (e.g., rain gardens, disconnected downspouts, etc.).
 - Incentivize re-wilding yards with native plants that require minimal watering, benefiting pollinators and biodiversity.
 - Promote water-saving habits as a community norm (e.g., Melbourne's approach with stick-on shower timers).
 - Increase awareness of water usage impacts on local ecosystems.
- **Partnerships and outreach**
 - Strengthen partnerships with the Grand River Conservation Authority (GRCA) to address off-site water impacts.
 - Encourage green infrastructure to enhance groundwater recharge and balance sustainability.
- **Water Reuse**
 - Implement water reuse systems for lawn watering and industrial purposes.
 - Explore options for stormwater management, including rain gardens and infiltration areas.
- **Advanced monitoring**
 - Introduce real-time water use billing and advanced metering for better data-driven decision-making.
 - Improve public education on water conservation using data insights.

Participants shared the following other innovative one-water programs from other cities they would like to see offered in Guelph:

- **Policy and planning**
 - Incentivize retrofitting of impermeable surfaces (e.g., driveways and parking lots) to improve water infiltration.
 - Shift toward on-site stormwater management instead of relying on large-scale end-of-pipe solutions.
 - Strengthen collaboration between city planners and developers to ensure water-efficient infrastructure is standard in new builds.
 - Prioritize long-term water savings over upfront costs, recognizing Guelph's reliance on underground aquifers.
- **Water Reuse**
 - Require greywater recycling systems in all new residential and commercial developments.

- Mandate rain gardens, xeriscaping and underground cisterns to capture and reuse stormwater.
- Ensure new buildings have downspouts that divert water from storm sewers into storage for reuse.
- **Global best practices**
 - San Francisco, USA: Distributed on-site water systems.
 - New York City, USA: Watershed protection initiatives.
 - Melbourne, Australia: Community-driven water conservation habits.

Ideas for Residential Water-Related Programs

Participants identified the following other water-related programs they would like to see offered for homes:

- **Greywater and rainwater reuse**
 - Support homeowners in retrofitting greywater systems for toilets and irrigation.
 - Provide incentives for rain barrels and alternative water capture systems beyond traditional barrels.
 - Mandate greywater collection in all newly built homes to reduce retrofitting costs.
- **Retrofits and rebates**
 - Offer financial support for converting driveways to permeable surfaces.
 - Offer rebates for shower conversions, encouraging homeowners to replace bathtubs with more water-efficient options.
 - Provide incentives for washing machines that allow rinse water to be reused.

Ideas for Businesses, Schools and Industry Water-Related Programs

Participants identified the following water-related programs they would like to see offered to businesses, schools and the industrial sector:

- **Policy and planning**
 - Ensure high water-use industries pay fair rates, preventing them from paying less per cubic meter than residents.
 - Scale up rainwater harvesting and greywater recycling for businesses, schools and industrial use.
 - Mandate free tap water access at public events and facilities (e.g., stadium parks) to reduce bottled water dependency.
- **Sustainable landscaping and infrastructure**
 - Implement green roof incentives.
 - Encourage businesses and schools to replace grass lawns with native, low-water plants to support pollinators.
 - Promote water-efficient fixtures like low-flow faucets, drip irrigation and water cisterns in commercial buildings.
- **Education**
 - Introduce school programs on water conservation to encourage sustainable habits early.

- Provide training and audits for winter salt management to reduce overuse and environmental impact.

Additional Feedback

Participants provided the following additional feedback:

- Ensure planned growth accounts for water demand and aligns with performance-based site plan requirements.
- Provide clearer graphics and data on water consumption, including why the reference year 2017 is being used, total daily water consumption in the city and a breakdown of residential vs. non-residential water use.

Demographics

Seventeen individuals completed the demographic questions. Ninety-four per cent (94%) “live in Guelph,” and six per cent (6%) identified as a student.

The age groups of survey participants are shown in the figure below:

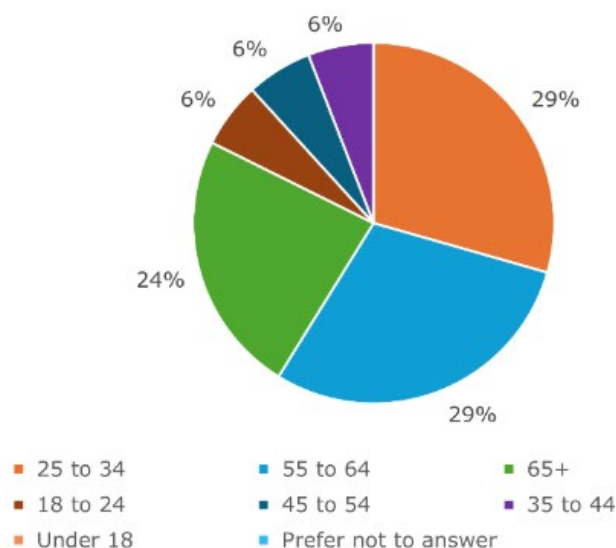


Figure 3 - Summary of participant ages. (N = 17)

Figure 3 shows that most participants were “25 to 34” (29%), “55 to 64” (29%) or “65+” (24%).

3. Community Pop-Ups & Online Survey Summary

Overview

On June 14 and August 23, 2025, the City of Guelph, Onterris Canada Inc. and LURA hosted two pop-up engagement events at the Guelph Multicultural Festival and Guelph Ribfest to inform community members of The Blueprint: Guelph's One Water Plan and gauge comfort levels with different fit-for-purpose water uses. During the engagements, people could learn about Guelph water and the project and provide any thoughts or feedback.

Participant Engagements

Approximately eighty (80) people stopped by the pop-ups. The following table summarizes the level of participation at each pop-up engagement.

Pop-up Engagement	Participation
Pop-up #1: June 14, 2025 (11 a.m. to 2 p.m.) at the Guelph Multicultural Festival.	Approximately 50 participants were engaged.
Pop-up #2: August 23, 2025 (11 a.m. to 2 p.m.) at Guelph Rib Fest.	Approximately 30 participants were engaged.



