

## COVID-19 Strategic Sharing Group: Water Utility Management Response

Meeting Date                    May 8, 2020 from 1:00 p.m. – 2:30 p.m. EDT  
Facilitator                        Sandra Cooke, Canadian Water Network

There were 19 municipalities participating from coast to coast (see the [attendee list](#)).

The objective of this meeting was for utilities and municipalities across Canada to provide an update on changing water demand trends, the financial impacts of these changes, and to examine potential approaches and responses that are being taken by municipalities/utilities across Canada to both mitigate and adapt to the ensuing revenue challenges as the country continues to navigate the COVID-19 pandemic (see the [meeting agenda](#)).

After providing an update on water demand trends for both ICI and residential customers, participants heard from guest expert, Michael Fenn, Senior Advisor at Strategy Corp, who provided a presentation exploring various financial trends and challenges that municipalities/utilities could consider in continuing to respond to COVID-19 and also as they emerge from the pandemic. Finally, municipalities/utilities discussed strategies for managing long-term revenue impacts resulting from the COVID-19 pandemic.

Please refer to the following hyperlinks for more information on the work that CWN is currently coordinating and undertaking: The [Canadian Coalition on Wastewater-Related COVID-19 Research](#); the Water and Wastewater Utility Management Responses to the COVID-19 Pandemic [summary document](#); [Blue Cities Discussions](#).

Below is a list of the specific topics which were discussed:

- Update on Water Demand Trends and Revenue Implications
  - Including: current and future water consumption trends (both on the residential and ICI side); anticipated revenue impacts.
- Financial Implications Arising from the Pandemic
  - Including: default payments; extended relief programs; the financial scale and impact of deferred water/wastewater/stormwater rates.
- Strategies for Managing Financial Impacts for the Long-Term
  - Including: projected revenue impacts; prioritizing/delaying capital projects; temporary or longer term workforce reduction; vacancy management; use of reserve funds.

Key challenges identified this week by the participating municipalities/utilities include:

- Revenues from commercial customers, especially retail, and large consumers like hotels, airports and schools have been in widespread decline.

- For municipalities/utilities without universal metering coverage for residential and ICI customers, changing water trends and their full impact to revenues is generally more difficult to discern.
- In general, the municipalities/utilities who have forecasted revenues and assessed revenue implications have not yet implemented strategies for managing financial impacts in the long-term. A number of questions still remain about the longer term financial impact of customer fiscal relief measures and the ongoing delays to non-emergency maintenance work.

## Summary of Municipal/Utility Actions

### Discussion Topic 1: Update on Water Demand Trends and Revenue Implications

In the weeks prior to this meeting, many municipalities across Canada either reported or anticipated an overall decrease in water demand with a significant shift in use from the ICI side to the residential side. With more data in hand, utilities and municipalities are beginning to paint a more detailed picture of how water demand is changing and the associated impact to both short- and long-term revenues. The picture, however, remains varied across the country with some utilities/municipalities, particularly those in Eastern Canada experiencing significant shifts in consumption patterns, whereas in other regions, demand changes have been minimal. Demand changes depend largely on the local economy and the degree of economic 'shut-down'.

Below is a summary of the key trends, challenges and considerations discussed:

- Many municipalities/utilities in central/eastern Canada are beginning to see a **net decrease in water consumption** both for the year-to-date and for the month of April when compared with 2019 net consumption. The most pronounced change has occurred in the commercial and institutional sectors with airports, schools, retail, and the hospitality sector seeing the sharpest decline in demand. Although many of these utilities are also reporting an **increase in residential consumption**, it has been noted that, in general, this increase has not offset the corresponding decrease in ICI consumption and so revenues are projected to decline. The revenue impact is expected to be somewhat offset in municipalities that instituted rate increases in early 2020.
- In other municipalities/utilities, particularly those in British Columbia, no significant changes in net consumption have been reported. This may be because business-as-usual has persisted in British Columbia compared to other provinces. However, it has been noted that it's been **difficult to quantify changes in consumption patterns as many municipalities/utilities are mostly unmetered or partially metered**.

