

## Canadian National Water Efficiency Network (CNWEN) MEETING NOTES

**Tuesday June 19, 2018  
11:00 am – 2:00 pm EST  
29 Waterworks Place, Guelph**

### **Attendees:**

<b>Name</b>	<b>Affiliation</b>	<b>Name</b>	<b>Affiliation</b>
Kathy McAlpine Sims	Halton Region	Carol Chaput	Region of Peel
Julie Anne Lamberts	City of Guelph	Stephanie Cote	City of Guelph
Heather Yates	City of Guelph	Shahrazad Gharabaghi	City of Guelph
Emily Stahl	City of Guelph	Glen Pleasance	Region of Durham
Karen McKeown	City of Guelph	Nicole Haynes	Region of Waterloo
Steve Gombos	Region of Waterloo		
Bill Gauley	Gauley Associates		
<b>Conference Call</b>	<b>Affiliation</b>	<b>Conference Call</b>	<b>Affiliation</b>
Mary Anne Dickinson	Alliance for Water Efficiency	Aaron Boulton-Chaykowski	City of Calgary
Mathieu Laneuville	Quebec Ministère des Affaires Municipales	Neal Klassen	City of Vancouver
John Koeller	Koeller & Company	Darren Perrett	City of Vancouver
Kimberly Wright-Caraballo	City of Toronto	Carol Salisbury	Ontario Ministry of Environment & Climate Change
Brent Houle	City of Winnipeg	Marie Irwin	Greater Victoria Reg. District

### **1. Review of March 20th 2018 Meeting Notes**

### **2. Additions to the Agenda: None**

### **3. Alliance for Water Efficiency (refer to presentation provided for more information)**

- o Water Sense Status Update
- o State (and province) scorecard
  - 2017 funding for US only
  - Exec summary and final report available online
  - Webinar was completed March 2018 to explain the report
  - Climate change/resiliency policies added to this score card
  - Purpose to track changes over time
  - Inventorying what is in the books, not on the ground works/implementation.
  - Looked at state level policies and not the individual City policies, due to funding provided.
  - Important to look at state level as these will influence policies at the local level.
  - Why not add provincial analysis to this? What would it take to complete these? Who would be involved and how could that be funded?

- With regards to Canada, the grades at a provincial level might not reflect what is happening at a municipal level.
- Quebec is taking a lot of action at provincial level and municipalities need to comply.
- Include consumption per capita, which would show results of the policies at a local level.
- Funds available at the CWWA level, in principal there may be some benefits to updating the provincial piece of the score card. People within CNWEN represent larger municipalities in Canada, but within CWWA we are trying to bring in resources to smaller municipalities to assist them within water efficiency programming. Would this be a resource beneficial to smaller municipalities?
- Carol Salisbury – at the province level, this would be helpful to understand what other provinces are doing.
- o Canadian Commercial Kitchen Guide
- o Outdoor water studies
  - This study will officially be released by the end of this summer, including an analytics document, consumer perception, etc.
  - Webinar will showcase the results later this summer
- o Cooling Study
- o Water Sense Status
- o Avoided Cost Research
  - Studies show that long term conservation keeps rates lower as it is a more cost effective way to cover costs. However, short term conservation might make rates rise to cover costs
  - In LA, rates would be 26% higher if they didn't participate in conservation programming
  - Infographics available e.g. Tucson, Arizona
  - 3 minute video available, feel free to post a link to it from your website, no membership requirement to use these
  - Reports available
  - Bill Gauley - To be open and transparent, natural savings that would have occurred without conservation programming should be included
  - Some clarification around water rates vs water bills and the terminology used might be required
  - Water bill should go down when rate goes up with water conservation but this depends on how the rate structure and how the bill is structured, and whether or not there are fixed charges etc.
- o Transforming Water Report
  - The IMPLAN Model Analysis tool is not Canadian friendly but if Canada has a similar tool, Canada might want to consider completing a similar study
- o Allocation of remaining CNWEN money.
  - Just under \$10000 available for mutually agreeable project (not \$15000 as indicated on the slide)
  - Money that sits at CWWA is money that comes from municipalities that attend both CNWEN and CWWA
  - Some of the money went to translating the greywater, and commercial kitchen guide to apply to Canada
  - Water and energy (hot water heating) might be the easiest sell to CWWA
  - CNWEN does not have ability to manage funds but CWWA and AWE can do this.
  - AWE offered to manage the study, but the money should stay in Canada.
  - Option A – shower head study by Bill Gauley. Bill's study determined that there was not a lot of savings between 1999 and 2016 shower use in the End Use Study. If shower heads have lower flow rates, there should be savings. Bill completed lab tests on actual shower heads using different methodologies than those that Water Sense uses. He would like to see a standard methodology developed for testing showerheads. Once a standard is developed, he will go to Water Sense for input. He is also suggesting to develop a score that tells people how the shower feels on the skin (e.g. high pressure, hard vs soft sprinkle) and the water efficiency of the shower head. Giving shower heads a score, allows consumers to find their preference. This isn't top of priority for Bill at the moment,