The project team had productive and engaging conversations with community participants that will help inform aspects of The Blueprint. Half the participants were unaware that Guelph uses groundwater as the drinking water supply. Many participants supported using treated stormwater or tested greywater for certain applications, such as street cleaning and dust control, supplying fire hydrants and cooling systems (in office buildings and hospitals), to name a few. Participants were more apprehensive about using treated stormwater or tested greywater for household activities, such as showering, laundry or dishwashing. Many participants would like more information about how stormwater or tested greywater would be treated before deciding whether to use it.

Online Survey

From June 27 to July 21, 2025, the City of Guelph, Onterris and LURA hosted a [Have Your Say](#) survey to gather input from Guelph community members on their comfort level around different potential water reuse and repurposing opportunities for stormwater and greywater in the City. The input from the 26 respondents helped gauge public support for various water-use applications and will inform The Blueprint. The survey results depicted strong support for fit-for-purpose water use when it is at a personal remove from them (e.g., supplying fire hydrants, cooling systems in office buildings,

street cleaning and irrigating sports fields). Comfort levels drop with more proximity to the individuals (e.g., supplying swimming pools, washing dishes and laundry).

4. Innovator Stakeholder Meeting Summaries

Meeting #1

Date: January 28, 2025

Time: 10 a.m. – 1 p.m.

Location: Guelph City Hall, Meeting Room C

Attendees: 15

Purpose:

- Share information about The Blueprint project, the integration of water management and the concept of One Water.
- Understand challenges, pressures and motivators for the ICI sectors related to water management.
- Consult collaborators about gap-filling and coordination between strategies.

Presentation

Introductions: The project team acknowledged the land and briefly introduced the project, then facilitated a round of introduction, followed by a review of the agenda and workshop purpose.

Overview and Purpose: The project team provided an overview of the One Water approach, explaining that the Water Research Foundation defines the term as “An integrated planning and implementation approach to manage finite water resources for long-term resilience and reliability meeting both community and ecosystem”. Project leads explained that The Blueprint will use this approach to achieve its key project goal of establishing a strategy to reduce water consumption as per the Water Supply Master Plan (2022). They then reviewed the six project tasks – Situational Analysis, Review of Initiatives, Strategic Direction, Implementation Plan, Stakeholder Engagement Summary and the Final Report.

Existing Programs and Incentives: The project team presented and explained existing programs, including direct and indirect water savings programs, Water Smart Business and the ICI Capacity Buyback Program.

Challenges and Opportunities: Project leads reviewed current challenges and opportunities by presenting a list of conservation and efficiency initiatives, including the 2022 Water Supply Master Plan (WSMP) Strategy and Update, reviewed the current progress of the Water Efficiency Strategy, including achievements in water reduction, municipal operations, water demand and the water loss management program, and reviewed annual residential water use trends between 2006 and 2023 and the projected average per capita water use.

Discussion

A brief discussion followed regarding reuse in municipal and residential buildings. Team members explained that rainwater harvesting exists for residential properties but not for municipal buildings

and noted that while there are rainwater rebates, they are limited and there is a significant opportunity to optimize water reuse. A 2017 transit system that uses rainwater to wash buses was highlighted.

The workshop format was introduced and five discussion questions focusing on identifying water management-related pressures, challenges and opportunities for incentivizing ICI and private sectors. The following summarizes the key discussion themes.

Holistic vs. Individual Water Management

Discussions regarding how organizations manage water-related issues revealed a mix of holistic and fragmented approaches. While some organizations integrate wastewater, water use and stormwater management, others manage them separately due to structural, financial or operational constraints. Key themes included the role of sub-metering, corporate sustainability goals, cost considerations and regulatory influences.

The following approaches to water and energy management were identified:

- **Environmental**
 - Organizations representing the innovation section—including the GRCA, Enviro-Stewards and REEP—are
 - Advocating for long-term sustainability across the watershed;
 - emphasizing collaboration between entities beyond municipal boundaries to address water supply and wastewater impacts;
 - integrating food loss, water and energy conservation; and
 - promoting the One Water approach and looking for efficiency opportunities across sectors.
- **Industry**
 - Organizations representing the industrial sector—including Gay Lea, Linamar and Magna—are
 - dealing with differing water management priorities across corporate, regional and operational levels;
 - managing water and energy separately but transitioning toward a more holistic approach;
 - striving to catch up to European water and energy sustainability standards in comparable industries; and
 - implementing sub-metering and exploring water recycling.
- **Institutional**
 - Organizations representing the institutional sector—including the University of Guelph and the Upper Grand District School Board—are
 - focusing on Net Zero initiatives, including geothermal heat pumps and low-flow fixtures;
 - implementing sub-metering across all buildings;

- implementing rainwater harvesting and exploring stormwater management; and
- educating the public on leak detection and water-saving initiatives.
- **Multi-Residential**
 - Organizations representing the multi-residential sector—including Skyline and Wellington County—are
 - considering all utilities when identifying conservation opportunities;
 - focusing more on energy conservation compared to water conservation efforts;
 - implementing sub-water metering in new buildings (with cost-prohibitive barriers for retrofitting older buildings); and
 - facing a siloed approach to conservation regarding water management for social housing.

Pressures

Discussions surrounding pressures affecting water conservation, wastewater and stormwater management for the ICI sector revolved around funding constraints, lack of awareness, regulatory barriers and technical difficulties. Organizations noted struggles with upfront costs, aging infrastructure and stormwater management innovations. Collaboration with the City, increased education and leadership support were suggested to overcome these pressures.

The following pressures affecting water conservation, wastewater and stormwater management for the ICI sector were identified:

- **Funding and Application**
 - Securing funding for initiatives is a common challenge across sectors.
 - Businesses must justify water-related projects and focus on a short payback period.
 - Some programs have complex or time-consuming application requirements, discouraging participation.
- **Infrastructure**
 - Aging, outdated or incompatible infrastructure systems can make implementing water conservation efforts challenging.
 - Stormwater management (SWM) innovations face obstacles, such as reusing greywater and avoiding excessive pipe enhancements.
- **Regulatory Barriers**
 - Building department regulations create obstacles for stormwater management.
 - Siloed programs and a lack of integrated regulatory support cause struggles.
- **Education and Awareness**
 - There is a lack of awareness of water-saving opportunities and incentive programs.
 - Contractors and staff need more education on water efficiency measures.
 - Lobbying efforts are needed to push for leadership-driven water plans.

