York Region

Clause No. 3 in Report No.6 of the Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on March 27, 2014.

3
2013 ANNUAL DRINKING WATER SYSTEM SUMMARY REPORT

Committee of the Whole recommends adoption of the recommendation contained in the following report dated, February 26, 2014 from the Commissioner of Environmental Services:

1. RECOMMENDATION

It is recommended that:

1. The Regional Clerk circulate this report to the Clerks of the local municipalities.

2. PURPOSE

York Region's 2013 Annual Drinking Water System Summary Report fulfills the reporting requirements of the Drinking Water Systems regulation under the *Safe Drinking Water Act, 2002*. The Summary Report (*Attachment 1*) provides detailed information on York Region's drinking water systems and supports Council in meeting the statutory Standard of Care under the *Safe Drinking Water Act, 2002*.

3. BACKGROUND

Legislation mandates system owners report annually on drinking water systems to Council and the public

York Region's 2013 Annual Drinking Water System Summary Report (*Attachment 1*) fulfills two requirements mandated under Schedule 22 and Section 11 by the Drinking Water Systems regulation (O. Reg. 170/03) under the *Safe Drinking Water Act, 2002*.

- Schedule 22 requires York Region to submit a Drinking Water System Summary Report that summarizes information on annual compliance and the capacity of drinking water systems to Council no later than March 31 of each year for the preceding calendar year.

- Section 11 requires York Region to prepare an Annual Water Quality Report to be made available to the public no later than February 28 of each year for the preceding calendar year. Attachment 1 was posted on our website www.york.ca and is available upon request. The report summarizes water quality data, describes major drinking water system expenses incurred, identifies any instances where the sample results did not meet Ontario Drinking Water Standards and summarizes corrective actions taken.

Summary Report provides Regional Council with information required to exercise due diligence and meet a "standard of care" for York Region's drinking water systems

Municipal Councillors have an important role to play in ensuring that York Region drinking water systems provide safe, high quality drinking water. Effective December 31, 2012, Section 19 of *the Safe Drinking Water Act, 2002* clarifies the legal responsibility held by people with decision-making authority over municipal drinking water systems by imposing a statutory standard of care. It specifically requires the exercise of a level of care, diligence and skill with regard to a municipal drinking water system that a reasonably prudent person would be expected to exercise in a similar situation and that this due diligence be exercised honestly, competently and with integrity.

4. ANALYSIS AND OPTIONS

York Region proactively manages risk to focus on compliance to ensure clean and safe drinking water

York Region regularly reviews its compliance with terms and conditions of approvals, permits and requirements of the *Safe Drinking Water Act, 2002* and its regulations. York Region's Integrated Management System, as endorsed by Council, provides a tool to identify and correct any adverse results or operational events identified and subsequently reported to applicable regulatory agencies, including the Ministry of the Environment (MOE) and the Medical Officer of Health.

York Region continues to provide clean, safe drinking water to residents and businesses. Proactively managing risk and supporting compliance is carried out every day by:

- Complying with legislation and the Drinking Water Quality Management Standard to provide high quality drinking water to residents
- Planning and constructing infrastructure to meet the needs of a growing Region
- Implementing innovative, progressive programs and securing strategic partnerships with industry leaders to drive innovation
- Operating and maintaining drinking water quality by completing thousands of tests to check that everything is operating properly, demonstrating the

effectiveness of processes and ensuring that drinking water meets quality standards
- Maintaining robust training programs so that water operators can continue to achieve excellence in delivering drinking water
- Maintaining an integrated management system to monitor compliance and drive continuous improvement

In addition, York Region's ISO 9001 and Drinking Water Quality Management Standard accredited quality management system provide mechanisms to identify and correct any adverse results or operational events. Corrective actions documented in the Region's quality management system procedures may include re-sampling, adjusting the system, adjusting treatment processes or notifying system users.

York Region also participates in internal, external and compliance audits as a due diligence measure and to support compliance with management system standards and applicable regulations. A summary of water facilities audited by Regional staff and York Region's external third-party auditors (ISO 9001 and DWQMS) and inspected by the MOE is provided in Table 1.

Table 1
Summary of MOE Inspections and Management System Audits of Water Facilities in 2013

Audit Type	Description	Purpose	Sites Audited in 2013
Internal Audits by Environmental Services Staff	Facilities are audited a minimum of every three years	Determine if facilities are meeting requirements of York Region's ISO and DWQMS systems	38
MOE Inspections	Inspected annually, in some cases twice a year; approximately one third of inspections are unannounced	Ensure facilities are in compliance with Provincial regulations	15
Compliance Audits by Environmental Services Staff	Each facility is audited a minimum of every three years	Similar to MOE Inspections, these are used to proactively address potential compliance issues	31
External Audits by third party accredited auditor	ISO and DWQMS audits completed annually	Verify that facilities are meeting the requirements of York Region's ISO and DWQMS systems	8*

*Note: Number of external audit sites varies by year based on audit types and ISO and DWQMS recertification requirements

York Region continues to provide sufficient capacity and high quality drinking water to meet community needs

All of York Region's drinking water systems met capacity needs, as well as monthly average flow, maximum daily withdrawal, and allowable daily withdrawal limits imposed by the Permits to Take Water for the 2013 reporting year. Further information is outlined in Section 3 of *Attachment 1*.

York Region complied with the terms and conditions of its drinking water system approvals, licences, permits and requirements of the *Safe Drinking Water Act, 2002* and its regulations in 2013 with the exception of 16 adverse events. None of these events posed a significant health threat or resulted in a service interruption to residents.

In 2013, a total of 37,332 tests were conducted and of those, 0.02 per cent or nine samples were adverse events. In all cases these events were related to elevated sodium levels, which triggered a reporting requirement but concentrations did not exceed Ontario Drinking Water Standards. None of these events posed a significant health threat or resulted in a service interruption to residents. York Region's testing program exceeds MOE requirements.

Real time monitoring of system performance allows for quick corrective action to system performance events

In 2013, there were seven adverse system performance events related to chlorine residual or fluoride. In all cases minor adjustments were made to the system or treatment processes to correct issues. None of these events posed a significant health threat or resulted in a service interruption to residents.

All recommendations from Ministry of the Environment inspections at 15 Regional water facilities were implemented in 2013

The MOE has implemented a rigorous and comprehensive province-wide approach for inspecting drinking water systems focusing on source, treatment and distribution components, as well as water system management practices. The MOE conducted 15 inspections at York Region water facilities in 2013. The focus of inspections was to confirm compliance with Provincial regulations and the terms and conditions of approvals, licenses and permits for the facilities.

During these inspections, two minor non-compliance issues were identified. Both were administrative in nature and related to procedural reporting issues associated with elevated sodium levels. O. Reg. 170/03 requires submission of a *Notice of Issue Resolution* report within seven days of an issue being resolved; however, in two

instances, this report was filed before sample retest results were received. Corrective action was taken to resolve this issue. In addition, five "Best Management Practice" recommendations were provided to optimize facility operations (such as modified sampling procedures and minor facility retrofits). All recommendations were implemented by York Region in 2013.

York Region is the top performer in the 2011-2012 Ontario Chief Drinking Water Inspector's annual report

In 2012, York Region achieved a compliance score on MOE inspections of 100 per cent, and a score of 100 per cent on samples meeting provincial water quality standards as shown in Table 2.

The City of Toronto and Peel Region who provide drinking water to York Region also received high drinking water quality scores in the Ontario Chief Drinking Water Inspector's report. City of Toronto met standards for 99.89 per cent of tests while Peel Region met standards for 99.97 per cent.

York Region's commitment to continuous improvement has contributed to the Region achieving the Ontario Chief Drinking Water Inspector's top ranking among Greater Toronto Area municipalities in the 2011-2012 annual report. Drinking water system performance summaries can be found in Section 3 in *Attachment 1*.

Table 2
Ministry of the Environment Inspection Ratings for Five Greater Toronto Area Municipalities

Municipality	2010-11 Inspection Rating (%)*	2011-12 Inspection Rating (%)*	2010-11 Drinking Water Quality (% Tests Meeting Standards)*	2011-12 Drinking Water Quality (% Tests Meeting Standards)*
York Region	**99.82**	**100.00**	**99.98**	**100.00**
Durham	99.70	99.83	99.95	99.90
Halton	100.00	98.78	99.98	99.95
Peel	96.15	99.59	99.98	99.97
Toronto	99.15	99.42	99.88	99.89

*Note: Average scores for all systems within regional jurisdiction.

Link to key Council-approved plans

York Region's Annual Drinking Water System Summary Report provides Council with an understanding of York Region's drinking water systems status, capacity, and quality for the year. Drinking water inspection and sampling results consistently demonstrate that York Region is a municipal leader in providing clean, safe drinking water to its residents.

Available information on York Region's drinking water systems capabilities and quality aligns with the Region's 2011 to 2015 Strategic Planning objective of continuing to deliver and sustain critical infrastructure necessary to support managed growth and optimize community benefit.

5. FINANCIAL IMPLICATIONS

Focus is on maintaining water infrastructure to ensure services are delivered in a safe, reliable and efficient manner while sustaining services for a growing Region

York Region will continue to proactively address the demands of maintaining water infrastructure in a good and reliable condition while meeting regulatory and operating requirements, as well as growth and development needs. York Region strives to ensure that programs and services are delivered to the community in an effective manner and are recovered through user rates. Multi-year rate approvals are important to secure funds to meet current and future operational needs.

Infrastructure maintenance is critical to delivering services that are safe, reliable and efficient, while sustaining a growing community. In 2013, York Region spent approximately $14.75 million installing, repairing or replacing equipment used to treat, store and deliver safe drinking water. These funds are a component of the overall Environmental Services budget as approved annually by Council.

6. LOCAL MUNICIPAL IMPACT

York Region's drinking water systems are operated to meet applicable regulatory compliance requirements prescribed through applicable legislation. Following these regulatory requirements assists the Region with delivering safe and sustainable supplies of drinking water to the nine local municipalities.

7. CONCLUSION

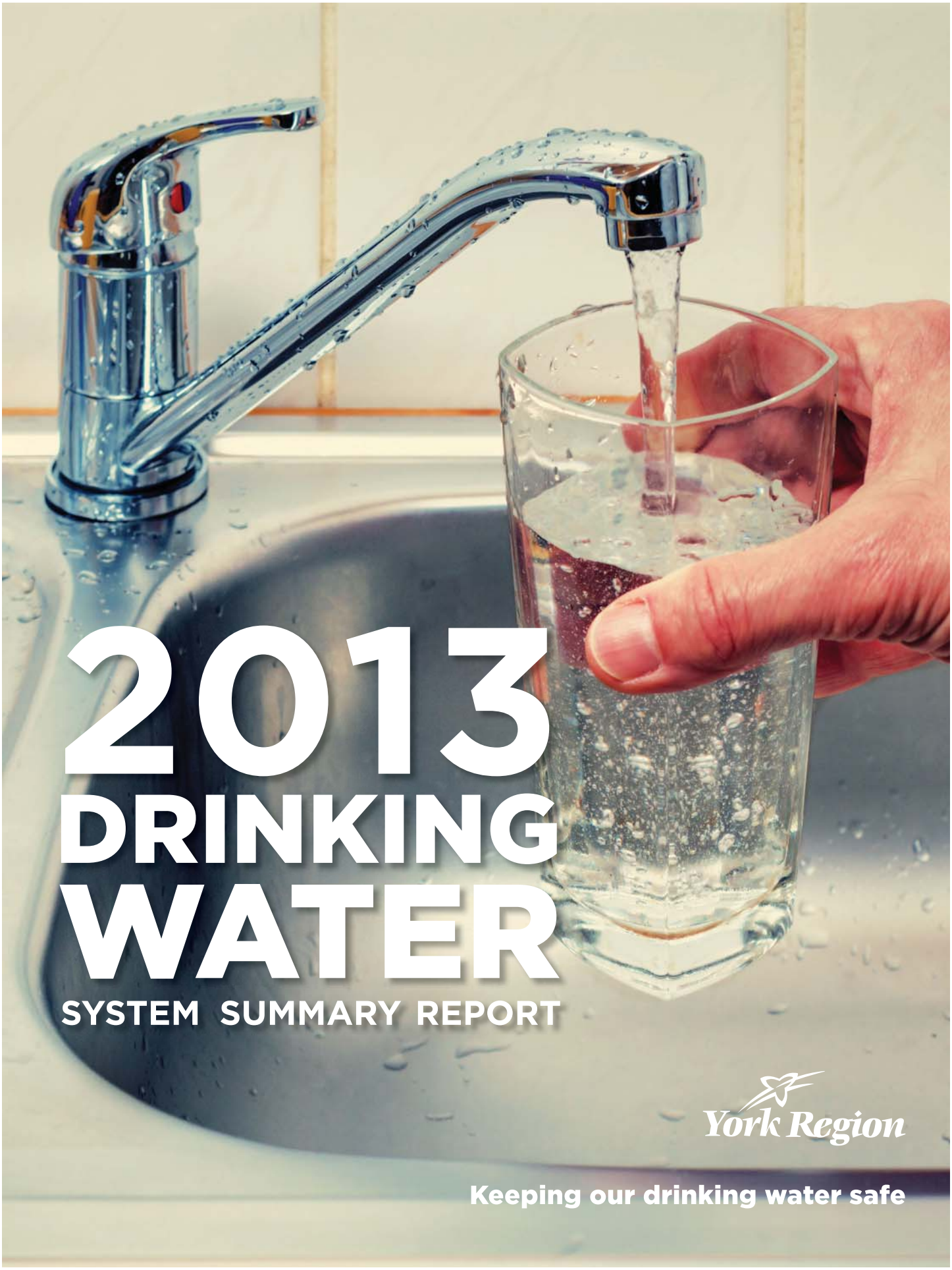
York Region's 2013 Annual Drinking Water Summary Report satisfies two reporting requirements of the *Safe Drinking Water Act, 2002*, namely Schedule 22 and Section 11 of O. Reg. 170/03. This Annual Drinking Water Summary Report provides detailed information on the Region's drinking water systems and supports Council by demonstrating aspects of due diligence under the Standard of Care requirements.

Findings from the 2013 reporting year continue to demonstrate the strength of York Region's drinking water systems which are subject to strict regulations that the Province of Ontario has implemented to keep drinking water safe and clean, as well as the Region's commitment to communicate performance to stakeholders and the public.

For more information on this report, please contact Laura McDowell, Director of Environmental Promotion and Protection at Ext. 75077.

The Senior Management Group has reviewed this report.

Attachment - 1



2013 DRINKING WATER

SYSTEM SUMMARY REPORT

York Region

Keeping our drinking water safe

Accessible formats or communication supports are available upon request. Please contact us by email at environmentalservices@york.ca or by phone at 1-877-464-9675 ext. 73000.

A copy of this report is available at the Environmental Services Department counter located at the York Region Administrative Centre or online at www.york.ca

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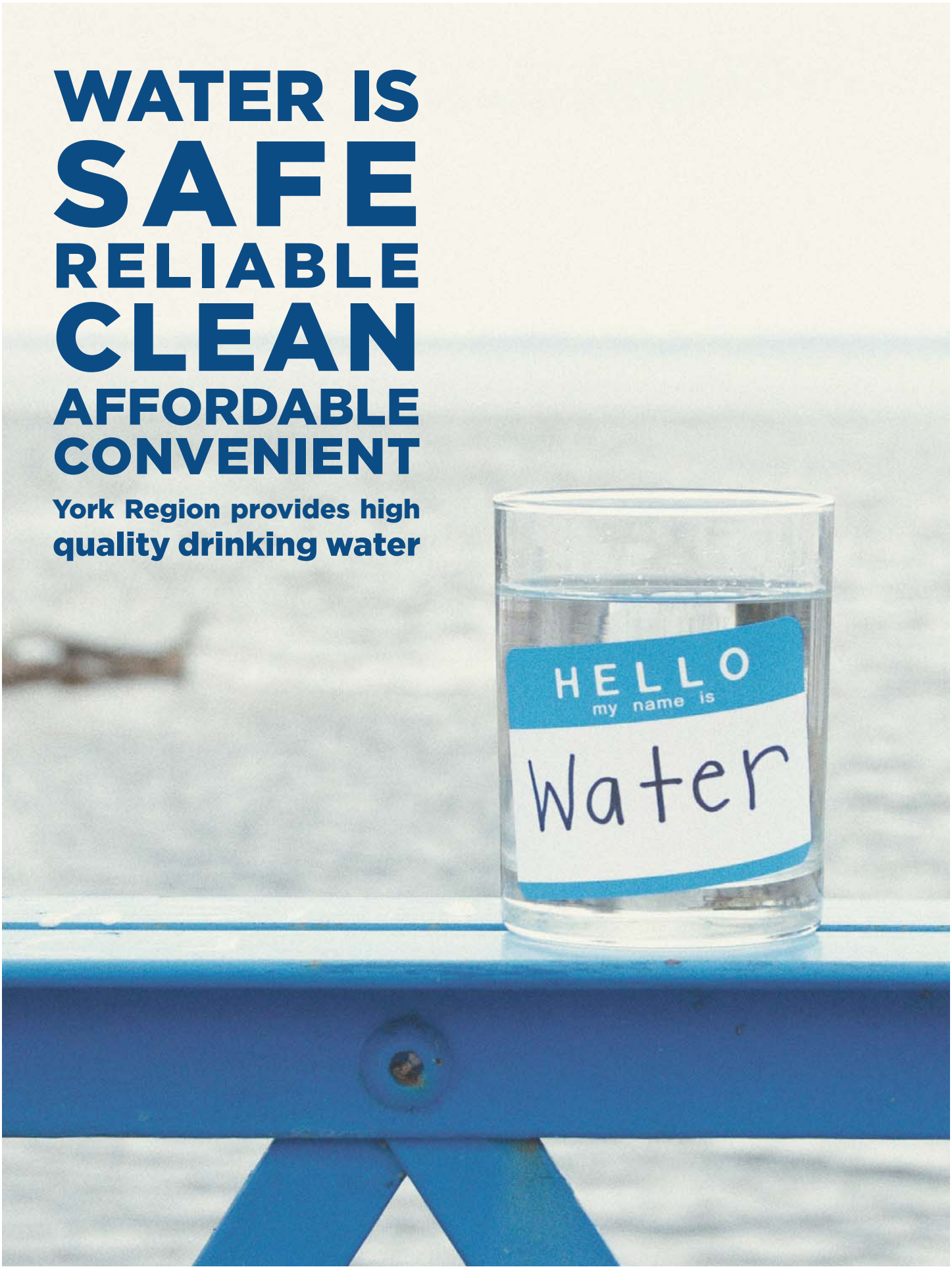
WATER IS SAFE RELIABLE CLEAN AFFORDABLE CONVENIENT

York Region provides high quality drinking water



Introduction

the report at a glance

The Regional Municipality of York (York Region) continues to provide clean, safe drinking water to residents and businesses. Proactively managing risk and supporting compliance is carried out every day by:

- Complying with legislation and the Drinking Water Quality Management Standard to provide high quality drinking water to residents
- Planning and constructing infrastructure to meet the needs of a growing Region
- Implementing innovative, progressive programs and securing strategic partnerships with industry leaders to drive innovation
- Performing regular audits to proactively manage risk
- Operating and maintaining drinking water quality by completing thousands of tests to check that everything is operating properly, demonstrating the effectiveness of processes and ensuring that drinking water meets quality standards
- Maintaining robust training programs so that operators can continue to achieve excellence in delivering drinking water
- Maintaining an integrated management system to monitor compliance and drive continuous improvement

The York Region *2013 Annual Drinking Water System Summary Report* satisfies two reporting requirements of the *Safe Drinking Water Act, 2002* (Safe Drinking Water Act), namely Schedule 22 and Section 11 of Ontario Regulation (O. Reg.) 170/03. As the owner of drinking water systems, York Region must prepare annual reports summarizing the status and capacities of each of its drinking water systems, as well as water quality produced, treated and delivered to our customers for each calendar year. This report is prepared in accordance with requirements of O. Reg. 170/03 and covers the reporting period from January 1 to December 31, 2013.

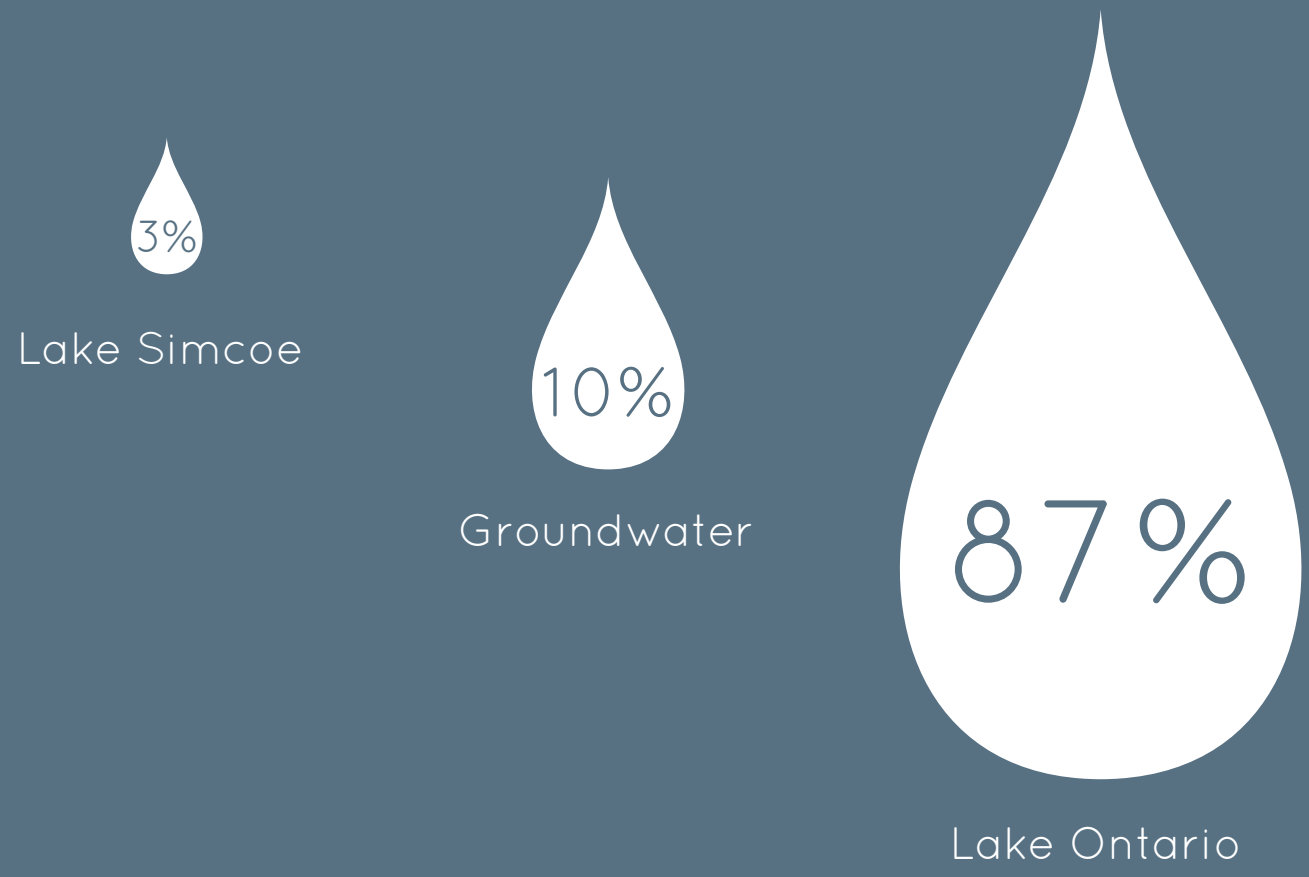
Drinking Water Compliance Status and Capacity Reporting

Reporting under Schedule 22 of O. Reg. 170/03 requires York Region to submit a summary report to Council no later than March 31st of each year for the preceding calendar year. This report summarizes the 2013 compliance status of York Region's drinking water systems and provides information about the systems' ability to meet water supply requirements of its communities. This report compares actual water flow data from the system to regulatory limits set by the Ministry of the Environment (MOE or Ministry).

Drinking Water Quality Reporting

Reporting under Section 11 of O. Reg. 170/03 requires York Region to submit a Drinking Water Quality Summary Report to the public no later than February 28th of each year for the preceding calendar year. The report summarizes water quality data, identifies results that were outside Ontario Drinking Water Standards requirements and corrective actions taken to bring results within required limits.

Sources of York Region Drinking Water



section 1

background + general information

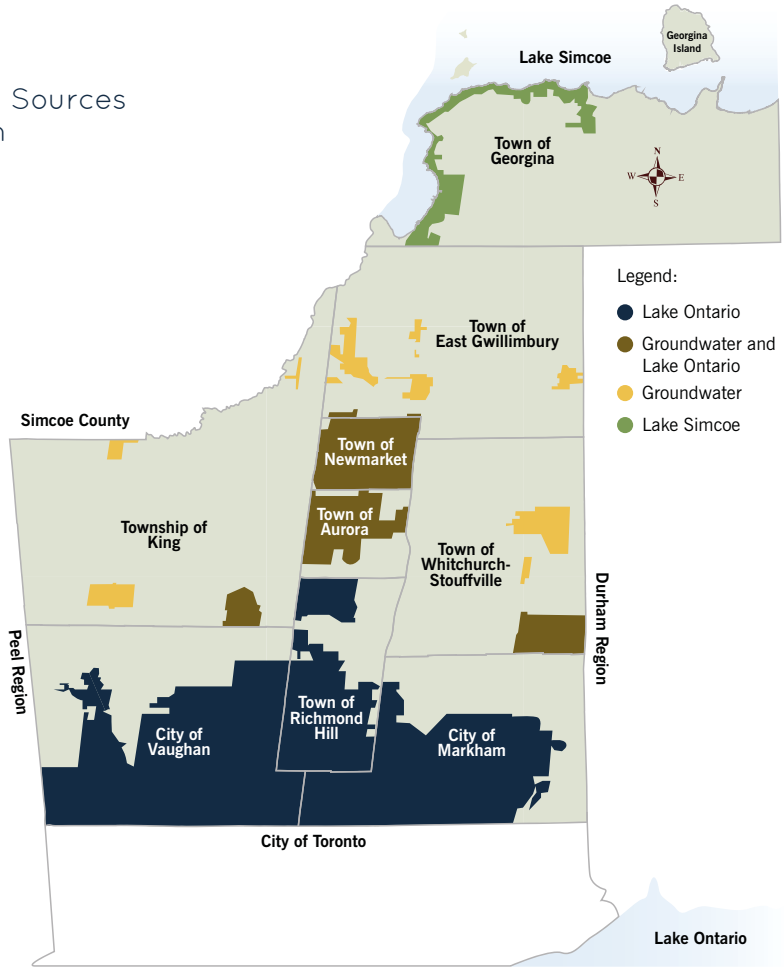
York Region is responsible for the supply, production, treatment, storage and transmission of drinking water to its nine municipalities: Town of Aurora, Town of East Gwillimbury, Town of Georgina, Town of Newmarket, Town of Richmond Hill, Town of Whitchurch-Stouffville, Township of King, City of Vaughan and City of Markham. The local municipalities are responsible for distribution of drinking water to residential, industrial, commercial and institutional customers.

York Region's drinking water sources are (Figure 1):

- Groundwater drawn from Regional aquifers
- Surface water drawn from Lake Ontario (provided through partnerships with the City of Toronto and the Regional Municipality of Peel (Peel Region))
- Surface water drawn from Lake Simcoe

To provide residents and businesses with safe and secure drinking water, York Region operates and maintains three water treatment facilities, 11 pumping stations, 41 storage facilities (elevated tanks and reservoirs), 42 production wells and more than 300 kilometres of transmission mains to maintain an uninterrupted water supply. Co-ordinated use of groundwater and surface water drinking sources provides additional system security to areas supplied by the York Drinking Water system.

Figure 1
Water Supply Sources in York Region



due diligence

York Region continues to maintain its water infrastructure in good and reliable condition to meet regulatory requirements, internal operating and compliance standards and provide uninterrupted service to communities within York Region.

This is done through a number of initiatives that maintain due diligence and protect York Region's assets. These programs include robust operator training programs which exceed legislated training requirements and encourage professional development. Details regarding initiatives undertaken by York Region to maintain infrastructure and water quality are included in the asset management section below.

ISO 9001 and Drinking Water Quality Management Standard

York Region is certified to ISO 9001 and the MOE's Drinking Water Quality Management Standard (DWQMS) to identify processes to continue to provide clean and safe drinking water. ISO 9001 is an internationally recognized standard of excellence, which helps drive continuous improvement to meet customer and regulatory requirements. In addition, the Province of Ontario requires that municipalities have a quality management system to guide key aspects of how the drinking water system is operated and maintained. This is regulated through Municipal Drinking Water Licences, which authorize operation of drinking water systems, and Drinking Water Works Permits which permit establishment or alteration of a drinking water system. The DWQMS was integrated with York Region's existing ISO management systems to establish an Integrated Management System (IMS) for the York Region Environmental Services department.

Auditing Programs

York Region participates in internal, external and compliance audits as a due diligence measure and to support compliance with management system standards and applicable regulations. A summary of water facilities audited by Regional staff, York Region's external third-party auditor (ISO 9001 and DWQMS), and inspected by the MOE are listed in Table 1. Results of MOE inspections are discussed later in the report under Section 2 - Regulatory Compliance Performance.

Table 1: Number of Ministry of the Environment Inspections and Management System Audits of Water Facilities in 2013

Audit Type	Frequency	Perfomed By	Purpose	Number of Sites Audited in 2013
Internal Audits	Facilities are audited a minimum of every three years	Environmental Services staff	Determine if facilities are meeting the requirements of York Region's ISO and DWQMS systems	38
MOE Inspections	Inspected annually, in some cases twice a year. Approximately one third of inspections are unannounced	Ministry of the Environment Inspectors	Ensure facilities are in compliance with Provincial regulations	15
Compliance Audits	Each facility is audited a minimum of every three years, these audits are designed to be similar to MOE inspection	Environmental Services staff	Similar to MOE inspections, these are used to proactively address potential compliance issues	31
External Audits	ISO and DWQMS audits completed annually	Third party accredited auditor	Verify that facilities are meeting the requirements of York Region's ISO and DWQMS systems requirements of York Region's ISO and DWQMS systems	8*

***Note: Number of external audit sites varies by year based on audit types and ISO and DWQMS recertification requirements.**

Major System Expenditures

Infrastructure maintenance is critical to delivering services that are safe, reliable and efficient, while sustaining a growing community. Ontario Regulation 170/03 s.11 (6)e requires York Region to report "major expenses incurred during the period covered by the report to install, repair or replace required equipment" as a part of this report. In 2013, York Region spent approximately $14.75 million installing, repairing or replacing equipment used to treat, store and deliver safe drinking water. Table 2 includes a summary of major expenditures for each drinking water system.

Table 2: Summary of Major Expenditures

Drinking Water System	Significant Equipment Installations, Repairs or Replacements	2013 Expenditures
Ansnorveldt	Well rehabilitation (maintenance and repair)	$16,162
Ballantrae-Musselman's Lake	Elevated tank inspection/repair Variable frequency drive pump repair	$32,808
Georgina	Reservoir upgrades Treatment plant upgrades Monitoring equipment installation/repair	$955,421
Kleinburg	Monitoring equipment installation/repair Well upgrades	$143,455
Mount Albert	Monitoring equipment installation/repair Elevated tank upgrades	$45,358
Nobleton	Elevated tank upgrades Monitoring equipment installation/repair Silicate feed system upgrade	$668,305
Schomberg	Monitoring equipment installation/repair Distribution system swab	$44,858
York Drinking Water System	Watermain repair Pumping station upgrades Monitoring equipment installation/repair Well maintenance and repair Elevated tank inspection and repair Electrical transformer upgrades Well upgrades Elevated tank recoating Facility safety upgrades	$12,842,118
TOTAL		$14,748,485

Asset Management

The Environmental Services Department's key goals involve proactively managing and maintaining asset lifecycle activities in a sustainable manner to deliver reliable and quality water services to customers and to comply with all regulatory requirements. Figure 2 presents the lifecycle management activities in various stages of the asset lifecycle.

The Asset Management Program leads and coordinates activities including:

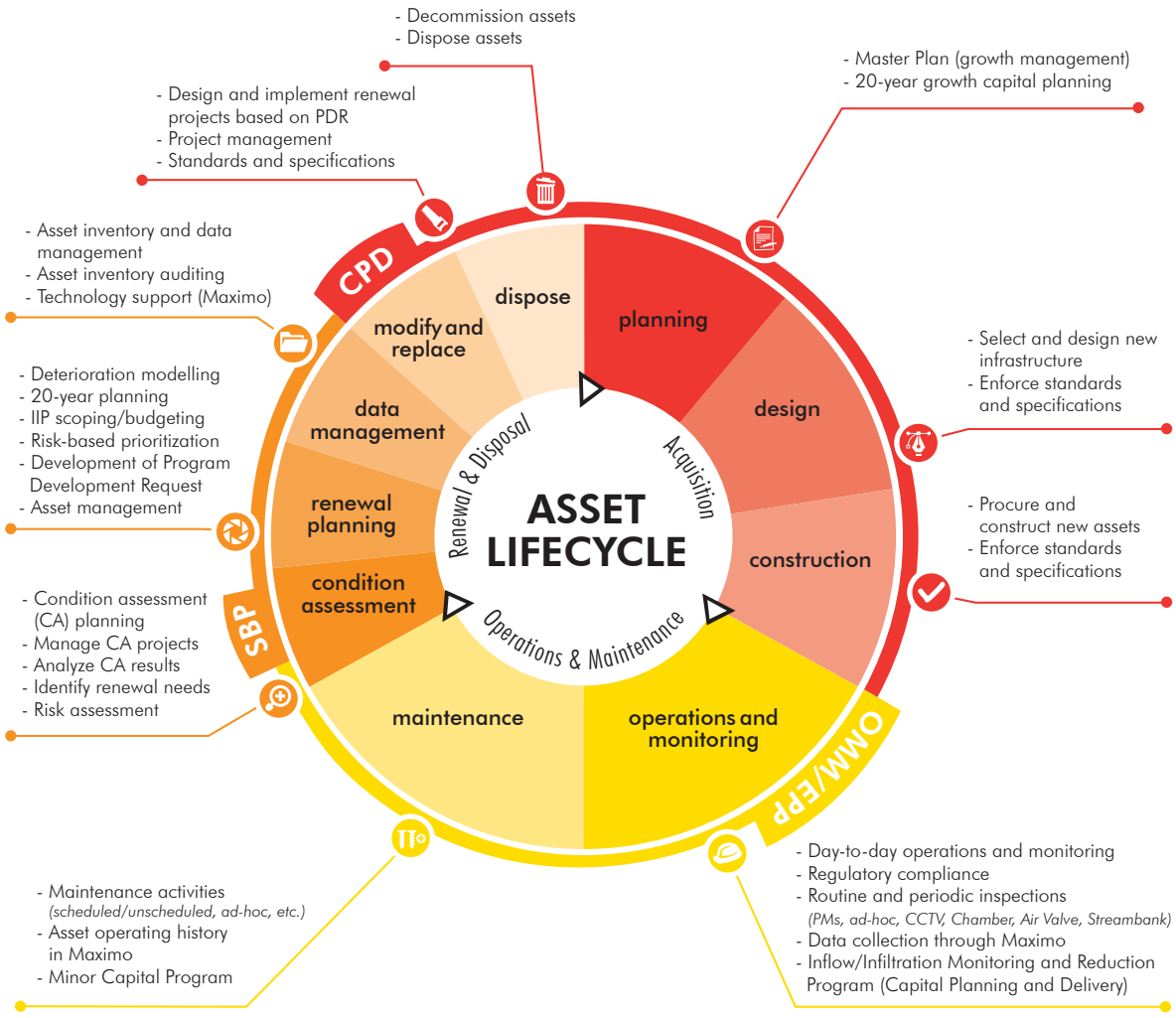
- Asset management strategies and framework
- Asset management plans
- Asset inspection, condition assessment and data collection
- Risk assessment
- State of Infrastructure report
- Infrastructure improvement planning
- Coordination of asset management activities

Environmental Services is developing and implementing a best-in-class asset management program by engaging, testing and evaluating rapidly evolving practices and techniques. A number of key initiatives have been planned for 2014/2015 including installation of Acoustic Fibre Optic (AFO) system for real-time condition monitoring of live watermains.

The bi-annual Environmental Services State of Infrastructure Report reflects York Region's commitment to proactively and transparently manage and communicate issues associated with delivery of services. In the most recent Report Card for water assets, York Region received a B (Good) rating overall. An updated State of Infrastructure Report will be brought to Council in the second quarter of 2014.

Figure 2

Asset Lifecycle Management - Roles and Responsibilities



innovation + planning for the future

York Region continues to be a municipal leader in drinking water protection, conservation and innovative technologies.

Source Water Protection

York Region continues to protect drinking water sources through continued collaboration with other source protection partners and the Province of Ontario.

The Regional Official Plan was amended in 2013 to include additional source protection mapping and policies. The added mapping makes the Official Plan current and reflects all vulnerable areas relative to municipal drinking water supplies. The added policies provide interim protection to water quality and quantity until the Source Protection Plans are approved by the Province, after which another Official Plan amendment will occur to conform to those policies.

Development applications within the vulnerable areas were reviewed throughout 2013 to identify potential future risks to municipal drinking water sources, and conditions were added to approvals of these development applications to prevent or mitigate those risks.

Existing risks to drinking water sources from current activities were also verified by Regional staff through a field program. Processes to manage those existing risks have been developed and are expected to be implemented beginning early in 2014.

Water Conservation

The Long Term Water Conservation Strategy was approved in 2011, and outlines a 40-year plan for water conservation and efficiency in York Region. The strategy showcases York Region's commitment to innovative water conservation programming, water resource protection, energy conservation and greenhouse gas reduction.

In 2013, implementation plans focused the Water for Tomorrow program on the following areas:

- Implementing contractor certification programs for plumbers and irrigation specialists to reduce outdoor water use and peak day demand
- Researching options to use storm and grey water in residential and industrial, commercial and institutional sectors under an integrated water management approach (for example, using non-potable water, such as storm water, for non-potable uses, such as irrigation)
- Researching options for the future to use storm and grey water in residential and industrial, commercial and institutional sectors under an integrated water management approach (for example, using non-potable water, such as storm water, for non-potable uses, such as irrigation)
- Working with local municipalities, conservation authorities and developers to promote the use of low impact development for both new and retrofit homes and facilities

Since the *Water for Tomorrow* program began in 1998 through to 2012, it has saved 25.8 million litres of water per day in York Region, helping to defer infrastructure expansion and reduce operational costs.

A Long Term Water Conservation Strategy and Inflow and Infiltration Reduction Strategy Report is published annually to satisfy conditions included in the Ministry of the Environment's approval for the Southeast Collector Trunk Sewer Project.

Figure 3 shows the total water supplied to the local municipalities divided by the total Regional population over time. These consumption values include water supplied to residential and industrial, commercial and institutional users as well as any non-revenue water. This graph demonstrates the reduction in total water consumption on a per capita basis during the period from 1999 to 2012, largely due to water conservation efforts.

York Region's efforts to conserve water are helping to ensure that York's drinking water system has sufficient supply using existing water source agreements to meet demand in 2041 as shown in Figure 4 on the next page. Groundwater systems have active monitoring systems to ensure the Region has sufficient supply to meet long-term demands of York Region residents, details on water taken and capacity of these systems is included in Section 3.

Figure 3

York Region Water Consumption

This chart shows the average water used per day by all sources including residential and industrial, commercial and institutional users as well as non-revenue water (expressed as per capita use) since the launch of the Water for Tomorrow program. York Region's efforts to conserve water are striving to ensure that it's drinking water system has sufficient supply using existing water source agreements to meet demand in 2041 as shown in Figure 4. Groundwater systems have active monitoring systems in place to track Regional water supplies and striving to ensure sufficient supply to meet long-term demands of York Region residents, details on water taken and capacity of these systems is included in Section 3. Source: March 28, 2013 Report to Regional Council "Long-Term Water Conservation Strategy Implementation".

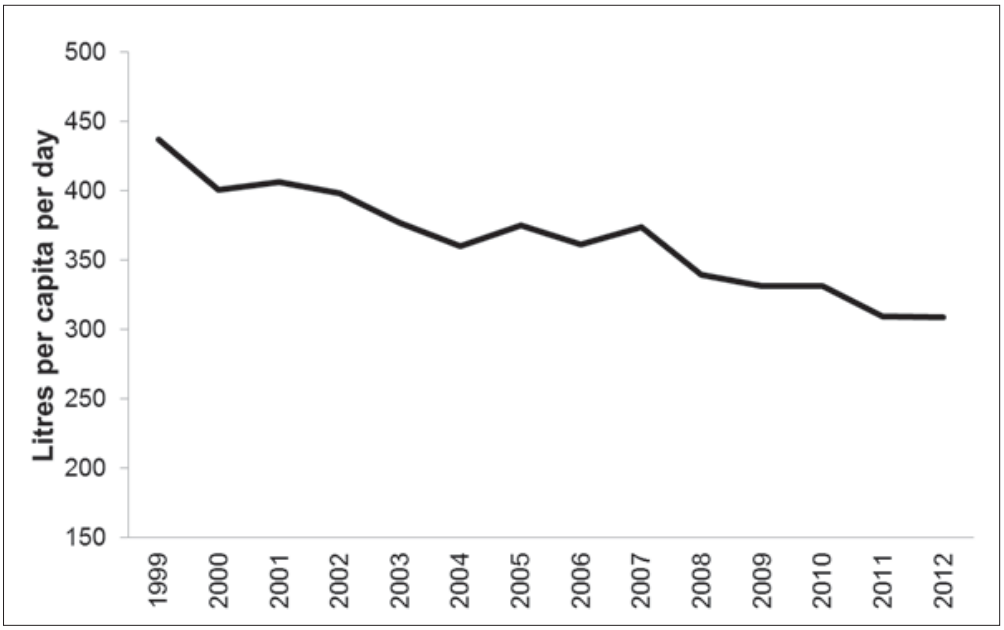
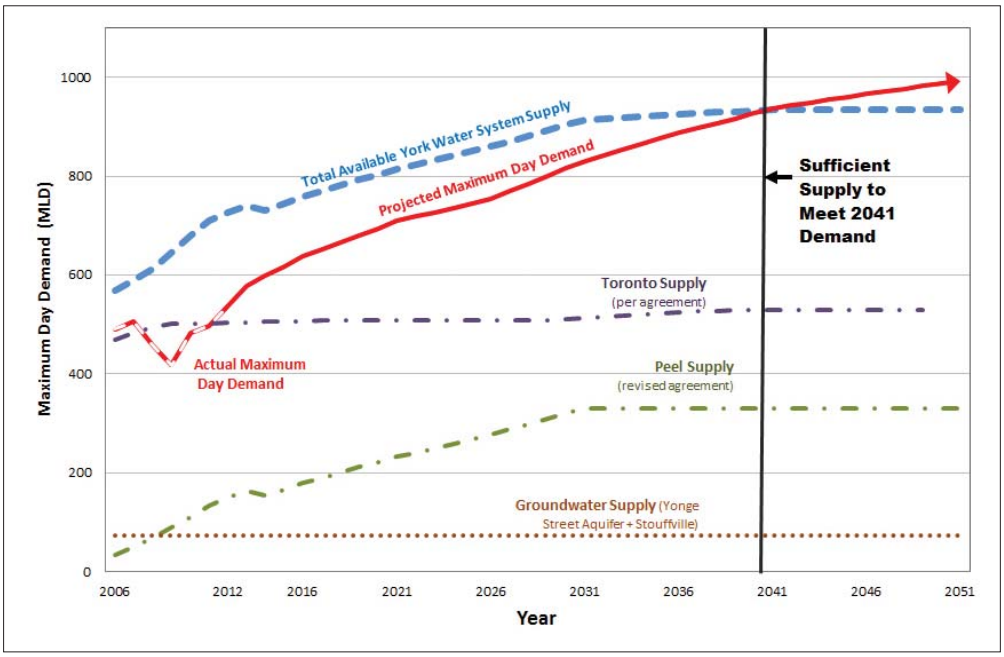


Figure 4

Projected York Water System Demand and Supply

The red line graphs the highest water use day of the year to demonstrate the ability of the system to manage the highest water use days, the dashed portion was the actual water used on a peak day in that year and the solid line is York Region's projection. This chart is not indicative of overall water conservation. Source: December 19, 2013 report to Regional Council "York-Peel Water Supply Agreement Renewal".



Leadership in Research and Innovative Partnerships

York Region is actively researching and fostering innovative water-related technologies, services and practices in the public sector. Through our partnerships outlined in Table 3 (on the next page), we are continuing to gain a greater understanding of emerging challenges, future regulatory changes and optimization of facility operations through new technology. The goal of the program is to align with Federal and Provincial initiatives, as well as with research conducted by United States Environmental Protection Agency (USEPA) and World Health Organization (WHO).

York Region's collaborative efforts are evident through the ongoing partnerships with the non-profit sector, including collaborations with the Province and universities. Many projects have identified opportunities for York Region to optimize its water services using innovative solutions, latest technologies and applied research. The results of these projects have the potential to enhance water treatment processes, operations, and maintenance activities to improve water quality.

Improved knowledge, successful partnerships and using innovation make York Region a leader in the industry and help to position the Region to meet future regulatory changes. Research and innovation efforts demonstrate York Region's commitment to continuous improvement, leadership and operational excellence. York Region also advocates for beneficial changes in public policy by coordinating with Local Municipalities and through membership in key municipal associations, such as Regional Public Works Commissioners of Ontario, Canadian Water Network, Municipal Water/Wastewater Regulatory Committee, and the Ontario Water Works Association. Through these groups, York Region is able to align with other municipal partners throughout the Province to provide a strong and united municipal voice for issues related to the provision of safe drinking water.

Photo (Left to Right): Ontario Minister of the Environment – Jim Bradley, Regional Chair – Bill Fisch, Regional Councillor – Vito Spatafora, Mayor of East Gwillimbury – Virginia Hackson, and Regional Councillor – Danny Wheeler at Keswick Water Pollution Control Plant for the Showcasing Water Innovation Partner Project.

Table 3: Research and Development Projects

Project	Partners	Project Description	Benefits
Advanced Water Distribution Systems Monitoring Technologies	Town of Newmarket King Township Town of East Gwillimbury	Adenosine tri-phosphate is used to quickly quantify biological activity in a water sample	This testing method has been recognized by the Ministry of the Environment based on work conducted by York Region
Biologically Active Filtration for Water Treatment	University of Toronto Drinking Water Research Group	Granular active carbon being used as material for biological filtration	Reducing disinfection by-products by up to 40 per cent based on trials at Georgina Water Treatment Plant
Titanium Oxide Nanowire Filtration Water Treatment	University of Toronto University of Waterloo Trojan UV	Evaluate the effectiveness of nanowire filtration for treatment of pharmaceuticals and disinfection by-products	Potential to reduce pharmaceuticals and by products in treated water
Free Chlorine Conversion	Town of Newmarket Town of East Gwillimbury	Use of an operational model and control of secondary disinfectant dosing, as well as enhanced monitoring and best practices. York Region is the second municipality to do this conversion	This is an enhanced maintenance practice which improves water quality and reduces biofilm in the distribution system
Contact Time Calculator for Disinfection	University of Toronto Drinking Water Research Group	Evaluation of current chlorine concentration rates and contact time practices to develop a calculator in real time putting York Region on the leading edge of the industry	Assists staff in demonstrating compliance during regulatory inspections
Quantitative Microbial Risk Analysis	University of Toronto Drinking Water Research Group Water Research Foundation	Raw water sampling of pathogens applied based on Health Canada's risk assessment model	Assessment model will help predict risk of pathogens; this is especially useful in emergency situations in predicting contact time
Chloramine Residual Stability	University of Toronto Drinking Water Research Group	Investigating blending of surface and ground waters to provide a chlorine secondary residual stability under various scenarios	Increasing longevity of residual to maintain safe drinking water
Removal of Micropollutants from Municipal Wastewater: Lake Simcoe/ York Region Pilot Project (Showcasing Water Innovation)	Ministry of the Environment University of Toronto Drinking Water Research Group	To evaluate the feasibility from a financial, energy footprint and treatment process perspective of using advanced oxidation to remove trace substances from wastewater effluent.	Reduced micropollutants released into Lake Simcoe

37,332 TESTS WERE PERFORMED IN 2013 TO ENSURE THE SAFETY OF OUR DRINKING WATER

section 2

regulatory compliance performance

Statement of Compliance

York Region regularly reviews its compliance with terms and conditions of approvals, permits and requirements of the Safe Drinking Water Act and its regulations. York Region's Integrated Management System provides a tool to identify and correct any adverse results or operational events identified and subsequently reported to applicable regulatory agencies, including the MOE and the Medical Officer of Health (MOH). In 2013, York Region complied with the terms and conditions of all approvals, licenses, permits and requirements of the Safe Drinking Water Act and its regulations, with the exception of those items outlined in this section.

As part of the reporting requirements under the Safe Drinking Water Act, the Region must note any known incidents of non-compliance with an Act, regulation, approval, municipal drinking water license along with Provincial Orders for the reporting period and describe the related corrective actions taken. The information in this section represents these non-compliance events and summarizes reports made to the MOE under the Act in 2013.

Summary of Water Capacity Against Allowable Limits

In 2013, all of York Region's Drinking Water Systems operated within the monthly average flow, maximum daily withdrawal, and allowable daily withdrawal limits imposed by the Permits to Take Water issued by the MOE. Refer to Section 3 for more details.

Summary of Adverse Water Quality Samples and Events

York Region conducts a comprehensive sampling program that exceeds regulatory requirements. In 2013, 37,332 tests were performed on water quality samples; results are included in Figure 5.

Adverse events are reported to the MOE and the local Medical Officer of Health (MOH) as required by the Safe Drinking Water Act. An adverse event does not necessarily indicate that drinking water is unsafe; it indicates that an incident occurred and corrective action must be taken. Corrective action may include re-sampling, adjusting the system or treatment processes, notification requirements and other actions as public health may direct. A total of 16 adverse events, of which nine related to minor sodium tests and seven related to adverse system performance events, were reported and are summarized in Tables 4A and 4B. A summary of best management practice events can be found in Table 5. Detailed water sampling results can be found in Section 3.

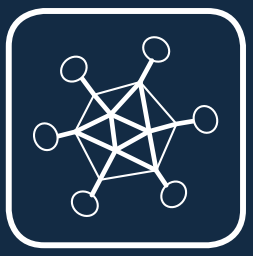
In 2013, nine adverse water sampling conditions or 0.02 per cent of the 37,332 tests performed on water quality samples were reported related to elevated sodium levels. In addition to the nine sampling conditions, seven adverse conditions to drinking water system performance objectives were reported. In all cases, minor adjustments were made to the system or treatment processes to correct issues. None of these incidents posed a significant health threat or resulted in a service interruption to residents.

Figure 5

Number of Tests Performed and Adverse Events Reported on Submitted Water Samples Taken in 2013

total number of tests performed 37,332

15,958
organic
42.7%



9,017
micro
24.2%

12,357
inorganic
33.1%

9
adverse
0.02%

total adverse sample results = 0.02 per cent

An adverse event does not necessarily indicate that drinking water is unsafe; it indicates that an incident occurred and corrective action taken. Corrective action may include re-sampling, adjusting the system or treatment processes and/or notification requirements.

Table 4A: Summary of Reported Adverse Sample Results in 2013

Location	Water Quality Parameter	Event Date (2013)	Limit	Result	Corrective Action
Aurora North Tower	Sodium*	February 27	20.0 mg/L	20.5 mg/L	Reported to MOE as adverse, resample taken, result 25.9 mg/L
Aurora North Reservoir	Sodium*	February 27	20.0 mg/L	20.4 mg/L	Reported to MOE as adverse, resample taken, result 26.0 mg/L
Aurora East Booster Pumping Station	Sodium*	February 27	20.0 mg/L	20.1 mg/L	Reported to MOE as adverse, resample taken, result 21.7 mg/L
South Maple Reservoir	Sodium*	April 15	20.0 mg/L	22.0 mg/L	Reported to MOE as adverse, resample taken, result 24.2 mg/L
North Maple Reservoir	Sodium*	April 15	20.0 mg/L	21.7 mg/L	Reported to MOE as adverse, resample taken, result 21.6 mg/L
East Woodbridge Elevated Tank	Sodium*	April 15	20.0 mg/L	21.6 mg/L	Reported to MOE as adverse, resample taken, result 23.4 mg/L
South Richmond Hill Reservoir	Sodium*	April 18	20.0 mg/L	23.3 mg/L	Reported to MOE as adverse, resample taken, result 15.8 mg/L
King City Tower	Sodium*	April 22	20.0 mg/L	20.7 mg/L	Reported to MOE as adverse, resample taken, result 21.4 mg/L
London Road Tower	Sodium*	April 29	20.0 mg/L	20.4 mg/L	Reported to MOE as adverse, resample taken, result 19.8 mg/L

***Note: The MOE's Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines notes the aesthetic objective for sodium in drinking water is 200 mg/L. The local Medical Officer of Health should be notified when the sodium concentration exceeds 20 mg/L so that this information maybe communicated to local physicians for their use with patients on sodium restricted diets. Although the results listed above are well below the 200 mg/L threshold, they are required to be reported as they meet the five-year reporting requirement.**

Table 4B: Summary of Reported Adverse System Performance Events in 2013

Location	Operational Objective	Event Date (2013)	Minimum	Maximum	Result	Corrective Action
Newmarket Bathurst Tower	Chlorine Residual – Free	February 22	0.05 mg/L	4.0 mg/L	4.00 mg/L	Free chlorine residual re-sampled
Newmarket Bathurst Tower	Chlorine Residual – Free	February 24	0.05 mg/L	4.0 mg/L	4.00 mg/L	Adjustment made to chlorine feed rate
Newmarket Well 15	Chlorine Residual - Combined	May 21	0.25 mg/L	3.0 mg/L	3.04 mg/L	Operator on site attending facility. Elevated chlorine residual was measured while operator made adjustments to system. Residual returned to normal operating levels while operator still on site
South Maple Reservoir	Chlorine Residual – Combined	July 31	0.25 mg/L	3.0 mg/L	0.09 mg/L	Feeder line flushed
Holland Landing Well 1	Chlorine Residual – Combined	November 28	0.25 mg/L	3.0 mg/L	3.08 mg/L	Operator on site attending facility. Elevated chlorine residual was measured while operator made adjustments to system. Residual returned to normal operating levels while operator still on site
Newmarket Well 15	Chlorine Residual - Combined	December 18	0.25 mg/L	3.0 mg/L	0.013 mg/L	Operator on site attending facility to perform routine maintenance on chlorine residual analyzer. Low residual reading was measured on the analyzer which returned back to normal operating levels once maintenance completed
Georgina Water Treatment Plant	Fluoride	December 29	N/A	1.5 mg/L	1.53 mg/L	Flushed line for 10 minutes until fluoride concentration was below 1.5 mg/l. Installed a pressure relief valve as a preventative measure

Note: All adverse system performance events were reported to the MOE.

Table 5: Summary of Best Management Practice Events Reported in 2013

Location	Operational Objective	Event Date (2013)	Minimum	Maximum	Result	Corrective Action
South Maple Reservoir	Chlorine Residual – Combined	January 18	0.25 mg/L	3.0 mg/L	2.3 mg/L	York Region was notified by Peel Region of a potential high chlorine residual event. MOE notified as a precaution. Feedermain was monitored, residual level did not exceed regulatory limit
Schomberg Water Treatment Plant	UV Dosage	January 25	40 mj/cm^2	N/A	33 mJ/ cm^2	Event reported to MOE as a precaution. UV dosage was within regulatory limit
Nobleton Well 2	Total Coliforms	August 9	Absence	Absence	Contact chamber bypass	Took precautionary samples which found no coliforms present. Lines were back flushed, chlorine residuals were raised until resolved
Kleinburg Tower	System Pressure	September 13	20 psi	N/A	0 psi	Isolated watermain for hydrant connection repair. Following repair, system was flushed and residual and BacT samples were taken and analyzed
Ansnorveldt Well 1 and 2	System Pressure	October 30	20 psi	N/A	0 psi	System restored by operating high lift pumps in manual
Ansnorveldt Well 1 and 2	System Pressure	December 12	20 psi	N/A	0 psi	System restored by operating high lift pumps in manual

Summary of MOE Inspections in 2013

The MOE has implemented a rigorous and comprehensive province-wide approach for inspecting drinking water systems focusing on source, treatment and distribution components, as well as water system management practices.

The MOE conducted 15 inspections at York Region water facilities in 2013. The focus of inspections was to confirm compliance with provincial regulations and the terms and conditions of approvals, licenses and permits for the facilities.

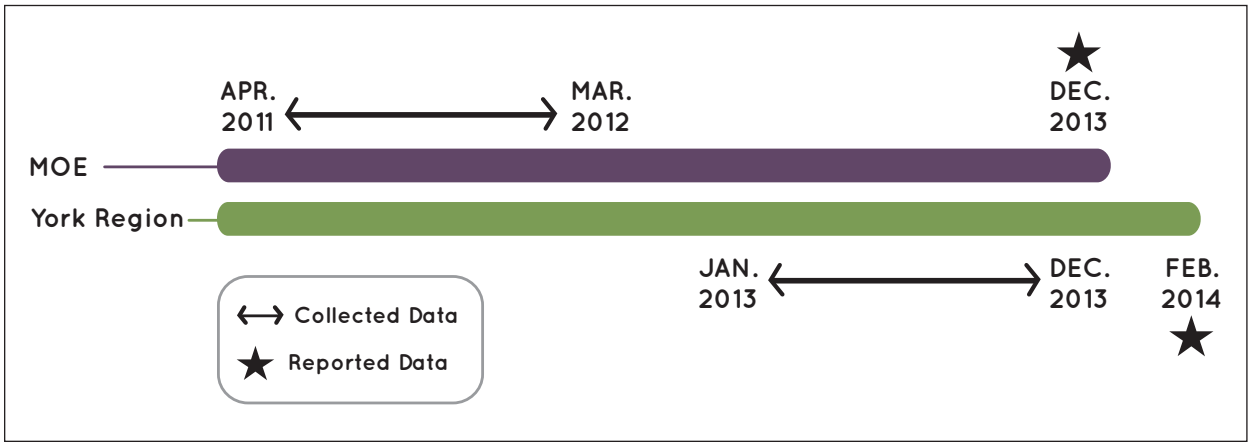
During these inspections, two minor non-compliance issues were identified. Both related to procedural reporting issues associated with elevated sodium levels where a notice of issue resolution report was filed before sample retest results were received. Corrective action was taken to resolve this issue, details can be found in Table 6.

In addition, five "Best Management Practice" recommendations were provided to optimize facility operations (such as increased inspections and modified sampling procedures). All recommendations were implemented by York Region in 2013.

Table 6: The Ministry of Environment Inspection Findings and Corrective Actions

Location	Corrective Action
Drinking Water System	Aurora Drinking Water System and King City Drinking Water System
Regulation	*Ontario Regulation 170/03, Schedule 16, Section 16-9(1)*
Operational Event	O.Reg. 170/03 requires the submission of a Notice of Issue Resolution within seven days of an issue being resolved. In two instances the Notices of Issue Resolution, related to sodium results, were submitted at the same time as the Written Notice of the Issue. At that time, the corrective actions had not yet been taken. Since the Notice of Resolution was sent before the sample retest results were received, this resulted in a Notice of Issue Resolution not being properly submitted within seven days of the issue being resolved.
Corrective Action	York Region filed a Non-Conformance Report under its Integrated Management System to address the early submission of a Notice of Issue Resolution form before receiving re-sampling results from the lab. A review of the Region's Procedure found it accurately reflects notification requirements, but this procedure was not followed in this instance. A written reminder was issued to all Operators summarizing requirements for these instances and reiterating the importance of summarizing action(s) taken and results achieved after resolution of the issue in the Notice of Issue Resolution form. All Operators were required to review the Region's Adverse Water Quality Procedure and sign-off that it was completed by September 30, 2013.

Figure 6: Comparison of the Ministry of Environment and York Region Reporting Periods



York Region achieved a compliance score of 100% for the Ontario Chief Drinking Water Inspector's 2011-2012 report.

2011-2012 Chief Drinking Water Inspector's Results

On December 5, 2013, the MOE published the 2011-2012 Ontario Chief Drinking Inspector's Annual Report. This report is published approximately one year after the reporting period and covers a fiscal year starting April 1 to March 31 as shown in Figure 6. Through this report, information about the quality of Ontario's drinking water and results of MOE drinking water system inspections (covering the period from April 1, 2011 to March 31, 2012) were made available to the public. Annual inspections of municipal residential drinking water systems help the MOE determine how well these systems are operating in relation to the Province's strict regulatory requirements. A risk-based inspection rating process allows inspection results to be quantified on a scale of 0 to 100 per cent.

The City of Toronto and Peel Region, providers of drinking water to York Region, also received high drinking water quality scores in the Chief Drinking Water Inspector's report. City of Toronto with 99.89 per cent and Peel Region with 99.7 per cent.

For the most recent 2011-2012 reporting period, York Region achieved a compliance score of 100 per cent when visited by MOE Drinking Water Inspectors. York Region also achieved a score of 100 per cent on samples meeting Provincial water quality standards. These results have placed York Region in first place among the Greater Toronto Area municipalities as shown in Table 7. York Region's local municipalities have also performed well with a combined average of 99.87 per cent of drinking water quality tests meeting Provincial water quality standards.

York Region's commitment to continuous improvement has contributed to the Region achieving the Ontario Chief Drinking Water Inspector's top ranking among Greater Toronto Area municipalities in the 2011-2012 annual report. Detailed drinking water system results can be found in the attached Drinking Water System Summary Report.

Table 7: Ministry of the Environment Inspection Ratings for Five Greater Toronto Area Municipalities

Municipality	2010-11 Inspection Rating (%)*	2011-12 Inspection Rating (%)*	2010-11 Drinking Water Quality (% Tests Meeting Standards)*	2011-12 Drinking Water Quality (% Tests Meeting Standards)*
York	99.82	100.00	99.98	100
York Local Municipalities *(combined average – Distribution Systems)*	96.62	98.58	99.90	99.87
Durham	99.70	99.83	99.95	99.90
Halton	100.00	98.78	99.98	99.95
Peel	96.15	99.59	99.98	99.97
Toronto	99.15	99.42	99.88	99.89

***Note: Average scores of all systems within regional jurisdiction. The City of Toronto and Peel Region provide water from Lake Ontario to York Region and also achieved excellent results in the Ontario Chief Drinking Water Inspector's Report. This achievement demonstrates the support of Regional Council along with the care and due diligence exercised by York Region and its partners in delivering clean, safe drinking water.**


DRINKING WATER MET
WATER QUALITY
STANDARDS FOR
99.9%
OF TEST RESULTS

section 3

drinking water performance summaries

York Region is the wholesale supplier of water to the local municipalities and is responsible for the supply, production, treatment and storage of water. The local municipalities own and operate the distribution system delivering the water from the Regional watermains to homes, businesses, and schools in the local community.

