



# POCKWOCK WATERSHED MANAGEMENT COMMITTEE

April 12, 2018 Meeting Minutes – 10:00 am 2 Park Avenue, Lower Sackville Halifax Water Conference Room

#### <u> Attendance:</u>

Jeff Brown (JeB), Forestry Technician	Department of Natural Resources (DNR)
Barry Geddes (BG), (Vice Chair) Watershed Manager	Halifax Water
Rachel Gilbert (RG), Manager of Planning Services	East Hants Municipality (EH)
Andrew Houlihan (AH), Supervisor, J.D. Kline Water Supply I	PlantHalifax Water
Dawn MacNeill (DM), Watershed Planner	Nova Scotia Environment (NSE)
Anna McCarron (AM), (Secretary) Source Water Planner	Halifax Water
Tim O'Brien (TO), (Chair) Crown Forester	Department of Natural Resources (DNR)
Heather Olivella (HO), Protected Areas Coordinator Central Re	egionNova Scotia Environment (NSE)
Regrets:	
Jillanna Brown (JiB), P. Eng.	Nova Scotia Environment (NSE)
Reid Campbell (RC), P. Eng., Director of Water Services	
Cyril McDonald (CM), Community Resident	
Guest:	
Tyler Mattheis (TM), Senior Business Development Officer	East Hants Municipality (EH)

# 1. Attendance / Introductions:

# AM distributed:

- 1. Meeting Agenda;
- 2. DRAFT October 19, 2017 Meeting Minutes;
- 3. Source Water Protection (SWP) Report; and

#### TM distributed:

1. East Hants Watershed Protection Overlay Zone Map

Pockwock Watershed Management Committee Meeting Called to Order by Chair (TO)

- Regrets were expressed (listed above); and
- Ouorum noted.

A Moment of Silence was observed for Cyril McDonald who passed away this week, after serving on the Committee as a Mount Uniacke Community Member for 4 years.



2. Presentation by Jason Casey – Westfor	<b>Action</b>
• Deferred	
Action: Set up new presentation time.	BG
3. Old Business:	ра
a. October 19, 2017 Minutes:	
<i>i.</i> Review of Action Items: (underlined) correspond with Agenda Items.	
ii. Approval of Minutes	
Motion to approve the Minutes – DM, seconded by RG. All in favour.	
b. Special Constable Status Update	
NSE to sign MOU. JiB to inquire with NSE to see where it is in process.	Complete
BG to follow up with JiB on where NSE is in the process with MOU.	Complete
• The Special Constable Status (SCS) MOU for an inspector (i.e., BG) specific to Halifax Water <i>Protected Water Areas</i> ( <i>PWA</i> ) (i.e., Lake Major, Pockwock and Bennery Lake), as defined under the <i>Environment Act</i> , has been signed by NSE and returned to Halifax Water for sign-off.	
Action: BG will show signed SCS MOU for Halifax Water to the Committee at the next meeting.	BG
c. Protected Area (PA) signage update:	
NSE to develop sign strategy for Pockwock Protected Area (PA).	Ongoing
• Due to its geographical location, the Pockwock <i>PA</i> NSE coverage is divided between Sally Steele and HO.	
• A meeting between DNR (JeB and Don Cameron), and NSE (Sally Steele) will occur in about a month or so, to discuss a sign plan.	
• Halifax Water, DNR and NSE co-manage the land within the <i>PWA</i> ; signs are necessary to differentiate the various jurisdictions and the variable regulations that apply within each.	
Action: HO will contact BG about Protected Area signage in PWA.	HO/BG
Action: JeB will pick a date to meet to determine where to post signs.	JeB
d. Mount Uniacke Signage	332
BG to assist CM to create a "fact or fiction" information bulletin dispelling the myth that Halifax Water regulates West Lake or has the authority under the Pockwock Watershed <i>PWA</i> Regulations.	Ongoing
• Due to CM's health, progress on this item was delayed.	
<ul> <li>Once a new PWMC Mount Uniacke community member is determined, this item may proceed.</li> </ul>	
• Use existing media tools (Mt. Uniacke newsletter, etc.) to get the message	

out about bylaws and regulations and contact numbers to help relieve frequency of phone calls to councillors getting.

