

Clause No. 3 in Report No. 6 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on November 21, 2013.

### **3**

#### **SOURCE WATER PROTECTION PLAN IMPLEMENTATION STATUS UPDATE**

**Committee of the Whole recommends adoption of the following recommendations contained in the report dated October 30, 2013 from the Commissioner of Environmental Services:**

#### **1. RECOMMENDATIONS**

It is recommended that:

1. Council authorize the Commissioner of Environmental Services to execute an inter-municipal agreement with Durham Region regarding Source Water Protection responsibilities
2. Council approve the decommissioning of Kleinburg Well # 2 and removal from the Credit Valley Toronto Region and Central Lake Ontario Source Protection Assessment Report as specified under the *Clean Water Act, 2006*
3. Council endorse in principle the proposed Source Water Protection Incentive Program
4. The Regional Clerk circulate this report to the Clerks of local municipalities

#### **2. PURPOSE**

This report seeks Council authorization of the proposed Source Water Protection Incentive Program and other specific actions to implement Regional responsibilities under the *Clean Water Act, 2006* and provides an update regarding the status of the source water protection program.

#### **3. BACKGROUND**

##### **Provincial review of Source Protection Plans is on-going**

In October 2012, the two Source Protection Plans affecting York Region were submitted to the Ministry of the Environment for review following extensive public and municipal

consultation. Minimal feedback has been received from the Province to date, however, recent reports from Provincial staff suggest each Source Protection Committee will receive Ministry comment and direction in early 2014.

Regional Source Water Protection staff have been working with Regional and local municipal planning and building department staff to prepare for implementation in the interim. However, existing planning tools, such as the Regional Official Plan, Provincial Policy Statement and Oak Ridges Moraine Conservation Plan continue to be used to ensure on-going development does not impair drinking water quality or quantity.

### **Field verification of potential threats has clarified implementation effort**

Technical work completed for Assessment Reports was based upon pre-existing documentation, including reports and maps. At the time, the estimated 1,100 potential threats represented the best information available. Staff have verified information for businesses identified as potential significant drinking water threats and determined that the original count was reasonable.

Although more than 200 of the businesses identified in Assessment Reports did not have significant threats present, the verification exercise identified a similar number of business properties with potential threats that were not originally captured. More than half of the agricultural properties identified in the Assessment Reports do not have significant threat activities occurring. The on-going verification exercise provided specific information regarding threat activity, relevant policy and risk management measures required that helped to clarify the extent of implementation efforts.

### **Final implementation steps for Risk Management Office require council endorsement**

As outlined in previous reports to Council and more recently in Report No. 8 of the Environmental Services Committee on October 18, 2012, the Region is moving forward with establishing a Risk Management Office for source water protection. This work is in the final stages of development. To date the following, work has been completed.:

- Council approved and appointed a Risk Management Official and Inspectors to enforce and monitor 1,100 potential significant drinking water threats
- Developed, in collaboration with local municipalities, a process for new planning and building permit applications to ensure new threats do not appear on the landscape
- Developed a new tracking data management system for risk management activities
- Considered cost recovery approaches which will be included in the Value of Water project to capture source water protection as a component of the water rate
- Developed and submitted annual report on risk management activities to the Source Protection Authorities due February 1<sup>st</sup> of each year
- Council adopted Regional Official Plan Amendment 5 (ROPA 5) to reflect mapping identified in provincially approved Assessment Reports and associated policy

### **Remaining work includes finalizing risk management agreements and incentive program**

At this time, the remaining items from the work plan are:

- Finalize inter-municipal risk management agreements with cross boundary protection areas; pending Council endorsement of this report
- Finalize the principles of an incentive program to promote risk management implementation; pending Council endorsement of this report
- Finalize promotional materials on corrective actions required for significant drinking water threats, pending approval of the Source Protection Plans