Individual Water System Summaries

The following section will summarize the water quality and capacity results for each of the Region's Drinking Water Systems as required by the legislation. As previously discussed, the Region uses a number of sources to deliver water and as a result, holds a number of Drinking Water System Permits and Licences. Several communities in the Region are also supported by more than one water supply source. Table 8 illustrates the water supply source for York Region communities, including those that are on blended or single-supply sources.

Table 8: Summary of Water Supply Services Provided to Communities in York Region

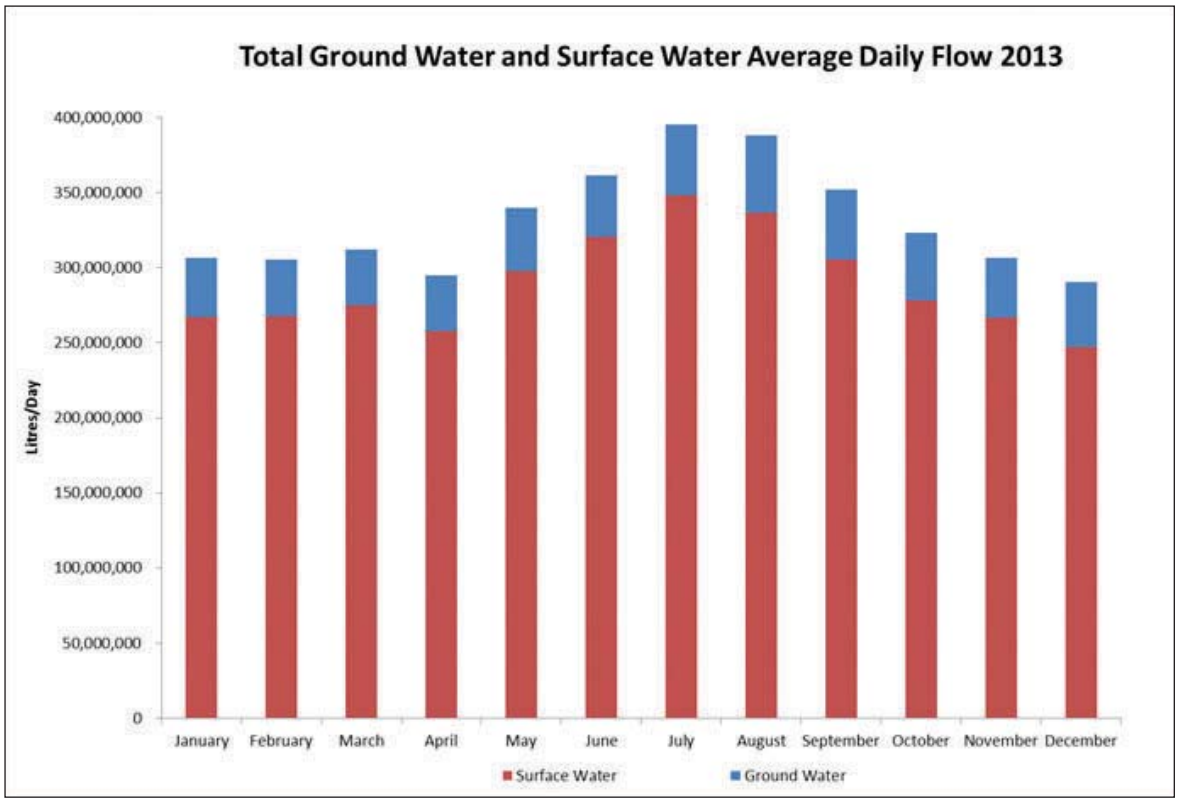
Drinking Water System	Community Served	Local Municipality
GROUNDWATER SOURCE		
Ansnorveldt Drinking Water System	Ansnorveldt	King
Ballantrae/Musselman's Lake Drinking Water System	Ballantrae Musselman's Lake	Whitchurch-Stouffville
Kleinburg Drinking Water System (Surface water from Lake Ontario - changeover from groundwater occurred in November 2013)	Kleinburg	Vaughan
Mount Albert Drinking Water System	Mount Albert	East Gwillimbury
Nobleton Drinking Water System	Nobleton	King
Schomberg Drinking Water System	Schomberg	King
GROUNDWATER AND LAKE WATER (BLENDED SOURCE)		
York Drinking Water System	Aurora	Aurora
	Holland Landing	East Gwillimbury
	Newmarket	Newmarket
	Queensville	East Gwillimbury
	Sharon	East Gwillimbury
	Stouffville	Whitchurch-Stouffville

continued on next page

Drinking Water System	Community Served	Local Municipality
LAKE ONTARIO (SURFACE WATER SOURCE)		
York Drinking Water System	Markham	Markham
	Richmond Hill	Richmond Hill
	King City	King
	Vaughan	Vaughan
LAKE SIMCOE (SURFACE WATER SOURCE)		
Georgina Drinking Water System	Keswick	Georgina
	Sutton	Georgina
	Lakeside Communities	Georgina

Summary of Water Supply Flows for 2013

York Region operates a dynamic and integrated water system to effectively meet the needs of residents. Based on operational strategies, individual sources are used at varying rates throughout the year to optimize use of water resources. As a result, charts for individual wells often do not follow seasonal trends. The chart below shows the monthly flows for the full system, this indicates the overall trends in water usage throughout the Region.



Ansnorveldt

drinking water system

[groundwater]

Ansnorveldt is a rural community located on Dufferin Street, north of Highway #9 in the Township of King. The community is largely based on the agricultural industry and is centrally located in the Holland Marsh.

The communal water supply system was originally owned and operated by local residents, known as the Ansnorveldt Water Supply Company. York Region owns and operates the Ansnorveldt water system in accordance with an Order under the Ontario Water Resources Act, issued by the Province of Ontario.

To improve the overall water supply on the Ansnorveldt Drinking Water System, Well No. 1 was decommissioned and replaced with Well No. 3 in 2013.

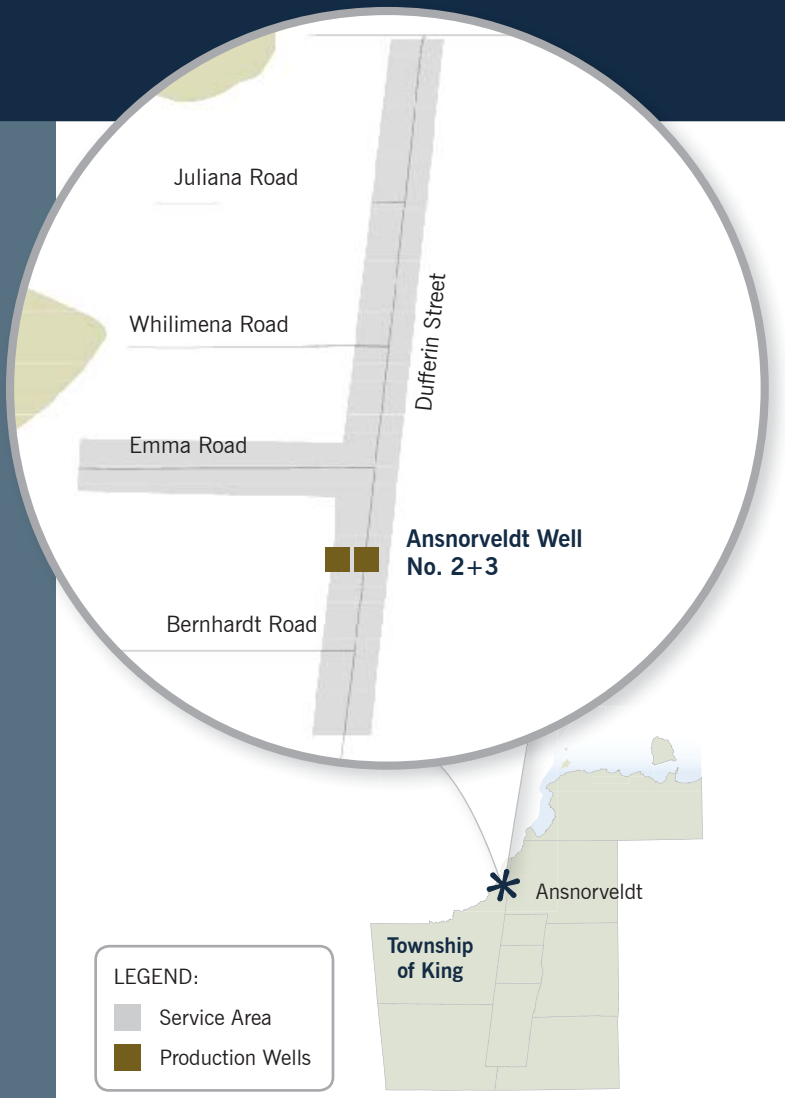
Raw Water Source Description

Water is supplied by two wells and services fewer than 100 homes, a school, church and a library. Water withdrawal from each of the wells is regulated by a Permit to Take Water issued by the MOE.

Wells are screened in the deep aquifer. With some exceptions, raw water quality meets and exceeds all health-related Ontario Drinking Water Standards. Sodium, iron and hardness concentrations exceed the aesthetic objectives, although values are consistent with other York Region wells.

Water Treatment

Water treatment for the Ansnorveldt wells is comprised of the addition of sodium hypochlorite (liquid chlorine) for disinfection. Water from the wells is combined, treated and pumped into a concrete reservoir. High lift pumps deliver the water to the distribution system. Treatment processes throughout the facility are monitored by online analyzers which are equipped with alarms and lockouts to alert operational staff of conditions requiring attention.



Summary of Approvals and Permits

Municipal Drinking Water	
Licence Number:	013-108
Issue Number:	Issue 2
Issue Date:	January 29, 2010
Revision Date:	September 25, 2013
Expiry Date:	January 28, 2015
Drinking Water Works	
Permit Number:	013-208
Issue Number:	Issue 21
Issue Date:	January 29, 2010
Revision Date:	September 25, 2013
Permit to Take Water Number:	8037-94XPXR
Issue Date:	March 15, 2013
Expiry Date:	March 31, 2021
Operational Plan Number:	013-408
Financial Plan Number:	013-301A
MOE Waterworks Number:	260002213
System Classification:	Water Distribution II (WD II)

Ansnorveldt Drinking Water System (Wells 1, 2+3) Performance Summary:

[A] Absence
[hpc] Heterotrophic Plate Count

RAW	102 samples	[A] e-coli results	[A] total coliforms	n/a hpc samples	n/a hpc results
TREATED	52 samples	[A] e-coli results	[A] total coliforms	53 hpc samples	0 to 130 hpc results

Average Treated Water Concentration (mg/L)

40	119	0.21
sodium	hardness	fluoride

- Turbidity (Treated)
  8,760 samples
  ranged 0.010 to 5.00 ntu
  [min. to max.]
- Turbidity (Raw)
  31 samples
  ranged 0.02 to 0.86 ntu
  [min. to max.]
- Chlorine (Free)
  8,760 samples
  ranged 0.11 to 3.52 mg/L
  [min. to max.]

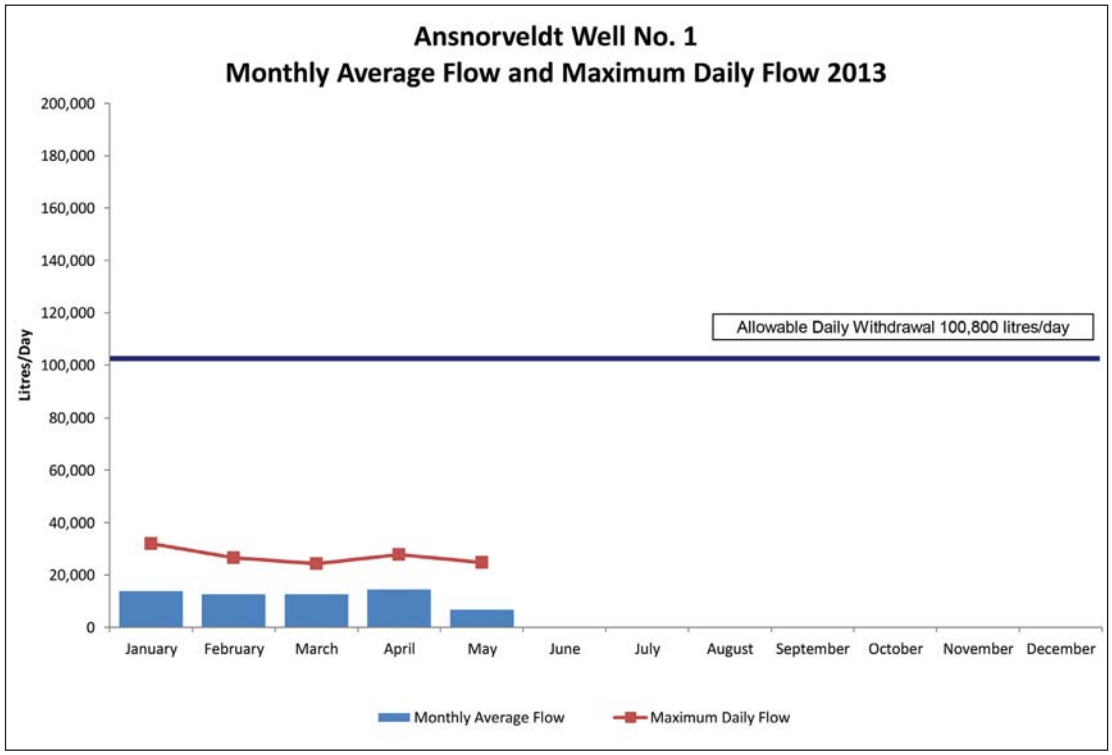
Permitted and Actual Maximum Daily Withdrawal from the Ansnorveldt Production Wells for January 1 to December 31, 2013

Location	*Permitted Daily Withdrawal (litres)*	*Actual Maximum Daily Withdrawal (litres)*	*Number of Days Operating at Peak Capacity (May to October)*	*Number of Days Operating at Peak Capacity (Annual)*
Well 1*	100,800	32,060 January 31, 2013	0	0
Well 2	184,320	134,400 December 21, 2013	0	0
Well 3*	115,200	38,010 September 4, 2013	0	0

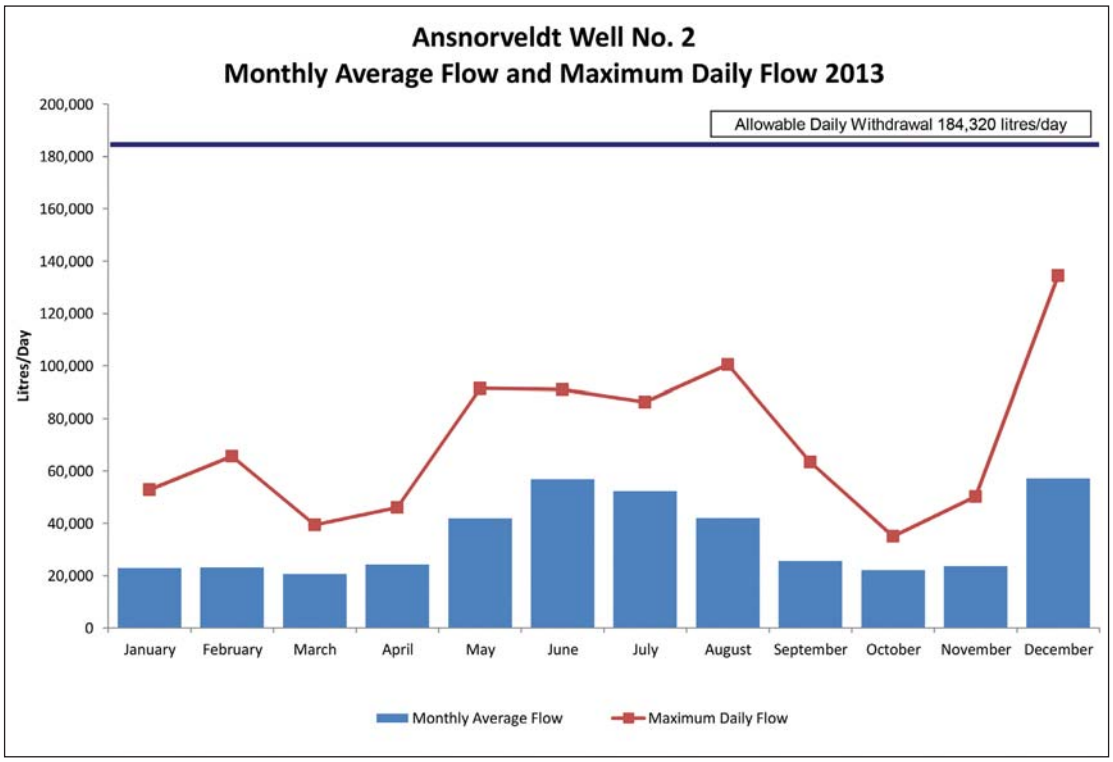
*Well 1 was decommissioned on May 2013 and replaced Well 3 on July 2013.

Permitted and Actual Maximum Annual Withdrawal from the Ansnorveldt Production Wells for January 1 – December 31, 2013

109,324,800 litres	15,891,770 litres	14.5 per cent
Annual Permitted Withdrawal	Actual Annual Withdrawal	Percentage of Permitted Annual Withdrawal

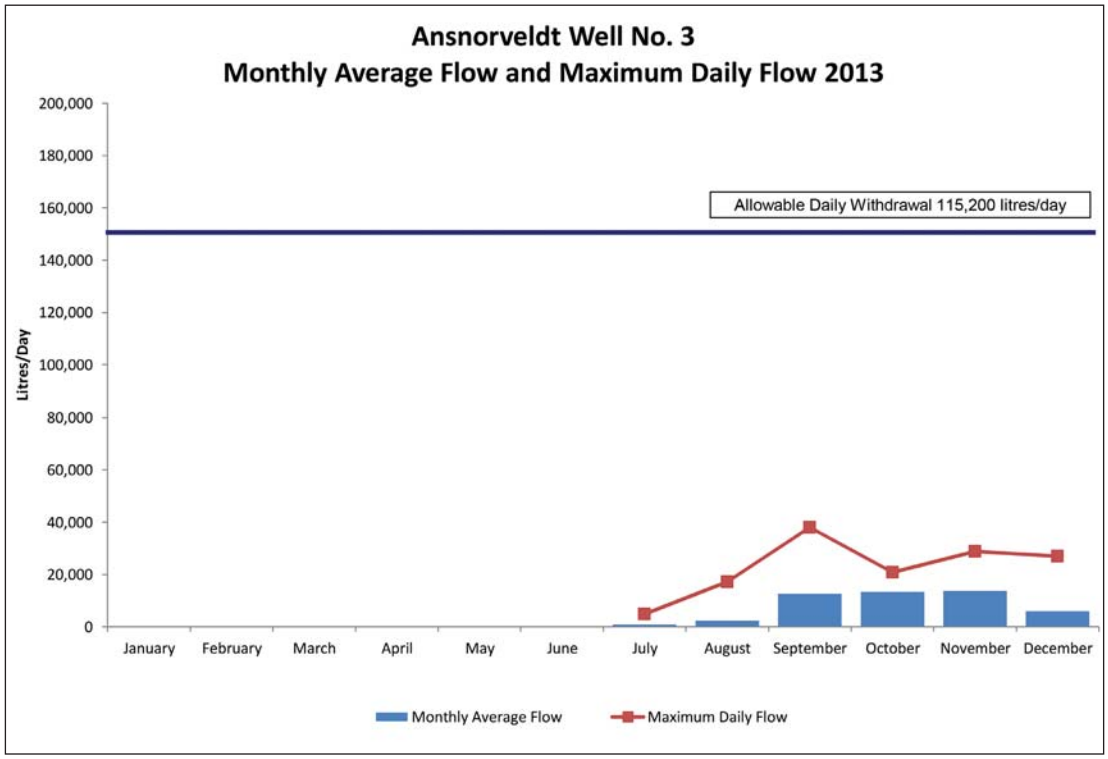


Ansnorveldt Well No. 1 shows no flow from June to December for the 2013 reporting year. Well No. 1 was decommissioned May 2013 and replaced with Well No. 3 July 2013.



Ansnorveldt Well No.2 had an increase in the monthly average flow and maximum daily flow for December. This increase in flow was mainly due to operational issues with the chlorination system when running both wells simultaneously. Well No. 2 ran predominantly until the issue was resolved.

Ansnorveldt Well No. 3 shows no flow from January to June for the 2013 reporting year. Well No. 1 was decommissioned May 2013 and replaced with Well No. 3 July 2013.



Inorganics Test Results

Reading	Units	ODWS		1/23/2013	4/24/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0002	0.0002
Arsenic as As	mg/L	0.025	IMAC	0.0007	0.0003
Barium as Ba	mg/L	1	MAC		0.128
Boron as B	mg/L	5	IMAC		0.13
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.255	0.224
Lead as Pb	mg/L	0.01	MAC	0.0052	0.0003
Mercury as Hg	mg/L	0.001	MAC		0.00012
Nitrate + Nitrite as N	mg/L	10	MAC	0.013	0.014
Nitrate as N	mg/L	10	MAC	0.013	0.014
Nitrite	mg/L	1	MAC	< 0.006	< 0.006
Selenium as Se	mg/L	0.01	MAC	0.0012	0.0002
Sodium as Na	mg/L	200	AO	40.3	40.7
Uranium as U	mg/L	0.02	MAC		< 0.0001

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/24/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		7/10/2013	10/9/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0005	0.0004
Arsenic as As	mg/L	0.025	IMAC	0.0008	0.0019
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	0.0008	0.0003
Fluoride as F	mg/L	1.5	MAC	0.208	0.17
Lead as Pb	mg/L	0.01	MAC	0.0052	0.0025
Nitrate + Nitrite as N	mg/L	10	MAC	0.139	0.162
Nitrate as N	mg/L	10	MAC	0.139	0.162
Nitrite	mg/L	1	MAC	< 0.006	< 0.008
Selenium as Se	mg/L	0.01	MAC	0.0014	0.0052
Sodium as Na	mg/L	200	AO	36.3	41.9

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		7/10/2013	8/7/2013	10/9/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003		< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001		< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001		< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001		< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC	< 0.0005		
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC	< 0.0005		
2,4,6-Trichlorophenol	mg/L	0.005	MAC	< 0.0005		
2,4-Dichlorophenol	mg/L	0.9	MAC	< 0.0007		
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC	< 0.0008		
Alachlor	mg/L	0.005	IMAC	< 0.0004		
Aldicarb	mg/L	0.009	MAC		< 0.0045	
Aldrin + Dieldrin	mg/L	0.0007	MAC	< 0.000006		
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC	< 0.0002		
Azinphos-methyl	mg/L	0.02	MAC	< 0.0003		
Bendiocarb	mg/L	0.04	MAC		< 0.003	
Benzene	mg/L	0.005	MAC	< 0.0001		< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC	< 0.00001		
Bromoxynil	mg/L	0.005	IMAC	< 0.0004		
Carbaryl	mg/L	0.09	MAC		< 0.003	
Carbofuran	mg/L	0.09	MAC		< 0.003	
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002		< 0.0002
Chlordane (Total)	mg/L	0.007	MAC	< 0.000006		
Chlorpyrifos	mg/L	0.09	MAC	< 0.0002		
Cyanazine	mg/L	0.01	IMAC	0.00101		
Diazinon	mg/L	0.02	MAC	< 0.0002		
Dicamba	mg/L	0.12	MAC	< 0.0004		
Dichloromethane	mg/L	0.05	MAC	0.0023		< 0.0005
Diclofop-methyl	mg/L	0.009	MAC	< 0.0004		
Dimethoate	mg/L	0.02	IMAC	< 0.0003		
Dinoseb	mg/L	0.01	MAC	< 0.0005		
Diquat	mg/L	0.07	MAC	< 0.001		
Diuron	mg/L	0.15	MAC		< 0.003	
Glyphosate	mg/L	0.28	IMAC	< 0.025		
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC	< 0.000008		
Lindane	mg/L	0.004	MAC	< 0.000005		
Malathion	mg/L	0.19	MAC	< 0.0002		
Methoxychlor	mg/L	0.9	MAC	< 0.000009		
Metolachlor	mg/L	0.05	IMAC	< 0.0002		
Metribuzin	mg/L	0.08	MAC	< 0.0003		
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001		< 0.0001

Organics Test Results

Reading	Units	ODWS		7/10/2013	8/7/2013	10/9/2013
Paraquat	mg/L	0.01	IMAC	< 0.001		
Parathion	mg/L	0.05	MAC	< 0.0002		
Pentachlorophenol	mg/L	0.06	MAC	< 0.0004		
Phorate	mg/L	0.002	IMAC	< 0.0002		
Picloram	mg/L	0.19	IMAC	< 0.0007		
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC	< 0.00002		
Prometryne	mg/L	0.001	IMAC	< 0.0002		
Simazine	mg/L	0.01	IMAC	< 0.0002		
Temephos	mg/L	0.28	IMAC	< 0.003		
Terbufos	mg/L	0.001	IMAC	< 0.0002		
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003		< 0.0003
Triallate	mg/L	0.23	MAC		< 0.004	
Trichloroethylene	mg/L	0.005	MAC	< 0.0001		< 0.0001
Trifluralin	mg/L	0.045	IMAC	< 0.000006		
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002		< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Ballantrae/Musselman's Lake
drinking water system

[groundwater]

York Region operates three wells and one elevated tank servicing the community of Ballantrae/Musselman's Lake in the Town of Whitchurch-Stouffville. Water withdrawal from each of the wells is regulated by a Permit to Take Water issued by the MOE.

Raw Water Source Description

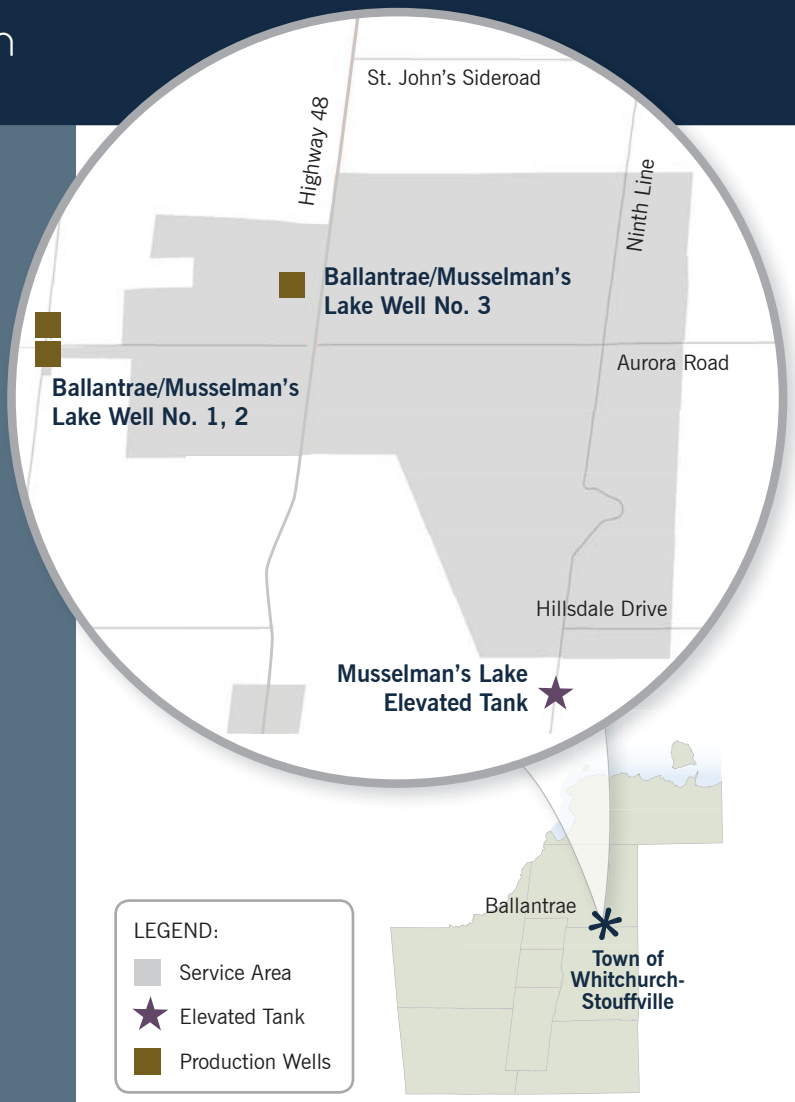
Wells are screened in a deep aquifer formation. Groundwater from the wells show some differences in characteristics as those of the shallow, intermediate or deep aquifers in the Yonge Street Aquifer area, suggesting that these wells are within a different groundwater region.

Water Treatment

Water is treated for the Ballantrae/Musselman's Lake wells by adding sodium hypochlorite (liquid chlorine) and chlorine gas for disinfection and sodium silicate to sequester the iron to reduce the potential for iron to stain plumbing fixtures and laundry in the serviced area.

Treatment processes throughout the facility are monitored by online analyzers which are equipped with alarms and lockouts to alert operational staff of conditions requiring attention.

Water pumped from the wells combines and receives treatment before it enters the distribution system. There is currently one storage tank servicing the community of Ballantrae/Musselman's Lake.



Summary of Approvals and Permits

Municipal Drinking Water Licence Number:	013-106
Issue Number:	Issue 3
Issue Date:	January 29, 2010
Revision Date:	January 29, 2010
Expiry Date:	January 28, 2015
Drinking Water Works Permit Number:	013-206
Issue Number:	Issue 2
Issue Date:	January 29, 2010
Revision Date:	March 1, 2013
Permit to Take Water Number:	2030-8KDJCG
Issue Date:	August 3, 2012
Expiry Date:	March 31, 2016
Operational Plan Number:	013-406
Financial Plan Number:	013-301A
MOE Waterworks Number:	220008658
System Classification:	Water Distribution and Supply II (WDSII)

Ballantrae Drinking Water System (Wells 1, 2 + 3) Performance Summary:

[A] Absence
[hpc] Heterotrophic Plate Count

RAW	125 samples	[A] e-coli results	4 [0 to 1] total coliforms	n/a hpc samples	n/a hpc results
TREATED	98 samples	[A] e-coli results	[A] total coliforms	99 hpc samples	0 to 86 hpc results

Average Treated Water Concentration (mg/L)

9	186	0.06
sodium	hardness	fluoride

- Turbidity (Treated) 8,760 samples ranged 0 to 5.01 ntu [min. to max.]
- Turbidity (Raw) 19 samples ranged 0.02 to 0.91 ntu [min. to max.]
- Chlorine (Free) 8,760 samples ranged 0.01 to 3.27 mg/L [min. to max.]

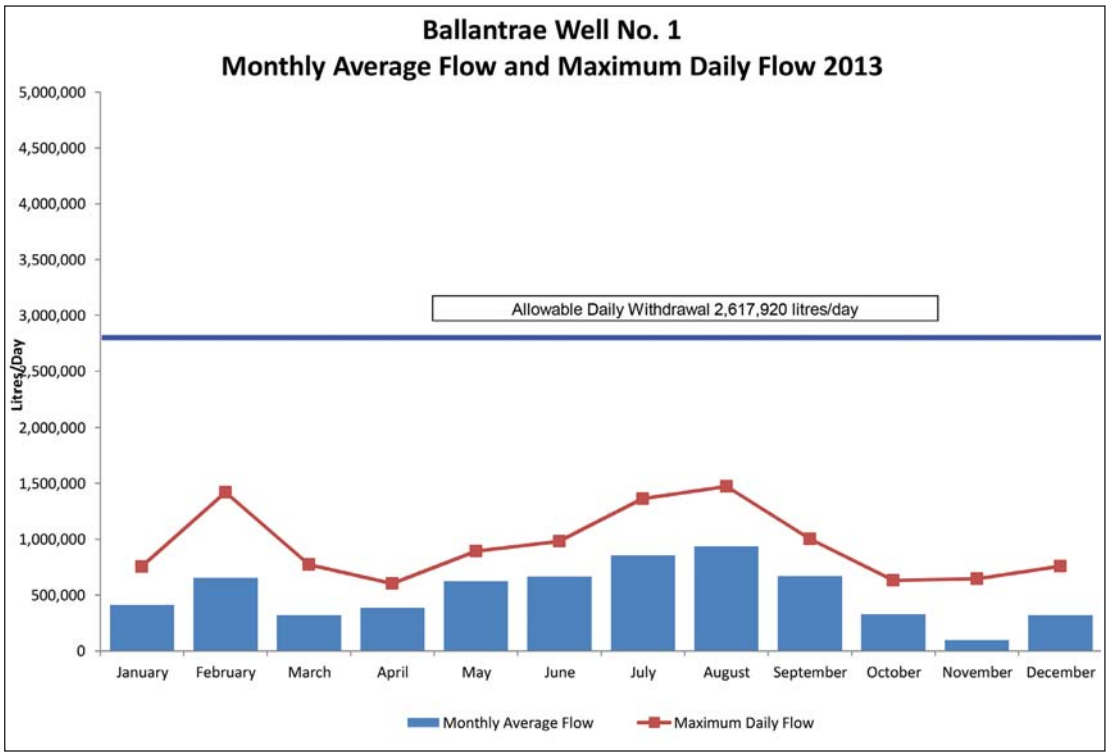
Permitted and Actual Maximum Daily Withdrawal from the Ballantrae Production Wells for January 1 to December 31, 2013

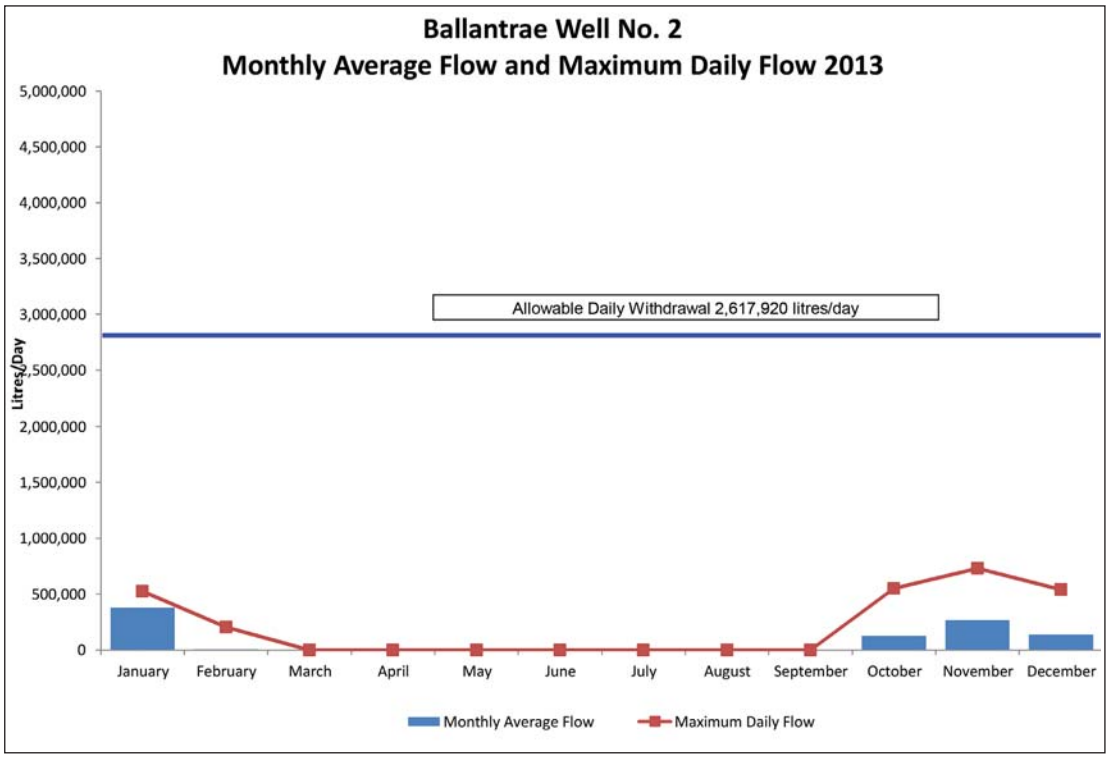
Location	*Permitted Daily Withdrawal (litres)*	*Actual Maximum Daily Withdrawal (litres)*	*Number of Days Operating at Peak Capacity (May to October)*	*Number of Days Operating at Peak Capacity (Annual)*
Well 1	2,617,920	1,474,750 August 15, 2013	0	0
Well 2	2,617,920	731,500 November 22, 2013	0	0
Well 3*	2,617,920	1,655,300 July 19, 2013	0	0
Well 1, 2 + 3	4,580,000	2,791,320 August 19, 2013	0	0

*Well 3 was commissioned February 2013.

Permitted and Actual Maximum Annual Withdrawal from the Ballantrae Production Wells for January 1 to December 31, 2013

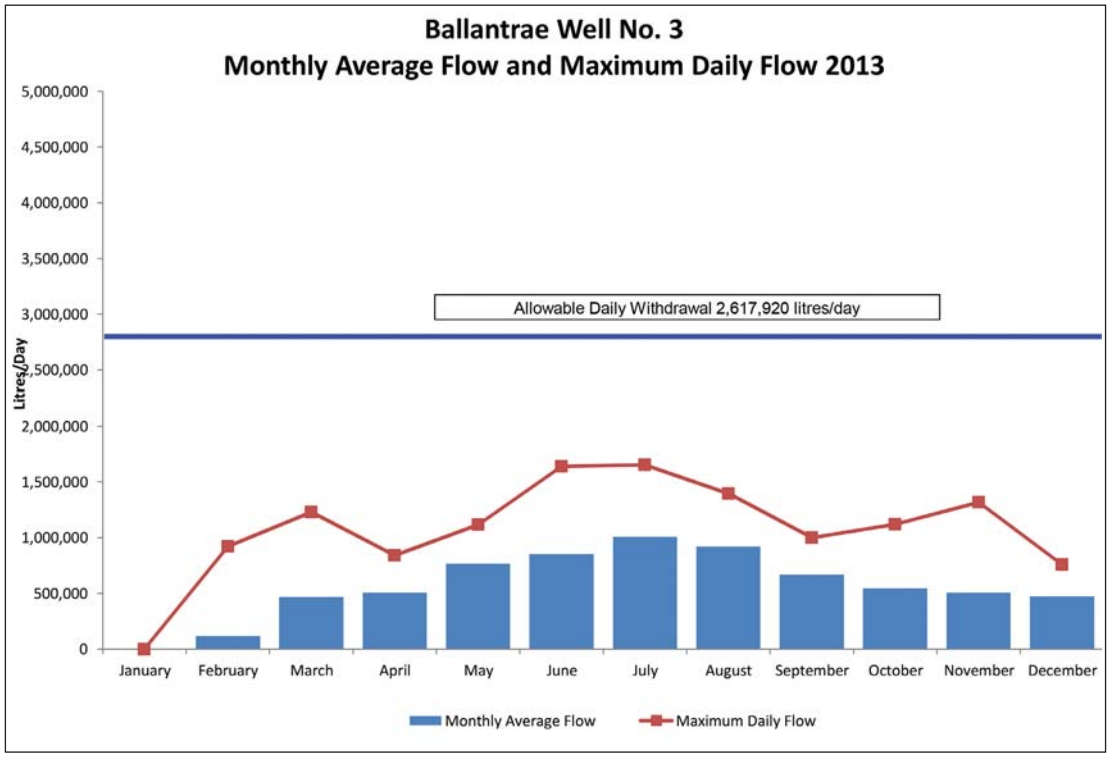
1,598,875,200 litres	427,283,088 litres	26.7 per cent
Annual Permitted Withdrawal	Actual Annual Withdrawal	Percentage of Permitted Annual Withdrawal





Ballantrae Well No. 2 had a reduced monthly average flow recorded between February and October. This reduction in flow was mainly due to scheduled maintenance conducted on the well to maintain the asset and improve the overall operation of the water system.

Ballantrae Well No. 3 had a reduced monthly average flow recorded for the month of January 2013. Ballantrae Well No. 3 was commissioned February 2013.



Inorganics Test Results

Reading	Units	ODWS		4/17/2013	7/17/2013	10/2/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0002	0.0004	0.0004
Arsenic as As	mg/L	0.025	IMAC	< 0.0001	< 0.0001	0.0001
Barium as Ba	mg/L	1	MAC	0.0551		
Boron as B	mg/L	5	IMAC	0.009		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	< 0.0001	< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.08	0.106	0.097
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	0.0001
Mercury as Hg	mg/L	0.001	MAC	< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	0.133	< 0.003
Nitrate as N	mg/L	10	MAC	0.013	0.133	< 0.001
Nitrite	mg/L	1	MAC	< 0.02	< 0.003	< 0.003
Selenium as Se	mg/L	0.01	MAC	< 0.0001	0.0002	< 0.0001
Sodium as Na	mg/L	200	AO	11.3	7.2	7.1
Uranium as U	mg/L	0.02	MAC	0.0001		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	4/24/2013	7/17/2013	10/2/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC		< 0.0005			
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC		< 0.0005			
2,4,6-Trichlorophenol	mg/L	0.005	MAC		< 0.0005			
2,4-Dichlorophenol	mg/L	0.9	MAC		< 0.0007			
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC		< 0.0008			
Alachlor	mg/L	0.005	IMAC		< 0.0004			
Aldicarb	mg/L	0.009	MAC			< 0.0045		
Aldrin + Dieldrin	mg/L	0.0007	MAC		< 0.000006			
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC		< 0.0002			
Azinphos-methyl	mg/L	0.02	MAC		< 0.0003			
Bendiocarb	mg/L	0.04	MAC			< 0.003		
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC		< 0.00001			
Bromoxynil	mg/L	0.005	IMAC		< 0.0004			
Carbaryl	mg/L	0.09	MAC			< 0.003		
Carbofuran	mg/L	0.09	MAC			< 0.003		
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC		< 0.000006			
Chlorpyrifos	mg/L	0.09	MAC		< 0.0002			
Cyanazine	mg/L	0.01	IMAC		< 0.0003			
Diazinon	mg/L	0.02	MAC		< 0.0002			
Dicamba	mg/L	0.12	MAC		< 0.0004			
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005		< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC		< 0.0004			
Dimethoate	mg/L	0.02	IMAC		< 0.0003			
Dinoseb	mg/L	0.01	MAC		< 0.0005			
Diquat	mg/L	0.07	MAC		< 0.001			
Diuron	mg/L	0.15	MAC			< 0.003		
Glyphosate	mg/L	0.28	IMAC		< 0.025			
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC		< 0.000008			
Lindane	mg/L	0.004	MAC		< 0.000005			
Malathion	mg/L	0.19	MAC		< 0.0002			
Methoxychlor	mg/L	0.9	MAC		< 0.000009			
Metolachlor	mg/L	0.05	IMAC		< 0.0002			
Metribuzin	mg/L	0.08	MAC		< 0.0003			
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	4/24/2013	7/17/2013	10/2/2013
Paraquat	mg/L	0.01	IMAC		< 0.001			
Parathion	mg/L	0.05	MAC		< 0.0002			
Pentachlorophenol	mg/L	0.06	MAC		< 0.0004			
Phorate	mg/L	0.002	IMAC		< 0.0002			
Picloram	mg/L	0.19	IMAC		< 0.0007			
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC		< 0.00002			
Prometryne	mg/L	0.001	IMAC		< 0.0002			
Simazine	mg/L	0.01	IMAC		< 0.0002			
Temephos	mg/L	0.28	IMAC		< 0.003			
Terbufos	mg/L	0.001	IMAC		< 0.0002			
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC			< 0.004		
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC		< 0.000006			
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		4/17/2013	7/17/2013	10/2/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0002	0.0004	0.0004
Arsenic as As	mg/L	0.025	IMAC	< 0.0001	< 0.0001	0.0001
Barium as Ba	mg/L	1	MAC	0.0551		
Boron as B	mg/L	5	IMAC	0.009		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	< 0.0001	< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.08	0.106	0.097
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	0.0001
Mercury as Hg	mg/L	0.001	MAC	< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	0.133	< 0.003
Nitrate as N	mg/L	10	MAC	0.013	0.133	< 0.001
Nitrite	mg/L	1	MAC	< 0.02	< 0.003	< 0.003
Selenium as Se	mg/L	0.01	MAC	< 0.0001	0.0002	< 0.0001
Sodium as Na	mg/L	200	AO	11.3	7.2	7.1
Uranium as U	mg/L	0.02	MAC	0.0001		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		4/17/2013	4/24/2013	7/17/2013	10/2/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003		< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001		< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001		< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001		< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC	< 0.0005			
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC	< 0.0005			
2,4,6-Trichlorophenol	mg/L	0.005	MAC	< 0.0005			
2,4-Dichlorophenol	mg/L	0.9	MAC	< 0.0007			
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC	< 0.0008			
Alachlor	mg/L	0.005	IMAC	< 0.0004			
Aldicarb	mg/L	0.009	MAC		< 0.0045		
Aldrin + Dieldrin	mg/L	0.0007	MAC	< 0.000006			
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC	< 0.0002			
Azinphos-methyl	mg/L	0.02	MAC	< 0.0003			
Bendiocarb	mg/L	0.04	MAC		< 0.003		
Benzene	mg/L	0.005	MAC	< 0.0001		< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC	< 0.00001			
Bromoxynil	mg/L	0.005	IMAC	< 0.0004			
Carbaryl	mg/L	0.09	MAC		< 0.003		
Carbofuran	mg/L	0.09	MAC		< 0.003		
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002		< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC	< 0.000006			
Chlorpyrifos	mg/L	0.09	MAC	< 0.0002			
Cyanazine	mg/L	0.01	IMAC	< 0.0003			
Diazinon	mg/L	0.02	MAC	< 0.0002			
Dicamba	mg/L	0.12	MAC	< 0.0004			
Dichloromethane	mg/L	0.05	MAC	< 0.0005		< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC	< 0.0004			
Dimethoate	mg/L	0.02	IMAC	< 0.0003			
Dinoseb	mg/L	0.01	MAC	< 0.0005			
Diquat	mg/L	0.07	MAC	< 0.001			
Diuron	mg/L	0.15	MAC		< 0.003		
Glyphosate	mg/L	0.28	IMAC	< 0.025			
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC	< 0.000008			
Lindane	mg/L	0.004	MAC	< 0.000005			
Malathion	mg/L	0.19	MAC	< 0.0002			
Methoxychlor	mg/L	0.9	MAC	< 0.000009			
Metolachlor	mg/L	0.05	IMAC	< 0.0002			
Metribuzin	mg/L	0.08	MAC	< 0.0003			
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001		< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		4/17/2013	4/24/2013	7/17/2013	10/2/2013
Paraquat	mg/L	0.01	IMAC	< 0.001			
Parathion	mg/L	0.05	MAC	< 0.0002			
Pentachlorophenol	mg/L	0.06	MAC	< 0.0004			
Phorate	mg/L	0.002	IMAC	< 0.0002			
Picloram	mg/L	0.19	IMAC	< 0.0007			
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC	< 0.00002			
Prometryne	mg/L	0.001	IMAC	< 0.0002			
Simazine	mg/L	0.01	IMAC	< 0.0002			
Temephos	mg/L	0.28	IMAC	< 0.003			
Terbufos	mg/L	0.001	IMAC	< 0.0002			
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003		< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC		< 0.004		
Trichloroethylene	mg/L	0.005	MAC	< 0.0001		< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC	< 0.000006			
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002		< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Kleinburg
drinking water system

[groundwater]

York Region operates three wells servicing the community of Kleinburg in the City of Vaughan. One of these wells (Well No. 2) is used as a standby well during emergencies or periods of high demand. Water withdrawal from each of the wells is regulated by a Permit to Take Water issued by the MOE. For the majority of 2013, Kleinburg drinking water system was supported by groundwater. On November 28, 2013 the system was converted to a primarily lake water based system with the intent of using groundwater as a backup source in the event of failed lake supply. In 2014, there are plans to upgrade the groundwater system to a chloramination system which will allow the groundwater wells to blend with the current lake based source and provide a backup supply. Well No. 2 was decommissioned in 2013.

Raw Water Source Description

The wells are screened at depth in the intermediate and deep aquifers. Groundwater quality meets the Ontario Drinking Water Standard criteria, with the exception of iron and sodium. Sodium levels are slightly above 20 mg/L and elevated iron is common in deep aquifers in York Region. As of November 2013 the majority of the water supplied to Kleinburg is from the York Drinking Water System which is sourced from Lake Ontario. Raw water is treated by Peel Region and enters through York Region's transmission system.

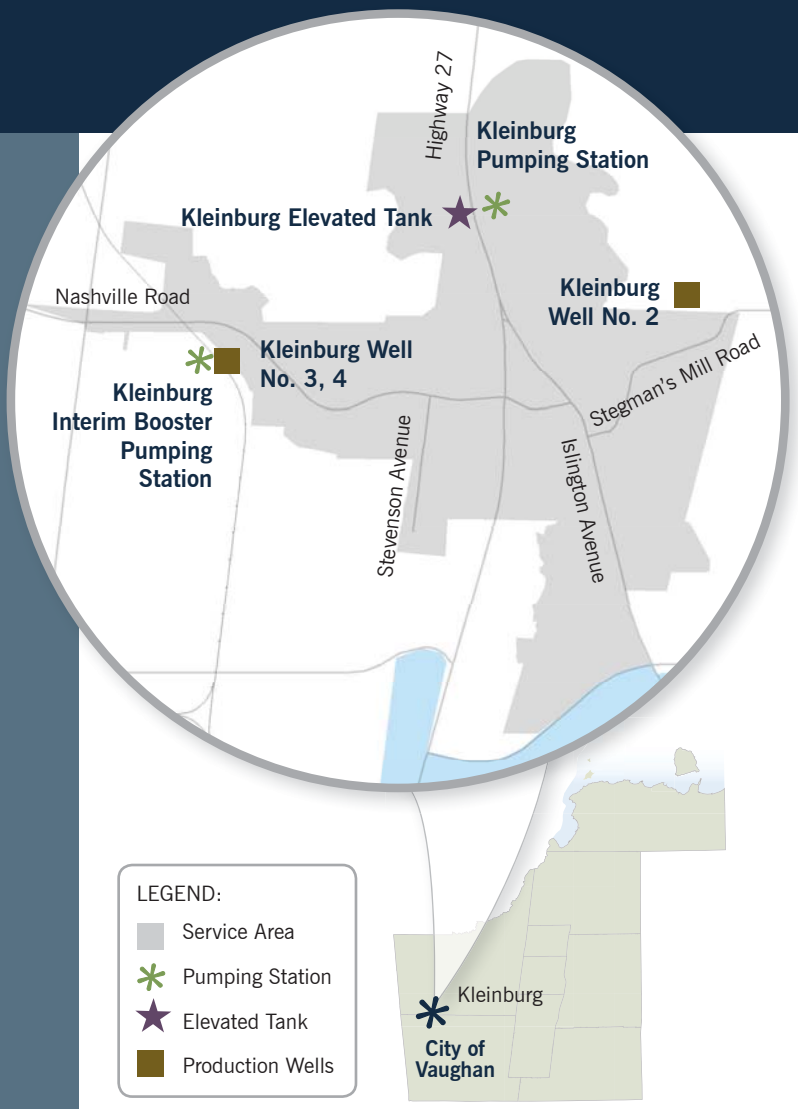
Water Treatment

Lake-Based Supply: There is no further treatment performed by York Region as the water travels to the local municipal distribution systems as this water is treated by Peel Region.

Groundwater: Water treatment for the Kleinburg wells includes the addition of sodium hypochlorite (liquid chlorine) and chlorine gas for disinfection.

Sodium silicate is added to the treatment process to sequester iron and reduce the potential for iron to stain plumbing fixtures and laundry in the serviced area. Treatment processes throughout the facility are monitored by online analyzers which are equipped with alarms and lockouts to alert operational staff of conditions requiring attention.

Following treatment, water enters the distribution system and is stored in the one elevated tank currently servicing the community of Kleinburg.



Summary of Approvals and Permits

Municipal Drinking Water	
Licence Number:	013-109
Issue Number:	Issue 2
Issue Date:	January 29, 2010
Revision Date:	September 24, 2012
Expiry Date:	January 28, 2015
Drinking Water Works	
Permit Number:	013-209
Issue Number:	Issue 2
Issue Date:	January 29, 2010
Revision Date:	March 21, 2012
Permit to Take Water Number:	4523-8TGSMJ
Issue Date:	April 24, 2012
Expiry Date:	April 23, 2022
Operational Plan Number:	013-409
Financial Plan Number:	013-301A
MOE Waterworks Number:	220002360
System Classification:	Water Distribution and Supply II (WDS II)

Kleinburg Drinking Water System (Wells 2, 3 + 4) Performance Summary:

[A] Absence
[hpc] Heterotrophic Plate Count

RAW	154 samples	[A] e-coli results	[A] total coliforms	n/a hpc samples	n/a hpc results
TREATED	95 samples	[A] e-coli results	[A] total coliforms	97 hpc samples	0 to 3 hpc results

Average Treated Water Concentration (mg/L)

22	275	0.10
sodium	hardness	fluoride

- Turbidity (Treated)
  8,760 samples
  ranged 0.03 to 5.00 ntu
  [min. to max.]
- Turbidity (Raw)
  46 samples
  ranged 0.03 to 13.4 ntu
  [min. to max.]
- Chlorine (Free)
  8,760 samples
  ranged 0.68 to 2.79 mg/L
  [min. to max.]

Summary of additional testing and sampling carried out in accordance with the requirements of the Permit to Take Water.

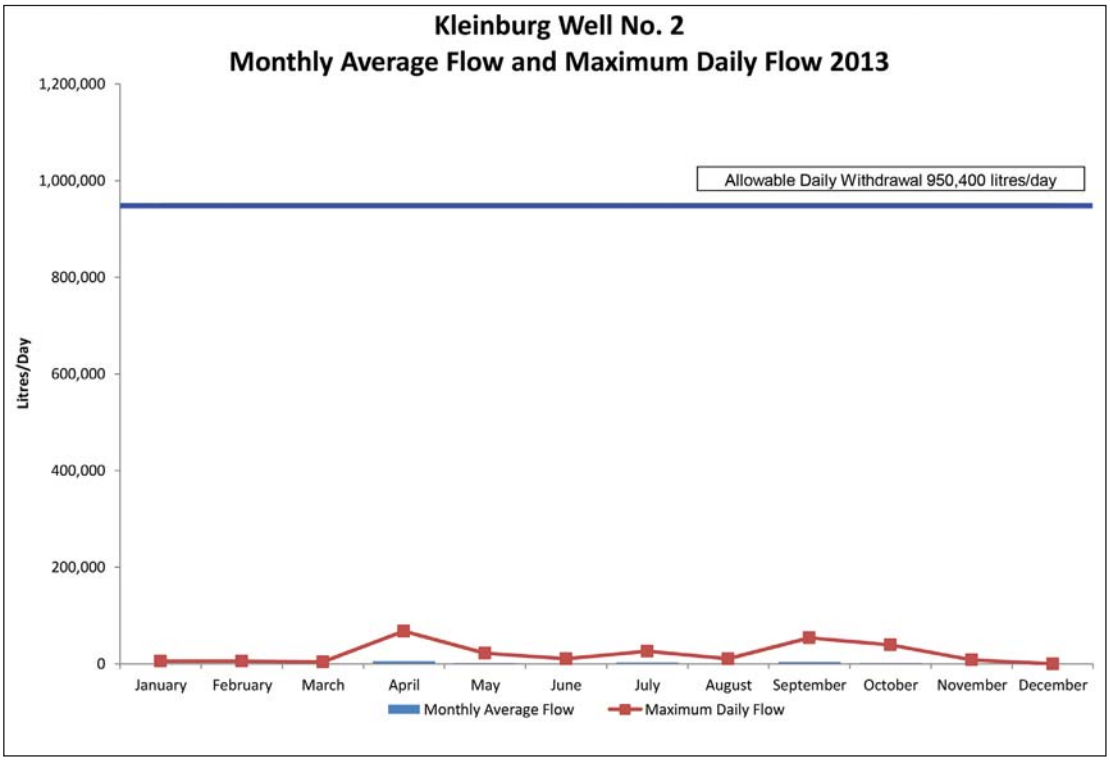
Facility	*Parameter*	*Ontario Drinking Water Standard Limit (mg/L)*	*Quarterly Results (mg/L)*
Kleinburg Wells 3 + 4 PTTW 2411-789N8E Dated January 22, 2008	Chloride	250	Q1-28.1, Q2-28.3, Q3-27.0, Q4-29.3

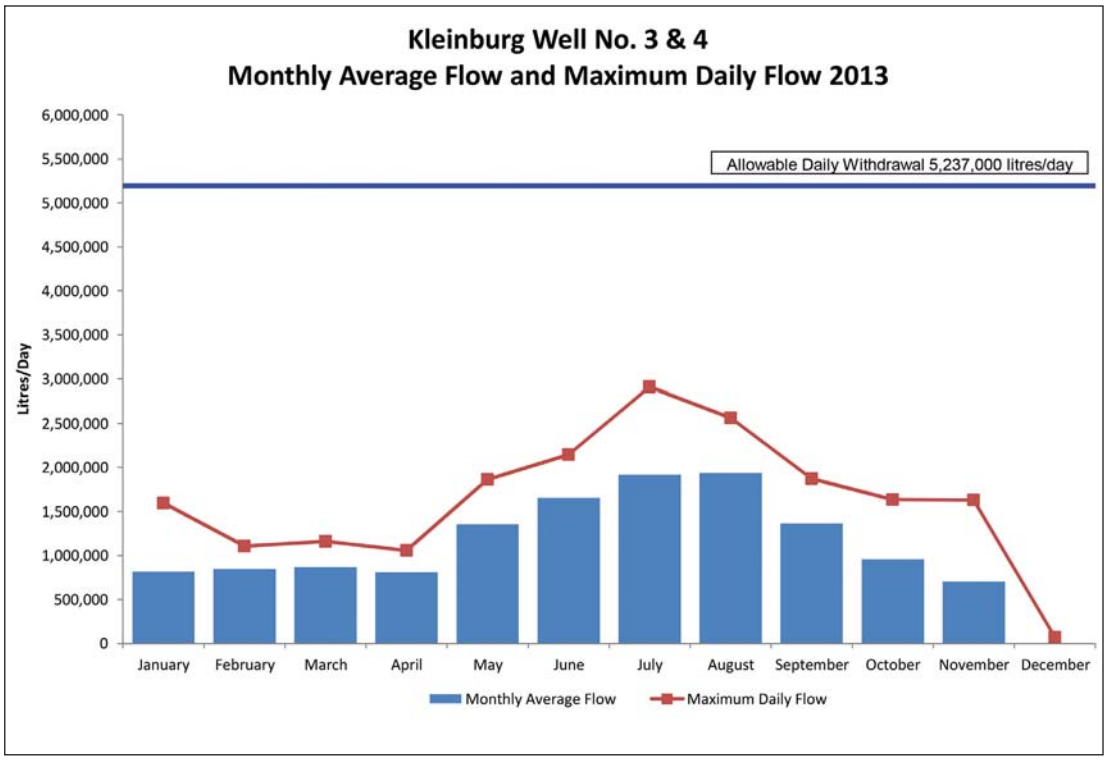
Permitted and Actual Maximum Daily Withdrawal from the Kleinburg Production Wells for January 1 to December 31, 2013

Location	*Permitted Daily Withdrawal (litres)*	*Actual Maximum Daily Withdrawal (litres)*	*Number of Days Operating at Peak Capacity (May to October)*	*Number of Days Operating at Peak Capacity (Annual)*
Well 2	950,400	67,687 April 17, 2013	0	0
Well 3 + 4	5,237,000	2,911,380 July 19, 2013	0	0

Permitted and Actual Maximum Annual Withdrawal from the Kleinburg Production Wells for January 1 to December 31, 2013

2,258,401,000 litres	403,676,891 litres	17.9 per cent
Annual Permitted Withdrawal	Actual Annual Withdrawal	Percentage of Permitted Annual Withdrawal

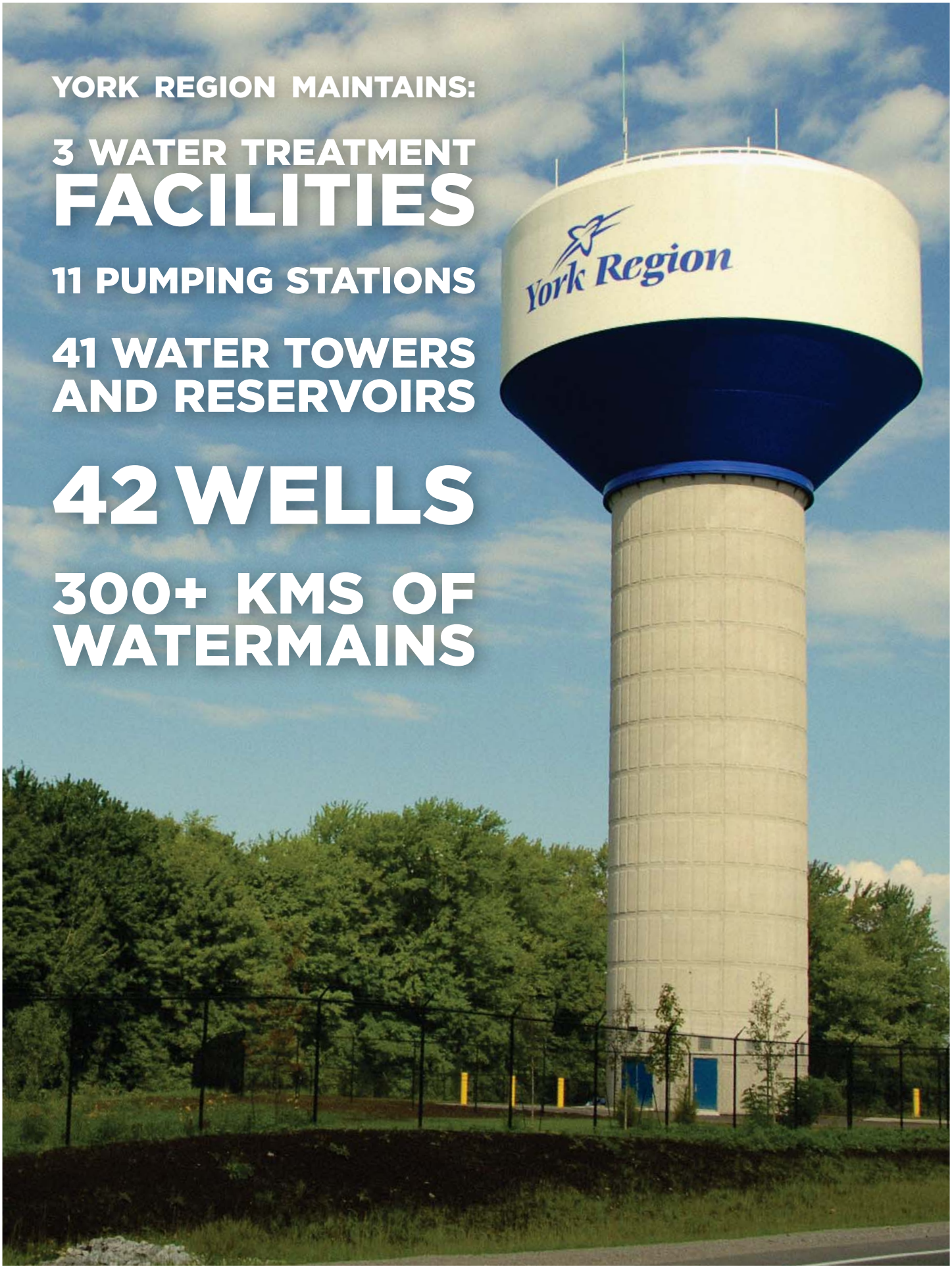




Kleinburg Well No. 2 shows a reduced monthly average flow recorded for the 2013 reporting year. This reduction in flow was due to the well primarily operated for short durations to collect regulatory samples. The well did not operate for the majority of 2013.

