

INFORMATION ITEMS

Week Ending October 3, 2014

REPORTS

1. Guelph Sports Hall of Fame Annual Report
2. Update Annual & Summary Water Services Report (compliance)

CORRESPONDENCE

1. City of Kingston re: Westray Amendments
2. Union Gas Ltd. Re: 2015 Rates Application

BOARDS & COMMITTEES

1. None

ITEMS AVAILABLE IN THE CLERK'S OFFICE

1. None

INFORMATION REPORT



TO City Council

SERVICE AREA Community and Social Services
Culture and Tourism

DATE October 2, 2014

SUBJECT Guelph Sports Hall of Fame Annual Report

REPORT NUMBER CSS-CT-1436

EXECUTIVE SUMMARY

SUMMARY OF REPORT

To submit an annual report for the Guelph Sports Hall of Fame.

KEY FINDINGS

The Guelph Sports Hall of Fame was established in 1993 and consists of six (6) members at large and three (3) Kiwanis Club members. Inductees are recognized at the annual Guelph Kiwanis Sports Celebrity Dinner which was hosted on June 18th, 2014. This year's inductees were:

- Athlete Bob "Whipper" Watson
- Veteran Athlete Thomas McKenna
- Builder Rob Holody
- Official James King
- Team 1960 Kiwanis Juveniles

FINANCIAL IMPLICATIONS

None

BACKGROUND

The Guelph Sports Hall of Fame was established in 1993 with the first inductees being recognized later that year. The committee consists of six (6) members at large and three (3) Kiwanis Club members. The Kiwanis Club members are appointed to the committee. Inductees are recognized and presented with personal plaques at the annual Kiwanis Sports Celebrity Dinner which this year was hosted in June. Larger commemorative plaques are placed on public display at the Sleeman Centre in an area designated for the Sports Hall of Fame. Nominations are accepted at all times, with a cut-off date of October 31. Next year's dinner will again be held in June.

INFORMATION REPORT



REPORT

Objectives for the Guelph Sports Hall of Fame

- To recognize and honour achievements of Guelph individuals and teams who have attained prominence and distinction in any field of sport, and those who have made a major contribution to the development and advancement of sports in Guelph
- To permanently record and give public prominence to the achievement of such individuals and teams in a public display centre

Classification of Inductees

- There are five (5) classes of induction into the Guelph Sports Hall of Fame – Athlete, Veteran Athlete, Official, Builder and Team.

Eligibility for Election

- Nominees who by outstanding achievement have attained prominence in any field of sport, or have made a major contribution to the development and advancement of sports in Guelph, are eligible for election to the Guelph Sports Hall of Fame.
- Athlete candidates must have concluded their careers as active players for a minimum of five (5) years before their election, except where – by reason of outstanding performance and skill upon request by the Selection Committee, made in advance – the Board of Governors may reduce such waiting period.
- Builder and Team candidates can be active or inactive at selection time.

Recent Meetings

To date, the committee met five times during 2014 – in January, February, April, May and July. Subsequent meetings are scheduled for October and November, with one in December if required.

28th Annual Kiwanis Sports Celebrity Dinner

This year's dinner was held at the Italian Canadian Club on Wednesday, June 18, 2014. The event was attended by in excess of 270 people. Special guests included:

- Jayna Hefferd – Was named to the 2014 Olympic hockey roster for Canada. At the 1994 National Under-18 championship, Hefferd was part of the gold medal winning Ontario team. In 1995 Hefferd participated with the Ottawa Regional Select team in a series against the US National Under-18 Team. Hefferd was the captain of Team Ontario at the 1995 Canada Winter Games.
- Dave Dryden – Holds the distinction of creating the modern day goaltending mask consisting of a fibreglass mask with a cage. Born in Hamilton, Ontario, played in the National Hockey League (NHL) and World Hockey Association (WHA) from 1962 to 1979, playing for the New York Rangers, Buffalo Sabres, Chicago Blackhawks, Chicago Cougars and Edmonton Oilers. In a game

INFORMATION REPORT



between his Sabres and the Montreal Canadiens, he faced his brother Ken, the only time in the NHL that brothers opposed each other as goalies.

- David Scott-Thomas – Takes a whole-person approach to coaching, developing both the student and the athlete. He is a 27 time winner of the Canadian Interuniversity Sport (CIS) Coach of the Year Award, the most in CIS history, as well as the recipient of the Fox 40 Ontario University Athletics (OUA) Coach of the Year Award since coming to Guelph in 1997. Dave has established the varsity program as the premier track and field program in the country. He is also the Coach of the Speed River Track and Field Club and has coached five Olympians.
- Matt Finn – Now in his third Ontario Hockey League (OHL) season, he was named Guelph Storm Most Valuable Player following the 2011 – 2012 season, and named Storm Rookie of the Year in 2010 – 2011. Finn signed a three-year entry level contract with the Toronto Maple Leafs in November, 2013. He also attended the Team Canada World Junior U-20 evaluation camp during the 2013 summer. He was named the OHL defence man of the month in October, 2013 after recording 12 points in 11 games. He has been captain of the Storm for two years.
- Jim Parcels – With the help of the Hockey News senior writer Ken Campbell, Norwood native Jim Parcels has compiled the good, bad and unbelievable of minor hockey into his new book *Selling The Dream: how hockey parents and their kids are paying the price for the national obsession*. Parcels was once trainer for the OHL’s Peterborough Petes and Guelph Storm, and Marketing Director of the Ontario Minor Hockey Association from 1996 – 1999.

This year’s inductees were:

- | | |
|-------------------|------------------------|
| • Athlete | Bob “Whipper” Watson |
| • Veteran Athlete | Thomas McKenna |
| • Builder | Rob Holody |
| • Official | James King |
| • Team | 1960 Kiwanis Juveniles |

CORPORATE STRATEGIC PLAN

Innovation in Local Government

2.3 Ensure accountability, transparency and engagement

City Building

3.1 Ensure a well-designed, safe, inclusive, appealing and sustainable City

3.3 Strengthen citizen and stakeholder engagement and communications

INFORMATION REPORT

DEPARTMENTAL CONSULTATION

Community and Social Services – Culture and Tourism

COMMUNICATIONS

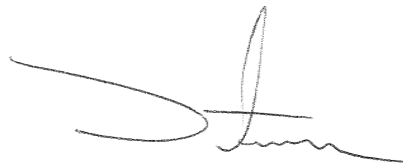
N/A

ATTACHMENTS

N/A

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INFORMATION REPORT



TO City Council

SERVICE AREA Planning, Building, Engineering and Environment

DATE October 2, 2014

**SUBJECT Update Annual & Summary Water Services Report
(compliance)**

REPORT NUMBER

EXECUTIVE SUMMARY

SUMMARY OF REPORT

This report is a compilation of information that demonstrates to the Owner and all stakeholders the ongoing delivery of an adequate and safe supply of drinking water to customers located within the City of Guelph Drinking Water System (Guelph DWS) and the Gazer Mooney Subdivision Distribution System (Gazer Mooney SDS, located in the Township of Guelph/Eramosa). Through this report, system owners, senior leaders, and customers are informed of the performance of the Water Services Department for the period January 1 to June 30, 2014.

KEY FINDINGS

In 2013, Water Services maintained a very high level of regulatory compliance as reflected in the Annual MOECC Inspection Report which achieved 94.49% for the Guelph DWS and 100% for the Gazer Mooney SDS. Also, Water Services fulfilled its mandate to deliver both an adequate and safe supply of drinking water to its customers in the City of Guelph and Guelph/Eramosa Township.

FINANCIAL IMPLICATIONS

All financial implications related to this report are accounted for in the approved Water Services Operating and Capital Budgets.

BACKGROUND

In conformance with our **Quality Management System 12-01 Reporting to Owner** policy, Water Services is presenting information to support the Owner's compliance with section 19 of the **Safe Drinking Water Act, 2002: Standard of care, municipal drinking water system**. The "Owner" is defined as City Council, CAO and Executive Director – Planning, Building, Engineering and Environment.

INFORMATION REPORT



REPORT

Water Services is requesting that the Owners review the attached **Summary Water Services Report – Report Card**. The full report is available on the City’s website at: <http://guelph.ca/living/environment/water/drinking-water/water-testing/>. Click on the link for “Update Annual & Summary Water Services Report – 2014”. Significant highlights of the report for Council’s consideration are as follows:

- Water Services had no health-related exceedances of provincial water quality parameters;
- Water Services took every reasonable precaution and effort to comply with all provincial regulations and obtained a score of 94.49% (Guelph DWS) and 100% (Gazer Mooney SDS) in their last Annual Inspection by the Ontario Ministry of the Environment and Climate Change (MOECC);
- Non-compliance items noted during the MOECC inspection were related to the security of inactive wells, back-up generator maintenance, and four missed occasions of continuous chlorine monitoring at five-minute intervals due to equipment failure (see Section A in the Annual and Summary Report). Water Services experienced no incidents of “non-compliance” outside of the MOECC Annual Inspection.
- Water Services (as the Operating Authority) maintained the requirements for Accreditation, as required under the provincial Municipal Drinking Water Licensing Program, with no significant issues;
- All regulatory microbiological and chemical quality samples were taken by certified operators;
- All tests were performed by accredited, licensed laboratories on water samples collected throughout the drinking water system;
- The MOECC approved Water Services’ Lead Reduction Plan on Mar. 21, 2012;
- The system provided approximately 8.4 million cubic meters of treated water (8.4 billion litres) from Jan. 01 to Jun. 30, 2014;
- Implementation of SDWA s.19 “Standard of Care” - On December 31, 2012, Standard of Care provisions under Section 19 of the Safe Drinking Water Act (SDWA), 2002, came into force. City staff, the Mayor and Council received training on this subject in 2011, and will receive a refresher in 2015;
- Water Services experienced four events that were considered “adverse water quality incidents” as defined by the Safe Drinking Water Act; all events were resolved to the satisfaction of the Ministry of the Environment (see Table 1 in the Annual and Summary Report);

INFORMATION REPORT

CORPORATE STRATEGIC PLAN

- 1.2 Develop collaborative work teams and apply whole systems thinking to deliver creative solutions;
- 1.3 Build robust systems, structures and frameworks aligned to strategy;
- 2.3 Ensure accountability, transparency and engagement.

