

# Meeting Minutes

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City of Guelph

## **Water Conservation and Efficiency Public Advisory Committee (WCEPAC)**

November 29, 2017

City Hall, Meeting Room D

From 7:00 to 9:00 p.m.

Meeting Chair: Paul McLennan (PM)

Committee Membership: Grant Parkinson (GP), Mike Darmon (MD), Patty Quackenbush (PQ), Hugh Whiteley (HW), Louise Cottreau (LC), Renuka Baral (RB), David Worden (DW).

**Regrets:** Renuka Baral (RB), 1 Vacant seat

**Staff:** Stephanie Cote (SC), Jennifer Gilks (JG), and Heather Yates (HY)

**Presenters:** Dave Kains (DK), Kirk Stinchcomb (KS), Rebecca Mersereau (RM),

## **Agenda Items**

### **Item 1**

Welcome and introductions – P. McLennan, all

### **Item 2**

**Confirmation of last meeting's minutes – September 13, 2017 – P. McLennan**

**Motion:** The minutes from the September 13, 2017 meeting be approved and circulated.

**Motion** Approved by PM

**Seconded** by MD

**Carried**

### **Item 3**

**Residential Market Research Study – Alternative Water Softening Technology – D. Kains**

Attachment A: Water Conditioner Market Study Update PowerPoint presentation

This pilot study involves 18 Guelph and Waterloo Region households who were willing to install this alternative water softening technology. The purpose is to understand resident perceptions and attitudes towards crystallization (MIC) technology. This technology converts dissolved hardness into microscopic crystals that remain as insoluble particles that will not form scale on surfaces. The units are being installed through November and December 2017, in most cases by an approved contractor. The Study will conclude in December 2018, with a final report in early 2019.

#### **Discussion:**

**HW:** What happens to the water's pH level? Removing the cation affects the anion.

**HY:** We can investigate that.

**DK:** Installations are complete. Participants are using the technology now and we will regroup in the new year to talk about their experience. At the end of the study in the new year, a focus group and an online discussion forum for participants will provide opportunity to consider their experience with taste, how their appliances function, how Page 2 of 5 CITY OF GUELPH MEETING AGENDA the water feels during showers, and their desire to keep the technology or re-install their water softener at the end of the study, for example. Anecdotal feedback from other users has been that it took time to get used to the change in the water's consistency, but they would not go back to their water softener.

**PQ:** How can you make sure you haven't skewed their behaviour by making them more aware of their water use when you want to determine water savings?

**DK:** We installed sub-meters up to installation so we can benchmark from before the alternative water softening technology was installed. We have tried to control for awareness as best as possible.

**HY:** It will be interesting to see if more water is used due to residents requiring more soaps and shampoos when washing with hard water.

**LC:** What are the beads and do they need to be replaced?

**DK:** The medium, on average, lasts 3-5 years and will need to be replaced. The beads are polymeric resin beads. As the medium starts to wear down, water will become noticeably harder. Some companies have said a resident could change the medium themselves, but others have recommended a professional should replace it.

**PQ:** How does the price compare? What are the main differences expected to be between this technology and a traditional water softener?

**DK:** They are pretty much equivalent to a typical water softener but there is a wide price range on these units. The feel of the water and the amount of soap needed is expected to be different because the water is not being softened. The water is still hard.

**GP:** A regular water softener will flush minerals down the drain, while for this technology the minerals stay suspended in the water.

**DK:** The study is not about whether the technology will work with Guelph water. An engineering study has already been done. This study is about whether or not people will accept the change in water quality and be open to using this technology.

**HW:** Will the summary report consider the option to have neither technology installed? It isn't a necessity and drinking softened water is not good for human health. Have there been studies on the health effects of the alternative water softening technology? In terms of descaling the pipes, we need to consider Flint.

**DK:** They have done studies on the effectiveness of the technology. I don't know about health effects.

**MD:** Is there anything being used to attract the minerals to the medium.

**DK:** The systems do not use energy; it is passive.

**ACTION:** Staff to circulate research on the NAC/TAC water conditioning systems to the committee following meeting. Staff to follow up with Health Canada on health effects of consuming water conditioned using this technology and change in pH of water.

#### **Item 4**

**Public Education and Communications Strategy (PECS) Update – D. Kains, K. Stinchcombe, R. Mersereau**

## **Part 1.** Attachment B: Guelph PECS Update PowerPoint presentation

An update including trends emerging from the case studies, literature review and telephone surveys. Key messages and targeting strategy are in development. Program completion expected early in the new year. Results, thus far, suggest we need to communicate why conservation is important (including connections between conservation and water rate changes) and target very specific behaviours. Guelph is already and a national leader in terms of water conservation communications.

### **Discussion:**

**PQ:** How do you measure the success of marketing programs? It must be hard to measure the impact on water consumption. Page 3 of 5 CITY OF GUELPH MEETING AGENDA

**KS:** We can ask about the impacts and feedback from their communications during interviews. Areas with larger budgets might have hard data.

**RM:** The literature review provides insights on advertising strategies and messages that translate into actual impacts. Guelph is doing a great job at measuring awareness and water use over time which is a good indication that the City's communications are effective.

**DK:** Projects would need to be very large and specific for data collection to be worthwhile. A loose extrapolation occurs more often and considers whether people have seen the ads and whether or not they self-report lifestyle changes as a result.

**HY:** Community Based Social Marketing is a great tool that we are looking to further incorporate into our programs. We would like to target more specific, individual behaviours. Behaviour change will be key in our programs moving forward.