On November 28, 2013 the connections to surface water was made connecting the Kleinburg Drinking Water System to the Peel Drinking Water System.

Kleinburg Well No. 3 and 4 shows a reduced monthly average flow recorded for December 2013. This reduction in flow was due to the connecting of the Kleinburg Drinking Water System to the Peel Drinking Water System on November 28, 2013.


YORK REGION MAINTAINS:
3 WATER TREATMENT FACILITIES
11 PUMPING STATIONS
41 WATER TOWERS AND RESERVOIRS
42 WELLS
300+ KMS OF WATERMAINS
York Region

Inorganics Test Results

Reading	Units	ODWS		1/16/2013	4/17/2013	7/10/2013	10/23/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0005	0.0002	0.0004	0.0001
Arsenic as As	mg/L	0.025	IMAC	0.0011	0.0001	0.0005	0.0001
Barium as Ba	mg/L	1	MAC		0.183		
Boron as B	mg/L	5	IMAC		0.014		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	< 0.0001	0.001	< 0.0002
Fluoride as F	mg/L	1.5	MAC	0.12	0.06	0.05	0.05
Lead as Pb	mg/L	0.01	MAC	0.0001	0.0002	0.0002	0.0014
Mercury as Hg	mg/L	0.001	MAC		< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	< 0.02	< 0.02	< 0.008
Nitrate as N	mg/L	10	MAC	< 0.005	< 0.005	< 0.005	< 0.002
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.02	< 0.008
Selenium as Se	mg/L	0.01	MAC	0.0018	< 0.0001	0.0009	< 0.0005
Sodium as Na	mg/L	200	AO	24.9	18.8	20.7	20.1
Uranium as U	mg/L	0.02	MAC		0.0001		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/16/2013	4/17/2013	5/1/2013	7/10/2013	10/23/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC		< 0.0005			
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC		< 0.0005			
2,4,6-Trichlorophenol	mg/L	0.005	MAC		< 0.0005			
2,4-Dichlorophenol	mg/L	0.9	MAC		< 0.0007			
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC		< 0.0008			
Alachlor	mg/L	0.005	IMAC		< 0.0004			
Aldicarb	mg/L	0.009	MAC			< 0.0045		
Aldrin + Dieldrin	mg/L	0.0007	MAC		< 0.000006			
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC		< 0.0002			
Azinphos-methyl	mg/L	0.02	MAC		< 0.0003			
Bendiocarb	mg/L	0.04	MAC			< 0.003		
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC		< 0.00001			
Bromoxynil	mg/L	0.005	IMAC		< 0.0004			
Carbaryl	mg/L	0.09	MAC			< 0.003		
Carbofuran	mg/L	0.09	MAC			< 0.003		
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC		< 0.000006			
Chlorpyrifos	mg/L	0.09	MAC		< 0.0002			
Cyanazine	mg/L	0.01	IMAC		< 0.0003			
Diazinon	mg/L	0.02	MAC		< 0.0002			
Dicamba	mg/L	0.12	MAC		< 0.0004			
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005		< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC		< 0.0004			
Dimethoate	mg/L	0.02	IMAC		< 0.0003			
Dinoseb	mg/L	0.01	MAC		< 0.0005			
Diquat	mg/L	0.07	MAC			< 0.001		
Diuron	mg/L	0.15	MAC			< 0.003		
Glyphosate	mg/L	0.28	IMAC			< 0.025		
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC		< 0.000008			
Lindane	mg/L	0.004	MAC		< 0.000005			
Malathion	mg/L	0.19	MAC		< 0.0002			
Methoxychlor	mg/L	0.9	MAC		< 0.000009			
Metolachlor	mg/L	0.05	IMAC		< 0.0002			
Metribuzin	mg/L	0.08	MAC		< 0.0003			
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/16/2013	4/17/2013	5/1/2013	7/10/2013	10/23/2013
Paraquat	mg/L	0.01	IMAC			< 0.001		
Parathion	mg/L	0.05	MAC		< 0.0002			
Pentachlorophenol	mg/L	0.06	MAC		< 0.0004			
Phorate	mg/L	0.002	IMAC		< 0.0002			
Picloram	mg/L	0.19	IMAC		< 0.0007			
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC		< 0.00002			
Prometryne	mg/L	0.001	IMAC		< 0.0002			
Simazine	mg/L	0.01	IMAC		< 0.0002			
Temephos	mg/L	0.28	IMAC		< 0.003			
Terbufos	mg/L	0.001	IMAC		< 0.0002			
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC			< 0.004		
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC		< 0.000006			
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/16/2013	4/17/2013	7/10/2013	10/23/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0005	0.0002	0.0004	0.0002
Arsenic as As	mg/L	0.025	IMAC	0.001	0.0005	0.0016	0.0005
Barium as Ba	mg/L	1	MAC		0.375		
Boron as B	mg/L	5	IMAC		0.098		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	< 0.0001	0.0014	< 0.0002
Fluoride as F	mg/L	1.5	MAC	0.12	0.11	0.15	0.1
Lead as Pb	mg/L	0.01	MAC	0.0002	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC		< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	< 0.02	0.66	< 0.008
Nitrate as N	mg/L	10	MAC	< 0.005	< 0.005	0.658	< 0.002
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.02	< 0.008
Selenium as Se	mg/L	0.01	MAC	0.0016	< 0.0001	0.0022	0.001
Sodium as Na	mg/L	200	AO	22.6	24	23.4	24.2
Uranium as U	mg/L	0.02	MAC		< 0.0001		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/16/2013	4/17/2013	5/1/2013	7/10/2013	10/23/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC		< 0.0005			
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC		< 0.0005			
2,4,6-Trichlorophenol	mg/L	0.005	MAC		< 0.0005			
2,4-Dichlorophenol	mg/L	0.9	MAC		< 0.0007			
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC		< 0.0008			
Alachlor	mg/L	0.005	IMAC		< 0.0004			
Aldicarb	mg/L	0.009	MAC			< 0.0045		
Aldrin + Dieldrin	mg/L	0.0007	MAC		< 0.000006			
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC		< 0.0002			
Azinphos-methyl	mg/L	0.02	MAC		< 0.0003			
Bendiocarb	mg/L	0.04	MAC			< 0.003		
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC		< 0.00001			
Bromoxynil	mg/L	0.005	IMAC		< 0.0004			
Carbaryl	mg/L	0.09	MAC			< 0.003		
Carbofuran	mg/L	0.09	MAC			< 0.003		
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC		< 0.000006			
Chlorpyrifos	mg/L	0.09	MAC		< 0.0002			
Cyanazine	mg/L	0.01	IMAC		< 0.0003			
Diazinon	mg/L	0.02	MAC		< 0.0002			
Dicamba	mg/L	0.12	MAC		< 0.0004			
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005		< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC		< 0.0004			
Dimethoate	mg/L	0.02	IMAC		< 0.0003			
Dinoseb	mg/L	0.01	MAC		< 0.0005			
Diquat	mg/L	0.07	MAC			< 0.001		
Diuron	mg/L	0.15	MAC			< 0.003		
Glyphosate	mg/L	0.28	IMAC			< 0.025		
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC		< 0.000008			
Lindane	mg/L	0.004	MAC		< 0.000005			
Malathion	mg/L	0.19	MAC		< 0.0002			
Methoxychlor	mg/L	0.9	MAC		< 0.000009			
Metolachlor	mg/L	0.05	IMAC		< 0.0002			
Metribuzin	mg/L	0.08	MAC		< 0.0003			
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/16/2013	4/17/2013	5/1/2013	7/10/2013	10/23/2013
Paraquat	mg/L	0.01	IMAC			< 0.001		
Parathion	mg/L	0.05	MAC		< 0.0002			
Pentachlorophenol	mg/L	0.06	MAC		< 0.0004			
Phorate	mg/L	0.002	IMAC		< 0.0002			
Picloram	mg/L	0.19	IMAC		< 0.0007			
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC		< 0.00002			
Prometryne	mg/L	0.001	IMAC		< 0.0002			
Simazine	mg/L	0.01	IMAC		< 0.0002			
Temephos	mg/L	0.28	IMAC		< 0.003			
Terbufos	mg/L	0.001	IMAC		< 0.0002			
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC			< 0.004		
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC		< 0.000006			
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Mount Albert

drinking water system

[groundwater]

York Region operates three production wells servicing the community of Mount Albert in the Town of East Gwillimbury. Water withdrawal from each of the wells is regulated by a Permit to Take Water, issued by the MOE.

Raw Water Source Description

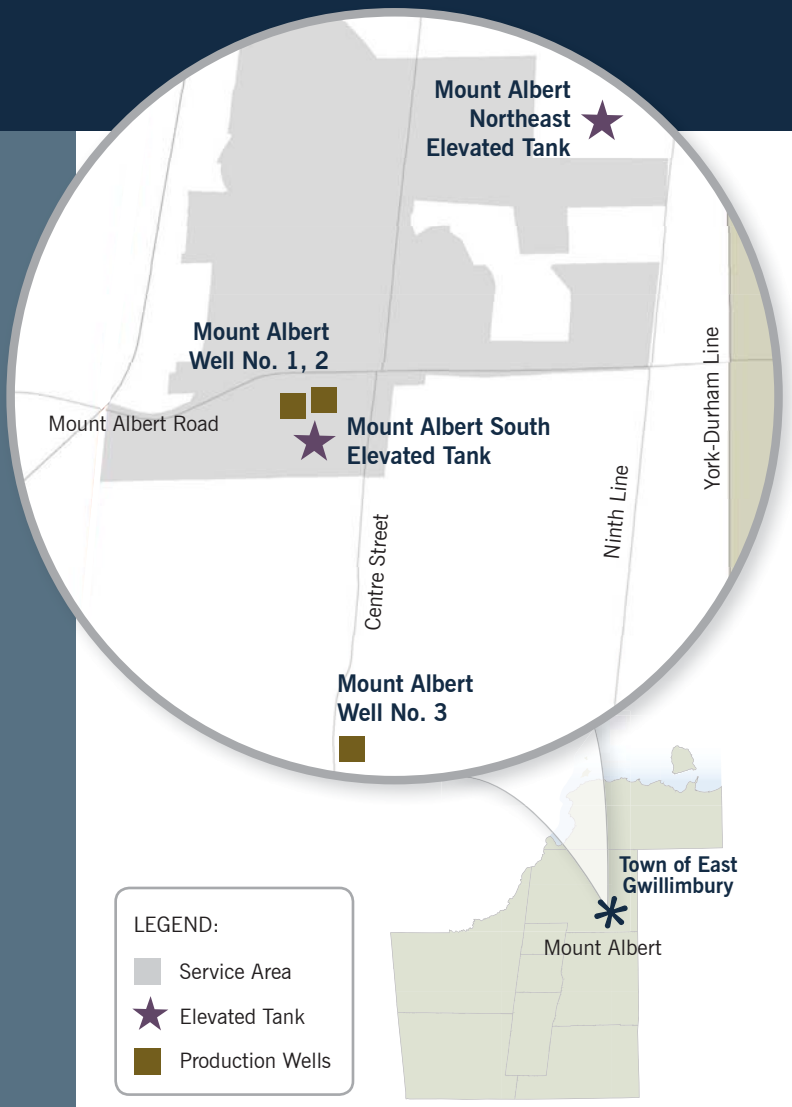
Wells are screened in the deep confined aquifer. Groundwater quality meets the Ontario Drinking Water Standard with the exception of slightly elevated iron and manganese concentrations.

Water Treatment

Water is treated for the Mount Albert wells prior to entry into the distribution system by adding sodium hypochlorite (liquid chlorine) and chlorine gas for disinfection. Sodium silicate is added following chlorination to sequester the iron to reduce potential for iron to stain plumbing fixtures and laundry in the serviced area.

Treatment processes throughout the facility are monitored by online analyzers which are equipped with alarms and lockouts to alert operational staff of conditions requiring attention.

There are currently two storage tanks servicing the community of Mount Albert.



Summary of Approvals and Permits

Municipal Drinking Water	
Licence Number:	013-103
Issue Number:	Issue 1
Issue Date:	January 29, 2010
Revision Date:	January 29, 2010
Expiry Date:	January 28, 2015
Drinking Water Works	
Permit Number:	013-203
Issue Number:	Issue 2
Issue Date:	January 29, 2010
Revision Date:	March 18, 2012
Permit to Take Water Number:	0050-7FCMMY
Issue Date:	June 9, 2008
Expiry Date:	March 31, 2018
Operational Plan Number:	013-403
Financial Plan Number:	013-301A
MOE Waterworks Number:	220006543
System Classification:	Water Distribution and Supply II (WDS II)

Mount Albert Drinking Water System (Wells 1, 2 + 3) Performance Summary:

[A] Absence
[hpc] Heterotrophic Plate Count

RAW	159 samples	[A] e-coli results	[A] total coliforms	n/a hpc samples	n/a hpc results
TREATED	105 samples	[A] e-coli results	[A] total coliforms	106 hpc samples	0 to 45 hpc results

Average Treated Water Concentration (mg/L)

12	323	0.05
sodium	hardness	fluoride

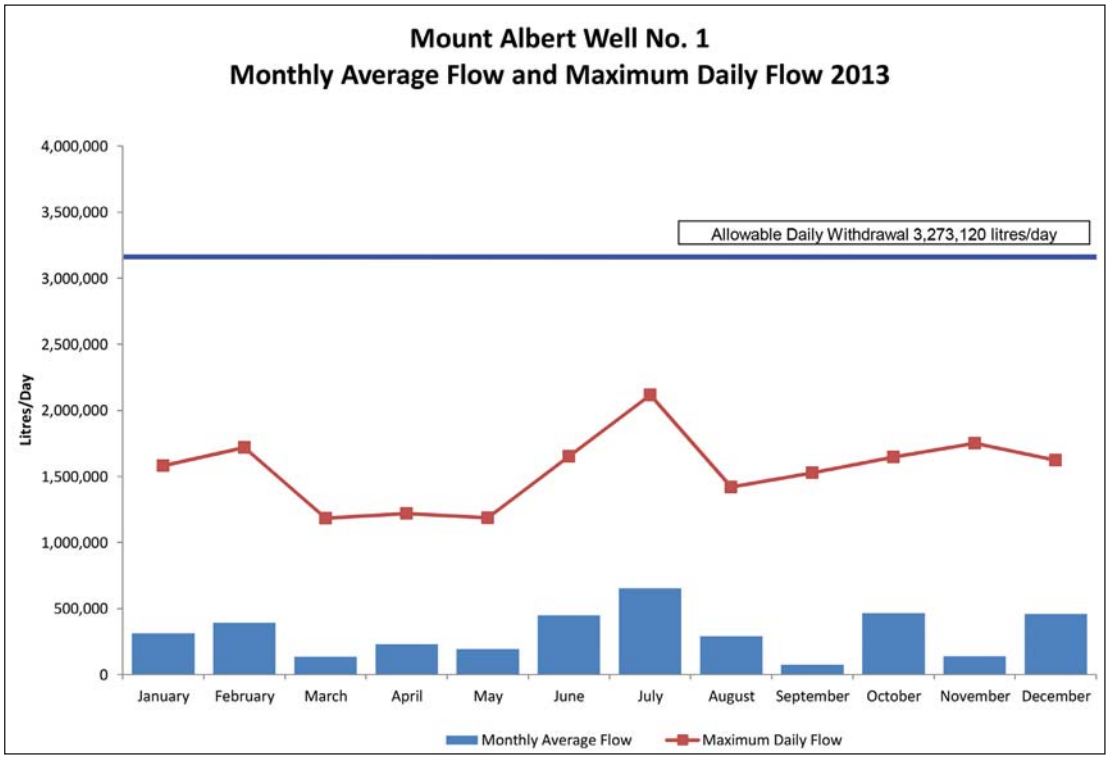
- Turbidity (Treated) 8,760 samples ranged 0 to 5.01 ntu [min. to max.]
- Turbidity (Raw) 36 samples ranged 0.06 to 0.6 ntu [min. to max.]
- Chlorine (Free) 8,760 samples ranged 0.33 to 3.19 mg/L [min. to max.]

Permitted and Actual Maximum Daily Withdrawal from the Mount Albert Production Wells for January 1 to December 31, 2013

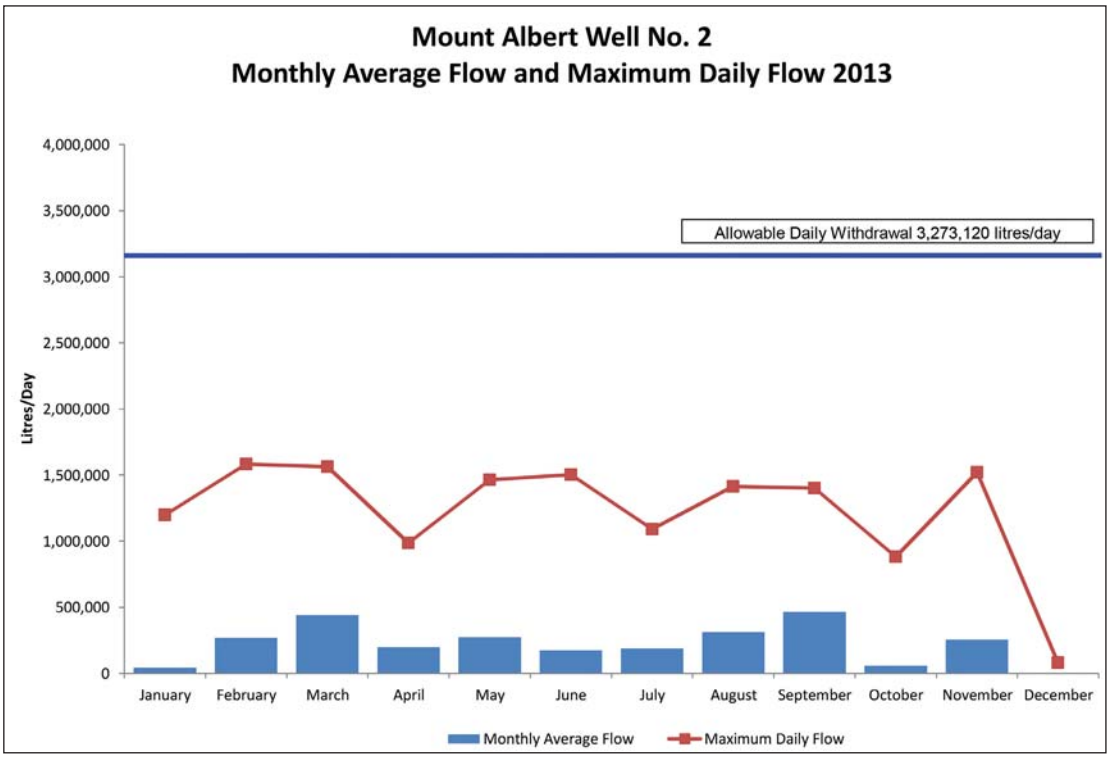
Location	*Permitted Daily Withdrawal (litres)*	*Actual Maximum Daily Withdrawal (litres)*	*Number of Days Operating at Peak Capacity (May to October)*	*Number of Days Operating at Peak Capacity (Annual)*
Well 1	3,273,120	2,116,880 July 17, 2013	0	0
Well 2	3,273,120	1,583,800 February 19, 2013	0	0
Well 3	3,273,120	2,157,520 August 21, 2013	0	0
Well 1, 2 + 3	4,990,000	2,157,520 August 21, 2013	0	0

Permitted and Actual Maximum Annual Withdrawal from the Mount Albert Production Wells for January 1 to December 31, 2013

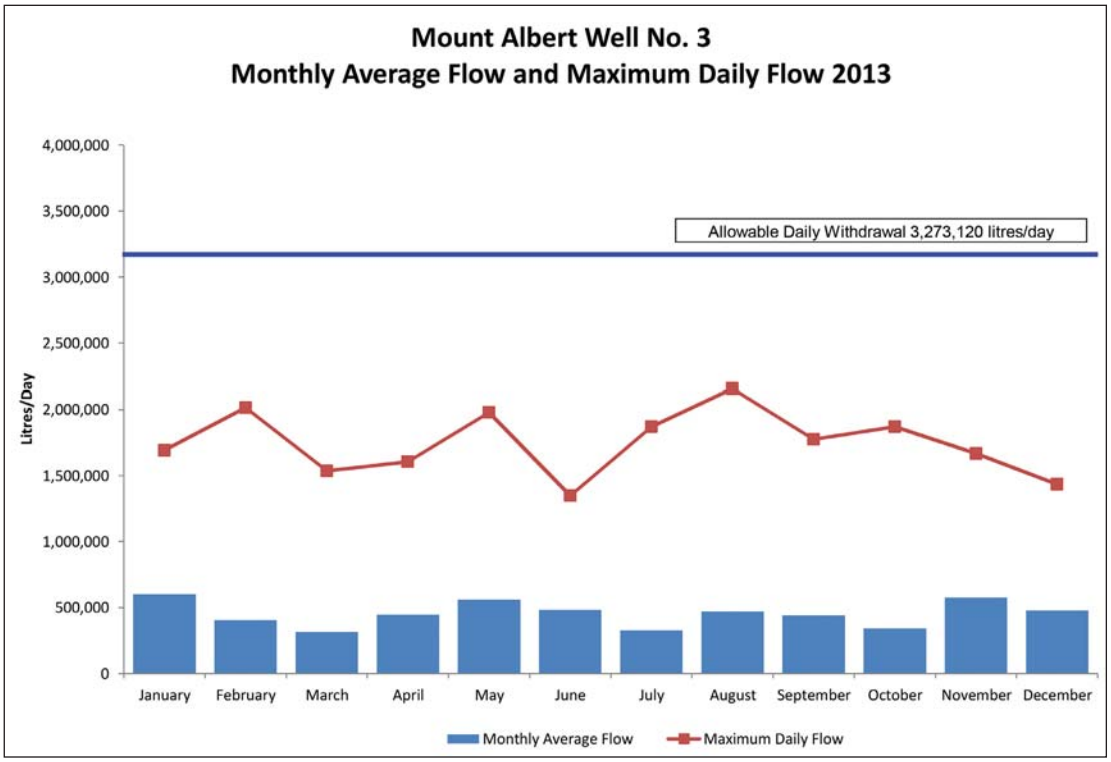
1,826,340,000 litres	362,198,604 litres	19.8 per cent
Annual Permitted Withdrawal	Actual Annual Withdrawal	Percentage of Permitted Annual Withdrawal

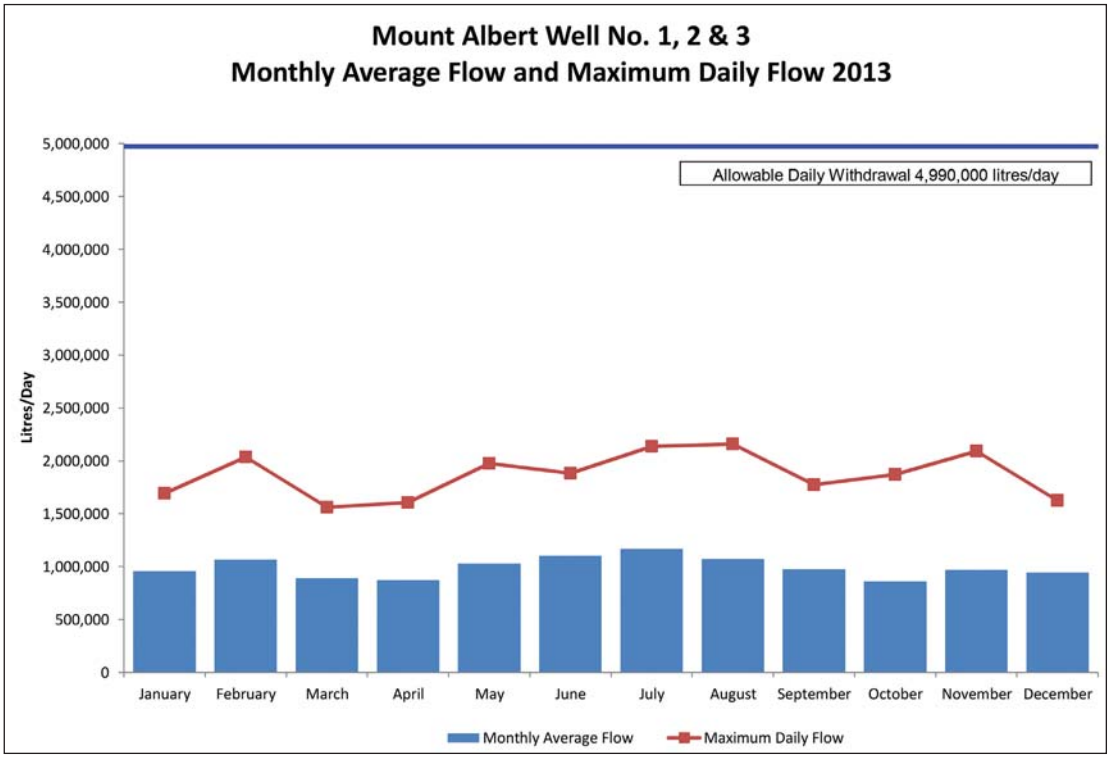


Mount Albert Well No. 1 had a reduced monthly average flow recorded throughout the 2013 reporting year. This reduction in flow was mainly due to scheduled maintenance conducted on the well to improve the overall operation of the water system.



Mount Albert Well No. 2 had a reduced monthly average flow recorded throughout the 2013 reporting year. This reduction in flow was mainly due to scheduled maintenance conducted on the well to improve the overall operation of the water system.


Mount Albert Well No. 3
Monthly Average Flow and Maximum Daily Flow 2013
Allowable Daily Withdrawal 3,273,120 litres/day
Litres/Day
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
January
February
March
April
May
June
July
August
September
October
November
December
Monthly Average Flow
Maximum Daily Flow


Mount Albert Well No. 1, 2 & 3
Monthly Average Flow and Maximum Daily Flow 2013
Allowable Daily Withdrawal 4,990,000 litres/day
Litres/Day
5,000,000
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
January
February
March
April
May
June
July
August
September
October
November
December
Monthly Average Flow
Maximum Daily Flow

Inorganics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	7/17/2013	10/2/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0004	0.0003	0.0005	0.0004
Arsenic as As	mg/L	0.025	IMAC	0.0002	0.0002	0.0002	0.0001
Barium as Ba	mg/L	1	MAC		0.0551		
Boron as B	mg/L	5	IMAC		< 0.009		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.06	0.04	0.05	0.06
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC		< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	4.71	< 0.02	< 0.02
Nitrate as N	mg/L	10	MAC	< 0.005	4.71	< 0.005	< 0.005
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.02	< 0.02
Selenium as Se	mg/L	0.01	MAC	0.0003	< 0.0001	0.0006	< 0.0001
Sodium as Na	mg/L	200	AO	15.6	10.1	15.9	19
Uranium as U	mg/L	0.02	MAC		0.0096		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	4/24/2013	7/17/2013	10/2/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC		< 0.0005			
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC		< 0.0005			
2,4,6-Trichlorophenol	mg/L	0.005	MAC		< 0.0005			
2,4-Dichlorophenol	mg/L	0.9	MAC		< 0.0007			
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC		< 0.0008			
Alachlor	mg/L	0.005	IMAC		< 0.0004			
Aldicarb	mg/L	0.009	MAC			< 0.0045		
Aldrin + Dieldrin	mg/L	0.0007	MAC		< 0.000006			
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC		< 0.0002			
Azinphos-methyl	mg/L	0.02	MAC		< 0.0003			
Bendiocarb	mg/L	0.04	MAC			< 0.003		
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC		< 0.00001			
Bromoxynil	mg/L	0.005	IMAC		< 0.0004			
Carbaryl	mg/L	0.09	MAC			< 0.003		
Carbofuran	mg/L	0.09	MAC			< 0.003		
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC		< 0.000006			
Chlorpyrifos	mg/L	0.09	MAC		< 0.0002			
Cyanazine	mg/L	0.01	IMAC		< 0.0003			
Diazinon	mg/L	0.02	MAC		< 0.0002			
Dicamba	mg/L	0.12	MAC		< 0.0004			
Dichloromethane	mg/L	0.05	MAC	< 0.0005	0.0006		< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC		< 0.0004			
Dimethoate	mg/L	0.02	IMAC		< 0.0003			
Dinoseb	mg/L	0.01	MAC		< 0.0005			
Diquat	mg/L	0.07	MAC		< 0.001			
Diuron	mg/L	0.15	MAC			< 0.003		
Glyphosate	mg/L	0.28	IMAC		< 0.025			
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC		< 0.000008			
Lindane	mg/L	0.004	MAC		< 0.000005			
Malathion	mg/L	0.19	MAC		< 0.0002			
Methoxychlor	mg/L	0.9	MAC		< 0.000009			
Metolachlor	mg/L	0.05	IMAC		< 0.0002			
Metribuzin	mg/L	0.08	MAC		< 0.0003			
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	4/24/2013	7/17/2013	10/2/2013
Paraquat	mg/L	0.01	IMAC		< 0.001			
Parathion	mg/L	0.05	MAC		< 0.0002			
Pentachlorophenol	mg/L	0.06	MAC		< 0.0004			
Phorate	mg/L	0.002	IMAC		< 0.0002			
Picloram	mg/L	0.19	IMAC		< 0.0007			
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC		< 0.00002			
Prometryne	mg/L	0.001	IMAC		< 0.0002			
Simazine	mg/L	0.01	IMAC		< 0.0002			
Temephos	mg/L	0.28	IMAC		< 0.003			
Terbufos	mg/L	0.001	IMAC		< 0.0002			
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC			< 0.004		
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC		< 0.000006			
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	7/17/2013	10/2/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0005	0.0003	0.0008	0.0005
Arsenic as As	mg/L	0.025	IMAC	0.0005	0.0003	0.0004	0.0003
Barium as Ba	mg/L	1	MAC		0.0526		
Boron as B	mg/L	5	IMAC		< 0.009		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.05	0.05	0.04	0.06
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC		< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	4.8	4.99	4.88	5.96
Nitrate as N	mg/L	10	MAC	4.8	4.99	4.88	5.96
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.02	< 0.02
Selenium as Se	mg/L	0.01	MAC	0.0005	< 0.0001	0.0001	< 0.0001
Sodium as Na	mg/L	200	AO	9.07	9.59	10	6.5
Uranium as U	mg/L	0.02	MAC	0.0089	0.0094	0.0094	

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AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	4/24/2013	7/17/2013	10/2/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC		< 0.0005			
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC		< 0.0005			
2,4,6-Trichlorophenol	mg/L	0.005	MAC		< 0.0005			
2,4-Dichlorophenol	mg/L	0.9	MAC		< 0.0007			
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC		< 0.0008			
Alachlor	mg/L	0.005	IMAC		< 0.0004			
Aldicarb	mg/L	0.009	MAC			< 0.0045		
Aldrin + Dieldrin	mg/L	0.0007	MAC		< 0.000006			
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC		< 0.0002			
Azinphos-methyl	mg/L	0.02	MAC		< 0.0003			
Bendiocarb	mg/L	0.04	MAC			< 0.003		
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC		< 0.00001			
Bromoxynil	mg/L	0.005	IMAC		< 0.0004			
Carbaryl	mg/L	0.09	MAC			< 0.003		
Carbofuran	mg/L	0.09	MAC			< 0.003		
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC		< 0.000006			
Chlorpyrifos	mg/L	0.09	MAC		< 0.0002			
Cyanazine	mg/L	0.01	IMAC		< 0.0003			
Diazinon	mg/L	0.02	MAC		< 0.0002			
Dicamba	mg/L	0.12	MAC		< 0.0004			
Dichloromethane	mg/L	0.05	MAC	< 0.0005	0.0013		< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC		< 0.0004			
Dimethoate	mg/L	0.02	IMAC		< 0.0003			
Dinoseb	mg/L	0.01	MAC		< 0.0005			
Diquat	mg/L	0.07	MAC		< 0.001			
Diuron	mg/L	0.15	MAC			< 0.003		
Glyphosate	mg/L	0.28	IMAC		< 0.025			
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC		< 0.000008			
Lindane	mg/L	0.004	MAC		< 0.000005			
Malathion	mg/L	0.19	MAC		< 0.0002			
Methoxychlor	mg/L	0.9	MAC		< 0.000009			
Metolachlor	mg/L	0.05	IMAC		< 0.0002			
Metribuzin	mg/L	0.08	MAC		< 0.0003			
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	4/24/2013	7/17/2013	10/2/2013
Paraquat	mg/L	0.01	IMAC		< 0.001			
Parathion	mg/L	0.05	MAC		< 0.0002			
Pentachlorophenol	mg/L	0.06	MAC		< 0.0004			
Phorate	mg/L	0.002	IMAC		< 0.0002			
Picloram	mg/L	0.19	IMAC		< 0.0007			
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC		< 0.00002			
Prometryne	mg/L	0.001	IMAC		< 0.0002			
Simazine	mg/L	0.01	IMAC		< 0.0002			
Temephos	mg/L	0.28	IMAC		< 0.003			
Terbufos	mg/L	0.001	IMAC		< 0.0002			
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC			< 0.004		
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC		< 0.000006			
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Nobleton

drinking water system

[groundwater]

York Region operates two wells servicing the community of Nobleton in the Township of King. Water withdrawal from each of the wells is regulated by a Permit to Take Water, issued by the MOE.

Raw Water Source Description

Wells are screened in the deep aquifer. Groundwater quality meets the Ontario Drinking Water Standards with the exception of elevated iron, common in deep aquifers in York Region.

Water Treatment

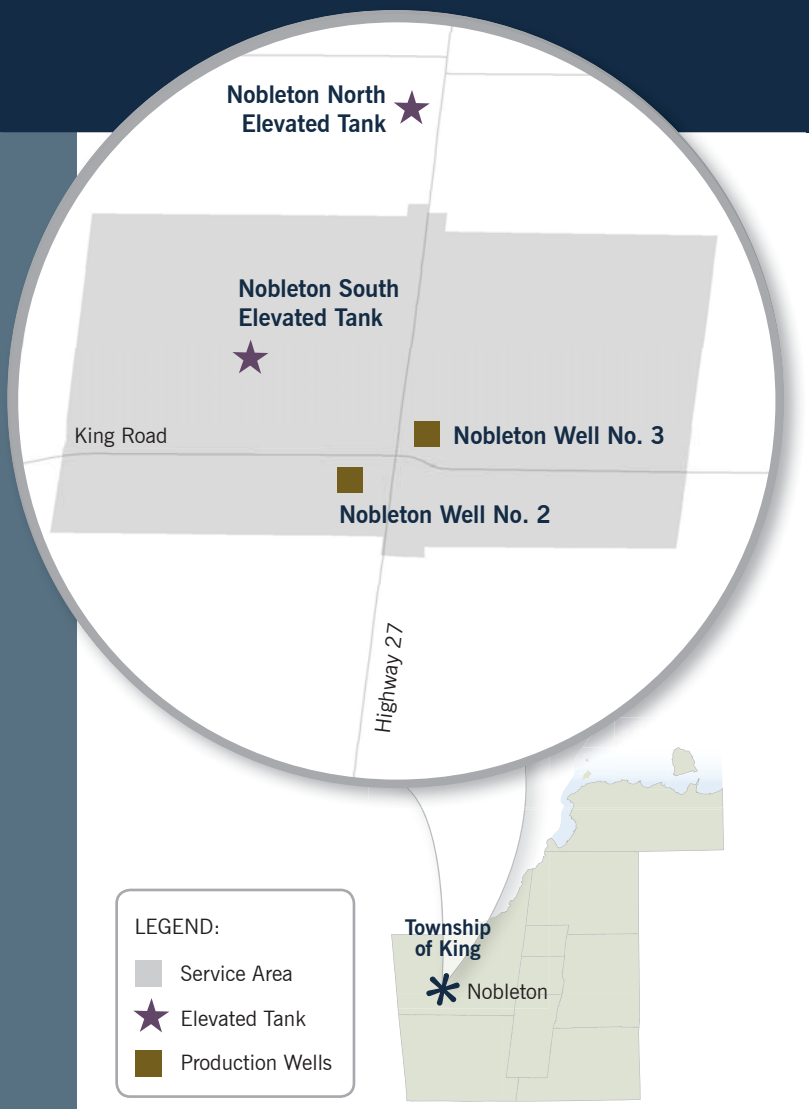
Water pumped from Wells No. 2 and 3 receives treatment before it enters the distribution system. Water treatment for Well No. 2 includes the addition of chlorine gas for disinfection, while Well No. 3 uses sodium hypochlorite.

Sodium silicate is added to the treatment process to sequester the iron to reduce the potential for iron to stain plumbing fixtures and laundry in the serviced area.

Treatment processes throughout the facility are monitored by online analyzers which are equipped with alarms and lockouts to alert operational staff of conditions requiring attention.

The addition of the new well (Well No. 5) will provide adequate standby capacity to service growth anticipated in the community when it comes online in mid to late 2014.

Following treatment, water enters the distribution system and is stored in two elevated tanks.



Summary of Approvals and Permits

Municipal Drinking Water	
Licence Number:	013-105
Issue Number:	Issue 1
Issue Date:	January 29, 2010
Revision Date:	January 29, 2010
Expiry Date:	January 28, 2015
Drinking Water Works	
Permit Number:	013-205
Issue Number:	Issue 2
Issue Date:	January 29, 2010
Revision Date:	July 12, 2013
Permit to Take Water Number:	6270-7U5PBL
Issue Date:	July 22, 2009
Expiry Date:	June 30, 2019
Operational Plan Number:	013-405
Financial Plan Number:	013-301A
MOE Waterworks Number:	220002306
System Classification:	Water Distribution and Supply II (WDS II)

Nobleton Drinking Water System (Wells 2 + 3) Performance Summary:

[A] Absence
[hpc] Heterotrophic Plate Count

RAW	106 samples	[A] e-coli results	7 [0 to 1] total coliforms	n/a hpc samples	n/a hpc results
TREATED	107 samples	[A] e-coli results	[A] total coliforms	108 hpc samples	0 to 5 hpc results

Average Treated Water Concentration (mg/L)

17	264	0.10
sodium	hardness	fluoride

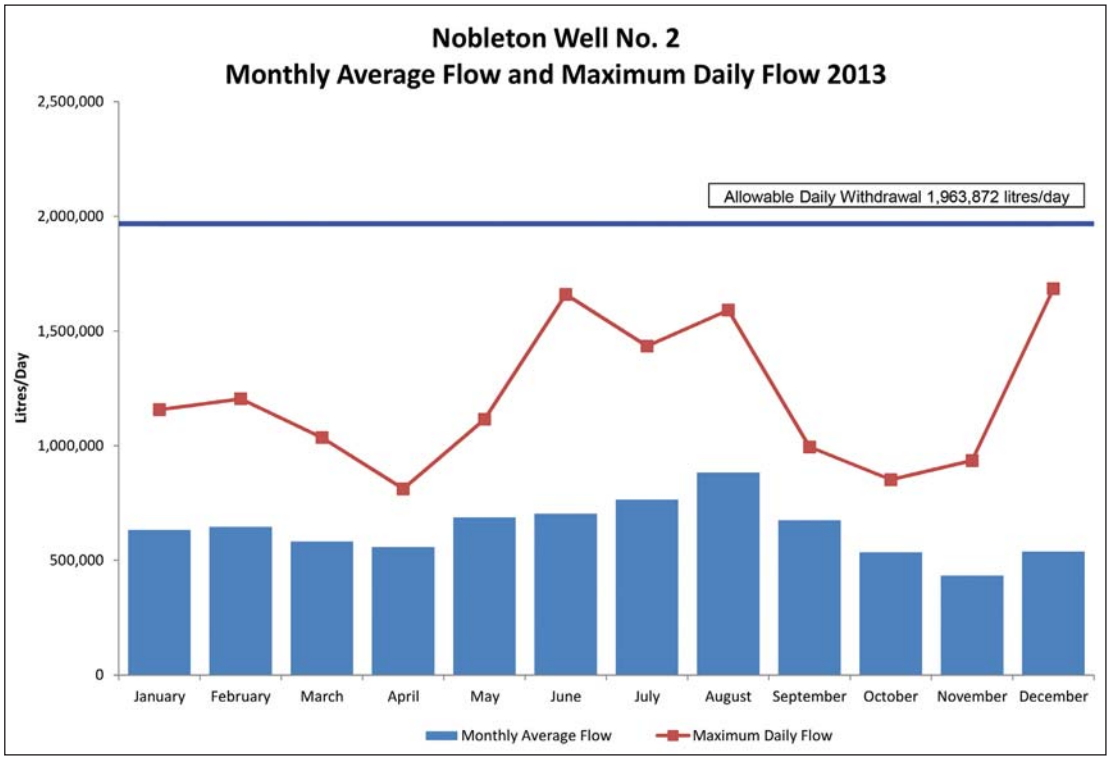
- Turbidity (Treated)
  8,760 samples
  ranged 0.02 to 5.00 ntu
  [min. to max.]
- Turbidity (Raw)
  31 samples
  ranged 0.12 to 7.4 ntu
  [min. to max.]
- Chlorine (Free)
  8,760 samples
  ranged 0.62 to 3.01 mg/L
  [min. to max.]

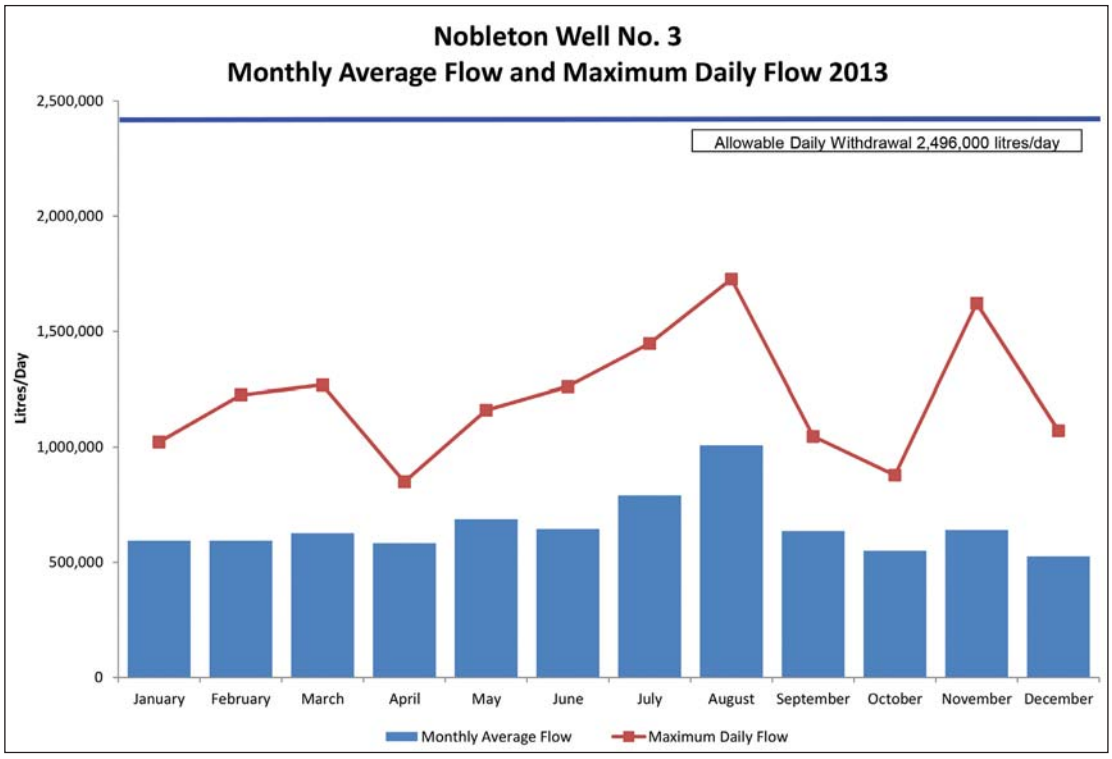
Permitted and Actual Maximum Daily Withdrawal from the Nobleton Production Wells for January 1 to December 31, 2013

Location	*Permitted Daily Withdrawal (litres)*	*Actual Maximum Daily Withdrawal (litres)*	*Number of Days Operating at Peak Capacity (May to October)*	*Number of Days Operating at Peak Capacity (Annual)*
Well 2	1,964,000	1,684,130 December 8, 2013	3	4
Well 3	2,496,000	1,726,750 August 13, 2013	0	0

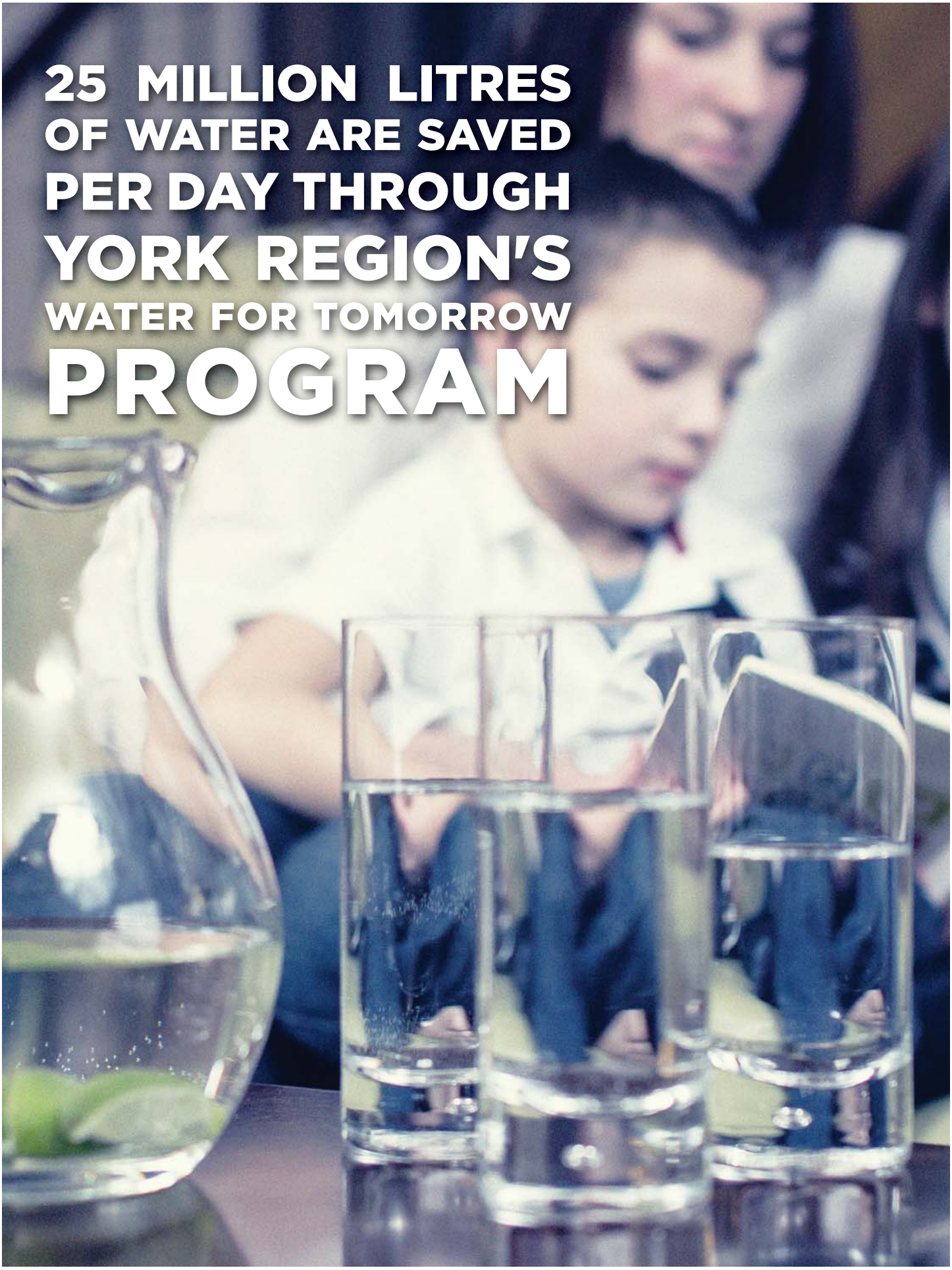
Permitted and Actual Maximum Annual Withdrawal from the Nobleton Production Wells for January 1 to December 31, 2013

1,627,900,100 litres	472,469,918 litres	29.0 per cent
Annual Permitted Withdrawal	Actual Annual Withdrawal	Percentage of Permitted Annual Withdrawal





Nobleton Well No. 2 had an increase in the maximum daily flow for December. This increase in flow was mainly due to scheduled maintenance conducted on Nobleton Well No. 3 to improve the overall operation of the water system. As a result Nobleton Well 2 ran more predominately in December until the scheduled maintenance was completed.


25 MILLION LITRES
OF WATER ARE SAVED
PER DAY THROUGH
YORK REGION'S
WATER FOR TOMORROW
PROGRAM

Inorganics Test Results

Reading	Units	ODWS		1/16/2013	4/17/2013	7/10/2013	10/23/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0006	0.0002	0.0003	0.0003
Arsenic as As	mg/L	0.025	IMAC	0.0002	0.0001	0.0003	0.0005
Barium as Ba	mg/L	1	MAC		0.202		
Boron as B	mg/L	5	IMAC		0.019		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	< 0.0001	0.001	< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.1	0.1	0.12	0.07
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC		< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	< 0.02	< 0.02	0.503
Nitrate as N	mg/L	10	MAC	< 0.005	0.006	< 0.005	0.503
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.02	< 0.008
Selenium as Se	mg/L	0.01	MAC	0.0002	< 0.0001	0.0007	0.0011
Sodium as Na	mg/L	200	AO	16.5	16.8	13.8	15.1
Uranium as U	mg/L	0.02	MAC		< 0.0001		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/16/2013	4/17/2013	5/1/2013	7/10/2013	10/23/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC		< 0.0005			
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC		< 0.0005			
2,4,6-Trichlorophenol	mg/L	0.005	MAC		< 0.0005			
2,4-Dichlorophenol	mg/L	0.9	MAC		< 0.0007			
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC		< 0.0008			
Alachlor	mg/L	0.005	IMAC		< 0.0004			
Aldicarb	mg/L	0.009	MAC			< 0.0045		
Aldrin + Dieldrin	mg/L	0.0007	MAC		< 0.000006			
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC		< 0.0002			
Azinphos-methyl	mg/L	0.02	MAC		< 0.0003			
Bendiocarb	mg/L	0.04	MAC			< 0.003		
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC		< 0.00001			
Bromoxynil	mg/L	0.005	IMAC		< 0.0004			
Carbaryl	mg/L	0.09	MAC			< 0.003		
Carbofuran	mg/L	0.09	MAC			< 0.003		
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC		< 0.000006			
Chlorpyrifos	mg/L	0.09	MAC		< 0.0002			
Cyanazine	mg/L	0.01	IMAC		< 0.0003			
Diazinon	mg/L	0.02	MAC		< 0.0002			
Dicamba	mg/L	0.12	MAC		< 0.0004			
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005		< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC		< 0.0004			
Dimethoate	mg/L	0.02	IMAC		< 0.0003			
Dinoseb	mg/L	0.01	MAC		< 0.0005			
Diquat	mg/L	0.07	MAC			< 0.001		
Diuron	mg/L	0.15	MAC			< 0.003		
Glyphosate	mg/L	0.28	IMAC			< 0.025		
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC		< 0.000008			
Lindane	mg/L	0.004	MAC		< 0.000005			
Malathion	mg/L	0.19	MAC		< 0.0002			
Methoxychlor	mg/L	0.9	MAC		< 0.000009			
Metolachlor	mg/L	0.05	IMAC		< 0.0002			
Metribuzin	mg/L	0.08	MAC		< 0.0003			
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/16/2013	4/17/2013	5/1/2013	7/10/2013	10/23/2013
Paraquat	mg/L	0.01	IMAC			< 0.001		
Parathion	mg/L	0.05	MAC		< 0.0002			
Pentachlorophenol	mg/L	0.06	MAC		< 0.0004			
Phorate	mg/L	0.002	IMAC		< 0.0002			
Picloram	mg/L	0.19	IMAC		< 0.0007			
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC		< 0.00002			
Prometryne	mg/L	0.001	IMAC		< 0.0002			
Simazine	mg/L	0.01	IMAC		< 0.0002			
Temephos	mg/L	0.28	IMAC		< 0.003			
Terbufos	mg/L	0.001	IMAC		< 0.0002			
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC			< 0.004		
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC		< 0.000006			
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
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AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/16/2013	4/17/2013	7/10/2013	10/23/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0006	0.0002	0.0004	0.0006
Arsenic as As	mg/L	0.025	IMAC	0.0004	0.0002	0.0004	0.0008
Barium as Ba	mg/L	1	MAC		0.241		
Boron as B	mg/L	5	IMAC		0.02		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	< 0.0001	0.0008	< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.1	0.09	0.13	0.07
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	0.0001	0.0001
Mercury as Hg	mg/L	0.001	MAC		0.00006		
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	< 0.02	< 0.02	< 0.008
Nitrate as N	mg/L	10	MAC	< 0.005	< 0.005	< 0.005	< 0.002
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.02	< 0.008
Selenium as Se	mg/L	0.01	MAC	0.0001	< 0.0001	0.0002	0.0011
Sodium as Na	mg/L	200	AO	18.1	17.4	17.8	18.3
Uranium as U	mg/L	0.02	MAC		< 0.0001		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/16/2013	4/17/2013	5/1/2013	7/10/2013	10/23/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC		< 0.0005			
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC		< 0.0005			
2,4,6-Trichlorophenol	mg/L	0.005	MAC		< 0.0005			
2,4-Dichlorophenol	mg/L	0.9	MAC		< 0.0007			
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC		< 0.0008			
Alachlor	mg/L	0.005	IMAC		< 0.0004			
Aldicarb	mg/L	0.009	MAC			< 0.0045		
Aldrin + Dieldrin	mg/L	0.0007	MAC		< 0.000006			
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC		< 0.0002			
Azinphos-methyl	mg/L	0.02	MAC		< 0.0003			
Bendiocarb	mg/L	0.04	MAC			< 0.003		
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC		< 0.00001			
Bromoxynil	mg/L	0.005	IMAC		< 0.0004			
Carbaryl	mg/L	0.09	MAC			< 0.003		
Carbofuran	mg/L	0.09	MAC			< 0.003		
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC		< 0.000006			
Chlorpyrifos	mg/L	0.09	MAC		< 0.0002			
Cyanazine	mg/L	0.01	IMAC		< 0.0003			
Diazinon	mg/L	0.02	MAC		< 0.0002			
Dicamba	mg/L	0.12	MAC		< 0.0004			
Dichloromethane	mg/L	0.05	MAC	< 0.0005	0.0034		< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC		< 0.0004			
Dimethoate	mg/L	0.02	IMAC		< 0.0003			
Dinoseb	mg/L	0.01	MAC		< 0.0005			
Diquat	mg/L	0.07	MAC			< 0.001		
Diuron	mg/L	0.15	MAC			< 0.003		
Glyphosate	mg/L	0.28	IMAC			< 0.025		
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC		< 0.000008			
Lindane	mg/L	0.004	MAC		< 0.000005			
Malathion	mg/L	0.19	MAC		< 0.0002			
Methoxychlor	mg/L	0.9	MAC		< 0.000009			
Metolachlor	mg/L	0.05	IMAC		< 0.0002			
Metribuzin	mg/L	0.08	MAC		< 0.0003			
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001

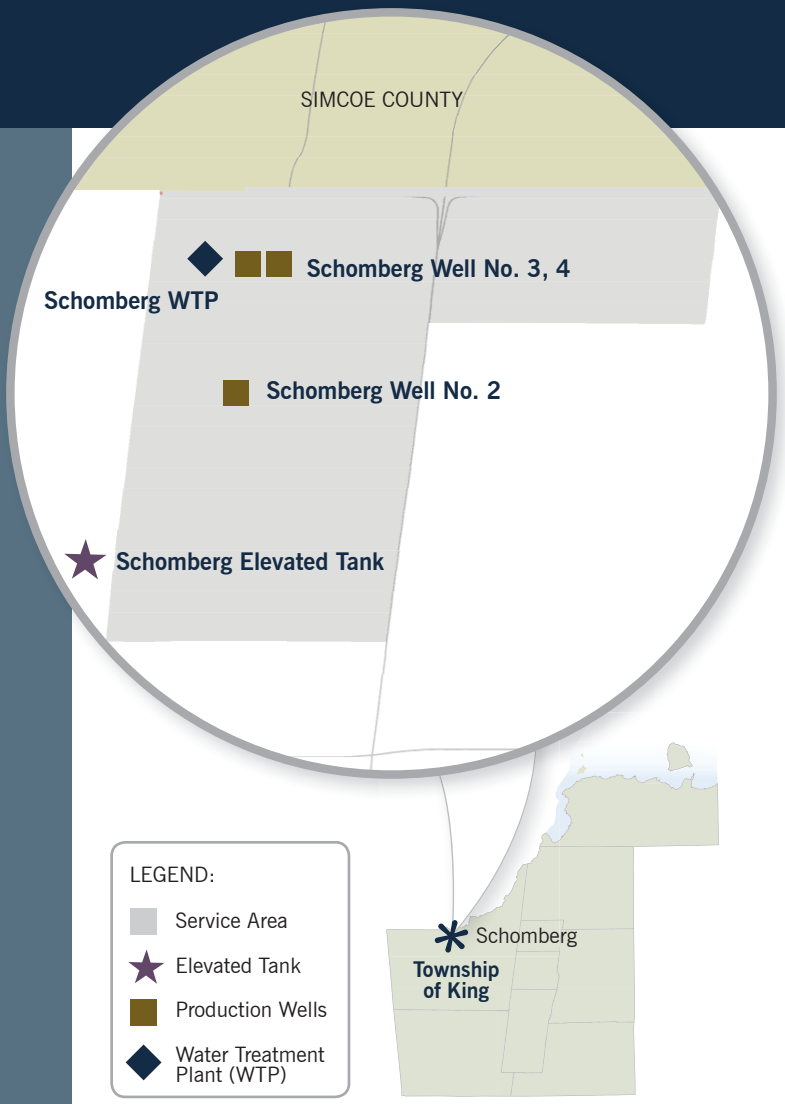
Organics Test Results

Reading	Units	ODWS		1/16/2013	4/17/2013	5/1/2013	7/10/2013	10/23/2013
Paraquat	mg/L	0.01	IMAC			< 0.001		
Parathion	mg/L	0.05	MAC		< 0.0002			
Pentachlorophenol	mg/L	0.06	MAC		< 0.0004			
Phorate	mg/L	0.002	IMAC		< 0.0002			
Picloram	mg/L	0.19	IMAC		< 0.0007			
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC		< 0.00002			
Prometryne	mg/L	0.001	IMAC		< 0.0002			
Simazine	mg/L	0.01	IMAC		< 0.0002			
Temephos	mg/L	0.28	IMAC		< 0.003			
Terbufos	mg/L	0.001	IMAC		< 0.0002			
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC			< 0.004		
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC		< 0.000006			
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Schomberg
drinking water system

[groundwater]



York Region operates a groundwater treatment plant supplied by three wells servicing the community of Schomberg in the Township of King. Water withdrawal from each of the wells is regulated by a Permit to Take Water issued by the MOE.

Raw Water Source Description

Wells are screened in the deep aquifer. Groundwater quality meets the Ontario Drinking Water Standard with the exceptions of elevated iron, manganese, methane and ammonia in the raw water.

Water Treatment

The Schomberg Water Treatment Plant was commissioned in December 2009. Three production wells pump into the treatment plant where the water is stripped of methane and treated with potassium permanganate to remove iron and manganese. The water is disinfected using ultraviolet light and chlorine. The natural occurring ammonia is used in the treatment process to provide chloramination as a secondary disinfectant for the distribution system.

Treatment processes throughout the facility are monitored by online analyzers which are equipped with alarms and lockouts to alert operational staff of conditions requiring attention.

Following treatment, water enters the distribution system and is stored in one elevated tank currently servicing the community of Schomberg.

