



City of
Peterborough

TO: Members of Planning Committee

FROM: Ken Hetherington, Manager, Planning Division

MEETING DATE: March 8, 2010

SUBJECT: Report PLPD10-017
Source Water Protection
Information Report

PURPOSE

A report to provide an update on the Source Water Protection initiative and the progress of the Source Protection Committee.

RECOMMENDATION

That Council approve the recommendation outlined in Report PLPD10-017, dated March 8, 2010 of the Manager, Planning Division, as follows:

That Report PLPD10-017 be received for information purposes.

BUDGET AND FINANCIAL IMPLICATIONS

No budget or financial implications would result from the decision to approve the above recommendation.

BACKGROUND

The *Clean Water Act, 2006* (CWA) is the Provincial Government's commitment to implementing recommendations that stem from the Walkerton Inquiry. The new legislation has introduced a process by which a new level of protection for drinking water resources will be provided. The concept of a multi-barrier approach to protecting source water adds one more level of protection to the existing protective measures provided through: effective water treatment; secure distribution systems; monitoring programs and response protocol to adverse test results.

Ultimately it is the municipality that is responsible for protecting its source of drinking water. Once the source protection plan is approved, the CWA requires the municipality to implement and enforce recommendations contained within the plan. It is anticipated that this may be accomplished through the Official Plan policy update and subsequent amendments to the Zoning By-law carried out within the plan's five year review cycle.

The *Clean Water Act 2006*, legislates the obligation to:

- 1) Create the *Source Protection structure* (establish Source Protection Areas, Source Protection Committee (SPC), and Terms of Reference) (complete);
- 2) Establish new rules and bodies to develop an *Assessment Report* (nearing completion);
- 3) Develop a *Source Protection Plan* (pending); and
- 4) *Implement and enforce* recommendations contained within the Plan (pending).

Time line Review:

- 2005 Conservation authorities were involved in preliminary research for the *watershed characterization and water budget analysis*.
- 2006 *Clean Water Act* became law.
- 2007 City Council supported Lower Trent Conservation as the lead agency for the Trent Conservation Coalition (TCC). The TCC consisting of four Conservation Authorities including Otonabee Conservation, has hired consultants to conduct a threats and issues inventory and risk assessment of the surface water intake in relation to the City's water treatment plant.

- 2008 City Council appointed Richard Straka, Planner Policy & Research and Mary Smith, Deputy Reeve, Smith-Ennismore-Lakefield, as Municipal Representatives to the Source Water Protection Committee. The Committee is made up of 28 stakeholders representing a variety of sectors (municipal, agriculture, industry, First Nations, public etc.) The committee is responsible for the completion of the Assessment Report and the development of the Source Protection Plan. Wayne Stiver, Vice-President Water Utility Services for the Peterborough Utilities Services is also a member of the SPC as a Drinking Water Expert and Councillor Len Vass is a member of the Municipal Working Group for the Otonabee-Peterborough Source Protection Area.
- 2009 Independent consultants have been contracted to prepare reports that identify and assess threats to the Surface Water Intake for the City of Peterborough Water Treatment Plant and other municipal drinking water systems located throughout the Otonabee-Peterborough Source Protection Area. Technical studies such as the water budget, identification and assessment of threats and issues relevant to municipal drinking water sources, and the delineation of the Surface Water Intake Protection Zone for the City of Peterborough Water Treatment Plant (and Wellhead Protection Areas outside of the City of Peterborough) are in various stages of completion and peer review.
- 2010 The Assessment Report for the Otonabee-Peterborough Source Protection Area is currently required to be completed in early 2010. It is anticipated that the Assessment Report will be completed by the end of May 2010 and will be the subject of public consultation in June 2010 before being finalized.
- 2010 Public consultation regarding Proposed Regulations under the *Clean Water Act*, 2006 is currently underway until March 26, 2010. The regulations will enable the Source Water Protection Committee to prepare the Source Water Protection Plans. The regulations will touch upon the policy approaches ranging from permissive to prohibitive policies including the use of Risk Management Plans that could be used to address significant threats.
- 2011 Source Protection Plan is to be developed with the process beginning late 2010.
- 2012 Completion of Source Protection Plan.

