Date: March 19, 2019

To: Chair and Members
   Committee of the Whole – Operations and Administration

From: E. (Beth) Goodger, General Manager, Public Works
       Public Works Commission

1.0 Type of Report
   Consent Item [ ]
   Item For Consideration [X]

2.0 Topic Update to City of Brantford’s Source Water Protection Plan [Financial Implications – None]

3.0 Recommendation
   A. THAT Report No. 2019-163 titled “Update to City of Brantford’s Source Protection Plan” BE RECEIVED; and
   B. THAT the proposed amendments to specific policies in the Brantford Source Protection Plan as set out in Appendix A of Report 2019-163 BE APPROVED; and
   C. THAT the minor proposed changes to Brantford’s Assessment Report BE APPROVED; and
   D. THAT a copy of this resolution BE PROVIDED to the Grand River Source Protection Authority by April 3rd, 2019.

4.0 Purpose and Overview
   The City’s current Source Water Protection Plan was approved in 2015. Amendments have been proposed in order to streamline and update specific
policies within the City’s Source Protection Plan as set out in Appendix A of Report 2019-163. Minor changes were also made to Brantford’s Assessment Report.

Council approval of the proposed amendments is required in advance of the April 8 - May 21, 2019 public consultation period on the Draft Updated Grand River Source Protection Plan. The Lake Erie Region Source Protection Committee will consider any comments received at their meeting on June 20, 2019 and will direct the Grand River Conservation Authority to revise the Draft Updated Grand River Source Protection Plan, as necessary. The revised Draft Updated Plan will then be released to the Grand River Source Protection Authority for submission to the Ministry of Environment, Conservation and Parks.

5.0 Background

The Ministry of the Environment, Conservation and Parks (MECP) approved the Grand River Assessment Report and Source Protection Plan on November 26, 2015. Source protection plans were locally developed, science-based plans designed to protect the health of the lakes, rivers and sources of underground water that supply municipal drinking water systems. The plans, which took effect July 1st, 2016, set out actions to eliminate, manage or reduce potential risks to drinking water sources. Mandatory actions can only be assigned to existing and future land use activities identified as significant threats within delineated highly vulnerable areas such as Intake Protection Zones or Wellhead Protection Areas.

Under the MECP’s Clean Water Act, 2006, there are 21 threats, 19 of which address activities that have the potential to release chemical and pathogenic contaminants; the remaining two activities are considered to be threats to source water quantity.

Previous Council reports relevant to Source Water Protection and Source Protection Plan include:


The current Source Protection Plan is available on the City of Brantford Website.¹

6.0 **Corporate Policy Context**

Goal 3: Managed Growth & Environmental Leadership is related to this issue. One of the five long-term desired outcomes identified to meet this goal states: “Brantford will be recognized for its environmental stewardship and protection of its natural assets”.

Implementation of the Grand River Source Protection Plan helps manage risk to the quality of Grand River water and is the foremost barrier in safeguarding our drinking water supply.

7.0 Input from Other Sources

The Grand River Conservation Authority prepared the Draft Updated Grand River Source Protection Plan with input from municipalities in the Grand River watershed.

8.0 Analysis

The Grand River Source Protection Authority is the lead authority in the Lake Erie Source Protection Region and as such along with the Lake Erie Region Source Protection Committee initiated an update to the Grand River Source Protection Plan and Assessment Report. As required by S.34(3) of the Clean Water Act, 2006, the Grand River Source Protection Authority must obtain an approval of the Draft Updated Grand River Source Protection Plan and Assessment Report from the City of Brantford by April 3rd, 2019 prior to formal public consultation. This proposed Draft Updated Grand River Source Protection Plan applies to the City of Brantford Including the boundary expansion lands. The City was given notice of public consultation on February 11, 2018, attached as Appendix B.

The public consultation period on the Draft Updated Grand River Source Protection Plan is scheduled to start on Monday, April 8, 2019 following the April 4, 2019 Lake Erie Region Source Protection Committee meeting, and closes on Tuesday, May 21, 2019.

Following the public consultation period, the Lake Erie Region Source Protection Committee will consider any comments received at their meeting on June 20, 2019 and direct the Grand River Conservation Authority to revise the Draft Updated Grand River Source Protection Plan, as necessary. The revised Draft Updated Plan will then be released to the Grand River Source Protection Authority for submission to the MECP.

1. The proposed revisions to Brantford’s Source Protection Plan are detailed in Appendix A. The following is a summary of the proposed changes:

   - In Appendix A, Implementation and Timeline policies CB-CW-1.1 b) and e) were revised to include the words “or amendment” with the intent to
underscore that current policies and future policy amendments are legally binding. This policy references various sections of the Clean Water Act.