DEPARTMENTAL CONSULTATION

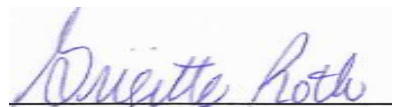
Feedback from Water Services staff (e.g. management, supervisory, compliance, and technical) was requested on the contents of this report. Comments and feedback submitted have been incorporated into this report.

COMMUNICATIONS

Water Services will continue to make regular reports to Council (i.e. the drinking water system Owners) on the continuing suitability, adequacy and effectiveness of Water Services' quality management system to ensure the ongoing delivery of an adequate and safe supply of drinking water.

ATTACHMENTS

- Attachment 1 2014 Update - Annual & Summary Water Services Report – Report Card
- Attachment 2 The full report is available on the City's website at:
<http://guelph.ca/living/environment/water/drinking-water/water-testing/>
Click on the link for "Update Annual & Summary Water Services Report – 2014".



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2014 Update

As per the Accessibility for Ontarians with Disabilities Act (AODA), this document is

Water Services Annual & Summary Report Card



INTRODUCTION

The purpose of this report card is to provide a high-level summary of the 2014 Annual & Summary Update Report to several stakeholders. The full version of this report can be accessed online at www.guelph.ca/water.

Any inquiries can be made by e-mailing waterservices@guelph.ca or by calling 519-837-5627.

This report card includes information from both the **Guelph Drinking Water System** and the **Gazer Mooney Subdivision Distribution System** for the period of Jan. 1 to Jun. 30, 2014 (unless otherwise noted). This report provides information related to responsibilities, scope and accomplishments of the Water Services division. This report also illustrates performance through dashboard and scorecard reporting on key performance indicators.

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GOVERNANCE STRUCTURE

City Council

The governance structure at the City of Guelph has the departments reporting through standing committees to City Council.

The Water Services Department of the Planning, Building, Engineering and Environment Service Area reports through the Planning, Building, Engineering and Environment (PBEE) Committee to City Council.

Planning, Building, Engineering and Environment Committee

According to the 2013 HR Annual Report, PBEE has 17 per cent of the corporation's staff.

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Planning, Building, Engineering and Environment Service Area

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Planning Services

Building Services

Engineering Services

Solid Waste Resources

Wastewater Services

Water Services

According to the 2013 HR Annual Report, PBEE has 17 per cent of the corporation's staff.

Owner (City Council, CAO and ED-PBEE) oversight of Water Services' major policy areas and programs include:

- Financial Plans
- Budgets – Resources and Staffing
- Infrastructure Master Planning
- Major Programs
- Emergency Response
- Customer Service

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Water Services is comprised of four functional areas as shown in Water Services' Organizational Structure.

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Water Services' Organizational Structure





Safe Drinking Water is a shared responsibility between

- **The Province:**

- the Ministry of the ENVIRONMENT & CLIMATE CHANGE and
- the Ministry of HEALTH AND LONG-TERM CARE

- **Public Health:**

- Wellington-Dufferin-Guelph Public Health (WDGPH)

- **The Municipality's Drinking Water System Owner:**

- City of Guelph Council and CAO (Guelph Drinking Water System)
- Township of Guelph / Eramosa (Gazer Mooney Sub. Dist. Syst.)

- **The Operating Authority:**

- Guelph Water Services (Accredited Operating Authority)

OUR ROLE

1. Source Water Protection

- Grand River Source Protection Plan
- Guelph Source Water Protection Program
- Arkell Springs Forest Stewardship Project
(36,700 trees planted since 2007)
- Water Conservation & Efficiency
Strategy Programs (135 m³/day saved)
 - o Residential Rebate Programs
 - o Blue Built Home
 - o ICI Capacity Buyback
 - o Water Wagon and tap
water promotion
 - o Rainwater harvesting
 - o "H2O GO Festival"

Outside Water Use By-law

Leak Detection Program

to be reported in next update

This section illustrates the scope of responsibility and activities conducted by Water Services.

1. Source Water Protection

- Grand River Source Protection Plan
- Guelph Source Water Protection
Program
- Arkell Springs Forest Stewardship
Project
(36,700 trees planted since 2007)

Water Conservation & Efficiency

Strategy Programs (135 m³/day saved)

- o Residential Rebate Programs
- o Blue Built Home
- o ICI Capacity Buyback
- o Water Wagon and tap
water promotion
- o Rainwater harvesting
- o "H2O GO Festival"

Outside Water Use By-law

Leak Detection Program

2. Effective Treatment

- Class IV Water Distribution & Supply Subsystem
- 31 facilities for water: sources, supply, treatment, storage or transfer
 - 21 operational groundwater wells and a
shallow groundwater collector system
- 10 sites using chlorination for primary disinfection
 - 3 sites using UV + chlorination
for multi-barrier primary disinfection
- 8.4 billion litres treated (Jan. 1-Jun. 30)
- avg. daily demand of 46.6 million litres
 - Automation & redundancies built-in

3. Secure Distribution

6.38 kms of aqueduct;

~ 50 million litres of water storage capacity:

- five storage reservoirs (~ 48 million litres);
- three water towers (~ 11.2 million litres);

539 kms of watermain;

4,034 watermain valves;

2,674 fire hydrants;

41,233 water services and

water meters;

2,624 ICI and multi-residential buildings and structures with:

- 6,105 backflow prevention devices
- 1,659 premise isolations.

4. Effective Monitoring & Reporting

- Continuous monitoring
- All regulatory microbiological and chemical quality samples are taken by certified operators and tests performed by accredited, licensed laboratories, as required by Safe Drinking Water Act
- 31 facilities for water: sources, supply, treatment, storage or transfer
- 21 operational groundwater wells and a shallow groundwater collector system
- 10 sites using chlorination for primary disinfection
 - 3 sites using UV + chlorination for multi-barrier primary disinfection
- 8.4 billion litres treated (Jan. 1-Jun. 30)
- avg. daily demand of 46.6 million litres
- Automation & redundancies built-in

4. Effective Monitoring & Reporting

- Continuous monitoring
 - All regulatory microbiological and chemical quality samples are taken by certified operators and tests performed by accredited, licensed laboratories, as required by Safe Drinking Water Act
5. Effective Management
- Municipal Drinking Water Licence, Drinking Water Works Permit, Permits to Take Water, Financial & Infrastructure Plans, DWQMS Accreditation,

Risk & Emergency Management,
37 Certified Operators & 24/7 coverage,
Quarterly reports to Management to ensure Operators' ongoing certification,
NSF Certification of parts & chemicals,
Continual Improvement.



5. Effective Management
 Municipal Drinking Water Licence,
 Drinking Water Works Permit,
 Permits to Take Water,
 Financial & Infrastructure Plans,
 DWQMS Accreditation,
 Risk & Emergency Management,
 37 Certified Operators & 24/7
 coverage,
 Quarterly reports to Management to
 ensure Operators' ongoing certification,
 NSF Certification of parts &
 chemicals

Map of Guelph's Drinking Water System

The map included on this page depicts the two pressure zones that exist in Guelph's Drinking Water System, along with the location of booster stations, wells, reservoirs and water towers.

There are two main water sources for Guelph's drinking water system:

- True groundwater requiring chlorination and
- GUDI-WEF (groundwater under the direct influence of surface water with effective in-situ filtration) requiring chlorination + UV

Owners and Operating Authorities are responsible for ensuring their drinking water systems:

- Provide water that meets all drinking water quality standards.
- Operate in accordance with the Safe Drinking Water Act and its regulations.
- Are kept in a fit state of repair.
- Are appropriately staffed and supervised by qualified persons.
- Comply with all sampling, testing and monitoring requirements.
- Meet all notification and reporting requirements.

Map of Guelph's Drinking Water System

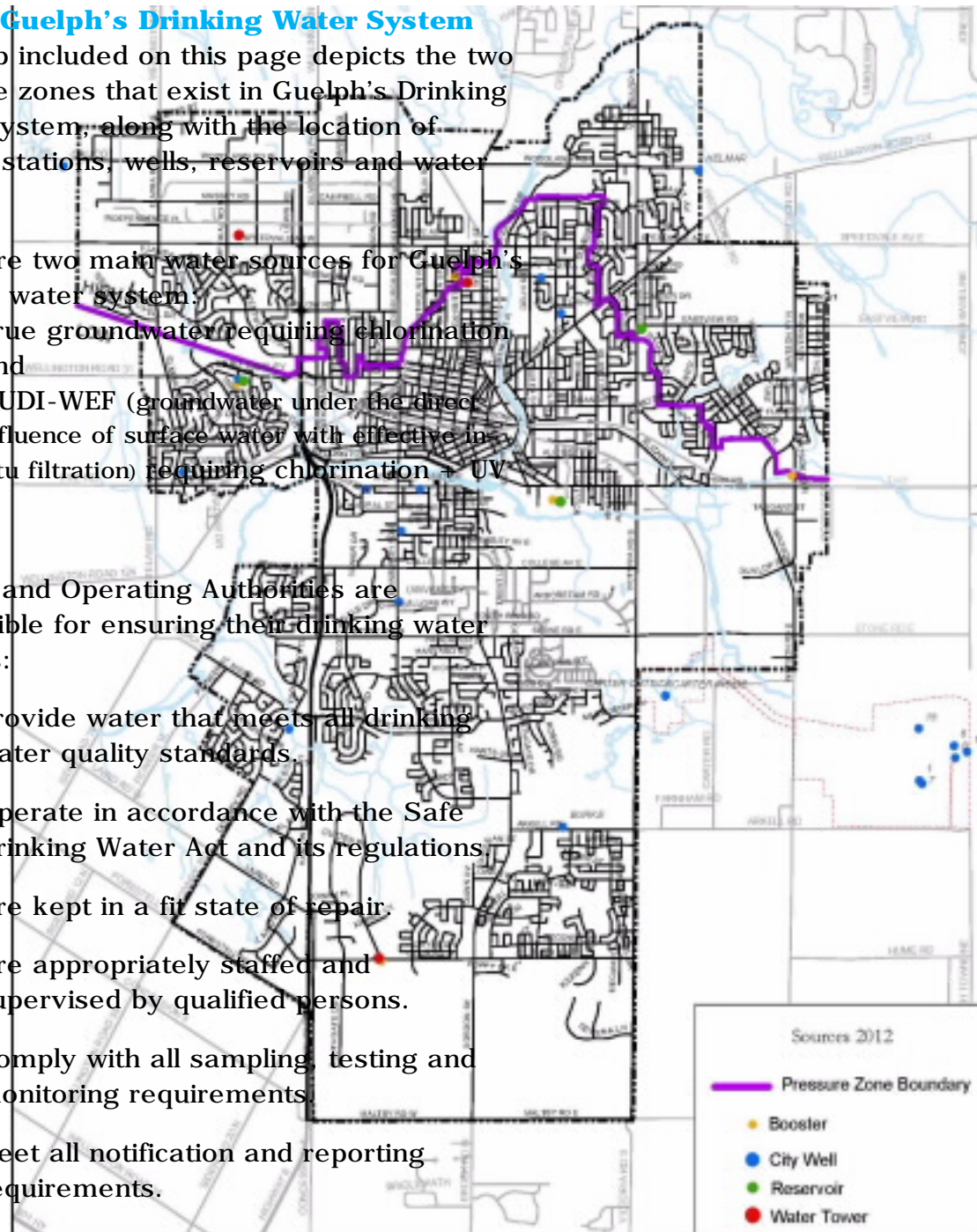
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- Are appropriately staffed and supervised by qualified persons.
- Comply with all sampling, testing and monitoring requirements.
- Meet all notification and reporting requirements.