- **General exceptions to the primarily decreasing trend** in water demand include:
  - i. Municipalities where cases of COVID-19 are low and as a result, many commercial customers have continued operating throughout the pandemic; and,
  - ii. Municipalities that contain factories and facilities in the food and agriculture sector. In these municipalities, consumption has either remained the same or increased as a result of stringent sanitation protocols and the transition to 24/7 operating hours as shifts are staggered to ensure physical distancing.
- Many municipalities/utilities across Canada have identified a **shift in peak demand times, with morning peak times now occurring later than pre-COVID-19 peaks**. This is likely due to an increasing number of the population working from home and the associated change in working hours and daily water use habits (e.g. since many are no longer commuting, their morning routine is now occurring later in the morning and therefore shifting when water consumption is taking place).
- Municipalities/utilities are **anticipating an increase in consumption as buildings begin to re-open** and ICI customers in buildings that experienced reduced or no occupancy begin to flush systems. However, concern remains that some commercial and industrial customers may not re-open after taking a strong financial hit from COVID-19.
- **Municipalities/utilities across Canada who have advanced metering infrastructure (AMI) have benefited from real-time data and have been able to identify consumption trends early** and as such, have gotten a head start on identifying the short- and long-term revenue impacts through modeling and scenario planning. In other cities with conventional meter infrastructure or where customers (residential, ICI, etc.) are not universally metered, the municipality/utility is taking strides to identify and predict future consumption patterns using methods such as analyzing pressure zone meter data, monthly billing data (if metered), monitoring changes in pumping pressure patterns, identifying high-use and low-use 'pockets' or areas, and scenario modeling.
- Some municipalities/utilities are still unsure of the extent to which changing consumption patterns can be attributed to COVID-19 or whether they are simply **related to seasonal changes** in demand (e.g. delayed spring season for some leading to lower water consumption in April than in previous years due to the resulting delay in irrigation demands).

## Discussion Topic 2: Guest Expert and Financial Implications Arising from the Pandemic

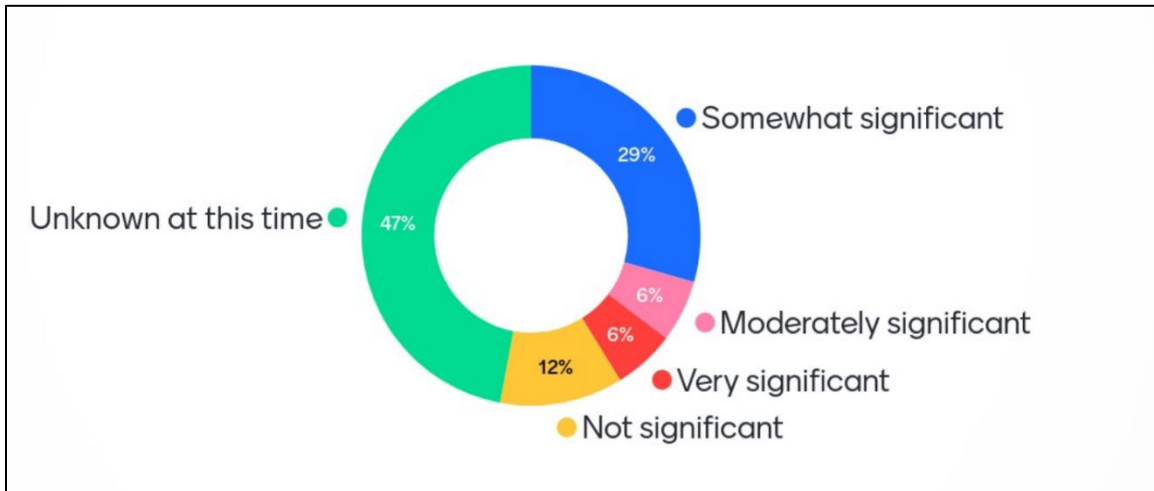
Guest Expert: Michael Fenn, Senior Advisor, Strategy Corp

As changing water consumption trends resulting from COVID-19 continue to threaten municipality/utility revenues, considerations for identifying the true scale of financial impacts are needed in order to respond, recover and re-think for the future. Guest expert, Michael Fenn,

provided a brief overview of key financial challenges and trends for utilities based on the report he recently completed with Harry Kitchen - [\*Bringing sustainability to Ontario's water systems: A quarter-century of progress, with much left to do.\*](#) These challenges and trends are important for utilities to consider as they continue to respond to COVID-19 and also as they emerge from the pandemic. Below is a summary of the key points from Michael Fenn's overview of financial challenges and trends.

