



Collin's Park Watershed Advisory Committee Meeting Minutes

February 22, 2017

7:00 – 9:00

Gordon Snow Centre Boardroom, Fall River

Attendees:

Damon Conrad (DC), Community Rep.....Fall River
Barry Geddes (BG), Watershed Manager.....Halifax Water
Erin MacIntyre (EM), Principle Planner.....Halifax Municipality Planning and Development
Bev Lawson, Wellington.....Collin's Park WSP Customer
Dawn MacNeill (DM), Watershed Planner.....Nova Scotia Environment
Keith Manchester (KM), Community Rep.....Lake Fletcher
Anna McCarron (AM), Source Water Planner.....Halifax Water
Tom Mills (TM) (Chair)....Shubenacadie Watershed Environmental Protection Society (SWEPS)
Dick Pickrill (DP), Community Rep.....Wellington

Absent:

Scott Smith.....Nova Scotia Home Builders Association

1. Welcome and Introductions

- TM, Collin's Park Watershed Advisory Committee (CPWAC) Chair called the meeting to order.
 - Round of Introductions.
- AM/BG distributed copies of
 - a. February 22, 2017 Meeting Agenda;
 - b. DRAFT October 20, 2016 Meeting Minutes;
 - c. Attached set of maps and list of Sample Points:
 - i. Map of Collin's Park Watershed Area Geology and Sample Points;
 - ii. List of Collin's Park Sample Points;
 - iii. Two Google Earth© Collin's Park Watershed Area Boundary Area maps showing water quality sample points and Community areas;
 - d. Risk factor materials for discussion purposes:
 - i. BoMont and Collin's Park Watershed Area Risk Zones map;
 - ii. Collin's Park Watershed Area Risk Factors for consideration presented in form of DRAFT BoMont SWPP Table of Contents; and
 - iii. Risk Assessment Model (one-page hand-out);
 - e. Source Water Protection Report; and
 - f. Collin's Park Watershed Advisory Committee Reference binder (for those who had not yet received one).

Action

2. Review and Approval of October 20, 2016 meeting Minutes

- DM requested changes to the Minutes:
 - Page 3, top bullet regarding “Step 3” reference;
 - Correct order and titles of Steps in the step process; and
 - Reference to *Protected Water Area (PWA)* – remove “Watershed” and “Supply”.
- Review of **Action Items**:
 - Send letter to NS Home Builders Association regarding lapse in member attendance:
 - The CPWAC Administration decided not to wait before sending a letter because the member in question had not missed three consecutive meetings.
 - The member has an opportunity to read the Minutes and therefore the opportunity to know the Committee’s concern about the lapse in meeting attendance.
 - This meeting marks the third consecutive meeting the member has been absent; therefore, a letter may now be sent to the NSHBA.
 - The Action Item will now be pursued (**Item 3.a.** below).
 - Provide to the members an overview of the known risks to the water supply area a month in advance of the next meeting:
 - The outdated Collin’s Park Watershed Area (CPWA) Source Water Protection Plan (SWPP) was sent to the members; it contains previously defined risks to the watershed area.
 - We will discuss in more detail other risks to the watershed area that have been found since (through the development of the BoMont SWPP), further in the agenda (**Item 4.**).
 - Expand on Sample Site Names to provide clarity:
 - Members were invited to review the distributed maps and sample points list (**1.b.** above).

Q: Upon review of the map, DM asked whether the airport area inside the CPWA is where de-icing occurs?

A: Bennery Brook is the receiving waters for the de-icing area of the Airport. (DC). Further, it is believed that the de-icing agent is collected and reused. (TM)

- Tours of the Collin’s Park Water Supply Plant (WSP) and the Lake Major WSP for comparison:
 - Typical workday times are best for staffing purposes as opposed to evening times.
 - Afternoons/later in the day is best for Committee members

– 2:00 or 3:00 p.m.

- Members were advised of Personal Protection Equipment (PPE) needs required while touring plants.
- AM will send out directions to the Lake Major Plant.

Action: Send to members directions to the Lake Major WSP.

- Approval of October 20, 2016 Minutes – **Approved with changes.**

Moved by DP, seconded by KM.

