

3

UPDATE ON *CLEAN WATER ACT* REQUIREMENTS AND REPLACEMENT OF MUNICIPAL REPRESENTATIVE ON SOUTH GEORGIAN BAY LAKE SIMCOE SOURCE PROTECTION COMMITTEE

The Environmental Services Committee recommends the adoption of the recommendations contained in the following report dated January 28, 2011, from the Commissioner of Environmental Services and Commissioner of Planning and Development Services.

1. RECOMMENDATIONS

It is recommended that:

1. Regional Council endorse the nomination of Wendy Kemp, Water Resources Manager as the Municipal Representative for York Region and its local municipalities on the South Georgian Bay Lake Simcoe Source Protection Committee.
2. Regional Council request the Towns of Aurora, Newmarket, Georgina, East Gwillimbury, Whitchurch-Stouffville, King Township to endorse the nomination of Wendy Kemp, Water Resources Manager, as the Municipal Representative on South Georgian Bay Lake Simcoe Source Protection Committee.
3. The Regional Clerk circulate this report to the Clerks of the local municipalities for the Towns of Aurora, Newmarket, Georgina, East Gwillimbury, Whitchurch-Stouffville, King Township and City of Vaughan; to Don Goodyear, Director, Source Water Protection, South Georgian Bay Lake Simcoe Source Protection Region and to Ian Smith, Director, Source Water Protection, Ministry of Environment.

2. PURPOSE

This report requests endorsement by Regional Council and local municipalities to nominate Wendy Kemp, Water Resources Manager, to be a member to the South Georgian Bay Lake Simcoe Source Protection Committee to ensure the Region and local municipalities' interests continue to be represented in development of the Source Protection Plan. The report also summarizes recent source water protection activities to meet new legislative requirements specified in the *Clean Water Act*. Above all, the report describes the need to deliver a new risk management program to meet enforcement and monitoring responsibilities delegated by the Province to York Region, as a provider of safe drinking water.

3. BACKGROUND

Clean Water Act promotes protection of drinking water sources through voluntary and mandatory actions

Following the Walkerton tragedy, the Province created the *Clean Water Act* to set out a framework to protect drinking water at the source. It has established a locally driven process using the latest scientific approaches to consider existing and potential threats to drinking water sources. It is a highly regulated process, with specific deliverables and aggressive timelines. Public consultation is mandated under the *Clean Water Act* at various stages throughout the process to promote participation and provide local context. In addition, it has introduced new responsibilities for municipalities.

Source Protection Committees have authority to establish requirements to protect drinking water sources under the Clean Water Act

Administered by the Conservation Authorities, the Source Protection Committee, a group of appointed representatives from municipalities, agriculture, public, golf courses, aggregate and other industries, is responsible for the *Clean Water Act* deliverables. There are two Source Protection Committees in York Region as the Region straddles two source protection areas, the Credit Valley, Toronto and Region, Central Lake Ontario Source Protection Area and the South Georgian Bay Lake Simcoe Source Protection area. With 21 members for each committee, seven members represent the municipal sector as defined by Provincial regulation.

Since 2007, York Region representation has been maintained for the two source protection committees. Erin Mahoney, Commissioner of Environmental Services and Laura McDowell, Director of Environmental Promotion and Protection are the endorsed municipal representatives for the South Georgian Bay Lake Simcoe Source Protection Committees and the Credit Valley, Toronto and Region, Central Lake Ontario Source Protection Committee, respectively (Transportation Works Committee No 3 March 2008, Transportation Works Committee No 2 Feb 2009). As members on these Committees, they have the ability to vote on resolutions that relate to deliverables under the *Clean Water Act*.

As previously outlined to Regional Council (Environmental Services Committee No 5, May 12, 2010) work is well underway to deliver key components of source protection as prescribed under the *Clean Water Act* (Table 1).

Table 1
Regulatory Deadlines for Deliverables Under the *Clean Water Act*

Deliverables	Status	Current Deadlines for Source Protection Region	
		South Georgian Bay Lake Simcoe	Credit Valley Toronto Region Central Lake Ontario
Terms of Reference	Complete	June 29, 2009	August 17, 2009
Assessment Report	Complete	December 17, 2010	December 22, 2010
Source Protection Plan	Initiated	August, 2012	August, 2012

Assessment Reports identified over 3,000 threats to drinking water supplies in York Region

In recent months, the Region and Conservation Authorities for the South Georgian Bay Lake Simcoe and the Credit Valley Toronto Regional Central Lake Ontario Source Protection Regions submitted final draft Assessment Reports to the Province. These reports summarized a series of technical studies that analyzed the landscape for threats to drinking water quality and quantity within a watershed boundary. More specifically, the Reports identify:

- Vulnerable areas on a map which include wellhead protection areas, intake protection zones, significant recharge areas and highly vulnerable aquifers
- Water quality issues related to water sources
- Land use activities that are considered low, moderate and significant risks to municipal drinking water systems as prescribed by the Province
- A total count of the number of low, moderate and significant drinking water threats located in vulnerable areas for each municipal drinking water system in York Region.

