



**POCKWOCK WATERSHED
MANAGEMENT COMMITTEE**

Meeting Minutes – October 20, 2016
10:00 am

2 Park Avenue, Lower Sackville
Halifax Water Conference Room



Attendance:

Jeff Brown (JeB), Forestry Technician.....Department of Natural Resources
 Jillanna Brown (JiB), P. Eng.....Nova Scotia Environment
 Barry Geddes (BG), (*Chair*) Watershed Manager.....Halifax Water
 Rachel Gilbert (RG), Manager of Planning Services.....East Hants Municipality
 Andrew Houlihan (AH), Supervisor, J.D. Kline WS PlantHalifax Water
 Dawn MacNeill (DM), Watershed PlannerNova Scotia Environment
 Anna McCarron (AM), (*Recorder*) Source Water Planner.....Halifax Water
 Tim O’Brien (TO), (*Vice Chair*) Crown Forester.....Department of Natural Resources

Regrets:

Reid Campbell (RC), P. Eng., Director of Water Services.....Halifax Water
 Cyril McDonald (CM), Community ResidentMount Uniacke
 Heather Olivella (HO), Protected AreasNova Scotia Environment

<u>Pockwock Watershed Management Committee Meeting Called to Order by Chair.</u>	<u>Action</u>
<p>1. Attendance / Introductions:</p> <ul style="list-style-type: none"> • Regrets were expressed (listed above); • Quorum noted; • AM and BG distributed copies of: <ul style="list-style-type: none"> a. Meeting Agenda b. DRAFT March 3, 2016 Meeting Minutes c. Approved PWMC Terms of Reference (ToR) d. Halifax Water Source Water Protection Watershed Brochure <p>2. Old Business:</p> <p>a. <u>Review of March 3, 2016 Minutes and Action Items.</u></p> <ul style="list-style-type: none"> • Mount Uniacke Watershed Signage and Bell Park Interpretive Signage: <ul style="list-style-type: none"> ○ Halifax Water is in process of hiring Planning Student from Dalhousie University to redesign signs. Hope to have new design ready for March meeting. <ul style="list-style-type: none"> ▪ Pending consultant with Dalhousie University Planning and Design Department Coordinator to see if the proposed signage project meets student requirements for graduation. • Appointment of Special Constable Status (SCS): 	

<ul style="list-style-type: none"> ○ Training completed week of May 2, 2016 ○ Allows Halifax Water to Enforce Protected Water Area regulations; ○ Halifax Water still needs to be appointed SCS by NSE; however, the MOU still needs to be signed by NSE. It was confirmed that Halifax Water sent a signed copy of the MOU to NSE for final signature. 	<u>Action</u>
<p>ACTION: NSE TO SIGN MOU.</p> <ul style="list-style-type: none"> ● East Hants Newsletter. 	NSE
<p>ACTION: REQUEST THAT THE EAST HANTS NEWSLETTER BE MADE AVAILABLE ONLINE.</p> <ul style="list-style-type: none"> ● Protected Wilderness Areas Mount Uniacke Public Consultation. <ul style="list-style-type: none"> ○ Action item to be arranged by NSE and MEH at their own discretion. ○ Remove from Agenda ● Changes to ToR. <ul style="list-style-type: none"> ○ Changes accepted. Include updated version as an attachment to the Annual Source Water Protection Report and send to NSE. 	Complete RG
<p>ACTION: ATTACHED TOR TO ANNUAL 2016 SWP REPORT</p>	BG
<p><u>March 3, 2016 Minutes Approved.</u></p> <p>b. <u>Protected Areas Update</u></p>	
<p>ACTION: PREPARE AN ELECTRONIC AND HARD COPY VERSION OF THE PROTECTED WILDERNESS AREAS MAP TO MAKE AVAILABLE FOR THE BOARDROOM MEETING.</p>	BG/AM
<p>Q: Is Pockwock's Wilderness Area designated yet? (TO)</p>	
<p>A: In Heather Olivella's absence, BG responded: Yes.</p>	
<p>Q: Are the Wilderness Area signs up? (TO)</p>	
<p>A: In Heather Olivella's absence, BG responded: Not that he is aware of.</p>	
<ul style="list-style-type: none"> ● Pockwock's Protected Wilderness Area was created in consultation with Halifax Water, with the objective to protect biodiversity and water quality. ● The license for Halifax Water to operate in the watershed is being negotiated; wording regarding high water mark and flowage rights still needs to be determined. ● The initial Pockwock Wilderness Area that was considered for protection was 1178 ha. The final area agreed to is 1900 ha. 	
<p>Q: Is more area being considered for future protection under the Pockwock Wilderness Area? (JiB)</p>	
<p>A: No more area is being considered; ~33% (1900 ha) of the watershed area is now protected as Wilderness Area. Further, ~96% of the Pockwock watershed is protected through combined regulations associated with Crown land and Halifax Water ownership</p>	