3. *Old Business*

a. **Terms of Reference (ToR):**

- An advertisement was submitted in the March 2017 issue of The Laker, advertising the vacant Waverley position.
- Nova Scotia Home Builders Association (NSHBA) membership – as of tonight’s meeting is now out of compliance; time to advise the NSHBA.

Action: Send a letter to the NSHBA informing them that their selected representative has not attended any meetings and ask whether they wish to have a representative on the Committee, considering the ToR (sec. 20), which states that “Members who miss three consecutive meetings will forfeit their position to which the [Committee] will seek replacement...”.

Q: Is there any other group we could approach to represent the development community on the Committee? TM

A: For our other groups, the regulator has acted as the representative for a particular sector, e.g., DNR represents the forest industry on our Lake Major Watershed Advisory Board (WAB). HRM Planning and Development and NSE’s watershed planner representatives can provide expertise with respect to development sectors instead of the NSHBA. (BG)

b. **Development of Source Water Protection Plan (SWPP)**

- Development/Assessment of Risks:
 - Members were asked to view the risk factor material handouts (1.d.). AM explained their purpose and how risk severity, probability and exposure are assessed in developing SWPPs.

Q: Though you can produce a map for each of those characteristics; can you go from that to stacking cumulative risks? (DP)

A: Yes. At the moment it is very general, so we need to break the risks out further for certain variables. Although the Collin’s Park area is coloured green (low risk) on the Bomont Map, which indicates that area’s risk impact specific to the BoMont intake area, the Collin’s Park watershed area will be broken down into red (high), yellow (medium) and green (low) risk area zones (RAZs) to reflect the

Action

**AM
Complete**

BG/AM

risks specific to the Collin's Park watershed area. (BG)

Q: *Is the airport considered a risk; and if so under what category is it listed.*
(DM)

A: the airport would fall under the IC&I sector. (AM)

- SWPPs are based on the risks in the watershed and how those risks may be mitigated or managed; e.g., proximity of developable land to the watercourse is considered a risk. To manage that risk in our Bennery Lake *Protected Water Area (PWA)* we have a land acquisition plan. The SWPP helps us determine what land should be purchased, based on what land area is most at risk of being impacted by undesirable activity.
- Using the BoMont SWPP Table of Contents (ToC) as a template, we ask the Committee to assess whether there are any risks missing and to send your observations to Halifax Water.

Action: Look over the list of risks presented (BoMont SWPP Table of Contents) and consider what needs to be added to the SWPP.

Action: Send reminder to the members to provide input on the SWPP in late May 2017.

- Are there any industrial contamination sites identified in this area?
 - Transformers used to be stored on NSPI land where the quonset hut is currently situated.
 - There was also an old junkyard where the Shoppers Drug Mart is now;
 - The landowner collected old cars – 100 or 200 a year – and crushed them.
 - Another junk yard site has been reported to be near “A” Lake, where there is now a “No Dumping” sign.
 - Are salvage yards included in commercial uses?
- Cumulative situations need to be considered in the SWPP; and
- Also the one ofs; i.e., the airplane crash or the overturned boat.

Q: *What is the deadline to develop the SWPP?*

A: SWPPs are living documents. If changes are required, they will be reflected in the Annual Source Water Protection Report that is submitted to NSE. (DM)

- A third of the catchment is coming from Miller Lake. Recommend adding a water quality sample site at the Miller Lake outfall to provide a sense of the sub-catchment area water quality. (DP)
 - SWEPS has worked with Halifax Water to take water samples coming from the Aerotech Park; e.g. Phosphorus; botany plant growth – Halifax Water is looking at the upper portion of this watershed area.

Action

All

AM

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-
- SWEPS is looking to collect data for the next 20 years in this portion of the watershed.
 - Halifax Water doesn't have an issue for adding sample sites except that there needs to be the resources to add sites.

Action

Q: Is testing done for pharmaceuticals?

A: Such tests are required at our plants by Halifax Water.

Action: Halifax Water will ask how Halifax Water tests for pharmaceuticals.