Table 1 shows nature of activities regulated by each section of the Clean Water Act:

Table 1: Explanation of Sections of the Clean Water Act

<table>
<thead>
<tr>
<th>Section of Clean Water Act</th>
<th>Nature of Activity Governed</th>
<th>Example of Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>57</td>
<td>Prohibited activities</td>
<td>Handling and storage of commercial fertilizer in Intake Protection Zone 1</td>
</tr>
<tr>
<td>58</td>
<td>Regulated activities</td>
<td>Handling and storage of fuel greater than 2,500 liters</td>
</tr>
<tr>
<td>59</td>
<td>Restricted land uses</td>
<td>Screening a development application to determine if a prescribed activity pose a significant drinking water threat</td>
</tr>
<tr>
<td>43</td>
<td>Prescribed instruments (regulations) conformity</td>
<td>Stormwater management facility</td>
</tr>
<tr>
<td>42</td>
<td>Zoning bylaw conformity</td>
<td>A property located in IPZ-1 that stores snow onsite which pose a significant drinking water threat must be managed via a risk management plan</td>
</tr>
<tr>
<td>40</td>
<td>Official Plan conformity</td>
<td>Prohibit the installation of septic systems in IPZ-1</td>
</tr>
</tbody>
</table>

- Policies pertaining to the application of commercial fertilizers to land have been removed due to the low percentage of managed lands and livestock density in Brantford (as detailed in Brantford’s Assessment Report). As such, policy CB-CW-7.1 was removed and policies CB-MC-7.2 and CB-
CW-7.3 were revised. Since the current circumstances of commercial fertilizer application to land does not qualify to pose a significant drinking water threat, this policy revision will have no impact to the City or the private sector.

- The application of road salt policy was omitted in the first iteration of Brantford’s Source Protection Plan and has been added via policies CB-CW-10.1 and CB-CW-10.5. This education and outreach policy will promote industry best practices for the application of road salt at the municipal, commercial and private residential levels.

- The handling and storage of fuel policy had to be extended to Intake Protection Zone 2 (IPZ-2) to reflect the changes made to the MECP’s Tables of Circumstances (Policy CB-CW-12.1.1). This policy will impact future fuel storage tank design in IPZ-2 by ensuring that proper containment, spill response and monitoring will be in place if the fuel tank capacity is above 2500 liters.

- Policy CB-MC-3.5.1 was recently proposed to eliminate a gap in managing significant drinking water threats from storm water management facilities (SWMFs) that do not require a MECP Environmental Compliance Approval. The policy ensures that future activities that could pose a significant drinking water threat will be managed by way of a Risk Management Plan (RMP). In a few circumstances, the MECP didn’t issue an ECA as part of a complete planning/building application and this proposed policy will ensure that all future SWMFs in a source protection area of the City that pose a significant drinking water threat will be managed by a Risk Management Plan. This new policy failed to be part of this round of Source Protection Plan amendments because of timeline issues but will be part of the next round in 2020.

- Delineating in maps Brantford’s new physical boundaries and additional intake protection zones from the Dunnville intake (Haldimand County) and Six Nations (Appendix C).

2. The proposed revisions to Brantford’s Assessment Report are minor and include:

- An updated description of Brantford’s Water Treatment Plant and average pumping rates.
• Delineating Brantford's new physical boundaries in maps.

• Replacing Ministry of the Environment and Climate (MOECC) Change with Ministry of the Environment, Conservation and Parks (MECP).

• Removing some redundant sections from all municipal Assessment Reports and consolidating them into Section 3, Water Quality Threat Assessment Methodology as part of the Grand River Source Protection Area Assessment Report.

3. Impact of Source Water Protection Policy Amendments

Up to five properties may be impacted by the proposed Source Water Protection policy amendments and up to two properties in the boundary expansion area. These properties may be impacted if activities carried out on-site pose significant drinking water threats.

9.0 Financial Implications

Communication and implementation of the amended Source Protection Plan will be managed through the existing Water Operations budget. Therefore no financial implication to the City is anticipated.

10.0 Conclusion

Amendments to some policies in Brantford Source Protection Plan are proposed in order to address either a legal or activity gap. Minor amendments were also proposed to Brantford's Assessment Report. For those amendments to be considered by the MECP, Council must approve the proposed updates with a resolution by April 3rd, 2019. Although policy CB-MC-3.5.1 on managing significant drinking water threats from storm water management facilities cannot be included in this round of policy amendments, it can be approved in principle by Council for the next round of policy amendments in 2020.
Selvi Kongara, P.Eng  
Director, Environmental Services  
Public Works Commission

E. (Beth) Goodger, General Manager Public Works Commission

Patrick Halevy, RMO/RMI  
Environmental Services

Attachments

Appendix A – Proposed Amendments to Brantford’s Source Water Protection Plan

Appendix B - Notice of Pre-Consultation – Draft Updated Grand River Source Protection Plan

Appendix C – Draft Updated Policy Applications Maps of City of Brantford

Copy to:

Paul Moore, General Manager, Community Development

In adopting this report, is a by-law or agreement required? If so, it should be referenced in the recommendation section.

