

COVID-19 Strategic Sharing Group: Water Utility Management Response

Meeting Date April 9, 2020 from 1:00 p.m. – 2:30 p.m. EDT
Facilitator Sandra Cooke, Canadian Water Network

There were 21 municipalities participating from coast to coast (see the [attendee list](#)).

The objective of the meeting was to better understand approaches and responses taken by municipalities/utilities across Canada for maintaining or scaling back municipal water services during the uncertain and rapidly evolving circumstances of the COVID-19 pandemic (see the [meeting agenda](#)).

The following themes were discussed:

- Business Continuity Planning
 - Including: Broadening the collaboration between key stakeholders in an effort to address gaps in areas critical to business continuity e.g. critical materials (treatment chemicals, equipment, staffing).
- Staffing requirements and staffing redundancy planning
 - Including: Identifying critical skills; Developing a skills competency database; Supporting staff by providing childcare, priority testing, etc.

Key challenges identified by the participating municipalities/utilities include:

- Lack of clear regulatory guidance and support, specifically with respect to regulatory relief on sampling, operator training requirements, and the designation of water/wastewater operations as an essential service.
- Challenges related to identifying training requirements for essential staff and investigating potential avenues for training through online courses.
- Ensuring the supply of critical materials either through onsite stockpiling or by coordinating with suppliers and Emergency Operations Centres (EOCs).
- Ensuring that essential staff have the support they need (e.g. the availability of childcare for essential staff).

Summary of Municipal/Utility Actions

Discussion Topic 1: Business Continuity Planning

Municipalities/utilities are increasingly exploring potential actions to ensure the continuity of business operations within various areas of the water sector. As effective treatment of both drinking water and wastewater is paramount to the health and safety of all residents, maintaining levels of essential service through the development of business continuity plans is a key consideration for municipalities and utilities across Canada.

Below are the key considerations and challenges experienced by the municipalities/utilities who are developing or have developed a Business Continuity Plan.

- **Increased Communication and Collaboration**
 - Many municipalities/utilities are beginning to have **discussions with neighboring municipalities/utilities** to share knowledge on the different approaches they are taking and challenges they are facing in responding to the pandemic. Some are also communicating and coordinating with their local **Emergency Operations Centres (EOCs)**.
 - Municipalities/utilities are **continuing to reach out to regulators** (e.g. the Department of Health, Ministry of Environment) regarding operator training requirements, water quality regulations and sampling requirements, and safe return-to-work protocols for staff that had been sick or quarantined. In general, there continues to be a lack of provincial guidance, specifically with respect to regulatory relief on sampling, operator training requirements, and the designation of water/wastewater operations as an essential service.
 - Some municipalities/utilities have **partnered with local businesses** to get the supplies they need. For example, some local breweries and distilleries have now retooled their operations to produce hand sanitizer, which they are now providing to municipalities/utilities.
 - Municipalities/utilities are increasingly **collaborating with unions** to ensure that all staffing changes and onsite safety precautions are being executed in accordance with the new standards. Some provinces have laws in place to ensure that this collaboration takes place.
- **Supply of Critical Materials**
 - While some municipalities/utilities continue to experience challenges with the supply of critical materials, others report no issues.
 - Of those that report issues, the main issues are related to (1) the supply of chemicals for wastewater and drinking water treatment, (2) the supply of PPE, especially masks for field staff who must work in close proximity to deal with emergency issues such as water main breaks, and (3) the supply and availability of disinfecting solutions for workspaces within treatment plants.
 - In general, municipalities/utilities are using various methods to ensure their supplies of critical chemicals and materials. Some have stockpiled critical chemicals and materials onsite, while others are working with suppliers or EOCs to secure essential chemicals and materials.
 - Some municipalities/utilities are being prompted by their coagulant suppliers to consider switching from ferric chloride to ferrous sulphate for wastewater

and drinking water treatment. Suppliers have indicated that the chloride portion of ferric chloride is an industrial byproduct which, due to the pandemic-related decrease in industrial activity, is now less readily available. Some of the participating municipalities/utilities indicated that they had tested the use of ferrous sulphate at their facilities before the pandemic and discovered that it is generally just as effective as ferric chloride, if not more effective. One large Canadian city has recently implemented a large-scale switch from ferric chloride to ferrous sulphate for drinking water treatment, and can share information with others as needed.

- Some utilities are beginning to explore alternate options for disinfecting solutions and PPE. For example, some municipalities/utilities are producing in-house sanitizer. Also, some municipalities/utilities are looking into the use of alternate filtering facepiece respirators or non-surgical masks. Some are concerned about the disinfecting effectiveness of in-house sanitizers.
- Municipalities/utilities are continuing to procure a variety of different PPE depending on availability and need. They continue to explore the potential use of half-face and full-face masks and respirators.