PERFORMANCE SCORECARDS

The performance scorecards for Water Services consist of both KPIs and Statistics. Both types of measurements are needed to effectively manage the division. Additional information is included in the full version of this update report that can be accessed online at guelph.ca/water. Performance summaries are provided in the following categories:

- a) Incidents of Regulatory Non-Compliance
- b) Incidents of Adverse Drinking-Water Tests
- c) Deviations from Critical Control Point (CCP) Limits and Response Actions
- d) The Efficacy of the Risk Assessment Process
- e) Internal and Third-Party Audit Results
- f) Results of Emergency Response Testing
- g) Operational Performance and Statistics
- h) Raw and Treated Water Quality – Guelph Drinking Water System
- i) Treated Water Quality – Gazer Mooney Subdivision Distribution System
- j) Status of Ongoing and Emerging Water Quality/Supply Initiatives
- k) Expected Future Changes That Could Affect the DWS or the QMS
- l) Consumer Feedback
- m) The Resources Needed to Maintain the QMS
- n) The Results of Infrastructure Review
- o) Operational Plan Currency, Content and Updates
- p) Staff Suggestions

DEFINITIONS

Key Performance Indicator (KPI): A measurement of the degree or status of progress towards goals and objectives. It is a measurement that you can impact.

Statistic: A measurement that provides information on trends or events. You often have minimal impact on statistics, such as number of customer calls or quantity of visits. Statistics inform activity that can impact the key performance indicators.

Status:

The results are out of the target range and corrective actions/initiatives are required to correct performance.

The results are in range of the target, but not yet achieving target, some mitigating action may be necessary.

The results are outside the target range and corrective actions/initiatives are required to correct performance.

The results are positive and within target, no action is necessary.

The results are positive and within target, no action is necessary.

The results are in range of the target, but not yet achieving target, some mitigating action may be necessary.

A) INCIDENTS OF REGULATORY NON-COMPLIANCE

There were no incidents of non-compliance associated with the Guelph Drinking Water System in 2014 (Jan. 01 to Jun. 30).

The most recent assessment of compliance for the Guelph Drinking Water System as determined by the MOECC during their Annual Inspection resulted in an assessment score of 94.49 per cent (compliance); and for the Gazer Mooney Subdivision Distribution System, an assessment score of 100 per cent (compliance).

Non-compliance items noted during the MOECC Annual Inspection were related to the security of inactive wells, back-up generator maintenance, and four missed occasions of continuous chlorine monitoring at five-minute intervals due to equipment failure. All response action items are either complete or ongoing.

B) INCIDENTS OF ADVERSE DRINKING WATER TESTS

“Adverse Water Quality Incidents” (AWQI) refers to any unusual test result from treated water that does not meet a provincial water quality standard, or situation where disinfection of the water may be compromised. An AWQI indicates that on at least one occasion, a water quality standard was not met. From Jan. 1 – Jun. 30, 2014, there were two adverse water quality incidents (AWQIs) in the Guelph Drinking Water System and one AWQI in the Gazer Mooney Subdivision Distribution System. A summary is included below:

#	Date	AWQI #	Location	Description	Corrective Action	Resample Results Good	Deviation from Critical Control Point
1	Jan 28	115902	Burkes POE Sample Tap (S002)	Total Coliform (TC) colony count of 9 at Burkes POE Sample Tap (S002)	Wellington-Dufferin-Guelph Public Health (WDGPH), MOECC, and Spills Action Centre (SAC) notified. Re-sample results showed non-detect results for TC, E. coli and background at upstream and downstream locations (including S001, D005, and D0250 sample locations). No further action required.	Yes	No
2	Feb 24	116157	Eleven samples	Sodium results ranging from 23 mg/L to 130 mg/L.	Wellington-Dufferin-Guelph Public Health (WDGPH), MOECC, and Spills Action Centre (SAC) notified.	No ¹	No

¹ 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 may be communicated to local physicians for their use with patients on sodium restricted diets.

	Feb 24	116157	Eleven samples at various locations	Sodium results ranging from 23 mg/L to 130 mg/L.	Wellington-Dufferin-Guelph Public Health (WDGPH), MOECC, and Spills Action Centre (SAC) notified. Resample results are comparable to initial results. No further action required.	No ¹	No
3	Feb 24	116159	Gazer Mooney Lift Station (GM223)	Sodium sample and resample results were 26 mg/L and 25 mg/L.	Wellington-Dufferin-Guelph Public Health (WDGPH), MOECC, and Spills Action Centre (SAC) notified. Resample results are comparable to initial results. No further action required.	No ²	No

C) DEVIATIONS FROM CRITICAL CONTROL POINT (CCP) LIMITS AND RESPONSE ACTIONS

This section describes any deviation from essential steps or points in the drinking water system at which control can be applied to prevent or eliminate a drinking water hazard or to reduce it to an acceptable level. These essential steps or points are known as critical control points (CCPs). CCPs are used to identify control measures to address hazards and hazardous events. CCPs are in part stipulated by regulation and in part derived through risk assessment of the Drinking Water System. Deviations from the CCPs are reported to both the Owners and Top Management, and are summarized in the tables included in Section B) Incidents of Adverse Drinking Water Tests. There were no confirmed deviations from CCP Limits to date in 2014.

Water Services' Critical Control Points include:

- primary disinfection,
- secondary disinfection, and
- backflow prevention.

D) THE EFFICACY OF THE RISK ASSESSMENT PROCESS

This section confirms the occurrence of reviews of the risk assessment process to determine the effectiveness of the process in identifying and appropriately assessing the risk of hazardous events and hazards, and in identifying the appropriate control measures, critical control points (CCPs) and related critical control limits (CCLs).

The annual risk assessment review described in "QMS 07 Risk Assessment" was conducted by members of Water

¹ 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 may be communicated to local physicians for their use with patients on sodium restricted diets.

² 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 may be communicated to local physicians for their use with patients on sodium restricted diets.

Services' Continuous Improvement Team on Feb. 12, 2014, subsequently approved at a Management Review Meeting on Apr. 11, 2014 and presented in the "Executive Summary of Risk Assessment Outcomes" table:

Process	Hazardous Event	RISK RATING ³	City Physical Control Measures	City Operational Control Measures	External Control Measures (if applicable)
Water Supply	Source Degradation & Contamination: Private Sources	Moderate	Not Within City Control	+ ⁴	Private Contamination Sources Regulated by Ontario Ministry of the Environment
Water Supply	Source Degradation & Contamination: City Sources	Moderate			Ontario Environmental Protection Act, Source Protection Plans
	Source Water Infrastructure Failures	Moderate	+		-
Treatment (Chlorination at all sites + UV disinfection where applicable)	Inadequate Chemical Supply	Low			NSF Certification of Chemicals
	Treatment Infrastructure Failure	Low			-
	Insufficient Primary Disinfection	Moderate			-
Storage	Insufficient Secondary Disinfection	Low	+	+	-
	Storage Infrastructure Failure	Moderate	-	+	-
Distribution	Distribution Infrastructure Failure	Moderate	+		-
	Cross-connection or backflow	Moderate	+	+	-
	Insufficient Secondary Disinfection	Moderate	+	+	-
Security	Unauthorized Entry	Low	+		-
Monitoring & Reporting	Failure of Monitoring Equipment	Low			-
Power	Power Failure	Moderate			Mutual Aid & Assistance Agreements

E) INTERNAL AND THIRD-PARTY AUDIT RESULTS

Internal auditing and third-party auditing is performed to fulfill the mandatory requirements of the Drinking Water

³ Risk Ratings are based on the risk calculation (likelihood rating x consequence rating), as included in the "QMS 08 Risk Assessment Outcome" document: "Low" risk: 1 to 5; "Moderate" risk: 6 to 11; "High" risk: 12 or higher

⁴ Cells with **GREEN** highlights indicate that Water Services has determined there are sufficient control measures to adequately control the risks. Items highlighted in **YELLOW** and **RED** indicate risk areas that are not sufficiently addressed through existing control measures, and require additional work. + - Improvement being made

Quality Management Standard (DWQMS). The internal audit is completed using trained internal staff. The purpose of audits is to evaluate the level of conformance of Water Services to the DWQMS. Audits identify both conformance and non-conformance with the DWQMS as well as opportunities for improvement.

The 2014 internal process audits were completed on May 15 to 23, 2014. Internal audit findings are related to QMS orientation training updates for current and any new staff (QMS 04). Various opportunities for improvement suggested by staff were also noted in the internal audit report.