and there is no funding currently for this project. Certification/specification criteria is a pass/fail. Bill will come up with more detailed scope of work and estimated cost.

- Next CWWA meeting is mid-July. Aaron will include Bill on the agenda, so he can share his presentation with CWWA.
- Option B - Steve Gombos – rate cost study from Canadian perspective would be interesting. How does water efficiency influence water rates and bills in Canada? This would need to be done at a municipal level.
- Bill G – consumer price index has doubled since 2002. Average family is paying 2 to 3 times as much as what they paid in 2002 for their water bill. This is because water rates were underpriced to begin with.
- Emily S – perhaps looking at rate structures across Canada would fit in here. Maybe we should consider what do fixed rates look like versus tiered rates etc. A literature review could be completed. This could be done outside of the CWWA committee, as CWWA is water and energy so this study wouldn't appeal to them.
- Mathieu L – Called Statistic Canada over lunch and they are open to doing a rates
- **If anyone is interested in helping Mathieu coordinate please contact him.**

Other Notes:

- Chelsey Hawkinson has left the AWE.

#### 4. Highlights of 2018 AWWA Annual Conference

- Great papers on conservation but low attendance due to registration fees close to \$1000
- Water demand forecasting, lots of talk at management level
- Lisa Krentz is chair of Water Conservation Division of the AWWA, Veronica Belouette is Vice Chair (from EPA), Emily Stahl is the trustee
- Recommended by ANSI that the US Technical Advisory Group (TAG) develop the ISO Standard PC 316, Water Efficient Products / Banding.
- Looking for volunteers for the U.S. tag, but unsure if Canadians can be members.
- Participation on the TAG requires a commitment to actively participate on all calls and meetings, the first meeting is in Australia.
- Emily will forward press release along to the CNWEN group

#### 5. Guelph Program Updates

- o Multi-Residential Water Audit Program (refer to presentation provided for information)
  - Program developed to bridge the gap between residential and the ICI side
  - Multi-res is defined as 7 units or more, as this is in line with our planning department
  - Consultants complete the onsite audits at the unit and building process level, over 24 to 48 hrs
  - Water audit report presents water use stats, suite inspection results, evidence of unusual water demand patterns and indicators of excessive leakage in the building (if applicable), retrofit recommendations and a tailored resource list
  - This program launched a few months ago and we've just completed our first assessment. There are a number of additional interested people who have contacted us.
- o Residential Sub-Water Meter Rebate Program (refer to presentation provided for information)
  - Previously through a pilot program we offered \$50 rebate for the Flowie, an add-on meter. This new program pulls from what we learned from our pilot program and a more robust program was developed.
  - We decided to increase the rebate from \$50 to \$100 for the add-on sub water meter because through the pilot, we didn't see a lot of uptake with the \$50 rebate
  - Buildings with more than 7 units must complete a water audit through the City's Multi-Res Water Audit program prior to participation in this program, if avg water demand is more than 150 m<sup>3</sup>/unit/year.

