

# Canadian National Water Efficiency Network

Tuesday February 5, 2013  
11:00 am – 2:00 pm

Halton Regional Building  
1151 Bronte Rd, Oakville L6M 3L1  
Sheridan Room (by round-about entrance)

## Attendees

## Teleconference

Kimberly Wright-Caraballo	Kristy Baidy
Johann Manente	Ashley Warren
Kathy McAlpine Sims	Bill Christiansen
Steve Gombos	Naomi Herold
Glen Pleasance	Aaron Boulton-Chaykowski
	Mathieu Laneuville
	Carol Salisbury
	Cate Soroczan

## Meeting Notes

### Action By

#### 1. Review of Dec. 2012 Meeting Notes

-Carol clarified that the 2014 Ontario Building Code urinal flush volume will be 1.9 Lpf

#### 2. Additions to the Agenda

-Peter Mayer to provide Home Water Works website update  
-Steve to provide water softener testing update

#### 3. Administration

-Financial Report – see attached  
-Johann will be meeting with our Accountant next week to complete our year end report

#### 4. Water Partner Advisory Committee/Water Stewardship Council Update

-Johann said there is not much activity for the Council of the Federation Committee  
-Sub-committees have been established  
- Next full committee scheduled for end of February

#### 5. Residential End Uses of Water Study Interim Update

-Steve said that Waterloo data logging is done  
-Summary data due by month's end  
-79 homes in total were monitored, Peel had over 70 homes  
-Waterloo had nine homes that had hot water heating data recorded  
-Peel had some problems with hot water meters so their data will be done a little later

## 6. CNWEN Projects Status Updates:

### **2013 CWWA Conference:** Oct 17 – 18, 2013 Calgary ,

- Program Technical Committee has had conference call, and Call for Papers has gone out from CWWA - Kathy emailed to CNWEN members.
- Kathy encouraged group to circulate Call for Papers, and to submit abstracts
- Steve will submit on water softeners
- Aaron said that Calgary will submit several on energy use as it relates to water efficiency
- Challenges of approval for out of province travel was discussed
- Carol indicated MOE staff cannot attend
- Mathieu will try to attend as a speaker
- Kristy said that York will submit abstracts
- Cate said that out of province is a pervasive problem, however she plans go as a presenter.
- Aaron suggested that maybe CWWA could help some financially
- Kathy said that the Keynote speaker would receive compensation
- Kristy asked if there is consideration for a webcast
- Kathy said it had not been discussed yet but would bring it up with CWWA.

### **Green Plumbers Project:**

- Kathy said Kirk could not join us for this meeting, however he has submitted a draft Phase 1 report to Kathy & Cate. Kathy will circulate to working group
- That there is no common voice for plumbers is an issue, but there is interest in this type of program
- RBC Blue Water funding application submitted, we are eligible to submit a full application pending a decision with AWE as they have also submitted a funding application
- Cate pointed out that Kirk still had to talk to CSA which would be interested in running Green Plumbers, so this might provide additional info.

### **AWE Home WaterWorks Website: - Peter Mayer**

- Begun by AWE with Home Depot funding
- Chicago Field Museum had developed a calculator that used inaccurate data, but provided sound platform
- AWE established a contract to partner with the Field Museum to refine the calculator
- Glen obtained Canadian data through several Federal agencies to link Postal Codes to ET for outdoor water use estimates
- Indoor water use data will be the same across North America
- Peter walked us through how the home owner works through the process and the data the user has to provide in order to determine how they compare with homes of similar age so that they get a picture of how efficient the home is
- Municipalities can get a custom logo to provide a link from your website to the Home water Works site

- Aaron suggested that a drop down menu be added to enable the user to add fixtures – eg. Humidifiers, garburators.
- Peter said that this could be considered for the next iteration of the calculator, however cautioned that a key design criteria is simple inputs and fast response so as not to lose users.
- Mathieu asked if a translation could be undertaken in French via Quebec AWWA, Peter said yes he can
- Johann asked when the Canadian site will be ready for external use
- Peter said they are just finishing up, should be ready in a couple of weeks