Third-party external on-site audits were completed on Jun. 10 to Jun. 12, 2014. There were no nonconformities identified during this audit. Noted opportunities for improvement by the auditor were related to improving the following processes: communications (QMS 12); and tracking improvement items (QMS 21). These opportunities for improvement will be followed-up on by the auditor at the next on-site audit in Jun. 9-11, 2015.

F) RESULTS OF EMERGENCY RESPONSE TESTING

Emergency response testing is regularly completed as a component covered by the Water Services' Quality Management System (QMS) to ensure that Water Services maintains a reasonable readiness to deal with emergencies. The ability to deal with emergencies is critical in demonstrating that Water Services has taken a diligent approach to operating the Guelph Drinking Water System. Feedback from this testing and from actual events is gathered during debriefing sessions and improvement items are incorporated into the Water Services Emergency Plan and /or daily operations.

During the winter of 2014, Guelph experienced seventy-six frozen services (with sixty temporary lines installed); the greatest number in one season since 1993. Typically, there are six frozen service lines in a winter season. For each frozen service event, immediate actions were taken by staff to prevent any further complications.

Water Services staff continue to work on closing corrective actions initiated from debriefing sessions related to Winter 2014's frozen services and ice storm events that occurred in 2013.

Follow-up on longer-term corrective and improvement actions is in progress.

G) OPERATIONAL PERFORMANCE AND STATISTICS

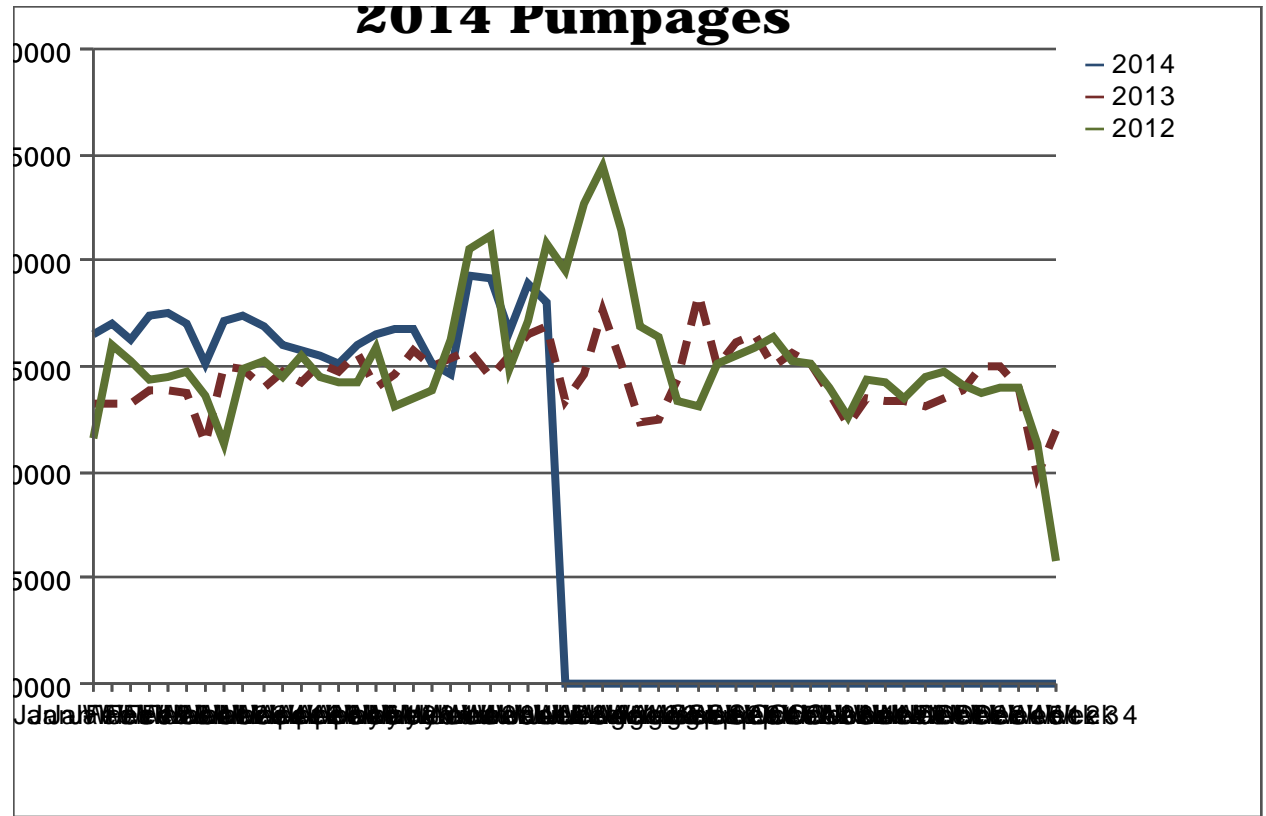
This section describes the various pieces of information that are used to gauge the performance of the Drinking Water System, including reasoning for changes or observations. The following information is related to pumpages:

Water Services processed 8,443,540 cubic metres (8.4 billion litres) of water to the distribution system in 2014 (Jan. 01 to Jun. 30). This represents 5.0 per cent more water being supplied to the distribution system in 2014 as compared to the same time period in 2013 and 2.6 per cent more water than in 2012. The average daily water demand was 46,649 cubic metres (46.6 million litres). The maximum day production of water in 2014 was 52,614 cubic metres (52.6 million litres) and occurred on Jun. 17, 2014. The minimum day production of water in the same time period was 39,248 cubic metres (39.3 million litres) and occurred on May 18, 2014.

Summaries of total water pumped, instantaneous flows and capacity (flows and volumes compared to rated capacities) by the City of Guelph from Jan. 01 to Jun. 30, 2014 can be found in the full version of the report available at www.guelph.ca/water.

Water Services processed 8,443,540 cubic metres (8.4 billion litres) of water to the distribution system in 2014 (Jan. 01 to Jun. 30). This represents 5.0 per cent more water being supplied to the distribution system in 2014 as compared to the same time period in 2013 and 2.6 per cent more water than in 2012. The average daily water demand was 46,649 cubic metres (46.6 million litres). The maximum day production of water in 2014 was 52,614 cubic metres (52.6 million litres) and occurred on Jun. 17, 2014. The minimum day production of water in the same time period was 39,248 cubic metres (39.3 million litres) and occurred on May 18, 2014.

2014 Pumpages



Water Production vs. Water Consumption vs. Population

The table below depicts the maximum pumpages (peak water days), average daily water production, and average daily water consumption rates in cubic metres per day (m³/day) as compared against Guelph's population.

Water Conservation & Efficiency Program goals include:

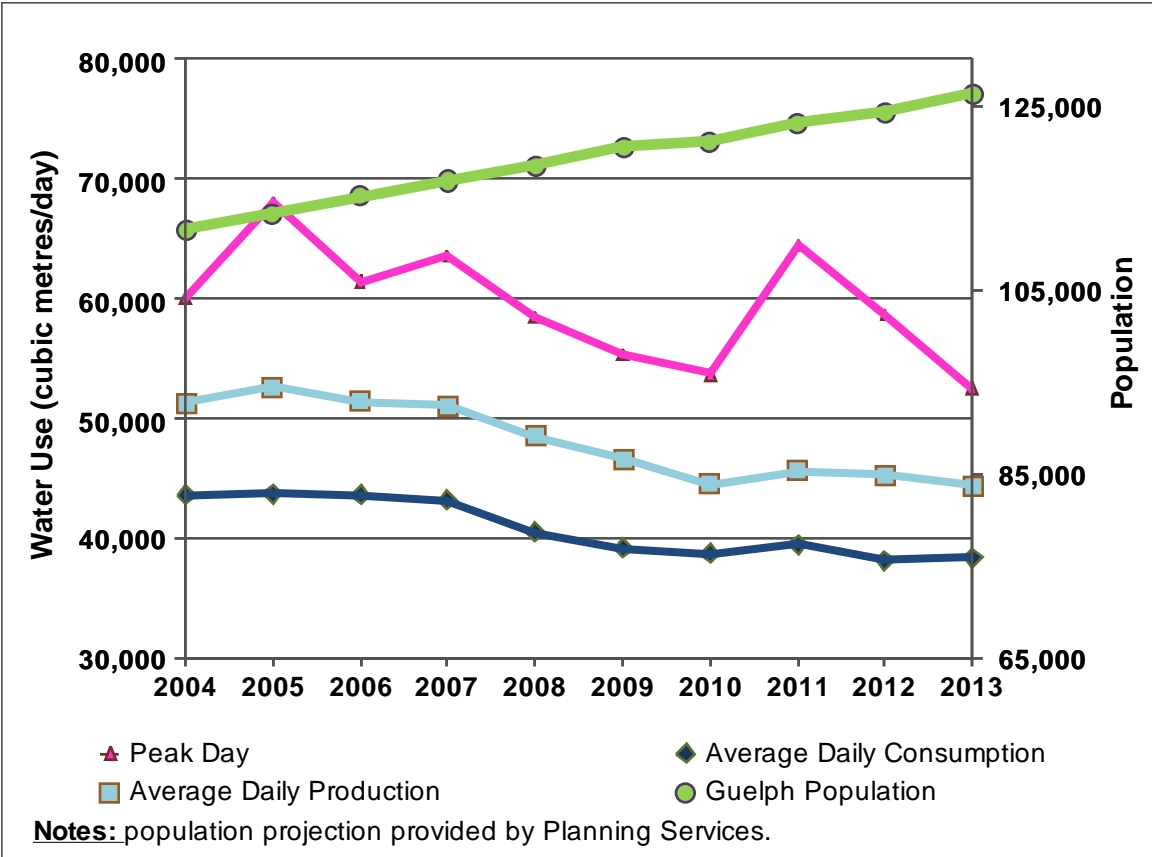
- Water use reduction of **8.7 MLD by 2019**
- **Affordability:** most cost effective source of new water capacity and limit capital and O&M costs
- **Source Sustainability:** contribute to sustainability of water supply, limit impacts of growth, and expand life of public supply infrastructure assets
- **Source Optimization:** reduce operational and environmental impacts of peak season demands
- **Compliance:** maintain compliance requirements for PTTWs and Water Opportunities Act.
- **Community Awareness:** foster community awareness regarding water use and stewardship.
- **Emergency Preparedness:** manage short-term water demand and engage public in emergency scenarios
- **Future Readiness:** position City for climate change resiliency

Water Production vs. Water Consumption vs. Population

Water Conservation & Efficiency

Program goals include:

- Water use reduction of **8.7 MLD by 2019**
- **Affordability:** most cost effective source of new water capacity and limit capital and O&M costs
- **Source Sustainability:** contribute to sustainability of water supply, limit impacts of growth, and expand life of public supply infrastructure assets
- **Source Optimization:** reduce operational and environmental impacts of peak season demands



Collector Flows

The Arkell Spring Grounds Collectors (“Collectors”), one of Guelph’s many water sources, consist of a gravity-fed under-drain system that collects shallow overburden groundwater. This system has been in use since the early 1900s and can represent as much as 40 per cent of the total city-wide daily water production. When the output of this source is reduced, Water Services is required to make up the difference from other water supplies.