**HW:** It might be good to consider European case studies. German water use has dropped, and has maintained their water use to below 100 Litres per capita per day (LCD).

**ACTION:** Staff to look into German per capita water use drivers to achieve and maintain low LCD.

## **Part 2.** Attachment C: Metroline PECS PowerPoint Presentation

Some key findings from telephone surveys. We need to communicate why conservation is important, how it is linked to water rates, target more specific behaviours, and be cognisant of how we communicate our message to ensure we reach the target audience.

### **Discussion:**

**LC:** Why doesn't the study include schools and elementary students? This is another group in the community who aren't rate payers, who don't own a home or pay water bills, and aren't necessarily thinking about infrastructure and water usage.

**DK:** Other recent studies have targeted high-school and university students.

**HY:** We are looking at targeting a diversity of groups through this strategy, including youth, non-rate payers, etc. to ensure we develop core key messages that will resonate through all our programming. This will be reflected in the youth based water education programs the City currently offers as well.

**HW:** It seems effort is needed to communicate that the true costs of the system are fixed charges and what the long term benefits of reduced use are. This is to combat the perception

that that conservation will achieve immediate reduced costs to address the concern that water rates increase, making water conservation pointless.

## **Item 5**

### **Multi-residential Water Audit Program – J. Gilks**

Attachment D: Multi-res Audit PowerPoint Presentation

The proposed program involves a free multi-residential suite and building process audit to conduct a facility water balance. The purpose is to encourage greater awareness of water-use, and identify the potential for water savings in multi-residential buildings and further water conservation. This program is scheduled to Launch January 1<sup>st</sup> 2018.

#### **Discussion:**

**HW:** I suspect leakage would be a significant. This could be a primary message for marketing. Could monitoring be conducted for a week to monitor diurnal water use patterns and leakage as part of the audit?

**JG:** Water use monitoring would have a role in the audit. Based on consultations, it has been recommended that a 24 hour period would be sufficient for determining leaks. Water use tends to remain fairly consistent.

**PM:** For high water use buildings, monitoring may be valuable to determine what is causing the high water use.

**JG:** If the data is valuable it could be worthwhile. We will have to consider this along with resources required to conduct longer periods of data collection and analysis.

**LC:** How will you determine the day on which audits will be conducted as water use varies? There could be big fluctuations. Consider a building that houses students for example, and winter versus summer seasons.

**JG:** Multiple season audits would be ideal, but we need to consider associated costs and challenges. Historical water consumption data could also play a role.

**PQ:** Is there a different approach for condominiums versus apartments? Because highrises aren't individually metered, they can't be treated as a single family unit.

**JG:** Condominiums have common areas and shared water processes and are similar to apartments in that respect.

**PQ:** It may be worthwhile to target managers or owners of multiple properties first as you can reach many buildings with a few connections.

**MD:** The payback period may be shorter, and water savings may be greater, than you originally anticipated if you consider the potential for leaks in older 13 litre toilets.

**GP:** A targeted multi-residential program will be important moving forward. Especially as we see more being developed and representing a larger proportion of the population.

**LC:** You could provide incentives to participation first, such as a leak detection kit.

**HW:** Non-profit buildings might be more willing to participate if savings are greater than their loans.

**PM:** Loans are available to non-profits for replacing fixtures.

**MD:** A YouTube video showcasing 3L toilet performance may be a good communication tool.

## **Item 6**

### **Residential Sub-metering Rebate Program – J. Gilks**

Attachment E: Residential Sub-metering PowerPoint Presentation

Sub-meters can increase awareness and education around water use in multi-residential buildings and single-family homes, and subsequently further water conservation goals.

#### **Discussion:**

**PQ:** Consideration for insurance would be a good selling point.

**HW:** What about requiring all individual units to have a water meter? Sub-meters could be a City requirement and rebates could be provided for a period of time allowing buildings to adapt at a reduced cost. A good initial step may be to require all new buildings to have individually metered units.

**HY:** The main meter is a City meter, but the individual sub-meters are on private property and are the responsibility of the property owner. There are a number of concerns related to liability that would make an option like this challenging. Our tactics typically involve voluntary, positive incentives to encourage behaviour. As we move forward, there may be instances where we should move towards policy changes and create requirements to further conservation goals.

**PQ:** You would think individual units would want to be sub-metered so the cost isn't spread equally between them, and they aren't paying for their neighbours high water use. If units are responsible for their own water use, they may be more likely to participate in the programs you are offering.

**PQ:** Recommend breaking the application form into permanent and removable submeters.

**HW:** Collaboration with Waterloo region could be helpful to determine if they sub-meter

## **Item 7**

Other Business – All

#### **Discussion:**

**HY:** There will be four committee members stepping down in 2018. Please feel free to invite those who may be interested to attend meetings as members of the public.

**PM:** We will need to begin facilitating knowledge transfer to new members soon. Indicated willingness to step down in the near future.

**HW:** If the Committee wishes to stage a transition, one option could see two members step down in spring, and then two more in the fall.

**HY:** Election of a new chair will need to take place. We can also further discuss extending a member's term to help facilitate knowledge transfer to new members.

**ACTION:** Staff to work with Committee Chair to discuss transition plan for the Water Conservation and Efficiency Public Advisory Committee.

## **Item 8**

### **Next meeting dates – All**

A date survey will be sent out to schedule a meeting for early February.

## **Item 9**

Adjourn – 9:47 pm