Challenges and Gaps

Discussions surrounding challenges highlighted several gaps in the City's water conservation programs, emphasizing the need for better data accessibility, business case support, pilot project funding and increased awareness efforts. Key challenges included difficulty demonstrating return on investment (ROI), lack of targeted programming and issues navigating City services. Suggested improvements included streamlining services, creating industry-specific models and increasing collaboration between the City, businesses and institutions.

The following suggestions to improve City services were identified:

- **Accessible Technology, ROI and Data**
 - Provide an active list of technologies and tools with specific savings potential for each.
 - Create an ROI calculator to clarify business cases.
 - Provide accurate and timely billing to ensure that users track water usage easily.
 - Display a dashboard for smart monitoring to improve usability.
 - Provide a "single window" approach to simplify access and navigation of City services (e.g., water utilities).
 - Provide training and support opportunities to ensure operations staff are familiar with new equipment and technology.
- **Awareness and Recognition**
 - Prioritize promotion to boost awareness of existing programs.
 - Create dedicated programs for specific audiences and sectors (e.g., developers, end-users, etc.).
 - Advocate for a national-level "Blue Certification."
 - Expand the Water Smart Business program.
 - Ensure continued engagement with businesses with established sustainability plans and resources.
 - Expand school-based education on water conservation to encourage long-term behavioural change.
- **Municipal Role and Collaboration**
 - Clarify the division of responsibility (e.g., sewer monitoring vs. engineering requirements).
 - Explore more on-site micro water reuse initiatives in addition to large-scale City solutions.

Incentivizing Opportunities

Discussions regarding incentives for water conservation in the ICI sectors included increasing awareness, providing financial motivators/incentives and recognition. Providing water use comparisons, simplifying access to information and offering targeted stakeholder incentives were suggested to drive the ICI sector toward water conservation efforts.

The following additional suggestions for incentive opportunities were identified:

- **Awareness and Recognition**
 - Highlight what other businesses are doing successfully.
 - Effectively communicate the City's efforts and reasons for conservation initiatives.
 - Publicly recognize and acknowledge businesses making water conservation efforts through awards and designations.
- **Financial Incentives**
 - Reduce expenses through rebates, lower rates or tax incentives.
 - Offer specific incentives targeted at key stakeholders.
 - Create cross-sector incentives that combine energy, water and other sustainability efforts to maximize impact.
- **Data and Comparisons**
 - Centralize access to all relevant information in one place.
 - Provide comparative data-sharing, allowing businesses to see how their water usage compares to others.
- **City Engagement and Support**
 - Encourage City audits and meetings with businesses to provide tailored guidance.
 - Create sustainable business community groups or expos to encourage idea-sharing and collaboration.
 - Coordinate between purchasing and facilities departments to secure better pricing for retrofits.

Corporate Value Proposition

Discussions regarding integrating water management into a corporate value proposition included several strategies and benefits, highlighting improvements to cost savings, sustainability efforts, partnerships and brand reputation.

The following suggestions and benefits for integrating water management into a corporate value proposition were identified:

- **One Water Approach**
 - Integrating water and energy management can create efficiencies and cost savings.
 - Water should be considered part of a broader sustainability strategy, not managed in isolation.
 - Collaboration beyond the City and partnering with other organizations can strengthen impact.
- **Internal Coordination and Retrofitting Opportunities**
 - Coordination between departments and water management teams is crucial for efficiency.
 - Retrofitting existing infrastructure presents a greater opportunity than focusing solely on new developments.
 - Private properties have significant potential for stormwater management retrofits.
- **Economic and Business Development**

- Businesses are a specific audience that may not reside in the municipality but can still contribute to conservation efforts.
- Stronger ties with economic development initiatives can help promote integrated water strategies to corporate stakeholders.
- **Certification Benefits**
 - Green certification badges can enhance corporate reputation.
 - Water conservation efforts can be marketed as a sustainability commitment to stakeholders and customers.

Closing and Next Steps

The project team thanked the participants and noted that they would review all the ideas and prepare a summary, and noted that the next innovators' workshop would be facilitated in 2025.

Meeting #2

Date: October 29, 2025

Time: 10 a.m. – 12 p.m.

Location: Virtual meeting via Zoom

Attendees: 8

Purpose:

- Provide a refresher about The Blueprint project and process.
- Review the proposed recommendations.
- Gather feedback and insights regarding the recommendations.
- Present next steps.

Presentation

Introductions: The project team acknowledged the land and briefly introduced the project, facilitated a round of introductions and reviewed the workshop agenda and purpose.

Overview and Purpose: Project leads provided an overview of the One Water approach, noting that it is an integrated planning and implementation strategy that acknowledges interactions between the natural water cycle, human impacts, natural features and built infrastructure. The framework reduces the need for new infrastructure construction, increases the longevity of existing infrastructure and contributes to climate resilience. They reviewed the project's scope and guiding principles, including Customer-Focused Collaboration, Efficiency First, Equity and Affordability, Innovation and Adaptability and One Water Governance.

Guelph's History of Water Conservation: Project leads presented a comprehensive history of Guelph's water conservation efforts and initiatives, including Direct and Indirect Water Conservation and Efficiency Programs, as well as Non-Revenue Water Programs and discussed the range and degree of success observed from Guelph's water conservation programs, the top 10 sectors by total and average water consumption, as well as opportunities for future and continued water efficiency.

Insights from Municipal and Trades Sector Interviews: The project team presented the key themes and insights identified from interviews with leading cities and local trades. They highlighted that leading cities demonstrate that integrated governance, local business cases and data-driven decision-making are key to successful water management, while innovation is often constrained more by social and regulatory barriers than technical ones. Programs like EPCOR's RainWise show the value of multi-benefit approaches that improve water quality, reduce flooding and enhance resilience. Insights from local trades highlight low public awareness and interest in efficiency, with most customers prioritizing cost over water savings due to limited incentives and complicated rebate processes.