Summary of Approvals and Permits

Municipal Drinking Water	
Licence Number:	013-110
Issue Number:	Issue 2
Issue Date:	January 29, 2010
Revision Date:	February 2, 2011
Expiry Date:	January 28, 2015
Drinking Water Works	
Permit Number:	013-210
Issue Number:	Issue 2
Issue Date:	January 29, 2010
Revision Date:	February 2, 2011
Permit to Take Water Number:	0706-7E8T5G
Issue Date:	June 3, 2008
Expiry Date:	April 30, 2018
Operational Plan Number:	013-410
Financial Plan Number:	013-301A
MOE Waterworks Number:	220004901
System Classification:	Water Treatment (WT II)

Schomberg Drinking Water System (Wells 2, 3+ 4) Performance Summary:

[A] Absence
[hpc] Heterotrophic Plate Count

RAW	189	[A] e-coli results	[A] total coliforms	n/a hpc samples	n/a hpc results
TREATED	52 samples	[A] e-coli results	[A] total coliforms	53 hpc samples	0 to 480 hpc results

Average Treated Water Concentration (mg/L)

19	282	0.13
sodium	hardness	fluoride

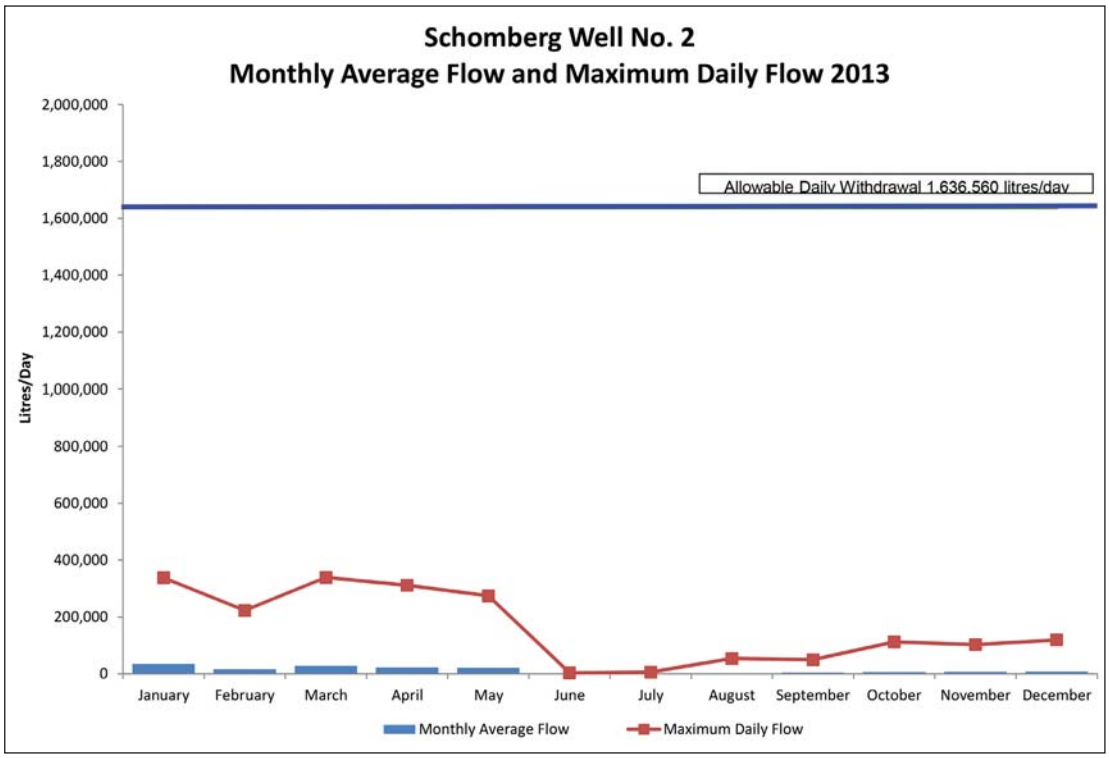
- Turbidity (Treated)
  8,760 samples
  ranged 0.08 to 5.00 ntu
  [min. to max.]
- Turbidity (Raw)
  48 samples
  ranged .06 to 27.5 ntu
  [min. to max.]
- Chlorine (Combined)
  8,760 samples
  ranged 0.0 to 2.89 mg/L
  [min. to max.]

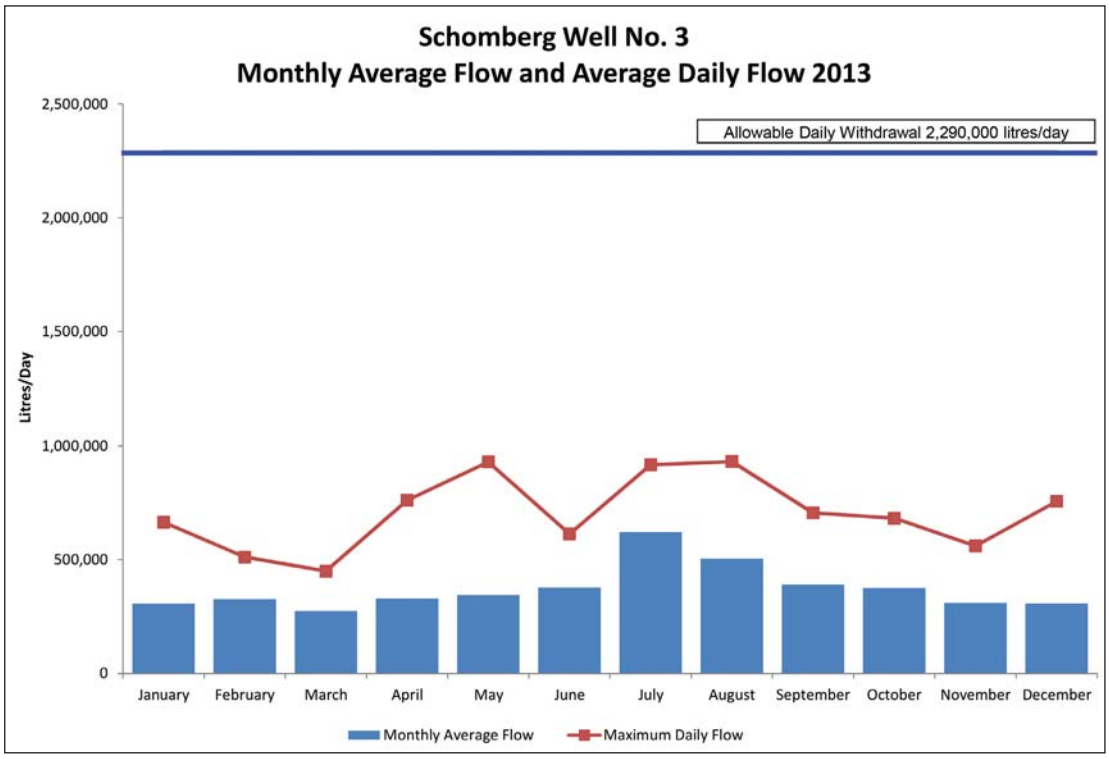
Permitted and Actual Maximum Daily Withdrawal from the Schomberg Production Wells for January 1 to December 31, 2013

Location	*Permitted Daily Withdrawal (litres)*	*Actual Maximum Daily Withdrawal (litres)*	*Number of Days Operating at Peak Capacity (May to October)*	*Number of Days Operating at Peak Capacity (Annual)*
Well 2	1,636,560	339,000 March 6, 2013	0	0
Well 3	2,290,000	931,340 August 8, 2013	0	0
Well 4	1,507,680	1,254,380 July 24, 2013	3	3

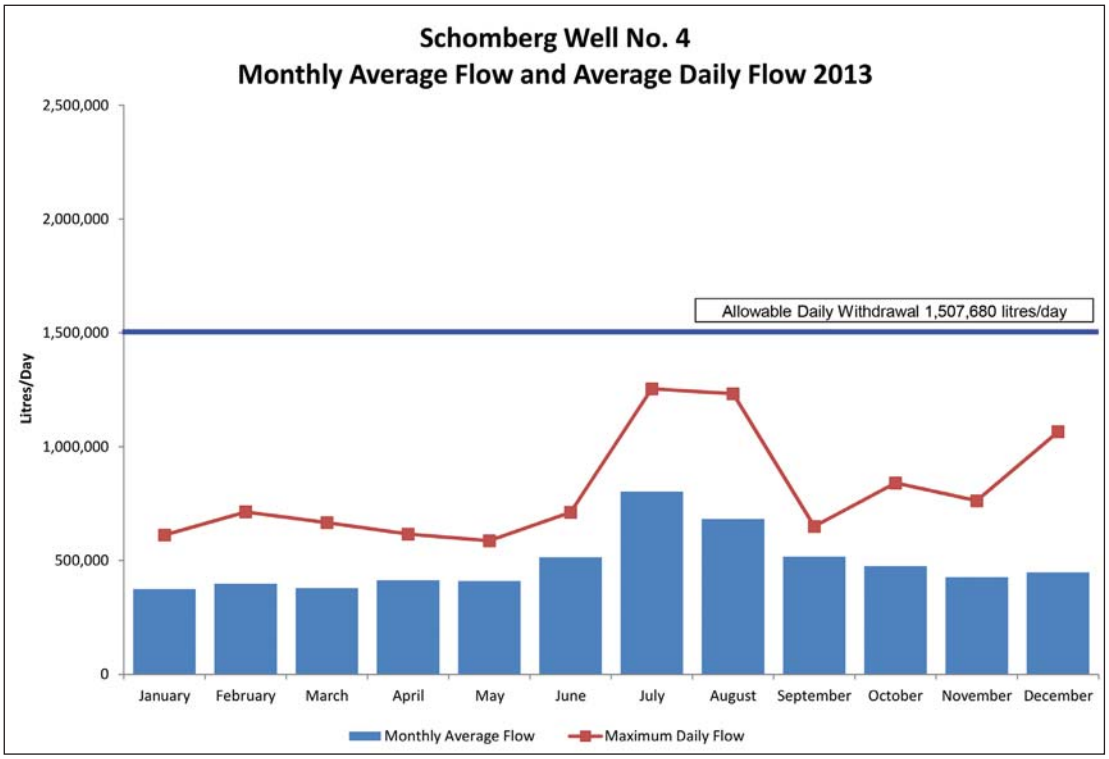
Permitted and Actual Maximum Annual Withdrawal from the Schomberg Production Wells for January 1 to December 31, 2013

1,983,497,600 litres	318,951,370 litres	16.0 per cent
Annual Permitted Withdrawal	Actual Annual Withdrawal	Percentage of Permitted Annual Withdrawal





Schomberg Well No. 2 shows a reduced monthly average flow for the 2013 reporting year. This reduction in flow is due to the well primarily used as a backup well and operated for short durations to collect water samples. The well did not operate for the majority of 2013.


Schomberg Well No. 4
Monthly Average Flow and Average Daily Flow 2013
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Litres/Day
Allowable Daily Withdrawal 1,507,680 litres/day
January
February
March
April
May
June
July
August
September
October
November
December
Monthly Average Flow
Maximum Daily Flow

Inorganics Test Results

Reading	Units	ODWS		1/16/2013	4/17/2013	7/2/2013	7/4/2013	7/8/2013	7/10/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0005	0.0004				0.0005
Arsenic as As	mg/L	0.025	IMAC	0.0007	0.0004				0.0006
Barium as Ba	mg/L	1	MAC		0.127				
Boron as B	mg/L	5	IMAC		0.044				
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001				< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	< 0.0001				0.001
Fluoride as F	mg/L	1.5	MAC	0.12	0.1	0.124	0.16	0.08	0.149
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001				< 0.0001
Mercury as Hg	mg/L	0.001	MAC		< 0.00002				
Nitrate + Nitrite as N	mg/L	10	MAC	0.04	0.03	0.165	0.21	0.03	0.338
Nitrate as N	mg/L	10	MAC	0.013	0.009	0.123	0.167	0.01	0.277
Nitrite	mg/L	1	MAC	0.02	0.02	0.042	0.05	< 0.02	0.061
Selenium as Se	mg/L	0.01	MAC	< 0.0001	< 0.0001				< 0.0001
Sodium as Na	mg/L	200	AO	19.6	18.8	19.7	19.5	19	19.3
Uranium as U	mg/L	0.02	MAC		< 0.0001				

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mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		7/11/2013	7/15/2013	7/18/2013	7/22/2013	7/25/2013	7/29/2013
Antimony as Sb	mg/L	0.006	IMAC						
Arsenic as As	mg/L	0.025	IMAC						
Barium as Ba	mg/L	1	MAC						
Boron as B	mg/L	5	IMAC						
Cadmium as Cd	mg/L	0.005	MAC						
Chromium as Cr	mg/L	0.05	MAC						
Fluoride as F	mg/L	1.5	MAC	0.16	0.1	0.15	0.16	0.22	0.22
Lead as Pb	mg/L	0.01	MAC						
Mercury as Hg	mg/L	0.001	MAC						
Nitrate + Nitrite as N	mg/L	10	MAC	0.4	0.22	0.31	0.32	0.3	0.3
Nitrate as N	mg/L	10	MAC	0.334	0.151	0.204	0.204	0.24	0.236
Nitrite	mg/L	1	MAC	0.07	0.07	0.11	0.11	0.06	0.06
Selenium as Se	mg/L	0.01	MAC						
Sodium as Na	mg/L	200	AO	19.4	18.9	18.9	18.9	19	19.1
Uranium as U	mg/L	0.02	MAC						

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Inorganics Test Results

Reading	Units	ODWS		8/1/2013	8/12/2013	8/15/2013	8/21/2013	8/28/2013	10/2/2013
Antimony as Sb	mg/L	0.006	IMAC						
Arsenic as As	mg/L	0.025	IMAC						
Barium as Ba	mg/L	1	MAC						
Boron as B	mg/L	5	IMAC						
Cadmium as Cd	mg/L	0.005	MAC						
Chromium as Cr	mg/L	0.05	MAC						
Fluoride as F	mg/L	1.5	MAC	0.21	0.15	0.16	0.132	0.155	0.104
Lead as Pb	mg/L	0.01	MAC						
Mercury as Hg	mg/L	0.001	MAC						
Nitrate + Nitrite as N	mg/L	10	MAC	0.73	0.57	0.4	0.22	0.292	0.181
Nitrate as N	mg/L	10	MAC	0.651	0.531	0.345	0.185	0.209	0.152
Nitrite	mg/L	1	MAC	0.08	0.04	0.06	0.035	0.083	0.029
Selenium as Se	mg/L	0.01	MAC						
Sodium as Na	mg/L	200	AO	18.8	19.4	19.2	19.2	19.4	19.3
Uranium as U	mg/L	0.02	MAC						

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mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		10/8/2013	10/23/2013	10/30/2013	11/6/2013	11/13/2013	11/20/2013
Antimony as Sb	mg/L	0.006	IMAC		< 0.003				
Arsenic as As	mg/L	0.025	IMAC		< 0.0007				
Barium as Ba	mg/L	1	MAC						
Boron as B	mg/L	5	IMAC						
Cadmium as Cd	mg/L	0.005	MAC		< 0.0001				
Chromium as Cr	mg/L	0.05	MAC		< 0.0003				
Fluoride as F	mg/L	1.5	MAC	0.108	0.121	0.097	0.095	0.095	0.098
Lead as Pb	mg/L	0.01	MAC		< 0.0007				
Mercury as Hg	mg/L	0.001	MAC						
Nitrate + Nitrite as N	mg/L	10	MAC	0.434	0.424	0.16	0.149	0.148	0.159
Nitrate as N	mg/L	10	MAC	0.387	0.405	0.133	0.124	0.126	0.133
Nitrite	mg/L	1	MAC	0.047	0.019	0.027	0.025	0.022	0.026
Selenium as Se	mg/L	0.01	MAC		< 0.002				
Sodium as Na	mg/L	200	AO	19.7	19.7	19.4	19.6	19.6	19.5
Uranium as U	mg/L	0.02	MAC						

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mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		11/27/2013	12/4/2013	12/11/2013	12/18/2013
Antimony as Sb	mg/L	0.006	IMAC				
Arsenic as As	mg/L	0.025	IMAC				
Barium as Ba	mg/L	1	MAC				
Boron as B	mg/L	5	IMAC				
Cadmium as Cd	mg/L	0.005	MAC				
Chromium as Cr	mg/L	0.05	MAC				
Fluoride as F	mg/L	1.5	MAC	0.089	0.114	0.122	0.104
Lead as Pb	mg/L	0.01	MAC				
Mercury as Hg	mg/L	0.001	MAC				
Nitrate + Nitrite as N	mg/L	10	MAC	0.155	0.15	0.194	0.105
Nitrate as N	mg/L	10	MAC	0.132	0.128	0.153	0.084
Nitrite	mg/L	1	MAC	0.023	0.022	0.041	0.021
Selenium as Se	mg/L	0.01	MAC				
Sodium as Na	mg/L	200	AO	19.3	19.4	19.3	19.2
Uranium as U	mg/L	0.02	MAC				

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mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/16/2013	4/17/2013	5/1/2013	7/10/2013	10/23/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC		< 0.0005			
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC		< 0.0005			
2,4,6-Trichlorophenol	mg/L	0.005	MAC		< 0.0005			
2,4-Dichlorophenol	mg/L	0.9	MAC		< 0.0007			
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC		< 0.0008			
Alachlor	mg/L	0.005	IMAC		< 0.0004			
Aldicarb	mg/L	0.009	MAC			< 0.0045		
Aldrin + Dieldrin	mg/L	0.0007	MAC		< 0.000006			
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC		< 0.0002			
Azinphos-methyl	mg/L	0.02	MAC		< 0.0003			
Bendiocarb	mg/L	0.04	MAC			< 0.003		
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC		< 0.00001			
Bromoxynil	mg/L	0.005	IMAC		< 0.0004			
Carbaryl	mg/L	0.09	MAC			< 0.003		
Carbofuran	mg/L	0.09	MAC			< 0.003		
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC		< 0.000006			
Chlorpyrifos	mg/L	0.09	MAC		< 0.0002			
Cyanazine	mg/L	0.01	IMAC		< 0.0003			
Diazinon	mg/L	0.02	MAC		< 0.0002			
Dicamba	mg/L	0.12	MAC		< 0.0004			
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005		< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC		< 0.0004			
Dimethoate	mg/L	0.02	IMAC		< 0.0003			
Dinoseb	mg/L	0.01	MAC		< 0.0005			
Diquat	mg/L	0.07	MAC			< 0.001		
Diuron	mg/L	0.15	MAC			< 0.003		
Glyphosate	mg/L	0.28	IMAC			< 0.025		
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC		< 0.000008			
Lindane	mg/L	0.004	MAC		< 0.000005			
Malathion	mg/L	0.19	MAC		< 0.0002			
Methoxychlor	mg/L	0.9	MAC		< 0.000009			
Metolachlor	mg/L	0.05	IMAC		< 0.0002			
Metribuzin	mg/L	0.08	MAC		< 0.0003			
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/16/2013	4/17/2013	5/1/2013	7/10/2013	10/23/2013
Paraquat	mg/L	0.01	IMAC			< 0.001		
Parathion	mg/L	0.05	MAC		< 0.0002			
Pentachlorophenol	mg/L	0.06	MAC		< 0.0004			
Phorate	mg/L	0.002	IMAC		< 0.0002			
Picloram	mg/L	0.19	IMAC		< 0.0007			
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC		< 0.00002			
Prometryne	mg/L	0.001	IMAC		< 0.0002			
Simazine	mg/L	0.01	IMAC		< 0.0002			
Temephos	mg/L	0.28	IMAC		< 0.003			
Terbufos	mg/L	0.001	IMAC		< 0.0002			
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC			< 0.004		
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC		< 0.000006			
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
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mg/L: milligrams per litre, parts per million (ppm)

York
drinking water system

[surface water - lake ontario]

The York Drinking Water System consists of pumping stations, storage facilities and large diameter watermains required to transmit water between pumping stations and storage facilities. York Region services the southern end of the Region (King City, City of Markham, City of Vaughan and Town of Richmond Hill) exclusively with surface water from Lake Ontario supplied by the City of Toronto and Peel Region.

Water Treatment

Lake-Based Supply: Water supplied to the local municipalities from the York Drinking Water System is sourced from Lake Ontario. Raw water is treated by the City of Toronto or Peel Region and enters through York Region's transmission system. There is no further treatment performed by York Region as the water travels to the local municipal distribution systems.

Toronto Water Supplied to York Region

For the agreement between the City of Toronto and York Region (Toronto/York Water Supply Agreement) York Region budgeted for 81,395,000 cubic metres of water per year in 2013.

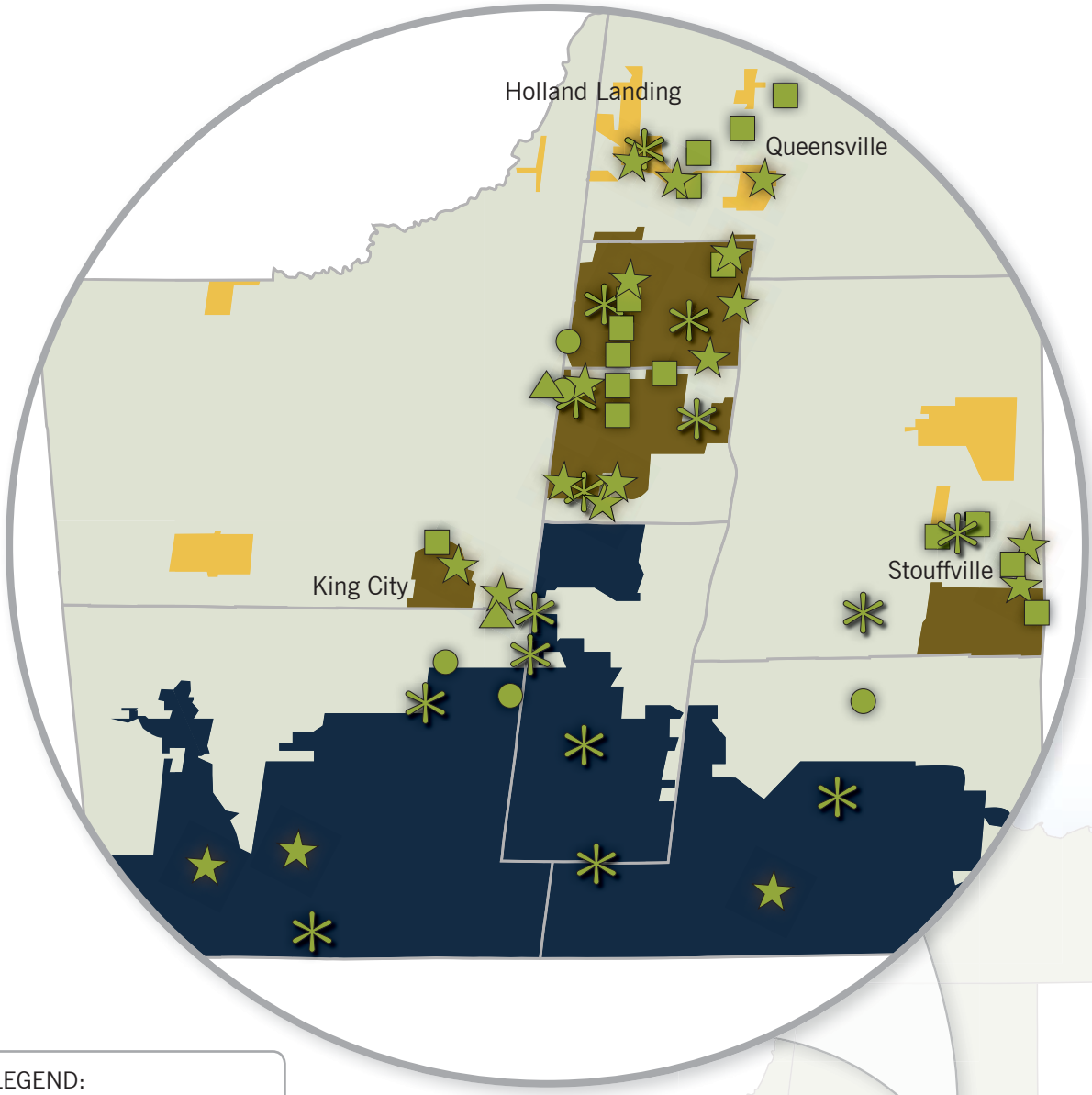
The total volume of water supplied from Toronto to the York Drinking Water System for the reporting period was 63,366,602 cubic metres. The system operated at 78 per cent of the budgeted figure and remained within the maximum limit established in the operating agreement.

Peel Water Supplied to York Region

For the agreement between Peel Region and York Region (Peel/York Water Supply Agreement) York Region budgeted for 31,390,000 cubic metres of water per year in 2013.

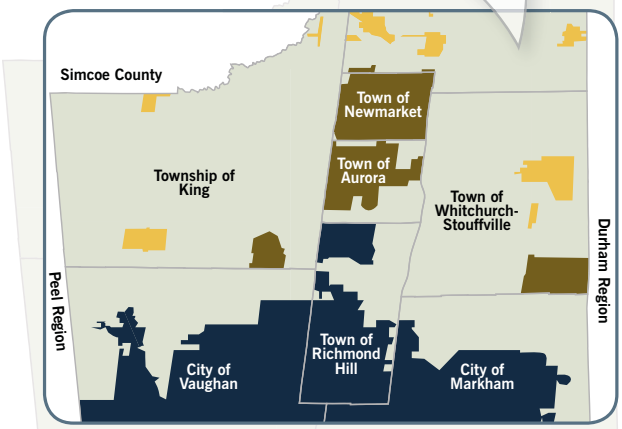
The total volume of water supplied from Peel Region to the York Drinking Water System for the reporting period was 42,191,460. The system operated at 134 per cent of the budgeted figure but remained within the maximum limit established in the water supply agreement.

York Drinking Water System service area



LEGEND:

- Pumping Station
- Elevated Tank
- Reservoir
- Production Well
- Pressure Sustaining Valve (PSV)
- Lake Ontario
- Groundwater and Lake Ontario
- Groundwater



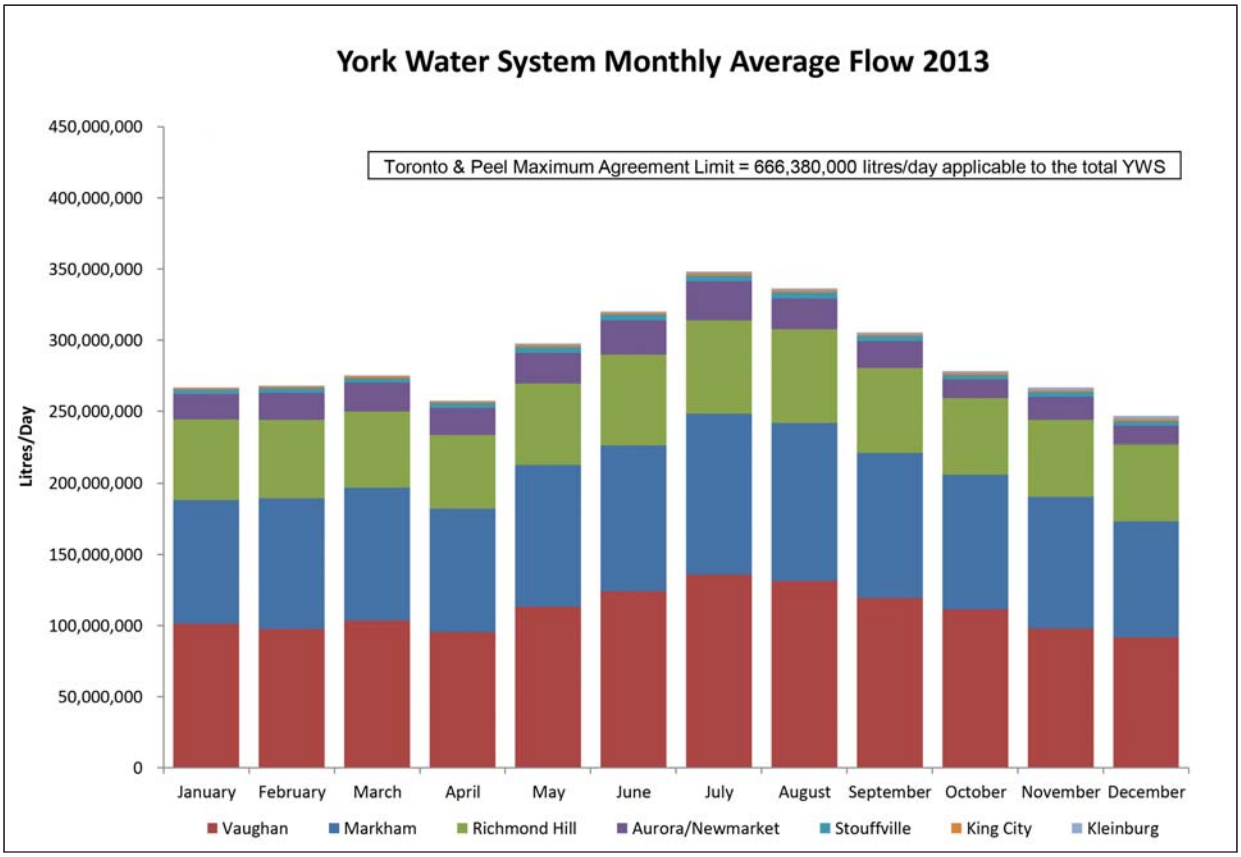
York Drinking Water System
(York Distribution System) Performance Summary:

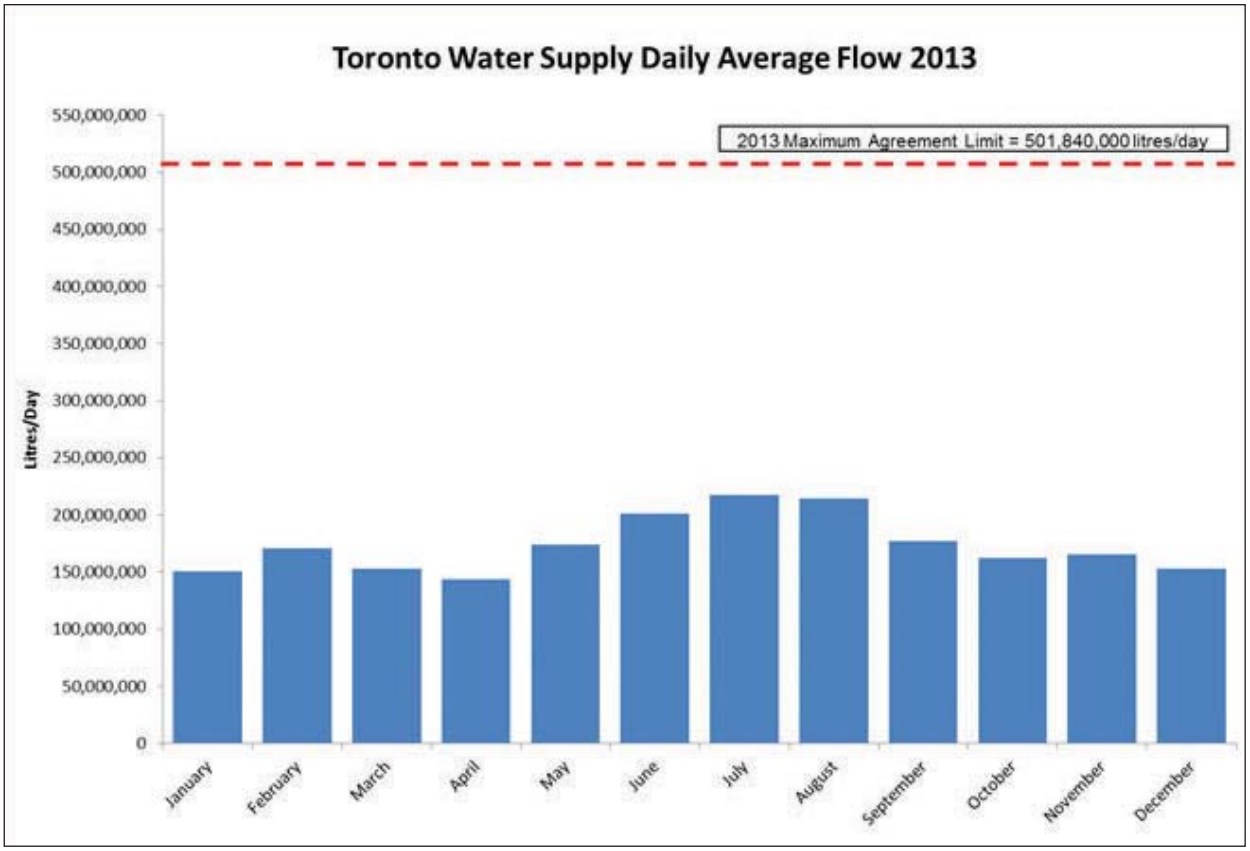
[A] Absence
[hpc] Heterotrophic Plate Count

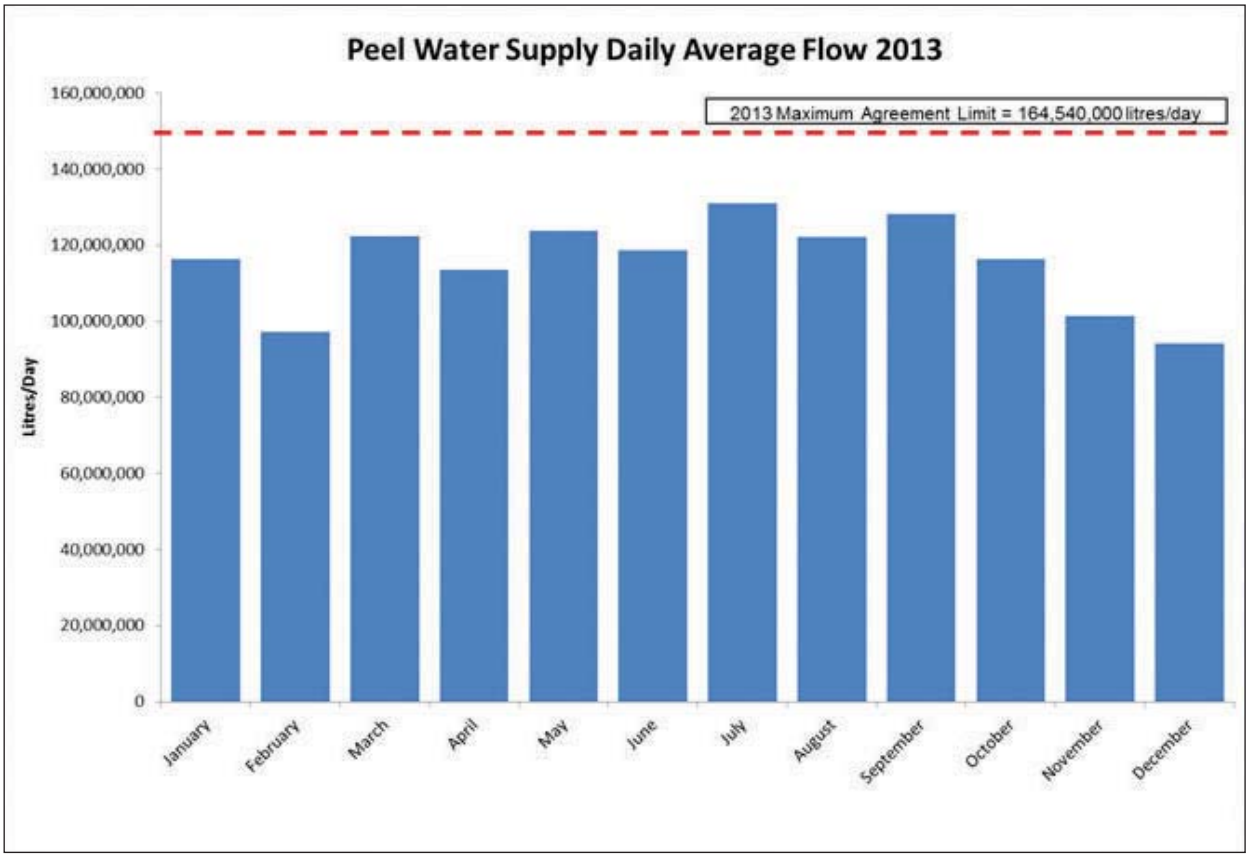
DISTRIBUTION	631 samples	[A] e-coli results	[A] total coliforms	295 hpc samples	0 to 10 hpc results

Average Treated Water Concentration (mg/L)	16	124	0.41
	sodium	hardness	fluoride

- Turbidity (Treated)
  N/A
- Turbidity (Raw)
  N/A
- Chlorine
  1,169 samples
  ranged 0.41 to 2.30 mg/L
  [min. to max.]




Toronto Water Supply Daily Average Flow 2013
2013 Maximum Agreement Limit = 501,840,000 litres/day
Litres/Day
550,000,000
500,000,000
450,000,000
400,000,000
350,000,000
300,000,000
250,000,000
200,000,000
150,000,000
100,000,000
50,000,000
0
January
February
March
April
May
June
July
August
September
October
November
December


Peel Water Supply Daily Average Flow 2013
2013 Maximum Agreement Limit = 164,540,000 litres/day
Litres/Day
160,000,000
140,000,000
120,000,000
100,000,000
80,000,000
60,000,000
40,000,000
20,000,000
0
January
February
March
April
May
June
July
August
September
October
November
December

Inorganics Test Results

Reading	Units	ODWS		1/7/2013	4/15/2013	4/18/2013	5/14/2013	7/15/2013	11/4/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0006	0.0005			0.0008	0.0007
Arsenic as As	mg/L	0.025	IMAC	0.0007	0.0008			0.001	0.0009
Barium as Ba	mg/L	1	MAC		0.0225				
Boron as B	mg/L	5	IMAC		0.018				
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001			< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	0.0004			< 0.0001	< 0.0002
Fluoride as F	mg/L	1.5	MAC	0.37	0.436			0.493	0.464
Lead as Pb	mg/L	0.01	MAC	< 0.0001	0.0001			0.0003	0.0002
Mercury as Hg	mg/L	0.001	MAC		< 0.00002				
Nitrate + Nitrite as N	mg/L	10	MAC	0.56	0.584			0.364	0.43
Nitrate as N	mg/L	10	MAC	0.56	0.584			0.364	0.43
Nitrite	mg/L	1	MAC	< 0.006	< 0.006			< 0.006	< 0.006
Selenium as Se	mg/L	0.01	MAC	0.0003	0.0006			0.0014	< 0.0005
Sodium as Na	mg/L	200	AO	15.9	21.6	23.4	16.5	14.7	15.4
Uranium as U	mg/L	0.02	MAC		0.0002				

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/7/2013	4/15/2013	7/15/2013	11/4/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC				< 0.0005
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC				< 0.0005
2,4,6-Trichlorophenol	mg/L	0.005	MAC				< 0.0005
2,4-Dichlorophenol	mg/L	0.9	MAC				< 0.0007
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC				< 0.0008
Alachlor	mg/L	0.005	IMAC				< 0.0004
Aldicarb	mg/L	0.009	MAC				< 0.0045
Aldrin + Dieldrin	mg/L	0.0007	MAC				< 0.000006
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC				< 0.0002
Azinphos-methyl	mg/L	0.02	MAC				< 0.0003
Bendiocarb	mg/L	0.04	MAC				< 0.003
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC				< 0.00001
Bromoxynil	mg/L	0.005	IMAC				< 0.0004
Carbaryl	mg/L	0.09	MAC				< 0.003
Carbofuran	mg/L	0.09	MAC				< 0.003
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC				< 0.000006
Chlorpyrifos	mg/L	0.09	MAC				< 0.0002
Cyanazine	mg/L	0.01	IMAC				< 0.0003
Diazinon	mg/L	0.02	MAC				< 0.0002
Dicamba	mg/L	0.12	MAC				< 0.0004
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC				< 0.0004
Dimethoate	mg/L	0.02	IMAC				< 0.0003
Dinoseb	mg/L	0.01	MAC				< 0.0005
Diquat	mg/L	0.07	MAC				< 0.001
Diuron	mg/L	0.15	MAC				< 0.003
Glyphosate	mg/L	0.28	IMAC				< 0.025
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC				< 0.000008
Lindane	mg/L	0.004	MAC				< 0.000005
Malathion	mg/L	0.19	MAC				< 0.0002
Methoxychlor	mg/L	0.9	MAC				< 0.000009
Metolachlor	mg/L	0.05	IMAC				< 0.0002
Metribuzin	mg/L	0.08	MAC				< 0.0003
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/7/2013	4/15/2013	7/15/2013	11/4/2013
Paraquat	mg/L	0.01	IMAC				< 0.001
Parathion	mg/L	0.05	MAC				< 0.0002
Pentachlorophenol	mg/L	0.06	MAC				< 0.0004
Phorate	mg/L	0.002	IMAC				< 0.0002
Picloram	mg/L	0.19	IMAC				< 0.0007
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC				< 0.00002
Prometryne	mg/L	0.001	IMAC				< 0.0002
Simazine	mg/L	0.01	IMAC				< 0.0002
Temephos	mg/L	0.28	IMAC				< 0.003
Terbufos	mg/L	0.001	IMAC				< 0.0002
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC				< 0.000006
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/7/2013	4/15/2013	7/15/2013	11/4/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0006	0.0005	0.0007	0.0006
Arsenic as As	mg/L	0.025	IMAC	0.0007	0.0007	0.0011	0.0008
Barium as Ba	mg/L	1	MAC		0.0225		
Boron as B	mg/L	5	IMAC		0.018		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	0.0004	0.0001	< 0.0002
Fluoride as F	mg/L	1.5	MAC	0.386	0.464	0.48	0.482
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC		< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	0.504	0.557	0.352	0.427
Nitrate as N	mg/L	10	MAC	0.504	0.557	0.352	0.427
Nitrite	mg/L	1	MAC	< 0.006	< 0.006	< 0.006	< 0.006
Selenium as Se	mg/L	0.01	MAC	0.0003	0.0006	0.0013	< 0.0005
Sodium as Na	mg/L	200	AO	14.8	20.4	14.4	15.3
Uranium as U	mg/L	0.02	MAC		0.0003		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/7/2013	4/15/2013	7/15/2013	11/4/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC				< 0.0005
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC				< 0.0005
2,4,6-Trichlorophenol	mg/L	0.005	MAC				< 0.0005
2,4-Dichlorophenol	mg/L	0.9	MAC				< 0.0007
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC				< 0.0008
Alachlor	mg/L	0.005	IMAC				< 0.0004
Aldicarb	mg/L	0.009	MAC				< 0.0045
Aldrin + Dieldrin	mg/L	0.0007	MAC				< 0.000006
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC				< 0.0002
Azinphos-methyl	mg/L	0.02	MAC				< 0.0003
Bendiocarb	mg/L	0.04	MAC				< 0.003
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC				< 0.00001
Bromoxynil	mg/L	0.005	IMAC				< 0.0004
Carbaryl	mg/L	0.09	MAC				< 0.003
Carbofuran	mg/L	0.09	MAC				< 0.003
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC				< 0.000006
Chlorpyrifos	mg/L	0.09	MAC				< 0.0002
Cyanazine	mg/L	0.01	IMAC				< 0.0003
Diazinon	mg/L	0.02	MAC				< 0.0002
Dicamba	mg/L	0.12	MAC				< 0.0004
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC				< 0.0004
Dimethoate	mg/L	0.02	IMAC				< 0.0003
Dinoseb	mg/L	0.01	MAC				< 0.0005
Diquat	mg/L	0.07	MAC				< 0.001
Diuron	mg/L	0.15	MAC				< 0.003
Glyphosate	mg/L	0.28	IMAC				< 0.025
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC				< 0.000008
Lindane	mg/L	0.004	MAC				< 0.000005
Malathion	mg/L	0.19	MAC				< 0.0002
Methoxychlor	mg/L	0.9	MAC				< 0.000009
Metolachlor	mg/L	0.05	IMAC				< 0.0002
Metribuzin	mg/L	0.08	MAC				< 0.0003
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/7/2013	4/15/2013	7/15/2013	11/4/2013
Paraquat	mg/L	0.01	IMAC				< 0.001
Parathion	mg/L	0.05	MAC				< 0.0002
Pentachlorophenol	mg/L	0.06	MAC				< 0.0004
Phorate	mg/L	0.002	IMAC				< 0.0002
Picloram	mg/L	0.19	IMAC				< 0.0007
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC				< 0.00002
Prometryne	mg/L	0.001	IMAC				< 0.0002
Simazine	mg/L	0.01	IMAC				< 0.0002
Temephos	mg/L	0.28	IMAC				< 0.003
Terbufos	mg/L	0.001	IMAC				< 0.0002
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC				< 0.000006
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/14/2013	4/15/2013	7/15/2013	10/7/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0008	0.0007	0.0007	0.0007
Arsenic as As	mg/L	0.025	IMAC	0.0008	0.0006	0.0007	0.0007
Barium as Ba	mg/L	1	MAC		0.0218		
Boron as B	mg/L	5	IMAC		0.02		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	0.0003	< 0.0001	< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.463	0.369	0.139	0.168
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC		< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	0.503	0.488	0.334	0.544
Nitrate as N	mg/L	10	MAC	0.503	0.488	0.334	0.544
Nitrite	mg/L	1	MAC	< 0.006	< 0.006	< 0.006	< 0.006
Selenium as Se	mg/L	0.01	MAC	0.0004	0.0005	0.0013	< 0.0001
Sodium as Na	mg/L	200	AO	14.6	16.3	13.6	13.9
Uranium as U	mg/L	0.02	MAC		0.0003		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/14/2013	4/15/2013	7/15/2013	10/7/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC				< 0.0005
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC				< 0.0005
2,4,6-Trichlorophenol	mg/L	0.005	MAC				< 0.0005
2,4-Dichlorophenol	mg/L	0.9	MAC				< 0.0007
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC				< 0.0008
Alachlor	mg/L	0.005	IMAC				< 0.0004
Aldicarb	mg/L	0.009	MAC				< 0.0045
Aldrin + Dieldrin	mg/L	0.0007	MAC				< 0.000006
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC				< 0.0002
Azinphos-methyl	mg/L	0.02	MAC				< 0.0003
Bendiocarb	mg/L	0.04	MAC				< 0.003
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC				< 0.00001
Bromoxynil	mg/L	0.005	IMAC				< 0.0004
Carbaryl	mg/L	0.09	MAC				< 0.003
Carbofuran	mg/L	0.09	MAC				< 0.003
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC				< 0.000006
Chlorpyrifos	mg/L	0.09	MAC				< 0.0002
Cyanazine	mg/L	0.01	IMAC				< 0.0003
Diazinon	mg/L	0.02	MAC				< 0.0002
Dicamba	mg/L	0.12	MAC				< 0.0004
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC				< 0.0004
Dimethoate	mg/L	0.02	IMAC				< 0.0003
Dinoseb	mg/L	0.01	MAC				< 0.0005
Diquat	mg/L	0.07	MAC				< 0.001
Diuron	mg/L	0.15	MAC				< 0.003
Glyphosate	mg/L	0.28	IMAC				< 0.025
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC				< 0.000008
Lindane	mg/L	0.004	MAC				< 0.000005
Malathion	mg/L	0.19	MAC				< 0.0002
Methoxychlor	mg/L	0.9	MAC				< 0.000009
Metolachlor	mg/L	0.05	IMAC				< 0.0002
Metribuzin	mg/L	0.08	MAC				< 0.0003
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/14/2013	4/15/2013	7/15/2013	10/7/2013
Paraquat	mg/L	0.01	IMAC				< 0.001
Parathion	mg/L	0.05	MAC				< 0.0002
Pentachlorophenol	mg/L	0.06	MAC				< 0.0004
Phorate	mg/L	0.002	IMAC				< 0.0002
Picloram	mg/L	0.19	IMAC				< 0.0007
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC				< 0.00002
Prometryne	mg/L	0.001	IMAC				< 0.0002
Simazine	mg/L	0.01	IMAC				< 0.0002
Temephos	mg/L	0.28	IMAC				< 0.003
Terbufos	mg/L	0.001	IMAC				< 0.0002
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC				< 0.000006
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/14/2013	4/15/2013	7/15/2013	10/7/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0007	0.0007	0.0007	0.0006
Arsenic as As	mg/L	0.025	IMAC	0.0007	0.0006	0.0005	0.0007
Barium as Ba	mg/L	1	MAC		0.0218		
Boron as B	mg/L	5	IMAC		0.021		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	0.0003	< 0.0001	< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.454	0.456	0.109	0.149
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	0.0001	0.0001
Mercury as Hg	mg/L	0.001	MAC		< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	0.505	0.469	0.332	0.527
Nitrate as N	mg/L	10	MAC	0.505	0.469	0.332	0.527
Nitrite	mg/L	1	MAC	< 0.006	< 0.006	< 0.006	< 0.006
Selenium as Se	mg/L	0.01	MAC	0.0003	0.0005	0.0006	< 0.0001
Sodium as Na	mg/L	200	AO	14.6	15.5	13.4	13.8
Uranium as U	mg/L	0.02	MAC		0.0003		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/14/2013	4/15/2013	7/15/2013	10/7/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC				< 0.0005
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC				< 0.0005
2,4,6-Trichlorophenol	mg/L	0.005	MAC				< 0.0005
2,4-Dichlorophenol	mg/L	0.9	MAC				< 0.0007
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC				< 0.0008
Alachlor	mg/L	0.005	IMAC				< 0.0004
Aldicarb	mg/L	0.009	MAC				< 0.0045
Aldrin + Dieldrin	mg/L	0.0007	MAC				< 0.000006
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC				< 0.0002
Azinphos-methyl	mg/L	0.02	MAC				< 0.0003
Bendiocarb	mg/L	0.04	MAC				< 0.003
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC				< 0.00001
Bromoxynil	mg/L	0.005	IMAC				< 0.0004
Carbaryl	mg/L	0.09	MAC				< 0.003
Carbofuran	mg/L	0.09	MAC				< 0.003
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC				< 0.000006
Chlorpyrifos	mg/L	0.09	MAC				< 0.0002
Cyanazine	mg/L	0.01	IMAC				< 0.0003
Diazinon	mg/L	0.02	MAC				< 0.0002
Dicamba	mg/L	0.12	MAC				< 0.0004
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC				< 0.0004
Dimethoate	mg/L	0.02	IMAC				< 0.0003
Dinoseb	mg/L	0.01	MAC				< 0.0005
Diquat	mg/L	0.07	MAC				< 0.001
Diuron	mg/L	0.15	MAC				< 0.003
Glyphosate	mg/L	0.28	IMAC				< 0.025
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC				< 0.000008
Lindane	mg/L	0.004	MAC				< 0.000005
Malathion	mg/L	0.19	MAC				< 0.0002
Methoxychlor	mg/L	0.9	MAC				< 0.000009
Metolachlor	mg/L	0.05	IMAC				< 0.0002
Metribuzin	mg/L	0.08	MAC				< 0.0003
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/14/2013	4/15/2013	7/15/2013	10/7/2013
Paraquat	mg/L	0.01	IMAC				< 0.001
Parathion	mg/L	0.05	MAC				< 0.0002
Pentachlorophenol	mg/L	0.06	MAC				< 0.0004
Phorate	mg/L	0.002	IMAC				< 0.0002
Picloram	mg/L	0.19	IMAC				< 0.0007
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC				< 0.00002
Prometryne	mg/L	0.001	IMAC				< 0.0002
Simazine	mg/L	0.01	IMAC				< 0.0002
Temephos	mg/L	0.28	IMAC				< 0.003
Terbufos	mg/L	0.001	IMAC				< 0.0002
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC				< 0.000006
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/14/2013	4/15/2013	7/15/2013	10/7/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0008	0.0007	0.0008	0.0006
Arsenic as As	mg/L	0.025	IMAC	0.0007	0.0006	0.0005	0.0007
Barium as Ba	mg/L	1	MAC		0.0218		
Boron as B	mg/L	5	IMAC		0.02		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	0.0003	0.0001	< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.474	0.401	0.145	0.174
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC		< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	0.501	0.49	0.33	0.559
Nitrate as N	mg/L	10	MAC	0.501	0.49	0.33	0.559
Nitrite	mg/L	1	MAC	< 0.006	< 0.006	< 0.006	< 0.006
Selenium as Se	mg/L	0.01	MAC	0.0004	0.0005	< 0.0001	< 0.0001
Sodium as Na	mg/L	200	AO	14.4	16.4	13.7	13.9
Uranium as U	mg/L	0.02	MAC		0.0003		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
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AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/14/2013	4/15/2013	7/15/2013	10/7/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC				< 0.0005
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC				< 0.0005
2,4,6-Trichlorophenol	mg/L	0.005	MAC				< 0.0005
2,4-Dichlorophenol	mg/L	0.9	MAC				< 0.0007
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC				< 0.0008
Alachlor	mg/L	0.005	IMAC				< 0.0004
Aldicarb	mg/L	0.009	MAC				< 0.0045
Aldrin + Dieldrin	mg/L	0.0007	MAC				< 0.000006
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC				< 0.0002
Azinphos-methyl	mg/L	0.02	MAC				< 0.0003
Bendiocarb	mg/L	0.04	MAC				< 0.003
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC				< 0.00001
Bromoxynil	mg/L	0.005	IMAC				< 0.0004
Carbaryl	mg/L	0.09	MAC				< 0.003
Carbofuran	mg/L	0.09	MAC				< 0.003
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC				< 0.000006
Chlorpyrifos	mg/L	0.09	MAC				< 0.0002
Cyanazine	mg/L	0.01	IMAC				< 0.0003
Diazinon	mg/L	0.02	MAC				< 0.0002
Dicamba	mg/L	0.12	MAC				< 0.0004
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC				< 0.0004
Dimethoate	mg/L	0.02	IMAC				< 0.0003
Dinoseb	mg/L	0.01	MAC				< 0.0005
Diquat	mg/L	0.07	MAC				< 0.001
Diuron	mg/L	0.15	MAC				< 0.003
Glyphosate	mg/L	0.28	IMAC				< 0.025
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC				< 0.000008
Lindane	mg/L	0.004	MAC				< 0.000005
Malathion	mg/L	0.19	MAC				< 0.0002
Methoxychlor	mg/L	0.9	MAC				< 0.000009
Metolachlor	mg/L	0.05	IMAC				< 0.0002
Metribuzin	mg/L	0.08	MAC				< 0.0003
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/14/2013	4/15/2013	7/15/2013	10/7/2013
Paraquat	mg/L	0.01	IMAC				< 0.001
Parathion	mg/L	0.05	MAC				< 0.0002
Pentachlorophenol	mg/L	0.06	MAC				< 0.0004
Phorate	mg/L	0.002	IMAC				< 0.0002
Picloram	mg/L	0.19	IMAC				< 0.0007
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC				< 0.00002
Prometryne	mg/L	0.001	IMAC				< 0.0002
Simazine	mg/L	0.01	IMAC				< 0.0002
Temephos	mg/L	0.28	IMAC				< 0.003
Terbufos	mg/L	0.001	IMAC				< 0.0002
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC				< 0.000006
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	7/24/2013	10/23/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0005	0.0006	0.0006	< 0.003
Arsenic as As	mg/L	0.025	IMAC	0.0008	0.0006	0.0007	0.001
Barium as Ba	mg/L	1	MAC		0.0226		
Boron as B	mg/L	5	IMAC		0.014		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	0.0003	0.0007	0.0006	< 0.0003
Fluoride as F	mg/L	1.5	MAC	0.473	0.48	0.445	0.49
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0007
Mercury as Hg	mg/L	0.001	MAC		< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	0.555	0.52	0.398	0.649
Nitrate as N	mg/L	10	MAC	0.555	0.515	0.398	0.649
Nitrite	mg/L	1	MAC	< 0.006	< 0.02	< 0.006	< 0.008
Selenium as Se	mg/L	0.01	MAC	0.0005	< 0.0001	< 0.0001	< 0.002
Sodium as Na	mg/L	200	AO	15.8	18.9	14.7	14.7
Uranium as U	mg/L	0.02	MAC		0.0003		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	7/24/2013	8/14/2013	10/23/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC			< 0.0005		
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC			< 0.0005		
2,4,6-Trichlorophenol	mg/L	0.005	MAC			< 0.0005		
2,4-Dichlorophenol	mg/L	0.9	MAC			< 0.0007		
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC			< 0.0008		
Alachlor	mg/L	0.005	IMAC			< 0.0004		
Aldicarb	mg/L	0.009	MAC				< 0.0045	
Aldrin + Dieldrin	mg/L	0.0007	MAC			< 0.000006		
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC			< 0.0002		
Azinphos-methyl	mg/L	0.02	MAC			< 0.0003		
Bendiocarb	mg/L	0.04	MAC				< 0.003	
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC			< 0.00001		
Bromoxynil	mg/L	0.005	IMAC			< 0.0004		
Carbaryl	mg/L	0.09	MAC				< 0.003	
Carbofuran	mg/L	0.09	MAC				< 0.003	
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002
Chlordane (Total)	mg/L	0.007	MAC			< 0.000006		
Chlorpyrifos	mg/L	0.09	MAC			< 0.0002		
Cyanazine	mg/L	0.01	IMAC			< 0.0003		
Diazinon	mg/L	0.02	MAC			< 0.0002		
Dicamba	mg/L	0.12	MAC			< 0.0004		
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005		< 0.0005
Diclofop-methyl	mg/L	0.009	MAC			< 0.0004		
Dimethoate	mg/L	0.02	IMAC			< 0.0003		
Dinoseb	mg/L	0.01	MAC			< 0.0005		
Diquat	mg/L	0.07	MAC			< 0.001		
Diuron	mg/L	0.15	MAC				< 0.003	
Glyphosate	mg/L	0.28	IMAC			< 0.025		
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC			< 0.000008		
Lindane	mg/L	0.004	MAC			< 0.000005		
Malathion	mg/L	0.19	MAC			< 0.0002		
Methoxychlor	mg/L	0.9	MAC			< 0.000009		
Metolachlor	mg/L	0.05	IMAC			< 0.0002		
Metribuzin	mg/L	0.08	MAC			< 0.0003		
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	7/24/2013	8/14/2013	10/23/2013
Paraquat	mg/L	0.01	IMAC			< 0.001		
Parathion	mg/L	0.05	MAC			< 0.0002		
Pentachlorophenol	mg/L	0.06	MAC			< 0.0004		
Phorate	mg/L	0.002	IMAC			< 0.0002		
Picloram	mg/L	0.19	IMAC			< 0.0007		
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC			< 0.00002		
Prometryne	mg/L	0.001	IMAC			< 0.0002		
Simazine	mg/L	0.01	IMAC			< 0.0002		
Temephos	mg/L	0.28	IMAC			< 0.003		
Terbufos	mg/L	0.001	IMAC			< 0.0002		
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004	
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Trifluralin	mg/L	0.045	IMAC			< 0.000006		
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
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mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/7/2013	4/15/2013	7/15/2013	11/4/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0006	0.0005	0.0007	0.0007
Arsenic as As	mg/L	0.025	IMAC	0.0007	0.0007	0.0009	0.0008
Barium as Ba	mg/L	1	MAC		0.0224		
Boron as B	mg/L	5	IMAC		0.018		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	0.0003	< 0.0001	< 0.0002
Fluoride as F	mg/L	1.5	MAC	0.412	0.481	0.455	0.483
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC		< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	0.468	0.529	0.335	0.413
Nitrate as N	mg/L	10	MAC	0.468	0.529	0.335	0.413
Nitrite	mg/L	1	MAC	< 0.006	< 0.006	< 0.006	< 0.006
Selenium as Se	mg/L	0.01	MAC	0.0003	0.0006	0.0003	0.0006
Sodium as Na	mg/L	200	AO	14.1	19.8	14	14.7
Uranium as U	mg/L	0.02	MAC		0.0003		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/7/2013	4/15/2013	7/15/2013	11/4/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC				< 0.0005
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC				< 0.0005
2,4,6-Trichlorophenol	mg/L	0.005	MAC				< 0.0005
2,4-Dichlorophenol	mg/L	0.9	MAC				< 0.0007
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC				< 0.0008
Alachlor	mg/L	0.005	IMAC				< 0.0004
Aldicarb	mg/L	0.009	MAC				< 0.0045
Aldrin + Dieldrin	mg/L	0.0007	MAC				< 0.000006
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC				< 0.0002
Azinphos-methyl	mg/L	0.02	MAC				< 0.0003
Bendiocarb	mg/L	0.04	MAC				< 0.003
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC				< 0.00001
Bromoxynil	mg/L	0.005	IMAC				< 0.0004
Carbaryl	mg/L	0.09	MAC				< 0.003
Carbofuran	mg/L	0.09	MAC				< 0.003
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC				< 0.000006
Chlorpyrifos	mg/L	0.09	MAC				< 0.0002
Cyanazine	mg/L	0.01	IMAC				< 0.0003
Diazinon	mg/L	0.02	MAC				< 0.0002
Dicamba	mg/L	0.12	MAC				< 0.0004
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC				< 0.0004
Dimethoate	mg/L	0.02	IMAC				< 0.0003
Dinoseb	mg/L	0.01	MAC				< 0.0005
Diquat	mg/L	0.07	MAC				< 0.001
Diuron	mg/L	0.15	MAC				< 0.003
Glyphosate	mg/L	0.28	IMAC				< 0.025
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC				< 0.000008
Lindane	mg/L	0.004	MAC				< 0.000005
Malathion	mg/L	0.19	MAC				< 0.0002
Methoxychlor	mg/L	0.9	MAC				< 0.000009
Metolachlor	mg/L	0.05	IMAC				< 0.0002
Metribuzin	mg/L	0.08	MAC				< 0.0003
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/7/2013	4/15/2013	7/15/2013	11/4/2013
Paraquat	mg/L	0.01	IMAC				< 0.001
Parathion	mg/L	0.05	MAC				< 0.0002
Pentachlorophenol	mg/L	0.06	MAC				< 0.0004
Phorate	mg/L	0.002	IMAC				< 0.0002
Picloram	mg/L	0.19	IMAC				< 0.0007
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC				< 0.00002
Prometryne	mg/L	0.001	IMAC				< 0.0002
Simazine	mg/L	0.01	IMAC				< 0.0002
Temephos	mg/L	0.28	IMAC				< 0.003
Terbufos	mg/L	0.001	IMAC				< 0.0002
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC				< 0.000006
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/7/2013	4/15/2013	4/18/2013	5/14/2013	7/15/2013	11/4/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0006	0.0005			0.0008	0.0011
Arsenic as As	mg/L	0.025	IMAC	0.0007	0.0008			0.001	0.0008
Barium as Ba	mg/L	1	MAC		0.0226				
Boron as B	mg/L	5	IMAC		0.018				
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001			< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	0.0003			0.0001	< 0.0002
Fluoride as F	mg/L	1.5	MAC	0.33	0.435			0.478	0.478
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001			< 0.0001	0.0003
Mercury as Hg	mg/L	0.001	MAC		< 0.00002				
Nitrate + Nitrite as N	mg/L	10	MAC	0.575	0.607			0.345	0.417
Nitrate as N	mg/L	10	MAC	0.575	0.607			0.345	0.417
Nitrite	mg/L	1	MAC	< 0.006	< 0.006			< 0.006	< 0.006
Selenium as Se	mg/L	0.01	MAC	0.0004	0.0006			0.0013	< 0.0005
Sodium as Na	mg/L	200	AO	16.1	21.7	21.6	17.2	15.1	15.3
Uranium as U	mg/L	0.02	MAC		0.0003				

