

# Meeting Minutes

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City of Guelph

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

June 4, 2019

City Hall, Meeting Room D

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

Meeting Chair: Grant Parkinson (GP)

Vice-Chair: Jaime Boutilier (JB)

**Present:** Justin Arbuckle (JA), Jaime Boutilier (JB), Taylor Dorland (TD), Grant Parkinson (GP), Patty Quackenbush (PQ), Emma Thompson (ET), David Worden (DW)

**Regrets:** Emily Stahl (ES), Louise Cottreau (LC)

**Staff:** Stephanie Cote (SC), Travis Pawlick (TP), Heather Yates (HY), Steve Yessie (SY)

## **Agenda Items**

### **Item 1**

Welcome to all – G. Parkinson

### **Item 2**

Approval of meeting minutes from the April 23, 2019 WCEPAC meeting – G. Parkinson

**Motion:** to approve last meetings minutes (April 23, 2019)

**Motion** Approved by DW

**Seconded** by JB

**Carried**

### **Item 3**

#### **Proposed Changes to Terms of Reference – H. Yates**

The committee reviewed the proposed staff changes to the Terms of Reference. These changes will be put forward to the Committee of the Whole for review and approved by Council (estimated Q4). Key updates include aligning language with terminology used by the City Clerks department and the addition of text to clarify the role of the committee chair, vice chair, and how the public can engage with the committee. Consideration is being made for the incorporation of the Corporate Administrative Plan and City's Climate Crisis declaration.

#### **Discussion:**

**JB:** Should language about attendance requirements be included?

**HY:** Committee attendance requirements are outlined in the City's [Public Appointment Policy](#).

**GP:** Is language in our Terms of Reference consistent with that of other City committees?

**HY:** Original language and structure was borrowed from the River Systems Advisory Committee, but altered to fit the needs and intent of our WCEPAC specifically. Each committee is unique.

**Action:** HY to follow-up on whether, and how, the Corporate Administrative Plan and City's Climate Crisis declaration should be embedded within the role of the WCEPAC and the associated Terms of Reference.

## **Item 4**

### **Water Supply Master Plan and Update – E. Stahl**

A brief discussion and overview was to be provided of the Water Supply Master Plan, historical drivers for water efficiency and the updates required for an updated Plan in 2020. This item was deferred to the next WCEPAC meeting due to Emily Stahl's regrets.

## **Item 5**

### **Residential Sub-water meter rebate program update – S. Yessie**

This program has been operational for one year; staff have suggestions to streamline program delivery and increase program uptake. Especially for multi-residential properties.

Attachment A: 2019-06 Sub-Water Meter Rebate Program Update

### **Discussion:**

**DW:** Do you know how many buildings have a minimum average water demand of 130 cubic meters per suite per year?

**SY:** No. This requirement aligns with the requirements for the multi-residential water audit program. The 130 m<sup>3</sup>/unit/year threshold is, in part, meant to limit buildings constructed to current code, where opportunity for conservation is limited. The only buildings built to current code that might qualify under these eligibility criteria would likely have a combination of cooling tower(s), irrigation system(s) and swimming pool(s).

**JB:** By offering only one rebate per suite, is the manager potentially missing out on a rebate for a second sub-meter if they need to install two to account for a hot and cold water line?

**SY:** Yes, that is correct. If they had two water lines and two sub-meters in a unit, they would only get a rebate for one. This limitation is to balance the need of maintaining an incentive we can afford, but is still attractive to the property owners.

**TD:** Do you have data available on the household water savings from this technology?

**SY:** Nothing that is statistically significant, but we have observed savings between approximately 1 and 2 cubic meters per household per month.

**TD:** Who are you typically seeing install the technology?

**SY:** Anecdotally, data and tech minded people and those with a conservation-orientated mindset tend to be the early adopters. Also, those who have experienced a significant water leak previously.

**HY:** Some of the apps offer gamification which might be motivating for some.

**JA:** What is the cost of sub-meters?

**SY:** Approximately \$300 for the temporary and \$500 for the permanent sub-meters with monthly monitoring fees between \$7 to \$10.

**DW:** Do you think it better to encourage the installation of the permanent, in-line sub-meters due to their ability to shut off the water if a leak occurs and to better ensure data accuracy (you aren't relying on the accuracy of the main water meter)?