Throughout the year, the production from this water supply varies from an approximate low of 4,000 cubic metres (4 million litres) up to an approximate high of 20,000 cubic metres (20 million litres) per day.

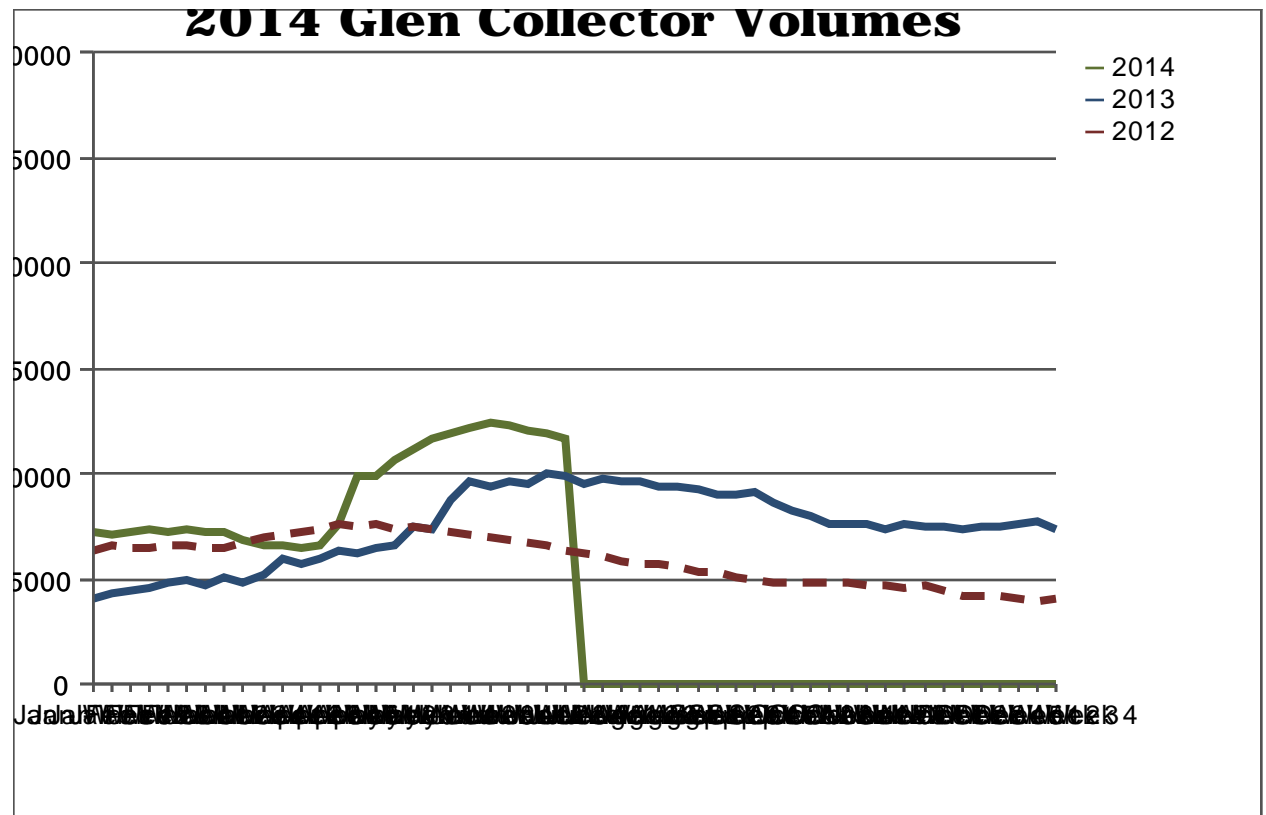
The Collectors can also be used as a measurable index of the state of the environment (i.e. very dry to very wet) as they respond to rainfall and other environmental conditions.

The volume of water that the Collectors produce is one of the benchmarks used in the decision-making process to determine the appropriate level of outside water use for the City.

The following “Glen Collector Volumes” graph depicts the Glen Collector flow rate in cubic metres per day (m³/day) that is averaged each week (Jan. 01 to Jun. 30).

Throughout the year, the production from this water supply varies from an approximate low of 4,000 cubic metres (4 million litres) up to an approximate high of 20,000 cubic metres (20 million litres) per day.

The Collectors can also be used as a measurable index of the state of the environment (i.e. very dry to very wet) as they respond to rainfall and other environmental conditions.



The Collectors have produced 1,622,355 cubic metres (1.6 billion litres) of water in 2014 (Jan. 01 to Jun. 30). This represents 28.0 per cent more water as compared to the same time period in 2013 and 26.8 per cent more water than in 2012. Please note that collector flow was not augmented by the addition of Recharge water from the Eramosa River from 2011 through 2014 in order to accommodate the Arkell OTP/AMP (Operational Testing Plan / Adaptive Management Plan) which is a condition of the Arkell Well Field PTTW (Permit to Take Water).

Management of Water Supply includes:

- Water quality monitoring
- Redundant equipment for major processes
- Provincially certified operators
- Additional treatment where necessary
- Continuous monitoring and daily checks of supply facilities
- Fully automated and redundant treatment systems facilities

- Protection from power failures through uninterruptable power supplies and electrical generators
- SCADA system which provides for system security and alarms to on-call operator for after-hours issues

Distribution goals are:

- Effective design and build
 - o Max. daily use for residential & ICI customers
 - o Fire fighting demand
 - o Operational redundancy
- Effective operation
 - o Pressure management
 - o Chlorine residual
 - o Flushing and cleaning
- Effective maintenance
 - o Timely response to breakdowns
 - o Preventive work to ensure infrastructure longevity and reliability of service
- Mitigation of distribution system failures
 - o Automated monitoring and alarming
 - o Competent and trained operators
 - o Standard operating procedures
 - o After-hours on-call and response program
 - o Water Services Emergency Response Plan
-

Major Water Supply Maintenance (Jan. 1 to Jun. 30):

SUPPLY MAJOR MAINTENANCE ACTIVITY	Well Site(s)
Dam Rehabilitation (in progress)	Arkell Spring Grounds
Diesel Generator Automatic Transfer Switch Installation	Robertson Booster Station
Diesel Generator Service	Burkes, Arkell #14, Robertson Booster Station
Diesel Generator Service and Load Test	F.M. Woods
Gate Installation	All Sites
Heater Installation	Arkell / Carter Entrances
Heater Diesel Fuel	Speedvale Tower
HVAC Preventive Maintenance (annual)	F.M. Woods
Pump & Motor Rebuild	Paisley (ATL Pump #2)
Pump Piping Replacement	Eramosa River
Reliability-Centered Maintenance Program (RCM) System	All sites
Snow Removal (seasonal)	Various sites
Tree Removal (risk of damage to hydro lines)	Arkell, Carters
UV Maintenance	Emma and Water
Waste Line Connections	Arkell #7 at Arkell #15
Well Pump Replacement	Helmar Well

- Effective design and build

Distribution System Maintenance (Jan. 1 to Jun. 30)

DISTRIBUTION TYPE	2014
Dig to find leak	1
Hydrant Remove	1
Hydrant Repair	2
Hydrant Replace fit	1

- o Pressure management
- o Chlorine residual
- o Flushing and cleaning

Main Break	58
Other (e.g. exploratory excavations)	2
Service Cut Off	5
Service Lowered	2
Service Repair	43
Service Replace Lead	1
Service Replace Non-Lead	3
Valve Repair	4
Valve Replace (WW)	8

Major Water Supply Maintenance (Jan. 1 to Jun. 30):

SUPPLY MAJOR MAINTENANCE ACTIVITY	Well Site(s)
Dam Rehabilitation (in progress)	Arkell Spring Grounds
Diesel Generator Automatic Transfer Switch Install	Robertson Booster Station
Diesel Generator Rentals	Burkes, Arkell # 14, Robertson Booster Station
Diesel Generator Service	F.M. Woods
Diesel Generator Service and Load Test	All Sites
Gate Installation	Arkell / Carter Entrances
Heater Rental	Speedvale Tower
Heater Diesel Fuel	Speedvale Tower
HVAC Preventive Maintenance (annual)	F.M. Woods
Pump & Motor Rebuild	Paisley (ATL Pump #2)
Pump Piping Replacement	Eramosa River
Reliability-Centered Maintenance Program (RCMP, ongoing)	All sites
Snow Removal (seasonal)	Various sites
Tree Removal (risk of damage to hydro lines)	Arkell, Carters
UV Maintenance	Emma and Water
Waste Line Connections	Arkell #7 at Arkell #15
Well Pump Replacement	Helmar Well



H) RAW AND TREATED WATER QUALITY

under the Safe Drinking Water Act (SDWA), municipalities are required to monitor both the raw and treated quality of the source water supplied. This monitoring is performed for both regulatory compliance and due diligence.