Assessment Report:

Consultants working under the management of the Trent Conservation Coalition have prepared draft Assessment Reports and continue to refine their content to comply with the technical rules provided by the Ministry of the Environment. In addition to a description of the watershed characteristics, the report will include an assessment of water budgets to determine potential stresses and risks. The report delineates Intake Protection Zones (IPZs) and proceeds to identify issues, inventory threats and assess potential risks and hazards.

A key component of the Assessment Report is the determination of the level of vulnerability of municipal drinking water sources. The map showing the vulnerability scores for the City of Peterborough surface water intake is attached as Exhibit “A”.

The identification of threats to municipal water sources have been identified. Consultants are in the process of contacting landowners to gather additional information in an effort to assess the potential threat(s). The municipality will be notified when these site visits will occur. An ORCA staff member specifically trained by the Ministry of the Environment for this purpose, will accompany the consultant on any site visits that may be required, and will adhere to MFIPPA legislation throughout the process.

Public Open House events have been held to date offering information on the progress of the work being done toward protecting source water. The latest maps illustrating the Intake Protection Zones and vulnerability scores for Lakefield and Peterborough were presented at the open house held at the Evinrude Centre on October 6, 2010. The Map for Peterborough is attached to this report as Exhibits A.

Stewardship Funding:

In an effort to eliminate or mitigate threats to municipal drinking water sources, the Ontario Drinking Water Stewardship Program (ODWSP) was included as part of the *Clean Water Act, 2006*. The goal of the ODWSP is to provide financial assistance to landowners within defined areas around surface water intakes (IPZ-2) and Wellhead Protection Areas in the case of municipal well supplies, to undertake Early Actions stewardship activities to protect municipal drinking water sources. Eligible landowners have been notified that they may be eligible for this funding and a number of projects funded through the ODWSP are presently underway including several well upgrades, municipal sewer connections, decommissioning of septic systems and pollution prevention reviews.

Otonabee Conservation has administered the following projects through the ODWSP.

Projects	ODWSP Funding
1 run off and erosion	\$ 9,320
1 sewer connection	\$ 4,800
3 septic inspections and repair	\$ 355

Peterborough has been able to take advantage of the Ministry of Environment's Source Protection Stewardship Fund in an Early Action Initiative along the Otonabee River near the Riverview Zoo. Otonabee Conservation, in partnership with Lakeland Alliance, and the Peterborough Utilities Inc., including students from Peterborough Collegiate and Vocational Institute were engaged in the enhancement of about 600 metres of the Otonabee



Bio-engineered shoreline Riverview Zoo

River shoreline, up stream of the water intake. The riparian shoreline was naturalized with native trees, shrubs and plant material designed to stabilize the soils, reduce erosion, and the rate of run off into the river. The planting scheme was also designed to deter waterfowl from inhabiting the shoreline area to reduce the potential risk of bacterial contamination of source of drinking water.

Another initiative involves plans for significant improvements to the design of the storm water management facility on Water Street next to the Otonabee River, just up stream of the intake. The design work for the detention pond is to be completed this winter and it is anticipated that the facility will be reconstructed in 2010.

Municipal Involvement:

Ultimately, the Municipality is responsible for the protection of Source Water. The *Planning Act* requires planning approval authorities to integrate new obligations introduced by the *Clean Water Act* within mandated plans and policies such as our Official Plan as it becomes updated. The Provincial Policy Statement also requires decision makers to be “consistent” with provincial policy direction providing protection for all water resources including drinking water. The Provincial Policy Statement would require updated policies to introduce “measures” to protect municipal sources of drinking water. Such “measures” will depend on the results of the threats assessment stage of the source water protection process and guidance from the Ministry of the Environment as the Source Protection Plan is developed.

Staff Reports to Council regarding Source Water Protection:

Staff have reported to City Council on previous occasions to ensure Council is kept up to date on the progress of the Source Water Protection Committee.

PLPD07-013 March 21, 2007

Resolution of Council to support Lower Trent Conservation Authority as the lead agency on conducting a threats and issues inventory and risk assessment of the surface water intake for the City of Peterborough's water treatment plant.

PLPD08-16 March 10, 2008

Report on progress of Source Water Protection Committee and municipal input to the Source Protection Committee to allow completion of the Terms of Reference for the source water protection planning process.

PLPD09-035 June 22, 2009

Expansion of the Intake Protection Zone 1 for the purpose of application of the Ontario Drinking Water Stewardship Program.

Submitted by,

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Attachments:

Exhibit "A" – Map of Intake Protection Zone Peterborough

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