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
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AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/7/2013	4/15/2013	7/15/2013	11/4/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC				< 0.0005
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC				< 0.0005
2,4,6-Trichlorophenol	mg/L	0.005	MAC				< 0.0005
2,4-Dichlorophenol	mg/L	0.9	MAC				< 0.0007
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC				< 0.0008
Alachlor	mg/L	0.005	IMAC				< 0.0004
Aldicarb	mg/L	0.009	MAC				< 0.0045
Aldrin + Dieldrin	mg/L	0.0007	MAC				< 0.000006
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC				< 0.0002
Azinphos-methyl	mg/L	0.02	MAC				< 0.0003
Bendiocarb	mg/L	0.04	MAC				< 0.003
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC				< 0.00001
Bromoxynil	mg/L	0.005	IMAC				< 0.0004
Carbaryl	mg/L	0.09	MAC				< 0.003
Carbofuran	mg/L	0.09	MAC				< 0.003
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC				< 0.000006
Chlorpyrifos	mg/L	0.09	MAC				< 0.0002
Cyanazine	mg/L	0.01	IMAC				< 0.0003
Diazinon	mg/L	0.02	MAC				< 0.0002
Dicamba	mg/L	0.12	MAC				< 0.0004
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC				< 0.0004
Dimethoate	mg/L	0.02	IMAC				< 0.0003
Dinoseb	mg/L	0.01	MAC				< 0.0005
Diquat	mg/L	0.07	MAC				< 0.001
Diuron	mg/L	0.15	MAC				< 0.003
Glyphosate	mg/L	0.28	IMAC				< 0.025
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC				< 0.000008
Lindane	mg/L	0.004	MAC				< 0.000005
Malathion	mg/L	0.19	MAC				< 0.0002
Methoxychlor	mg/L	0.9	MAC				< 0.000009
Metolachlor	mg/L	0.05	IMAC				< 0.0002
Metribuzin	mg/L	0.08	MAC				< 0.0003
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/7/2013	4/15/2013	7/15/2013	11/4/2013
Paraquat	mg/L	0.01	IMAC				< 0.001
Parathion	mg/L	0.05	MAC				< 0.0002
Pentachlorophenol	mg/L	0.06	MAC				< 0.0004
Phorate	mg/L	0.002	IMAC				< 0.0002
Picloram	mg/L	0.19	IMAC				< 0.0007
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC				< 0.00002
Prometryne	mg/L	0.001	IMAC				< 0.0002
Simazine	mg/L	0.01	IMAC				< 0.0002
Temephos	mg/L	0.28	IMAC				< 0.003
Terbufos	mg/L	0.001	IMAC				< 0.0002
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC				< 0.000006
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	7/24/2013	10/23/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0005	0.0005	0.0006	< 0.003
Arsenic as As	mg/L	0.025	IMAC	0.0008	0.0006	0.0007	< 0.0007
Barium as Ba	mg/L	1	MAC		0.0225		
Boron as B	mg/L	5	IMAC		0.014		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	0.0003	0.0002	0.0005	< 0.0003
Fluoride as F	mg/L	1.5	MAC	0.461	0.48	0.451	0.5
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0007
Mercury as Hg	mg/L	0.001	MAC		< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	0.543	0.51	0.403	0.651
Nitrate as N	mg/L	10	MAC	0.543	0.51	0.403	0.651
Nitrite	mg/L	1	MAC	< 0.006	< 0.02	< 0.006	< 0.008
Selenium as Se	mg/L	0.01	MAC	0.0004	< 0.0001	< 0.0001	< 0.002
Sodium as Na	mg/L	200	AO	15.8	19	14.7	14.8
Uranium as U	mg/L	0.02	MAC		0.0003		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	7/24/2013	8/14/2013	10/23/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC			< 0.0005		
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC			< 0.0005		
2,4,6-Trichlorophenol	mg/L	0.005	MAC			< 0.0005		
2,4-Dichlorophenol	mg/L	0.9	MAC			< 0.0007		
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC			< 0.0008		
Alachlor	mg/L	0.005	IMAC			< 0.0004		
Aldicarb	mg/L	0.009	MAC				< 0.0045	
Aldrin + Dieldrin	mg/L	0.0007	MAC			< 0.000006		
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC			< 0.0002		
Azinphos-methyl	mg/L	0.02	MAC			< 0.0003		
Bendiocarb	mg/L	0.04	MAC				< 0.003	
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC			< 0.00001		
Bromoxynil	mg/L	0.005	IMAC			< 0.0004		
Carbaryl	mg/L	0.09	MAC				< 0.003	
Carbofuran	mg/L	0.09	MAC				< 0.003	
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002
Chlordane (Total)	mg/L	0.007	MAC			< 0.000006		
Chlorpyrifos	mg/L	0.09	MAC			< 0.0002		
Cyanazine	mg/L	0.01	IMAC			< 0.0003		
Diazinon	mg/L	0.02	MAC			< 0.0002		
Dicamba	mg/L	0.12	MAC			< 0.0004		
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005		< 0.0005
Diclofop-methyl	mg/L	0.009	MAC			< 0.0004		
Dimethoate	mg/L	0.02	IMAC			< 0.0003		
Dinoseb	mg/L	0.01	MAC			< 0.0005		
Diquat	mg/L	0.07	MAC			< 0.001		
Diuron	mg/L	0.15	MAC				< 0.003	
Glyphosate	mg/L	0.28	IMAC			< 0.025		
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC			< 0.000008		
Lindane	mg/L	0.004	MAC			< 0.000005		
Malathion	mg/L	0.19	MAC			< 0.0002		
Methoxychlor	mg/L	0.9	MAC			< 0.000009		
Metolachlor	mg/L	0.05	IMAC			< 0.0002		
Metribuzin	mg/L	0.08	MAC			< 0.0003		
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	7/24/2013	8/14/2013	10/23/2013
Paraquat	mg/L	0.01	IMAC			< 0.001		
Parathion	mg/L	0.05	MAC			< 0.0002		
Pentachlorophenol	mg/L	0.06	MAC			< 0.0004		
Phorate	mg/L	0.002	IMAC			< 0.0002		
Picloram	mg/L	0.19	IMAC			< 0.0007		
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC			< 0.00002		
Prometryne	mg/L	0.001	IMAC			< 0.0002		
Simazine	mg/L	0.01	IMAC			< 0.0002		
Temephos	mg/L	0.28	IMAC			< 0.003		
Terbufos	mg/L	0.001	IMAC			< 0.0002		
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004	
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Trifluralin	mg/L	0.045	IMAC			< 0.000006		
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
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AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/7/2013	4/15/2013	4/18/2013	5/14/2013	7/15/2013	11/4/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0006	0.0005			0.0007	0.0006
Arsenic as As	mg/L	0.025	IMAC	0.0007	0.0007			0.001	0.001
Barium as Ba	mg/L	1	MAC		0.0226				
Boron as B	mg/L	5	IMAC		0.018				
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001			< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	0.0003			< 0.0001	0.0002
Fluoride as F	mg/L	1.5	MAC	0.355	0.434			0.466	0.47
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001			< 0.0001	0.0001
Mercury as Hg	mg/L	0.001	MAC		< 0.00002				
Nitrate + Nitrite as N	mg/L	10	MAC	0.537	0.571			0.354	0.44
Nitrate as N	mg/L	10	MAC	0.537	0.571			0.354	0.44
Nitrite	mg/L	1	MAC	< 0.006	< 0.006			< 0.006	< 0.006
Selenium as Se	mg/L	0.01	MAC	0.0003	0.0005			0.0005	< 0.0005
Sodium as Na	mg/L	200	AO	15.6	22	24.2	16.3	15.1	15.6
Uranium as U	mg/L	0.02	MAC		0.0002				

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AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/7/2013	4/15/2013	7/15/2013	11/4/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC				< 0.0005
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC				< 0.0005
2,4,6-Trichlorophenol	mg/L	0.005	MAC				< 0.0005
2,4-Dichlorophenol	mg/L	0.9	MAC				< 0.0007
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC				< 0.0008
Alachlor	mg/L	0.005	IMAC				< 0.0004
Aldicarb	mg/L	0.009	MAC				< 0.0045
Aldrin + Dieldrin	mg/L	0.0007	MAC				< 0.000006
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC				< 0.0002
Azinphos-methyl	mg/L	0.02	MAC				< 0.0003
Bendiocarb	mg/L	0.04	MAC				< 0.003
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC				< 0.00001
Bromoxynil	mg/L	0.005	IMAC				< 0.0004
Carbaryl	mg/L	0.09	MAC				< 0.003
Carbofuran	mg/L	0.09	MAC				< 0.003
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC				< 0.000006
Chlorpyrifos	mg/L	0.09	MAC				< 0.0002
Cyanazine	mg/L	0.01	IMAC				< 0.0003
Diazinon	mg/L	0.02	MAC				< 0.0002
Dicamba	mg/L	0.12	MAC				< 0.0004
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC				< 0.0004
Dimethoate	mg/L	0.02	IMAC				< 0.0003
Dinoseb	mg/L	0.01	MAC				< 0.0005
Diquat	mg/L	0.07	MAC				< 0.001
Diuron	mg/L	0.15	MAC				< 0.003
Glyphosate	mg/L	0.28	IMAC				< 0.025
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC				< 0.000008
Lindane	mg/L	0.004	MAC				< 0.000005
Malathion	mg/L	0.19	MAC				< 0.0002
Methoxychlor	mg/L	0.9	MAC				< 0.000009
Metolachlor	mg/L	0.05	IMAC				< 0.0002
Metribuzin	mg/L	0.08	MAC				< 0.0003
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/7/2013	4/15/2013	7/15/2013	11/4/2013
Paraquat	mg/L	0.01	IMAC				< 0.001
Parathion	mg/L	0.05	MAC				< 0.0002
Pentachlorophenol	mg/L	0.06	MAC				< 0.0004
Phorate	mg/L	0.002	IMAC				< 0.0002
Picloram	mg/L	0.19	IMAC				< 0.0007
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC				< 0.00002
Prometryne	mg/L	0.001	IMAC				< 0.0002
Simazine	mg/L	0.01	IMAC				< 0.0002
Temephos	mg/L	0.28	IMAC				< 0.003
Terbufos	mg/L	0.001	IMAC				< 0.0002
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC				< 0.000006
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002

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ODWS: Ontario Drinking Water Standard
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mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/14/2013	4/15/2013	4/19/2013	7/15/2013	10/7/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0008	0.0007		0.0007	0.0006
Arsenic as As	mg/L	0.025	IMAC	0.0008	0.0007		0.0005	0.0008
Barium as Ba	mg/L	1	MAC		0.0229			
Boron as B	mg/L	5	IMAC		0.02			
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	0.0003		< 0.0001	< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.408	0.429		0.465	0.534
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC		< 0.00002			
Nitrate + Nitrite as N	mg/L	10	MAC	0.503	0.578		0.323	0.562
Nitrate as N	mg/L	10	MAC	0.503	0.578		0.323	0.562
Nitrite	mg/L	1	MAC	< 0.006	< 0.006		< 0.006	< 0.006
Selenium as Se	mg/L	0.01	MAC	0.0005	0.0006		0.0003	< 0.0001
Sodium as Na	mg/L	200	AO	14.2	23.3	15.8	13.8	14.7
Uranium as U	mg/L	0.02	MAC		0.0002			

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MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/14/2013	4/15/2013	7/15/2013	10/7/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC				< 0.0005
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC				< 0.0005
2,4,6-Trichlorophenol	mg/L	0.005	MAC				< 0.0005
2,4-Dichlorophenol	mg/L	0.9	MAC				< 0.0007
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC				< 0.0008
Alachlor	mg/L	0.005	IMAC				< 0.0004
Aldicarb	mg/L	0.009	MAC				< 0.0045
Aldrin + Dieldrin	mg/L	0.0007	MAC				< 0.000006
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC				< 0.0002
Azinphos-methyl	mg/L	0.02	MAC				< 0.0003
Bendiocarb	mg/L	0.04	MAC				< 0.003
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC				< 0.00001
Bromoxynil	mg/L	0.005	IMAC				< 0.0004
Carbaryl	mg/L	0.09	MAC				< 0.003
Carbofuran	mg/L	0.09	MAC				< 0.003
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC				< 0.000006
Chlorpyrifos	mg/L	0.09	MAC				< 0.0002
Cyanazine	mg/L	0.01	IMAC				< 0.0003
Diazinon	mg/L	0.02	MAC				< 0.0002
Dicamba	mg/L	0.12	MAC				< 0.0004
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC				< 0.0004
Dimethoate	mg/L	0.02	IMAC				< 0.0003
Dinoseb	mg/L	0.01	MAC				< 0.0005
Diquat	mg/L	0.07	MAC				< 0.001
Diuron	mg/L	0.15	MAC				< 0.003
Glyphosate	mg/L	0.28	IMAC				< 0.025
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC				< 0.000008
Lindane	mg/L	0.004	MAC				< 0.000005
Malathion	mg/L	0.19	MAC				< 0.0002
Methoxychlor	mg/L	0.9	MAC				< 0.000009
Metolachlor	mg/L	0.05	IMAC				< 0.0002
Metribuzin	mg/L	0.08	MAC				< 0.0003
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/14/2013	4/15/2013	7/15/2013	10/7/2013
Paraquat	mg/L	0.01	IMAC				< 0.001
Parathion	mg/L	0.05	MAC				< 0.0002
Pentachlorophenol	mg/L	0.06	MAC				< 0.0004
Phorate	mg/L	0.002	IMAC				< 0.0002
Picloram	mg/L	0.19	IMAC				< 0.0007
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC				< 0.00002
Prometryne	mg/L	0.001	IMAC				< 0.0002
Simazine	mg/L	0.01	IMAC				< 0.0002
Temephos	mg/L	0.28	IMAC				< 0.003
Terbufos	mg/L	0.001	IMAC				< 0.0002
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC				< 0.000006
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/7/2013	4/15/2013	7/15/2013	11/4/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0006	0.0005	0.0007	0.0008
Arsenic as As	mg/L	0.025	IMAC	0.0005	0.0005	0.0004	0.0005
Barium as Ba	mg/L	1	MAC		0.022		
Boron as B	mg/L	5	IMAC		0.018		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	0.0001	0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	0.0005	< 0.0001	0.0002
Fluoride as F	mg/L	1.5	MAC	0.573	0.333	0.428	0.452
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	0.0001	0.0001
Mercury as Hg	mg/L	0.001	MAC		< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	0.58	0.539	0.324	0.425
Nitrate as N	mg/L	10	MAC	0.58	0.539	0.324	0.425
Nitrite	mg/L	1	MAC	< 0.006	< 0.006	< 0.006	< 0.006
Selenium as Se	mg/L	0.01	MAC	0.0003	0.0005	0.0004	< 0.0005
Sodium as Na	mg/L	200	AO	15.7	19.1	13.8	14.1
Uranium as U	mg/L	0.02	MAC		0.0003		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/7/2013	4/15/2013	7/15/2013	11/4/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC				< 0.0005
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC				< 0.0005
2,4,6-Trichlorophenol	mg/L	0.005	MAC				< 0.0005
2,4-Dichlorophenol	mg/L	0.9	MAC				< 0.0007
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC				< 0.0008
Alachlor	mg/L	0.005	IMAC				< 0.0004
Aldicarb	mg/L	0.009	MAC				< 0.0045
Aldrin + Dieldrin	mg/L	0.0007	MAC				< 0.000006
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC				< 0.0002
Azinphos-methyl	mg/L	0.02	MAC				< 0.0003
Bendiocarb	mg/L	0.04	MAC				< 0.003
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC				< 0.00001
Bromoxynil	mg/L	0.005	IMAC				< 0.0004
Carbaryl	mg/L	0.09	MAC				< 0.003
Carbofuran	mg/L	0.09	MAC				< 0.003
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC				< 0.000006
Chlorpyrifos	mg/L	0.09	MAC				< 0.0002
Cyanazine	mg/L	0.01	IMAC				< 0.0003
Diazinon	mg/L	0.02	MAC				< 0.0002
Dicamba	mg/L	0.12	MAC				< 0.0004
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC				< 0.0004
Dimethoate	mg/L	0.02	IMAC				< 0.0003
Dinoseb	mg/L	0.01	MAC				< 0.0005
Diquat	mg/L	0.07	MAC				< 0.001
Diuron	mg/L	0.15	MAC				< 0.003
Glyphosate	mg/L	0.28	IMAC				< 0.025
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC				< 0.000008
Lindane	mg/L	0.004	MAC				< 0.000005
Malathion	mg/L	0.19	MAC				< 0.0002
Methoxychlor	mg/L	0.9	MAC				< 0.000009
Metolachlor	mg/L	0.05	IMAC				< 0.0002
Metribuzin	mg/L	0.08	MAC				< 0.0003
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/7/2013	4/15/2013	7/15/2013	11/4/2013
Paraquat	mg/L	0.01	IMAC				< 0.001
Parathion	mg/L	0.05	MAC				< 0.0002
Pentachlorophenol	mg/L	0.06	MAC				< 0.0004
Phorate	mg/L	0.002	IMAC				< 0.0002
Picloram	mg/L	0.19	IMAC				< 0.0007
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC				< 0.00002
Prometryne	mg/L	0.001	IMAC				< 0.0002
Simazine	mg/L	0.01	IMAC				< 0.0002
Temephos	mg/L	0.28	IMAC				< 0.003
Terbufos	mg/L	0.001	IMAC				< 0.0002
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC				< 0.000006
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

York
drinking water system

[surface + groundwater]

The York Drinking Water System consists of wells, pumping stations, storage facilities and large diameter watermains required to transmit water between pumping stations and storage facilities. The York Drinking Water System supplies water to the Towns of Aurora, East Gwillimbury, Township of King, Community of Kleinburg, Town of Newmarket, and Town of Whitchurch-Stouffville.

Surface water is blended with groundwater within the York Drinking Water System. The description of each groundwater source within the York Drinking Water System is provided in the following sections of the report.

Water Treatment

Lake-Based Supply: The majority of the water supplied to the local municipalities from the York Drinking Water System is sourced from Lake Ontario. Raw water is treated by the City of Toronto or Peel Region and enters through York Region's transmission system. No further treatment is performed by York Region as the water travels to the local municipal distribution systems, however some of the water storage facilities in Aurora and Newmarket have the ability to re-chlorinate water if required. Fluoride is not added to the York Drinking Water System groundwater supply, although fluoride is added to lake-based water supply from the City of Toronto and Peel Region.

Groundwater Supply: Groundwater supply in the York Drinking Water System is treated and blended with the lake-based water supplied by City of Toronto and Peel Region. To ensure the treatment processes for groundwater are consistent with the lake-based water supplied, the groundwater wells in the York Drinking Water System, are treated with a combination of chlorine and ammonia to form the common distribution system chloramine secondary disinfectant. Sodium silicate is added to the treatment process to reduce the potential for

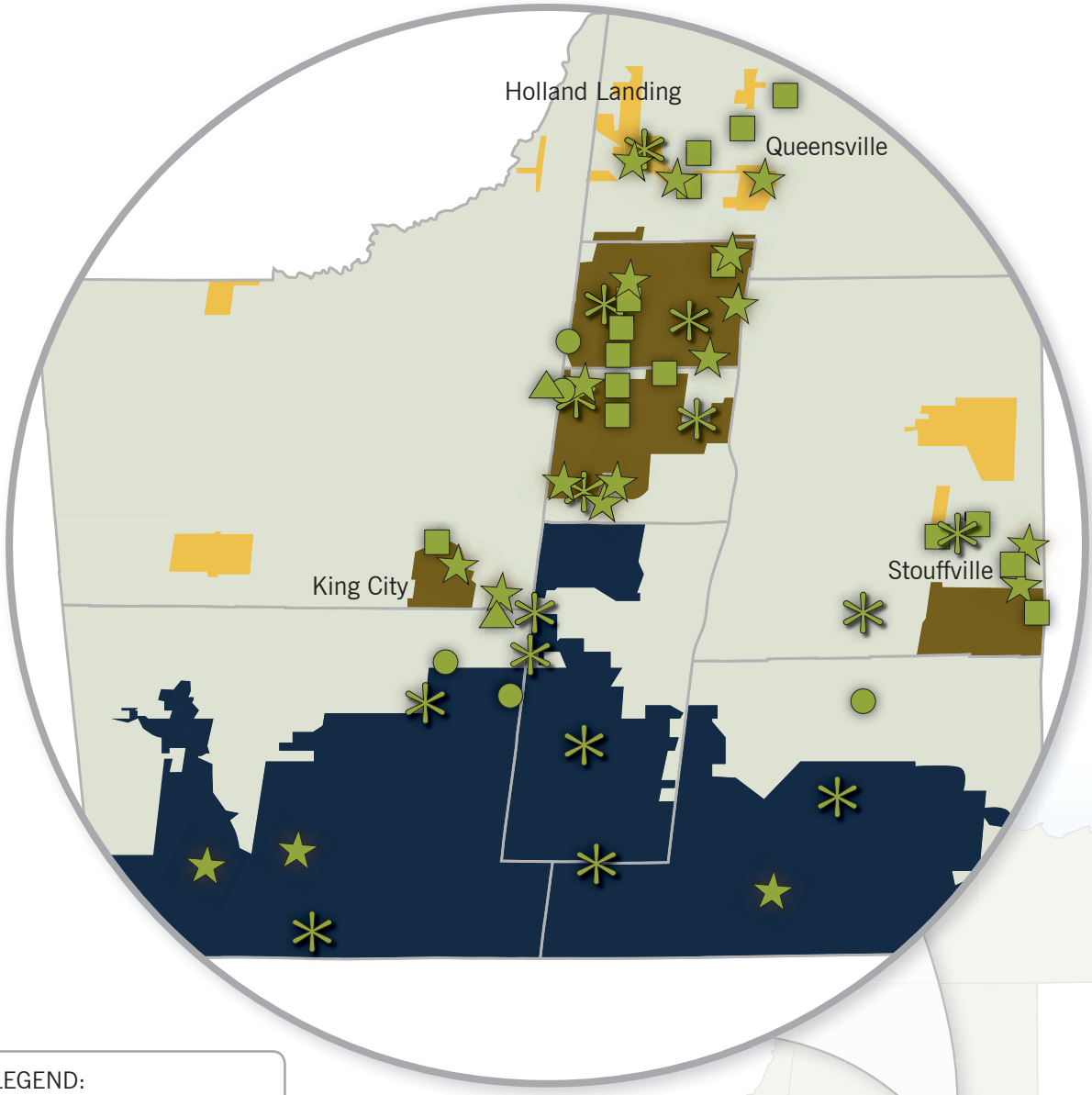
Water Treatment *(continued)*

iron to stain plumbing fixtures and laundry in the serviced area. Treatment processes throughout facilities are monitored by online analyzers which are equipped with alarms and lockouts to alert operational staff of conditions requiring attention. Treatment is consistent for all groundwater supply systems in the York Drinking Water System unless otherwise indicated in the following sections.

Summary of Approvals and Permits

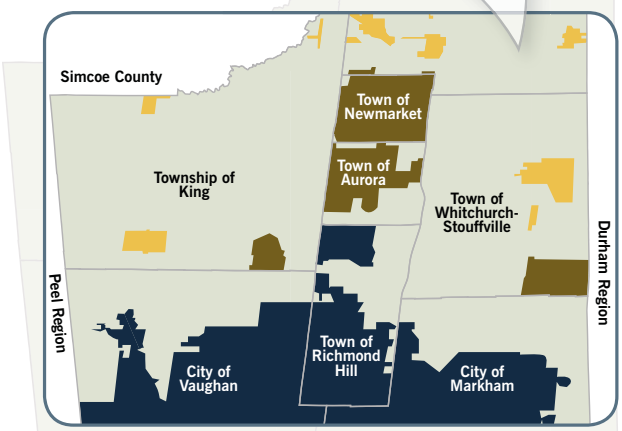
The amount of lake based water withdrawn for the York Drinking Water System is limited to the amount set within the agreements York Region has with Peel Region and the City of Toronto which is further discussed in G-1. Alternatively, water withdrawal from each of the groundwater wells in the York Drinking Water System is regulated by a Permit to Take Water issued by the MOE for the Yonge Street Aquifer as a whole.

York Drinking Water System service area



LEGEND:

- Pumping Station
- Elevated Tank
- Reservoir
- Production Well
- Pressure Sustaining Valve (PSV)
- Lake Ontario
- Groundwater and Lake Ontario
- Groundwater



Aurora

drinking water sub-system

York Drinking Water System

[surface + groundwater]

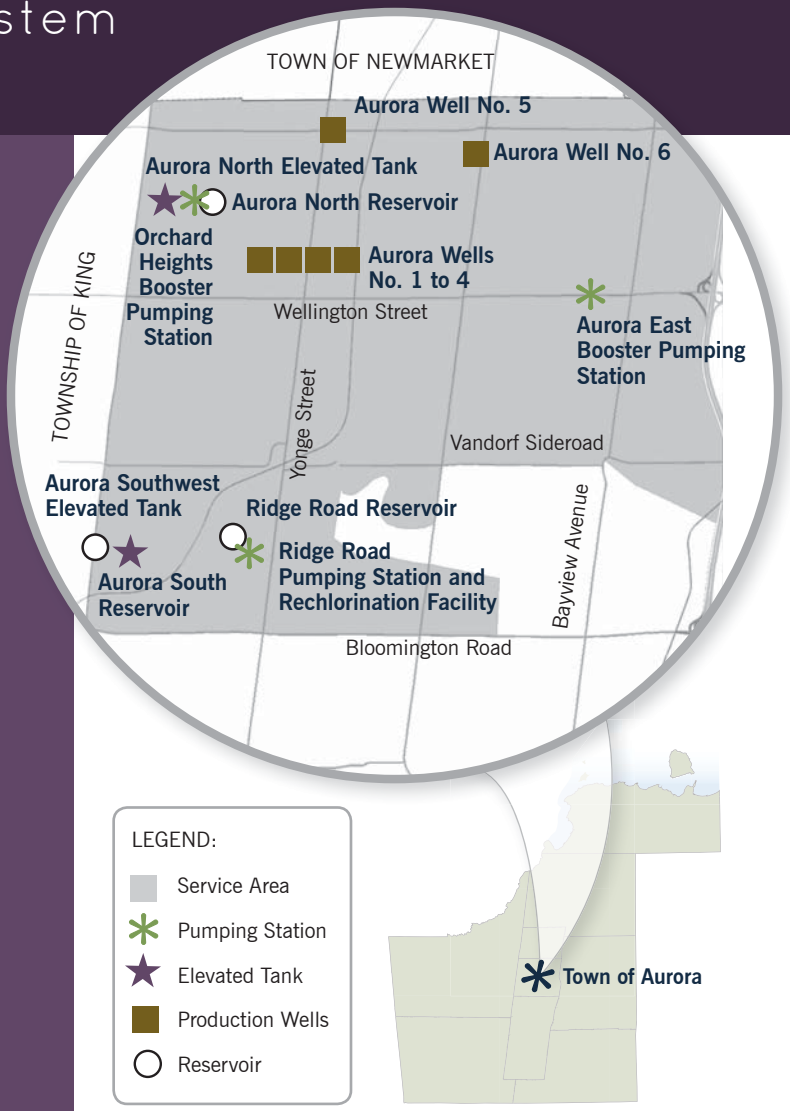
York Region operates six wells in the Town of Aurora. The Aurora wells draw water from the Yonge Street Aquifer. The Aurora wells are part of an interconnecting system between Aurora, East Gwillimbury, Newmarket and the York Drinking Water System.

York Region supplements the groundwater supply in Aurora with lake based water. The intent is to decrease the demand on the aquifer and provide additional security by having a second supply source.

Raw Water Source Description

Wells are mostly screened in the deep aquifer. Water quality meets all health-related Ontario Drinking Water Standards (ODWS). Aesthetic parameters, such as iron and hardness exceeded the ODWS, although that is common in deep aquifers in York Region.

Chloramine is used to treat and disinfect groundwater, sodium silicate is also added to reduce the potential for iron to stain plumbing fixtures and laundry in the serviced area. Treatment processes throughout the facility are monitored by online analyzers which are equipped with alarms and lockouts to alert operational staff of conditions requiring attention. Treatment is consistent with the description in section H-1. Currently, there is one reservoir and two elevated tanks servicing Town of Aurora.



Summary of Approvals and Permits

Municipal Drinking Water	
Licence Number:	013-101
Issue Number:	Issue 2
Issue Date:	March 12, 2010
Revision Date:	May 4, 2012
Expiry Date:	March 11, 2015
Drinking Water Works	
Permit Number:	013-201
Issue Number:	Issue 5
Issue Date:	March 11, 2012
Revision Date:	September 18, 2013
Permit to Take Water Number:	6623-68QQ6L
Issue Date:	March 10, 2005
Expiry Date:	March 31, 2015
Operational Plan Number:	013-401
Financial Plan Number:	013-301A
MOE Waterworks Number:	220002440
System Classification:	Water Distribution and Supply III (WDS III)

Aurora Drinking Water Sub-System (Wells 1 to 6) Performance Summary:

[A] Absence
[hpc] Heterotrophic Plate Count

RAW Wells 1 to 6	312 samples	[A] e-coli results	[A] total coliforms	n/a hpc samples	n/a hpc results
TREATED Well 1 to 5 and WTP	155 samples	[A] e-coli results	[A] total coliforms	156 hpc samples	0 to 14 hpc results

Average Treated Water Concentration (mg/L)

15	182	0.13
sodium	hardness	fluoride

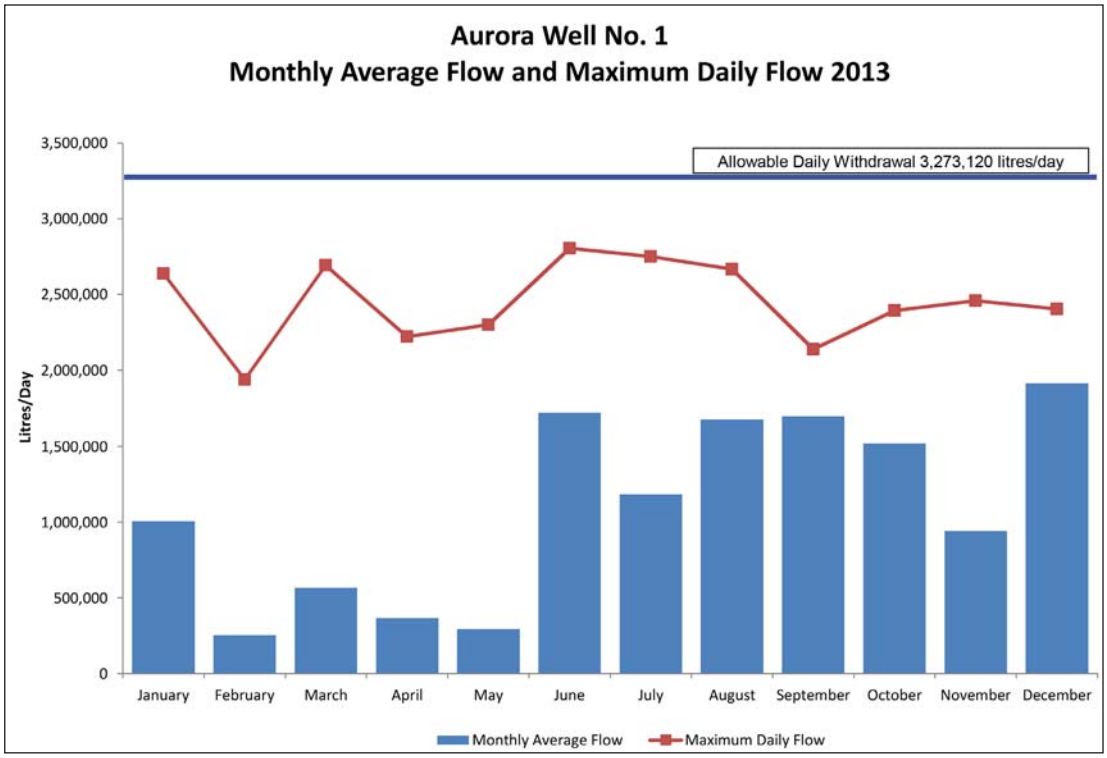
- Turbidity (Treated)
  8,760 samples
  ranged 0.02 to 5.01 ntu
  [min. to max.]
- Turbidity (Raw)
  90 samples
  ranged 0.02 to 1.46 ntu
  [min. to max.]
- Chlorine (Combined)
  8,760 samples
  ranged 0.27 to 2.89 mg/L
  [min. to max.]

Permitted and Actual Maximum Daily Withdrawal from the Aurora Production Wells for January 1 to December 31, 2013

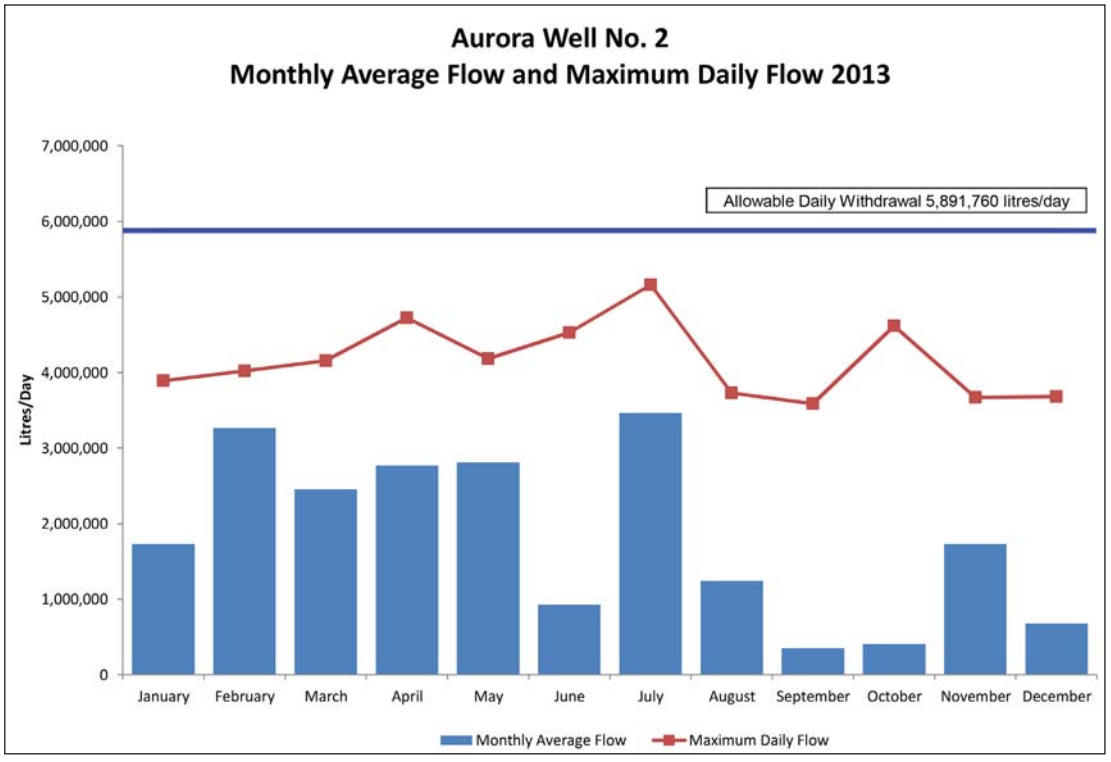
Location	*Permitted Daily Withdrawal (litres)*	*Actual Maximum Daily Withdrawal (litres)*	*Number of Days Operating at Peak Capacity (May to October)*	*Number of Days Operating at Peak Capacity (Annual)*
Well 1	3,273,120	2,803,000 June 21, 2013	5	7
Well 2	5,891,760	5,159,000 July 22, 2013	2	3
Well 3	5,237,136	4,740,000 July 22, 2013	3	5
Well 4	7,855,632	4,740,000 October 10, 2013	0	0
Well 5	5,891,760	4,741,000 August 19, 2013	1	1
Well 6	3,469,536	2,370,630 December 5, 2013	0	0

Permitted and Actual Maximum Annual Withdrawal from the Aurora Production Wells for January 1 to December 31, 2013

11,540,914,560 litres	3,570,674,720 litres	30.9 per cent
Annual Permitted Withdrawal	Actual Annual Withdrawal	Percentage of Permitted Annual Withdrawal

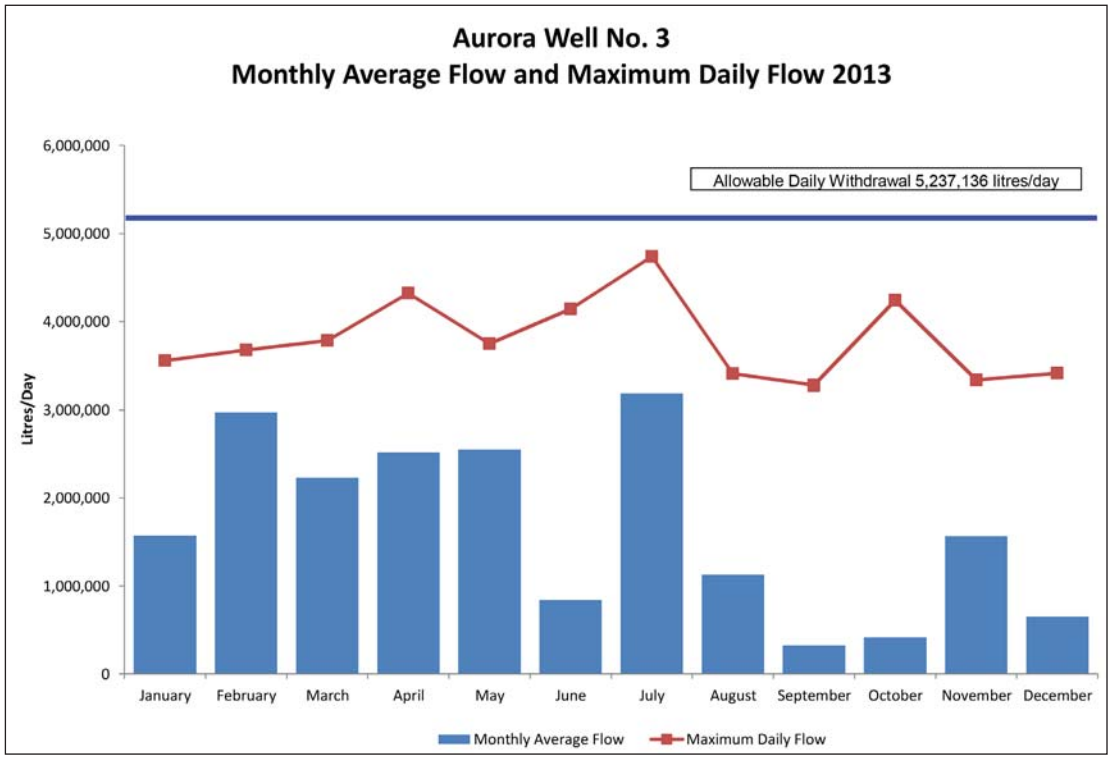


Aurora Well No. 1 had a reduced monthly average flow recorded between February to May. This reduction in flow was due to an increase in surface water use through the connection to the City of Toronto and Peel Region lake-based water supply.

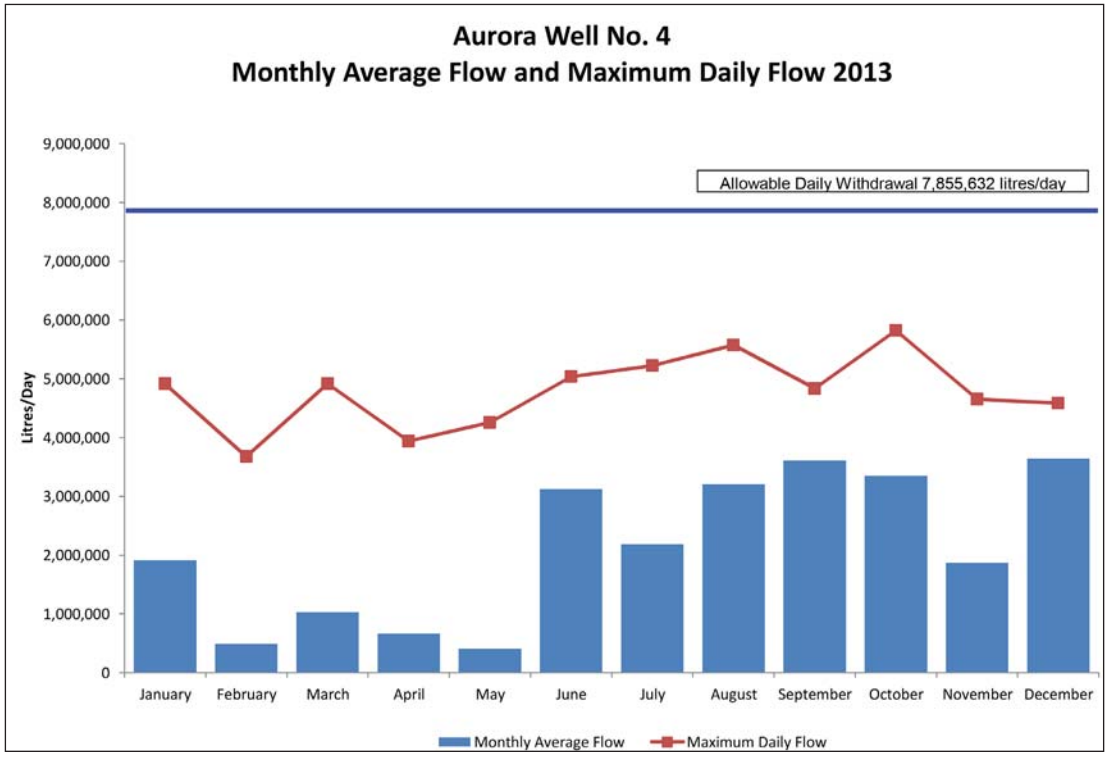


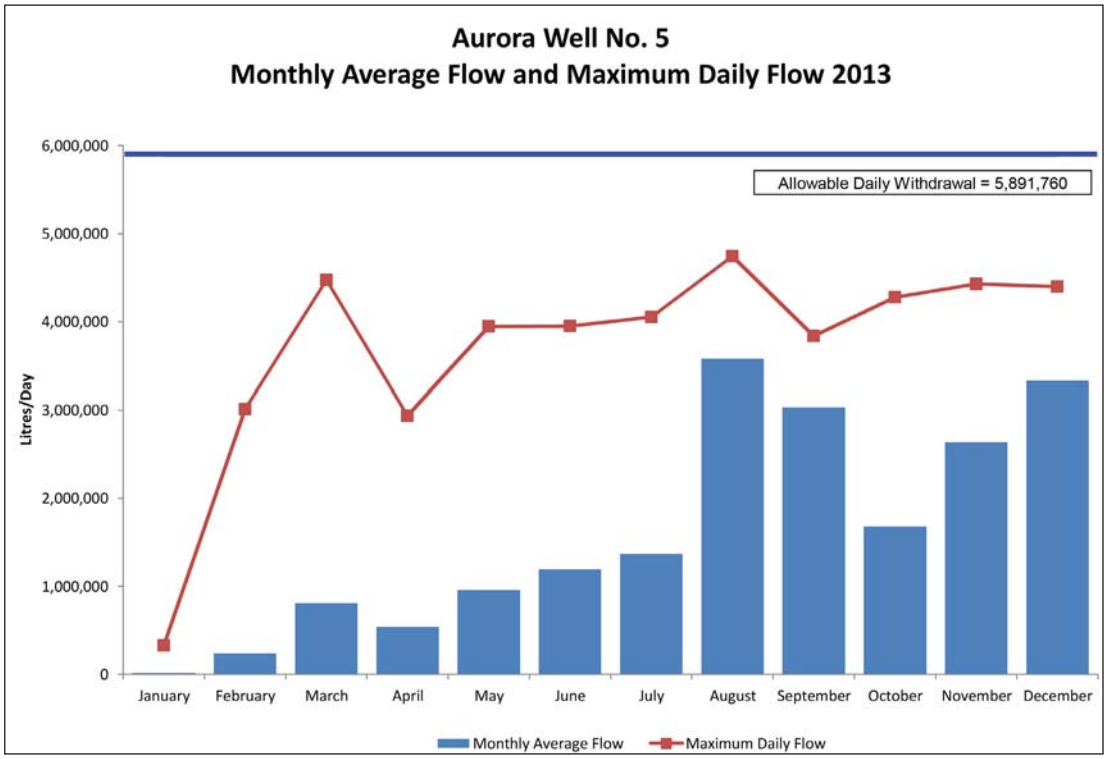
Aurora Well No. 2 had a reduced monthly average flow recorded between September and December. This reduction in flow was due to an increase in surface water use through the connection to the City of Toronto and Peel Region lake-based water supply.

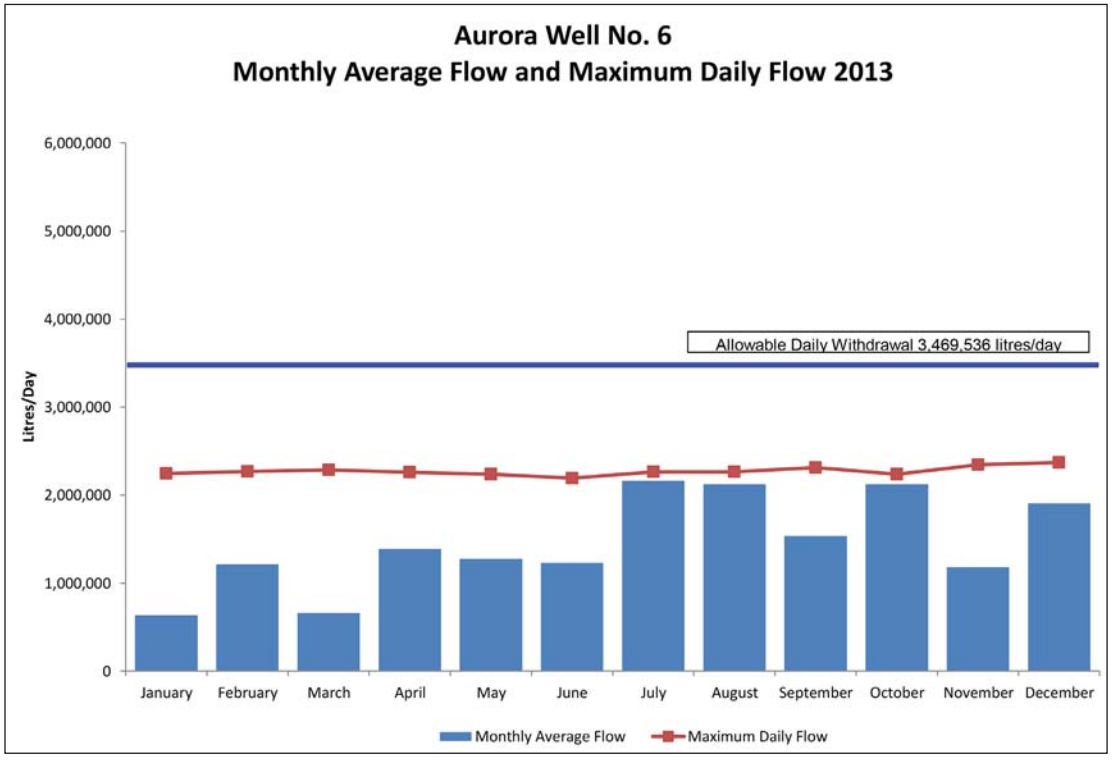
Aurora Well No. 3 had a reduced monthly average flow recorded between September and December. This reduction in flow was due to an increase in surface water use through the connection to the City of Toronto and Peel Region lake-based water supply.



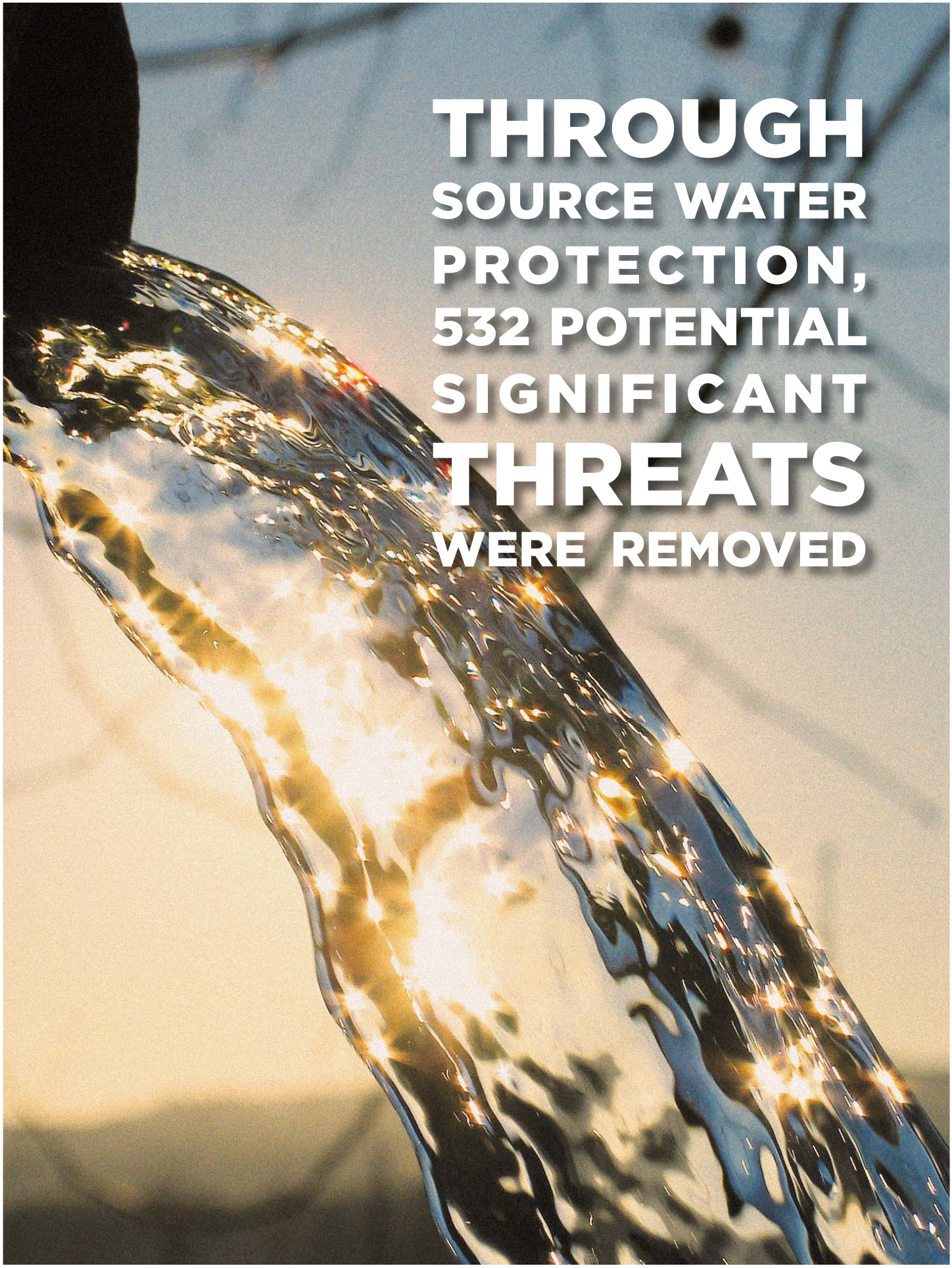
Aurora Well No. 4 had a reduced monthly average flow recorded between February and May. This reduction in flow was due to an increase in surface water use through the connection to the City of Toronto and Peel Region lake-based water supply.







Aurora Well No. 5 had a reduced monthly average flow recorded between January and July. This reduction in flow was due to an increase in surface water use through the connection to the City of Toronto and Peel Region lake-based water supply.


THROUGH
SOURCE WATER
PROTECTION,
532 POTENTIAL
SIGNIFICANT
THREATS
WERE REMOVED

Inorganics Test Results

Reading	Units	ODWS		1/23/2013	2/27/2013	3/6/2013	4/17/2013	4/24/2013	5/29/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0006			0.0003		
Arsenic as As	mg/L	0.025	IMAC	0.0002			0.0001		
Barium as Ba	mg/L	1	MAC				0.0758		
Boron as B	mg/L	5	IMAC				0.018		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001			< 0.0001		
Chromium as Cr	mg/L	0.05	MAC	< 0.0001			< 0.0001		
Fluoride as F	mg/L	1.5	MAC	0.122	0.1	0.1	0.12	0.12	0.07
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC				< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	0.017	< 0.02	< 0.02	< 0.02	0.03	< 0.02
Nitrate as N	mg/L	10	MAC	0.017	0.01	0.01	< 0.005	0.027	0.01
Nitrite	mg/L	1	MAC	< 0.006	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Selenium as Se	mg/L	0.01	MAC	0.0001			< 0.0001		
Sodium as Na	mg/L	200	AO	13.8	13.8	14.6	15.2	14.8	14.4
Uranium as U	mg/L	0.02	MAC				< 0.0001		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		6/26/2013	7/24/2013	10/23/2013
Antimony as Sb	mg/L	0.006	IMAC		0.0006	0.0006
Arsenic as As	mg/L	0.025	IMAC		0.0001	0.0001
Barium as Ba	mg/L	1	MAC			
Boron as B	mg/L	5	IMAC			
Cadmium as Cd	mg/L	0.005	MAC		< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC		0.0016	< 0.0002
Fluoride as F	mg/L	1.5	MAC	0.07	0.13	0.08
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC			
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	0.22	0.505
Nitrate as N	mg/L	10	MAC	0.007	0.223	0.505
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.008
Selenium as Se	mg/L	0.01	MAC		< 0.0001	< 0.0005
Sodium as Na	mg/L	200	AO	12.8	14.2	13.2
Uranium as U	mg/L	0.02	MAC			

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	7/24/2013	8/14/2013	10/23/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC			< 0.0005		
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC			< 0.0005		
2,4,6-Trichlorophenol	mg/L	0.005	MAC			< 0.0005		
2,4-Dichlorophenol	mg/L	0.9	MAC			< 0.0007		
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC			< 0.0008		
Alachlor	mg/L	0.005	IMAC			< 0.0004		
Aldicarb	mg/L	0.009	MAC				< 0.0045	
Aldrin + Dieldrin	mg/L	0.0007	MAC			< 0.000006		
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC			< 0.0002		
Azinphos-methyl	mg/L	0.02	MAC			< 0.0003		
Bendiocarb	mg/L	0.04	MAC				< 0.003	
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC			< 0.00001		
Bromoxynil	mg/L	0.005	IMAC			< 0.0004		
Carbaryl	mg/L	0.09	MAC				< 0.003	
Carbofuran	mg/L	0.09	MAC				< 0.003	
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002
Chlordane (Total)	mg/L	0.007	MAC			< 0.000006		
Chlorpyrifos	mg/L	0.09	MAC			< 0.0002		
Cyanazine	mg/L	0.01	IMAC			< 0.0003		
Diazinon	mg/L	0.02	MAC			< 0.0002		
Dicamba	mg/L	0.12	MAC			< 0.0004		
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005		< 0.0005
Diclofop-methyl	mg/L	0.009	MAC			< 0.0004		
Dimethoate	mg/L	0.02	IMAC			< 0.0003		
Dinoseb	mg/L	0.01	MAC			< 0.0005		
Diquat	mg/L	0.07	MAC			< 0.001		
Diuron	mg/L	0.15	MAC				< 0.003	
Glyphosate	mg/L	0.28	IMAC			< 0.025		
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC			< 0.000008		
Lindane	mg/L	0.004	MAC			< 0.000005		
Malathion	mg/L	0.19	MAC			< 0.0002		
Methoxychlor	mg/L	0.9	MAC			< 0.000009		
Metolachlor	mg/L	0.05	IMAC			< 0.0002		
Metribuzin	mg/L	0.08	MAC			< 0.0003		
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	7/24/2013	8/14/2013	10/23/2013 1
Paraquat	mg/L	0.01	IMAC			< 0.001		
Parathion	mg/L	0.05	MAC			< 0.0002		
Pentachlorophenol	mg/L	0.06	MAC			< 0.0004		
Phorate	mg/L	0.002	IMAC			< 0.0002		
Picloram	mg/L	0.19	IMAC			< 0.0007		
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC			< 0.00002		
Prometryne	mg/L	0.001	IMAC			< 0.0002		
Simazine	mg/L	0.01	IMAC			< 0.0002		
Temephos	mg/L	0.28	IMAC			< 0.003		
Terbufos	mg/L	0.001	IMAC			< 0.0002		
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004	
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Trifluralin	mg/L	0.045	IMAC			< 0.000006		
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/30/2013	2/27/2013	3/6/2013	4/17/2013	4/25/2013	5/29/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0004			0.0004		
Arsenic as As	mg/L	0.025	IMAC	0.0002			0.0001		
Barium as Ba	mg/L	1	MAC				0.0998		
Boron as B	mg/L	5	IMAC				0.014		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001			< 0.0001		
Chromium as Cr	mg/L	0.05	MAC	< 0.0001			< 0.0001		
Fluoride as F	mg/L	1.5	MAC	0.132	0.11	0.11	0.14	0.12	0.07
Lead as Pb	mg/L	0.01	MAC	< 0.0001	0.0001	0.0004	0.0001	< 0.0001	0.0001
Mercury as Hg	mg/L	0.001	MAC				< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	0.041	0.02	0.04	0.03	0.04	< 0.02
Nitrate as N	mg/L	10	MAC	0.019	0.021	0.035	0.033	0.041	0.009
Nitrite	mg/L	1	MAC	0.022	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Selenium as Se	mg/L	0.01	MAC	0.0001			< 0.0001		
Sodium as Na	mg/L	200	AO	11	15	14.9	12.9	12.5	12.3
Uranium as U	mg/L	0.02	MAC				< 0.0001		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		6/26/2013	7/24/2013	10/23/2013
Antimony as Sb	mg/L	0.006	IMAC		0.0003	0.0007
Arsenic as As	mg/L	0.025	IMAC		0.0001	0.0002
Barium as Ba	mg/L	1	MAC			
Boron as B	mg/L	5	IMAC			
Cadmium as Cd	mg/L	0.005	MAC		< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC		0.0011	< 0.0002
Fluoride as F	mg/L	1.5	MAC	0.08	0.144	0.09
Lead as Pb	mg/L	0.01	MAC	0.0001	< 0.0001	0.0001
Mercury as Hg	mg/L	0.001	MAC			
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	0.096	0.505
Nitrate as N	mg/L	10	MAC	0.007	0.096	0.505
Nitrite	mg/L	1	MAC	< 0.02	< 0.006	< 0.008
Selenium as Se	mg/L	0.01	MAC		< 0.0001	< 0.0005
Sodium as Na	mg/L	200	AO	12.2	10.2	12.3
Uranium as U	mg/L	0.02	MAC			

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/30/2013	4/17/2013	7/24/2013	8/14/2013	10/23/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC			< 0.0005		
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC			< 0.0005		
2,4,6-Trichlorophenol	mg/L	0.005	MAC			< 0.0005		
2,4-Dichlorophenol	mg/L	0.9	MAC			< 0.0007		
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC			< 0.0008		
Alachlor	mg/L	0.005	IMAC			< 0.0004		
Aldicarb	mg/L	0.009	MAC				< 0.0045	
Aldrin + Dieldrin	mg/L	0.0007	MAC			< 0.000006		
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC			< 0.0002		
Azinphos-methyl	mg/L	0.02	MAC			< 0.0003		
Bendiocarb	mg/L	0.04	MAC				< 0.003	
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC			< 0.00001		
Bromoxynil	mg/L	0.005	IMAC			< 0.0004		
Carbaryl	mg/L	0.09	MAC				< 0.003	
Carbofuran	mg/L	0.09	MAC				< 0.003	
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002
Chlordane (Total)	mg/L	0.007	MAC			< 0.000006		
Chlorpyrifos	mg/L	0.09	MAC			< 0.0002		
Cyanazine	mg/L	0.01	IMAC			< 0.0003		
Diazinon	mg/L	0.02	MAC			< 0.0002		
Dicamba	mg/L	0.12	MAC			< 0.0004		
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005		< 0.0005
Diclofop-methyl	mg/L	0.009	MAC			< 0.0004		
Dimethoate	mg/L	0.02	IMAC			< 0.0003		
Dinoseb	mg/L	0.01	MAC			< 0.0005		
Diquat	mg/L	0.07	MAC			< 0.001		
Diuron	mg/L	0.15	MAC				< 0.003	
Glyphosate	mg/L	0.28	IMAC			< 0.025		
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC			< 0.000008		
Lindane	mg/L	0.004	MAC			< 0.000005		
Malathion	mg/L	0.19	MAC			< 0.0002		
Methoxychlor	mg/L	0.9	MAC			< 0.000009		
Metolachlor	mg/L	0.05	IMAC			< 0.0002		
Metribuzin	mg/L	0.08	MAC			< 0.0003		
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001

Organics Test Results

Reading	Units	ODWS		1/30/2013	4/17/2013	7/24/2013	8/14/2013	10/23/2013
Paraquat	mg/L	0.01	IMAC			< 0.001		
Parathion	mg/L	0.05	MAC			< 0.0002		
Pentachlorophenol	mg/L	0.06	MAC			< 0.0004		
Phorate	mg/L	0.002	IMAC			< 0.0002		
Picloram	mg/L	0.19	IMAC			< 0.0007		
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC			< 0.00002		
Prometryne	mg/L	0.001	IMAC			< 0.0002		
Simazine	mg/L	0.01	IMAC			< 0.0002		
Temephos	mg/L	0.28	IMAC			< 0.003		
Terbufos	mg/L	0.001	IMAC			< 0.0002		
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004	
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Trifluralin	mg/L	0.045	IMAC			< 0.000006		
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/23/2013	2/27/2013	3/6/2013	4/17/2013	4/23/2013	4/24/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0004			0.0003		
Arsenic as As	mg/L	0.025	IMAC	0.0001			< 0.0001		
Barium as Ba	mg/L	1	MAC				0.0389		
Boron as B	mg/L	5	IMAC				0.036		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001			< 0.0001		
Chromium as Cr	mg/L	0.05	MAC	0.0003			< 0.0001		
Fluoride as F	mg/L	1.5	MAC	0.221	0.16	0.23	0.19		0.18
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Mercury as Hg	mg/L	0.001	MAC				< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	0.038	< 0.02	< 0.02	< 0.02		< 0.02
Nitrate as N	mg/L	10	MAC	0.038	0.009	0.007	< 0.005		0.018
Nitrite	mg/L	1	MAC	< 0.006	< 0.02	< 0.02	< 0.02		< 0.02
Selenium as Se	mg/L	0.01	MAC	0.0001			< 0.0001		
Sodium as Na	mg/L	200	AO	19.6	18.7	19.9	20.1	18.7	18.9
Uranium as U	mg/L	0.02	MAC				< 0.0001		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		5/29/2013	6/26/2013	7/24/2013	10/23/2013
Antimony as Sb	mg/L	0.006	IMAC			0.0003	0.0006
Arsenic as As	mg/L	0.025	IMAC			< 0.0001	< 0.0001
Barium as Ba	mg/L	1	MAC				
Boron as B	mg/L	5	IMAC				
Cadmium as Cd	mg/L	0.005	MAC			< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC			0.0008	< 0.0002
Fluoride as F	mg/L	1.5	MAC	0.11	0.15	0.2	0.17
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC				
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	0.04	0.101	0.506
Nitrate as N	mg/L	10	MAC	< 0.005	0.043	0.101	0.506
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.006	< 0.008
Selenium as Se	mg/L	0.01	MAC			< 0.0001	< 0.0005
Sodium as Na	mg/L	200	AO	20.1	18.9	19.9	20.7
Uranium as U	mg/L	0.02	MAC				

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	7/24/2013	8/14/2013	10/23/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC			< 0.0005		
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC			< 0.0005		
2,4,6-Trichlorophenol	mg/L	0.005	MAC			< 0.0005		
2,4-Dichlorophenol	mg/L	0.9	MAC			< 0.0007		
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC			< 0.0008		
Alachlor	mg/L	0.005	IMAC			< 0.0004		
Aldicarb	mg/L	0.009	MAC				< 0.0045	
Aldrin + Dieldrin	mg/L	0.0007	MAC			< 0.000006		
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC			< 0.0002		
Azinphos-methyl	mg/L	0.02	MAC			< 0.0003		
Bendiocarb	mg/L	0.04	MAC				< 0.003	
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC			< 0.00001		
Bromoxynil	mg/L	0.005	IMAC			< 0.0004		
Carbaryl	mg/L	0.09	MAC				< 0.003	
Carbofuran	mg/L	0.09	MAC				< 0.003	
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002
Chlordane (Total)	mg/L	0.007	MAC			< 0.000006		
Chlorpyrifos	mg/L	0.09	MAC			< 0.0002		
Cyanazine	mg/L	0.01	IMAC			< 0.0003		
Diazinon	mg/L	0.02	MAC			< 0.0002		
Dicamba	mg/L	0.12	MAC			< 0.0004		
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005		< 0.0005
Diclofop-methyl	mg/L	0.009	MAC			< 0.0004		
Dimethoate	mg/L	0.02	IMAC			< 0.0003		
Dinoseb	mg/L	0.01	MAC			< 0.0005		
Diquat	mg/L	0.07	MAC			< 0.001		
Diuron	mg/L	0.15	MAC				< 0.003	
Glyphosate	mg/L	0.28	IMAC			< 0.025		
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC			< 0.000008		
Lindane	mg/L	0.004	MAC			< 0.000005		
Malathion	mg/L	0.19	MAC			< 0.0002		
Methoxychlor	mg/L	0.9	MAC			< 0.000009		
Metolachlor	mg/L	0.05	IMAC			< 0.0002		
Metribuzin	mg/L	0.08	MAC			< 0.0003		
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	7/24/2013	8/14/2013	10/23/2013
Paraquat	mg/L	0.01	IMAC			< 0.001		
Parathion	mg/L	0.05	MAC			< 0.0002		
Pentachlorophenol	mg/L	0.06	MAC			< 0.0004		
Phorate	mg/L	0.002	IMAC			< 0.0002		
Picloram	mg/L	0.19	IMAC			< 0.0007		
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC			< 0.00002		
Prometryne	mg/L	0.001	IMAC			< 0.0002		
Simazine	mg/L	0.01	IMAC			< 0.0002		
Temephos	mg/L	0.28	IMAC			< 0.003		
Terbufos	mg/L	0.001	IMAC			< 0.0002		
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004	
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Trifluralin	mg/L	0.045	IMAC			< 0.000006		
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Holland Landing

[surface + groundwater]

drinking water sub-system

York Drinking Water System

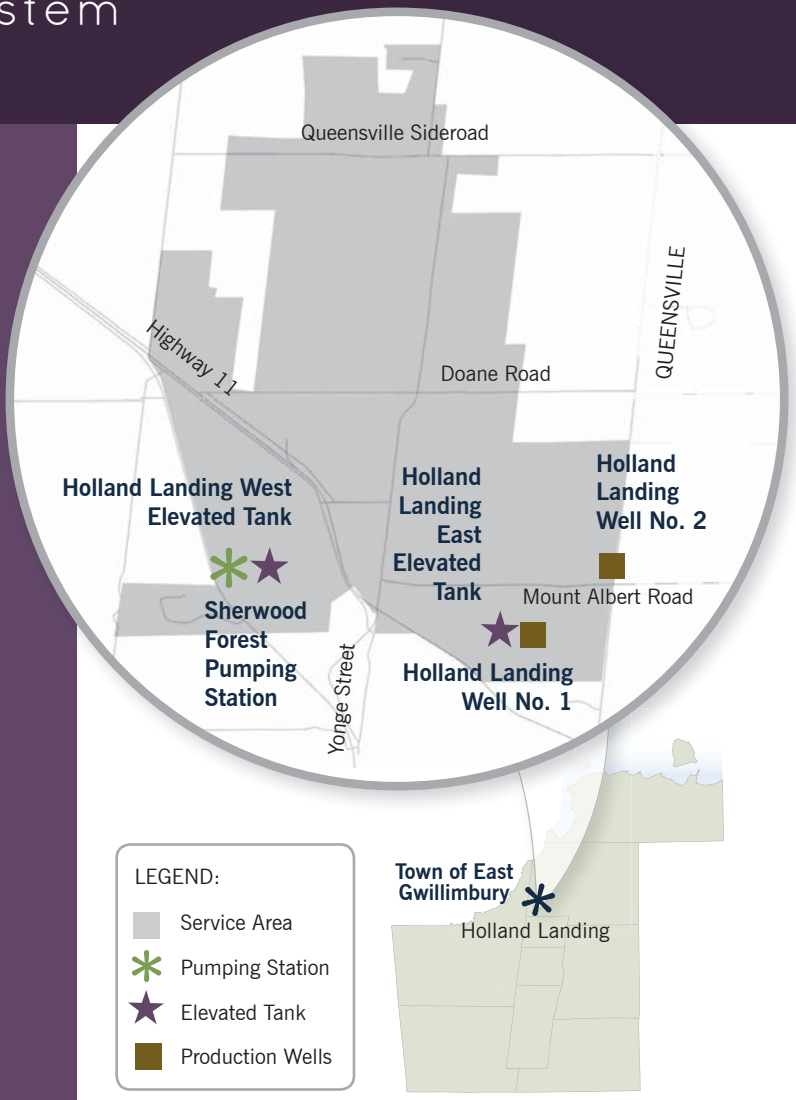
York Region operates two wells servicing the community of Holland Landing in the Town of East Gwillimbury. The Holland Landing wells draw water from the Yonge Street Aquifer. The Holland Landing wells are part of an interconnecting system between Aurora, East Gwillimbury, Newmarket and the York Drinking Water System.