### **Water Softeners Testing:**

- Softener testing in Waterloo Region has concluded.
- Steve said they are considering harmonizing a performance standard with NSF/ANSI test.
- EPA is still in a wait and see mode re WaterSense standards for softeners
- Steve has been talking with his NSF contact to see if they are willing to share their test results
- Steve to request that NSF begin to include both water and salt efficiencies in their consumer info at point of sale
- NSF may be willing to raise the benchmark on water efficiency
- MaP could provide the means to develop a performance benchmark and publish through them if NSF is not able to
- Waterloo test rig may be available for others to use, eg. Academic Institutions...
- [www.watersoftenerfacts.ca](http://www.watersoftenerfacts.ca) website will be updated to provide more info for the consumer in the near future
- Glen asked if Univ. of Waterloo Engineering has been approached – Steve replied not yet
- Steve said softener testing is very complex, all units seems to intermittently produce hard water for a short period
- Maybe controller settings could be the issue
- Johann suggested that CNWEN could be asked to contribute money for a broader testing regime
- Steve said the project is very time consuming for he and his staff
- Kathy said that maybe a contractor could be hired to do the testing, with joint CNWEN funding
- Steve said Aquacraft's End Use Study should provide water use data for homes with softeners
- Johann said that 3% of homes in the Peel study area had softeners
- Waterloo Region saw over 60% of homes with softeners, as determined by an ambiguous questionnaire
- Waterloo will do another survey to be sure
- Kathy asked if Aquacraft's Trace Wizard Software can quantify water softeners water use, -Steve replied that they can
- Aaron asked what kind of money would be required to expand testing
- Steve said they have been spending \$25-\$40K per year since 2009 and they have tested 12 units
- NSF charges \$6000 per unit for a simpler test (i.e. \$72,000 for the 12 units Waterloo has tested)
- Aaron asked if the type of unit infers its performance

- Steve said that the *NSF-ANSI 44 test* has a minimum benchmark that a unit should remove a minimum of 1000 grains of hardness for every 5 gallons of water
- Aaron asked if Steve could do a webinar for the group to bring the issue to the forefront
- Steve said he would consider one

#### **7. PERC ICI Drainline Transport Study – John Koeller -**

- John said the study's three key findings were; drain pipe slope, flush volume, toilet paper tensile strength. Trailing water and flush velocity were not factors (i.e. the flush velocity gravity vs pressure assist made no difference)
- Next phase will answer outstanding questions raised in this phase
- Kathy asked whether we need to meet with toilet paper manufacturers to talk about tensile strength
- John said they were unwilling to meet because they didn't want an outside body dictating product specs to them
- Kathy said her fear is that the paper manufacturer's will blame HETs for clogs resulting from too much high-tensile paper
- Aaron said that methodology used a flush device, will they use them in Phase 2
- John said yes, in the interest of consistency

#### **8. Ontario Building Code Conservation Advisory Council**

- Glen asked for suggestions for the next edition of the OBC
- he said items he is considering backflow preventers to prevent basement flooding during storm events
- Mathieu asked whether hot water pipe insulation was included in the 2014 OBC – Glen said yes

#### **9. Research Projects – Status Report**

- no updates due to Bill being on holiday

#### **10. New Info:**

##### **B.C. Alberta, Manitoba, OWWA, MOE, Quebec, CWWA**

- Calgary developing a ICI plan and updating 2005 WEP
- OWWA's Annual conference is in May in Ottawa with several water efficiency papers
- OWWA's Drought Response Workshop is scheduled for March 6<sup>th</sup>.

-

#### **Quebec Update – February 2013:**

- Mathieu cited three conferences in March all with water efficiency components
- his Ministry has published two guides (i) Water Efficiency Guide for Municipalities (ii) ICI Water Audit Guide including over 20 case studies
- The new publications include the 2012 Water Use Form and of two technical papers. Three 3 conferences are scheduled in February on water Efficiency for municipalities in collaboration with the Quebec AWWA section.