Currently, water quantity threats have not been identified in the Reports but are expected to be included in future updates once water budget studies are complete in mid-2011.

Drinking water quality threats are defined in the *Clean Water Act* as land use activities related to septic systems, waste disposal sites, agricultural source material, fuels, road salt, fertilizers, pesticides, solvents and other related chemicals. A significant threat is defined as one of these land uses located in a highly vulnerable area. In York Region, significant threats were located within wellhead protection areas close to wells. For example, septic systems located within the 100m or 2-year wellhead protection area or a fuel tank located in the 5-year wellhead protection areas were ranked as significant threats. Low and moderate threats were found mostly in wellhead protection areas in the outer wellhead protection areas or within other vulnerable areas. Examples of low threats are septic systems located in the 25-year wellhead protection areas.

Information on these threats is limited by available data sets and minimal field verification. A conservative approach was taken based on a number of assumed site conditions. On-site property specific details were not mandated or funded by the Province for the Assessment Report. Although it was hoped that public consultation would improve site specific data quality, it was limited by a lack of land owner response. The Assessment Report is the basis for developing Source Protection Plans, which will outline policies designed to minimize risks to sources of drinking water.

Source Protection Plan specifies actions needed to protect drinking water

As the final deliverable to the Province in 2012, the Source Protection Plan will detail actions required to protect drinking water as determined by the Source Protection Committee. Although locally driven, the Province has regulated the objectives and content of source protection plans through legislation. The source protection plans must specify actions that ensure drinking water threats cease to be or never become significant risks to drinking water. Public consultation is an essential component to ensure the policies are locally driven. Notices to announce the commencement of the planning activities will be sent to all land owners and municipalities in early 2011 as required by Provincial regulation.

Regional staff involved in planning working groups to develop draft Source Protection Plans by June 2011

Various working groups have been initiated by both Source Protection Committees to write source protection plan policies. These groups provide support to the Committees by bringing together knowledge and expertise in specialized areas. Membership on these working committees includes Source Protection Committee members, Region staff from Environmental Services and Long Range Planning, local municipal staff and conservation authority staff. As a participant on the Planning working groups, the Region helps guide the process to ensure decisions made by the Source Protection Committees consider local context. Draft Source Protection Plans are expected to be written by mid-2011 to allow sufficient time to meet regulatory requirements for consulting with the public.

4. ANALYSIS AND OPTIONS

Wendy Kemp is recommended as the York Region and local municipal representative for the South Georgian Bay Lake Simcoe Source Protection Committee

To continue to meet York Region's legislative obligations under the *Clean Water Act* and maintain local interests, it is proposed that Wendy Kemp, Water Resources Manager in Environmental Services be nominated to the Committee to replace Erin Mahoney, Commissioner of Environmental Services. Wendy Kemp has been actively involved in

Source Water Protection As per the protocols established by the lead Source Protection Authority, membership appointment, administered by staff at the Lake Simcoe Region Conservation Authority uses the following process:

1. Inform municipality of the Source Protection Committee membership opportunity and request they nominate an individual
2. Municipality nominates an individual
3. If there are more nominations than available seats, conduct a vote among Council-appointed delegates who are given the authority to vote on behalf of the municipality; each municipality is entitled to a vote per seat within their watershed. Should a vote arise for the Lake Simcoe watershed, York Region and its local municipalities would be entitled to seven out of twenty votes
4. Lead Source Protection Authority affirms membership

Over the next year, committee members will vote on resolutions to approve various policies to protect drinking water in York Region. The rationale for the type of policy will be delivered through workshops held monthly over the next six months. At this time, it is appropriate to reassign committee membership to a senior technical manager to ensure direct technical engagement in development of future policy directions. Through Regional Council endorsement, the Region and local municipalities' interests can continue to be represented, which is particularly important as the committee moves ahead with the next phase of source protection planning. Actions mandated in these plans will establish a long term road map for risk management in York Region.