- The eMERGE home tune-up is an audit completed by a small non-profit local group. They receive external resources to complete their work. City of Guelph Water funds them for the water component, Guelph Hydro fund them for energy component etc.
  - The eMERGE home tune-up is a free audit for the owners.
  - Building relationships has become a big focus for the success of our programs
  - City of Guelph owns some submeters on private property but we are moving towards single water services and moving away from submetering. Submetering will be up to private property managers.
  - Glen P - Bulk versus submetering will not be included in OBC at this time. Municipalities don't want the cost associated with submetering.
- o Blue Built Home Program (refer to presentation provided for information)
- Homes built to include water savings technologies etc. that go beyond OBC.
  - Revised program launched May 15
  - Program now applies to retro-fits including multi-res buildings, however at this time certification only applies to the units but not the building. Eventually Phase 2 will include certification of multi-res buildings in their entirety.
  - Bill Gauley assisted the City to develop the requirements included in the program.
  - Requirements applicable to all building types (low, medium, and high density) to keep the program simple.
  - Rain water harvesting needs to connect to all toilets in the home/building in order to be certified.
  - Building is automatically BBH certified if option A, rain water harvesting system, or B, grey water reuse system, is installed.
  - Option C – complete a minimum of 3 qualifying water saving options for BBH certification. At least 2 options must come from the primary options list (more expensive, more permanent, or provide obvious water savings). Not all energy star washing machines qualify, about 20% do not qualify. In terms of reducing hot water waste, no more than 0.5 gallons (1.9 liters) of water stored between the hot water source and furthest fixture. This is adopted from Water Sense Home Certification program.
  - The process for retrofits: A water audit must be completed on the building first. Retrofitted homes sign up for an eMERGE visit. Multi-Res need to sign up for the Multi-Res Audit program. These audits give us the information needed to understand what the buildings currently have and what they need to do to qualify
  - Appreciation package will be provided to each certified home.
  - Customer does not need to complete a calculation to determine if their washing machine qualifies and uses 19 Liters per person per day or less. They just have to purchase a machine from the list of qualifying washing machines provided on-line by looking up the model number for the Energy Star washing machine.
  - eMERGE home tune-up and Multi-Res Audit determine number of people living in the house
  - Website links to the Map Premium toilets and all of them apply.
  - Mathieu – Quebec uses the washing machine criteria - liters per cycle not liters per person.
  - BBH program uses 19 Liters per person for washing machines because we wanted to get away from restricting washing machine based on size of washing machine.
  - John K – suggested to remove the 19 l/person from the criteria as the customer does not need to do this calculation and they don't need to know this information. Make it easier for the customer.
  - Criteria includes 4 liter toilets or less rather than 3 liter because we wanted to provide more options for people, and to cover varying costs in toilets.
  - A rebate is not provided for installing an energy star dishwashers but this will help you qualify to be a certified BBH home.
  - Mary Ann D – Whirlpool has determined that new dishwashers have been found to be extremely efficient compared to old. Perhaps to encourage people to complete changing out dishwashers a rebate should be provided. Older dishwashers typically get changed out when their life cycle is complete, rather than to reduce water use.
  - This program has been developed with the Home Builders Association, and other builders.
  - 6 people have already signed up for EMERGE visits directly interested in BBH program.

## 6. Proposed Modifications to the Quebec Plumbing – Mathieu Laneuville

- Mathieu wanted to propose 3L reduced flush at National level but higher authorities not interested. One of their reasons being there aren't enough of these types of toilets available.
- There are 89 dual flush toilets on the Water Sense list, with 67 having a reduced flush of 3L. Lots of models available and lots of manufacturers that meet this requirement.
- John K – suggested that going from 4 L to 3L isn't that beneficial because a lot of people don't use the reduced flush, unless they are really green minded.
- 4.1/6 dual flush toilets don't provide any savings at all as these already meet the standard. If you are going to promote dual flush, they should use less than this.
- Recommendation: Fight for 4.8 Liters all the way around.

## 7. Other Business

Duncan's email:

ISO TC 224 WG 12, Water Efficiency Management has completed the development of the proposed Standard ISO 24526, and it is now being circulated amongst the members of TC 224 for approval as a Draft International Standard. The Seattle meeting resulted in the inclusion of wording that enabled Germany and Austria to withdraw their objections.

If the response to the ballot is positive and there are NO technical comments, the standard will go forward for translation and publication. Expected publication date would be late 2018 or early 2019.

John K - Hoping for an update at the next CNWEN meeting from Duncan on the topic of developing a standard for flushable products. This has been a stale mate between manufacturers and waste water utilities.

## 8. CNWEN Chair

- Heather Yates has kindly agreed to take on this role for now.

## 9. Other business:

**Glen P** – Water Efficiency Strategy committee report will go to Council this September. Will send out Durham Region's new communication pieces to share.

**Carol C** – add Fusion Landscape update on the agenda for next meeting.

**Steve G** – Template Assisted Crystalization study ongoing. 18 homes, 17 still active, most home owners still like this water softening technology. Most people that have ion exchange water softeners were drinking the water. Now these people are drinking the water from the TAC technology and they say it "tastes better". The TAC technology does not resolve the issue of water spots on glasses, so people are trying to deal with this through various actions including adding vinegar to the dishwasher.

- OWWA active with workshops, Steve is the new OWWA Chair.

## 10. Next Meetings:

**Tues. Nov. 20<sup>th</sup>, 2018 – Peel**