Proposed Strategic Direction: Project leads presented the proposed strategic direction, noting Guelph's current challenges, including future water demand uncertainty; data and reporting limitations; customer engagement fatigue and gaps; program alignment across departments; non-revenue water (NRW) and system optimization; costs and benefits of further innovation; and financial and resource constraints. They noted that a change in direction is needed to focus on the highest water users to achieve higher gains and on the integration of related City programs, technology and information. The recommendations emphasize improving data governance and integrity, enhancing customer engagement and optimizing system performance to reduce losses and improve efficiency. The proposed framework calls for unified governance and planning across all water services, ensuring that conservation, asset management and financial planning are aligned under a coordinated vision for long-term sustainability.

Guelph ICI Programs: Project leads presented an overview of Guelph's ICI programs, noting that the City is exploring ways to build on its successful conservation programs for the ICI sector by consolidating existing initiatives into a single, coordinated One Water framework. This approach would support both engaged participants and high-water users who have not yet adopted conservation measures. Key opportunities include expanding the existing Water Smart Business Audit to include a more holistic One Water Audit, examining the reuse of treated stormwater and wastewater, implementing stormwater credits for businesses and sewer credits for businesses, focusing engagement with high-volume water users and introducing a recognition program.

Discussion

The following summarizes the key discussion themes:

Customer Engagement Approach

Participants were supportive of the proposed customer engagement approach and emphasized the value of linking water conservation with related elements, such as energy and waste reduction. They encouraged a more integrated and data-informed strategy, expanded incentives and simpler processes to engage a wider range of users—particularly high-water users in the ICI sector.

Suggested refinements to the customer engagement approach:

Participants agreed that the approach aligns well with current needs and builds on ongoing efforts. Additional comments included:

- Add waste and energy efficiency to water assessments (e.g., reusing heat from cooling towers) to reflect how facilities manage resources.
- Growing attention to dwindling water resources, rising water costs and increased incentives are key motivators for efficiency.
- Provide stronger financial incentives to offset the upfront cost of installing sub-meters and simplify application forms for existing programs.
- Track evaporation from chiller towers to ensure accurate billing for sewer use, as better data and structured incentives would improve participation.
- Make processes easier to navigate—especially for large organizations managing multiple projects to sustain engagement.

Other considerations:

- Regulatory and administrative challenges pose potential barriers in the ICI sector, which need to be considered.
- Data granularity at the building level can be a constraint for designing and monitoring conservation programs.
- Coordination across departments and facilities remains a challenge.

Water Smart Business Program

Participants expressed strong support for refining and expanding the Water Smart Business program, emphasizing flexibility, continuity and customization for different facility types. They noted that audits should transition from a one-time interaction to an ongoing relationship that includes support for implementation, monitoring and long-term engagement.

Suggested refinements to the Water Smart Business program:

Participants supported the idea of expanded and ongoing audits. Additional comments included:

- Consider customized assessments and additional metering for larger or more complex facilities to capture water use accurately.
- Maintain ongoing communication after an audit to ensure that recommendations are implemented.
- Revisit how incentives are structured—potentially by unit or occupancy—to better reflect differences in building types and usage levels.
- Benchmark self-audits against City standards as a screening tool for engagement.
- Implement early engagement strategies, such as educational videos, to explain the importance of water efficiency and foster long-term awareness.
- Incorporate practical demonstrations, such as training on using rainwater for greenhouse irrigation.

High Volume Customers

Participants supported the development of a specific engagement and recognition framework for high-volume water users but emphasized that meaningful financial incentives and streamlined

processes are also essential. They noted that upfront costs, administrative complexity and lack of awareness remain key barriers for large-scale participation.

Suggestions for creating a system to recognize high-volume user needs:

- Emphasize cost recovery by pushing programs that help offset the original investment in meters or efficiency upgrades.
- Simplify application forms and provide more explicit guidance on available programs to make participation easier.
- Use metering data to tailor outreach, focusing efforts on facilities where potential water savings are greatest.

Recognition Programs

Participants valued the visibility and marketing potential of recognition programs. They were seen as beneficial complements, especially if tied to broader communications, Environmental, Social and Governance (ESG) reporting or peer learning opportunities.

Feedback on recognition and recognition formats for the Water Smart Business program:

- Case studies and awards are effective tools for highlighting successful participants and sharing best practices.
- Public acknowledgment, such as media coverage or event appearances, supports the ESG and corporate responsibility narratives of some companies.
- Events involving the Mayor or other City leaders, as well as digital or media exposure, would be most meaningful.
- Recognition would be beneficial for investor appeal and reputation.

Closing and Next Steps

The project team thanked the participants, noted that the project team would review all the ideas and prepare a summary, and noted that the information provided would help refine and inform Tech Memo 3: Strategic Direction and Tech Memo 4: Implementation Plan.

5. Staff Workshop Summaries

Workshop #1

Date: October 31, 2024

Time: 10 a.m. – 12 p.m.

Location: Guelph City Hall, Meeting Room C

Attendees: 18

Purpose:

- Provide an overview of the project and process.
- Confirm collective goals and desired outcomes for the project.
- Identify risks.
- Identify the criteria to evaluate promising practices or initiatives.

Presentation

Introductions: The project team opened the meeting by welcoming attendees, introducing the project and project team members, providing the land acknowledgment and introducing the new title of the project, “The Blueprint: Guelph’s One Water Plan”, previously referred to as the Integrated Water Management Strategy.

Project Overview & Vision and Goal Setting: Project leads presented the project's vision for inclusion, diversity, equity and integrating different voices and perspectives. They emphasized the significance of incorporating Indigenous Nations’ traditional knowledge and sustainability practices and building strong, long-term partnerships. The project's primary objective was identified as reduction of water consumption through a One Water strategy that protects water sources and uses integrated planning methods. Project leads summarized the work completed to date and the upcoming project tasks, including the situational analysis, review of other relevant initiatives and plan to bring the findings back to the City for direction, ultimately creating an implementation plan.