<p>and the <i>Protected Water Area (PWA)</i> Regulations, which allows Halifax Water and the province flexibility in managing the watershed to achieve goals in protecting species biodiversity and water quality. The original purpose for expropriating Pockwock <i>PWA</i> lands from forest companies and other landowners was to protect the water supply as a potable water supply source for the City of Halifax. (BG)</p>	<p><u>Action</u></p>
<p>Q: <i>How has watershed water quality changed over time, based on data collection results? How have land use practices inside the watershed changed? How have these changes impacted water quality?</i> (TO)</p> <p>A: The Sediment Core Sampling Research Study completed in 2015/2016 outlines the water quality changes that were observed through carbon dating. The Study reports improvements in water quality since the watershed became a <i>Protected Water Area</i>. (BG)</p>	
<p>ACTION: BRIEFLY PRESENT AT THE NEXT MEETING HOW POCKWOCK WATER QUALITY HAS CHANGED OVER TIME BASED ON SEDIMENT CORE SAMPLE RESULTS.</p>	<p>BG</p>
<p>c. <u>Resource Management Update.</u></p> <p>i. Forest</p> <p>Q: <i>Have any Protected Wilderness Area Management Plans begun to be implemented anywhere in the Province?</i> (TO)</p> <p>A: Answer deferred to the next meeting that Heather Olivella attends.</p> <p>Q: <i>Is there any plan to conduct forest harvesting in the Pockwock watershed area in 2017?</i> (TO)</p> <p>A: WestFor is the Licensee for the Western Crown Lands (former Bowater lands) which now includes Pockwock as part of the license area. WestFor has not indicated to Halifax Water that they are interested in harvesting in the Pockwock watershed in 2017. DNR and WestFor would need to identify any areas considered for harvesting and consult with Halifax Water.</p> <p>ii. Water Quality</p> <ul style="list-style-type: none"> • Geosmin Update <ul style="list-style-type: none"> ○ Geosmin first detected in Pockwock Lake in 2012. ○ Geosmin presents an “earthy” taste and odour problem. A consultant was hired in 2012 to identify what was causing geosmin to grow. The cause was determined to be cyanobacteria which are capable of producing neurotoxins. This is currently a non-health issue; however, Halifax Water is continuing to monitor geosmin levels. ○ 2016 geosmin levels have been among the highest recorded since 2012. The consultant returned in 2016 to retest to see if the source changed. Currently waiting for the report. ○ Geosmin is common, especially in the southern US <p>ACTION ITEM: PRESENT FINDINGS OF GEOSMIN REPORT AT MARCH MEETING.</p>	<p>BG</p>

	<u>Action</u>
<p>Q: <i>Is there anything that can be done to treat geosmin?</i> (JiB)</p> <p>A: Yes; however, the treatment process is very costly. Halifax Water is doing research to find out what the potential source(s) is (are) and what the treatment options are. At this point, Halifax Water is still collecting data. (AH)</p> <ul style="list-style-type: none"> • Lake Recovery Research <ul style="list-style-type: none"> ○ With the recent shutdown of coal-fired generating plants in the central and eastern US, the theory is that water quality (especially pH) is showing an improvement due to a reduction of sulfur dioxide (SO²) emissions. ○ Pockwock, Lake Major and Bennery Lake are all showing signs of lake recovery, which is causing problems with the treatment process. Halifax Water has begun to investigate why water quality is changing and what the implications are to Halifax Water in terms of optimizing treatability. ○ Increased sampling over the next 2-5 years is being conducted to better understand water quality. ○ There will be future presentations once more data is gathered. <p>ACTION: PRESENT LAKE RECOVERY DATA FINDINGS BY EXPERT, AFTER MORE DATA HAS BEEN COLLECTED.</p>	<p>BG</p>
<p>3. New Business:</p> <p>a. <u>Pockwock Water Levels</u></p> <ul style="list-style-type: none"> • NSE asked that all water utilities in the province be prepared to report water levels at watershed meetings. <ul style="list-style-type: none"> ○ AH provided water level information on behalf of Halifax Water. <ul style="list-style-type: none"> ▪ Pockwock’s lake level is 47.5 inches below the dam level. ▪ This level is lower than normal, but Halifax Water has experienced this before. ▪ The historic low was on January 6, 2002, when water levels were 70.5 inches below dam level. <p>Q: <i>How is the downstream flow being maintained? Is Halifax Water spilling water?</i> (JiB)</p> <p>A: No, the Pockwock dam is not spilling. Halifax Water is currently not required to open the dam under the existing operating permit. (BG)</p> <p>Q: <i>Is there a conservation plan in place for Pockwock during low periods? How does Halifax Water notify people?</i> (JiB)</p> <p>A1: Halifax Water has a conservation plan protocol in place for Pockwock that is similar to Lake Major’s; i.e., to notify the public to reduce consumption, but Halifax Water has never had to use it for Pockwock. (AH)</p> <p>A2: Though Halifax Water has more customers now than it had in the 1970’s, less water is being consumed due to technological advances to reduce usage, e.g., low flow shower</p>	

