
TO: GENERAL COMMITTEE

SUBJECT: RECRUITMENT OF RISK MANAGEMENT OFFICIAL

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RECOMMENDED MOTION

1. That staff initiate recruitment immediately of one full time dedicated Risk Management Official at a cost of approximately \$156,000, with funding from the Water Rate Reserve (12-05-0580) for any salary and benefit costs incurred in 2012 and funding for 2013 provided by Water Rate Revenues.
2. That staff report back to General Committee by June 2013 regarding a new fee structure related to Source Protection Activities.

PURPOSE & BACKGROUND

3. The purpose of this staff report is to initiate the early recruitment of a Risk Management Official (RMO) to commence the implementation of the Source Protection Plan (SPP) for the City of Barrie's identified significant threats to its drinking water system.
4. The Lake Simcoe Region Conservation Authority (LSRCA) is leading the Source Protection Committee (SPC) for the South Georgian Bay Lake Simcoe Source Protection Region. The City of Barrie has direct representation on the SPC, and staff members are actively involved through planning and municipal working groups. City staff have provided information to Council on several occasions (see Appendix "A" for reference dates).
5. SPCs across the province are currently developing and consulting on draft SPPs which include policies and measures to protect municipal sources of drinking water in Ontario. These SPPs will have implications for municipal planning, operations and processes.
6. The Clean Water Act, 2006 (CWA) introduces strict restrictions on land uses and activities and provides municipalities with the authority to regulate activities that are significant drinking water threats on a site-specific basis, where such activities are located within intake protection zones or wellhead protection areas.
7. The Assessment Report dated November 2011, which provides the technical background for the identification of the risks to the drinking water sources that will be addressed in the SPP, identified 546 significant drinking water threats for Barrie. These reports are 'living documents' that will be periodically updated and amended as new information becomes available. Part of the legislative requirements of the SPP development is that a strong priority be placed on public involvement and consultation. Several notices have been sent to property owners, whose properties have been identified as having potentially significant threats to source water. Hundreds of property owners have attended the open houses held for the development of the Assessment Report and to receive comments on the SPP.

8. The majority of threats to the City of Barrie's source water are the application of road salt, handling and storage of dense non-aqueous phase liquid (DNAPL), stormwater management facilities, application of commercial fertilizer, storage of fuel, and on-site sewage systems (septics).
9. The following provides a summary of the types of identified threats in the City of Barrie and who the responsible property owner would be:
 - Residential threats – on-site sewage systems (septics), application of road salt, and application of fertilizer.
 - Business threats – handling and storage of DNAPL, organic solvents, non-agricultural source material, pesticides, and fuel, application of road salt, and storage of snow and fertilizers.
 - Municipal threats – waste disposal sites, application and storage of road salt, stormwater management (outlet and pond), storage of snow, and sanitary sewer systems.
10. Any new development within a vulnerable area would either be prohibited depending on the threat type or managed through Risk Management Plans (RMPs). This would ensure that the site is developed from the onset with risk management in place. It should be noted that many items are already required for new development such as the use of oil-grit separators for large parking lots. Some additional items for large parking lots as an example would be minimizing lot coverage, maximizing infiltration from rooftop while reducing contamination from salt application and snow storage.
11. Under Part IV of the CWA, any single tier municipality that has authority to pass by-laws under the Municipal Act for the production, treatment and storage of water is the enforcement authority.
12. The City is the body responsible for enforcing Part IV – Regulation of Drinking Water Threats under the CWA and therefore will have the legislative requirement to appoint one or more RMOs and Risk Management Inspectors (RMIs).
13. It is proposed that the City of Barrie have a dedicated RMO who initially will also be the RMI until this role can be established. The RMO will in turn determine the future requirements for the RMI position along with any other administrative coordination.
14. The RMO will have the following responsibilities:
 - a) Negotiate and establish RMPs for identified significant threats.
 - b) Evaluate risk assessments that conclude an activity is not a significant threat.
 - c) Screen all development applications submitted that could potentially be in a vulnerable area.
 - d) Issue orders and establish a RMP for the activity. All orders are appealable to the provincial Environmental Review Tribunal (ERT).
 - e) Issue notices of failure to comply, including fines similar to Provincial offences.
 - f) Attend ERT hearings.
 - g) Annually report to the Source Protection Authority (SPA) on progress of implementation.
 - h) Interact with other municipal departments depending upon the situation.
 - i) Considered Provincial Offences Officer under the Provincial Offences Act.
 - j) Must complete a Ministry-approved RMO/RMI and property entry training courses.