Overview of Guelph’s Water: Project leads discussed the approaches for source water protection from the different City plan documents, including various watershed studies, master plans and the Climate Change Adaptation Plan. They highlighted the importance of gathering stakeholders to address strategic issues, develop a vision beyond the master planning process and incorporate City expertise.

The Water Supply Master Plan’s (AECOM, 2022) objective to establish a 30-year timeframe to predict the City’s water needs for water supply, analyze peak day capacity and estimate population growth was summarized. Scenarios forecasted a conservative 6.5% water use reduction. Alternative water supply methods, such as conservation, increased groundwater, surface water sources, community growth limits and do-nothing scenarios, were also discussed. Additional sources and infrastructure were also noted, with Arkell Springs as an example, where it took 18 years from conception and initiation to operation to achieve 18,000 m³/day of additional supply. Therefore, planning for the 2051 water demands will require early action. Strategies for water demand optimization included reducing peak demand factors, collaborating with industrial users and improving infrastructure. It was also noted that only 15% of the City’s water is used for drinking, with the potential for other sources to supply the remainder.

Wastewater treatment presents cost and capacity constraints for water supply, affecting how much treated water can be discharged from the wastewater treatment plant (WTP). Reusing water was proposed as an initiative for the One Water strategy.

Reducing direct runoff impacts, maximizing infiltration and planning for regional and local water resource impacts were discussed, along with monitoring strategies to minimize environmental impacts, prevent pollutants and maintain water quality. Other studies related to stormwater management include the Natural Heritage Action Plan, which addresses wetlands and associated water resource reliance.

Discussion

The floor was opened for a group discussion or questions regarding the presentation. No comments or inquiries were made.

The format and four topics were introduced for discussion: (1) goals and desired outcomes, (2) risks, (3) evaluation criteria and (4) promising practices. The following summarizes the key themes from each discussion.

Goals and Desired Outcomes

The following were presented as the current identified goals for the project:

- Improve the resilience and reliability of water systems, as well as the health and well-being of people and ecosystems.
- Reduce the dependence on piped water systems, lower the expenses of water management, enhance the natural environment and create a more livable and sustainable community.
- Coordinate water planning and implementation across different sectors and stakeholders, such as the community, industry, businesses and the City of Guelph organization.
- Consider the impacts of climate change, population growth, urbanization and other factors on water supply and demand and quality.

Discussion Question: What, in your view, are the key goals and outcomes for the project? What would you add or change—are there other goals and/or outcomes that should be considered?

Several participants noted that the goals were very broad in nature. They felt the first two on the list above are goals, while the last two are ways to achieve the goals. There was a suggestion to review and adopt appropriate goals from the Corporate Climate Adaptation Plan (CCAP). The following additional goals and desired outcomes were identified:

- **Education and Communication**
 - Improve collaboration across departments and external partnerships toward a shared goal. Collaboration leads to retention, progression and knowledge sharing, creating an opportunity to model a One Water unified approach. This includes securing buy-in for full resources across planning, operation and maintenance stages.
 - Improve internal and external (partners) engagement about water issues, leveraging communication channels and consolidated reporting.
 - Promote and build an understanding of water's foundational role amongst Council and decision-makers.
 - Emphasize conservation as a part of supply.
 - Consider the process of change management to create excitement, support and alignment across departments. Revamp stagnant rules.
- **Strategic Alignment**

- Find solutions that align with strategic direction to address housing needs (housing accelerator fund), faster development while ensuring infrastructure is coordinated with water needs (e.g., affordable housing infrastructure).
- Link to Asset Management planning.
- Consider linkages to natural system criteria and sub-watershed approaches that consider the value and impacts on natural water bodies (water outside of the municipal system).
- Align with diversity, equity and inclusion goals to meet the needs of all community members—including Indigenous groups and newcomers.
- **Customer Centric**
 - Identify a goal from the perspective of the end user. What solutions can be identified that make it easy to participate, reaching those further on the behaviour adoption curb, identify barriers to programs as well as incentives.
- **Optimization**
 - Optimize water use by finding capacity and reuse opportunities, optimize resources and focus on circularity.
 - Find solutions that overcome regulations and legislation that limit progression.
- **Revenue/Non-revenue**
 - Rethink revenue and non-revenue opportunities by considering lost supply beyond the meter.
- **Environmental Impacts**
 - Consider how climate (e.g. increased rainfall impacts on wetlands) impacts water infrastructure and natural system solutions, to improve management planning.
- **Indigenous ways of Knowing-Being-Doing**
 - Recognize and apply Indigenous ways of Knowing-Being-Doing and relationships to land and water as part of wholistic approaches to water.

Risk

Discussion Question: What are the risks to the City if the project does not succeed? What are some of the most formative risks to be addressed through this project?

The following risks were identified:

- **Internal Alignment and Project Scope**
 - Internal discord, competing priorities and scope challenges could hinder the project's progress.
 - Insufficient staff resources, time, budget, project management and back-end planning are needed to launch and sustain the project.
 - Ineffective collaboration across departments, resulting in missed opportunities.
 - An overly broad scope may prevent the project from targeting particular and impactful actions.
 - Council changes and impacts of changing priorities.
- **Relationships**

- Risk to First Nation relationships if not successful.
- Relationships beyond city boundaries when considering water as an entity with rights.
- **Housing and Water Supply Constraints**
 - The focus on affordable housing may detract from environmental factors and an adequate focus on water supply.
 - Lack of alignment between housing growth goals and water supply constraints.
- **Financial and Resource Limitations**
 - Limited or constrained budget and/or resources could lead to reduced project funding.
- **Regulatory and Legal Challenges**
 - Difficulty implementing new technology and regulations (e.g., building codes or standards that do not accommodate water needs).
 - Legal barriers and risk aversion may hinder innovation and project success.
- **Environmental Impact**
 - Potential negative impacts on wetlands, rivers and terrestrial ecosystems if the environment is not prioritized adequately.
 - Long-term consequences if the City falls short of achieving the climate change strategy and resilience goals.
- **Community Engagement and Perception**
 - Public disinterest or mistrust due to lack of awareness, perceived financial burden and long timeline.
 - Need to communicate the “why” requires storytelling, clarity and a strong business case.
 - Risk of damage to reputation if the City cannot use public funding effectively.
 - Social media misinformation, as well as a lack of public education and understanding.