heads and toilets. Halifax Water also has a progressive water leak detection program, which proactively identifies and fixes leaks, further reducing demand on the water supply. (BG)

b. Enforcement Issues

- It has been a good year in terms of enforcement challenges; very little to report.
 - Since the charges were laid in September 2015, ATV use is down. Monitoring continues.
 - The remaining pinch point is an access point north of the watershed.
 - New signage and a barrier are being installed at this access point.

Q: *Have you ever contacted NSE inspectors to deal with some of the watershed violations?* (JiB)

A: No; NSE is only contacted for problems outside of the Protected water Area (PWA). NSDNR Conservation Officers are usually contacted for problems that occur inside the non-designated portion of the watershed area. (BG).

4. Landowner Q&A:

- No questions at this time

5. East Hants Planning and Development Update:

a. Mount Uniacke Business Park Expansion Discussion

- MEH Planning and Development (P&D) is in the early stages of purchasing and expanding the Mount Uniacke Business Park. (RG)
- A landowner, interested in building an asphalt plant inside the Pockwock Protected Water Supply Zone of the Mount Uniacke Business Park, is in the early discussion phase with MEH P&D. MEH is bringing it to Halifax Water's and the PWM Committee's attention because the concept does not comply with the Pockwock Protected Water Supply Zone land-use for the area.

Q: *Would Halifax Water be alright with changing the by-laws to allow for the asphalt plant inside the Pockwock Water Supply Zone?* (RG)

A1: Halifax Water understands that MEH is required to be reasonably consistent with the *Statement of Provincial Interest (SPI) Regarding Drinking Water*, and consider land-use restrictions to reduce the risk to the Pockwock water supply. (BG)

A2: An asphalt plant is a designated activity under the *Environment Act's* Activities Designation Regulations (ADR) meaning that NSE will not allow the asphalt plant to be constructed inside a municipal water supply. NSE would require a physical set back from the watershed boundary because of the toxic nature of the asphalt plant. (JB)

ACTION ITEM: MEH STAFF TO CONTACT JIB TO DISCUSS THE ACTIVITY.

- MEH P&D has initial concerns with the proximity of the asphalt plant to the Pockwock watershed and are looking at other ways to facilitate the development.

Action

RG/JiB

<ul style="list-style-type: none"> • Further, the geology of the Mount Uniacke Business Park is underlain by Halifax Formation bedrock, which has high potential for producing acid rock drainage (ARD) when exposed to air and fresh water. ARD is highly toxic to water quality and aquatic life. The Sulphide-Bearing Material Disposal Regulations would apply if disturbance of the bedrock is likely. Any exposed bedrock would have to be disposed of at a government approved location. <p>b. <u>MEH Regional Plan Review Update</u></p> <ul style="list-style-type: none"> • At the March 2016 PWMC meeting, the MEH Community Plan was still in the initial design stages. The Plan has been completed and is now in place. There were no changes to the Pockwock PWS zoning bylaws; however, two new bylaw areas have been created and fall within the Pockwock PWS Bylaw Zone: the first is the southern expansion of the existing Mount Uniacke Business Park; and the second is the new Lakeshore Residential Bylaw Zone designed to further protect the integrity of the shoreline within the Pockwock PWS Zone. • AH pointed out a small area close to the Provincial Bell Park was mis-identified; i.e., overlooked. RG to bring to East Hants Planning and Development’s attention. 	<p><u>Action</u></p>
<p>ACTION: BRING MAPPING ERROR TO EAST HANTS PLANNING AND DEVELOPMENT’S ATTENTION.</p>	<p>RG</p>
<p>6. Education and awareness</p> <ul style="list-style-type: none"> • The new Source Water Protection Brochure created by intern student was circulated. <ul style="list-style-type: none"> ○ Copies were provided to the Committee members for distribution. <p>7. Election of Officers</p> <ul style="list-style-type: none"> • 2017-2018 Chair – Tim O’Brien • 2017-2018 Vice Chair – Barry Geddes • 2017-2018 Secretary – Anna McCarron <p>8. Next Meeting:</p> <ul style="list-style-type: none"> • March 2, 2017 9:30 am • Location: 2 Park Ave., Lower Sackville, Halifax Water Office Boardroom <p>9. Adjournment</p> <ul style="list-style-type: none"> • 12:00 pm <p><i>Barry Geddes – Chair</i> <i>Tim O’Brien – Vice Chair</i> <i>Anna McCarron –Secretary</i></p>	