**Action** 

BG/RG

# Action: BG to contact RG about next steps.

# e. Resource management updates:

- i. Forest:
- WestFor Management Inc. is responsible for developing and managing forest management practices on western NS Crown lands including Pockwock. Halifax Water is a stakeholder that WestFor must work with.
- Halifax Water and WestFor met regarding harvesting in the Pockwock *PWA*;
- BG and TO provided an overview of WestFor's presentation (regretfully WestFor could not present today; their original presentation, set for the March 8 PWMC meeting was cancelled due to weather):
  - Westfor is a consortium of 13 mills that determines how wood is to be divided. Marcus Zwicker is WestFor's new manager;
  - WestFor and Halifax Water a stakeholder due to interest in water quality impacts – conducted a site visit; WestFor will consult with DNR;
  - Later there will be public consultation about harvesting the chosen site because the proposed harvesting will be on Crown land;
  - o Two (2) locations have been identified as potential harvest areas:
    - 1. The western backside of the watershed; however, Halifax Water is concerned about creating new access to this block because this would also create new access to the watershed for off-highway vehicles (OHV). Halifax Water suggests instead updating existing roads; and
    - 2. a selection management block to meet Halifax Water needs; i.e., target a spruce budworm area that Halifax Water would like to have cut just north of the ring road.

**Q:** Could the Protected Area (PA) boundary be displayed relative to the proposed blocks? (HO)

**A:** Reminder that these areas were clearcuts 60 years ago; therefore, could be again. (TO)

- Halifax Water discussed with Westfor the needs regarding forest pretreatment assessments; i.e., soil, slope and wind regimes, to determine appropriate management for this block; i.e., thin or clear-cut?
  - Thinning could cause blow down that would negatively affect water quality; alternatively, to prevent blow-down, clearcutting may be the best risk mitigation strategy to protect water quality.
- 40 ha is the proposed size of one harvest area –large compared with most of the harvests in Halifax Water *PWA* areas too large is another consideration.

Q: Are DNR and Halifax Water on the same page? (TM)

**A:** Yes. If forest companies don't practice the way DNR and other stakeholders (e.g., Halifax Water) want, then conducting business on Crown land won't be permitted. Halifax Water takes the lead where *PWA* water quality is the highest priority. (TO)

Action

- Sediment core research shows how local impacts to water quality have decreased since watershed activities have been regulated and best management practices (BMPs) have been put in place;
- Forest management that decreases water quality impacts is an important mitigation strategy;
- Extreme events are the biggest concerns; e.g., hurricanes and fires present a significant impact to water quality;

**Q**: Has that area been pre-commercially thinned (PCT)? (TO)

A: I believe so because it was Bowater lands. (BG)

**Q**: How does clearcutting affect the forest in the short term? (TM)

A: A short term increase in nutrients resulting in a short term decrease in water quality.

- WestFor has not sent any data to DNR on potential blocks (cutting areas) for DNR to identify any potential conflicts;
- Pre-treatment Ecological Land Classification data provides DNR with baseline information and a framework that influences whether a proposed management plan is approved, needs adjustments, or is denied; (TO)
- WestFor then considers any DNR-identified conflicts and outlines to DNR what the Special Management Practices are within this block in the plan that they send back to DNR; (TO)
- WestFor will manage it even though they don't have a long term agreement, which they cannot develop now because the government is waiting for the Lahey Report release; DNR is unwilling to entertain any long term agreements until that occurs; (TO)
- From a business perspective, companies prefer to have a long term plan, otherwise, there is uncertainty for mills; (TO)

**Q**: Who gets the money for the stumpage?(TM)

A: Stumpage is based on consumer price index from last year, which gets adjusted each year and paid to DNR (not to Halifax Water), when it is on Crown land.

- Strategic analysis is given to WestFor to determine how to manage the forest;
- There are three (3) types of clearcuts:
  - Seed trees scattered trees throughout clearcut to provide seed;
  - o Stocked overstory removal has enough regeneration to grow back; and
  - Unstocked overstory removal needs planting because it does not have enough regeneration stock to grow on its own; (BG)
- Public consultation online process:
  - o DNR has 30 days to post and provides 20 days for comments;
  - People express comments online, most of which are useful; e.g., what will operations do to access camps and other activities; and
  - DNR understandably justifies activities to the public, preferably as determined by science.

**Q**: What is the projected timeline? DM

**A**: We don't know yet. Could be 6 months to two years – sometime during the 2018 or 2019 operating season. In past there would be a multi-year plan.

**Action** 

- ii. Water Quality:
- Geosmin update:
  - AH described Geosmin as an algae in the water that dies off and generates an odour or taste in the water. Smell/taste detection varies by individual. It is an aesthetic concern not a health concern:
  - Halifax area was getting more complaints than other areas in the province were, although it is in other watersheds in the province;
  - Tree Frog consultants conducted tests to determine source of odour; small areas of geosmin concentrations were found but not enough to definitively determine the source;
  - o Lake recovery is theorized to be the cause of geosmin outbreaks;
  - o The same algae that produces geosmin also produces neurotoxins;
  - Halifax Water complaint thresholds range in the high 13s low 20s -low compared to places where numbers are in the 400 range;
  - Other cities (e.g., Calgary) have done expensive treatment, but haven't needed to treat geosmin again because it hasn't appeared since;
  - o Treatment for one algae species will not treat others;
  - We need to consider activities on the land base; and
  - o A strategy used elsewhere is to put alfalfa on the lake.