Evaluation Criteria for Actions

Discussion Question: What criteria should the team use to rank and evaluate initiatives or promising practices for further assessment? Of these criteria, pick your top ones (1-3).

The following evaluation criteria were identified and prioritized by participants:

- | | |
|--|---|
| ● Environmental protection (12) | ● Bolster climate resilient (2) |
| ● Cost/volume of water m ³ H ₂ O (7) | ● Cultural impact (2) |
| ● Long-term sustainability (7) | ● Short term feasibility (1) |
| ● Political perception (5) | ● Approvability (1) |
| ● Fiscal sustainability (asset management) (5) | ● GHG emissions net zero (1) |
| ● User uptake (4) | ● Climate resilient initiative (1) |
| ● Population promotion (3) | ● Alignment with corporate strategy (1) |
| ● Regulatory resilience (2) | ● Implementation time (0) |
| | ● Indirect savings (0) |

- Economic promotion (0)
- Public perception (0)

Promising Practice

Discussion Question: Which promising practices interest you the most? Are there other promising practices or jurisdictions which you suggest the team investigate?

The following practices were identified:

- **Water Use and Reuse**
 - Explore using industrial wells for non-potable purposes and potential water transfer between industrial users. (e.g. Tuscan, Arizona's approach to treat contaminated water in aquifers for future use and Portland's Robert St. Field Park).
 - Investigate mid-to-high cost adaptations for greywater reuse and integrate them into building codes where possible.
- **Asset Management and Planning**
 - Implement asset management practices to assess risk, manage costs and extend asset lifecycles.
 - Leverage rate-based funding for sustainable maintenance.
 - Apply an affordability lens in master planning and capital prioritization.
- **Stormwater Management**
 - Explore bioswales and stormwater capture systems (e.g. New York).
 - Reuse collected stormwater from parks and other public spaces (e.g., Exhibition Park) - pilot programs could incentivize developers.
- **Education and Engagement**
 - Expand successful initiatives to emphasize public education about water conservation (e.g., Guelph's Water Wagon program).
 - Expand educational programs such as LID programs, TRCA's SNAP project, rainwater harvesting and gardens.
- **Technology**
 - Invest in active leak detection (e.g., Advanced Metering Infrastructure and Automated Meter Reading).
 - Consider direct installation programs for leak-prone areas and encourage maintenance by providing leak alerts.

Closing and Next Steps

The project team thanked participants and noted that they would review all the ideas and prepare a brief meeting summary. Project leads noted that the project team is completing Task 1 and 2, which will be informed by the ideas generated at this meeting. The project team thanked participants for their feedback and noted that the next staff workshop is planned for November 26, 2024.

Workshop #2

Date: November 26, 2024

Location: Guelph City Hall, Meeting Room C

Time: 10:15 a.m. – 12:15 p.m.

Attendees: 24

Purpose:

- Provide an overview of the project and its purpose.
- Provide a summary of feedback gathered from the first staff workshop.
- Identify suggestions for changes and opportunities associated with current water efficiency and conservation initiatives.
- Discuss promising practices and barriers to new water efficiency and conservation initiatives.

Presentation

Introductions: The project team acknowledged the land, provided a brief reintroduction to the project and project team members, and reviewed the agenda and workshop purpose.

Overview and Purpose: Project leads provided an overview of the One Water approach, defining the term as a holistic approach to managing water resources, integrating all aspects of the water cycle. They emphasized that this requires collaboration between departments, organizational structures/governance, wider engagement with stakeholders and developing networks to share ideas, knowledge and strategies. Four (4) examples of One Water plans were noted including EPCOR, Edmonton, Canada (2010), Los Angeles City, California, USA (2015), New York City, New York, USA (2010) and Sydney Water Corporation, Sydney, Australia (2017). Project tasks were reviewed, identifying “Task 2: Review of Initiatives” as currently ongoing.

Workshop #1 Review: Project leads presented the overall findings gathered from the first staff workshop. The summary of feedback was regarding the four discussion topics: (1) goals and desired outcomes, (2) risks, (3) evaluation criteria and (4) promising practices.

Current Conservation and Efficiency Initiatives: Project leads reviewed current conservation and efficiency initiatives, including the 2022 WSMP Strategy and Update. They presented the historical and projected per capita water demand rates, Water Efficiency Strategy program progress, water reduction progress, direct water saving programs, municipal operations, water loss management programs and indirect water saving programs to set the context for water conservation and efficiency within the city currently.

Promising Practices: The project team presented the key themes identified from promising practices research to date and highlighted the following key themes: (1) Water Use and Reuse, (2) Asset Management & Planning, (3) Stormwater Management, (4) Education & Engagement and (5) Technology & Leak Detection. A best-in-class study review of different program areas and jurisdictions was presented.

The program areas identified are the following:

1. High Volume Water Users and Targeted Residential Programs
2. Industrial, Commercial and Institutional (ICI) Programs

- | | |
|---|---|
| 3. Regulatory Enforcement | 7. Smart Water Network / Metering |
| 4. Financial Incentives | 8. Wastewater Reuse / Recycling |
| 5. Intensify Indirect Programs
(Communications, Education and
Outreach) | 9. Municipal Stormwater Management
and Water Reuse |
| 6. Management of Non-Revenue Water | 10. Lot-Level / New Development
Initiatives |

Discussion

A brief discussion followed regarding evaluating the benefits of various programs, assessing their accuracy and leveraging this data to rank and prioritize initiatives for future implementation.

The format and two topics for discussion were introduced: (1) suggested updates and changes to current water conservation initiatives; and (2) promising practices and barriers to new water conservation initiatives. The following summarizes the key themes from each discussion.