### **Removal of Kleinburg Well #2 wellhead protection area requires Council approval**

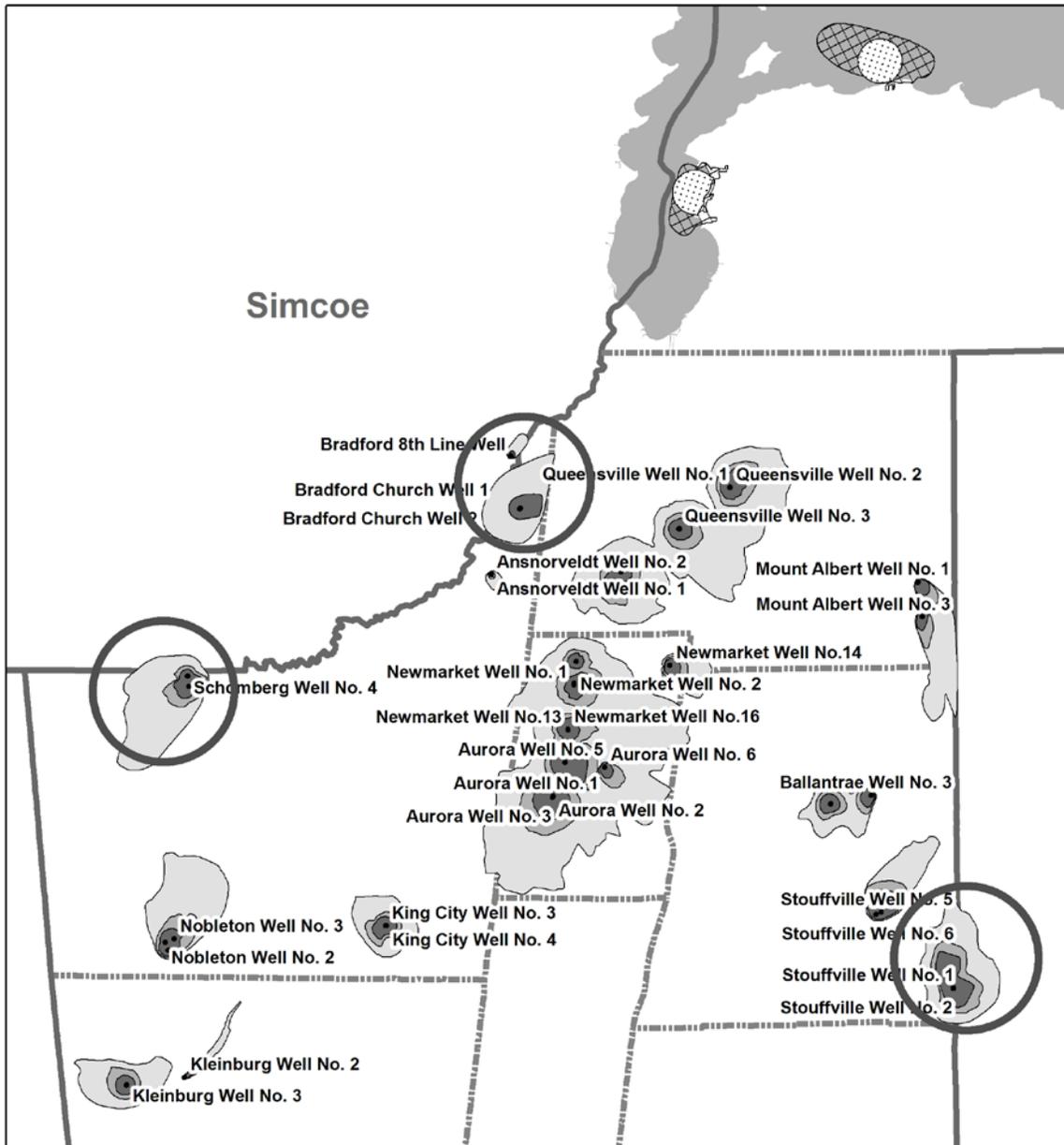
In addition, there remains an opportunity to update the Assessment Reports, the technical foundation documents, to reflect recent water supply system changes. Although groundwater will continue to be part of the water supply system for the community, the recent introduction of Lake Ontario supply eliminates the need for Kleinburg Well #2. Well #2 was constructed in 1960 and contributed approximately 5 per cent of the community's water needs. Kleinburg wells #3 and #4 will be retained for system security purposes. Under the *Clean Water Act, 2006*, there is a prescribed process for removing unused municipal drinking water wells and associated wellhead protection areas from Assessment Reports.