- Response to the impacts of COVID-19 falls into three broad buckets:
  - **Emergency response phase** – Federal and provincial government response in terms of income support.
  - **Recovery phase** – how municipalities/utilities 'get back on their feet' and how this affects the way water and wastewater utilities are managed.
  - **Re-thinking for the future phase** – the crisis creates an opportunity for municipalities/utilities to re-think how they have been operating.
- In order to successfully respond to and recover from the pandemic, there is a **growing need to understand the extent of the financial impact of various fiscal relief measures** adopted by municipalities/utilities and what this means in the long term. In addition, there is a need to **fully understand the implications of using reserves** (e.g. to service debt obligations that were/are outstanding) **or capital expenditure funds** to cover operating and/or maintenance costs instead of the capital works costs for which they are intended.
- When thinking about affordability and the customer's ability to pay, municipalities/utilities need to be cautious in their approach to providing subsidies. Subsidizing the product/service as part of an income redistribution program as opposed to subsidizing the actual customer could impact the viability and sustainability of the utility itself.

During the presentation participants were asked to respond to a poll question about the financial scale of impact of deferred water/wastewater/stormwater rates to the municipality. **Approximately 47% of respondents indicated that the financial scale of impact was unknown at this time, while 41% indicated that it was anywhere between somewhat to very significant.** The results of the poll question are presented in Figure 1.



**Figure 1.** Results from the poll question asking participants to estimate the financial scale of impact of deferred water/wastewater/stormwater rates to their municipality/utility (no. of respondents = 17)

In the discussion that followed our guest expert's presentation, a number of key themes emerged with respect to ongoing considerations, challenges, and moving forward as we emerge from COVID-19.

- **To account for the anticipated loss of revenue, many municipalities/utilities have begun prioritizing capital and operating activities** to determine which projects can be delayed until they have recovered financially. However, concern remains about delaying non-emergency maintenance work for too long as it may result in additional financial impact.
- Some municipalities are exploring opportunities for reengineering processes and changing the way the utility is managed in order to reduce costs. There is a **general reluctance to resume pre-COVID-19 business-as-usual operations** and instead there is interest in identifying how processes and methods can be changed and what new procedures can be adopted to reduce costs moving forward (e.g. through AI, machine-based learning, AMI, collaboration).
- A number of municipalities identified that having a number of their staff **work from home has resulted in a more productive workforce**. For many, this could result in longer term changes to remote working approaches for specific departments, including supporting home office set-ups.

### Discussion Topic 3: Strategies for Managing Financial Impacts for the Long Term

Throughout the course of the COVID-19 pandemic, municipalities/utilities have adopted several fiscal relief measures and assistance programs to reduce financial strain on customers during these unprecedented times. Actions such as deferred payments, eliminating penalties for non-payment, cessation of disconnections for non-paying customers, and rate freezes are some of the ways utilities have endeavored to support customers as the country continues to navigate the COVID-19 pandemic. However, these measures are anticipated to result in financial strain to municipalities/utilities, especially as the pandemic persists. Municipalities/utilities now have to prepare for the inevitable financial challenges that ensue.

Below is a summary of the key challenges facing municipalities/utilities at this time and strategies for managing the financial impacts in the long term.

- Because many **municipalities bill monthly, bimonthly or quarterly, there is still some concern regarding the degree of defaults on payments**, particularly among economically disadvantaged groups. There is a need to better assess the extent that incoming cash flow will be impacted as a result of fiscal relief measures, especially if the pandemic persists late into the year. Many municipalities/utilities continue to explore affordability options for customers; however, concern remains about what the municipalities' financial outlook will look like once bill collections start again.
- A number of municipalities/utilities shared their programs and **plans to extend fiscal relief to customers**. Many are considering the possibility of further extensions should the pandemic persist. Below are examples from the utilities who shared updates to their customer relief programs.
  - [Utilities Kingston](#)
  - [City of Thunder Bay](#)
  - [City of Winnipeg](#)
  - [Medicine Hat](#)
- Some municipalities identified that it was **still too early to determine whether or not they would be using reserves to cover costs**, while others stated that their reserve funds will most likely not be used to cover operating expenses.

### Looking Ahead: Opportunities to Consider and Emerging Challenge Areas

- Some municipalities/utilities are unsure of whether changes in consumption in the month of April are related to seasonal changes or if they can be attributed to COVID-19.