Current Initiative

Discussions surrounding current initiatives highlighted several ongoing water efficiency and conservation practices, such as ICI-targeted programs, leak detection and sub-meter installations. Improvements and suggestions to rebate programs such as Royal Flush and Blue Built Homes were also discussed. Additionally, participants identified opportunities to improve current practices by securing sustainable funding, strengthening partnerships, improving marketing and engaging residents more deeply to expand programs' reach.

The following suggested updates and changes to current initiatives were identified:

- **Industrial, Commercial and Institutional (ICI) Programs**
 - Focus on energy and water efficiency through targeted programs for high water users.
 - Separate ICI sectors for a more tailored approach.
 - Encourage sub-meter installations to reduce barriers for businesses and show proof of consumption reduction.
 - Stress the importance of leak detection, as leaks in ICI settings can cause significant losses.
- **Rebate Programs (e.g., Royal Flush and Blue Built Homes Program)**
 - Provide incentives, such as discounts for completing water audits or improved leak detection.
 - Integrate audits and rebate programs as a part of a larger incentive program to streamline them for easier access.
 - Enhance certification standards (e.g., Bronze, Silver, Gold), with ongoing recertification and maintenance.
 - Consider a membership-based model to ensure long-term compliance and sustainability.
- **Policy and Funding**

- Support provincial-level water conservation policies to secure capacity and sustainable funding.
- **Partnership and Outreach**
 - Strengthen partnerships with contractors, designers and trades for better program reach.
 - Improve marketing efforts, targeting relevant locations (e.g., hardware stores).
 - Learn from successful energy efficiency campaigns to replicate in water conservation efforts.
- **Resident and Public Engagement**
 - Need to develop renter and tenant-friendly programs and promote water literacy (e.g. reading water bills).
 - Consider replacing outdated programs with initiatives addressing residential leaks.
 - Encourage proactive customer engagement to prevent water losses and flag issues in billing systems.
 - Address systemic issues such as lack of care, funding and knowledge in residential sectors.

New Initiatives

Participants discussed new ideas for advancing water conservation and efficiency, such as decentralized water systems for new developments and expanded use of water reuse technologies such as purple pipe systems. Innovative approaches to improve water tracking include smart metering, AI-powered leak detection and pressure management. Other new conservation strategies included implementing tiered rate structures, proactive enforcement, collaborative communication with residents and partnerships with developers for low-income support and water-efficient housing.

The following promising practices and barriers to new initiatives were identified:

- **Infrastructure and Programs**
 - Reuse of Treated Wastewater
 - Explore effluent reuse through purple pipe systems, construction dewatering and sewer flushing programs.
 - Address infrastructure gaps and regulatory constraints for water reuse systems to ensure adequate water quality and management.
 - Encourage district-level systems for wastewater treatment and reuse in new developments.
 - Smart Metering
 - Improve responsiveness to water usage changes.
 - Reduce billing delays.
 - Implement AI-powered leak detection.
 - Introduce smart meter deployment to track water use more precisely, with loan programs to support broader adoption.

- Pressure Management
 - Simplify pressure monitoring systems to reduce non-revenue water (NRW) in applicable areas.
- Fusion Landscaping
 - Expand green landscape design programs inspired by Mississauga's Fusion Landscapes initiative.
- **Behavioral Change and Engagement**
 - Targeting Different Water Users
 - Use tiered rate systems, such as EPCOR's model, to incentivize conservation among high, average and low users.
 - Address challenges such as resistance to change due to low water costs, reducing the incentive to conserve.
 - SNAP (Sustainable Neighbourhood Action Plans)
 - Focus on in-person interaction over mailed communications to drive meaningful change.
 - Encourage collaborative efforts to drive participation in water-saving programs.
 - Pool and Spa Management
 - Address evaporative loss and chemical disposal through user education.
- **Policy and Equity Considerations**
 - Enforcement
 - Ensure bylaw enforcement is proactive rather than complaint-driven.
 - Low-Income Support
 - Partner with developers to implement sub-meter and low-flush fixtures in affordable housing.

Closing and Next Steps

The project team thanked the participants, noted that the project team would review all the ideas and prepare a brief summary, and stated that as the team looks ahead to strategic initiatives in the new year, they will collaborate with the WC&E team to focus on early implementation planning. Additionally, a range of engagement activities were planned, including a public project launch, workshops with ICI businesses, committee presentations, pop-ups and public events from February 2025 to April 2025. To culminate the project, in spring 2025, there will be an Indigenous-led water walk-inspired event. The project team thanked participants for their feedback and noted that the next staff workshop is planned for the new year, with a more specific date to be provided in the following weeks.

Workshop #3

Date: October 10, 2025

Time: 10:15 a.m. – 12:15 p.m.

Location: Guelph City Hall, Meeting Room C

Attendees: 24

Presentation

Introductions: Project leads acknowledged the land, introduced the project and the project team and reviewed the agenda and workshop purpose.

Overview & Project Purpose: Project leads provided an overview of the One Water approach, as well as the project's scope and guiding principles: Customer-Focused Collaboration, Efficiency First, Equity and Affordability, Innovation and Adaptability and One Water Governance.

Guelph's History of Water Conservation: The project team presented a comprehensive history of Guelph's water conservation efforts and initiatives, including Direct and Indirect Water Conservation and Efficiency Programs, as well as Non-Revenue Water Programs, then discussed the range and degree of success observed from Guelph's water conservation programs, as well as how to manage future demand.

Insights from Municipal and Trades Sector Interviews: The project team presented the key themes and insights identified from interviews with leading cities and local trades. Leading cities were highlighted that demonstrate that integrated governance, local business cases and data-driven decision-making are key to successful water management, while innovation is often constrained more by social and regulatory barriers than technical ones. Programs like EPCOR's RainWise show the value of multi-benefit approaches that improve water quality, reduce flooding and enhance resilience. Insights from local trades highlight low public awareness and interest in efficiency, with most customers prioritizing cost over water savings due to limited incentives and complicated rebate processes.

Proposed Strategic Direction: Project leads presented the proposed strategic direction, focusing on building a more integrated and data-driven One Water approach to Guelph's water management. The recommendations emphasize improving data governance and integrity, enhancing customer engagement and optimizing system performance to reduce losses and improve efficiency. The proposed framework also calls for unified governance and planning across all water services, ensuring that conservation, asset management and financial planning are aligned under a coordinated vision for long-term sustainability.