The new features of the Water Use Form are as follows:

- display the results of the previous year for simple and

- rigorous monitoring
- New requirements for the verification of the flow meters to ensure a precision of 5 %
- New requirement for the recording of the data for a better understanding of the night flow and to improve the estimation of water losses
- An improved methodology to estimate costs and revenues for water services
- And an improved methodology for a faster validation of data by the municipalities and the ministry of municipal affairs

#### Methodological Guide for auditing the water use in institutional buildings

Guide :

[http://www.cteau.com/wp-content/uploads/2013/01/Guide\\_CTE\\_version\\_1.pdf](http://www.cteau.com/wp-content/uploads/2013/01/Guide_CTE_version_1.pdf)

Annexes :

[http://www.cteau.com/wp-content/uploads/2013/01/Annexes\\_ABCD\\_Guide\\_CTE.pdf](http://www.cteau.com/wp-content/uploads/2013/01/Annexes_ABCD_Guide_CTE.pdf)

- This guide was produced by the Centre des technologies de l'eau (Water Technology Centre)
- It is aimed for managers and those who are responsible for equipment maintenance
- Although it is written in the spirit of an audit in institutional buildings, any organization wishing to contribute to better water management in a non residential building may find relevant information
- The Annexes of the guide present case studies, reference data (around Canada, North America and the World) and also include a simple form to reduce water consumption without doing an audit.

#### Water Efficiency and the Municipalities Guide

Volume 1 :

[http://www.reseau-environnement.com/UCtrl/scripts/kcfinder/upload/files/leconomie\\_deau\\_dans\\_les\\_municipalites\\_volume1.pdf](http://www.reseau-environnement.com/UCtrl/scripts/kcfinder/upload/files/leconomie_deau_dans_les_municipalites_volume1.pdf)

Volume 2 :

[http://www.reseau-environnement.com/UCtrl/scripts/kcfinder/upload/files/leconomie\\_deau\\_dans\\_les\\_municipalites\\_volume2.pdf](http://www.reseau-environnement.com/UCtrl/scripts/kcfinder/upload/files/leconomie_deau_dans_les_municipalites_volume2.pdf)

- This guide has been updated by the Quebec AWWA section (Réseau Environnement) and replaces the second edition published in 2011.
- The guide is now divided into two volumes. Volume 1 provides general information to optimize the management of drinking water and Volume 2 includes additional information.

One of the main improvements is the section of the guide on the verification and calibration of flow meters.

Conference on Water Efficiency for small and medium municipalities :

<http://www.reseau-environnement.com/fr/evenements/formation-sur-leconomie-deau-potable-dans-les-municipalites>

Webconference on the 2012 Water Use Form :

<http://www.quebecmunicipal.qc.ca/index.asp?module=conferences&action=express&id=57>

Conference on leak detection :

[http://www.google.ca/url?sa=t&rct=j&q=colloque%20r%C3%A9gional%20capitale-nationale%2Fchaudi%C3%A8re-appalaches%20fuites&source=web&cd=3&cad=rja&ved=0CDoQFjAC&url=http%3A%2F%2Fwww.reseau-environnement.com%2FUctrl%2Fscripts%2Fkfinder%2Fupload%2Ffiles%2FProgramme\\_colloque2013.docx&ei=uwIZUapL7Cj0AHKrYGwDw&usq=AFQjCNFZeTWf84hC2C\\_4ll4xODJ-MD5HYA&bvm=bv.42080656,d.dmQ](http://www.google.ca/url?sa=t&rct=j&q=colloque%20r%C3%A9gional%20capitale-nationale%2Fchaudi%C3%A8re-appalaches%20fuites&source=web&cd=3&cad=rja&ved=0CDoQFjAC&url=http%3A%2F%2Fwww.reseau-environnement.com%2FUctrl%2Fscripts%2Fkfinder%2Fupload%2Ffiles%2FProgramme_colloque2013.docx&ei=uwIZUapL7Cj0AHKrYGwDw&usq=AFQjCNFZeTWf84hC2C_4ll4xODJ-MD5HYA&bvm=bv.42080656,d.dmQ)

## 11. Other Business

-Steve would like to know what other municipalities are doing regarding BOD concentration for ICI wastewater streams. Do Sewer Use Bylaws compete with improved water efficiency in places like restaurants, since improved water efficiency could result in increased BOD concentrations, and higher charges. It would depend if BOD measurements are mass-based or concentration based (Waterloo's is concentration - based). Please get back to Steve.

-Glen related that the Clarington/Durham – Green Permit program is progressing now that they will be hiring the key staffer at Clarington

-Johann related that Peel has completed their WEP update

-Toronto has refined the name of the WE section to focus more on serving Toronto business customers' water issues

-York has lowered their toilet and humidifier rebates

**12. Next Meeting: Tuesday, April 2, 2013, location TBD**

**13. Adjournment**