Operational and Microbiological Sampling						
Parameter	Location	# Analyses	Criteria	# Outside Criteria	Results Range	Regulatory Reference
Free Chlorine Residual	Guelph Zone One	181	0.05-4.0 mg/L	0	0.61 - 1.03 mg/L	O. Reg. 170/03 Schedule 7-2
Free Chlorine Residual	Guelph Zone Two	181	0.05-4.0 mg/L	0	0.61 - 0.97 mg/L	O. Reg. 170/03 Schedule 7-2
Raw - E. coli	Raw sources, no disinfection	438	n/a	n/a	0 - 1 cfu/100 mL	O. Reg. 170/03 Schedule 10-4
Raw - Total Coliform	Raw sources, no disinfection	438	n/a	n/a	0 - 30 cfu/100 mL	O. Reg. 170/03 Schedule 10-4
Raw - HPC	Raw sources, no disinfection	0	n/a	n/a	n/a	O. Reg. 170/03 Schedule 10-4
Raw - Background	Raw sources, no disinfection	438	n/a	n/a	0 - 240 cfu/100 mL	O. Reg. 170/03 Schedule 10-4
Raw River - E. coli	Raw sources, no disinfection	0	n/a	n/a	n/a	O. Reg. 170/03 Schedule 10-4
Raw River - Total Coliform	Raw sources, no disinfection	0	n/a	n/a	n/a	O. Reg. 170/03 Schedule 10-4
Raw River - HPC	Raw sources, no disinfection	0	n/a	n/a	n/a	O. Reg. 170/03 Schedule 10-4
Raw River- Background	Raw sources, no disinfection	0	n/a	n/a	n/a	O. Reg. 170/03 Schedule 10-4
POE - E. coli	Disinfected ("treated") water at point of entry (POE)	240	0	0	n/a	O. Reg. 170/03 Schedule 10-3
POE - Total Coliform	Disinfected ("treated") water at point of entry (POE)	240	0	1	0 - 9 cfu/100 mL	O. Reg. 170/03 Schedule 10-3
POE - HPC	Disinfected ("treated") water at point of entry (POE)	240	n/a	n/a	0 - 4 cfu/mL	O. Reg. 170/03 Schedule 10-3
POE - Background	Disinfected ("treated") water at point of entry (POE)	240	n/a	n/a	0 - 5 cfu/100 mL	O. Reg. 170/03 Schedule 10-3
POE - Free Chlorine Residual	Disinfected ("treated") water at point of entry (POE)	239	0.05-4.0 mg/L	0	0.61 - 1.29 mg/L	O. Reg. 170/03 Schedule 6-3
Dist. - E. coli	Disinfected ("treated") water in Distribution System	817	0	n/a	n/a	O. Reg. 170/03 Schedule 10-2
Dist.- Total Coliform	Disinfected ("treated")	817	0	n/a	n/a	O. Reg. 170/03 Schedule 10-2

	water in Distribution System					
Dist.- HPC	Disinfected ("treated") water in Distribution System	404	n/a	n/a	0 - 1 cfu/100 mL	O. Reg. 170/03 Schedule 10-2
Dist.- Background	Disinfected ("treated") water in Distribution System	817	n/a	n/a	0 - 4 cfu/100 mL	O. Reg. 170/03 Schedule 10-2
Dist.- Free Chlorine Residual	Disinfected ("treated") water in Distribution System	1,052	0.05-4.0 mg/L	0	0.3 - 1.30 mg/L	O. Reg. 170/03 Schedule 6-3
Raw Source Turbidity	Raw sources, no disinfection	423	n/a	n/a	0.04 - 0.39 ntu	O. Reg. 170/03 Schedule 7-3
GUDI-WEF characteristics	Microparticulate & Laser Particle Counting	3	n/a	n/a	Confirmed GUDI-WEF	MOE GUDI Terms of Reference
POE - Free Chlorine Residual	15 POE monitoring devices - continuous monitoring	1:5mins	0.05 mg/L	0	n/a	O. Reg. 170/03 Schedule 6-5
UV Dose F.M. Woods	1 POE monitoring device - continuous monitoring	1:5mins	24 mJ/cm ²	0	n/a	MOE UV Treatment Criteria
UV Dose Urban Wells	2 POE monitoring devices - continuous monitoring	1:5mins	40 mJ/cm ²	0	n/a	MOE UV Treatment Criteria

The table below includes relevant information about chemical, organic and inorganic sampling results due to their presence or significance within the Guelph Drinking Water System. Only parameters with Ontario Drinking Water Quality Standards (ODWQS) Maximum Allowable Concentration (MAC) limits are included. There was no instance of an adverse result in 2014 (Jan. 1 - Jun. 30). The full version of the Annual & Summary Report provides results for all chemical sampling.

Chemical Sampling (all data reported in mg/L)									
Parameter	# Samples	Sampling Frequency	Criteria MAC	Criteria ½ MAC	# Outside Criteria	Results Range		Average	Regulatory Reference
						Min	Max		
Trihalomethanes - Distribution System Samples	4	1:3 months	0.100 ^A	n/a	0	0.0252	0.0418	0.0324	O. Reg. 170/03 Schedule 13-6
Nitrate + Nitrite (as nitrogen)	19	1:3 months	10	5	0	< 0.10	2.32	1.188	O. Reg. 170/03 Schedule 13-7
Nitrate + Nitrite (as nitrogen) - Woods' Raw Sources (Operational Sampling)	13	1:3 months	n/a	n/a	n/a	0.27	3.61	1.509	O. Reg. 170/03 Schedule 13-7
Nitrate + Nitrite (as nitrogen) - Paisley Raw Source (Operational Sampling)	1	1:3 months	n/a	n/a	n/a	1.9	1.9	1.9	O. Reg. 170/03 Schedule 13-7
Dichloromethane	57	1:3 months	0.05	0.025	0	< 0.0005	< 0.0005	n/a	O. Reg. 170/03 Schedule 24
Tetrachloroethylene (perchloroethylene)	64	1:3 months	0.03	0.015	0	< 0.0001	< 0.0001	n/a	O. Reg. 170/03 Schedule 24

Trichloroethylene	57	1: 3 months	0.005	0.0025	0	< 0.0001	0.00219	0.00099	O. Reg. 170/03 Schedule 24
Trihalomethanes ^B	60	1: 3 months	0.100 ^A	n/a	0	< 0.0002	0.0418	0.01352	O. Reg. 170/03 Schedule 24
Antimony	1	1: 12 months ^C	0.014	0.007	0	< 0.0005	< 0.0005	n/a	O. Reg. 170/03 Schedule 23
Arsenic	1	1: 12 months	0.025	0.0125	0	< 0.001	< 0.001	n/a	O. Reg. 170/03 Schedule 23
Barium	1	1: 12 months	1.0	0.5	0	0.047	0.047	0.047	O. Reg. 170/03 Schedule 23
Boron	1	1: 12 months	5.0	2.5	0	0.012	0.012	0.012	O. Reg. 170/03 Schedule 23
Cadmium	1	1: 12 months	0.005	0.0025	0	0.00011	0.00011	0.00011	O. Reg. 170/03 Schedule 23
Chromium	1	1: 12 months	0.05	0.025	0	< 0.005	< 0.005	n/a	O. Reg. 170/03 Schedule 23
Mercury	1	1: 12 months	0.001	0.0005	0	< 0.0001	< 0.0001	n/a	O. Reg. 170/03 Schedule 23
Selenium	1	1: 12 months	0.01	0.005	0	< 0.002	< 0.002	n/a	O. Reg. 170/03 Schedule 23
Uranium	1	1: 12 months	0.02	0.01	0	0.00064	0.00064	0.00064	O. Reg. 170/03 Schedule 23
Sodium	27	1: 12 months ^D	20 & 200 ^E	n/a	27	21	150	58.037	O. Reg. 170/03 Schedule 13-8
Fluoride	20	1: 60 months	1.5 & 2.4 ^F	0.75	0	0.13	0.77	0.292	O. Reg. 170/03 Schedule 13-9

A - This standard is expressed as a running annual average

B - This subset of trihalomethane samples represents sampling from treated sources and does not refer to the previous distribution system sampling

C - Sched. 23 sampling is normally scheduled on a 1:36 month frequency. This sampling is required 1:12 months for F.M. Woods because 3 of 8 sources that supply F.M. Woods are GUDI-WEF.

D - Sodium is sampled on a more frequent basis due to the fact that for every treated source except F.M. Woods (currently), sodium levels are above the lower reportable limit of 20 mg/L

E - 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 may be communicated to local physicians for their use with patients on sodium restricted diets.

F - Where supplies contain naturally occurring fluoride at levels higher than 1.5 mg/L but less than 2.4 mg/L the Ministry of Health and Long Term Care recommends an approach through local boards of health to raise public and professional awareness to control excessive exposure to fluoride from other sources.



I) TREATED WATER QUALITY - GAZER MOONEY SUBDIVISION DISTRIBUTION SYSTEM

related to Section H) Raw and Treated Water Quality, this section describes the Regulatory water quality monitoring that has been collected in the Gazer Mooney Subdivision Distribution System in 2014 (Jan. 01 to Jun. 30, 2014).

Operational and Microbiological Sampling						
Parameter	Location	# Analyses	Criteria	# Outside Criteria*	Results Range	Regulatory Reference
Free Chlorine Residual	Gazer Mooney	181	0.05-4.0 mg/L	0	0.57 - 1.06 mg/L	O. Reg. 170/03 Schedule 7-2
Dist. - E. coli	Disinfected ("treated") water in Distribution System	25	0	0	n/a	O. Reg. 170/03 Schedule 10-2
Dist.- Total Coliform	Disinfected ("treated") water in Distribution System	25	0	0	n/a	O. Reg. 170/03 Schedule 10-2
Dist.- HPC	Disinfected ("treated") water in Distribution System	25	n/a	0	n/a	O. Reg. 170/03 Schedule 10-2
Dist.- Background	Disinfected ("treated") water in Distribution System	25	n/a	n/a	n/a	O. Reg. 170/03 Schedule 10-2

Dist.- Free Chlorine Residual	Disinfected ("treated") water in Distribution System	181	0.05-4.0 mg/L	0	0.57 - 1.06 mg/L	O. Reg. 170/03 Schedule 10-2
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**Chemical Sampling
(all data reported in mg/L)**

Parameter	# Samples	Sampling Frequency	Criteria MAC	Criteria ½ MAC	# Outside Criteria*	Results Range		Average	Regulatory Reference
						Min	Max		
Trihalomethanes	3	1: 3 months	0.100 ^A	n/a	0	0.0157	0.0185	0.0168	O. Reg. 170/03 Schedule 13-6
Sodium	3	1: 12 months	20 & 200 ^B	n/a	1	26	26	26	O. Reg. 170/03 Schedule 13-8

A - This standard is expressed as a running annual average

B - 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 may be communicated to local physicians for their use with patients on sodium restricted diets.