15. The RMI will have the following responsibilities:
 - a) Conducts site inspections to verify threat and ensure compliance with RMPs.
 - b) Utilizes property entry powers for the purposes of inspections and data collection.
 - c) Issue notices of failure to comply, including fines similar to Provincial offences.
 - d) When entering property– if RMI becomes aware of a drinking water health hazard must notify the Ministry of the Environment (MOE) immediately.
 - e) Considered Provincial Offences Officer under the Provincial Offences Act.
 - f) Must complete a Ministry-approved RMO/RMI and property entry training courses.
16. Once the RMPs have been established, the long term role of the RMO/RMI will be enforcement of the RMPs, ensuring that moderate threats do not become significant, ensuring no new threats are establish through development, annual reporting, implementation of new polices that will be developed for recharge areas, establishing and implementing inspection programs, amending by-laws and official plans, records management, and consultation on new legislative requirements as they develop.
17. The Region of York, with 1,100 significant threats (Total Area: 1,762 km², 2011 Population 1,032,524), has two RMOs and three RMIs (two hydrogeologists and a program coordinator that are existing staff in the Water Resources Department), for a total of five full-time staff plus co-op students as required. The team has support from legal, planning (seeking a dedicated planner) and administration. In addition, the Region of York anticipates hiring an additional two full-time staff for enforcement of risk management within the next two years.
18. The Region of Waterloo with 2,613 significant threats (Total Area: 1,362 km², 2011 Population 507,096) currently utilizing existing staff from Hydrogeology and Source Water Department for the RMO and RMI with legal support and hydrogeologists. They intend to hire a second RMI and one program support position. It is important to note that this region has had a dedicated department working on source water for 20 years.
19. The following dates are set out of the SPC in order to meet legislative requirements:
 - a) Proposed South Georgian Bay Lake Simcoe Source Protection Plan will be submitted to the MOE by October 22, 2012.
 - b) Approval of the Proposed SPP by MOE estimated for April 2013.
 - c) First annual SPP Progress Report submitted to the local SPA on the steps taken in the previous calendar year to implement these significant threat policies and recommendations – February 2015.

ROLES AND RESPONSIBILITIES

20. The municipality is responsible for administration, compliance and enforcement of Part IV of the CWA, including:
 - a) Appointing RMOs and RMIs;
 - b) Establishing rules or policies to administer Part IV, which may include fees, inspection programs, forms and applications;
 - c) Prepare annual public reports; and,
 - d) Integrating Part IV into municipal processes.

21. The SPA has the responsibility to complete the following activities under the CWA:
 - a) Designate Significant Drinking Water Threat (SDWT) activities and areas where a RMP would be required.
 - b) Designate SDWT activities and areas where prohibition for future activities and specific date when existing activities will be phased out.
 - c) Designate related Land Uses that are subject to approval of the RMO before proceeding with a development proposal is permitted.
 - d) Consult with the municipality on any SPP draft policies.
22. The property owner is responsible for meeting all provincial legislative requirements under the CWA by phasing out any activity that is prohibited, obtaining a notice from the RMO before proceeding with development proposal, establishing a RMP for designated activities and completing upgrades required to reduce the risk associated with a significant threat activity.

