



CITY OF HAMILTON
PUBLIC WORKS DEPARTMENT
Hamilton Water Division

TO:	Chair and Members Public Works Committee
COMMITTEE DATE:	May 30, 2016
SUBJECT/REPORT NO:	Monitoring Wells Agreement with the Niagara Peninsula Conservation Authority (PW16047)(Wards 11 and 12)
WARD(S) AFFECTED:	Wards 11 and 12
PREPARED BY:	Mike Christie Project Manager, Sustainable Initiatives 905-546-2424, Extension 6194
SUBMITTED BY:	Mark Bainbridge Director of Water & Wastewater Planning & Capital 905-546-2424, Extension 5929
SIGNATURE:	

RECOMMENDATION

That the General Manager of Public Works enter into a monitoring well agreement between the City of Hamilton and the Niagara Peninsula Conservation Authority (NPCA), as well as any related or ancillary documentation, that would allow the NPCA to undertake installation and maintenance of groundwater monitoring wells located within the City-owned road allowance for improved regional groundwater monitoring, in a form satisfactory to the City Solicitor, and with content acceptable to the General Manager of Public Works.

EXECUTIVE SUMMARY

The City of Hamilton has partnered with the Niagara Peninsula Conservation Authority (NPCA) and the Ontario Geological Survey (OGS) for the WaterSmart Niagara Program. This partnership has included a letter in support of NPCA’s application for WaterSmart funding as well as knowledge sharing within our shared boundaries. This program promotes the protection of water resources and safe, clean drinking water for residents within the NPCA area, while providing a valuable linkage between data collection, source water protection, and watershed management for communities and decision makers. Given that the WaterSmart Niagara initiative relies on comprehensive groundwater monitoring, NPCA is pursuing an agreement with the City of Hamilton that would permit the installation of a minimum of two wells within City-owned road allowances. It is expected that the total number of wells would not exceed 5. The wells will be retained by NPCA for monitoring purposes, and the data from these wells will be actively shared with the City of Hamilton and OGS.

NPCA has extensive experience operating similar groundwater monitoring wells within other municipalities as part of the WaterSmart Niagara program and as part of a

Ministry of Environment and Climate Change program, the Provincial Groundwater Monitoring Network. These added locations in the City of Hamilton will give the City a better understanding of local groundwater quality and availability.

NPCA will install monitoring wells in accordance with R.R.O. 1990, Regulation 903 ('Wells') under the Ontario Water Resources Act. All costs associated with construction, operation, maintenance, and decommissioning will be borne by NPCA. The City of Hamilton will be fully indemnified of any risks associated with this program.

Alternatives for Consideration – See Page 4

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: None. All costs associated with the execution of the encroachment will be the responsibility of NPCA. Any costs related to the maintenance or future decommissioning of the monitoring wells will be the responsibility of the NPCA. The NPCA will also be responsible for obtaining and maintaining insurance for all relevant activities done on site.

Staffing: None.

Legal: Legal Services has been consulted in the preparation of this report.

HISTORICAL BACKGROUND

Most residents within rural Hamilton rely on groundwater for their water supply. Groundwater monitoring networks provide information not only on naturally-occurring groundwater quality and quantity, but it also supports changes in public policy, land use, and climate that can affect our city's water resources. This agreement will allow the NPCA to collect high quality groundwater monitoring information and provide a framework to effectively share this information with City of Hamilton staff. This agreement is a useful and efficient tool which will help to support both NPCA and Hamilton's short and long term groundwater management planning within our shared boundaries. This groundwater monitoring initiative will be focused in southeast Ancaster and west Glanbrook and would most directly benefit residents in these communities. However, enhanced groundwater monitoring has the potential to improve knowledge and decision making across the City. The term of the agreement will be for 20 years, the minimum expected lifespan of a monitoring well.

In 2015, NPCA applied for funding under the WaterSmart incentive program to improve their regional groundwater monitoring. Hamilton Water, Ontario Geological Survey, and nearby municipalities offered letters of support for their application. NPCA subsequently received funding to install new monitoring wells and is seeking approval from the City to expand their groundwater monitoring network by including two sites within the City of Hamilton municipally-owned road allowance.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

The proper installation, potential maintenance, and future decommissioning of the wells will need to be carried out in accordance with applicable legislation, including R.R.O.