York Region responsible for enforcement and monitoring of Source Protection Plans as mandated by the Act

As a provider of safe drinking water, York Region will be required to deliver a risk management program to protect source waters. Under Part IV of the *Clean Water Act*, municipalities responsible for the water production, treatment and storage in a two-tiered municipal structure are required to enforce policies related to significant threats in the Source Protection Plans. The Act allows for appointment to a board of health, planning board or source protection authority to undertake risk management duties on a municipality's behalf. However, the legal responsibility remains with the identified municipality. Requirements to appoint risk management officials and inspectors to enforce and monitor the Plan are also specified in the Act. Joint enforcement between two neighbouring municipalities is also allowed with provisions to create agreements to address cost sharing and appoint risk management officials and inspectors. York Region will need to enter into agreements with Simcoe County, Durham Region and Town of Bradford West Gwillimbury as protection areas cross these municipal boundaries.

New Regional risk management program is required to meet the *Clean Water Act*

In recent months, staff has worked with the Province and subject matter experts to identify the program scope to successfully align existing activities with new legislative

requirements and prevent any duplication of effort across local municipal and Regional responsibilities. A new Regional risk management program will be necessary to:

- Formally appoint a new Risk Management Official and Risk Management Inspectors to enforce and monitor 1,100 significant drinking water threats. For example septic systems and fuel storage are the most prevalent significant threats within wellhead protection areas in York Region
- Develop agreements for enforcement and monitoring activities in joint jurisdictional protection areas within Durham Region, Simcoe County and Town of Bradford West Gwillimbury
- Issue and track a new land use permit program to prevent new significant threats
- Develop by-laws and protocols for fee recovery and consistency across the Region
- Define upper and lower tier municipal roles and responsibilities
- Promote and educate the public on risk management requirements
- Report activities to the Province and Source Protection Committees
- Address additional needs related to risk management.

This new program will need to be designed prior to release of the Source Protection Plan to ensure timely and effective management of drinking water threats.

York Region is required by legislation to manage 1,100 significant threats identified in the Assessment Reports as early as June 2011

Upon approval of the Assessment Reports by the Province, interim risk management activities may begin to address identified significant threats as outlined in the Act. Fuel storage, agricultural source material (i.e. manure), septic systems and chemicals are examples of significant threats within wellhead protection areas in York Region. As reported previously, limited ground truthing has been undertaken to obtain site specific information from land owners identified in the Assessment Reports. Additional work will be necessary to engage land owners on an individual basis to adequately identify risks and management activities as outlined in legislation. Early outreach has been initiated with a few land owners located adjacent to Regional wells to inform and advocate their participation during the policy development stage. This early outreach has shown that the engagement process requires significant resources to maintain communications and build trust.

Increased Provincial requirements continue to strain existing Regional resources to protect drinking water

With the release of the *Oak Ridges Moraine Conservation Act 2001*, followed by the *Greenbelt Act 2005* and *Clean Water Act 2006*, increased pressure to protect drinking water has been placed on municipalities. Since 2005, York Region has had policies within the Regional Official Plans that are first steps towards limiting activities that may impact drinking water. However, expectations in the *Clean Water Act* push well beyond existing municipal planning approaches and capacity. The real effort is working with new

development applications, existing land owners and future land owners to ensure informed decisions are made as early as possible. Significant efforts are needed to ensure that best management practices to protect drinking water are consistently applied and monitored. This type of behavioural change requires resources to engage, track, monitor and report as mandated by legislation. It is a continuous process that builds over time with multiple interactions with the public and development community. York Region has additional challenges as a two-tier municipal structure, which adds complexity to interface with planning and land use controls within local municipal responsibilities.

5. FINANCIAL IMPLICATIONS

Province has not committed to fund risk management activities beyond 2012

As previously reported to Regional Council, the Province has committed more than \$20 million for municipalities and Conservation Authorities to conduct studies for the Assessment Report and develop Source Protection Plans. This funding includes costs for public consultation activities. There remains uncertainty how municipalities will fund programs to enforce and monitor the Source Protection Plan as required in the Act. At this time, there is no provincial funding to create and establish a risk management program for 2011 or 2012 fiscal cycles. Early discussions with the Province and upper-tier municipalities have been initiated to outline municipal challenges to meet these new Provincial mandates. The Act does specify opportunities for municipalities to introduce cost recovery by-laws, however questions remain to ensure consistency across all municipalities in the Province. Staff will continue to seek provincially funding mechanisms as legislation continues to unfold.