Raw Water Source Description

Wells are mostly screened in the deep aquifer. Water quality meets all health-related Ontario Drinking Water Standards (ODWS). The concentration of aesthetic parameters, such as iron and hardness exceeded the ODWS, although that is common in deep aquifers in York Region.

Chloramine is used to treat and disinfect groundwater, sodium silicate is also added to reduce the potential for iron to stain plumbing fixtures and laundry in Holland Landing. Treatment processes throughout the facility are monitored by online analyzers which are equipped with alarms and lockouts to alert operational staff of conditions requiring attention. Treatment is consistent with the description in section H-1.

Currently, there are two elevated tanks servicing the community of Holland Landing.



Summary of Approvals and Permits

Municipal Drinking Water	
Licence Number:	013-101
Issue Number:	Issue 2
Issue Date:	March 12, 2010
Revision Date:	May 4, 2012
Expiry Date:	March 11, 2015
Drinking Water Works	
Permit Number:	013-201
Issue Number:	Issue 5
Issue Date:	March 11, 2010
Revision Date:	September 18, 2013
Permit to Take Water Number:	6623-68QQ6L
Issue Date:	March 10, 2005
Expiry Date:	March 31, 2015
Operational Plan Number:	013-401
Financial Plan Number:	013-301A
MOE Waterworks Number:	220004046
System Classification:	Water Distribution and Supply III (WDS III)

Holland Landing Drinking Water Sub-System (Wells 1 + 2) Performance Summary:

[A] Absence
[hpc] Heterotrophic Plate Count

RAW	106 samples	[A] e-coli results	[A] total coliforms	n/a hpc samples	n/a hpc results
TREATED	105 samples	[A] e-coli results	[A] total coliforms	106 hpc samples	0 to 6 hpc results

Average Treated Water Concentration (mg/L)

22	169	0.17
sodium	hardness	fluoride

- Turbidity (Treated)
  8,760 samples
  ranged 0.01 to 5.00 ntu
  [min. to max.]
- Turbidity (Raw)
  30 samples
  ranged 0.13 to 2.0 ntu
  [min. to max.]
- Chlorine (Combined)
  8,760 samples
  ranged 0.42 to 3.08* mg/L
  [min. to max.]

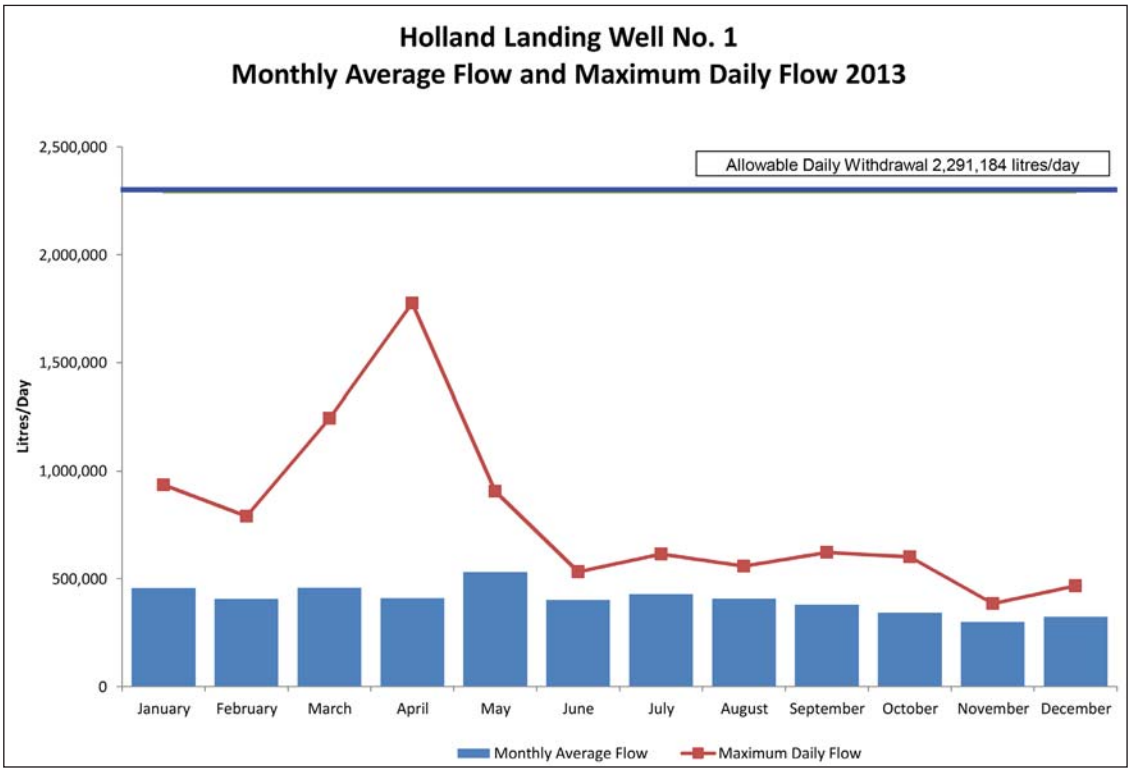
  *adverse water quality reported

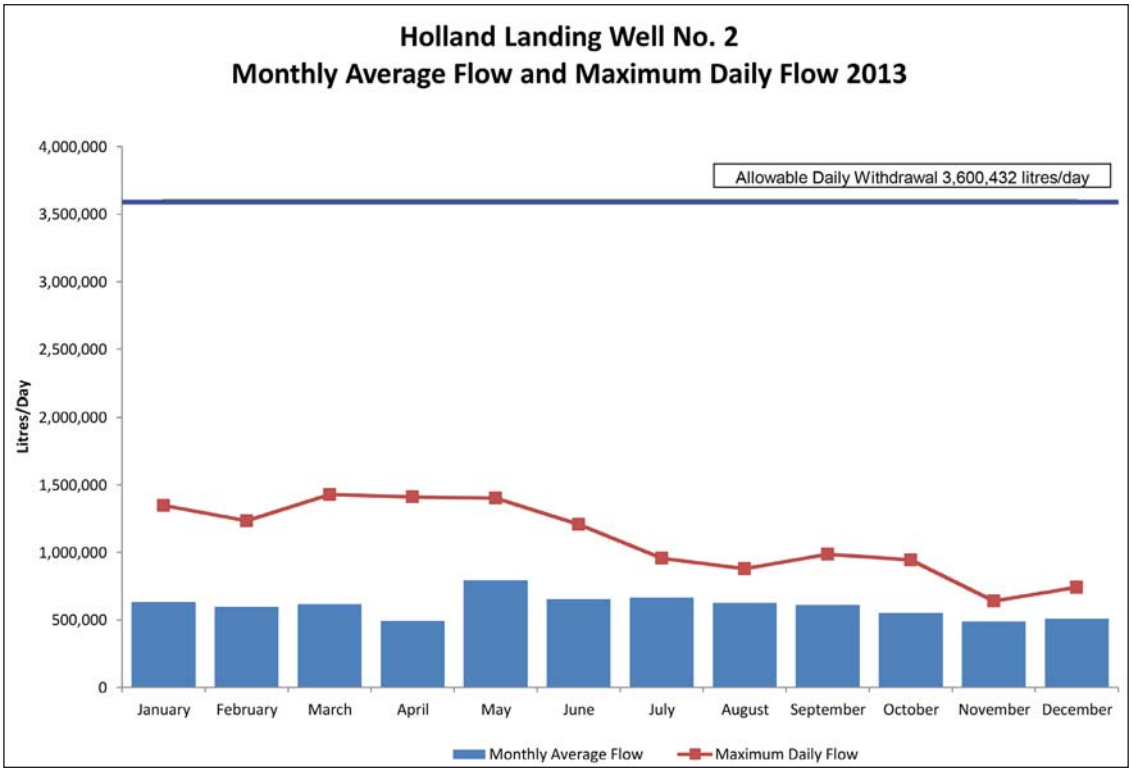
Permitted and Actual Maximum Daily Withdrawal from the Holland Landing Production Wells for January 1 to December 31, 2013

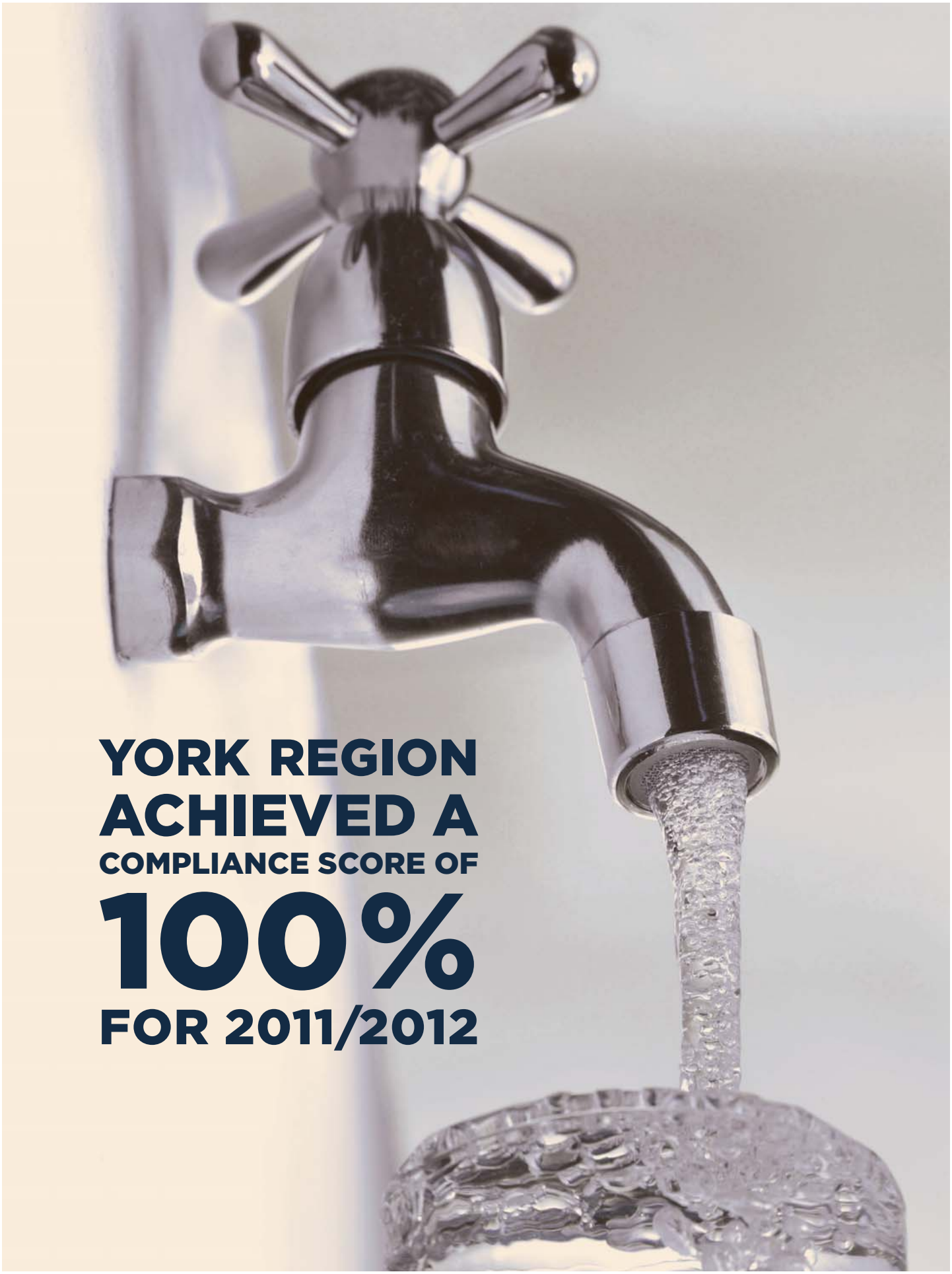
Location	*Permitted Daily Withdrawal (litres)*	*Actual Maximum Daily Withdrawal (litres)*	*Number of Days Operating at Peak Capacity (May to October)*	*Number of Days Operating at Peak Capacity (Annual)*
Well 1	2,291,184	1,776,000 April 1, 2013	0	0
Well 2	3,600,432	1,429,000 March 16, 2013	0	0

Permitted and Actual Maximum Annual Withdrawal from the Holland Landing Production Wells for January 1 to December 31, 2013.

1,316,448,86 litres	367,769,215 litres	27.9 per cent
Annual Permitted Withdrawal	Actual Annual Withdrawal	Percentage of Permitted Annual Withdrawal


Holland Landing Well No. 1
Monthly Average Flow and Maximum Daily Flow 2013
Allowable Daily Withdrawal 2,291,184 litres/day
Litres/Day
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
January
February
March
April
May
June
July
August
September
October
November
December
Monthly Average Flow
Maximum Daily Flow


Holland Landing Well No. 2
Monthly Average Flow and Maximum Daily Flow 2013
Allowable Daily Withdrawal 3,600,432 litres/day
Litres/Day
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
January
February
March
April
May
June
July
August
September
October
November
December
Monthly Average Flow
Maximum Daily Flow



YORK REGION ACHIEVED A COMPLIANCE SCORE OF 100% FOR 2011/2012

Inorganics Test Results

Reading	Units	ODWS		1/16/2013	1/23/2013	2/6/2013	3/6/2013	4/17/2013	4/24/2013
Antimony as Sb	mg/L	0.006	IMAC		0.0002				0.0004
Arsenic as As	mg/L	0.025	IMAC		0.0002				0.0001
Barium as Ba	mg/L	1	MAC						0.146
Boron as B	mg/L	5	IMAC						0.046
Cadmium as Cd	mg/L	0.005	MAC		< 0.0001				< 0.0001
Chromium as Cr	mg/L	0.05	MAC		< 0.0001				< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.16	0.18	0.18	0.15	0.18	0.161
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC						< 0.00002
Nitrate + Nitrite as N	mg/L	10	MAC	0.03	< 0.02	< 0.02	< 0.02	< 0.02	0.007
Nitrate as N	mg/L	10	MAC	0.033	< 0.005	< 0.005	0.008	0.006	0.007
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.006
Selenium as Se	mg/L	0.01	MAC		0.0003				< 0.0001
Sodium as Na	mg/L	200	AO	20.2	20.3	20.2	20.3	20.8	20.9
Uranium as U	mg/L	0.02	MAC						< 0.0001

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		5/8/2013	6/5/2013	7/10/2013	10/9/2013
Antimony as Sb	mg/L	0.006	IMAC			0.0004	0.0004
Arsenic as As	mg/L	0.025	IMAC			0.0002	0.0012
Barium as Ba	mg/L	1	MAC				
Boron as B	mg/L	5	IMAC				
Cadmium as Cd	mg/L	0.005	MAC			< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC			0.0008	0.0003
Fluoride as F	mg/L	1.5	MAC	0.15	0.13	0.172	0.15
Lead as Pb	mg/L	0.01	MAC	0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC				
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	< 0.02	0.271	0.163
Nitrate as N	mg/L	10	MAC	0.01	0.012	0.271	0.163
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.006	< 0.008
Selenium as Se	mg/L	0.01	MAC			0.0003	0.0035
Sodium as Na	mg/L	200	AO	20.9	21.1	20.6	20.5
Uranium as U	mg/L	0.02	MAC				

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/24/2013	7/10/2013	8/7/2013	10/9/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC			< 0.0005		
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC			< 0.0005		
2,4,6-Trichlorophenol	mg/L	0.005	MAC			< 0.0005		
2,4-Dichlorophenol	mg/L	0.9	MAC			< 0.0007		
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC			< 0.0008		
Alachlor	mg/L	0.005	IMAC			< 0.0004		
Aldicarb	mg/L	0.009	MAC				< 0.0045	
Aldrin + Dieldrin	mg/L	0.0007	MAC			< 0.000006		
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC			< 0.0002		
Azinphos-methyl	mg/L	0.02	MAC			< 0.0003		
Bendiocarb	mg/L	0.04	MAC				< 0.003	
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC			< 0.00001		
Bromoxynil	mg/L	0.005	IMAC			< 0.0004		
Carbaryl	mg/L	0.09	MAC				< 0.003	
Carbofuran	mg/L	0.09	MAC				< 0.003	
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002
Chlordane (Total)	mg/L	0.007	MAC			< 0.000006		
Chlorpyrifos	mg/L	0.09	MAC			< 0.0002		
Cyanazine	mg/L	0.01	IMAC			< 0.0003		
Diazinon	mg/L	0.02	MAC			< 0.0002		
Dicamba	mg/L	0.12	MAC			< 0.0004		
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	0.0007		< 0.0005
Diclofop-methyl	mg/L	0.009	MAC			< 0.0004		
Dimethoate	mg/L	0.02	IMAC			< 0.0003		
Dinoseb	mg/L	0.01	MAC			< 0.0005		
Diquat	mg/L	0.07	MAC			< 0.001		
Diuron	mg/L	0.15	MAC				< 0.003	
Glyphosate	mg/L	0.28	IMAC			< 0.025		
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC			< 0.000008		
Lindane	mg/L	0.004	MAC			< 0.000005		
Malathion	mg/L	0.19	MAC			< 0.0002		
Methoxychlor	mg/L	0.9	MAC			< 0.000009		
Metolachlor	mg/L	0.05	IMAC			< 0.0002		
Metribuzin	mg/L	0.08	MAC			< 0.0003		
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/24/2013	7/10/2013	8/7/2013	10/9/2013
Paraquat	mg/L	0.01	IMAC			< 0.001		
Parathion	mg/L	0.05	MAC			< 0.0002		
Pentachlorophenol	mg/L	0.06	MAC			< 0.0004		
Phorate	mg/L	0.002	IMAC			< 0.0002		
Picloram	mg/L	0.19	IMAC			< 0.0007		
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC			< 0.00002		
Prometryne	mg/L	0.001	IMAC			< 0.0002		
Simazine	mg/L	0.01	IMAC			< 0.0002		
Temephos	mg/L	0.28	IMAC			< 0.003		
Terbufos	mg/L	0.001	IMAC			< 0.0002		
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004	
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Trifluralin	mg/L	0.045	IMAC			< 0.000006		
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/16/2013	1/23/2013	2/6/2013	3/6/2013	4/17/2013	4/24/2013
Antimony as Sb	mg/L	0.006	IMAC		0.0002				0.0003
Arsenic as As	mg/L	0.025	IMAC		0.0001				0.0001
Barium as Ba	mg/L	1	MAC						0.19
Boron as B	mg/L	5	IMAC						0.048
Cadmium as Cd	mg/L	0.005	MAC		< 0.0001				< 0.0001
Chromium as Cr	mg/L	0.05	MAC		< 0.0001				< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.18	0.21	0.2	0.15	0.2	0.178
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC						< 0.00002
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.014
Nitrate as N	mg/L	10	MAC	0.009	0.01	0.008	0.009	0.011	0.014
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.006
Selenium as Se	mg/L	0.01	MAC		0.0003				< 0.0001
Sodium as Na	mg/L	200	AO	22.5	21.8	22.6	22.9	23.1	23.6
Uranium as U	mg/L	0.02	MAC						< 0.0001

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		5/8/2013	6/5/2013	7/10/2013	10/9/2013
Antimony as Sb	mg/L	0.006	IMAC			0.0003	0.0004
Arsenic as As	mg/L	0.025	IMAC			0.0003	0.0012
Barium as Ba	mg/L	1	MAC				
Boron as B	mg/L	5	IMAC				
Cadmium as Cd	mg/L	0.005	MAC			< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC			0.0008	0.0003
Fluoride as F	mg/L	1.5	MAC	0.17	0.12	0.202	0.16
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC				
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	< 0.02	0.274	0.164
Nitrate as N	mg/L	10	MAC	0.014	0.011	0.274	0.164
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.006	< 0.008
Selenium as Se	mg/L	0.01	MAC			0.0005	0.0036
Sodium as Na	mg/L	200	AO	23.4	20	22.4	23.6
Uranium as U	mg/L	0.02	MAC				

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/24/2013	7/10/2013	8/7/2013	10/9/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC			< 0.0005		
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC			< 0.0005		
2,4,6-Trichlorophenol	mg/L	0.005	MAC			< 0.0005		
2,4-Dichlorophenol	mg/L	0.9	MAC			< 0.0007		
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC			< 0.0008		
Alachlor	mg/L	0.005	IMAC			< 0.0004		
Aldicarb	mg/L	0.009	MAC				< 0.0045	
Aldrin + Dieldrin	mg/L	0.0007	MAC			< 0.000006		
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC			< 0.0002		
Azinphos-methyl	mg/L	0.02	MAC			< 0.0003		
Bendiocarb	mg/L	0.04	MAC				< 0.003	
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC			< 0.00001		
Bromoxynil	mg/L	0.005	IMAC			< 0.0004		
Carbaryl	mg/L	0.09	MAC				< 0.003	
Carbofuran	mg/L	0.09	MAC				< 0.003	
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002
Chlordane (Total)	mg/L	0.007	MAC			< 0.000006		
Chlorpyrifos	mg/L	0.09	MAC			< 0.0002		
Cyanazine	mg/L	0.01	IMAC			< 0.0003		
Diazinon	mg/L	0.02	MAC			< 0.0002		
Dicamba	mg/L	0.12	MAC			< 0.0004		
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005		< 0.0005
Diclofop-methyl	mg/L	0.009	MAC			< 0.0004		
Dimethoate	mg/L	0.02	IMAC			< 0.0003		
Dinoseb	mg/L	0.01	MAC			< 0.0005		
Diquat	mg/L	0.07	MAC			< 0.001		
Diuron	mg/L	0.15	MAC				< 0.003	
Glyphosate	mg/L	0.28	IMAC			< 0.025		
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC			< 0.000008		
Lindane	mg/L	0.004	MAC			< 0.000005		
Malathion	mg/L	0.19	MAC			< 0.0002		
Methoxychlor	mg/L	0.9	MAC			< 0.000009		
Metolachlor	mg/L	0.05	IMAC			< 0.0002		
Metribuzin	mg/L	0.08	MAC			< 0.0003		
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/24/2013	7/10/2013	8/7/2013	10/9/2013
Paraquat	mg/L	0.01	IMAC			< 0.001		
Parathion	mg/L	0.05	MAC			< 0.0002		
Pentachlorophenol	mg/L	0.06	MAC			< 0.0004		
Phorate	mg/L	0.002	IMAC			< 0.0002		
Picloram	mg/L	0.19	IMAC			< 0.0007		
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC			< 0.00002		
Prometryne	mg/L	0.001	IMAC			< 0.0002		
Simazine	mg/L	0.01	IMAC			< 0.0002		
Temephos	mg/L	0.28	IMAC			< 0.003		
Terbufos	mg/L	0.001	IMAC			< 0.0002		
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004	
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Trifluralin	mg/L	0.045	IMAC			< 0.000006		
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

King City

drinking water sub-system

York Drinking Water System

[surface water - lake ontario]

York Region operates two wells servicing King City in the Township of King. Water withdrawal from each of the wells is regulated by a Permit to Take Water issued by the MOE.

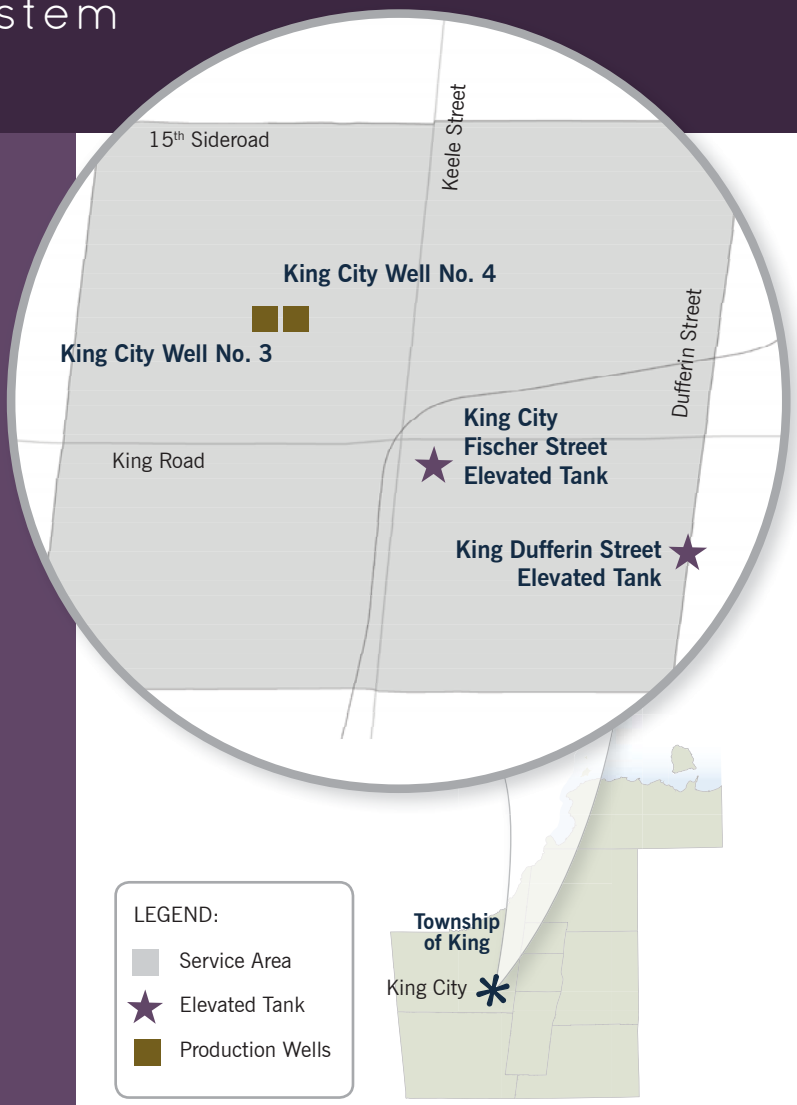
In 2013, King City community was 100 per cent supplied by Lake Ontario based water. The groundwater supply was placed on standby until an amendment to the Environmental Compliance Approval was finalized. York Region will continue to keep groundwater supply on standby to be used in the event emergency capacity is required and will blend the groundwater supply and lake based water to support the community as required.

Raw Water Source Description

Wells are screened in the intermediate aquifer. Water quality meets the Ontario Drinking Water Standard with the exception of elevated concentrations of iron, which is common in deep aquifers in York Region.

If King City wells are used for emergency capacity, chloramine will be used to treat and disinfect groundwater, sodium silicate will also added to reduce the potential for iron to stain plumbing fixtures and laundry. Treatment processes throughout the facility are monitored by online analyzers which are equipped with alarms and lockouts to alert operational staff of conditions requiring attention. Treatment is consistent with the description in section H-1.

Currently, there are two elevated tanks servicing the community of King City.



Summary of Approvals and Permits

Municipal Drinking Water	
Licence Number:	013-101
Issue Number:	Issue 2
Issue Date:	March 12, 2010
Revision Date:	May 4, 2012
Expiry Date:	March 11, 2015
Drinking Water Works	
Permit Number:	013-201
Issue Number:	Issue 5
Issue Date:	March 11, 2010
Revision Date:	September 18, 2013
Permit to Take Water Number:	8634-67HR9L
Issue Date:	December 20, 2004
Expiry Date:	January 31, 2015
Operational Plan Number:	013-407
Financial Plan Number:	013-301A
MOE Waterworks Number:	220002299
System Classification:	Water Distribution and Supply II (WDS II)

King City Drinking Water Sub-System (Wells 3 + 4) Performance Summary:

[A] Absence
[hpc] Heterotrophic Plate Count

RAW	96 samples	[A] e-coli results	[A] total coliforms	n/a hpc samples	n/a hpc results
TREATED	n/a samples	n/a ecoli results	n/a total coliforms	n/a hpc samples	n/a hpc results

Average Treated Water Concentration (mg/L)

n/a	n/a	n/a
sodium	hardness	fluoride

- Turbidity (Treated) n/a
- Turbidity (Raw) 34 samples ranged 0.09 to 1.41 ntu [min. to max.]
- Chlorine (Combined) n/a

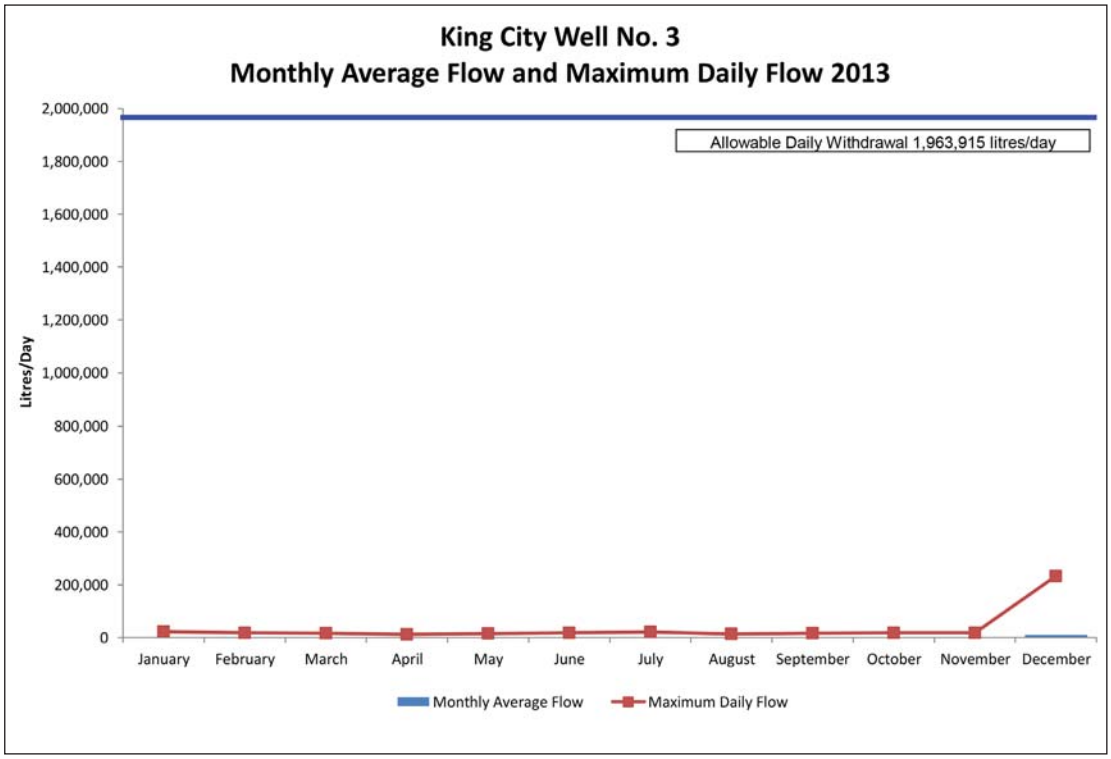
Permitted and Actual Maximum Daily Withdrawal from the King City Production Wells for January 1 to December 31, 2013

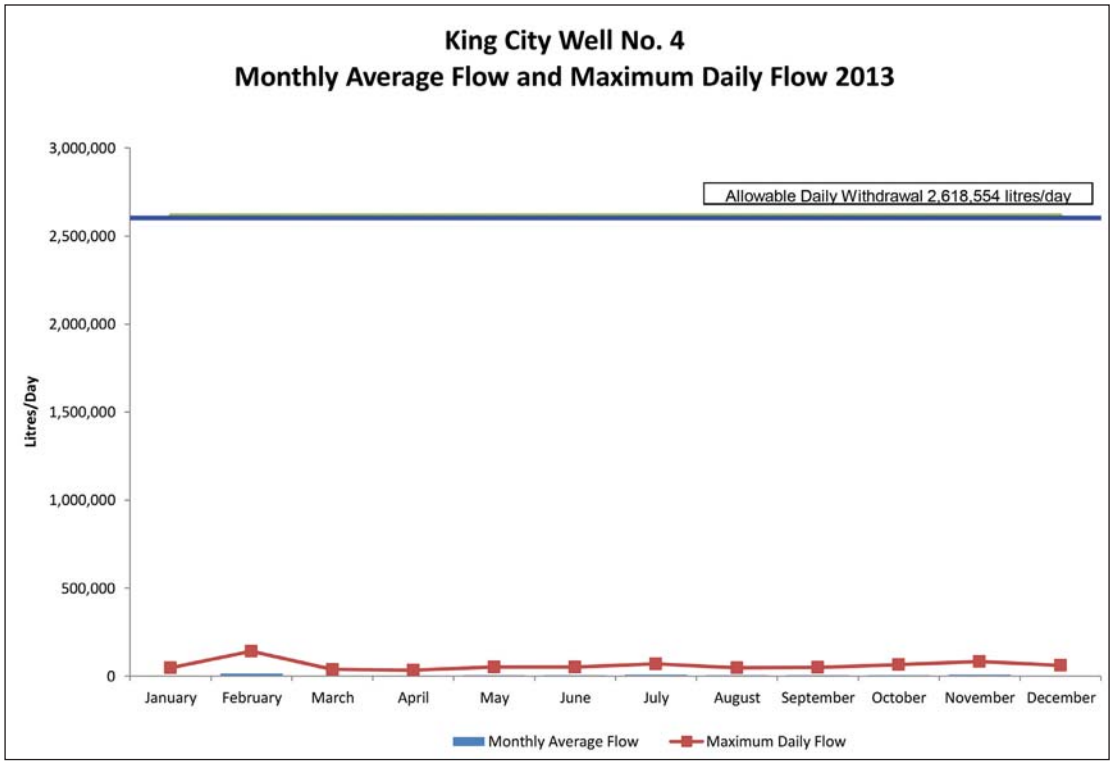
Location	*Permitted Daily Withdrawal (litres)*	*Actual Maximum Daily Withdrawal (litres)*	*Number of Days Operating at Peak Capacity (May to October)*	*Number of Days Operating at Peak Capacity (Annual)*
Well 3	1,963,915	*232,500 December 11, 2013	0	0
Well 4	2,618,554	*141,300 February 1, 2013	0	0

*King City Well No. 3 and 4 actual maximum daily withdrawals are a result of running the well to waste in order to collect weekly raw regulatory samples. Both wells were on standby and the King City drinking water system was supplied with the City of Toronto and Peel Region lake-based water supply.

Permitted and Actual Maximum Annual Withdrawal from the King City Production Wells for January 1 to December 31, 2013

1,672,601,550 litres	2,955,755 litres	0.0 per cent
Annual Permitted Withdrawal	Actual Annual Withdrawal	Percentage of Permitted Annual Withdrawal





King City Wells No. 3 and 4 had a reduced monthly average flow throughout 2013. This reduction in flow was mainly due to wells being on standby and the King City drinking water system supplied by the City of Toronto and Peel Region lake-based water supply.


OVER
$14 MILLION
SPENT TO
INSTALL,
REPAIR OR
REPLACE
EQUIPMENT

Newmarket

drinking water sub-system

[surface + groundwater]

York Drinking Water System

York Region currently operates six wells in the Town of Newmarket. The Newmarket wells draw water from the Yonge Street Aquifer complex. Newmarket wells are part of an interconnecting system between Aurora, East Gwillimbury, Newmarket, and the York Drinking Water System.

The Newmarket Water Supply System receives some of its water from the Queensville Water Supply System. Approximately 72 per cent of water from Queensville Wells No. 1 to 4 are pumped to supply the Newmarket Water System.

York Region supplements the groundwater supply in Newmarket with lake based water. The intent is to decrease the demand on the aquifer and provide additional capacity by having a second supply source.

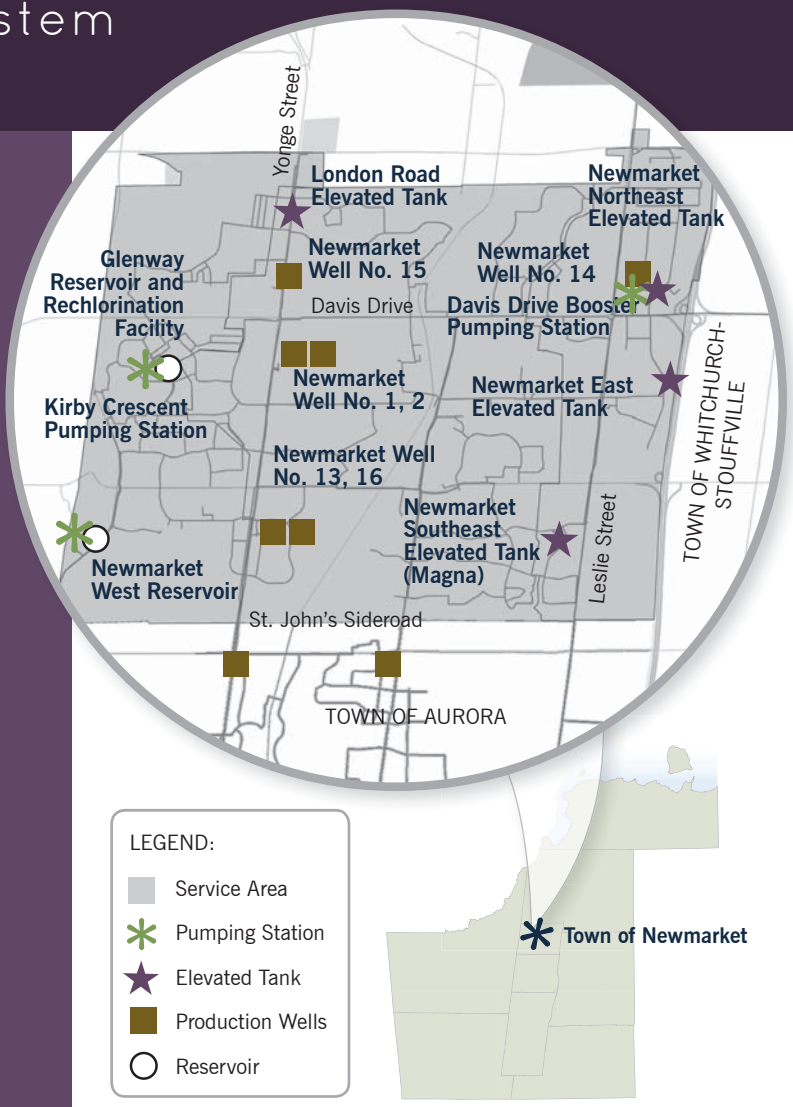
In spring 2013, with MOE approval, the Town of Newmarket, in conjunction with the Regional Municipality of York in consultation with MOE and York Region Public Health temporarily changed to a free chlorine disinfection method in the water distribution system throughout most of Newmarket. This temporary change in the treatment system is part of an enhanced water maintenance program. Swabbing and flushing (cleaning the pipes) was performed in several areas throughout the town, with completion based on sufficient water monitoring results. As result, the Report shows peak pumping days in the Newmarket wells in the Spring during this maintenance program. The water taking was within allowable capacity and permits. As a result, lake based supply was off line in Newmarket for two months to allow for the flushing to occur.

Raw Water Source Description

Wells are screened in either the intermediate or deep aquifer. Water quality characteristics are similar to other wells screened in the Yonge Street Aquifer Complex. Iron levels are above the Ontario Drinking Water Standard guideline of 0.3 mg/L.

Chloramine is used to treat and disinfect groundwater, sodium silicate is also added to reduce the potential for iron to stain plumbing fixtures and laundry in the serviced area. Treatment processes throughout the facility are monitored by online analyzers which are equipped with alarms and lockouts to alert operational staff of conditions requiring attention. Treatment is consistent with the description in section G-1.

Currently, there are two reservoirs and three elevated tanks servicing the community of Newmarket.



Summary of Approvals and Permits

Municipal Drinking Water	
Licence Number:	013-101
Issue Number:	Issue 2
Issue Date:	March 12, 2010
Revision Date:	May 4, 2012
Expiry Date:	March 11, 2015
Drinking Water Works	
Permit Number:	013-201
Issue Number:	Issue 5
Issue Date:	March 11, 2010
Revision Date:	September 18, 2013
Permit to Take Water Number:	6623-68QQ6L
Issue Date:	March 10, 2005
Expiry Date:	March 31, 2015
Operational Plan Number:	013-401
Financial Plan Number:	013-301A
MOE Waterworks Number:	220002413
System Classification:	Water Distribution and Supply III (WDS III)

Newmarket Drinking Water Sub-System (Wells 1, 2, 13, 15 + 16) Performance Summary:

[A] Absence
[hpc] Heterotrophic Plate Count

RAW	254 samples	[A] e-coli results	2 [0 to 1] total coliforms	n/a hpc samples	n/a hpc results
TREATED	156 samples	[A] e-coli results	[A] total coliforms	157 hpc samples	0 to 4 hpc results

Average Treated Water Concentration (mg/L)

17	192	0.12
sodium	hardness	fluoride

- Turbidity (Treated) 8,760 samples ranged 0.02 to 5.01 ntu [min. to max.]
- Turbidity (Raw) 66 samples ranged 0.22 to 057 ntu [min. to max.]
- Chlorine Free* 8,760 samples ranged 0.15 to 3.60 mg/L [min. to max.]
- Chlorine Combined* 8,760 samples ranged 0.01 to 3.04 mg/L [min. to max.]

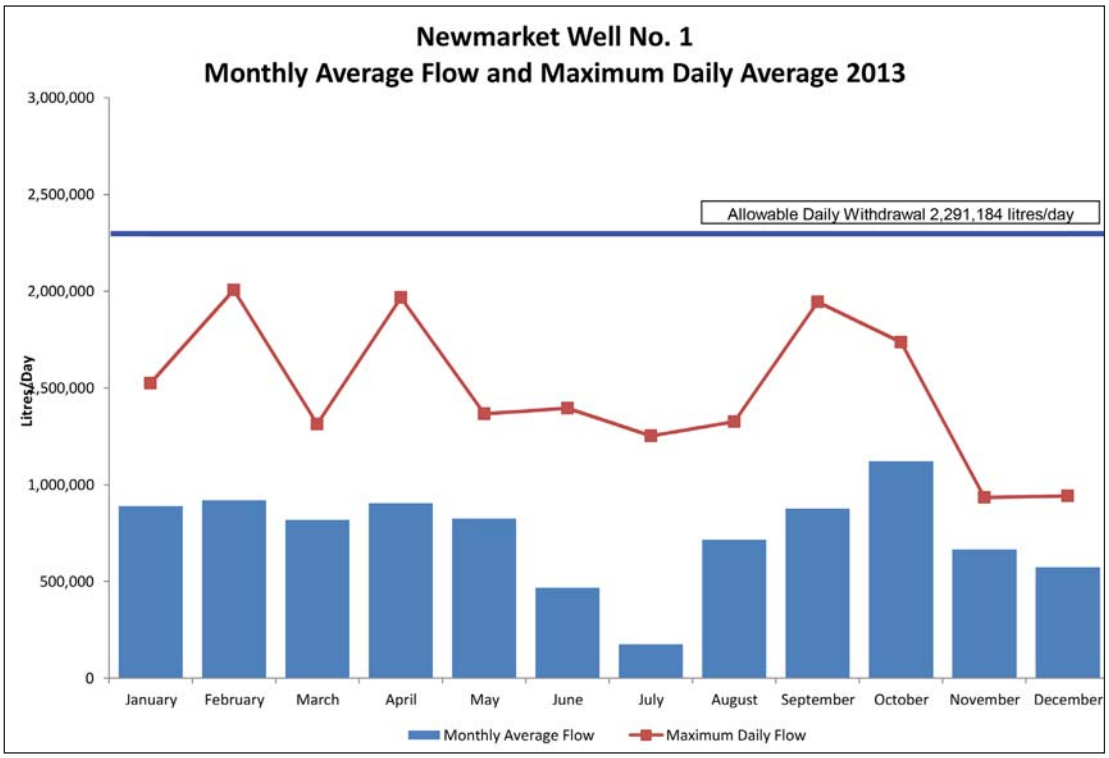
*System converted to a free chlorine system due to free burn maintenance program from February to April. Converted back to combined system in May.

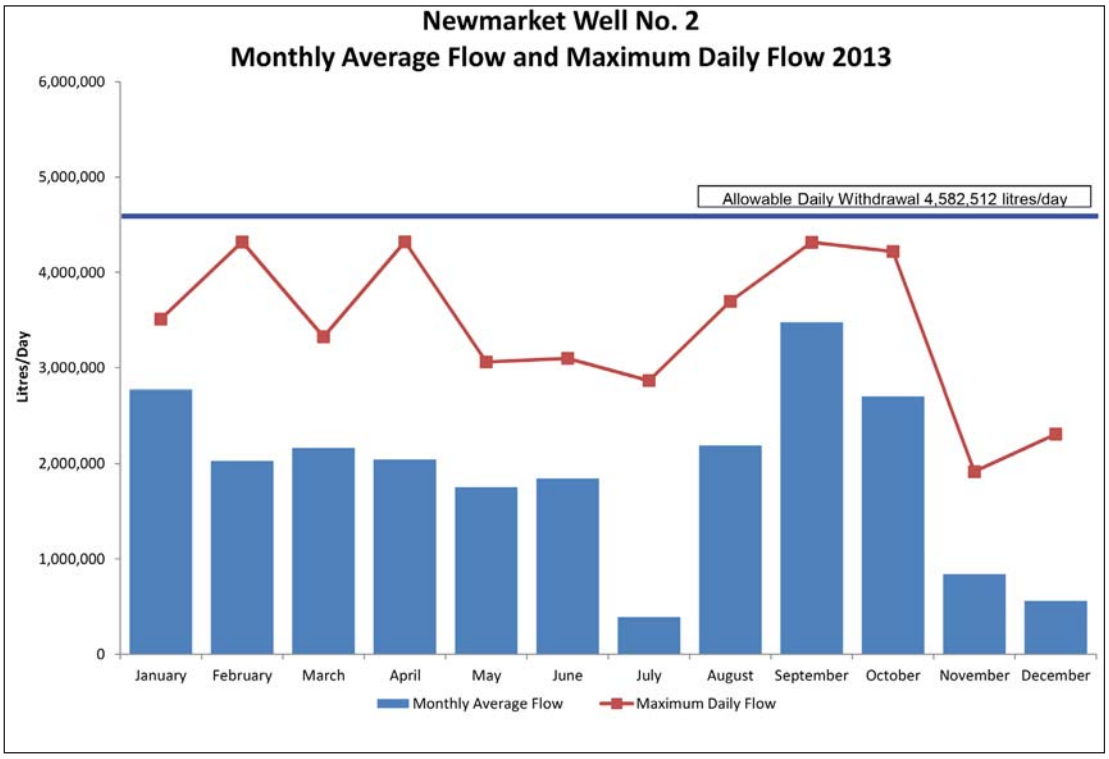
Permitted and Actual Maximum Daily Withdrawal from the Newmarket Production Wells for January 1 to December 31, 2013

Location	*Permitted Daily Withdrawal (litres)*	*Actual Maximum Daily Withdrawal (litres)*	*Number of Days Operating at Peak Capacity (May to October)*	*Number of Days Operating at Peak Capacity (Annual)*
Well 1	2,291,184	2,005,700 February 12, 2013	3	6
Well 2	4,582,512	4,321,000 April 17, 2013	15	19
Well 13	5,891,760	5,288,800 January 13, 2013	0	3
Well 14 *(Newmarket Well 14 was offline for 2013, water withdrawn was used to collect raw water samples)*	2,291,184	91,840 April 25, 2013	0	0
Well 15	3,273,120	2,884,000 February 12, 2013	0	1
Well 16	5,629,824	5,116,000 April 30, 2013	0	2

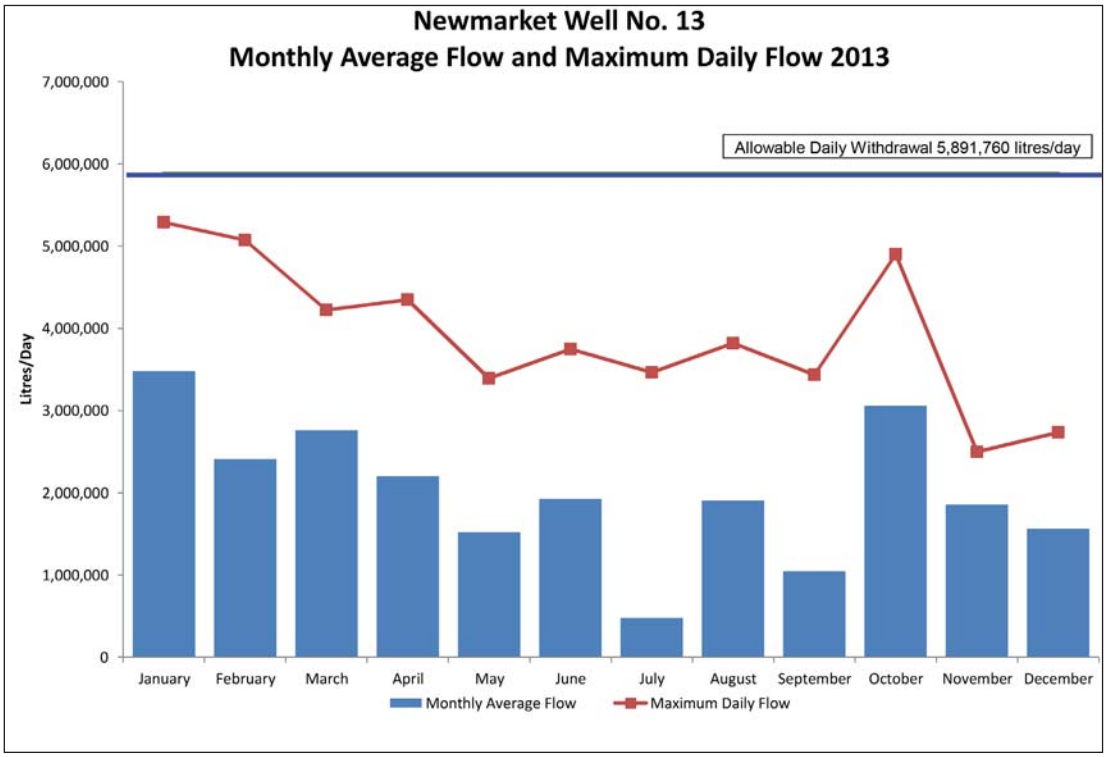
Permitted and Actual Maximum Annual Withdrawal from the Newmarket Production Wells for January 1 to December 31, 2013

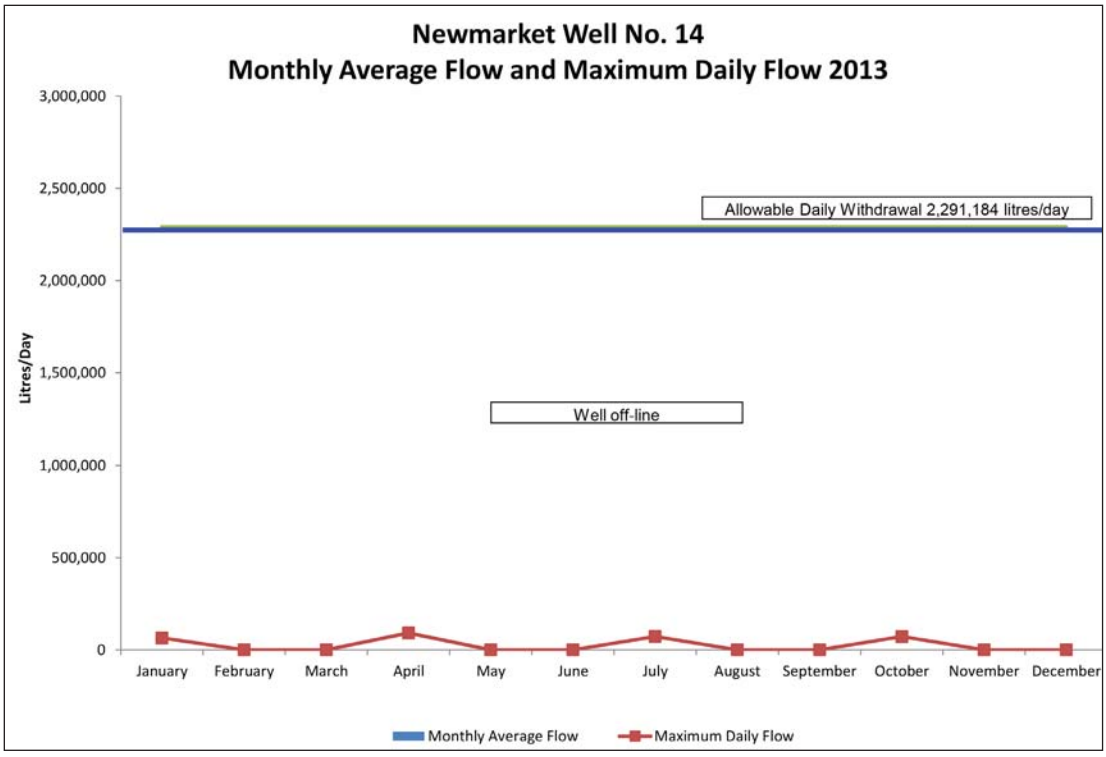
8,745,248,160 litres	2,548,425,240 litres	29.1 per cent
Annual Permitted Withdrawal	Actual Annual Withdrawal	Percentage of Permitted Annual Withdrawal


Newmarket Well No. 1
Monthly Average Flow and Maximum Daily Average 2013
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Litres/Day
Allowable Daily Withdrawal 2,291,184 litres/day
January
February
March
April
May
June
July
August
September
October
November
December
Monthly Average Flow
Maximum Daily Flow


Newmarket Well No. 2
Monthly Average Flow and Maximum Daily Flow 2013
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Litres/Day
Allowable Daily Withdrawal 4,582,512 litres/day
January
February
March
April
May
June
July
August
September
October
November
December
Monthly Average Flow
Maximum Daily Flow

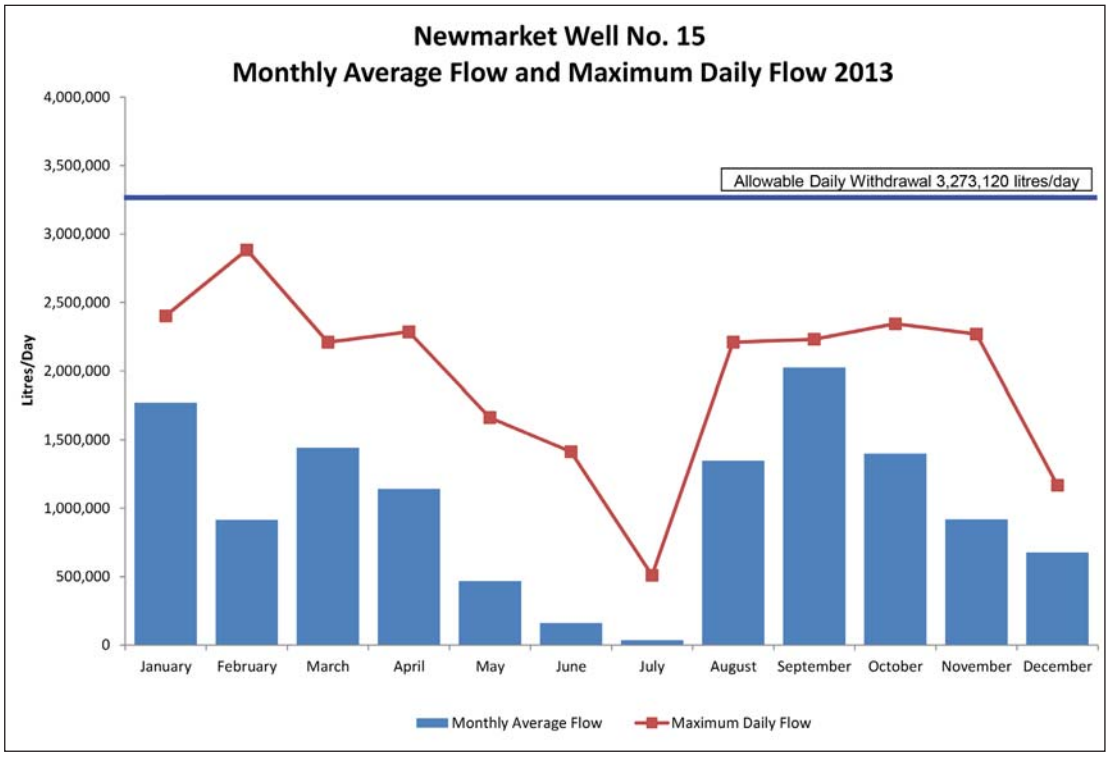
Newmarket Well No. 14 remains off line pending an ongoing investigation of nearby contamination as previously reported in 2011. Ongoing discussions continue to occur with the Region and the Ministry of Environment regarding groundwater conditions at the site. Despite best efforts, York Region has limited authority to order the landowner to clean up. Although the well continues to produce safe drinking water that meets all regulatory requirements, it remains offline as a precautionary measure.