BG

Q: Is there some community awareness that we can do to try to reduce flushing pharmaceuticals? (TM)

A: Bring them back to the pharmacy for free. (DC)

Q: Where is the geology represented in the risks assessments list? (KM)

A: Under Natural Hazards. (AM)

- Map development – Clarify Site Abbreviations
 - Clarification of sample site names was included in the handouts outlined in **1.c**.
- Applicable Regulations:
 - On-site Sewage Disposal System (OSSDS) Best Management Practices (BMPs):
 - DM explained the changes to the OSSDS Regulations:
 - Section 5 (1) (i) of the OSSDS Regulations states that you have to follow the PWA Regulations;
 - presentations on *PWS* OSSDS installations are being targeted to “Qualified Persons” (QPs); i.e., OSSDS installers, and pumpers and engineers; and
 - in non-designated water supply areas they are being told that municipal land use bylaws may need to be considered;
 - The problem in the Collin's Park watershed area is the age of on-site sewage systems in use.

Q: How well is the HRM phosphorus loading policy working in the development world? (AM)

A: The phosphorus loading policy has been fully adopted by Council and is tucked into all of the HRM Municipal Planning Strategies; for new opportunity sites for more significant densities, developers have to outline and mitigate phosphorus loading.

Discussion:

There is a technical issue with the wording – basically saying they can come up

with biological or engineered solutions. HRM Planning has a couple of sites we have dealt with; some on Ingram Drive and others. Not sure of the specifics and what the loading would be.

One of the consultants working on the Fall River Watershed Study recommended that composting toilets be used in this area; and that they should be considered. Considering not so long ago that solar power seemed out of reach, now it is common practice.

Outputs need to be coordinated with what the province requires; re OSSDSs, the Standard and Regulations must be followed.

Q: Collin's Park WSP is pumping water up hill. Shouldn't we have an in-house discussion on the impact of chlorinated water on OSSDSs? Is the customer's on-site septic system affected by the chlorination?(TM)

A: The real estate agents are recommending that the system be replaced before you move (20 years). However, there have **not** been a lot of fields changed in the customer's area. (BL)

Discussion:

Fields are typically small in the older dwellings; larger OSSDSs seem to work better.

Historical properties with old septic systems are a risk and should be flagged in the SWPP.

4. New Business

a. Source Water Protection (SWP) Annual Report

- Members asked to review the report (Item 1.e.) and provide any comments by mid-March.

Action: Members to review the SWP Report and provide comments by mid-March.

- The last two pages of the SWP Report are on Collin's Park SWPP accomplishments, the outstanding issues and what we have done with regard to watershed protection in the area this year.
- This also serves the purpose of an addendum to the SWPPs
- Water Quality Trends: *(BG displayed water quality data on screen).*
 - CPG4 is the control point for water quality assessment baseline.
 - DM wants the description of the sample points included as an appendix in the whole SWP Report.

Q: Surprised at the Eutrophication levels displayed. (TM)

A: Lake Fletcher limnology shows that it is in an oligotrophic – mesotrophic state. Water quality data indicates that the lake is oligotrophic at top layer and eutrophic at the bottom.

Action

All

- *E. Coli* levels rise and fall i.e., there are peaks and valleys in the detection values. There are large discrepancies which make the average level lower than some of the highest readings; e.g., of the 12 points sampled, the one at the 300 level will cause the overall average to be in the 80s.
- *E.Coli* is not a real concern until you get to the thousands range in terms of drinking water quality (due to treatment processes).
- CCME Recreational Guideline is 200 m/L

Action

Q: *Is there a chance that the Waste Water Treatment Plant (WWTP) will overflow again?*

A: We think it has been taken care of.

Action: Determine whether the issue of overflow has been resolved at Lockview's WWTP.

BG

- When the lakes are frozen you can tell which systems are malfunctioning because it is where the water is not frozen.

5. Education and Awareness

- A standing item on the agenda
 - Discovery Centre – still in the development stage.
 - Brochures: Members were invited to circulate brochures in their community/neighbourhood.

6. HRM Planning and development

- EM provided the know applications to date in a hand out for the Committee's review and explained the information:
 - The development requests shown are on their way to Council.
 - They are not guaranteed but are in the pipe (Council could deny them)
 - Subdivision Applications; redevelopment proposals:
 - in various stages of approval: some are off to the finish line, some have just come in the door and some will not be passed.
 - Rezoning – low impact on Collin's Park
 - Open Space development on Windgate Drive.
 - Fills in a (development) hole between Capilano Estates and Kinsac;
 - Stormwater drainage would go into Kinsac and into Grand below Collin's Park Watershed.