ANALYSIS

23. Several municipalities such as the Region of Waterloo and York have already been working on source protection for many years as a result of other environmental concerns specific to those areas, such as the Oak Ridges Moraine Conservation Plan. This has not only assisted with realizing the implications of the draft SPP and ability to provide comments, it has also assisted in reducing the number of new threats from growth and development. Through consultation with municipalities such as the Region of York, City staff have been able to assess the workload associated with source protection and determined that it would be beneficial for the City to be proactive in their recruitment.
24. Barrie is an identified growth node under the Provincial Growth Plan. Land use planning decisions must consider the protection of the drinking water sources to be consistent with the Provincial Policy Statement. Decisions on planning matters must conform to source protection policies and manage moderate threats. The public consultation for an Official Plan amendment for the City is targeted to commence in the Fall 2012 to ensure these source protection elements are included.
25. The Assessment Report identified 546 significant drinking water threats for Barrie. Using an estimation of the number of RMPs required (360) and the time to establish and approve a plan (15-20 hours) prepared by the property owner using a template supplied by the City, the RMPs alone could take a minimum of four years to complete. However, this remains only a portion of the workload. The RMO will be required to screen all development applications submitted that could potentially be in a vulnerable area to identify if it is a significant threat. For this reason a new position should be created and the redeployment of existing staff for the RMO position is not suggested.
26. As part of the Proposed SPP, a requirement is to have verification of threats and RMPs established within five years of the approval of the SPP. This is a tight timeline for the City of Barrie to address the identified existing 546 threats. It is recommended to initiate recruitment immediately to meet these timelines. As well, given the professional qualifications required for this position, as other municipalities commence this same process there will be a high demand for qualified applicants.
27. This most recent version of the SPP indicates that the salt application policy for existing and future threats applies within the City of Barrie Issues Contributing Area which is the majority of the City's core, utilizing RMPs as a tool for risk management. The Assessment Report estimated that there are 745 private properties that apply road salt to their lands which could be categorized as a significant threat. This represents a significant number of potential RMPs for existing and future threats that were not previously anticipated. This workload has the potential to increase in the number of RMPs required once the SPP is approved. It is suggested that RMPs established for the Application of Road Salt would be exempt from any fee structure.

28. It is advantageous to have the position within the City to better facilitate internal coordination and communication. Amending Official Plans, altering development processes and annual reporting would still require resources within City staff. It is imperative that a data management framework be established early in the process to have an efficient use of resources to manage the volume of information collected. This new initiative will require extensive collaboration on business processes between departments and alter the way we currently serve the public. An internal education component will be required to provide an understanding to effectively implement the policies. The establishment of procedures and guidelines for implementation as soon as possible will greatly affect the success of the program.
29. Municipalities may enter into an agreement with neighbouring municipalities or the Conservation Authority for the enforcement of Part IV. Part or all of the enforcement authority could be delegated for the RMO role. Many of the municipalities considering delegating responsibility have few existing significant threats and minimal new development. Delegating the role of the RMO would not eliminate the legal responsibility of the City. This is not recommended given the significant workload associated with the implementation of source protection within Barrie. The Conservation Authorities plan to utilize existing staff to fulfil this role for some municipalities. It is uncertain if they would have the capacity to meet the workload for Barrie. It is advantageous for the position to be in the City to ensure control of the program and administer the process with a local focus. During the first five years after the plan is approved, it is estimated that several staff members will be required.
30. An example of where responsibility has been delegated to the City is be the stormwater review component for Site Plan Applications. The City of Barrie has a Memorandum of Understanding to complete this role for the Conservation Authority in order to meet timelines and avoid duplication of effort.

ENVIRONMENTAL MATTERS

31. The following environmental matters have been considered in the development of the recommendation:
 - a) This staff position will aid existing city staff in developing and delivering an implementation program to protect municipal sources of drinking water.

ALTERNATIVES

32. The following Alternatives are for consideration by General Committee:

Alternative #1

General Committee could choose to not commence the recruitment of an RMO until 2013.

This Alternative is not recommended as it would risk not meeting the implementation timelines under the SPPs. The Assessment Report was completed as a desk top exercise and a detailed review with field inspections will be required to analyze the threat elements set out by the MOE. If the recruitment was delayed until 2013, meeting the timelines would be a challenge.

Alternative #2

General Committee could choose to delegate some or all of the enforcement authority by entering into an agreement with neighbouring municipalities or the Conservation Authority for the RMO role.

This Alternative is not recommended given the significant workload associated with the implementation of source protection within Barrie. The Conservation Authority's plan is to utilize existing staff to fulfil this role for some municipalities. It is uncertain if they would have the capacity to meet the workload for Barrie. An agreement would be required and the City would likely be responsible for funding the position. During the first five years after the plan is approved, it is estimated that several staff members will be required.

Alternative #3

General Committee could choose to establish fees for screening development applications and establishing Risk Management Plans for new development only and not establish a fee for plans associated with existing identified threats.