**Q**: Was geosmin detected in the sediment sampling research program?

A: They looked at the types of bacteria, but geosmin was not definitively identified.

- Lake Recovery Research:
  - o BG briefly described *lake recovery* research; i.e., the theory is: largely due to the reduction of SO<sub>2</sub> (Sulphur Dioxide) emissions (producing acid rain) since the 1970s, surface (lake) water quality has been "recovering", as indicated by water quality data assessments, by becoming less acidic (higher pH) and more "productive" (Total Organic Carbon (TOC)). However, the recovery of water quality is affecting water treatment processes in the water supply plants (WSP), which were designed to treat a more acidic and less productive water supply.
  - AH added that the Pockwock WSP is only designed to handle about 3 mg/L of TOC. As TOC in the water increases toward this threshold, other treatment methods need to be considered. Beyond this threshold, the current treatment process can produce a product generating health concerns. Until the research definitively determines what water quality parameters are affecting the WSP treatment process and what solutions are available to combat them, close monitoring will be conducted.

# 4. New Business

- a. Source Water Protection Plan report (deferred to last part of meeting) (BG):
  - Halifax Water is pursuing a license to be allowed to work inside the

Pockwock Watershed Area.

### Action

#### b. Pockwock NSTIR Lands:

- A parcel of NS Transportation and Infrastructure Renewal (NSTIR) land is declared surplus. DNR was not interested in it and suggested contacting Halifax Water to determine an interest in buying it.
- Some of Halifax Water's Chain Lakes land is being expropriated to upgrade Highway 103, an opportune time to swap land with NSTIR.
- East Hants owns the adjacent property, precipitating the surplus declaration.

#### c. Water Research Network:

- forWater Research Network Project the next step in lake recovery program designed to coordinate research to protect forested water sources;
- Utilities and forest management have not typically worked together other jurisdictions are learning from Halifax Water's experience;
- Halifax Water is working with Dalhousie profs on a networking program between government, universities and utilities to share research about how forestry impacts water quality (specifically organic carbon):
  - o Dr. Peter Duinker, is looking at the forest management impacts; and
  - Dr. Rob Jamieson is monitoring water quality over a two-year period before, during and after forest management is practiced.

**Q:** How are they going to measure the carbon? (TO)

**A:** Dalhousie is determining that. One way is by establishing a control site never harvested before; another is to compare the control site with a different type of forest management treated site. Sampling started in April on (Lacy Mill) tributary. (BG)

**Q**: How does this impact the forest management?

A: WestFor and DNR support the research project.

# d. Community Member

• Due to the passing of Cyril McDonald, a new community member representing Mount Uniacke on the PWMC will need to be sought.

Action: Find a Community representative from Mount Uniacke.

#### BG/AM

#### 5. Landowner Q & A:

No reports

#### 6. Municipal Planning Update

#### a. East Hants – Development in Watershed Boundary (RG):

- There are two companies concerned about the watershed boundary line and regulations within the natural watershed area;
- East Hants Municipality has requested that Halifax Water prepare a document from a person qualified to do so, which demonstrates how the watershed line was determined;
- Need to determine how to deal with development interests wishing to

conduct activities not in accordance with East Hants Municipal Planning Strategy or Land Use Bylaws (LUB) inside the watershed area:

- Action
- Need to determine who to consult; i.e., Halifax Water, NSE and/or PWMC;
- If a boundary change is requested, then need to send application request to Municipal Affairs to address how the request impacts the Statement of Provincial Interest Regarding Drinking Water;
- o The LUB does not allow engineered solutions;
- O How to involve the committee:
  - ToR allow the Committee to meet as needed;
  - developer needs to make application to amend planning documents to East Hants Planning and Development (EHPD);
- Policy says to protect the watershed, so it could turn out that an amendment to the policy is required;
- Current East Hants development application process involves receiving application, going to executive committee and to Council, writing to different consultees (i.e., Halifax Water and the PWMC), formulating information and presenting to Council; and
- Since the land area in question is outside the PWA and inside the Pockwock natural watershed boundary, the Halifax Regional Water Commission Act sec 25, should be considered.

# b. Current Watershed Protection Overlay review regarding plans to expand the Business Park (TM);

- Want to break ground in 2019, depending on neighbouring landowners;
- May be able to build into the existing catchment design for Highway 101, to mitigate the risk from the business park;
- the business park is built on pyritic slate;
  - o could make pad-ready or other engineered solution;
- Want to highlight what can be done in the park rather than what can't be;
- Discuss at a future meeting.

# Action: Discuss Business Park expansion at future meeting.

All

- 7. Education and Awareness update
  - Nothing to report
- 8. Election of Officers October 2018
- 9. Next Meeting October 18, 2018

# 10. Adjournment

Tim O'Brien – Chair Barry Geddes – Vice Chair Anna McCarron –Secretary