Discussion Topic 2: Staffing Requirements and Staffing Redundancy Planning

Staffing and redundancy planning continues to be explored by municipalities/utilities across Canada. Although the cessation of some capital works projects has resulted in a reduction in staffing requirements, there are a number of factors that municipalities/utilities are considering including the ongoing support of essential staff, conducting staffing skills assessments, and continuing discussions on regulatory guidance and requirements that may impact staffing needs.

Below are the key considerations and challenges that municipalities/utilities identified with respect to staffing requirements and redundancy planning.

- There is ongoing interest in **shelter-at-work** discussions, including considerations for staff to shelter-at-home to ensure the availability of a skilled workforce. In general, many municipalities/utilities still view sheltering-at-work as a last resort because staff buy-in is essential to the implementation of such a strategy. Shelter-at-work planning was discussed during the April 3, 2020 COVID-19 Strategic Sharing Group meeting. Key points from that discussion include the following:
 - Enhanced health and safety precautions are a key aspect of any shelter-at-work strategy and include actions such as strict physical separation of teams, home isolation requirements before the start of a work shift, on-site isolation, start-of-shift temperature taking protocols and screening questionnaires for staff.

- Trigger points that would initiate a shelter-at-work strategy are being evaluated by a number of municipalities. Some are considering the provincial/municipal public infection percentage as a trigger, whereas others are considering employee infection rates as a trigger. Identifying an appropriate trigger point was noted as a key challenge in the development of a shelter-at-work strategy.
- If a shelter-at-work strategy is triggered, planning considerations for municipalities/utilities include the provision of sleeping accommodations (trailers, number of staff per trailer, etc.), food, exercise, entertainment amenities, and family support for sequestered staff. Another important consideration is identifying safety protocols for staff prior to starting a shelter-at-work shift (e.g. two weeks of home isolation prior to the start of a shift).
- The key challenges associated with implementing a shelter-at-work strategy include: Municipalities/utilities cannot mandate employees to shelter-at-work unless by order of government; not all employees favour a shelter-at-work strategy; some smaller utilities may require additional staff/training to accommodate the capacity required to implement a shelter-at-work strategy.
- **Availability of Childcare to Support Essential Staff**
 - Some municipalities/utilities are still experiencing challenges with respect to the availability of childcare for essential staff. For some municipalities/utilities, the main challenge is that the province has not yet identified the water sector as an essential service and therefore water utility staff are not able to access childcare services. For others, the main challenge is that some staff do not want to use childcare services because they are concerned about the risk of exposing their children.
 - Some provinces have opened up daycare facilities for essential workers and declared water/wastewater operations an essential service. These provinces include Quebec, Manitoba and Saskatchewan. This provides an option for essential water sector workers, but many municipalities are finding that staff are not making use of this opportunity because they are concerned about exposure.
- **Staffing and Compensation**
 - Levels of staffing have varied across municipalities/utilities with some experiencing very limited reduction in staff particularly as it relates to essential operations such as solid waste and water/wastewater operations staff. Others have reduced staff within specific departments, such as parks, roads, and maintenance departments. Many have begun to lay-off contract staff and have

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opted to either reduce or not re-hire seasonal staff that would typically be hired.

- During the meeting, participants were asked to respond to two poll questions. The first question was regarding whether their municipality/utility had reduced onsite field and facility staff. The second question was directed at those who have reduced onsite staff and asked them whether the municipality/utility has maintained compensation for offsite staff. The results of the poll questions are presented in Figures 1 and 2 below.

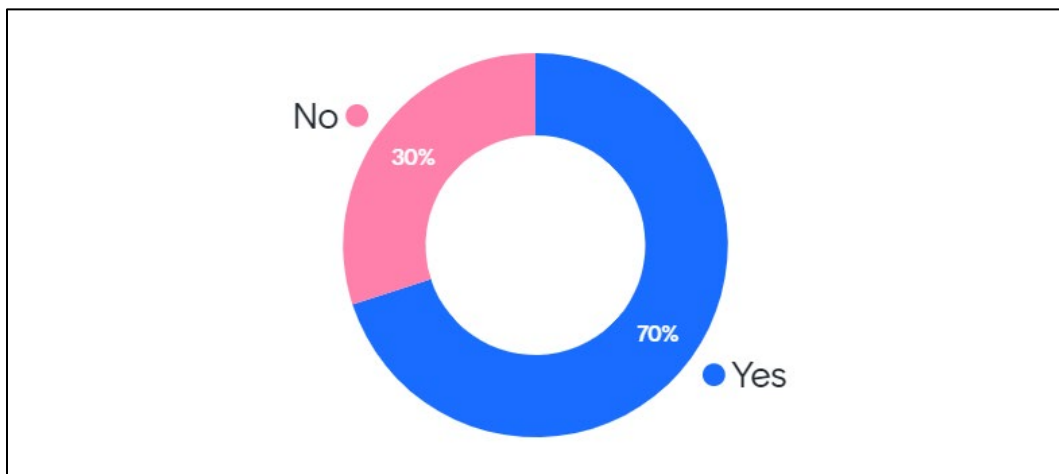


Figure 1. When asked whether their municipality/utility has reduced onsite field and facility staff, the majority of respondents (70%) indicated that they had reduced onsite staff (no. of respondents = 20)