Additional full time staff necessary in 2011 to deliver on provincial requirement to protect drinking water and to implement cost recovery approaches

Risk management is a long term program that requires decisions made by Regional staff who can protect the Region's interests and maintain due diligence. It is imperative that York Region continues to play a lead role in the engagement of local municipalities, conservation authorities, source protection committees and the public to raise our common understanding of risks to drinking water sources. In-house knowledge is essential for program development to allow for ongoing dialogue across science and planning disciplines including Local, Regional, Provincial and Conservation Authorities' boundaries.

Additional resources will be required to maintain consistency with Provincial requirements which require technical expertise in hydrogeology and land use planning. With this new responsibility to enforce the Plan, staff will need to be involved with

enforcement action in cases where land owners choose to ignore best management approaches.

Requests for additional staff in 2011 Environmental Services budget include a Program Manager and Hydrogeologist to establish a risk management program to meet the Provincial mandate for enforcement and monitoring. While the Province has funded 100% of the cost for completion of technical Source Water Protection studies and related staff time for project management, currently there is no provincial funding for enforcement and monitoring. As the program is developed, staff will continue to look for program efficiencies including opportunities to hire professional consulting services where specialized experts are required. For specified work scope staff will bring forward a report in late 2011 outlining opportunities for additional cost recovery that may be initiated once the Source Protection Plan is approved in 2012.

6. LOCAL MUNICIPAL IMPACT

It is imperative that local municipalities remain informed and involved as the Source Protection Plans are developed. Public consultation is a key component of the *Clean Water Act*, with specific requirements to liaise with key stakeholders. York Region continues to host quarterly meetings with the Region's local municipalities to provide an update on ongoing technical studies, available provincial funding and highlight upcoming source planning activities. In 2010, Regional staff conducted several presentations on Source Protection to local Councils to keep them informed on this complex issue. A workshop was held with Building Officials and other local municipal staff in September 2010 to gain a fulsome understanding of *the Building Code and Planning Act* responsibilities. Activities to map out integrated business processes for source water protection continue.

7. CONCLUSION

There are challenges ahead to address 1,100 potential significant drinking water threats that must be verified, managed and reported for source protection planning. With the release of the *Oak Ridges Moraine Conservation Act 2001*, followed by the *Greenbelt Act 2005* and the *Clean Water Act 2006*, increased pressure to protect drinking water is placed on municipalities by the Province.

It is paramount that the Region continues to have representation on the Source Protection Committees as the next phase of planning moves ahead. Source Protection Plans must specify actions that ensure drinking water threats cease to be or never become significant risks to drinking water as outlined by the Act and regulations. The Plan will provide a road map for York Region to enforce and monitor threats to drinking water as required by legislation Endorsement by Regional Council and local municipalities to nominating

Wendy Kemp, Water Resources Manager, will allow York Region to actively participate in the source protection committee selection process by the Source Protection Authority.

As a provider of drinking water, additional workload is placed on existing Regional resources to maintain a long term program for risk management that extends well beyond current municipal planning practices. These new legislative requirements mandate frequent and ongoing collaboration with land owners and the development community. With new enforcement requirements, York Region will need additional resources to deal with added responsibilities. Collection of fees adds further complexity to deal with cross jurisdiction boundary issues and two-tiered approaches to risk management. Additional staff are necessary to create a new risk management program to meet legislative requirements over the next 12 months. A request for two positions, Program Manager and Hydrogeologist, is included in the 2011 Environmental Services budget request. One of these new positions will be designated the Risk Management Official in 2011 to allow the Region to initiate interim risk management.

Assuming Provincial approval in June 2011, York Region will have legislative power to conduct interim risk management work for significant threats identified in the Assessment Reports. This interim work, prior to completion of the Source Protection Plan, provides essential insight into enforcement challenges to obtain compliance with best management practices. It also helps guide the nature of the policies anticipated in the Source Protection Plans by leveraging experience gained by early outreach.

In the coming months, public consultation will begin across the Region on the draft Source Protection policies. Municipalities and property owners will receive notification of initiation of this planning process. Public participation is critical to ensure policies consider the local context. Collaboration and communication are paramount as we move ahead with implementation of the *Clean Water Act*.

For more information on this report, please contact Laura McDowell, Director, Environmental Promotion and Protection, at (905) 830-4444 Ext. 5077 or John Waller, Director, Long Range and Strategic Planning, at Ext. 1525.

The Senior Management Group has reviewed this report.