By-law required [ ] yes [X] no

Agreement(s) or other documents to be signed by Mayor and/or City Clerk [ ] yes [X] no

Is the necessary by-law or agreement being sent concurrently to Council? [ ] yes [X] no
# Appendix A – Proposed Policy Amendments to Brantford’s Source Water Protection Plan

<table>
<thead>
<tr>
<th>Policy Number</th>
<th>Source Protection Plan Policies within the City of Brantford</th>
</tr>
</thead>
<tbody>
<tr>
<td>CB-CW-1.1</td>
<td>Unless otherwise specified, the policies contained in this Source Protection Plan shall come into effect on the date set out by the Minister.</td>
</tr>
</tbody>
</table>

  a. For Section 57 of the *Clean Water Act*, 2006 if an activity was engaged in at a particular location before this Source Protection Plan took effect, policies regarding prohibited activities do not apply to a person who engages in the activity at that location until 180 days from the date the Source Protection Plan takes effect;

  b. For Section 58 of the *Clean Water Act*, 2006 if an activity was engaged in at a particular location before this Source Protection Plan or amendment took effect and the Risk Management Official gives notice to a person who is engaged in the activity at that location that, in the opinion of the Risk Management Official, policies regarding regulated activities apply to the person who engages in the activity at that location on or after a date specified in the notice that is at least 120 days after the date the notice is given;

  c. For Section 59 of the *Clean Water Act*, 2006 policies regarding restricted land uses shall take effect the same day the Source Protection Plan takes effect;

  d. Where the Source Protection Policies require the City and/or the Source Protection Authority to develop and implement education and outreach programs as the primary tool for managing or eliminating a particular significant threat, such programs shall be developed and implemented within five (5) years from the date the Source Protection Plan takes effect;

  e. For Sections 43 of the *Clean Water Act*, 2006 if an activity was engaged in at a particular location before this Source Protection Plan or amendment took effect, amendments to Prescribed Instruments shall be completed within three (3) years from the date the Source Protection Plan takes effect;

  f. For Section 40 and 42 of the *Clean Water Act*, 2006 the Official Plan must be amended and adopted by council to conform with the significant threat policies within five (5) years from the date the Source Protection Plan takes effect or the next Official Plan review required under Section 26 of the *Planning Act* and the Zoning By-law within two (2) years from the adoption of the Official Plan.
### 8. The Application of Commercial Fertilizers to Land
### 9. The Handling and Storage of Commercial Fertilizer

| CB-CW-7.1 | To ensure any existing or future application, or handling and storage of commercial fertilizer within Intake Protection Zone 2, where such activities are or would be significant drinking water threats, cease to be and/or never become a significant drinking water threat, these activities are designated for the purposes of Section 58 of the *Clean Water Act, 2006* and a Risk Management Plan shall be required. |
| CB-MC-7.2 | To ensure any future application or handling and storage of commercial fertilizer never becomes a significant drinking water threat, within Intake Protection Zone 1, where such an activity is or would be a significant drinking water threat, these activities shall be designated for the purpose of Section 57 of the *Clean Water Act, 2006* and are therefore prohibited. |
| CB-CW-7.3 | To ensure the existing application or handling and storage of commercial fertilizer never becomes a significant drinking water threat, within Intake Protection Zone 1, where such an activity is or would be a significant drinking water threat, these activities are designated for the purposes of Section 58 of the *Clean Water Act, 2006* and a Risk Management Plan shall be required. |
### 12. The Application of Road Salt

| CB-CW-10.1 | To ensure any existing or future handling and storage of road salt ceases to be and/or never becomes a significant drinking water threat where such activities are, or would be, significant drinking water threats, the City shall develop and implement education and outreach programs for the private and public sector, as well as the general public, about the impacts of road salt on drinking water sources and the use of best management practices. It is recommended that the key messages should be to promote the efficient use of road salts and the use of alternatives. to ensure this activity ceases to be and/or never becomes a significant drinking water threat. |

| CB-CW-10.5 | To ensure any existing or future application of road salt where such activities are, or would be, significant drinking water threats, the City shall develop and implement education and outreach programs for the private and public sector, as well as the general public, about the impacts of road salt on drinking water sources and the use of best management practices. It is recommended that the key messages be the efficient use of road salts and the use of alternatives to ensure this activity ceases to be and/or never becomes a significant drinking water threat. |

### 13. The Handling and Storage of Road Salt

### 15. The Handling and Storage of Fuel

| CB-CW-12.1.1 | To ensure the future handling and storage of fuel greater than 2,500 Litres never becomes a significant drinking water threat, where such an activity would be a significant drinking water threat; related land uses shall be designated for the purposes of Section 58 of the Clean Water Act, 2006 and a Risk Management Plan shall be required. |

### 2. Establishment, Operation or Maintenance of a System That Collects, Stores, Transmits, Treats or Disposes of Sewage

| CB-MC-3.5.1 | To ensure any new discharge of stormwater from a stormwater management facility where such an activity would be a significant drinking water threat, never becomes a significant drinking water threat; this activity is designated for the purpose of Section 58, of the Clean Water Act, 2006 and a Risk Management Plan shall be required where a MECP Environmental Compliance Approval is not required. |