J) STATUS OF ONGOING AND EMERGING WATER QUALITY / SUPPLY INITIATIVES

Water Conservation and Efficiency Strategy & Water Supply Master Plan Updates

Water Services continues to implement recommendations of the Water Conservation and Efficiency Strategy. Key activities from Jan. 1 to Jun. 30, 2014 included:

Community outreach activities such as:

Celebration of Canada Water Week with the second annual H2O GO Festival.

Launch of a social media engagement campaign about water – protection, conservation and enjoyment.

Organization of “Water Wednesdays” with Guelph Public Library: water-themed educational programming.

Launch of H2Awesome, an opportunity for 800 students from Guelph elementary schools to learn about water conservation and the importance of water in our daily lives.

Launch of the revised Outside Water Use By-law on Apr. 1, 2014.

Completion of the tender for the construction of rainwater harvesting within Guelph Transit’s bus wash.

Field implementation of six district metered areas (DMAs) continued throughout early 2014 as part of the City’s Leak Detection Program. Initiated detailed hydraulic modeling of an additional 20 DMA’s (to be implemented in 2015-2018).

Operation and optimization of existing conservation programs continued (e.g. Residential Rebate Programs, Blue Built Home, ICI Capacity Buyback Program), equaling 135 m³/day in collective demand reductions to date in 2014.

Source Water Protection Program

The Lake Erie Source Protection Committee submitted the Proposed Grand River Source Protection Plan to the Ministry of the Environment and Climate Change (MOECC) for review and approval. This Plan includes a number of proposed policies to manage significant drinking water threats (identified in the Assessment Report) for the City of Guelph. The MOECC is presently reviewing Source Protection Plans that have been submitted from across the province. The Lake Erie Source Protection Committee anticipates that the Grand River Source Protection Plan will be approved by the Minister in 2016.

Currently, City staff are working on: the development of education and outreach materials for stakeholders, and development of guidelines for the preparation of risk management plans, and is working with internal City of Guelph departments to ensure conformance with the proposed policies in the Source Protection Plan. The City is also assessing the data management and information needs that will be required to administer the program once the Source Protection Plan is approved.

For more information on Guelph's Source Water Protection Program visit: guelph.ca/sourcewater

Arnell Springs Forest Stewardship Project

The Arnell Spring Grounds cover an area of 804 acres. The area is comprised of old and new forested areas, which makes it necessary for monitoring, maintenance and new planting plans. The objective of the Arnell Springs Forest Stewardship Project is to manage past plantings and prevent losses while monitoring general forest health. Delicate forest stands require continued maintenance and observation to ensure the prevention of any unnecessary and undesired losses.

Since 2007, the Community Environmental Leadership Program (CELP, on a volunteer basis) has planted 15,500 trees on 17 acres, and Bartram Woodlands (on-site contractor) has planted 15,955 trees on another 16 acres. In addition, funding was secured through the Ontario Ministry of Natural Resources' 50 Million Tree Program—part of the United Nations Billion Tree Campaign. The Ontario portion of the fund is committed to planting 50 million trees by 2025. This funding allowed the City to plant 5,245 seedlings in fields adjacent to Watson Road.

Lead Reduction Program Jan. 1 to Jun. 30, 2014

All sampling conducted from Mar. 21, 2012 to Jun. 30, 2014 was conducted in compliance with the Lead Reduction Plan (LRP) and in accordance with the approved regulatory relief. Lead sampling is conducted as part of the LRP to identify the presence of lead and to monitor lead levels following a lead service line (LSL) replacement. All LSLs verified are scheduled for replacement and the homeowner is encouraged to replace privately owned LSL with financial support from the Private LSL Replacement Grant Programs.

- 42 Lead Verification samples were collected.
- 9.5 per cent were above 5 µg/L indicating presence of a lead service line.
- 7.1 per cent also exceeded the ODWQS of 10 µg/L. Regulatory compliance is expected at individual sites that have undergone a full LSL replacement or where there is no lead remaining in the service line.
- 4 LSLs replaced (from 2010 to Jun. 30, 2014, 177 privately owned LSLs were replaced through grant programs)



K) EXPECTED FUTURE CHANGES THAT COULD AFFECT THE DWS OR THE QMS

Licensing Renewal Process – The renewal application for the Guelph Drinking Water System Municipal Drinking Water Licence (#017-101) was submitted on Feb. 25, 2014. The application included:

- a) the completed Licence Renewal Application Form;
- b) the Council Resolution related to the approval of the updated Long-Range Financial Plan (#017-301);
- c) a copy of the e-mail confirming submission of the Long-Range Financial Plan to MMAH;
- d) a copy of the updated Operational Plan (#017-401);
- e) the Status of Permits to Take Water application for renewals;
- f) updated Raw Water Assessment; and
- g) Guelph Drinking Water System's Distribution System Information.

Correspondence with the MOECC regarding updated MDWL and DWWP documents began on Jun. 4, 2014. Final MDWL

and DWWP documents are still underway.

Operational Testing Plan and Adaptive Management Plan (OTP / AMP) - The purpose of the OTP / AMP is to carry-out a detailed assessment of both the Arkell area aquifer and pumping conditions related to the aquifer to determine a sustainable capacity with respect to environmental considerations in the area. It is anticipated that the OTP / AMP will take place over approximately three years. Additional details may be obtained by contacting Water Services. Annual monitoring reports providing reporting on monitoring results for the previous year were provided in early 2012 and early 2013. As a result of two years of monitoring, Water Services requested an increase to the Arkell Bedrock Wellfield Permit to Take Water which was granted by the MOE in October 2013. Water Services is continuing to assess the sustainability of the bedrock water taking at the higher pumping rates with the intention of modifying the monitoring requirements within the permit. Additional monitoring and data collection / assessment is ongoing, and further extensive monitoring is being performed at Arkell Well #15 to confirm its source water characteristic classification as groundwater.

GUDI (Groundwater Under the Direct Influence of surface water) Terms of Reference are under review and may result in classification changes to source waters. The GUDI Terms of Reference are expected in 2016.

Operator Certification Compliance Management - The Water Certification Specialist reports to Management on a quarterly basis (and to the Owner bi-annually through this report) regarding the status of Operators' Certifications. Verifications of qualification are completed 6-months prior to certificate expiries to ensure lead time for Operators' continued certifications.

Carter Monitoring Program - The Permit to Take Water for Carter Well requires that the Carter Wells be operated at increased levels in conjunction with monitoring in the Torrence Creek Subwatershed. The purpose of the monitoring is to attempt to quantify impacts within this subwatershed.

Expiring Permits to Take Water (PTTWs) - Six PTTWs were scheduled for review and/or renewal in 2014. Three PTTWs are scheduled for review and/or renewal in 2015. These include:

1. [Admiral PTTW](#) (exp. 2014/01/31)
2. [Clythe Well PTTW](#) (exp. 2014/03/31)
3. [Queensdale PTTW](#) (exp. 2014/03/31)
4. [Smallfield Well PTTW](#) (extended exp. 2014/06/30)
5. [Edinburgh Well PTTW](#) (exp. 2014/10/31)
6. [Arkell Well No. 1 PTTW](#) (exp. 2015/05/31)
7. [Burke Well PTTW](#) (exp. 2015/05/31)
8. [Carter Wells PTTW](#) (exp. 2015/05/31)
9. [Carter Wells PTTW](#) (exp. 2015/05/31)

Mandatory Ontario 1Call participation - Under the "Ontario Underground Infrastructure Notification System Act 2012", all municipal infrastructure owners must register by June 19, 2014. Guelph registered for Ontario 1Call by the deadline.

Staff Certification - Quarterly reports are presented to Management to ensure Operators' ongoing certification. Details on the 37 Operators' Certifications ranging from Operators-in-Training to Class 4 are described in the full report.

Legal and Other Requirements Update

Date - 2013	Source of Posting / Reference	Title of Legal & Other Requirement Highlights of posting	Action and Status Update
Jan. 9	The Star	<p><u>West Elgin water system employee jailed for falsifying records</u></p> <p>A former West Elgin county water system operator has been sentenced to 30 days in jail and fined \$15,000 for falsifying records for a period of five years and failing to report dangerously low chlorine levels. Additionally, two other employees received \$6,000 and \$4,500 in fines and the municipality was fined \$129,000.</p>	No action required. This information was shared among Water staff.
Feb. 2	Internal E-mail (Compliance Coord. re: conversation with MOE)	<p><u>Compliance Alert – NSF 60/61 are changing.</u></p> <p>NSF 60/61 Standards that are listed in our MDWL and DWWP are changing. The change is regarding what “low lead” and “no lead” means. MOE has indicated that if we have inventory (such as meters or brass) that meets the current standards, we will be able to use them up until we renew our License (this year) after which we will have to comply with the new standards regardless of existing inventory. This may impact our purchasing and inventory control.</p>	Feb. 6 - Water Distribution Technician confirmed that our current meter supplier has been compliant to this new standard for years. We specified compliance to NSF 61 Annex F&G as well as NSF 372 in our recent meter tenders.
Feb. 10	<u>Health Canada re: Toluene, Ethylbenzene and Xylenes in Drinking Water</u>	<p><u>Toluene, Ethylbenzene and Xylenes in Drinking Water</u></p> <p>The Federal-Provincial-Territorial Committee on Drinking Water (CDW) has assessed the available information on toluene, ethylbenzene and xylenes with the intent of establishing drinking water guidelines. The purpose of this consultation is to solicit comments on the proposed guideline..Interested parties are encouraged to provide comments and suggestions by March 31st, 2014.</p>	No action required.
Feb. 13	<u>Willms & Shier Article: New Voluntary "Excess Soil" Guidelines</u>	<p><u>MOE Encourages Industry, Municipalities and Conservation Authorities To Implement New Voluntary "Excess Soil" Guidelines</u></p> <p>The Ontario Ministry of the Environment (MOE) has released new voluntary guidelines for the handling, transport and temporary storage of “excess soil” generated during construction or redevelopment activities (Guidelines). The MOE is encouraging municipalities and Conservation Authorities to consider the <u>Management of Excess Soil – A Guide for Best Management Practices</u> when establishing by-laws and issuing permits or approvals. The MOE anticipates that industry will develop complementary codes of practice to support the Guidelines.</p>	Forwarded the guideline to staff overseeing excavated soil management.
Mar. 3	OWWA e-mail	<p><u>MOE/OWWA/OMWA executive meeting - a follow-up on drinking water quality standards discussion</u></p> <p>The drinking water quality standards discussion at the February 11 OWWA executive meeting resulted in a few action items for MOE and the associations. Some information was put together for coordination with core team for their feedback on the proposed standards and potential impacts on drinking water systems.</p>	Water Supply Technician confirmed for applicable chemicals, Water Services' 220 sample results are below the lab's minimum detection limit.