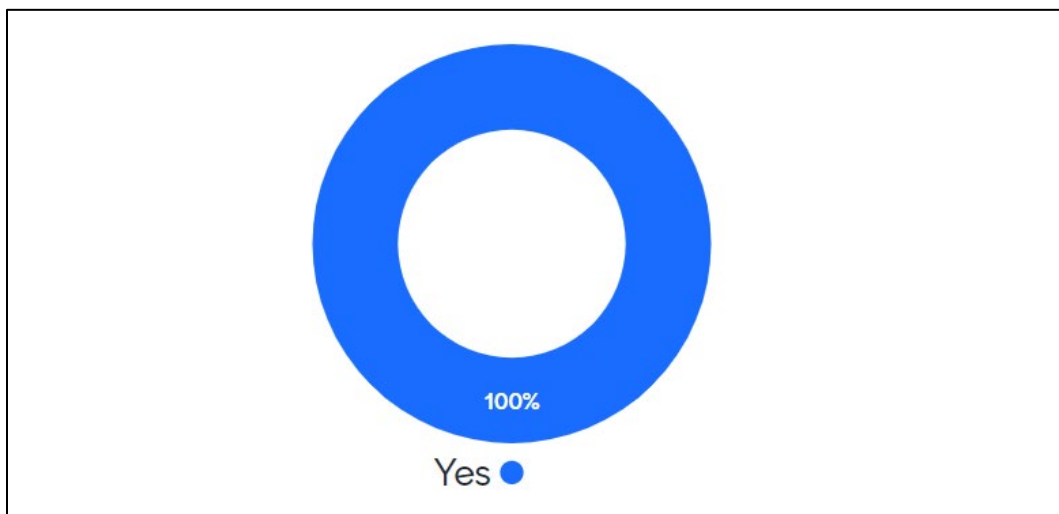


Figure 2. For the municipalities/utilities who had reduced onsite staff, all of them indicated that they have maintained compensation for offsite staff

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- The majority of respondents who indicated they have not reduced onsite staff are located in British Columbia.
- In general, municipalities/utilities who have reduced onsite field and facility staff have maintained full compensation for staff who are working from home, even if it's at a limited capacity or on-call.
- **Skills Tracking and Assessment**
 - Several municipalities/utilities have been compiling lists of skills and competencies that are required to fulfill specific essential tasks. Some municipalities/utilities have either begun or completed a staff skills inventory that aligns with the competency list.
 - Municipalities/utilities are beginning to identify critical staffing level triggers alongside their skills tracking and assessment.
- **Prioritized COVID-19 Testing for Essential Staff**
 - Several municipalities/utilities are increasingly requesting that their regulators provide prioritized testing for operators and maintenance crews in the water sector to ensure continuity of operations by identifying potential infections early.
- **Regulatory Guidance and Requirements**
 - Some provincial regulations for water quality monitoring for wastewater and drinking water have been relaxed; however, the path to achieving this tolerance has been different across many provinces e.g. some municipalities have received official direction for modified requirements, whereas others have to send their requests on a case-by-case basis to the regulator.
 - Many training providers have cancelled services, and the issuance of new licenses and renewals has been suspended for the duration of the state of emergency. Many municipalities/utilities are still investigating methods for completing the required **operator training** through online courses or correspondence where possible. Some municipalities/utilities have expressed that training requirements will be difficult to meet during and immediately following the duration of the state of emergency and are looking for their provincial regulator to provide relief to training requirements for 2020 and possibly 2021.

Looking Ahead: Opportunities to Consider and Emerging Challenge Areas

- Several municipalities/utilities are developing or have developed a **return-to-work policy or protocol for staff that have been sick or quarantined**. Many municipalities/utilities have an internal HR protocol that addresses the procedure for

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sick/quarantined staff returning to work. Others use provincial guidance to inform their return-to-work protocol.

