

# Knowledge Series

## Actions for Climate Resiliency



CWWA, as the National Voice on municipal water and wastewater issues, aims to support water utility professionals by providing information and support on key topics.



Climate risk assessments give municipal infrastructure and asset management practitioners a systematic way of identifying and communicating vulnerabilities, the likelihood of future climate hazards, and their potential impacts for municipal infrastructure and the communities they serve.

For those municipalities who are more advanced with incorporating climate change considerations, risk assessments can also be used as input to communicate / demonstrate that the municipalities plans, strategies, practices, etc. are dealing with the important risks.

Though there are numerous sources of climate data, risk assessment information, and associated tools available, we are focused on how municipalities can make sense of and systematically address the long list of climate risks that threaten our water/wastewater infrastructure. Implementing appropriate risk and vulnerability assessments at a city-wide scale, at a portfolio scale, and at smaller, local scales will help us 'futureproof' our water infrastructure. Did you know that water infrastructure accounts for more than one-third (36%) of Canada's core public infrastructure value (\$771.8 billion) ([Statistics Canada, 2023](#))?

**This is why we are beginning a knowledge sharing series on this topic to help utilities understand the Why, How, Where, and What's Next.**



We are also looking for your suggestions on topics that we can consider in our series.

Please reach out to our committee with questions, suggestions and stories.

# Things to Consider:

- Water infrastructure includes drinking water, wastewater, stormwater and natural water systems.
- It is important to have an organized and systematic approach to building climate resiliency and you need to start somewhere, however, where you start may not be the same as someone else. Getting started is the important first step. Your first action could be to gather data, attend a webinar, or talk to colleagues and other municipalities.
- One size does not fit all. You will need to scale your approach to your knowledge level, data quality and potential vulnerabilities to climate change. You may also find it important to use risk assessments at different scales for different purposes.
- How to connect the outcomes of the risk assessment to meaningful and applicable actions.
- You do not have to re-invent the wheel. There are many made-in-Canada methodologies available for use (e.g., PIEVC, CCME, CSA), as well as international standards (e.g., ISO, AWWA). Your counterparts across the country also have great stories to share.
- Climate projections are no longer the bottleneck. There are resources such as the “Climate Atlas”, [Climatedata.ca](http://Climatedata.ca), and other Canadian sources that are publicly available and offered at no cost.
- Municipalities are expanding the use of assessments of individual critical assets to entire asset classes and entire infrastructure systems. This creates a challenge given the amount of data that is created.
- How to know where the analysis should stop given the fact that some infrastructure systems have components that have different owners, and other wholly owned infrastructure systems have interdependencies with other systems or activities outside of a municipality's control.

Did you know that CWWA has an active Climate Change Committee, comprised of your peers across Canada from the public and private sectors? The Committee monitors and coordinates CWWA's involvement on federal programs and initiatives to both mitigate and adapt to a changing climate.



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