This Alternative is not recommended as the water rate would need to be increased to address the subsidy that would be provided to existing property owners. This is not consistent with Council's current approved direction to reduce rate increases associated with 2013 water and wastewater services. The Regions of Waterloo and York are not considering fees for existing threats however, they have had established departments for source protection for several years as part of environmental concerns. Their departments are funded through the water rate.

FINANCIAL

33. Under the CWA, municipalities are permitted to charge for activities related directly to Part IV including:
- a) Requiring the payment of fees for receiving an application with a RMP, Restricted Land Uses or risk assessments;
 - b) For agreeing to/establishing a RMP;
 - c) For issuing a notice;
 - d) For accepting a risk assessment; or
 - e) For entering property or exercising any other power; and
 - f) Requiring the payment of the costs of doing any "thing" under section 64 ("causing things to be done").
34. Through the initial stages of threat verification it will likely be that cost recovery through fees will not be possible because threats were identified through a desk top exercise and need to be confirmed. In discussions with the Region of York on implementation, they have found that of the threats identified in the Assessment Report, 1/3 of the threats are confirmed, 1/3 are not significant threats and the remaining 1/3 land parcels have additional threats that were not captured in the Assessment Report. These costs would be funded from Water Rate Reserve in 2012 and from Water Rate Revenues in 2013 as the work is directly linked to the protection of the drinking water system.
35. Staff contacted several other municipalities with groundwater sources and found that they are still evaluating options for the implementation of the SPP.

36. The Region of Waterloo is currently not charging fees for RMO activities. Drafting a Fee Structure is part of their 2013 work plan for new construction only. There are no fees proposed for existing threats.
37. The Region of York is currently not charging fees for RMO activities. They are considering fees for screening development applications and establishing RMPs for new developments only. They are not proposing to have fees for establishing RMPs for existing threats.
38. The RMO will build a process to streamline the process to make the process easier for property owners by preparing templates for each threat type and guidance documents for preparing RMPs to outline the level of information that will be required. This will also help to reduce the fees associated with establishing the RMPs. As consulting firms become familiar with the standards that the City requires, the cost to produce a RMP will be reduced. Where possible, the process, time and cost to the property owners will be minimized.
39. For properties where threats are confirmed, it is anticipated that RMPs will be prepared by the property owner using a template supplied by the City. Some property owners may require the services of a consulting firm to prepare a complex RMP which is estimated to cost at least \$2,500. As well, the property owner will be responsible for the potentially significant cost of upgrade protection measures to mitigate the potential risk. It is uncertain at this time the costs associated with these measures and if any funding program will be available for these property owners by the Province.
40. Some preliminary estimates on the potential Fee Revenues for Source Protection are as follows:
 - a) In calculating the Fee Revenues for the RMO position, a rate of \$140 per hour was calculated based on a Level 14 Non Union Pay Scale plus benefits and corporate overheads.
 - b) There could be a minimum fee of \$700 based on 5 hours of work. Any additional time could be charged at the hourly rate.
 - c) Based on this hourly fee and the estimated establishing time of 15 - 20 hours (pre-consultation, plan review, and negotiation) from the Region of York's experience, an average RMP fee of \$2,100 to \$2,800 could be paid to the City by the property owner.
 - d) With the estimate of 360 RMPs required for existing threats and 5 years to complete these plans, there will be approximately 70 RMPs per year with the potential of generating \$50,000 - \$140,000 annually in revenue. This does not account for any RMPs established for new development.
 - e) It is suggested that any RMP established for the Application of Road Salt would be exempt from any fee structure.
 - f) New fees could be added based on the CWA activities that municipalities are permitted to charge. There may be some services provided by the RMO where only a flat fee would apply. This will be determined as some experience is gained in the position.
 - g) Fee structure will be reviewed and staff will report by to General Committee in June 2013.