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- Many municipalities which are predominantly unmetered continue to experience challenges with respect to effectively identifying changing water use patterns and predicting future consumption trends.
- Although many municipalities across Canada are slowly beginning to emerge from the nationwide lockdown, many are concerned that some small businesses might not reopen and are assessing what this could mean for municipality/utility revenues.
- Challenges remain in determining the true extent of bill payment defaults over time. Many municipalities/utilities have not recorded significant amounts of debt across their customer base; however, this may be because billing is either bi-monthly or quarterly.
- Prioritizing capital and operating activities can provide some short-term relief with respect to municipality/utility finances; however, concern remains for continuing to delay non-emergency maintenance work.

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Attendees

<b>Municipality/Utility</b>	<b>Name</b>
Alberta Capital Region Wastewater Commission	Wade Teveniuk
Canadian Water and Wastewater Association	Robert Haller
City of Abbotsford	Jamie Austin
City of Calgary	Nancy Stalker
City of Guelph	Tim Robertson
City of Guelph	Chris Garcia
City of Hamilton	Nick Winters
City of Kitchener	Bu Lam
City of Medicine Hat	John Michalopoulos
City of Saskatoon	Russ Munro
City of Surrey	Tara Macrae
City of Surrey	Kevin Littlejohn
City of Thunder Bay	Michelle Warywoda
City of Vancouver	Andrea Becker
City of Vancouver	Michael Irvine
City of Winnipeg	Tim Shanks
City of Winnipeg	Terry Josephson
EPCOR	Chris Ward
EPCOR	Simon Thomas
Fenn Advisory Services Inc.	Michael Fenn
Halifax Water	Cathie O'Toole
Halifax Water	Wendy Krkosek
Metro Vancouver	Andjela Knezevic-Stevanovic
Metro Vancouver	Peter Navratil
Region of Durham	John Presta
Region of Durham	Ian McIlwham
Region of Peel	Jeff Hennings
Region of Peel	Elaine Gilliland
Utilities Kingston	Allen K. Lucas
York Region	Jennifer Khemai



## Agenda

<b>Agenda: COVID-19 Peer-sharing – Water Utility Management Response</b>	
Friday May 8, 2020 1:00 – 2:30 pm EDT	
1:00 – 1:10 pm	<p><b>Welcome and Introductions</b></p> <ul style="list-style-type: none"> <li>Review call structure, update on action items, reaching out to your neighboring municipalities</li> </ul>
1:10 – 1:30 pm	<p><b>Topic 1: Update on Water Demand Trends and Revenue Implications</b></p> <p>Many municipalities across Canada have either reported or anticipated an overall decrease in water demand with a significant shift in use from the ICI side to the residential side. Given this, how has your utility/municipality experienced changing water demands and to what extent is this shift anticipated to impact short- and long-term revenues?</p>
1:30 – 1:55 pm	<p><b>Topic 2: Guest Expert: What are the financial implications of the pandemic to municipalities?</b></p> <p><b>Michael Fenn</b>, Fenn Advisory Services Inc.</p> <p>Some considerations during this topic discussion will include identifying the financial scale and impact of deferred water / wastewater / stormwater rates and/or using financial reserves and reserve funds to meet current obligations</p>
1:55 – 2:15 pm	<p><b>Topic 3: Strategies for managing financial impacts for the long term</b></p> <p>Municipalities/utilities have adopted several fiscal relief measures to reduce financial strain on customers as the country continues to navigate the COVID-19 pandemic. This is anticipated to result in financial strain to the utility/municipality. Municipalities/utilities will now have to prepare for the inevitable revenue challenges that ensue.</p> <p>Please bring insights, ideas and/or questions around how your utility/municipality is assessing and preparing for projected revenue impacts. Does your utility/municipality have a plan to delay capital projects, reduce work output, reduce the workforce, or another strategy aimed at ensuring financial stability?</p>
2:15 – 2:20 pm	<p><b>Wastewater Coalition</b></p>
2:15 – 2:30 pm	<p><b>Wrap-up</b></p> <ul style="list-style-type: none"> <li>Next Meeting – May 22, 2020 @ 1:00 PM EDT</li> </ul> <p><b>Proposed Focus: TBD</b></p>