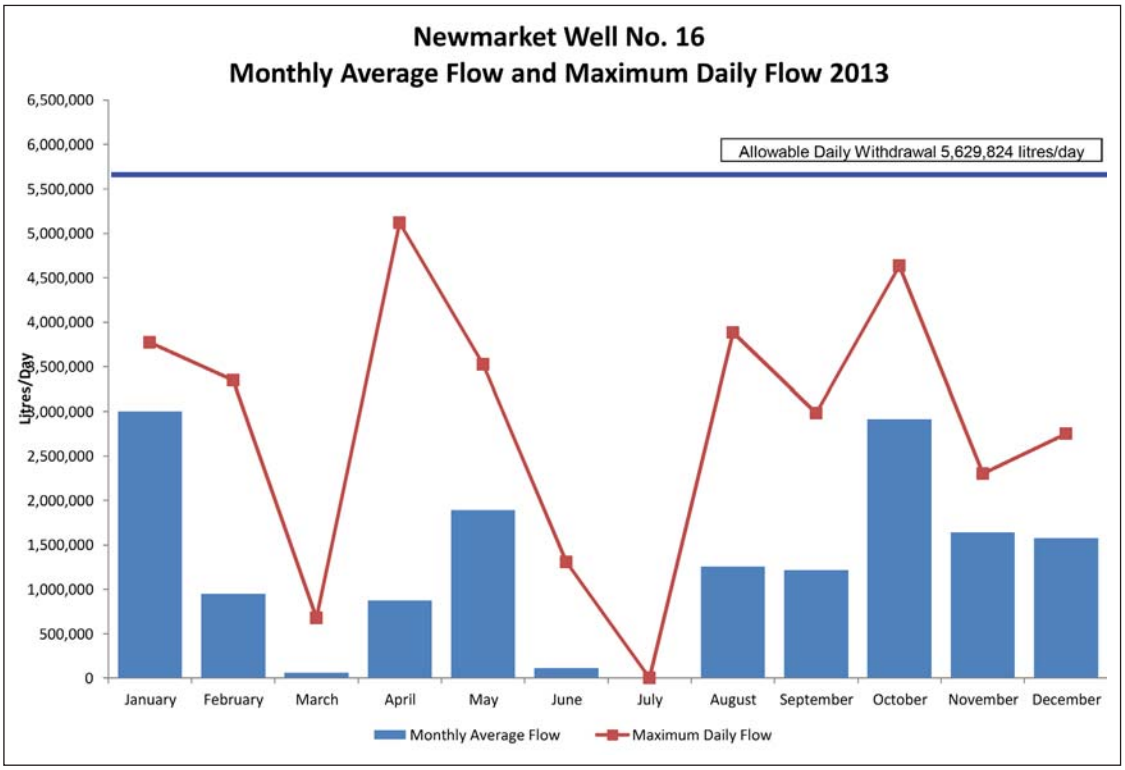


With the additional supply from the City of Toronto and Peel Region system, it is expected that there will be no disruption in services during the peak season and this well can remain off line until local soil remediation is complete.

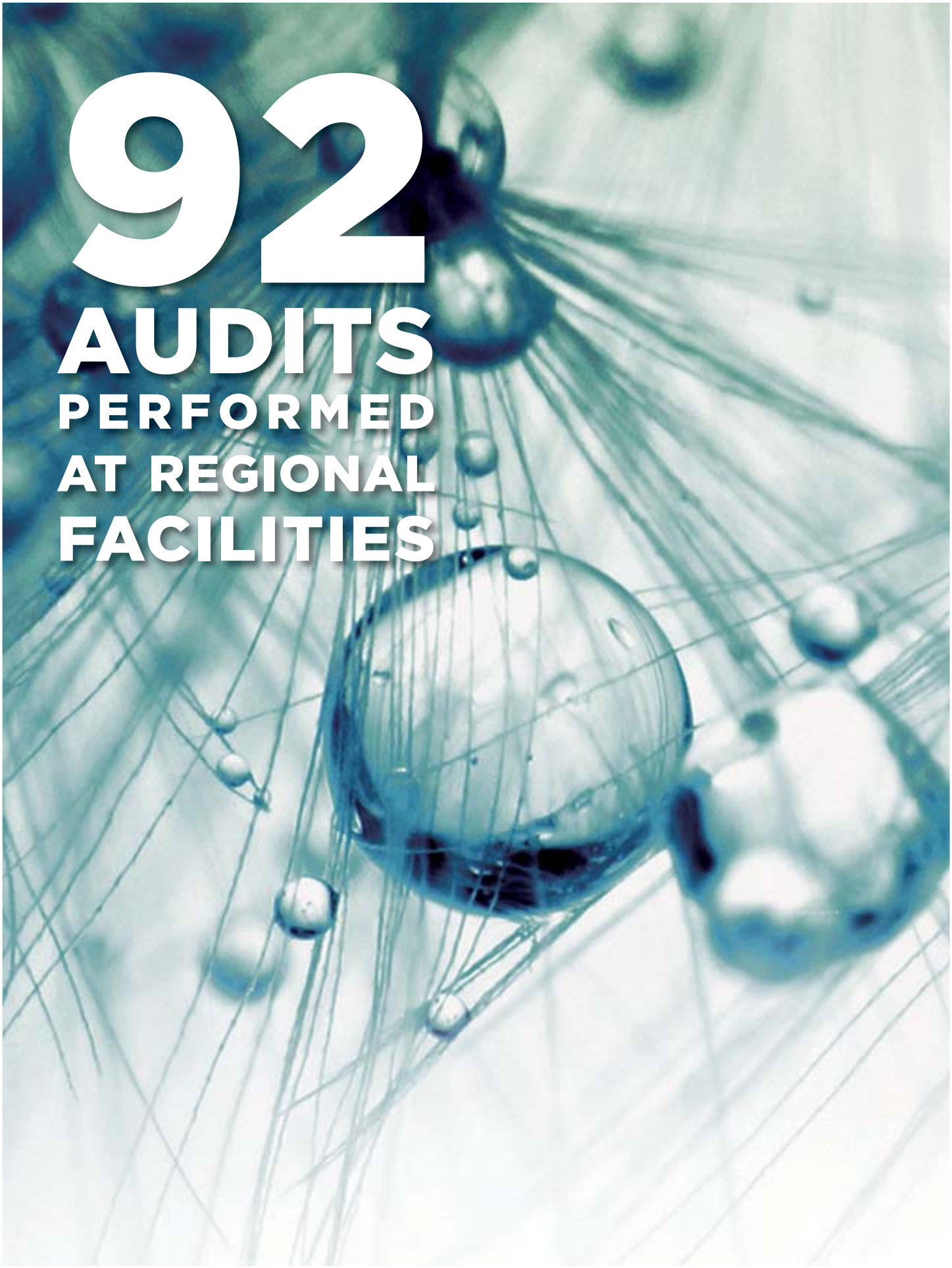
Newmarket Well No. 14 shows a reduced monthly average flow recorded for the 2013 reporting year. This reduction in flow was due to the well primarily being off line and operated for short durations to collect regulatory samples. The well did not operate for the majority of 2013.



Newmarket Well No. 15 had a reduced monthly average flow recorded between May and July. This reduction in flow is due to operational issues with ammonia chemical feed system.



Newmarket Well No. 16 had a reduced monthly average flow recorded for March, June and July for the 2013 reporting year, This reduction in flow was mainly due to scheduled maintenance conducted on the well to improve the overall operation of the water system.


92
AUDITS
PERFORMED
AT REGIONAL
FACILITIES

Inorganics Test Results

Reading	Units	ODWS		1/16/2013	1/23/2013	2/6/2013	3/6/2013	4/10/2013	4/24/2013
Antimony as Sb	mg/L	0.006	IMAC		0.0004				0.0003
Arsenic as As	mg/L	0.025	IMAC		0.0003				0.0002
Barium as Ba	mg/L	1	MAC						0.183
Boron as B	mg/L	5	IMAC						0.032
Cadmium as Cd	mg/L	0.005	MAC		< 0.0001				< 0.0001
Chromium as Cr	mg/L	0.05	MAC		< 0.0001				< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.12	0.149	0.14	0.11	0.12	0.134
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC						< 0.00002
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	0.007	< 0.02	< 0.02	< 0.02	0.007
Nitrate as N	mg/L	10	MAC	0.006	0.007	0.011	0.007	0.008	0.007
Nitrite	mg/L	1	MAC	< 0.02	< 0.006	< 0.02	< 0.02	< 0.02	< 0.006
Selenium as Se	mg/L	0.01	MAC		0.0003				< 0.0001
Sodium as Na	mg/L	200	AO	13.8	15	14.4	14.4	15.1	15
Uranium as U	mg/L	0.02	MAC						< 0.0001

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		5/8/2013	6/5/2013	7/10/2013	10/9/2013
Antimony as Sb	mg/L	0.006	IMAC			0.0004	0.0004
Arsenic as As	mg/L	0.025	IMAC			0.0003	0.0006
Barium as Ba	mg/L	1	MAC				
Boron as B	mg/L	5	IMAC				
Cadmium as Cd	mg/L	0.005	MAC			< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC			0.0007	< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.11	0.09	0.145	0.12
Lead as Pb	mg/L	0.01	MAC	< 0.0001	0.0003	0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC				
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	< 0.02	0.273	0.481
Nitrate as N	mg/L	10	MAC	0.006	0.01	0.273	0.481
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.006	< 0.008
Selenium as Se	mg/L	0.01	MAC			0.0003	0.0014
Sodium as Na	mg/L	200	AO	15	14.7	14.8	14.3
Uranium as U	mg/L	0.02	MAC				

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AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/24/2013	7/10/2013	8/7/2013	10/9/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC			< 0.0005		
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC			< 0.0005		
2,4,6-Trichlorophenol	mg/L	0.005	MAC			< 0.0005		
2,4-Dichlorophenol	mg/L	0.9	MAC			< 0.0007		
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC			< 0.0008		
Alachlor	mg/L	0.005	IMAC			< 0.0004		
Aldicarb	mg/L	0.009	MAC				< 0.0045	
Aldrin + Dieldrin	mg/L	0.0007	MAC			< 0.000006		
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC			< 0.0002		
Azinphos-methyl	mg/L	0.02	MAC			< 0.0003		
Bendiocarb	mg/L	0.04	MAC				< 0.003	
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC			< 0.00001		
Bromoxynil	mg/L	0.005	IMAC			< 0.0004		
Carbaryl	mg/L	0.09	MAC				< 0.003	
Carbofuran	mg/L	0.09	MAC				< 0.003	
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002
Chlordane (Total)	mg/L	0.007	MAC			< 0.000006		
Chlorpyrifos	mg/L	0.09	MAC			< 0.0002		
Cyanazine	mg/L	0.01	IMAC			< 0.0003		
Diazinon	mg/L	0.02	MAC			< 0.0002		
Dicamba	mg/L	0.12	MAC			< 0.0004		
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	0.0013		< 0.0005
Diclofop-methyl	mg/L	0.009	MAC			< 0.0004		
Dimethoate	mg/L	0.02	IMAC			< 0.0003		
Dinoseb	mg/L	0.01	MAC			< 0.0005		
Diquat	mg/L	0.07	MAC			< 0.001		
Diuron	mg/L	0.15	MAC				< 0.003	
Glyphosate	mg/L	0.28	IMAC			< 0.025		
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC			< 0.000008		
Lindane	mg/L	0.004	MAC			< 0.000005		
Malathion	mg/L	0.19	MAC			< 0.0002		
Methoxychlor	mg/L	0.9	MAC			< 0.000009		
Metolachlor	mg/L	0.05	IMAC			< 0.0002		
Metribuzin	mg/L	0.08	MAC			< 0.0003		
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/24/2013	7/10/2013	8/7/2013	10/9/2013
Paraquat	mg/L	0.01	IMAC			< 0.001		
Parathion	mg/L	0.05	MAC			< 0.0002		
Pentachlorophenol	mg/L	0.06	MAC			< 0.0004		
Phorate	mg/L	0.002	IMAC			< 0.0002		
Picloram	mg/L	0.19	IMAC			< 0.0007		
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC			< 0.00002		
Prometryne	mg/L	0.001	IMAC			< 0.0002		
Simazine	mg/L	0.01	IMAC			< 0.0002		
Temephos	mg/L	0.28	IMAC			< 0.003		
Terbufos	mg/L	0.001	IMAC			< 0.0002		
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004	
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Trifluralin	mg/L	0.045	IMAC			< 0.000006		
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002

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MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/16/2013	1/23/2013	2/6/2013	3/6/2013	4/10/2013	4/24/2013
Antimony as Sb	mg/L	0.006	IMAC		0.0004				0.0003
Arsenic as As	mg/L	0.025	IMAC		0.0003				0.0003
Barium as Ba	mg/L	1	MAC						0.139
Boron as B	mg/L	5	IMAC						0.031
Cadmium as Cd	mg/L	0.005	MAC		< 0.0001				< 0.0001
Chromium as Cr	mg/L	0.05	MAC		< 0.0001				< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.12	0.143	0.14	0.1	0.12	0.128
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.0001
Mercury as Hg	mg/L	0.001	MAC						< 0.00002
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	0.008	< 0.02	< 0.02	< 0.02	0.008
Nitrate as N	mg/L	10	MAC	0.007	0.008	0.007	0.009	0.007	0.008
Nitrite	mg/L	1	MAC	< 0.02	< 0.006	< 0.02	< 0.02	< 0.02	< 0.006
Selenium as Se	mg/L	0.01	MAC		0.0003				< 0.0001
Sodium as Na	mg/L	200	AO	15.9	17.1	15.8	16.5	17	17.3
Uranium as U	mg/L	0.02	MAC						< 0.0001

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Inorganics Test Results

Reading	Units	ODWS		5/8/2013	6/5/2013	7/10/2013	10/9/2013
Antimony as Sb	mg/L	0.006	IMAC			0.0004	0.0004
Arsenic as As	mg/L	0.025	IMAC			0.0003	0.0005
Barium as Ba	mg/L	1	MAC				
Boron as B	mg/L	5	IMAC				
Cadmium as Cd	mg/L	0.005	MAC			< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC			0.0007	0.0002
Fluoride as F	mg/L	1.5	MAC	0.11	0.08	0.134	0.12
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC				
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	< 0.02	0.272	0.482
Nitrate as N	mg/L	10	MAC	0.008	0.008	0.272	0.482
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.006	< 0.008
Selenium as Se	mg/L	0.01	MAC			0.0005	0.0013
Sodium as Na	mg/L	200	AO	15.5	14.1	16.1	14.5
Uranium as U	mg/L	0.02	MAC				

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MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/24/2013	7/10/2013	8/7/2013	10/9/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC			< 0.0005		
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC			< 0.0005		
2,4,6-Trichlorophenol	mg/L	0.005	MAC			< 0.0005		
2,4-Dichlorophenol	mg/L	0.9	MAC			< 0.0007		
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC			< 0.0008		
Alachlor	mg/L	0.005	IMAC			< 0.0004		
Aldicarb	mg/L	0.009	MAC				< 0.0045	
Aldrin + Dieldrin	mg/L	0.0007	MAC			< 0.000006		
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC			< 0.0002		
Azinphos-methyl	mg/L	0.02	MAC			< 0.0003		
Bendiocarb	mg/L	0.04	MAC				< 0.003	
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC			< 0.00001		
Bromoxynil	mg/L	0.005	IMAC			< 0.0004		
Carbaryl	mg/L	0.09	MAC				< 0.003	
Carbofuran	mg/L	0.09	MAC				< 0.003	
Carbon Tetrachloride	mg/L	0.005	MAC	0.0014	< 0.0002	< 0.0002		< 0.0002
Chlordane (Total)	mg/L	0.007	MAC			< 0.000006		
Chlorpyrifos	mg/L	0.09	MAC			< 0.0002		
Cyanazine	mg/L	0.01	IMAC			< 0.0003		
Diazinon	mg/L	0.02	MAC			< 0.0002		
Dicamba	mg/L	0.12	MAC			< 0.0004		
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005		< 0.0005
Diclofop-methyl	mg/L	0.009	MAC			< 0.0004		
Dimethoate	mg/L	0.02	IMAC			< 0.0003		
Dinoseb	mg/L	0.01	MAC			< 0.0005		
Diquat	mg/L	0.07	MAC			< 0.001		
Diuron	mg/L	0.15	MAC				< 0.003	
Glyphosate	mg/L	0.28	IMAC			< 0.025		
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC			< 0.000008		
Lindane	mg/L	0.004	MAC			< 0.000005		
Malathion	mg/L	0.19	MAC			< 0.0002		
Methoxychlor	mg/L	0.9	MAC			< 0.000009		
Metolachlor	mg/L	0.05	IMAC			< 0.0002		
Metribuzin	mg/L	0.08	MAC			< 0.0003		
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/24/2013	7/10/2013	8/7/2013	10/9/2013
Paraquat	mg/L	0.01	IMAC			< 0.001		
Parathion	mg/L	0.05	MAC			< 0.0002		
Pentachlorophenol	mg/L	0.06	MAC			< 0.0004		
Phorate	mg/L	0.002	IMAC			< 0.0002		
Picloram	mg/L	0.19	IMAC			< 0.0007		
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC			< 0.00002		
Prometryne	mg/L	0.001	IMAC			< 0.0002		
Simazine	mg/L	0.01	IMAC			< 0.0002		
Temephos	mg/L	0.28	IMAC			< 0.003		
Terbufos	mg/L	0.001	IMAC			< 0.0002		
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004	
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Trifluralin	mg/L	0.045	IMAC			< 0.000006		
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/16/2013	1/23/2013	2/6/2013	3/6/2013	4/10/2013	4/24/2013
Antimony as Sb	mg/L	0.006	IMAC		0.0004				0.0003
Arsenic as As	mg/L	0.025	IMAC		0.0003				0.0002
Barium as Ba	mg/L	1	MAC						0.197
Boron as B	mg/L	5	IMAC						0.035
Cadmium as Cd	mg/L	0.005	MAC		< 0.0001				< 0.0001
Chromium as Cr	mg/L	0.05	MAC		< 0.0001				< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.12	0.15	0.14	0.12	0.12	0.124
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC						< 0.00002
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	0.006	< 0.02	< 0.02	< 0.02	0.012
Nitrate as N	mg/L	10	MAC	< 0.005	0.006	0.013	0.007	< 0.005	0.012
Nitrite	mg/L	1	MAC	< 0.02	< 0.006	< 0.02	< 0.02	< 0.02	< 0.006
Selenium as Se	mg/L	0.01	MAC		0.0001				< 0.0001
Sodium as Na	mg/L	200	AO	22	22.1	14.4	20.5	19.8	20.1
Uranium as U	mg/L	0.02	MAC						< 0.0001

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		5/8/2013	6/5/2013	7/10/2013	10/9/2013
Antimony as Sb	mg/L	0.006	IMAC			0.0004	0.0004
Arsenic as As	mg/L	0.025	IMAC			0.0003	0.0008
Barium as Ba	mg/L	1	MAC				
Boron as B	mg/L	5	IMAC				
Cadmium as Cd	mg/L	0.005	MAC			0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC			0.0007	0.0002
Fluoride as F	mg/L	1.5	MAC	0.11	0.09	0.135	0.12
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC				
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	< 0.02	0.266	< 0.008
Nitrate as N	mg/L	10	MAC	< 0.005	0.008	0.266	< 0.002
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.006	< 0.008
Selenium as Se	mg/L	0.01	MAC			0.0001	0.0018
Sodium as Na	mg/L	200	AO	20	19.3	16.8	19.4
Uranium as U	mg/L	0.02	MAC				

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/24/2013	7/10/2013	8/7/2013	10/9/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC			< 0.0005		
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC			< 0.0005		
2,4,6-Trichlorophenol	mg/L	0.005	MAC			< 0.0005		
2,4-Dichlorophenol	mg/L	0.9	MAC			< 0.0007		
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC			< 0.0008		
Alachlor	mg/L	0.005	IMAC			< 0.0004		
Aldicarb	mg/L	0.009	MAC				< 0.0045	
Aldrin + Dieldrin	mg/L	0.0007	MAC			< 0.000006		
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC			< 0.0002		
Azinphos-methyl	mg/L	0.02	MAC			< 0.0003		
Bendiocarb	mg/L	0.04	MAC				< 0.003	
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC			< 0.00001		
Bromoxynil	mg/L	0.005	IMAC			< 0.0004		
Carbaryl	mg/L	0.09	MAC				< 0.003	
Carbofuran	mg/L	0.09	MAC				< 0.003	
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002
Chlordane (Total)	mg/L	0.007	MAC			< 0.000006		
Chlorpyrifos	mg/L	0.09	MAC			< 0.0002		
Cyanazine	mg/L	0.01	IMAC			< 0.0003		
Diazinon	mg/L	0.02	MAC			< 0.0002		
Dicamba	mg/L	0.12	MAC			< 0.0004		
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	0.003		< 0.0005
Diclofop-methyl	mg/L	0.009	MAC			< 0.0004		
Dimethoate	mg/L	0.02	IMAC			< 0.0003		
Dinoseb	mg/L	0.01	MAC			< 0.0005		
Diquat	mg/L	0.07	MAC			< 0.001		
Diuron	mg/L	0.15	MAC				< 0.003	
Glyphosate	mg/L	0.28	IMAC			< 0.025		
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC			< 0.000008		
Lindane	mg/L	0.004	MAC			< 0.000005		
Malathion	mg/L	0.19	MAC			< 0.0002		
Methoxychlor	mg/L	0.9	MAC			< 0.000009		
Metolachlor	mg/L	0.05	IMAC			< 0.0002		
Metribuzin	mg/L	0.08	MAC			< 0.0003		
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/24/2013	7/10/2013	8/7/2013	10/9/2013
Paraquat	mg/L	0.01	IMAC			< 0.001		
Parathion	mg/L	0.05	MAC			< 0.0002		
Pentachlorophenol	mg/L	0.06	MAC			< 0.0004		
Phorate	mg/L	0.002	IMAC			< 0.0002		
Picloram	mg/L	0.19	IMAC			< 0.0007		
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC			< 0.00002		
Prometryne	mg/L	0.001	IMAC			< 0.0002		
Simazine	mg/L	0.01	IMAC			< 0.0002		
Temephos	mg/L	0.28	IMAC			< 0.003		
Terbufos	mg/L	0.001	IMAC			< 0.0002		
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004	
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Trifluralin	mg/L	0.045	IMAC			< 0.000006		
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Queensville

drinking water sub-system

York Drinking Water System

[surface + groundwater]

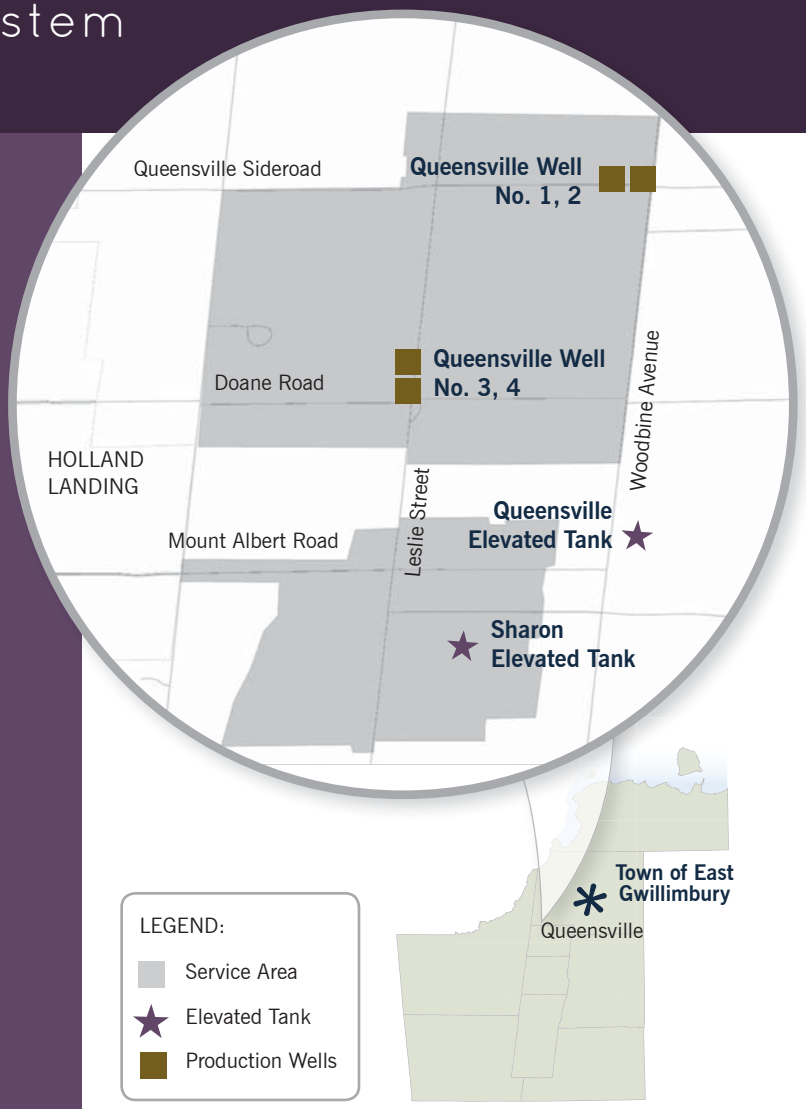
York Region operates four wells in the community of Queensville in the Town of East Gwillimbury. These wells supply water to the residents of Sharon, Queensville, Holland Landing and Newmarket. Queensville wells draw water from the Yonge Street Aquifer complex and are part of an interconnecting drinking water system between Aurora, East Gwillimbury, Newmarket and the York Drinking Water System. Approximately 72 per cent of water from Queensville Wells No. 1 to 4 is pumped to supply the Newmarket Water System.

Raw Water Source Description

Wells are screened in the intermediate and deep aquifers. Water quality meets the Ontario Drinking Water Standards with the exception of elevated iron that is common in deep aquifers in York Region.

Chloramine is used to treat and disinfect groundwater, sodium silicate is also added to reduce the potential for iron to stain plumbing fixtures and laundry in Aurora. Treatment processes throughout the facility are monitored by online analyzers which are equipped with alarms and lockouts to alert operational staff of conditions requiring attention. Treatment is consistent with the description in section G-1.

Currently, there are two elevated tanks servicing the communities of Queensville and Sharon.



Summary of Approvals and Permits

Municipal Drinking Water	
Licence Number:	013-101
Issue Number:	Issue 2
Issue Date:	March 12, 2010
Revision Date:	May 4, 2012
Expiry Date:	March 11, 2015
Drinking Water Works	
Permit Number:	013-201
Issue Number:	Issue 5
Issue Date:	March 11, 2010
Revision Date:	September 18, 2013
Permit to Take Water Number:	6623-68QQ6L
Issue Date:	March 10, 2005
Expiry Date:	March 31, 2015
Operational Plan Number:	013-401
Financial Plan Number:	013-301A
MOE Waterworks Number:	260001955
System Classification:	Water Distribution and Supply III (WDS III)

Queensville Drinking Water Sub-System (Wells 1, 2, 3 + 4) Performance Summary:

[A] Absence
[hpc] Heterotrophic Plate Count

RAW	200 samples	[A] e-coli results	[A] total coliforms	n/a hpc samples	n/a hpc results
TREATED	105 samples	[A] e-coli results	[A] total coliforms	106 hpc samples	0 to 2 hpc results

Average Treated Water Concentration (mg/L)

20	163	0.17
sodium	hardness	fluoride

- Turbidity (Treated)
  8,760 samples
  ranged 0.00 to 5.00 ntu
  [min. to max.]
- Turbidity (Raw)
  53 samples
  ranged 0.05 to 0.52 ntu
  [min. to max.]
- Chlorine (Combined)
  8,760 samples
  ranged 0.00 to 3.00 mg/L
  [min. to max.]

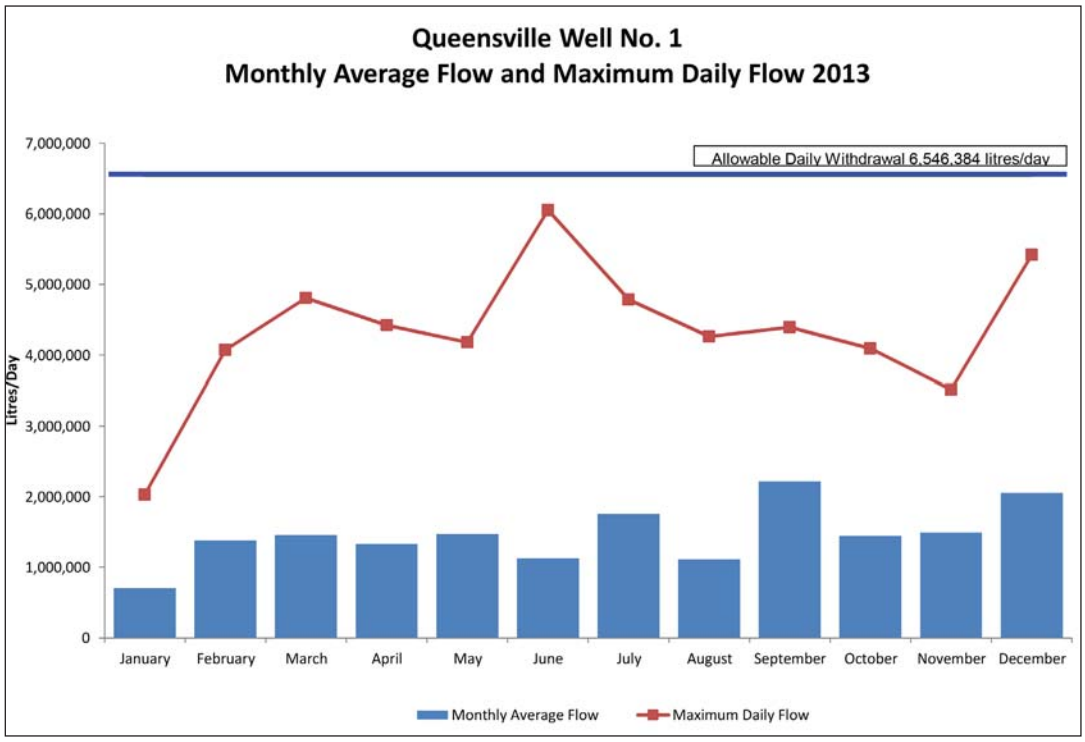
Permitted and Actual Maximum Daily Withdrawal from the Queensville Production Wells for January 1 to December 31, 2012

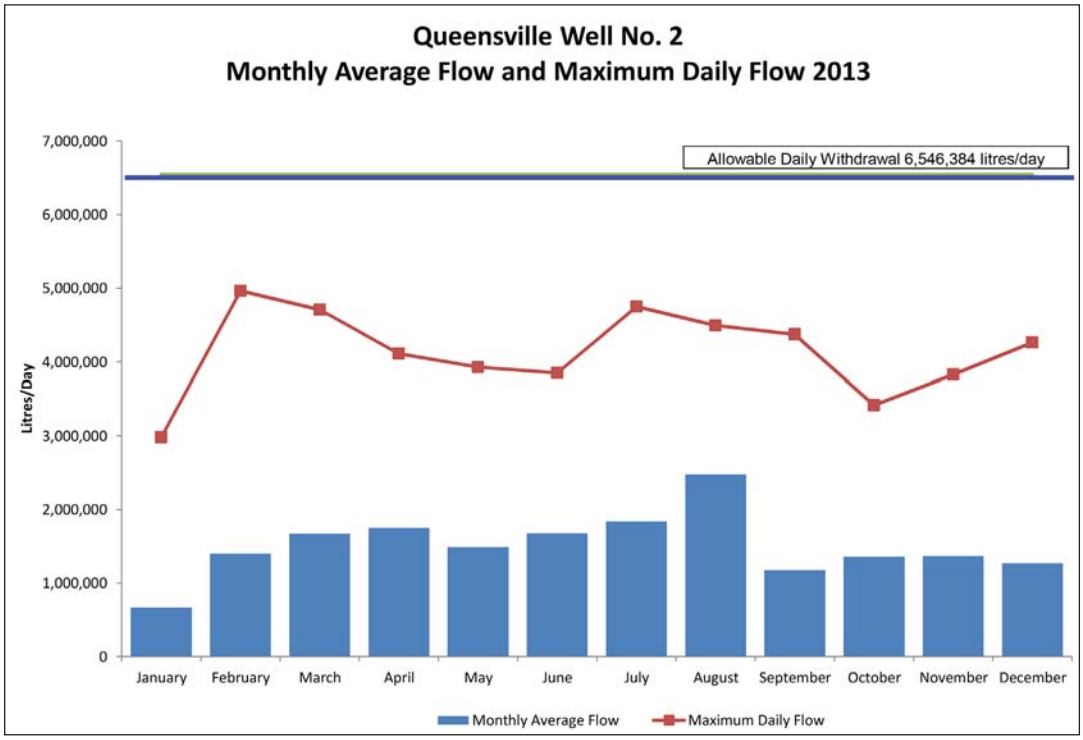
Location	*Permitted Daily Withdrawal (litres)*	*Actual Maximum Daily Withdrawal (litres)*	*Number of Days Operating at Peak Capacity (May to October)*	*Number of Days Operating at Peak Capacity (Annual)*
Well 1	6,546,384	6,052,000 June 20, 2013	2	3
Well 2	6,546,384	4,962,000 February 16, 2013	0	0
Well 3	6,546,384	4,808,000 July 31, 2013	0	0
Well 4	6,546,384	5,375,500 December 5, 2013	0	1

Permitted and Actual Maximum Annual Withdrawal from the Queensville Production Wells for January 1 to December 31, 2012

9,557,720,640 litres	2,017,351,750 litres	21.1 per cent
Annual Permitted Withdrawal	Actual Annual Withdrawal	Percentage of Permitted Annual Withdrawal

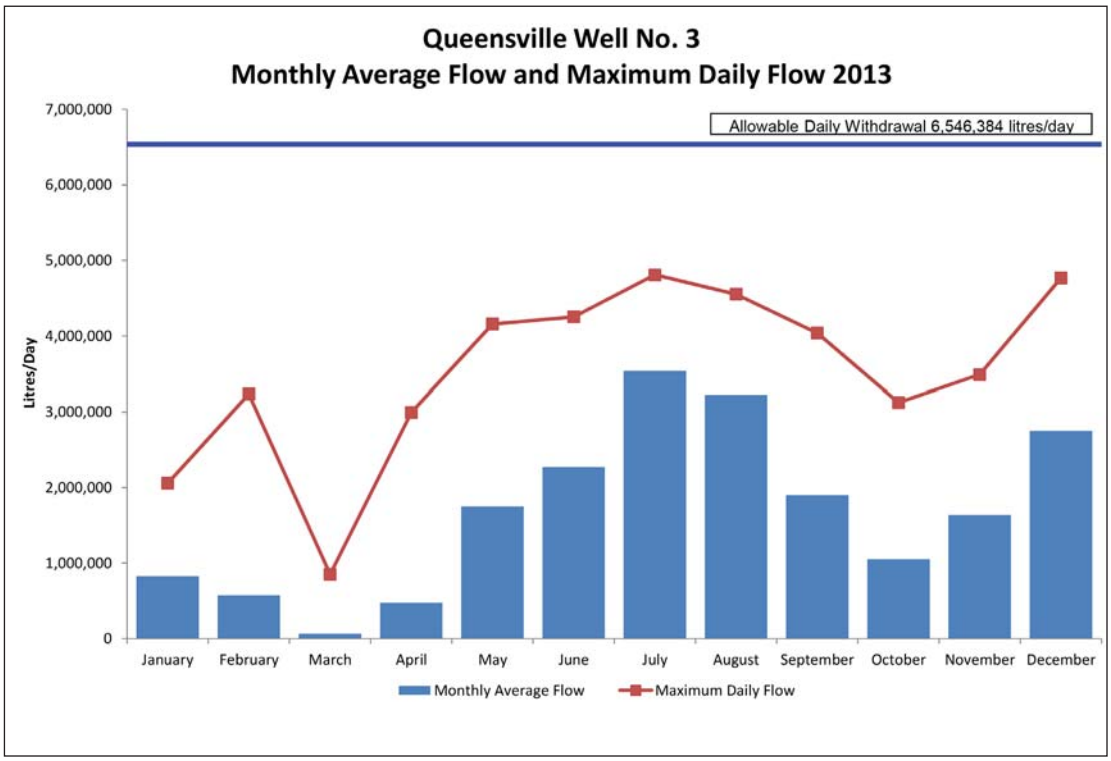
Queensville Well No. 1 and 2 had an increased monthly average flow recorded in November and December. This increase in flow was a result of commissioning the newly constructed Queensville elevated tank.

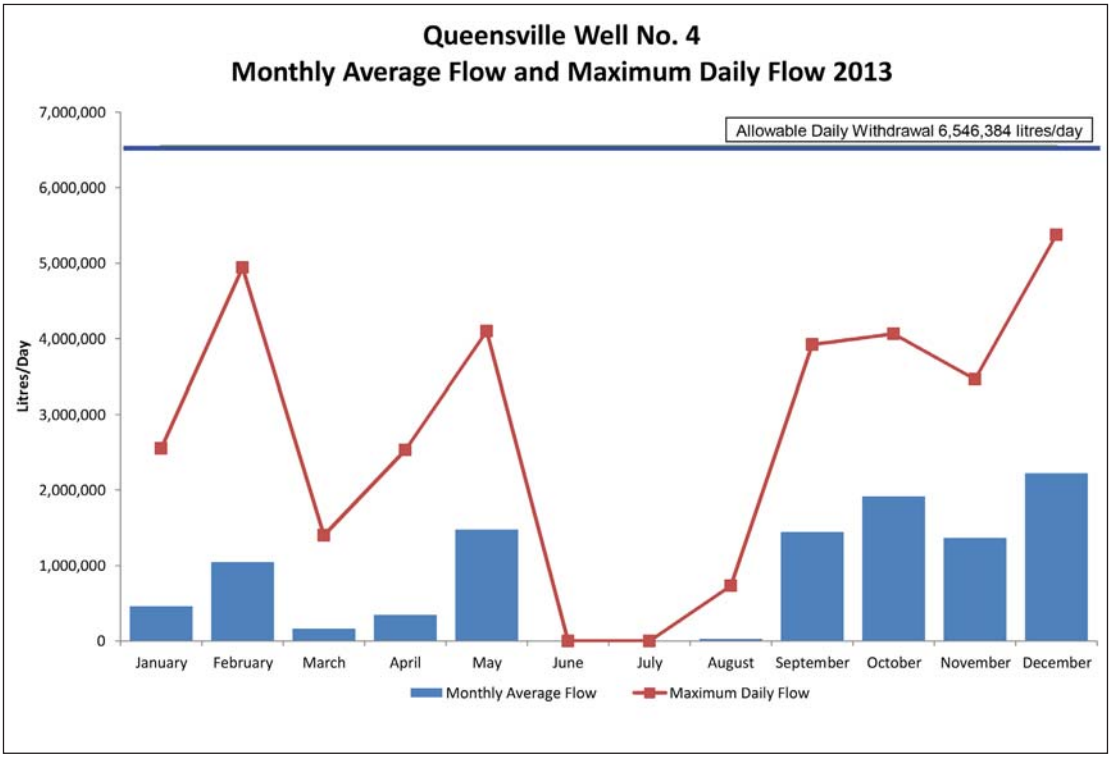




Queensville Well No. 3 had a reduced monthly average flow recorded between January and April. This reduction in flow was mainly due to scheduled maintenance and upgrades conducted on the wells chlorination system to improve the overall operation of the water system.

Queensville Well No. 4 had a reduced monthly average flow recorded between May and September of the 2013 reporting year. This reduction in flow was mainly due to scheduled maintenance conducted on the well to improve the overall operation of the water system.





Inorganics Test Results

Reading	Units	ODWS		1/16/2013	1/23/2013	2/6/2013 1	3/6/2013	4/10/2013	4/24/2013
Antimony as Sb	mg/L	0.006	IMAC		0.0005				0.0002
Arsenic as As	mg/L	0.025	IMAC		0.0005				0.0003
Barium as Ba	mg/L	1	MAC						0.152
Boron as B	mg/L	5	IMAC						0.04
Cadmium as Cd	mg/L	0.005	MAC		< 0.0001				< 0.0001
Chromium as Cr	mg/L	0.05	MAC		0.0001				< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.16	0.186	0.17	0.14	0.16	0.159
Lead as Pb	mg/L	0.01	MAC	0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC						< 0.00002
Nitrate + Nitrite as N	mg/L	10	MAC	0.07	0.087	0.07	0.04	0.03	0.02
Nitrate as N	mg/L	10	MAC	0.036	0.034	0.035	0.04	0.027	0.02
Nitrite	mg/L	1	MAC	0.04	0.053	0.04	< 0.02	< 0.02	< 0.006
Selenium as Se	mg/L	0.01	MAC		0.0001				< 0.0001
Sodium as Na	mg/L	200	AO	18	17.1	17.4	17.6	19.8	20
Uranium as U	mg/L	0.02	MAC						< 0.0001

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		5/8/2013	6/5/2013	7/10/2013	10/9/2013
Antimony as Sb	mg/L	0.006	IMAC			0.0003	0.0004
Arsenic as As	mg/L	0.025	IMAC			0.0003	0.0014
Barium as Ba	mg/L	1	MAC				
Boron as B	mg/L	5	IMAC				
Cadmium as Cd	mg/L	0.005	MAC			< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC			0.0012	< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.14	0.13	0.192	0.18
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	0.0001
Mercury as Hg	mg/L	0.001	MAC				
Nitrate + Nitrite as N	mg/L	10	MAC	0.02	< 0.02	0.273	0.16
Nitrate as N	mg/L	10	MAC	0.006	0.006	0.273	0.16
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.006	< 0.008
Selenium as Se	mg/L	0.01	MAC			0.0002	0.0034
Sodium as Na	mg/L	200	AO	19.5	19.3	19.3	19.2
Uranium as U	mg/L	0.02	MAC				

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/24/2013	7/10/2013	8/7/2013	10/9/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC			< 0.0005		
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC			< 0.0005		
2,4,6-Trichlorophenol	mg/L	0.005	MAC			< 0.0005		
2,4-Dichlorophenol	mg/L	0.9	MAC			< 0.0007		
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC			< 0.0008		
Alachlor	mg/L	0.005	IMAC			< 0.0004		
Aldicarb	mg/L	0.009	MAC				< 0.0045	
Aldrin + Dieldrin	mg/L	0.0007	MAC			< 0.000006		
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC			< 0.0002		
Azinphos-methyl	mg/L	0.02	MAC			< 0.0003		
Bendiocarb	mg/L	0.04	MAC				< 0.003	
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC			< 0.00001		
Bromoxynil	mg/L	0.005	IMAC			< 0.0004		
Carbaryl	mg/L	0.09	MAC				< 0.003	
Carbofuran	mg/L	0.09	MAC				< 0.003	
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002
Chlordane (Total)	mg/L	0.007	MAC			< 0.000006		
Chlorpyrifos	mg/L	0.09	MAC			< 0.0002		
Cyanazine	mg/L	0.01	IMAC			< 0.0003		
Diazinon	mg/L	0.02	MAC			< 0.0002		
Dicamba	mg/L	0.12	MAC			< 0.0004		
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005		< 0.0005
Diclofop-methyl	mg/L	0.009	MAC			< 0.0004		
Dimethoate	mg/L	0.02	IMAC			< 0.0003		
Dinoseb	mg/L	0.01	MAC			< 0.0005		
Diquat	mg/L	0.07	MAC			< 0.001		
Diuron	mg/L	0.15	MAC				< 0.003	
Glyphosate	mg/L	0.28	IMAC			< 0.025		
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC			< 0.000008		
Lindane	mg/L	0.004	MAC			< 0.000005		
Malathion	mg/L	0.19	MAC			< 0.0002		
Methoxychlor	mg/L	0.9	MAC			< 0.000009		
Metolachlor	mg/L	0.05	IMAC			< 0.0002		
Metribuzin	mg/L	0.08	MAC			< 0.0003		
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/24/2013	7/10/2013	8/7/2013	10/9/2013
Paraquat	mg/L	0.01	IMAC			< 0.001		
Parathion	mg/L	0.05	MAC			< 0.0002		
Pentachlorophenol	mg/L	0.06	MAC			< 0.0004		
Phorate	mg/L	0.002	IMAC			< 0.0002		
Picloram	mg/L	0.19	IMAC			< 0.0007		
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC			< 0.00002		
Prometryne	mg/L	0.001	IMAC			< 0.0002		
Simazine	mg/L	0.01	IMAC			< 0.0002		
Temephos	mg/L	0.28	IMAC			< 0.003		
Terbufos	mg/L	0.001	IMAC			< 0.0002		
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004	
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Trifluralin	mg/L	0.045	IMAC			< 0.000006		
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/16/2013	1/23/2013	2/6/2013	3/6/2013	4/10/2013	4/24/2013
Antimony as Sb	mg/L	0.006	IMAC		0.0004				0.0002
Arsenic as As	mg/L	0.025	IMAC		0.0006				0.0004
Barium as Ba	mg/L	1	MAC						0.14
Boron as B	mg/L	5	IMAC						0.041
Cadmium as Cd	mg/L	0.005	MAC		< 0.0001				< 0.0001
Chromium as Cr	mg/L	0.05	MAC		0.0001				< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.17	0.208	0.19	0.14	0.16	0.169
Lead as Pb	mg/L	0.01	MAC	0.0005	0.0009	0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC						< 0.00002
Nitrate + Nitrite as N	mg/L	10	MAC	0.04	0.076	0.02	0.04	0.04	0.014
Nitrate as N	mg/L	10	MAC	0.008	0.022	0.021	0.042	0.011	0.014
Nitrite	mg/L	1	MAC	0.03	0.054	< 0.02	< 0.02	0.03	< 0.006
Selenium as Se	mg/L	0.01	MAC		0.0001				< 0.0001
Sodium as Na	mg/L	200	AO	19.9	21	20.8	17.5	22	21.7
Uranium as U	mg/L	0.02	MAC						< 0.0001

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		5/8/2013	6/5/2013	7/10/2013	10/9/2013
Antimony as Sb	mg/L	0.006	IMAC			0.0003	0.0004
Arsenic as As	mg/L	0.025	IMAC			0.0007	0.0016
Barium as Ba	mg/L	1	MAC				
Boron as B	mg/L	5	IMAC				
Cadmium as Cd	mg/L	0.005	MAC			< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC			0.0013	< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.15	0.14	0.201	0.17
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	0.0001
Mercury as Hg	mg/L	0.001	MAC				
Nitrate + Nitrite as N	mg/L	10	MAC	< 0.02	< 0.02	0.282	0.164
Nitrate as N	mg/L	10	MAC	0.01	0.011	0.282	0.164
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.006	< 0.008
Selenium as Se	mg/L	0.01	MAC			0.0002	0.0034
Sodium as Na	mg/L	200	AO	21.9	22.2	22.1	22.5
Uranium as U	mg/L	0.02	MAC				

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/24/2013	7/10/2013	8/7/2013	10/9/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC			< 0.0005		
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC			< 0.0005		
2,4,6-Trichlorophenol	mg/L	0.005	MAC			< 0.0005		
2,4-Dichlorophenol	mg/L	0.9	MAC			< 0.0007		
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC			< 0.0008		
Alachlor	mg/L	0.005	IMAC			< 0.0004		
Aldicarb	mg/L	0.009	MAC				< 0.0045	
Aldrin + Dieldrin	mg/L	0.0007	MAC			< 0.000006		
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC			< 0.0002		
Azinphos-methyl	mg/L	0.02	MAC			< 0.0003		
Bendiocarb	mg/L	0.04	MAC				< 0.003	
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC			< 0.00001		
Bromoxynil	mg/L	0.005	IMAC			< 0.0004		
Carbaryl	mg/L	0.09	MAC				< 0.003	
Carbofuran	mg/L	0.09	MAC				< 0.003	
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002
Chlordane (Total)	mg/L	0.007	MAC			< 0.000006		
Chlorpyrifos	mg/L	0.09	MAC			< 0.0002		
Cyanazine	mg/L	0.01	IMAC			< 0.0003		
Diazinon	mg/L	0.02	MAC			< 0.0002		
Dicamba	mg/L	0.12	MAC			< 0.0004		
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005		< 0.0005
Diclofop-methyl	mg/L	0.009	MAC			< 0.0004		
Dimethoate	mg/L	0.02	IMAC			< 0.0003		
Dinoseb	mg/L	0.01	MAC			< 0.0005		
Diquat	mg/L	0.07	MAC			< 0.001		
Diuron	mg/L	0.15	MAC				< 0.003	
Glyphosate	mg/L	0.28	IMAC			< 0.025		
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC			< 0.000008		
Lindane	mg/L	0.004	MAC			< 0.000005		
Malathion	mg/L	0.19	MAC			< 0.0002		
Methoxychlor	mg/L	0.9	MAC			< 0.000009		
Metolachlor	mg/L	0.05	IMAC			< 0.0002		
Metribuzin	mg/L	0.08	MAC			< 0.0003		
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/24/2013	7/10/2013	8/7/2013	10/9/2013
Paraquat	mg/L	0.01	IMAC			< 0.001		
Parathion	mg/L	0.05	MAC			< 0.0002		
Pentachlorophenol	mg/L	0.06	MAC			< 0.0004		
Phorate	mg/L	0.002	IMAC			< 0.0002		
Picloram	mg/L	0.19	IMAC			< 0.0007		
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC			< 0.00002		
Prometryne	mg/L	0.001	IMAC			< 0.0002		
Simazine	mg/L	0.01	IMAC			< 0.0002		
Temephos	mg/L	0.28	IMAC			< 0.003		
Terbufos	mg/L	0.001	IMAC			< 0.0002		
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003	< 0.0003		< 0.0003
Triallate	mg/L	0.23	MAC				< 0.004	
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001		< 0.0001
Trifluralin	mg/L	0.045	IMAC			< 0.000006		
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002		< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
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mg/L: milligrams per litre, parts per million (ppm)

Stouffville

drinking water sub-system

York Drinking Water System

[surface + groundwater]

York Region operates five wells servicing the community of Stouffville in the Town of Whitchurch-Stouffville.

York Region supplements the groundwater supply in Stouffville with lake based water. The intent is to decrease the demand on the aquifer and provide additional security by having a second supply source.

Raw Water Source Description

Wells are screened in two separate aquifers – the shallow unconfined to semi-confined aquifer, and intermediate confined aquifer. Elevated concentrations of iron were identified and are common in deeper groundwater of York Region.

Groundwater in the shallow aquifer wells (Wells No. 3, 5 and 6) show higher chloride, sulphate and calcium concentrations in comparison to Wells No. 1 and 2 which are deeper in the aquifer. Shallow groundwater quality in York Region typically has higher concentrations due to impacts from the surrounding land use activities (e.g. road salt use). Ongoing source water protection initiatives are aimed at reducing the potential for these activities to impact water quality in the aquifer. The concentrations remain within safe drinking water limits and trends are monitored on an ongoing basis.

Due to the shallow aquifer setting, the raw water source for Wells No. 5 and 6 has been identified as Groundwater Under Direct Influence (GUDI) with effective insitu filtration. This indicates that the groundwater source is under the direct influence of surface water, although the aquifer also provides sufficient natural filtration. Water Treatment for the Stouffville wells includes the addition of chlorine for disinfection. At Wells No. 5 and 6, an ultraviolet light system was installed in 2006 to achieve primary disinfection of the raw water prior to addition of chlorine to maintain safe residual levels. At Zone 2 pumping station, treated lake based water from Toronto gets converted from combined chlorine to free chlorine. Treatment processes throughout the facility are monitored by online analyzers which are equipped with alarms and lockouts to alert operational staff of conditions requiring attention.

Currently, there is one reservoir and two elevated tanks servicing the community of Stouffville.

Summary of Approvals and Permits

Municipal Drinking Water	
Licence Number:	013-101
Issue Number:	Issue 2
Issue Date:	May 12, 2010
Revision Date:	May 4, 2012
Expiry Date:	March 11, 2015
Drinking Water Works	
Permit Number:	013-201
Issue Number:	Issue 5
Issue Date:	March 11, 2010
Revision Date:	September 18, 2013
Permit to Take Water Number:	7104-986FSJ
Issue Date:	July 12, 2013
Expiry Date:	March 31, 2017
Operational Plan Number:	013-401
Financial Plan Number:	013-301A
MOE Waterworks Number:	220002333
System Classification:	Water Distribution and Supply III (WD III) Water Treatment I (WTI)

Stouffville Drinking Water Sub-System (Wells 1, 2, 3, 5 + 6) Performance Summary:

[A] Absence
[hpc] Heterotrophic Plate Count

RAW	243 samples	[A] e-coli results	3 [0 to 1] total coliforms	n/a hpc samples	n/a hpc results
TREATED	105 samples	[A] e-coli results	[A] total coliforms	106 hpc samples	0 to 12 hpc results

Average Treated Water Concentration (mg/L)

32	281	0.09
sodium	hardness	fluoride

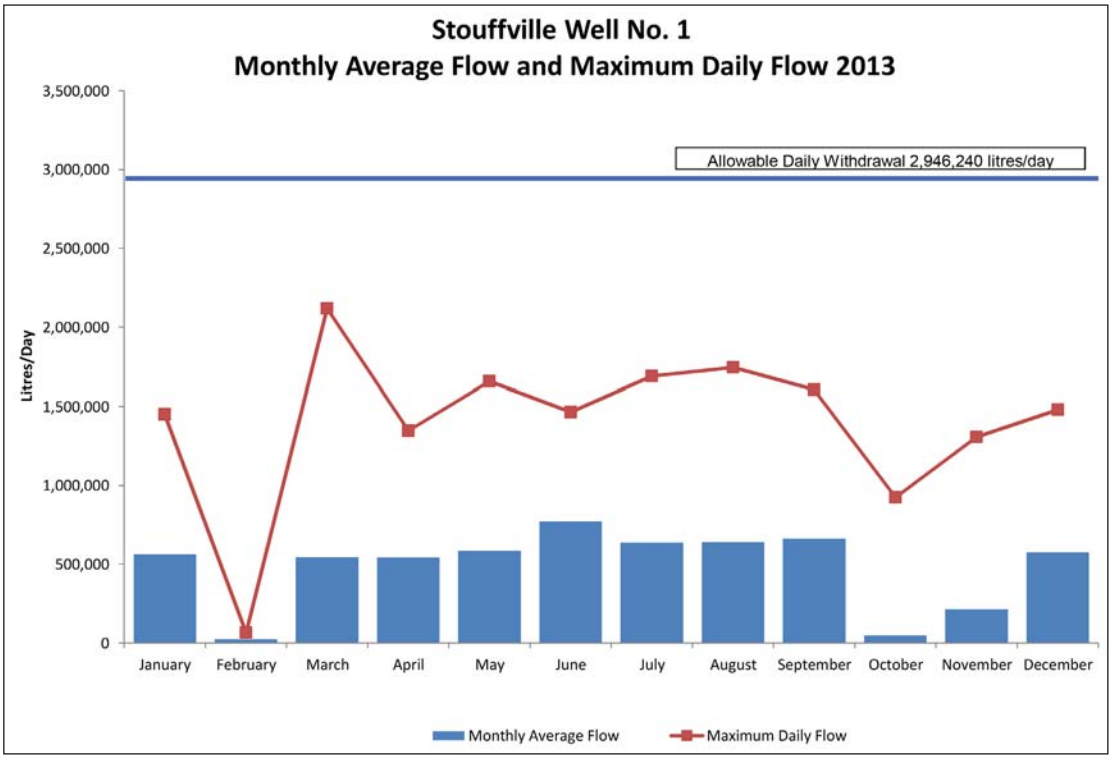
- Turbidity (Treated) 8,760 samples ranged 0.00 to 5.00 ntu [min. to max.]
- Turbidity (Raw) 67 samples ranged 0.01 to 1.2 ntu [min. to max.]
- Chlorine (Free) 8,760 samples ranged 0.37 to 2.99 mg/L [min. to max.]

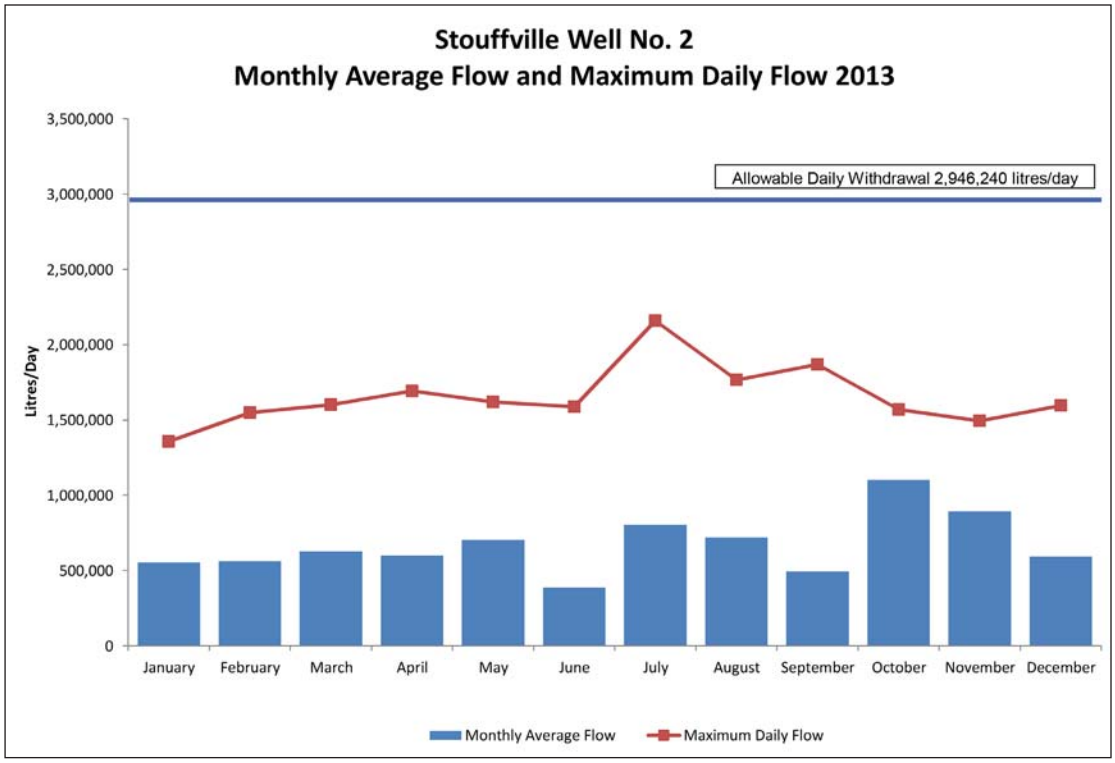
Permitted and Actual Maximum Daily Withdrawal from the Stouffville Production Wells for January 1 to December 31, 2013

Location	*Permitted Daily Withdrawal (litres)*	*Actual Maximum Daily Withdrawal (litres)*	*Number of Days Operating at Peak Capacity (May to October)*	*Number of Days Operating at Peak Capacity (Annual)*
Well 1	2,946,250	2,118,000 March 26, 2013	0	0
Well 2	2,946,250	2,158,250 July 20, 2013	0	0
Well 3	2,946,250	2,038,000 March 25, 2013	0	0
Well 5	3,110,400	1,229,100 March 26, 2013	0	0
Well 6	2,289,600	2,082,281 May 11, 2013	0	0

Permitted and Actual Maximum Annual Withdrawal from the Stouffville Production Wells for January 1 to December 31, 2013

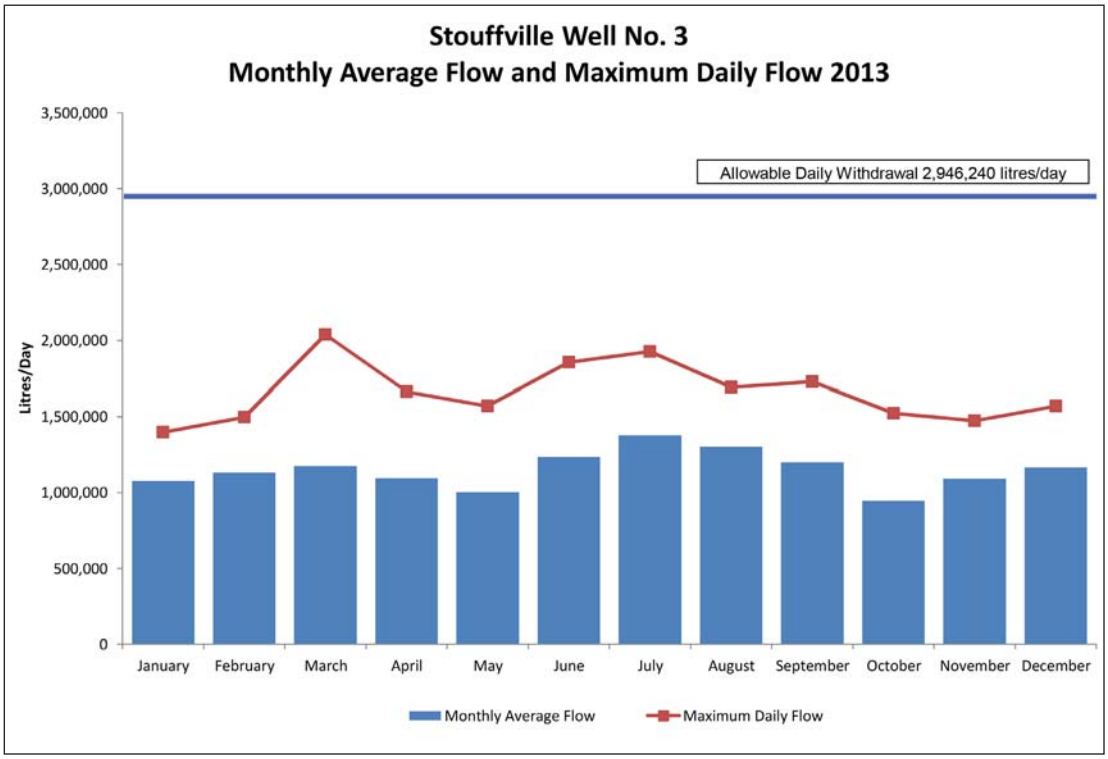
5,197,143,75 litres	1,381,769,911 litres	26.6 per cent
Annual Permitted Withdrawal	Actual Annual Withdrawal	Percentage of Permitted Annual Withdrawal

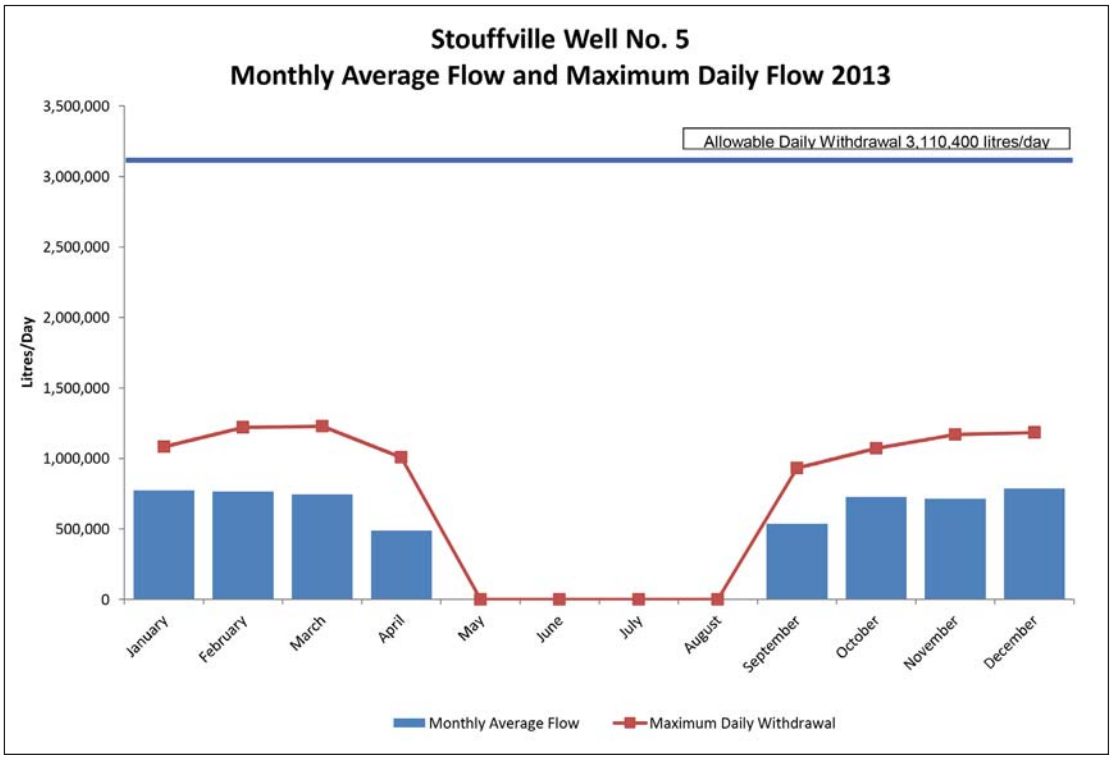


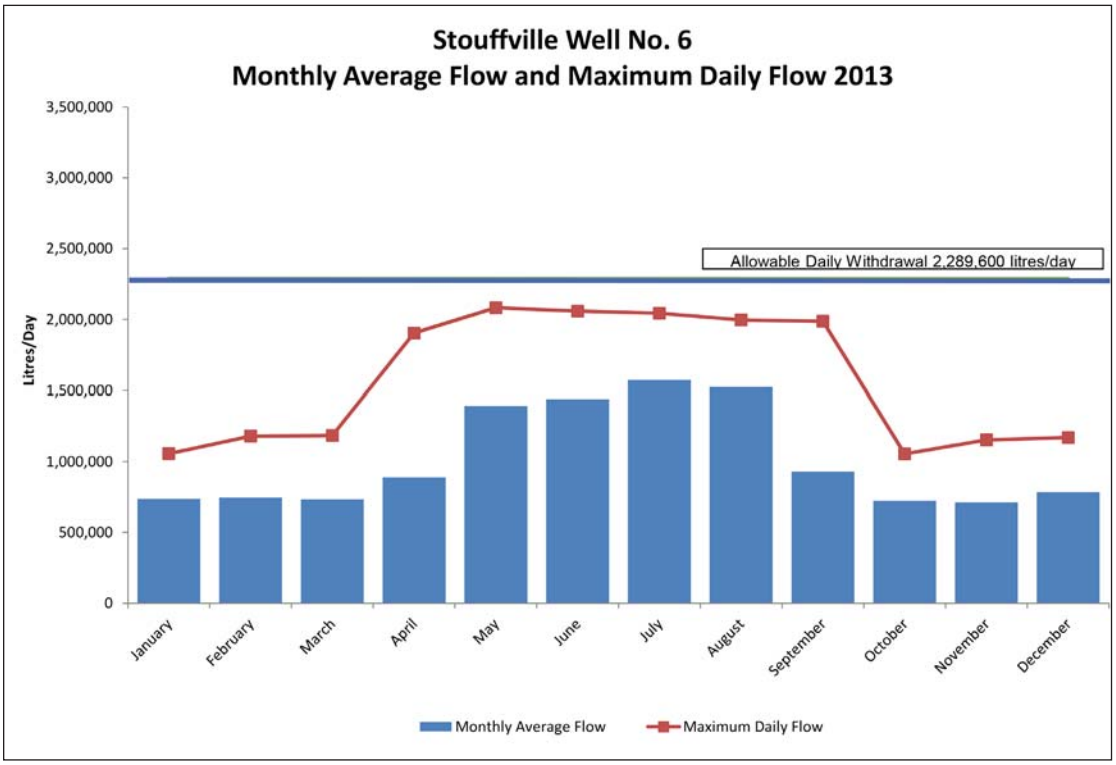


Stouffville Well No. 1 had a reduced monthly average flow recorded for February and between October and November. This reduction in flow was mainly due to scheduled maintenance conducted on the well to improve the overall operation of the water system.