An additional well has also been brought on line in the community of Ballantrae that requires an amendment to the Assessment Report. Adding the wellhead protection area for that new well to the Assessment Report can occur without Council approval, however, removal of a wellhead protection area requires Council approval as specified in the *Clean Water Act, 2006*. This report is intended to satisfy those statutory requirements and achieve approval of the remaining action items for the Risk Management Office.

## **4. ANALYSIS AND OPTIONS**

### **Wellhead Protection Areas span municipal boundaries and require inter-municipal cooperation for implementation**

Under the *Clean Water Act, 2006*, municipalities are responsible for implementation of source water protection in any vulnerable areas within their boundaries, unless that responsibility is transferred or shared via a Council endorsed agreement. Region staff have taken a hybrid approach to negotiate responsibilities with neighbouring municipalities to achieve the best outcome for York Region residents and businesses. There are three locations where wellhead protection areas overlap York Region boundaries as noted in Figure 1.

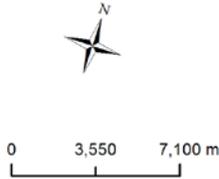


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**Figure 1: Three areas of Municipal overlap in wellhead protection areas**



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 Environmental Services  
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	Municipal Overlap
<b>Intake Protection Zone</b>	
	IPZ1
	IPZ2
<b>Wellhead Protection Area</b>	
	WHPA-A
	WHPA-B
	WHPA-C
	WHPA-D

### **Negotiated agreement with Durham Region required to specify implementation responsibilities for Stouffville wellhead protection area**

The wellhead protection area for Stouffville Wells 1-3 extends into Durham Region and four significant threats have been identified within that portion of the wellhead protection area. York Region has a duty of care to ensure Regional water supplies are appropriately protected and therefore wish to implement the York Region program in the Durham Region portion of the Stouffville wellhead protection area. It is proposed that Durham Region will continue to be the lead on all new development applications as they are the owners of the *Planning Act* responsibilities and will circulate applications to the York Region Risk Management Official for comment. Durham Region will also be responsible for implementing the septic inspection program as required. York Region will be responsible for negotiating and enforcing Risk Management Plans to address existing significant threat activities within the wellhead protection area for the Stouffville wells and will seek participation of Durham's Risk Management Official. Based upon Durham and York Region staff discussions, Legal Services has drafted an agreement reflecting the division of responsibilities described above that is currently under review by Durham Region.

### **Official Plan policy sufficient to ensure Schomberg water supplies are protected**

A very limited portion of the wellhead protection area for Schomberg extends into the Township of New Tecumseth and no significant threats have been identified within that portion of the wellhead protection area. Only one activity has been determined to be a significant threat in future (the storage and handling of dense non-aqueous phase liquids). Given the limited potential for a significant threat, a planning tool was deemed appropriate in place of a formal agreement. Water Resources and Legal Services staff are working with New Tecumseth staff to draft a New Tecumseth official plan policy that would require development proposals in that portion of the wellhead protection area to be circulated to York Region's Risk Management Official for review and comment.

### ***Clean Water Act, 2006* specifies York Region to lead implementation in Bradford wellhead protection area, with collaboration from King Township and the Town of East Gwillimbury**

The Town of Bradford West Gwillimbury operates two wells located within King Township (Bradford Church Street wells). The wellhead protection area for these wells is also primarily in King Township, with a small portion in Bradford and a small portion in the Town of East Gwillimbury. York Region and the two affected local municipalities are responsible for implementation of relevant policies for the portion of the wellhead protection area in York Region as a function of the *Clean Water Act, 2006*, so no formal agreement is required for that role.

## **Council Resolution required to remove Kleinburg Well # 2 from the Credit Valley Toronto Region and Central Lake Ontario (CTC) Assessment Report**

Although groundwater will continue to be part of the water supply system for the community, the recent introduction of Lake Ontario supply eliminates the need for Kleinburg Well # 2. Under the *Clean Water Act, 2006*, there is a prescribed process for removing unused municipal drinking water wells and associated wellhead protection areas from Assessment Reports. The following statutory requirements are necessary to remove the Kleinburg Well # 2 from the CTC Assessment Report:

- A Council Resolution indicating York Region's intent to cease use of the well
- Apply to the Ministry of the Environment to revoke all approvals associated with Well # 2
- Publish a notice of the intent to cease use of the well in local media
- Summarize actions taken in notices to the CTC Source Protection Committee and Toronto and Region Source Protection Authority

Staff are seeking Council endorsement to move the process forward and eliminate the need to undertake source water protection activities in the Kleinburg Well # 2 wellhead protection area.