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41. Offence penalties (set out in the CWA) such as failing to establish a RMP can result in fines up to \$25,000/day for an individual and up to \$50,000/day for a corporation.
 42. It is anticipated that the RMO will help clarify some of the future work plan elements where the costs are uncertain at this point such as:
 - a) Development and compliance of monitoring policies;
 - b) Resulting Official Plan and zoning bylaw amendments;
 - c) Defend subsequent Ontario Municipal Board and Environmental Review Tribunal appeals;
 - d) Additional training and workload;
 - e) Staffing, records management and prosecutions; and,
 - f) Outreach and education.
 43. No provincial funding to create and establish a risk management program for 2012 and beyond has been identified. As indicated above, the Act does indicate opportunities for municipalities to introduce cost recovery By-laws; however, it is uncertain if the Ministry will require consistency across all municipalities in the Province in establishing a fee structure.

LINKAGE TO 2010 – 2014 COUNCIL STRATEGIC PLANS

44. The recommendations included in this Staff Report support the following goals identified in the 2010-2014 City Council Strategic Plans:
 - a) Manage Growth and Protect the Environment

By protecting the municipal sources of drinking water, we will ensure they are available and sustainable in the future as the City continues to grow.

Appendix "A"

Source Protection Background

Source Protection Committee

The Clean Water Act (CWA) sets out the minimum requirements for the contents and preparation of Source Protection Plans (SPP). The regulation builds on those requirements and will support Source Protection Committees (SPC) in the development of their SPP. A SPC ensures that the SPP process is open and that reasonable, science based policies are developed to protect municipal drinking water sources. Barrie has direct representation on the SPC, and staff members are actively involved through the planning and municipal working groups.

The Lake Simcoe Region Conservation Authority (LSRCA) is leading the SPC for the South Georgian Bay Lake Simcoe Source Protection Region.

An overview of Source Water Protection for the City of Barrie was presented to Council on March 26, 2012.

Barrie Drinking Water System

The impacts to each municipality will vary depending on the responsibility for water supply, waste management and the number of significant threats that need to be addressed. There is one municipal drinking water system in Barrie, utilizing both groundwater supply and surface water supply. Areas that are vulnerable to contamination have been delineated; these are known as Wellhead Protection Areas (WHPA) for wells and Intake Protection Zones (IPZ) for surface water intakes.

The Assessment Reports are intended to provide an understanding of:

- What is going on in the surrounding watershed; both above ground as surface water and below ground as groundwater.
- How and where surface water and groundwater interact; as these are vulnerable areas that need special protection.
- The entire watershed including the factors influencing the quality and amount of water (quantity) found there.

The Assessment Report reviewed the 15 wells (in service and planned) at the time the report was prepared. The WHPAs cover the majority of the City core. The well supply has 546 significant threats associated with 477 land parcels that have been identified for further investigation. Impacts will need to be investigated as part of implementation of the SPP. Most of the threats identified are associated with a variety of land uses, with the majority associated with the handling and storage of dense non aqueous phase liquids (DNAPLs) such as trichloroethylene, vinyl chloride, etc. Under the CWA, all of the existing significant threats must be addressed. The Surface Water Treatment Plant has no significant threats; however, the IPZ needs to be considered with any future development as activities in these areas have the potential to affect the quality of water at the intake.

A summary of the Lake Simcoe Assessment Report was presented in a Memorandum to General Committee dated January 10, 2011.

Municipal Comments

The City submitted comments to the LSRCA on the Draft Source Protection Policy documents for the region which were distributed for a pre-consultation period with municipalities ending January 13, 2012. **The summary of comments from various City departments was presented in an Engineering Department Memorandum dated February 13, 2012.**

The City submitted a second round of comments to the policy documents for the region which were distributed for the first round of public consultation ending June 15, 2012. **The summary of comments from various City departments was presented in an Engineering Department Memorandum dated June 28, 2012.**

The major comments submitted by the City cover the topics of stormwater management, sewage treatment facilities, on-site sewage systems, Non-Agricultural Source Material (NASM), pesticides, fuel, road salt, DNAPLs and organic solvents.

Public Consultation Process

SPC will review all the comments submitted during the first round of formal public consultation and will include a summary of all the comments received as well as an explanation of how those comments were considered in the development of the revised SPP.

The second consultation on the revised SPP, with the general public, began August 27, 2012 and will be conducted until October 5, 2012.

Comments received during the second round of public consultations cannot be incorporated into another version of the plan but will be attached to the final submission of the Proposed Source Protection Plan and Explanatory Document to the Ministry of the Environment on October 22, 2012.