**SY:** Yes, I would agree with that.

**ET:** How does the City's adoption of bulk metering practice influence this program?

**SY:** Most multi-residential properties already operate using a bulk meter system in the sense that they have one meter into the building that accounts for all water use. New multi-residential buildings seem to be the focus for sub-meter services because the plumbing requirements can be easily built in. We would like to focus on retrofits since there is an assumption that there is a greater potential for water savings.

**JA:** Is there any incentive for new builds to install sub-water meters?

**SC:** Through Blue Built Home they can apply for rebates for sub-water meters, the caveat being that the property owner must own the meter.

**HY:** We understand how bulk metering is a challenge for conservation initiatives, but it is important for the City to ensure protection of the whole system and access to infrastructure, data accuracy, and cost recovery.

## **Item 6**

### **Residential Water Conditioner Study Update – H. Yates**

An update was presented to the committee on the alternative to ion-based residential water softener study completed in Guelph and Waterloo region. The goal of this study is to assess real world performance of water conditioners and the experience users had with their water when a conditioner was installed in their home. Water and salt use before and after the water conditioners were installed was also considered.

Attachment B: 2019-06 CoG Results on Water Conditioner Study

#### **Discussion:**

**PQ:** If the technology prevents scale from adhering to fixtures, do you know why they are seeing residue on their counters/dishes/floors?

**HY:** We do not know. There are variables that could cause the residue. Minerals still exist in the water; they do not form scale build-up.

**JA:** Is there no way to tell when the media expires?

**HY:** Not yet. The life of the media is another factor we would like to test in partnership with Waterloo. Some study participants used significantly more water than others, so we are very interested to know if there is a noticeable difference in what the media looks like.

**ET:** What is the cost comparison of the media to salt?

**HY:** According to [watersoftenerfacts.ca](http://watersoftenerfacts.ca) it compares favorably; "The estimated price to replace exhausted NAC/TAC media every four years ranges from \$250 to \$875, which is \$62 to \$218 on an annual basis. The estimated annual operating costs of ion exchange water softening is \$125 to \$248 per year per household for salt, water and energy." NOTE: these details were not provided during the meeting but through minutes only.

**ET:** Is there opportunity to teach people softeners and calibrating their own systems?

**JA:** Most people don't know how their softener works. There is minimal education, with mostly a set it, forget it mentality. People believe that they need one because they had one in their last house or their friends or neighbours have one.

**HY:** we will be updating [watersoftenerfacts.ca](http://watersoftenerfacts.ca) once we have final results to formally present. We will use the study results to consider how and if we might incentivize the use of this technology moving forward. If we move forward with an initiative to promote water conditions, we want to ensure people have realistic expectations for their use.

**TD:** Consider pursuing a hybrid education-incentive water softener program. For example, for optimizing or calibrating the system, using less salt, or for reducing the frequency at which the system undergoes a backwash.

**SC:** Perhaps similar to free irrigation system audits prevalent in many cities in the United States to help educate people on their system, calibrate them, and ensure they are working properly?

**HY and GP:** Indicated agreement with the concept of some hybrid education-incentive program.

**PQ:** Another alternative might be to have people reattach their softener just before the hot water tank to ensure softened water is only going to fixtures that use hot water. It might be worth another pilot study to evaluate the public's perception of a partially softened experience. PQ knows people who have their plumbing system set up this way and do not notice a difference. This could potentially cut down salt use by 25%.

**HY:** There is currently no accountability or legislation to support Health Canada's recommendation to avoid drinking softened water if you are on a low sodium diet. Having some would prove helpful for our efforts.

**HY:** Invites committee members to visit [watersoftenerfacts.ca](http://watersoftenerfacts.ca).

## **Item 7**

### **Other Business – G. Parkinson**

**HY:** City staff want to ensure participating in the WCEPAC is valuable for its members, and they feel engaged with the committee and materials being presented. Please reach out to GP, HY or SC to provide feedback on agenda items or the design or flow of the meetings.

Meeting adjourned 8:35 pm

### **Next Meeting:**

Tuesday September 17, 2019 from 7 – 9 p.m. Wastewater Treatment Plant, main boardroom