Stouffville Well No. 5 had a reduced monthly average flow recorded between May and August of 2013 reporting year. This reduction in flow was mainly due to scheduled well rehabilitation conducted on the well to improve the overall operation of the water system.






Stouffville Well No. 6
Monthly Average Flow and Maximum Daily Flow 2013
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Litres/Day
Allowable Daily Withdrawal 2,289,600 litres/day
January
February
March
April
May
June
July
August
September
October
November
December
Monthly Average Flow
Maximum Daily Flow


OVER 50
PLANNING
APPLICATIONS
REVIEWED TO
MANAGE RISK
TO SOURCE
WATER

Inorganics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	7/17/2013	10/2/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0005	0.0003	0.0006	0.0004
Arsenic as As	mg/L	0.025	IMAC	0.0004	0.0002	0.0004	0.0003
Barium as Ba	mg/L	1	MAC		0.144		
Boron as B	mg/L	5	IMAC		0.038		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.175	0.13	0.164	0.123
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC		< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	0.009	< 0.02	0.268	0.106
Nitrate as N	mg/L	10	MAC	0.009	0.011	0.268	0.106
Nitrite	mg/L	1	MAC	< 0.006	< 0.02	< 0.006	< 0.006
Selenium as Se	mg/L	0.01	MAC	0.0002	< 0.0001	0.0008	< 0.0001
Sodium as Na	mg/L	200	AO	26.1	28.2	27	25.1
Uranium as U	mg/L	0.02	MAC		< 0.0001		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	4/24/2013	7/17/2013	10/2/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC		< 0.0005			
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC		< 0.0005			
2,4,6-Trichlorophenol	mg/L	0.005	MAC		< 0.0005			
2,4-Dichlorophenol	mg/L	0.9	MAC		< 0.0007			
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC		< 0.0008			
Alachlor	mg/L	0.005	IMAC		< 0.0004			
Aldicarb	mg/L	0.009	MAC			< 0.0045		
Aldrin + Dieldrin	mg/L	0.0007	MAC		< 0.000006			
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC		< 0.0002			
Azinphos-methyl	mg/L	0.02	MAC		< 0.0003			
Bendiocarb	mg/L	0.04	MAC			< 0.003		
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC		< 0.00001			
Bromoxynil	mg/L	0.005	IMAC		< 0.0004			
Carbaryl	mg/L	0.09	MAC			< 0.003		
Carbofuran	mg/L	0.09	MAC			< 0.003		
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC		< 0.000006			
Chlorpyrifos	mg/L	0.09	MAC		< 0.0002			
Cyanazine	mg/L	0.01	IMAC		< 0.0003			
Diazinon	mg/L	0.02	MAC		< 0.0002			
Dicamba	mg/L	0.12	MAC		< 0.0004			
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005		< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC		< 0.0004			
Dimethoate	mg/L	0.02	IMAC		< 0.0003			
Dinoseb	mg/L	0.01	MAC		< 0.0005			
Diquat	mg/L	0.07	MAC		< 0.001			
Diuron	mg/L	0.15	MAC			< 0.003		
Glyphosate	mg/L	0.28	IMAC		< 0.025			
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC		< 0.000008			
Lindane	mg/L	0.004	MAC		< 0.000005			
Malathion	mg/L	0.19	MAC		< 0.0002			
Methoxychlor	mg/L	0.9	MAC		< 0.000009			
Metolachlor	mg/L	0.05	IMAC		< 0.0002			
Metribuzin	mg/L	0.08	MAC		< 0.0003			
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	4/24/2013	7/17/2013	10/2/2013
Paraquat	mg/L	0.01	IMAC		< 0.001			
Parathion	mg/L	0.05	MAC		< 0.0002			
Pentachlorophenol	mg/L	0.06	MAC		< 0.0004			
Phorate	mg/L	0.002	IMAC		< 0.0002			
Picloram	mg/L	0.19	IMAC		< 0.0007			
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC		< 0.00002			
Prometryne	mg/L	0.001	IMAC		< 0.0002			
Simazine	mg/L	0.01	IMAC		< 0.0002			
Temephos	mg/L	0.28	IMAC		< 0.003			
Terbufos	mg/L	0.001	IMAC		< 0.0002			
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC			< 0.004		
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC		< 0.000006			
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
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AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	7/17/2013	10/2/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0004	0.0003	0.0004	0.0003
Arsenic as As	mg/L	0.025	IMAC	0.0004	0.0002	0.0002	0.0003
Barium as Ba	mg/L	1	MAC		0.118		
Boron as B	mg/L	5	IMAC		< 0.009		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.05	0.04	0.16	0.06
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury as Hg	mg/L	0.001	MAC		< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	0.37	0.39	1.38	0.55
Nitrate as N	mg/L	10	MAC	0.373	0.392	1.38	0.55
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.03	< 0.03
Selenium as Se	mg/L	0.01	MAC	0.0005	< 0.0001	0.0003	< 0.0001
Sodium as Na	mg/L	200	AO	53.1	53.3	52	52
Uranium as U	mg/L	0.02	MAC		0.0031		

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mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	4/24/2013	7/17/2013	10/2/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC		< 0.0005			
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC		< 0.0005			
2,4,6-Trichlorophenol	mg/L	0.005	MAC		< 0.0005			
2,4-Dichlorophenol	mg/L	0.9	MAC		< 0.0007			
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC		< 0.0008			
Alachlor	mg/L	0.005	IMAC		< 0.0004			
Aldicarb	mg/L	0.009	MAC			< 0.0045		
Aldrin + Dieldrin	mg/L	0.0007	MAC		< 0.000006			
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC		< 0.0002			
Azinphos-methyl	mg/L	0.02	MAC		< 0.0003			
Bendiocarb	mg/L	0.04	MAC			< 0.003		
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC		< 0.00001			
Bromoxynil	mg/L	0.005	IMAC		< 0.0004			
Carbaryl	mg/L	0.09	MAC			< 0.003		
Carbofuran	mg/L	0.09	MAC			< 0.003		
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC		< 0.000006			
Chlorpyrifos	mg/L	0.09	MAC		< 0.0002			
Cyanazine	mg/L	0.01	IMAC		< 0.0003			
Diazinon	mg/L	0.02	MAC		< 0.0002			
Dicamba	mg/L	0.12	MAC		< 0.0004			
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005		< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC		< 0.0004			
Dimethoate	mg/L	0.02	IMAC		< 0.0003			
Dinoseb	mg/L	0.01	MAC		< 0.0005			
Diquat	mg/L	0.07	MAC		< 0.001			
Diuron	mg/L	0.15	MAC			< 0.003		
Glyphosate	mg/L	0.28	IMAC		< 0.025			
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC		< 0.000008			
Lindane	mg/L	0.004	MAC		< 0.000005			
Malathion	mg/L	0.19	MAC		< 0.0002			
Methoxychlor	mg/L	0.9	MAC		< 0.000009			
Metolachlor	mg/L	0.05	IMAC		< 0.0002			
Metribuzin	mg/L	0.08	MAC		< 0.0003			
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	4/24/2013	7/17/2013	10/2/2013
Paraquat	mg/L	0.01	IMAC		< 0.001			
Parathion	mg/L	0.05	MAC		< 0.0002			
Pentachlorophenol	mg/L	0.06	MAC		< 0.0004			
Phorate	mg/L	0.002	IMAC		< 0.0002			
Picloram	mg/L	0.19	IMAC		< 0.0007			
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC		< 0.00002			
Prometryne	mg/L	0.001	IMAC		< 0.0002			
Simazine	mg/L	0.01	IMAC		< 0.0002			
Temephos	mg/L	0.28	IMAC		< 0.003			
Terbufos	mg/L	0.001	IMAC		< 0.0002			
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC			< 0.004		
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC		< 0.000006			
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Inorganics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	7/17/2013	10/2/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0006	0.0003	0.0004	0.0004
Arsenic as As	mg/L	0.025	IMAC	0.0002	< 0.0001	0.0001	0.0002
Barium as Ba	mg/L	1	MAC		0.0891		
Boron as B	mg/L	5	IMAC		< 0.009		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	0.0001	< 0.0001	0.0002
Fluoride as F	mg/L	1.5	MAC	0.03	0.03	0.09	0.04
Lead as Pb	mg/L	0.01	MAC	0.0005	0.0003	0.0004	0.0005
Mercury as Hg	mg/L	0.001	MAC		< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	1.53	1.4	2.03	1.87
Nitrate as N	mg/L	10	MAC	1.53	1.4	2.03	1.87
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.02	< 0.02
Selenium as Se	mg/L	0.01	MAC	0.0006	< 0.0001	0.0008	< 0.0001
Sodium as Na	mg/L	200	AO	19	19.5	9.5	20
Uranium as U	mg/L	0.02	MAC		0.0024		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
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AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
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Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	4/24/2013	7/17/2013	10/2/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC		< 0.0005			
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC		< 0.0005			
2,4,6-Trichlorophenol	mg/L	0.005	MAC		< 0.0005			
2,4-Dichlorophenol	mg/L	0.9	MAC		< 0.0007			
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC		< 0.0008			
Alachlor	mg/L	0.005	IMAC		< 0.0004			
Aldicarb	mg/L	0.009	MAC			< 0.0045		
Aldrin + Dieldrin	mg/L	0.0007	MAC		< 0.000006			
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC		< 0.0002			
Azinphos-methyl	mg/L	0.02	MAC		< 0.0003			
Bendiocarb	mg/L	0.04	MAC			< 0.003		
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC		< 0.00001			
Bromoxynil	mg/L	0.005	IMAC		< 0.0004			
Carbaryl	mg/L	0.09	MAC			< 0.003		
Carbofuran	mg/L	0.09	MAC			< 0.003		
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC		< 0.000006			
Chlorpyrifos	mg/L	0.09	MAC		< 0.0002			
Cyanazine	mg/L	0.01	IMAC		< 0.0003			
Diazinon	mg/L	0.02	MAC		< 0.0002			
Dicamba	mg/L	0.12	MAC		< 0.0004			
Dichloromethane	mg/L	0.05	MAC	< 0.0005	0.0014		< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC		< 0.0004			
Dimethoate	mg/L	0.02	IMAC		< 0.0003			
Dinoseb	mg/L	0.01	MAC		< 0.0005			
Diquat	mg/L	0.07	MAC		< 0.001			
Diuron	mg/L	0.15	MAC			< 0.003		
Glyphosate	mg/L	0.28	IMAC		< 0.025			
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC		< 0.000008			
Lindane	mg/L	0.004	MAC		< 0.000005			
Malathion	mg/L	0.19	MAC		< 0.0002			
Methoxychlor	mg/L	0.9	MAC		< 0.000009			
Metolachlor	mg/L	0.05	IMAC		< 0.0002			
Metribuzin	mg/L	0.08	MAC		< 0.0003			
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/23/2013	4/17/2013	4/24/2013	7/17/2013	10/2/2013
Paraquat	mg/L	0.01	IMAC		< 0.001			
Parathion	mg/L	0.05	MAC		< 0.0002			
Pentachlorophenol	mg/L	0.06	MAC		< 0.0004			
Phorate	mg/L	0.002	IMAC		< 0.0002			
Picloram	mg/L	0.19	IMAC		< 0.0007			
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC		< 0.00002			
Prometryne	mg/L	0.001	IMAC		< 0.0002			
Simazine	mg/L	0.01	IMAC		< 0.0002			
Temephos	mg/L	0.28	IMAC		< 0.003			
Terbufos	mg/L	0.001	IMAC		< 0.0002			
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC			< 0.004		
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC		< 0.000006			
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
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AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Georgina
drinking water system
Sutton Drinking Water Sub-System

[surface water - lake simcoe]

The Georgina Water Treatment Plant (WTP), located in the Town of Georgina was commissioned in November 2003 and provides water to the communities of Keswick, Lakeshore, and Sutton.

The raw water intake consists of a one-metre diameter pipe extending 1.5 kilometres out into Lake Simcoe to a depth of 19 metres. Water is pumped from the intake pipe to a low lift pumping station. The pumping station is designed to house pumps and equipment to transfer the water to the treatment plant. Water withdrawal from the lake is regulated by a Permit to Take Water issued by the MOE.

Raw Water Source Description

The supply for the Georgina WTP is surface water from Lake Simcoe. Based on sampling conducted during the Engineer's Report exercise (2001, Simcoe Engineering) it was identified that local flora and fauna populations contributed to the occasional presence of coliforms or E.coli in the raw water supply. The summer season provides ideal conditions for abundant growth of algae in Lake Simcoe. When the algae die off in the fall, they release an organic chemical, which creates a musty taste and odour. This issue is generally seasonal, lasting from August to November and tends to improve during the cold water season.

Water Treatment

The Georgina WTP treatment process uses:

- Chlorine diffusion at the intake when the water temperature rises above 12 degrees Celcius to control zebra mussel growth
- Microfiltration treatment process removes suspended solids, Cryptosporidium, Giardia, as well as other potentially harmful parasites and bacteria; microfiltration is accomplished by drawing the raw water through membranes whose pore sizes are large enough to allow water to pass, but small enough to remove undesirable impurities
- Disinfection is accomplished by ultra-violet irradiation and the addition of chlorine
- Granular activated carbon (GAC) for taste and odour
- Hydrofluorosilicic acid is added to fluoridate

Treatment processes throughout the facility are monitored by online analyzers which are equipped with alarms and lockouts to alert operational staff of conditions requiring attention. Water supplied from the Georgina WTP branches off and feeds into the Sutton and Keswick distribution systems. In addition to the water treatment plant there is one storage tower servicing the community of Sutton, and two towers and one reservoir currently servicing Keswick and the Lakeshore communities.

Summary of Approvals and Permits

Municipal Drinking Water	
Licence Number:	013-104
Issue Number:	Issue 3
Issue Date:	January 29, 2010
Revision Date:	September 20, 2013
Expiry Date:	January 28, 2015
Drinking Water Works	
Permit Number:	013-204
Issue Number:	Issue 2
Issue Date:	January 29, 2010
Revision Date:	September 20, 2013
Permit to Take Water Number:	4523-8TGSMJ
Issue Date:	April 24, 2012
Expiry Date:	April 23, 2022
Operational Plan Number:	013-404
Financial Plan Number:	013-301A
MOE Waterworks Number:	260026156
System Classification:	Water Treatment III (WT III)

Georgina (Sutton) Drinking Water System (Georgina WTP) Performance Summary:

[A] Absence
[hpc] Heterotrophic Plate Count

RAW	52 samples	0 to 8 e-coli results	0 to 115 total coliforms	n/a hpc samples	n/a hpc results
TREATED	52 samples	[A] e-coli results	[A] total coliforms	53 hpc samples	0 to 4 hpc results

Average Treated Water Concentration (mg/L)

26	139	0.45
sodium	hardness	fluoride

- Turbidity (Treated) 8,760 samples ranged 0.02 to 1.28 ntu [min. to max.]
- Turbidity (Raw) 8,760 samples ranged 0.11 to 4.01 ntu [min. to max.]
- Chlorine (Free) 8,760 samples ranged 0.95 to 5.00 mg/L [min. to max.]
- Fluoride 8,760 samples ranged 0.20 to 1.53 mg/L [min. to max.]

Summary of additional testing and sampling carried out in accordance with the requirement of the licence

Facility	*Parameter*	*Permitted Annual Average Concentration (mg/L)*	*Permitted Maximum Concentration (mg/L)*	*Reported Yearly Average (mg/L)*
Georgina WTP - Yearly Average [Drinking Water Licence 013-104 Rev 3 dated September 20, 2013]	a] Suspended Solids (to lake)	25	N/A	2.54
	b] Free Chlorine (to lake)	N/A	0	0

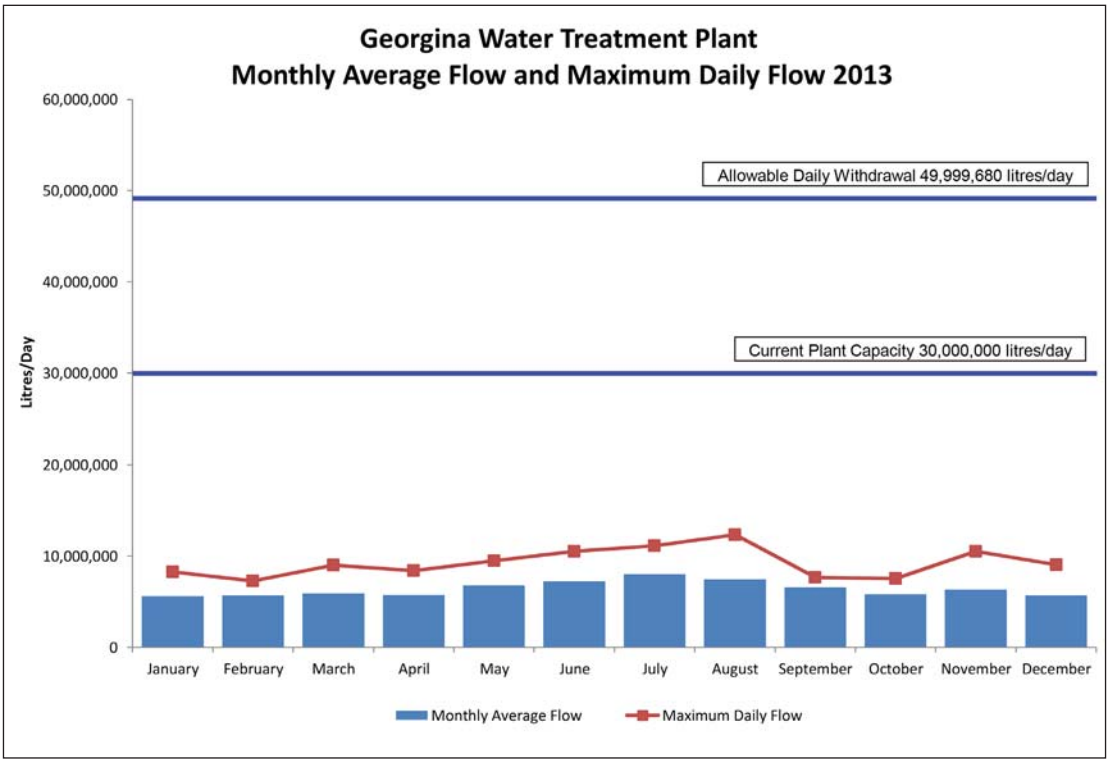
(Additional monitoring required as per Drinking Water License)

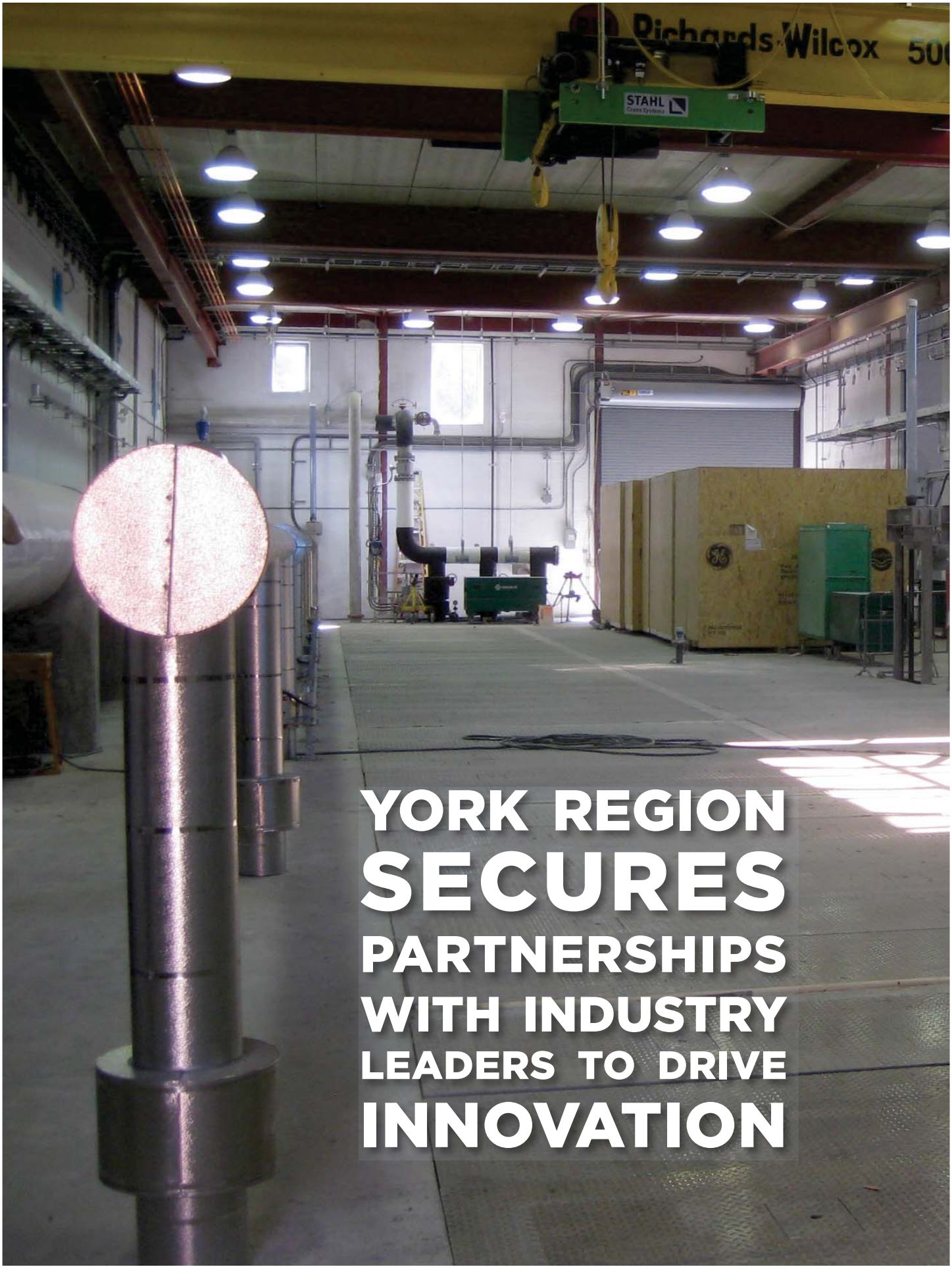
Permitted and Actual Maximum Daily Withdrawal from the Georgina (Sutton) Production Wells for January 1 to December 31, 2013

Location	*Permitted Daily Withdrawal (litres)*	*Actual Maximum Daily Withdrawal (July 16, 2012) (litres)*	*Number of Days Operating at Peak Capacity (May to October)*	*Number of Days Operating at Peak Capacity (Annual)*
Water Treatment Plant	49,999,680	12,347,000 August 4, 2013	0	0

Permitted and Actual Maximum Annual Withdrawal from the Georgina (Sutton) Production Wells for January 1 to December 31, 2013

18,250,000,000 litres	2,341,256,750 litres	12.8 per cent
Annual Permitted Withdrawal	Actual Annual Withdrawal	Percentage of Permitted Annual Withdrawal


Georgina Water Treatment Plant
Monthly Average Flow and Maximum Daily Flow 2013
60,000,000
50,000,000
40,000,000
30,000,000
20,000,000
10,000,000
0
Litres/Day
Allowable Daily Withdrawal 49,999,680 litres/day
Current Plant Capacity 30,000,000 litres/day
January
February
March
April
May
June
July
August
September
October
November
December
Monthly Average Flow
Maximum Daily Flow



YORK REGION SECURES PARTNERSHIPS WITH INDUSTRY LEADERS TO DRIVE INNOVATION

Inorganics Test Results

Reading	Units	ODWS		1/2/2013	4/3/2013	7/3/2013	10/2/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0005	0.0003	0.0006	0.0004
Arsenic as As	mg/L	0.025	IMAC	0.0007	0.0007	0.0006	0.0009
Barium as Ba	mg/L	1	MAC		0.0225		
Boron as B	mg/L	5	IMAC		0.02		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	0.0002	0.0008	0.0002
Fluoride as F	mg/L	1.5	MAC	0.47	0.37	0.38	0.584
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	0.0001
Mercury as Hg	mg/L	0.001	MAC		< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	0.18	0.06	0.18	0.164
Nitrate as N	mg/L	10	MAC	0.183	0.064	0.179	0.164
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.02	< 0.006
Selenium as Se	mg/L	0.01	MAC	0.0002	< 0.0001	< 0.0001	< 0.0001
Sodium as Na	mg/L	200	AO	25.3	26	25.7	25.8
Uranium as U	mg/L	0.02	MAC		0.0004		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/2/2013	4/3/2013	4/17/2013	7/3/2013	10/2/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC		< 0.0005			
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC		< 0.0005			
2,4,6-Trichlorophenol	mg/L	0.005	MAC		< 0.0005			
2,4-Dichlorophenol	mg/L	0.9	MAC		< 0.0007			
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC		< 0.0008			
Alachlor	mg/L	0.005	IMAC		< 0.0004			
Aldicarb	mg/L	0.009	MAC			< 0.0045		
Aldrin + Dieldrin	mg/L	0.0007	MAC		< 0.000006			
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC		< 0.0002			
Azinphos-methyl	mg/L	0.02	MAC		< 0.0003			
Bendiocarb	mg/L	0.04	MAC			< 0.003		
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC		< 0.00001			
Bromoxynil	mg/L	0.005	IMAC		< 0.0004			
Carbaryl	mg/L	0.09	MAC			< 0.003		
Carbofuran	mg/L	0.09	MAC			< 0.003		
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC		< 0.000006			
Chlorpyrifos	mg/L	0.09	MAC		< 0.0002			
Cyanazine	mg/L	0.01	IMAC		< 0.0003			
Diazinon	mg/L	0.02	MAC		< 0.0002			
Dicamba	mg/L	0.12	MAC		< 0.0004			
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005		< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC		< 0.0004			
Dimethoate	mg/L	0.02	IMAC		< 0.0003			
Dinoseb	mg/L	0.01	MAC		< 0.0005			
Diquat	mg/L	0.07	MAC		< 0.001			
Diuron	mg/L	0.15	MAC			< 0.003		
Glyphosate	mg/L	0.28	IMAC		< 0.025			
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC		< 0.000008			
Lindane	mg/L	0.004	MAC		< 0.000005			
Malathion	mg/L	0.19	MAC		< 0.0002			
Methoxychlor	mg/L	0.9	MAC		< 0.000009			
Metolachlor	mg/L	0.05	IMAC		< 0.0002			
Metribuzin	mg/L	0.08	MAC		< 0.0003			
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/2/2013	4/3/2013	4/17/2013	7/3/2013	10/2/2013
Paraquat	mg/L	0.01	IMAC		< 0.001			
Parathion	mg/L	0.05	MAC		< 0.0002			
Pentachlorophenol	mg/L	0.06	MAC		< 0.0004			
Phorate	mg/L	0.002	IMAC		< 0.0002			
Picloram	mg/L	0.19	IMAC		< 0.0007			
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC		< 0.00002			
Prometryne	mg/L	0.001	IMAC		< 0.0002			
Simazine	mg/L	0.01	IMAC		< 0.0002			
Temephos	mg/L	0.28	IMAC		< 0.003			
Terbufos	mg/L	0.001	IMAC		< 0.0002			
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC			< 0.004		
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC		< 0.000006			
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002

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Georgina

drinking water system

Keswick Drinking Water Sub-System

[surface water - lake simcoe]

York Region operates a water treatment plant in the community of Keswick. The 600-millimetre diameter water intake pipe extends 365 metres out into Cook's Bay and draws water from a depth of 8.5 metres. Water withdrawal from the lake is regulated by a Permit to Take Water issued by the MOE.

Raw Water Source Description

The supply for the Keswick WTP is surface water from Cook's Bay, Lake Simcoe. Based on sampling conducted during the Engineer's Report exercise (2001, Simcoe Engineering) it was identified that local flora and fauna populations contributed to the occasional presence of coliforms or E.coli in the raw water supply.

The summer season provides the ideal conditions for abundant growth of algae in Lake Simcoe. When algae die off in the fall, they release an organic chemical, which creates a musty taste and odour. This event is generally seasonal, lasting from August to November and tends to improve during the cold water season.

Water Treatment

Treatment at the Keswick WTP is accomplished by:

- Chlorine is added at the intake to limit zebra mussel growth when the incoming water temperature rises above 12 degrees Celsius (oC)
- Incoming water is initially screened to remove large objects
- Carbon dioxide is added to adjust the pH for coagulation
- Coagulant is used in flocculation tanks to make suspended particles clump together and eventually settle out during the treatment process
- Settling occurs in the sedimentation tanks
- Filtration is performed by dual media gravity filters with granular activated carbon, which removes taste and odour
- Water continues to the clearwell and ground reservoir located in the plant
- Filtered water is disinfected using chlorine and fluoride is added prior to the water being pumped to the distribution system

Treatment processes throughout the facility are monitored by online analyzers which are equipped with alarms and lockouts to alert operational staff of conditions that require attention. There is one point of entry from the Keswick WTP to the distribution system servicing Sutton, Keswick and the Lakeshore communities. In addition to the water treatment plant there are two storage towers and one reservoir currently servicing Keswick and Lakeshore communities.

Summary of Approvals and Permits

Municipal Drinking Water	
Licence Number:	013-104
Issue Number:	Issue 3
Issue Date:	January 29, 2010
Revision Date:	September 20, 2013
Expiry Date:	January 28, 2015
Drinking Water Works	
Permit Number:	013-204
Issue Number:	Issue 2
Issue Date:	January 29, 2010
Revision Date:	September 20, 2013
Permit to Take Water Number:	8413-994JDQ
Issue Date:	August 8, 2013
Expiry Date:	October 30, 2023
Operational Plan Number:	013-404
Financial Plan Number:	013-301A
MOE Waterworks Number:	260026156
System Classification:	Water Treatment III (WT III) Water Distribution Subsystem III (WDIII)

Georgina (Keswick) Drinking Water System (Keswick WTP) Performance Summary:

[A] Absence
[hpc] Heterotrophic Plate Count

RAW	52 samples	0 to 8 e-coli results	0 to 590 total coliforms	n/a hpc samples	n/a hpc results
TREATED	52 samples	[A] e-coli results	[A] total coliforms	53 hpc samples	0 to 150 hpc results

Average Treated Water Concentration (mg/L)

27	143	0.31
sodium	hardness	fluoride

- Turbidity (Treated) 8,760 samples ranged 0.02 to 1.12 ntu [min. to max.]
- Turbidity (Raw) 8,760 samples ranged 0.00 to 7.04 ntu [min. to max.]
- Chlorine (Free) 8,760 samples ranged 0.61 to 2.33 mg/L [min. to max.]
- Fluoride 8,760 samples ranged 0.198 to 1.46 mg/L [min. to max.]

Summary of additional testing and sampling carried out in accordance with the requirement of the licence

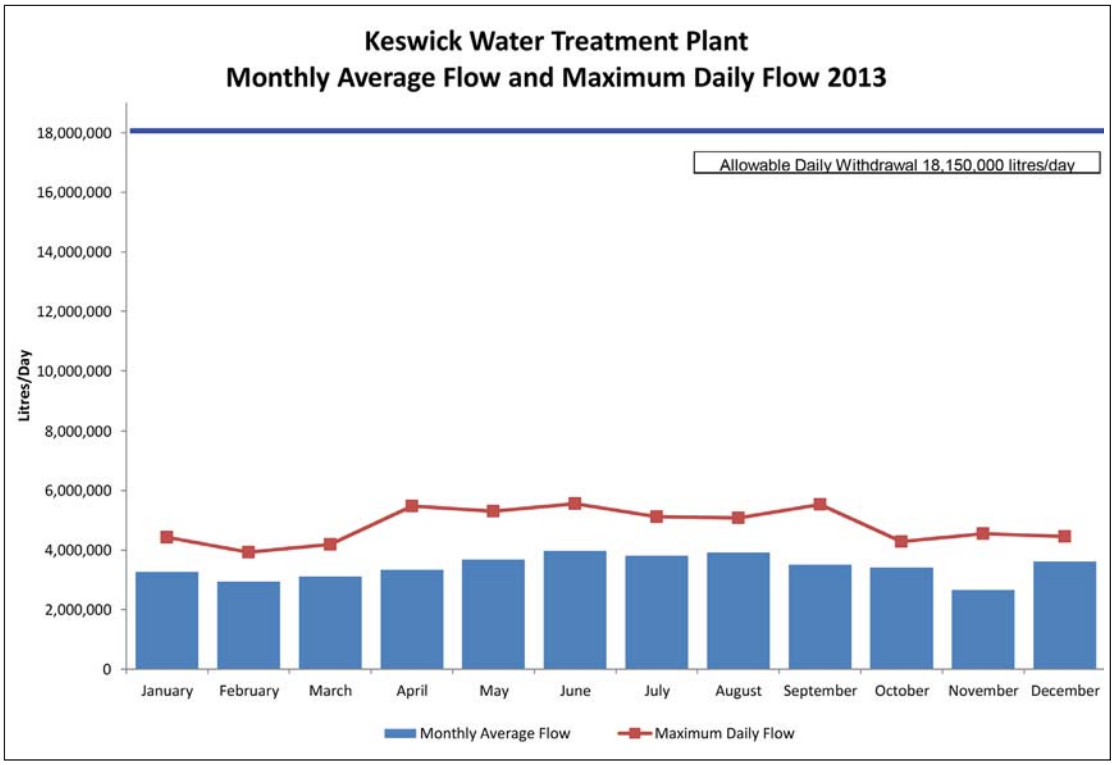
Facility	*Parameter*	*Permitted Annual Average Concentration (mg/L)*	*Reported Yearly Average (mg/L)*
Keswick WTP - Yearly Average [Drinking Water Licence 013-104 Rev 3 dated September 20, 2013]	a] Suspended Solids (to lake)	25	24.3
	(Additional monitoring required as per Drinking Water License)		

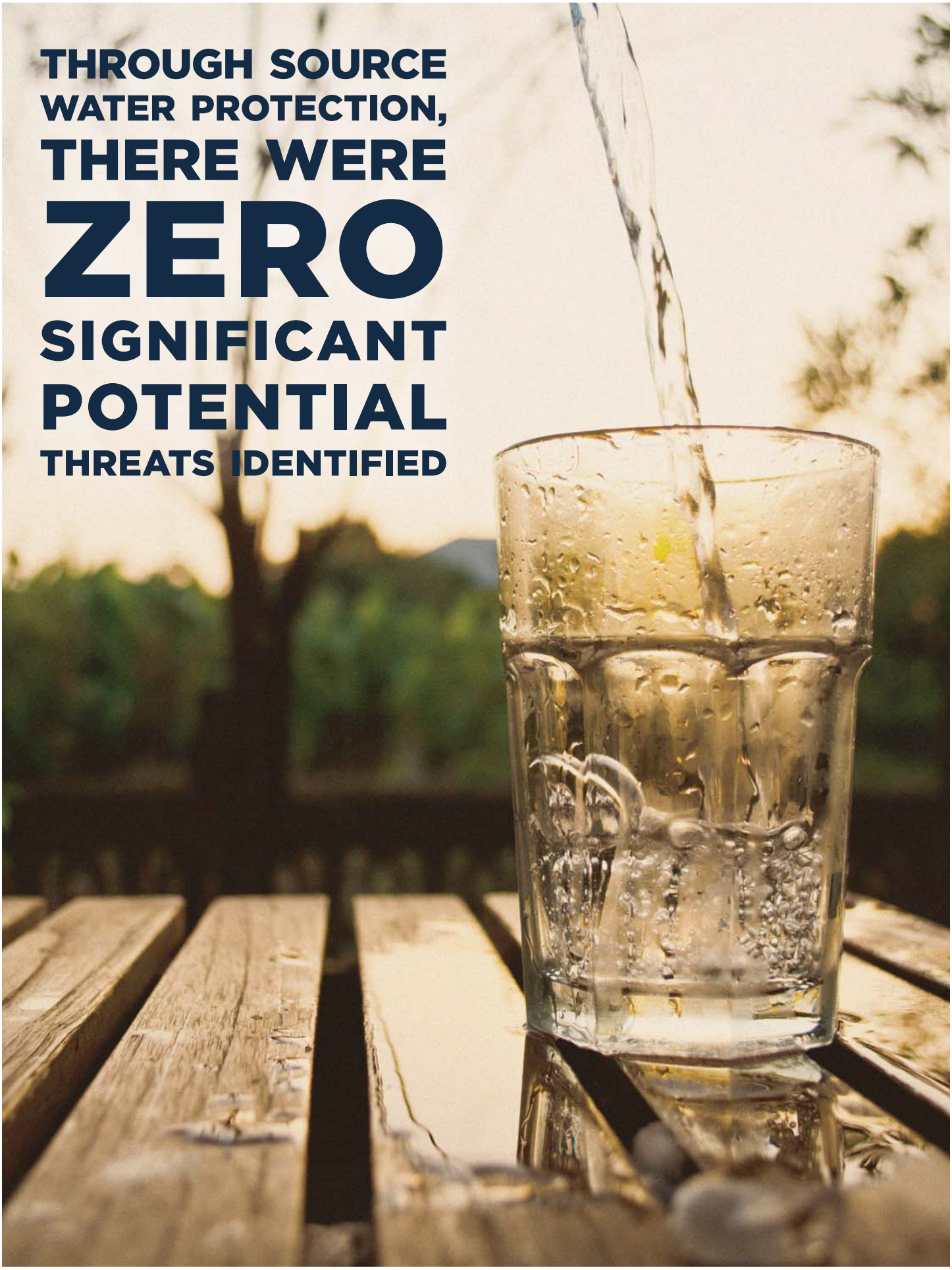
Permitted and Actual Maximum Daily Withdrawal from the Georgina (Keswick) Production Wells for January 1 to December 31, 2013

Location	*Permitted Daily Withdrawal (litres)*	*Actual Maximum Daily Withdrawal (October 31, 2012) (litres)*	*Number of Days Operating at Peak Capacity (May to October)*	*Number of Days Operating at Peak Capacity (Annual)*
Water Treatment Plant	18,150,000	5,559,000 June 19, 2013	0	0

Permitted and Actual Maximum Annual Withdrawal from the Georgina (Keswick) Production Wells for January 1 to December 31, 2013

6,624,750,000 litres	1,256,221,092 litres	19.0 per cent
Annual Permitted Withdrawal	Actual Annual Withdrawal	Percentage of Permitted Annual Withdrawal


Keswick Water Treatment Plant
Monthly Average Flow and Maximum Daily Flow 2013
Allowable Daily Withdrawal 18,150,000 litres/day
Litres/Day
18,000,000
16,000,000
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
January
February
March
April
May
June
July
August
September
October
November
December
Monthly Average Flow
Maximum Daily Flow


THROUGH SOURCE WATER PROTECTION, THERE WERE ZERO SIGNIFICANT POTENTIAL THREATS IDENTIFIED

Inorganics Test Results

Reading	Units	ODWS		1/2/2013	4/3/2013	7/3/2013	10/2/2013
Antimony as Sb	mg/L	0.006	IMAC	0.0006	0.0003	0.0005	0.0004
Arsenic as As	mg/L	0.025	IMAC	0.0005	0.0006	0.0005	0.0005
Barium as Ba	mg/L	1	MAC		0.0275		
Boron as B	mg/L	5	IMAC		0.017		
Cadmium as Cd	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium as Cr	mg/L	0.05	MAC	< 0.0001	0.0003	0.0004	< 0.0001
Fluoride as F	mg/L	1.5	MAC	0.23	0.5	0.43	0.091
Lead as Pb	mg/L	0.01	MAC	< 0.0001	< 0.0001	< 0.0001	0.0001
Mercury as Hg	mg/L	0.001	MAC		< 0.00002		
Nitrate + Nitrite as N	mg/L	10	MAC	0.17	0.13	0.17	0.149
Nitrate as N	mg/L	10	MAC	0.172	0.129	0.172	0.149
Nitrite	mg/L	1	MAC	< 0.02	< 0.02	< 0.02	< 0.006
Selenium as Se	mg/L	0.01	MAC	0.0001	< 0.0001	< 0.0001	< 0.0001
Sodium as Na	mg/L	200	AO	27.9	27.3	26.5	26.7
Uranium as U	mg/L	0.02	MAC		0.0002		

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

Organics Test Results

Reading	Units	ODWS		1/2/2013	4/3/2013	4/17/2013	7/3/2013	10/2/2013
1,1-dichloroethylene (vinylidene chloride)	mg/L	0.014	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
1,2-(o-dcb) Dichlorobenzene	mg/L	0.2	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
1,4-(p-dcb) Dichlorobenzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
2,3,4,6-Tetrachlorophenol	mg/L	0.1	MAC		< 0.0005			
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	mg/L	0.28	MAC		< 0.0005			
2,4,6-Trichlorophenol	mg/L	0.005	MAC		< 0.0005			
2,4-Dichlorophenol	mg/L	0.9	MAC		< 0.0007			
2,4-dichlorophenoxyacetic acid (2,4-D)	mg/L	0.1	IMAC		< 0.0008			
Alachlor	mg/L	0.005	IMAC		< 0.0004			
Aldicarb	mg/L	0.009	MAC			< 0.0045		
Aldrin + Dieldrin	mg/L	0.0007	MAC		< 0.000006			
Atrazine + N-dealkylated metabolites	mg/L	0.005	IMAC		< 0.0002			
Azinphos-methyl	mg/L	0.02	MAC		< 0.0003			
Bendiocarb	mg/L	0.04	MAC			< 0.003		
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Benzo(a)pyrene	mg/L	0.00001	MAC		< 0.00001			
Bromoxynil	mg/L	0.005	IMAC		< 0.0004			
Carbaryl	mg/L	0.09	MAC			< 0.003		
Carbofuran	mg/L	0.09	MAC			< 0.003		
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002
Chlordane (Total)	mg/L	0.007	MAC		< 0.000006			
Chlorpyrifos	mg/L	0.09	MAC		< 0.0002			
Cyanazine	mg/L	0.01	IMAC		< 0.0003			
Diazinon	mg/L	0.02	MAC		< 0.0002			
Dicamba	mg/L	0.12	MAC		< 0.0004			
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005		< 0.0005	< 0.0005
Diclofop-methyl	mg/L	0.009	MAC		< 0.0004			
Dimethoate	mg/L	0.02	IMAC		< 0.0003			
Dinoseb	mg/L	0.01	MAC		< 0.0005			
Diquat	mg/L	0.07	MAC		< 0.001			
Diuron	mg/L	0.15	MAC			< 0.003		
Glyphosate	mg/L	0.28	IMAC		< 0.025			
Heptachlor + Heptachlor Epoxide	mg/L	0.003	MAC		< 0.000008			
Lindane	mg/L	0.004	MAC		< 0.000005			
Malathion	mg/L	0.19	MAC		< 0.0002			
Methoxychlor	mg/L	0.9	MAC		< 0.000009			
Metolachlor	mg/L	0.05	IMAC		< 0.0002			
Metribuzin	mg/L	0.08	MAC		< 0.0003			
Monochlorobenzene	mg/L	0.08	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001

Organics Test Results

Reading	Units	ODWS		1/2/2013	4/3/2013	4/17/2013	7/3/2013	10/2/2013
Paraquat	mg/L	0.01	IMAC		< 0.001			
Parathion	mg/L	0.05	MAC		< 0.0002			
Pentachlorophenol	mg/L	0.06	MAC		< 0.0004			
Phorate	mg/L	0.002	IMAC		< 0.0002			
Picloram	mg/L	0.19	IMAC		< 0.0007			
Polychlorinated Biphenyls (PCBs)	mg/L	0.003	IMAC		< 0.00002			
Prometryne	mg/L	0.001	IMAC		< 0.0002			
Simazine	mg/L	0.01	IMAC		< 0.0002			
Temephos	mg/L	0.28	IMAC		< 0.003			
Terbufos	mg/L	0.001	IMAC		< 0.0002			
Tetrachloroethylene (perchloroethylene)	mg/L	0.03	MAC	< 0.0003	< 0.0003		< 0.0003	< 0.0003
Triallate	mg/L	0.23	MAC			< 0.004		
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001		< 0.0001	< 0.0001
Trifluralin	mg/L	0.045	IMAC		< 0.000006			
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002		< 0.0002	< 0.0002

"<": indicates the result is below Method Detection Limit
ODWS: Ontario Drinking Water Standard
MAC: Ontario Drinking Water Standard - Health Related (Maximum Acceptable Concentration)
AO: Ontario Drinking Water Standard - Non Health Related (Aesthetic Objective)
mg/L: milligrams per litre, parts per million (ppm)

glossary of terms

Adverse Water Quality - specifically identified in Schedule 16 of Ontario Regulation 170/03.

Analyzer - electronic instrument used in the water industry to determine the concentration of a known parameter (i.e. chlorine residual, turbidity etc.).

Bacteria - group of diverse and ubiquitous prokaryotic single-celled organisms.

Carbon Dioxide - added to drinking water to reduce pH.

Chloramination - use of both chlorine and ammonia to form chloramines used for secondary disinfection.

Contamination - introduction of materials which makes otherwise potable water unfit or less acceptable to use.

Cryptosporidium - protozoan parasite that produces an environmentally stable oocyst that is highly resistant to disinfection, but can be removed by effective treatment, which include filtration.

Free Chlorine Residual - amount of chlorine available for disinfection.

Cubic Metres per Day (m3/d) - flow measurement, $1m^3$ = 1000 litres or 220 gallons.

Disinfection - effective destruction by chemical or physical processes of pathogenic organisms capable of causing disease.

Disinfection by-product (DBP) - formation of chemical compounds that result from the addition of chlorine to water containing organic compounds. Some DBPs include trihalomethanes (THM) and haloacetic acids (HAA).

Distribution System - water supply network consisting of; pipes, watermains, valves, pumping stations, storage tanks and reservoirs that delivers water from a treatment plant or well to consumers. A 'trunk' distribution system refers to the Regional watermains, pumping stations, storage tanks and reservoirs within the system.

Drinking Water System (DWS) - Ministry of the Environment reference for regulated Municipal Residential Drinking Water Systems.

Drinking Water Works Permit (DWWP) - permit to establish or alter a drinking water system (together with a licence, this replaces Certificates of Approval).

E. coli (EC) - a bacteria and released in fecal matter that may be washed into water by rain, snowmelt and other forms of precipitation. As such, E. coli is a type of fecal coliform, and its presence in water indicates contamination with sewage or animal wastes. It is an indicator of the possible presence of pathogenic bacteria.

Fecal Coliforms - a group of bacteria that are associated with human or animal wastes. Also known as thermotolerant coliforms, these bacteria usually live in human or animal intestinal tracts, and their presence in drinking water is a strong indication of recent sewage or animal waste contamination.

Fluoride - added to drinking water as a means to decrease the incidence of tooth decay. Fluoride can also be naturally occurring in the environment. Where fluoride is added to drinking water, it is recommended that the concentration be adjusted to 0.5 - 0.8 mg/L, the optimum level for control of tooth decay.

Giardia - small, flagellated, protozoan parasites that inhabit the small intestines of a variety of animals. Giardia is the most commonly reported intestinal parasite in North America causing nausea, diarrhea, uneasiness in the upper intestine, malaise and perhaps low-grade fevers and chills. A well-managed water treatment system providing effective filtration and disinfection will control contamination by Giardia.

Grab Samples - single sample taken at a specific moment in time, a snapshot of conditions at the time the sample was retrieved.

Granular Activated Carbon - used to help remove taste and odour causing compounds in the drinking water.

Haloacetic Acid (HAA) - a common by-product of drinking water chlorination.

Hardness - measures mineral content in water. The two minerals that are most responsible for hardness are calcium and magnesium carbonate. Water hardness can also result in the scaling on pipes and appliances (hot water tanks, dishwashers). Hardness levels between 80 and 100 mg/L as calcium carbonate are considered to provide an acceptable balance between corrosion and incrustation. Water supplies with a hardness greater than 200 mg/L are considered poor but tolerable.

Heterotrophic Plate Count (HPC) - a microbiological test that provides an indication of general bacteria population.

Hydrofluorsilicic Acid (HFS) - a chemical added to drinking water for fluoridation purposes.

Inorganic Contaminants - such as salts and metals which can be naturally occurring or result from urban storm water run-off, industrial or domestic wastewater discharged, oil and gas production, mining or agriculture.

glossary of terms (continued)

Iron - may be present in groundwater as a result of mineral deposits and chemically reducing underground conditions. It may also be present in surface waters as a result of anaerobic decay in sediments and complex formation. Control of these minerals is required to avoid unpleasant colour and staining of fixtures and laundry.

Lead - metal, not typically found in either surface water or groundwater supplies; its presence in a water sample is primarily a result of lead being leached out of plumbing. The maximum acceptable concentration for lead in drinking water is 0.01 mg/L.

Litres per Second (L/s) - metric flow unit that describes the volume of water moved/transferred in one second.

Maximum Allowable Concentration (MAC) - upper limit that a water sample can contain and still be considered safe for human consumption, typically MACs are set at levels much lower than what is considered safe. When water samples show that the measured value is greater than fifty (50) percent of the MAC, operating authorities are directed to increase monitoring frequencies until the issue is resolved or detectable levels fall to less than the 50 percent threshold. MACs are typically expressed as mg/L or ug/L.

Maximum Flow Rate - peak or highest flow recorded during a specific time period usually in a twenty-four (24) hour period.

Microgram per Litre (ug/L) - measure of the concentration of a parameter in water, sometimes referred to as parts per billion (ppb).

Microbiological Contamination - such as viruses, bacteria or protozoa which may come from water pollution control plants, septic systems, livestock operations or wildlife.

Microfiltration Process - removes suspended solids, Cryptosporidium, Giardia, as well as other potentially harmful parasites and bacteria. Microfiltration is a membrane filtration process that removes contaminants from a fluid (i.e. water) by passage through a microporous membrane.

Microorganism - microscopic organism that cannot be seen without the aid of a microscope, including bacteria, protozoa, fungi, viruses and algae.

Milligram per Litre (mg/L) - measure of the concentration of a parameter in water, sometimes referred to as parts per million (ppm).

Ministry of the Environment (MOE) - provincial regulatory agency responsible for overseeing the water and wastewater industry in Ontario, primary functions include approval for new or expanding facilities, inspections and investigations.

Medical Officer of Health (MOH) - responsible for providing direction to the Operating Authority in instances of adverse water quality instances ensures adequate responses are being followed and has the authority issue boil water advisories and orders if necessary.

Municipal Drinking Water Licence (MDWL) - approvals framework for municipal residential drinking water systems requiring an owner to have a drinking water works permit, a permit to take water, an accepted operational plan, an accredited operating authority and a financial plan.

Non-Detectable (ND) - typically refers to concentrations that are at or below minimum detection limits.

Nitrosodimethylamine (NDMA) – a compound found in both surface water and groundwater sources, but found in drinking water primarily from its formation during the treatment process, particularly chloramination. Exposure to high levels of NDMA may cause liver damage in humans.

Nephelometric Turbidity Unit (NTU) - unit of measure for turbidity in a water sample.

Ontario Drinking Water Quality Standards (ODWQS) - Ontario Regulation 169/03 under the Safe Drinking Water Act. The ODWQS lists the maximum allowable concentrations for bacteriological, organic and inorganic parameters.

Operating Authority (OA) - service provider responsible for the operation and maintenance of the drinking water system.

Organics - substance containing the element carbon, these can be naturally occurring or man-made and can include pesticides, solvents, and by products of chlorination.

Organic Chemical Contaminants - includes synthetic and volatile organic chemicals, which are by-products of industrial processes, petroleum production, gas stations, urban storm water and septic systems.

Parts per Billion (ppb) - see definition for micrograms per litre.

pH - index of hydrogen ion activity, pH is defined as the negative logarithm of hydrogen ion concentration in moles per litre. A solution of pH from 0-7 is acidic, 7 is neutral, and 7-14 is alkaline.

Potable Water - water fit for human consumption.

Potassium Permanganate (KMnO4) - commonly used to treat drinking water for iron, manganese and sulfur odours.

Presence/Absence Test (P/A) - qualitative procedure used to determine the presence or absence of coliforms in water.

Pressure - term used to describe the strength of water flowing through a pipe or other channel.

Radionuclide - can either be naturally occurring or be the result of oil and gas production, mining activities or nuclear power plant operations.

Raw Water - surface water or groundwater that is available as a source of drinking water but has not received any treatment.

Sodium - found naturally in surface and groundwater as it is present in most rocks and soils across southern Ontario. Sodium has no smell or colour, however it can make the water taste salty at certain levels. The aesthetic objective for sodium in drinking water is 200 mg/L at which it can be detected by a salty taste. The local Medical Officer of Health is notified when the sodium concentration exceeds 20 mg/L.

Sodium Hypochlorite - used for disinfection in drinking water.

Sodium Silicate - used to sequester iron in drinking water (to reduce the potential for iron to stain plumbing fixtures).

Spills Action Centre (SAC) - reporting centre operated by the Ministry of the Environment. All calls related to adverse water quality are reported to the SAC by either the laboratory performing the analysis or the operating authority.

Total Coliform (TC) - coliform group of bacteria has been the most commonly used indicator of water quality. Total coliforms are a group of closely related bacteria that are usually free-living in the environment, but are also normally present in water contaminated with human and animal feces. With certain exceptions, they do not cause disease. Specifically, coliforms are used as a screen for fecal contamination as well as to determine the efficiency of treatment and the integrity of the water distribution system.

Treated Water - water entering the distribution system after the treatment is complete.

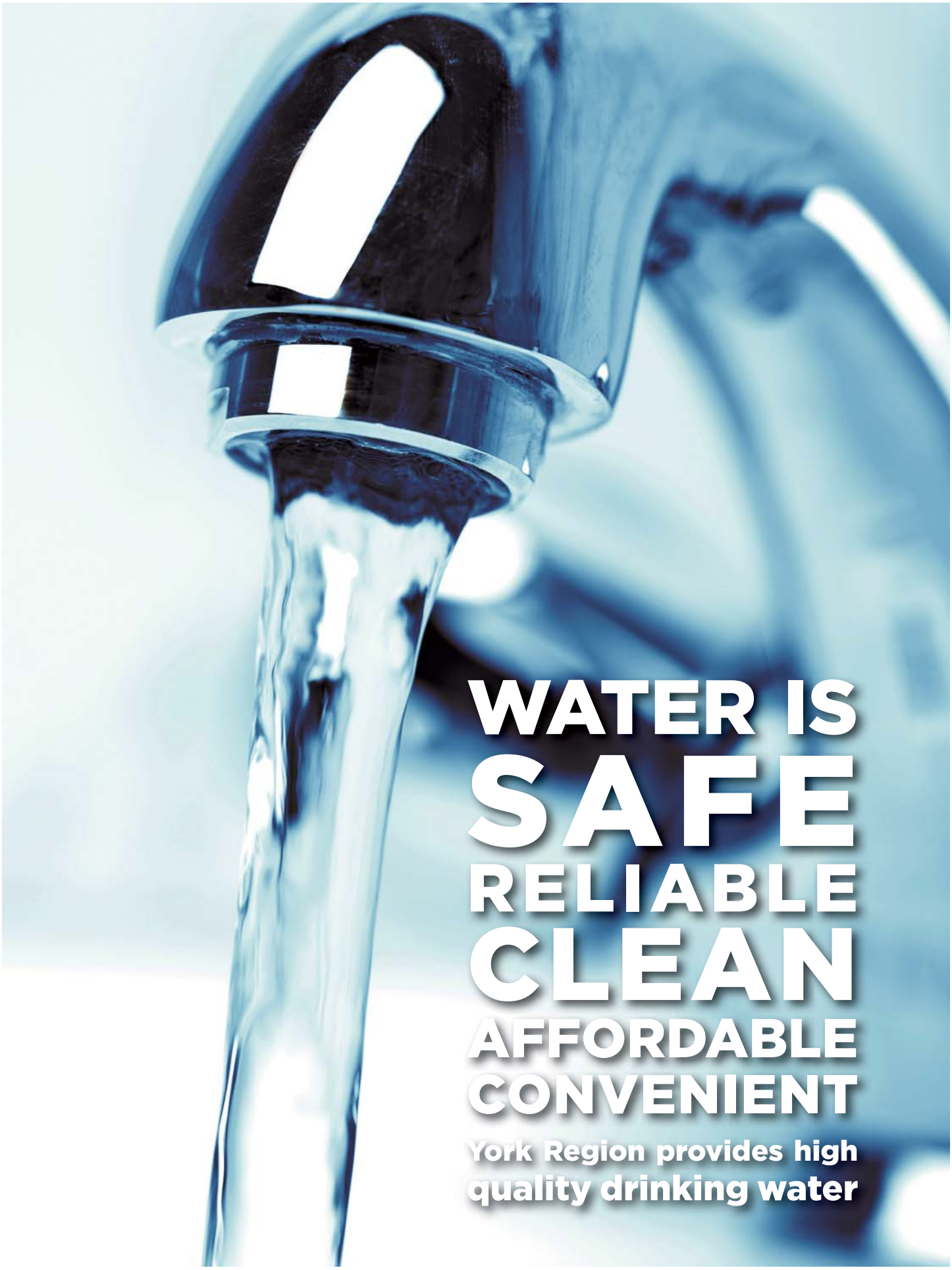
Trihalomethane (THM) - by-product resulting from chlorine being used to disinfect drinking water.

Turbidity - measure of relative clarity of a liquid, the presence of suspended matter or impurities that interfere with the clarity of the water. The more total suspended solids in the water, the cloudier it seems and the higher the turbidity.

Ultraviolet Disinfection (UV) - form of disinfection utilized in the water and wastewater industry, ultraviolet treatment uses the transmittance of ultraviolet irradiation to disrupt the genetic composition to inactivate waterborne pathogens.

Ultraviolet Intensity (UVI) - measured in mW/cm2. UV dose is the product of UVI and exposure time in mJ/cm2. UVI is a factor in the effectiveness of the UV water treatment process.

Water Supply System (WSS) - typically a facility composed of a variety of treatment processes that collectively treat the source water to a degree of purity that enables it to be deemed fit for human consumption or potable.


WATER IS
SAFE
RELIABLE
CLEAN
AFFORDABLE
CONVENIENT
York Region provides high quality drinking water

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Explanations on the health impacts of laboratory results of inorganic and organic parameters can be found in MOE document #4449e01, *Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines*.

www.ene.gov.on.ca/stdprodconsume/groups/lr/@ene/@resources/documents/resource/std01_079707.pdf

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