

Introduction

In the February 26, 2015 CWWA e-Bulletin, it was announced that the Climate Change Committee had formed a sub-committee focussed on engagement of our members. What's more, that the sub-committee's next steps would be to connect with the membership periodically throughout the year with an instrument for two-way interaction. These interactions would give the Committee an opportunity to share its findings and tools while obtaining feedback on the needs of the Water and Wastewater sector in Canadian communities. An annual three-point reporting arc has been envisioned. For the first arc, a storyline has been selected which encompasses three themes. These are:

- **Resources** - Tools available for municipalities and utilities.
- **Success Stories** - Best practices and innovation in Canadian climate change adaptation in the water and wastewater sector .
- **Champions** - Highlighting the successes of pivotal champions for local adaptation and community engagement.

These interactions would also work into the programs for the two major CWWA events: The National Water and Wastewater Conference and the Window on Ottawa.

Welcome to the first Issue of **Climate (Ex)Change** – a vehicle for communication between the Municipal and Utility Engagement Subcommittee and CWWA Members. The focus for this issue is: **Resources**.

In 2014, the Climate Change Committee's National Climate Change Questionnaire was circulated to over 60 organizations in municipalities from across Canada. Some Respondent Highlights:

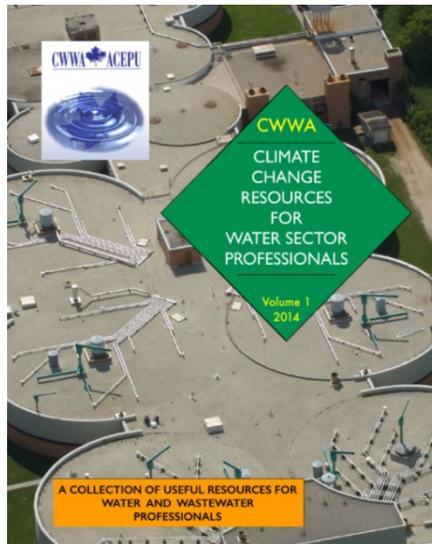
- Over half of the respondents said they believe that their systems and operations will be at least **"somewhat affected"** by the impacts of climate change. A smaller proportion (about 20%) report that their infrastructure and organization are **not prepared at all**.
- Nearly half of the respondents indicated that climate change is not a high priority, though some indicated that they believe it either will be a higher priority in the future or they are already doing more to prepare.
- When asked which extreme events can **affect** their water/wastewater infrastructure, **"Flooding"** was the most frequent response from the respondents.
- On resources needed for climate change preparedness, the most frequent response was **"funding"** followed by **"guidance on conducting risk/vulnerability assessments"**, and **"access to climate models"**.
 - With respect to barriers to adaptation, the responses included:
 - Funding / high cost, age of infrastructure and technical challenges (including: size of existing infrastructure, outdated models, and gaps in knowledge).
 - Non-technical challenges (including: political situation, priorities, time to implement, public education)
- Respondents reported a number of existing / on-going efforts to address impacts of climate change including: modelling, public education, planning, mapping, and design, vulnerability assessments, creation of additional supply sources, emergency response plans.

The observations were preliminary due to the sample size and response to the questionnaire. However, the CWWA National Committee on Climate Change truly appreciates the valuable feedback it receives through responses to questionnaires such as this. The committee uses this feedback to aid in the development of tools, events and technical and collaborative initiatives.

Climate Change Resources for Water Sector Professionals

In the National Questionnaire, when asked whether there were topics that they would like to see addressed in greater detail or have technical resources or tools for, members responded:

- Water sector climate change impacts in Canada
- Climate change data and regional projections
- Vulnerability assessment tools and frameworks
- Water sector policy guidance involving climate change



The Committee listened to member's requests and has curated a collection of resources pertaining to the water sector to help water professionals access important climate change assessment and adaptation planning knowledge. The CWAA Climate Change Resources for Water Sector Professionals (aka: The Resource Databank) contains over 130 Climate Change related links and is available for download from the CWAA website:

http://www.cwaa.ca/pdf_files/CC_Resource_Databank.pdf

Member Feedback

1) In the National Questionnaire, Members were asked whether there were other topics that they would like to see addressed in more detail at an event or through a technical resource or tool. Responses included:

- A list of climate change concerns / impacts as they relate to water and wastewater.
- Guidance on how to start initiating climate change preparedness programs including best practices.
- More detailed tools to complete integrated risk assessments on stormwater systems.
- Emergency planning guidance.

A Doodle Poll has been created to capture which of the topics are of the most interest to Members. Please vote on the topic of most interest to you by heading to the following link: [\[http://doodle.com/poll/rzng6wz566t59655\]](http://doodle.com/poll/rzng6wz566t59655)

2) The theme for Climate (Ex)Change Issue #2 is: **Success Stories** – highlighting Canadian examples of successful climate change adaptation in the water and wastewater sector. Have a good story that you'd like us to share? Contact us at the Municipal and Utility Engagement Subcommittee via email at: ADMIN@CWAA.CA

CWAA's Municipal and Utility Engagement Subcommittee:

Gordon Yasvinski, Health Canada

(Sub-Committee Chair)

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Jeff O'Driscoll, P. Eng., Associated Engineering

Paul Marsh, P.Eng. Amec Foster Wheeler

Adrian Toth, CWAA

Pierre-Andre Cote, University of Sherbrooke (Retired)

Sumon Ghosh, P. Eng. Aecom

Steve Conrad, Simon Fraser University

Climate Change Bytes

Why the Arctic's Big Mosquito Problem Is Getting a Lot Worse

<http://news.nationalgeographic.com/2015/09/150915-Arctic-mosquito-warming-caribou-Greenland-climate-CO2/>

One-two punch of rising seas, bigger storms may greatly magnify US East coast floods

<http://www.sciencedaily.com/releases/2015/09/150921133833.htm>