- One of the main considerations that municipalities/utilities are beginning to think about is the process for **restarting operations** once the state of emergency is lifted. In general, there are two elements to consider for municipalities/utilities when restarting operations.
 - The first element is the startup of operations within the treatment plant and the potential changes needed in operational procedures to ensure longer term physical distancing and PPE requirements.
 - The second element to consider is the resumption of water delivery to buildings where water had been stagnant. Both of these elements of restarting operations will be top-of-mind for municipalities/utilities in the coming weeks.

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Attendees

Municipality/Utility	Name
Alberta Capital Wastewater Commission	Wade Teveniuk
City of Abbotsford	Jamie Austin
City of Brantford	Selvi Kongara
City of Calgary	Martin Pollard
City of Guelph	Chris Garcia
City of Guelph	Matthew Phillips
City of Guelph	Tim Robertson
City of Hamilton	Nick Winters
City of Medicine Hat	John Michalopoulos
City of Montreal	Carole Fleury
City of Ottawa	Tammy Rose
City of Red Deer	Cody Gillrie
City of Regina	Kurtis Doney
City of Regina	Pat Wilson
City of Saskatoon	Brendan Lemke
City of Saskatoon	Russ Munro
City of Surrey	Adam Quan
City of Surrey	Ravi Boyal
City of Surrey	Tara Macrae
City of Thunder Bay	Michelle Warywoda
City of Vancouver	Andrea Becker
City of Vancouver	Michael Irvine
City of Vancouver	Sam Li
City of Winnipeg	Tim Shanks
CWN Board	Carl Yates
Canadian Water and Wastewater Association	Robert Haller
EPCOR	Cindy Shepel
Halifax Water	Cathie O'Toole
Halifax Water	Wendy Krkosek
Metro Vancouver	Andjela Knezevic-Stevanovic
Metro Vancouver	Heidi Walsh
Metro Vancouver	Sean Smyth
Region of Durham	Janine DeBoer
Region of Durham	Ian McIlwham
Region of Durham	John Presta
Utilities Kingston	Jim Miller

Agenda

Agenda: COVID-19 Peer-sharing – Water Utility Management Response	
Thursday April 9, 2020 1:00 – 2:30 pm EDT	
1:00 – 1:10 pm	<p>Welcome and Introductions</p> <ul style="list-style-type: none"> Review call structure, update on action items Update on coronavirus Wastewater Effluent Study with international partners <p>POLL: 1) What municipality are you from?</p>
1:10 – 1:25 pm	<p>Report out from new participants</p> <p>Please provide a brief (~3 min update) on your situation, focusing on key challenges you are experiencing or anticipate, and a top success story, considering staffing, supply chains, prioritization of operations and capital projects.</p> <ul style="list-style-type: none"> Brandon; Medicine Hat; Brantford; others?
1:25 – 2:25 pm	<p>Discussion Format:</p> <ul style="list-style-type: none"> Please consider the discussion points below; we will spend 25 mins on each topic. When prompted at the beginning of each session, please ‘put your hand up’ in the chat box by entering your name if you would like to contribute to the discussions. We will call on those who wish to contribute. Q&A: Please enter your questions in the comment box during each session. We will moderate the questions asked, and either read-out or ‘hand the mic’ to those who have posed a question (time permitting).
1:25 – 1:50 pm	<p>Topic 1: Business Continuity Planning</p> <ul style="list-style-type: none"> How is your utility working to broaden collaboration with key stakeholders in an effort to complement/address gaps in the utility’s business continuity plan? What is the status of your supply of critical materials (e.g. treatment chemicals, equipment, PPE, etc.) In terms of collaboration with key stakeholders (e.g. contractors, unions, local health departments, provincial regulator, local municipalities), what have been success stories, pain points, and lessons learned to share with peers.
1:50 – 2:15 pm	<p>Topic 2: Staffing/staffing redundancy planning</p> <p>POLL: 1) Has your municipality reduced on-site field and facility staff? 2) For those who have reduced staff, has the municipality maintained compensation for off-site staff?</p> <p>As the isolation continues, municipalities require staffing plans to sustain operations. Please share updates on:</p> <ul style="list-style-type: none"> What is the status of staffing skills tracking or assessments? How are the results of staff skills assessments being used? How are essential staff being supported (e.g. childcare, priority testing, etc.)?

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	<ul style="list-style-type: none"> Progress on regulatory guidance conversations with regulators that may impact staffing plans (e.g. operator qualifications, safe working/return to work protocols, etc.).
2:15 – 2:25 pm	<p>Topic 3: Q&A</p> <ul style="list-style-type: none"> Use the chat box to raise additional challenge areas that you would benefit from discussing with the group now and to potentially explore further next week.
2:25 – 2:30 pm	<p>Wrap-up</p> <ul style="list-style-type: none"> Next week's meeting is Friday April 17th