### **Financial incentive will expedite risk reduction efforts**

As previously reported to Council in Report No. 8 of the Environmental Services Committee on October 18, 2012, engaging business owners has highlighted the fact that, in the current economic climate, implementing risk reduction projects is low on the list of their priorities. At that time, Environmental Services Committee members requested further details on the incentive program and how the subsidy would mitigate costs incurred by businesses and land owners. The proposed incentive program is modelled after the Ontario Drinking Water Stewardship Program, which is not currently provincially funded. Easing the financial burden is anticipated to accelerate implementation of risk mitigation projects and increase compliance with Risk Management Plans as required in the proposed Source Protection Plans. As an example, a Risk Management Plan may require secondary containment for chemical storage or spill response equipment, which would be funded under this incentive program.

The following proposed approach is consistent with other programs like Conservation Authority stewardship programs and Regional programs, such as Water for Tomorrow and the Greening Strategy.

Proposed Source Water Protection Incentive Program principles:

#### **Eligibility**

- Property eligibility is based upon the presence of an existing significant drinking water threat based upon the *Clean Water Act, 2006* definition

- Eligible projects are risk reduction measures required by an approved Risk Management Plan, Provincial Instrument, or other Source Protection Policy but not currently in place. Examples include adding secondary containment to chemical storage, purchasing spill response equipment and developing a spill response plan, and calibrating agricultural machinery to ensure appropriate fertilizer and pesticide application rates
- Work that occurs prior to funding approval does not qualify for funding assistance
- Process changes that are not associated with a capital project do not qualify for funding assistance
- New operations, new buildings, work associated with additions to homes, or building expansions to increase herd capacity are not eligible for funding assistance

#### Funding Process

- Eligible projects will be funded at 85 per cent of the total cost of the project to a maximum of \$10,000
- Properties are limited to a maximum total of \$25,000 for all eligible projects over the life of the program
- A funding agreement will be drafted, after eligibility is confirmed, based on competitive cost estimates
- The funding agreement will include an obligation on the person engaged in the threat activity to maintain the infrastructure installed or improved through the project
- On-going inspections of the property by Risk Management Inspectors will be made to ensure the risk management measures are implemented
- Funding will be provided upon proof of completion of the works and proof of payment of all invoices

#### **Link to Key Council–approved Plans**

Implementation of Source Protection Plans supports the sustainable infrastructure priority area within the 2011-2015 Strategic Plan. As our communities grow, it is important that the Region sustain critical infrastructure. The delivery of drinking water via Regional infrastructure is contingent upon access to clean and sustainable water supplies. Managing or prohibiting activities that could impair drinking water quality or quantity is an effective component of life cycle infrastructure management. Measures mandated within the Source Protection Plan, as approved by the Source Protection Committee, will directly protect vital drinking water sources, as well as protect our infrastructure investment over the long term.

## **5. FINANCIAL IMPLICATIONS**

Implementation actions specified in this report related to inter-municipal agreements can be achieved with the existing staff complement and Environmental Services budget. Sharing implementation responsibility for the portion of the Stouffville Wells 1-3

wellhead protection area that extends into Durham can be accommodated within the significant overall scope of the York Region source water protection program.

Costs associated with decommissioning Kleinburg Well # 2 are included in the 2013 Water Capital budget (Nashville Road Water Main Project). Delineation of the wellhead protection area for the new Ballantrae well was completed under the 2012 Environmental Services Capital budget.

The incentive program to assist affected land and business owners is included in the proposed 2014 operating budget and budget forecast through to 2018. Timing of this program aligns with the timeline requirement specified in the current draft Source Protection Plans for Risk Management Plans. Current draft Plans specify a five year deadline from the date of approval for negotiating all required Risk Management Plans. Funding of \$250,000 for 2014 and \$500,000 for each following year through 2018 was considered reasonable based on the number and type of Risk Management Plans required, with an average subsidy of \$10,000 for 225 projects.