1990, Regulation 903 ('Wells') made under the Ontario Water Resources Act. All costs associated with these activities will be the responsibility of NPCA.

Due to the fact that these wells are not for drinking water purposes and for monitoring activities only, it is not anticipated that other policies or legislated requirements would apply.

RELEVANT CONSULTATION

- Niagara Peninsula Conservation Authority
- Legal Services Division
- Geomatics and Corridor Management Section, Engineer Services Division, Public Works

ANALYSIS AND RATIONALE FOR RECOMMENDATION

The installation of groundwater monitoring wells will become a part of the NPCA's network used for long-term groundwater monitoring, providing information on regional groundwater flow and groundwater quality. Groundwater data and analysis will be shared between inter-jurisdictional stakeholders including the City of Hamilton. This data can be requested at any time throughout the period of the agreement. These data sharing activities provide a level of benchmarking that supports Ontario Municipal Benchmarking Initiative principles.

This groundwater monitoring program is part of a larger project partially funded by the OGS, a provincial agency that conducts geoscience research and geological mapping as part of the Ontario Ministry of Northern Development and Mines. The OGS is a provincial leader in geoscience research and regularly conducts studies which help protect, manage and sustainably develop groundwater resources in Ontario.

This agreement will enable the NPCA to collect high quality groundwater monitoring information that will be useful for the City's own groundwater management planning at no extra cost to the City. The terms of the agreement respect all stakeholders and provide flexibility in case a stakeholder's priorities change in the future. Given the large gaps that exist in groundwater monitoring in our region and across the province, this agreement will improve local knowledge and decision-making for our water resources. It is anticipated that the monitoring wells will be operational for a lifespan of 20 years which will be the term of the agreement, with flexible options for renewal of the agreement in the future.

ALTERNATIVES FOR CONSIDERATION

1. Do nothing; this option is available if there are concerns with NPCA entering the City-owned road allowance for groundwater monitoring activities. No concerns have been identified to date. Groundwater monitoring wells are commonly found in or close to road allowances, including wells within the City of Hamilton. Furthermore, this agreement presents an opportunity to co-operate with NPCA and in turn benefit from the resulting increased understanding and availability of reliable groundwater data in these

communities. This information would also come at no cost to the City. As a result, this is not a recommended alternative.

2. Undertake all monitoring activities internally using City resources; additional costs and time requirements would be incurred, given the considerations of well siting, well drilling, the purchasing and installation of monitoring equipment, regular site visits for maintenance and downloading of monitoring data, data analysis and reporting, insurance, and potential data sharing with relevant partners. The only benefit to this alternative is the City would have greater control on which groups could access the monitoring data. However, given that Hamilton Water will have unrestricted access to this data at any time throughout the agreement at no cost to the City, and other monitoring information can already be made available to the public, this is not a recommended alternative.

ALIGNMENT TO THE 2012 – 2015 STRATEGIC PLAN

Strategic Priority #1

A Prosperous & Healthy Community

WE enhance our image, economy and well-being by demonstrating that Hamilton is a great place to live, work, play and learn.

Strategic Objective

1.6 Enhance Overall Sustainability (financial, economic, social and environmental).

Strategic Priority #2

Valued & Sustainable Services

WE deliver high quality services that meet citizen needs and expectations, in a cost effective and responsible manner.

Strategic Objective

2.1 Implement processes to improve services, leverage technology and validate cost effectiveness and efficiencies across the Corporation.

2.2 Improve the City's approach to engaging and informing citizens and stakeholders.

Strategic Priority #3

Leadership & Governance

WE work together to ensure we are a government that is respectful towards each other and that the community has confidence and trust in.

Strategic Objective

3.1 Engage in a range of inter-governmental relations (IGR) work that will advance partnerships and projects that benefit the City of Hamilton.

3.4 Enhance opportunities for administrative and operational efficiencies.

APPENDICES AND SCHEDULES ATTACHED

None.