Discussion

Staff discussed the following themes: (1) Grey Water/Purple Pipe; (2) Indirect Programs; and (3) AMI/AMR Smart Metering. For each theme, staff identified new opportunities, ideas, challenges and barriers that should be taken into consideration. The following summarizes the key themes from each station.

Grey Water / Purple Pipe

Discussions focused on the potential for greywater reuse and purple pipe systems to advance sustainable water management. Participants explored technical feasibility, policy alignment and opportunities for City-led pilot projects while recognizing that regulatory barriers and developer resistance remain significant challenges. The group emphasized the need for incentives, clear ownership models and stronger policy frameworks to move from concept to implementation.

The following challenges and barriers were identified:

- **Regulatory and Policy Barriers**
 - Provincial approvals and regulatory processes remain prohibitive, restrictive and time-intensive.
 - Existing policies often prohibit or fail to support decentralized reuse systems.
- **Stakeholder and Implementation Issues**
 - Developers express concerns around maintenance responsibilities, ownership and long-term accountability.
 - Lack of clarity regarding maintenance standards and compliance requirements.

The following opportunities and ideas were suggested:

- **Policy and Planning Alignment**
 - Integrate greywater reuse into master plans to maximize asset utility and support a “One Water” approach.
 - Align with Green Development Standards and broader sustainability initiatives.
- **Implementation and Piloting**
 - Potential exists for groundwater/surface water recharge.
 - Pursue pilot projects (e.g., cooling tower reuse) to test feasibility and demonstrate proof of concept.
 - Consider creating One Water utility.
 - Explore large-scale applications for stormwater reuse and infiltration systems.
 - Conduct feasibility studies to quantify the potential volumes of recycled water.
- **Leadership and Incentives**
 - Position the City as a leader by implementing greywater reuse in municipal facilities.
 - Introduce incentives to encourage developer participation and large-scale adoption.
 - Consider opportunities for the City to resell treated water, offsetting potential revenue losses.

Indirect Programs

Conversations centred on improving public education, outreach and engagement to enhance water literacy and conservation awareness. Participants emphasized the importance of simplifying communication, reaching new audiences and using creative engagement tools. They identified ongoing challenges related to limited communication capacity, equity consideration and the need to measure programs more effectively.

The following challenges and barriers were identified:

- **Engagement and Communication Barriers**
 - Limited communication capacity to reach residents unfamiliar with programs.
 - Messaging should primarily aim to target new or neutral audiences.
 - Public fatigue and competing issues can reduce interest in smaller conservation messages.
 - Mixed levels of Council support for communications programs.
 - Need to determine whether the City should act as the primary source of water information or rely more on partners (such as community groups).
- **Equity and Accessibility**
 - A lack of enforcement tools, such as fines, limits the effectiveness of by-laws, but new measures could create equity concerns.
 - Cultural perceptions around tap water affect trust and participation.
- **Clarity and Measurement**
 - Confusion around Level 1 and 2 water restriction bylaws.
 - Unclear definitions of “direct” and “indirect” programs for tracking water savings.
 - Limited granularity in data to assess behaviour change or savings.

The following opportunities and ideas were suggested:

- **Education and Awareness**
 - Expand outreach through signage, school presentations, newcomer education programs and engaging tools (e.g., games, activities, etc.).
 - Develop simple and consistent messaging and include water literacy materials in new-resident packages.
 - Use community surveys or intercept surveys to gauge awareness and identify knowledge gaps.
- **Targeted Engagement and Behaviour Change**
 - Focus on specific user groups through rebates and promotions (e.g., new homeowners).
 - Conduct focus groups—with honoraria—to gather feedback.
 - Clarify outdoor water use rules and connect them to bylaw education.
- **Partnerships and Communication Channels**
 - Collaborate with schools, community groups and businesses to deliver micro-level messaging, while the City focuses on city-wide campaigns.
 - Use visual prompts to illustrate water-saving benefits (e.g., rain barrels).
 - Measure cumulative impacts of outreach and evaluate overall program effectiveness.

AMI/AMR Smart Metering

Discussions highlighted how advanced data tools can improve water management efficiency and customer awareness. Participants identified opportunities to leverage existing technology for leak

detection, demand optimization and better integration with billing and wastewater systems. However, concerns about privacy, public engagement and staff capacity were noted as key barriers to broader adoption.

The following challenges and barriers were identified:

- **Equity and Privacy**
 - Customer concerns about monitoring and data privacy may affect participation.
 - Perceived inequity occurs when technology benefits are unevenly distributed among user groups.
- **Engagement and Adoption**
 - Many customers do not regularly review their detailed consumption data.
 - Behaviour change is limited without strong engagement strategies.
- **Operational Constraints**
 - Staff resourcing limitations constrain analysis and program expansion.
 - Integration across water, stormwater and wastewater systems remains a complex and challenging task.
 - Difficulty in securing council support for investment in data-driven infrastructure.

The following opportunities and ideas were suggested:

- **Data Insights and Optimization**
 - Improve understanding of high-use sectors (ICI, multi-residential).
 - Enable early leak detection, improving equity and efficiency.
 - Enhance water balance accuracy from supply through wastewater.
 - Use AI analytics to optimize pumping operations and manage demand.
- **Technology and Integration**
 - Build on the existing Neptune AMI/AMR system and expand coverage beyond the current limited number of ICI customers.
 - Incorporate radio/cellular data collection and virtual District Metered Areas (DMAs).
 - Integrate data systems across billing, stormwater and wastewater management for a unified “One Water” framework.
- **Customer Engagement**
 - Offer customer apps with usage alerts, gamification and visualization tools.
 - Promote awareness of cost and resource savings, including stacked savings across water, hydro and gas.
 - Increase landlord accountability through transparent usage reporting.

Closing and Next Steps

Project leads thanked the participants, noted that the project team would review all the ideas and prepare a summary. They also noted that the information provided would help refine and inform Tech Memo 3: Strategic Direction and Tech Memo 4: Implementation Plan.