Q: These proposed developments will be serviced by on-site septic systems. How do we deal with on-site septic systems that could fail with treated (chlorinated water)? What can NSE say to the sellers?(TM)

A: NSE does not say anything to the developer about on-site septic system – ability. (DM)

Action: DM will ask about what installers are told re On-Site Sewage Disposal Systems (OSSDS) in areas where chlorinated water is and whether the Standard considers the concern over treated (chlorinated) water’s impact on OSSDS functionality?

Discussion:

Having an OSSDS that receives treated (chlorinated) water is asking for trouble. (Many members concurred)

BL searched to learn more about the impacts and could not find any information supporting the concern.

The Miller Lake municipal water supply well had had a contamination issue that was believed to have been caused by nearby malfunctioning OSSDSs, resulting in the refurbishment of that well. (BG)

Volume is also a stressor for OSSDS, in addition to chlorination. (DC)

Q: Where is the evidence? Where are the studies regarding the relationship between treated water and OSSDSs? (BL)

A: CWRS would probably have the answers or point one in the right direction. (DC)

Increased volume could be designed for. But that doesn’t mean the changes might not happen in the future. (DP)

OSSDS design has changed in the Monarch-Rivendale subdivision since treated water was supplied. (EM)

- There are Concept Plans to understand the extent of proposed developments.
 - EM can bring her laptop for the Committee to view the Concept Plans.

Action: Concept Plans would help to facilitate discussions on proposed development applications.

- Planning and development is a standing item. We could invite the managers to come in to discuss the Concept Plans if desired.

Action: Suggest that the Planning and development portion of the agenda be moved ahead on the agenda to allow ample time for discussion.

- When Concept Plans come across to Halifax water, there needs to be a

Action

DM

EM

All

check off (flag) that it is in a water supply area.

- Flagging watershed areas is a training issue at HRM as well at Halifax Water.
- Testing of runoff from development construction across from Lake Charles is also a concern:
 - When questioned by TM at an open house regarding these developments, the developer stated that it is Halifax Water's job to test stormwater. This is not true; under the permit, it's the contractor's responsibility to test the runoff from these developments.

Q: If the contractor is not doing it, who is responsible for the testing/monitoring and conducting inspections?

A: HRM is responsible for regulating access, safety of access, built form, location, and use; through utilities. HRM approves the design for servicing; e.g., Erosion and Sedimentation Control Plans. HRM sends the plans to the province for their input, after which it is the contractor's responsibility to abide by the regulation. HRM then steps back. (EM)

It is then NSE's responsibility to do audits at this point and to make sure all the regulations are being followed. (DM)

- We need to discuss HRM's limitations in the development process.
- For the next meeting we are talking about development and the impact. A presentation on a couple of the developments, looking for certain parameters would be beneficial to the Committee, to gain a better understanding of the gaps in the development process that result in negative impacts on water quality.

Action: Send Collin's Park watershed area shapefile to EM to overlay the concept plans.

AM

Action: Speak to the limitations with respect to stormwater runoff.

EM

- You are doing terra forming – you are changing bedrock. And the background water is going downhill. The runoff is not just a pH and TSS issue; metal scans are required as well. (TM)
 - BG concurred.

Q: To address the Committee's concerns; do we write a letter about ensuring the responsible agencies are properly taking responsibility for their jurisdictions?

A: First we need to confirm this is not being done. We need to confirm whose jurisdiction it is; and find where (if any) gaps lie. We also should put this discussion at the beginning of the meeting. As we get more plans in place we need some education from HRM and then we can determine what is or is not being done. (DM/EM)

Action: Find the gaps in the development / jurisdictional process through education from HRM to confirm what is or isn't done. Put at beginning of the meeting to give sufficient time to determine what the gaps and risks are.

Action

All

7. *Next meeting:*

- September / October / November
- The current time of day works for everyone.

Action: Send out a Doodle Scheduling Email to determine best date.

All

8. *Motion to adjourn*

- BL moved to adjourn at 9:20 p.m.

Tom Mills – Chair

Barry Geddes – Vice Chair

Anna McCarron – Recorder