### **Incentive program will assist in avoiding other potentially higher Regional costs**

Although inspection will be required, the incentive program is expected to increase compliance with Risk Management Plans and avoid litigation and other costs associated with enforcement. The Walkerton tragedy has been estimated to cost over \$120 million and the US EPA estimates the cost of clean-up and replacement of contaminated drinking water supplies is forty times more costly than a preventative approach. By investing in an incentive program, the Region demonstrates a strong commitment to protecting municipal drinking water sources and by providing some financial assistance to those existing businesses and landowners affected by these new requirements.

Upon budget approval and endorsement of program principles by Council, staff will administer and deliver the program within existing staff resources.

## **6. LOCAL MUNICIPAL IMPACT**

### **Development applications within the Bradford wellhead protection area that extend into King Township and Town of East Gwillimbury will be subject to Source Protection Plan policies**

Local municipal staff are the first point of contact for most residents and businesses who wish to develop lands and build new structures. The Source Protection Plan policy requirements that prohibit future significant threat activities will be implemented for the portion of the Bradford wellhead protection area in York Region jointly between the Risk Management Official and local municipal planning and building department staff from King and East Gwillimbury.

### **Removal of Kleinburg Well # 2 from the CTC Assessment Report eases Source Water Protection implementation in Vaughan**

With introduction of Lake Ontario supply to the community of Kleinburg, the need for Kleinburg Well # 2 is eliminated, although the remaining groundwater wells will be retained for contingency purposes. The wellhead protection area associated with Well # 2 will not require Source Protection Plan policy implementation once it is formally removed from the Assessment Report. Until decommissioning, Regional staff will review applications in terms of Source Water Protection.

### **Additional wellhead protection area in Ballantrae will be subject to Source Protection Plan policies**

Whitchurch-Stouffville planning and building department staff will need to collaborate with Risk Management Office staff to extend Source Water Protection implementation efforts to the new wellhead protection area. Regional and local municipal staff have had several discussions and are already making planning comments to safeguard the water supply. The Town is pro-actively undertaking an Official Plan update to add this wellhead protection area in concert with the recently approved ROPA 5 amendment.

Updated Ballantrae planning documents will be reviewed by Regional staff as they are drafted to ensure mapping and policy coverage are included for this new wellhead protection area.

## **7. CONCLUSION**

### **Although Source Protection Plan approvals are pending, drinking water protection work is on-going in York Region**

Using existing tools and authorities, Risk Management Office staff are actively working with development proponents and existing landowners to manage or prevent risks to drinking water. Extensive preparation for implementation of Source Protection Plan policies and collaboration between Region and local municipal staff will facilitate a seamless transition following approval of the plans in 2014 and will supplement historical programs at the Region to safeguard water resources.

### **Council authorization required to action *Clean Water Act, 2006* requirements**

The wellhead protection area for Stouffville wells 1-3 extends into Durham Region. Council endorsed agreements are required to transfer implementation responsibility from the municipality within which the subject wells lie to another agency. For York Region Risk Management Office staff to implement Source Protection Plan policies for the portion of the wellhead protection area in Durham, a formal agreement is necessary.

Decommissioning of Kleinburg Well # 2, which is no longer required, will reduce Source Water Protection implementation efforts for the City of Vaughan and York Region. Council endorsement of the well abandonment is the first step required to remove the wellhead protection area from the Source Water Protection process.

Council endorsement of the proposed Source Water Protection Incentive Program will ease the burden on affected business and landowners, as well as accelerate risk reduction efforts, subject to budget approval. The program encourages voluntary compliance, potentially reducing the Region's costs associated with enforcement of Risk Management Plans or finding new sources of drinking water. By investing in an incentive program, the Region demonstrates a strong commitment to the protection of municipal drinking water sources and eases undue hardship on those affected by these new requirements.

For more information on this report, please contact Laura McDowell, Director, Environmental Promotion and Protection at 905-830-4444, Ext. 5077.

The Senior Management Group has reviewed this report.