Mar. 6	OMWA E-mail Communi-cation	<u>Operator-in-Training Exams at Municipal Operating Authority Sites</u> The Ministry of the Environment will be discontinuing operator certification exams at municipal and operating authority sites as of March 31st, 2014. After this date, applicants must write Operator-in-Training (OIT) exams at a Program Administrator (OWWCO) examination site. OWWCO exam dates and locations are posted at www.owwco.ca . Students enrolled in a college program may still write at an approved college examination site.	No action required.
Mar. 12	MOE E-mail	<u>Issue 5 of the Municipal Drinking Water Licensing Program Bulletin</u> Includes: Upcoming DWQMS Workshops; DWQMS Workshops – Best Practices; Innovative Operations – DR3 Program; Accreditation Related Appeals – How & Why; Financial Plan Requirements for Municipal Drinking Water Licences	No action required.
March	Ontario.ca	<u>Ministry of the Environment: Minister's Annual Report on Drinking Water 2013</u> The Minister's Annual Report on Drinking Water 2013 includes an overview of Ontario's drinking water systems' performance, highlights of our efforts to protect the Great Lakes, and our first report on the progress we have made under the Water Opportunities Act.	No action required.
April	Ontario.ca	<u>Chief Drinking Water Inspector Annual Report 2011-2012</u> Ontario continues to be a world leader on the environmental stage in drinking water protection, conservation and innovative clean water technologies. Our programs complement Ontario's rigorous legislative requirements. Together, these comprehensive measures and regulations help ensure the safety of our drinking water in Ontario. In reading the report, you will also find that Ontario continues to set the bar for excellence in drinking water protection.	No action required.
Apr. 7	AWWA e-mail	<u>Newly Revised AWWA Standard M28 – Rehabilitation of Water Mains</u> is available.	Apr. 11 - Ordered two copies for the two Supervisors of Distribution.
Apr. 10	Ontario.ca Newsroom	<u>Protecting Timmins-Area Drinking Water</u> Ontario has approved the Mattagami Region Source Protection Plan to strengthen local source-to-tap drinking water protection. The plan was developed by the Mattagami Region Source Protection Committee, made up of municipal and community partners, with implementation scheduled for fall 2014.	No action required.
Apr. 15	<u>Health Canada re: Guidance for Issuing and Rescinding Boil Water Advisories</u>	<u>Guidance for Issuing and Rescinding Boil Water Advisories</u> The Federal-Provincial-Territorial Committee on Drinking Water (CDW) has assessed the available information on issuing and rescinding boil water advisories for drinking water supplies with the intent of establishing a drinking water guidance document. The purpose of this consultation is to solicit comments on this guidance document..All comments must be received before June 16, 2014.	Submitted comment by deadline on behalf of the province-wide Municipal Water / Wastewater Regulatory Committee (MWWRC).
Apr. 15	OETC Newsletter	<u>Ontario MOE - Drinking Water Website – Changes</u> The MOE has once again changed their website portal for acquiring forms, documents and interacting with the MOE. Unfortunately, this change breaks all previous links to documents. Every guideline and form now has a new web address and location within the MOE website. This change is not for the better as it is now much more difficult to find documents. Over the coming weeks OETC will begin the process of searching out the new locations for these documents and update our website accordingly. Reminder – Deadline approaching for municipal registration under Ontario Underground Infrastructure Notification Systems Act – June 19, 2014 deadline for municipal registration.	Need to revisit all internal document links to MOE forms and update links. Ensured registration to Ontario 1 Call by Jun. 19.

		\$10,000 penalty for non-compliance.	
Apr. 25	MOE E-mail	<p><u>Open for your comments: A Guide for Drinking Water System Owners Seeking to Undertake a Backflow Prevention Program</u></p> <p>The Ministry of the Environment is pleased to let you know that a draft version of “A Guide for Drinking Water System Owners Seeking to Undertake a Backflow Prevention Program” is now posted on Ontario’s Environmental Registry for public comment for 45 days.</p>	Apr. 16 - confirmed with Manager of Inspection Services that Guelph’s program meets or exceeds the elements contained in the guide.
May 9	City Media Release	<p><u>Media Release: Tribunal grants City’s request for hearing; opens opportunity to address Dolime quarry risks</u></p> <p>The Environmental Review Tribunal has granted the City’s application for leave to appeal the Ministry of Environment’s decision to grant River Valley Developments Inc.’s amended permit to take water at the Dolime quarry. The decision, made May 2, opens up an opportunity to address the City’s long-standing concerns about the risks posed to the City’s water supply by the quarry operations at Wellington Road and the Hanlon Expressway.</p>	
May 12	U of Waterloo e-mail	<p><u>Ontario MOE releases Optimization Guidance Manual for Drinking Water Systems</u> The Optimization manual for Drinking Water Systems was developed in response to the increasing need to improve performance, increase capacity and/or reduce operating costs associated with existing Ontario drinking water systems. Operating authorities, consultants, regulatory personnel and others can use this manual to achieve compliance or more consistent and efficient performance from existing water treatment plants and distribution systems. The document is available through MOE’s Public Information Centre which can be reached toll free at 1- 800-565-4923. Any questions regarding the document itself can be directed to the Project Manager, George Lai, at (416) 327-3528 or George.Lai@ontario.ca</p>	Document shared with staff internally.
Jun. 18	U of Waterloo e-mail	<p><u>Water Safety in Distribution Systems</u></p> <p>The WHO has recently released a 147 page report entitled ‘Water Safety in Distribution Systems.’ It is being described as a reference tool which “has been developed to help water suppliers and regulators who are familiar with the Water Safety Plan approach, enhance their risk assessment and management and investment planning for their water distribution systems.”</p>	Shared with Water Services staff and Manager of Inspection Services.
Jun. 24	Ontario.ca Newsroom	<p><u>Ottawa Company Fined \$35,000 for Drinking Water System and Sewage Work Violations</u></p> <p>Brockville - Following an investigation, 7064512 Canada Ltd. and Tony Guiseppa Coccimiglio were fined \$35,000 for failing to comply with regulatory requirements and a ministry order involving a drinking water system and a ministry approval for a municipal sewage works ... Ministry staff conducted inspections of the Westport drinking water system. The inspections revealed that the operator’s certificate for Mr. Coccimiglio was not displayed as required. The log book for the facility was not available during the inspection. There also were missing entries and data for the entire facility and the alarm for the low chlorine residual was improperly set. They also failed to comply with a ministry order to report the daily minimum free chlorine residual results and provided false information that the minimum chlorine residual was always above 1 mg/L when in fact it had fallen below that level on numerous occasions._</p>	No action required.
Summer	OETC Newsletter	<p><u>Operator Certification Bulletin - Summer 2014</u></p> <p>Includes: Requirement Changes for Renewing Drinking Water Operator and Analyst Temporary Certificates; Enhanced Drinking Water Renewal Notifications; CHEATING...</p>	No action required.

Definitely Not Worth The Risk; Updates from the Walkerton Clean Water Centre; Ridgetown College's Water Quality Technical Program Graduates Have Greater Employability; Training Tools You Can Use; Operator Certification Working Group - Topics at their most recent meetings; Modernizing the Environmental Compliance Approvals Process for Sewage Works; Information - Drinking Water System Owners & Operators on Blue-Green Algae; OIT Exams at Non-municipal Sites...

Changes Affecting the Quality Management System (QMS)

QMS 05 – Various initiatives related to Document & Records Control are being implemented, including The Ontario Municipal Records Management System (TOMRMS); requirements to ensure compliance with the Municipal Freedom of Information and Protection of Privacy Act; expiry date tracking of essential documents.

QMS 09 – Water Services is currently working through an organizational review. Supervisor of Distribution positions were filled late 2013. Supervisor of Supply Operations and Maintenance and Manager of Technical Services positions are planned this fall.

QMS 18 – Employee training on the updated Water Services Emergency Plan (now including incident management systems guidelines) took place in February 2014. Critical Customers Lists are being updated and Crisis Communications guidelines are being updated over the course of 2014.



L) CONSUMER FEEDBACK

The table below represents all customer calls received during office hours and after hours in 2014 (Jan. 01 to Jun. 30):

Type	Number of Calls		
	2012	2013	2014
Locate requests	1,320	3,835 ⁵	Approx. 2,000
Mainbreak	43	56	105
Hydrant	18	18	27
Water Quality	72	113	114
Service Line Issues	189	146	288
Other	61	93	193
Pressure	55	85	101
Flushing/Swabbing	25	22	28

⁵ Previous years would count the number of locate requests (which could include 20 service locates); and as of 2013, the total number of locates is tallied (no longer by locate requests).



M) RESOURCES NEEDED TO MAINTAIN THE QMS

Water Services currently has one full-time Quality Assurance Coordinator (also the Quality Management System Representative) and has access to four Water Services Technicians, the Compliance Coordinator, and a Customer Service Clerk for reporting and documentation requirements of the QMS.

Challenges continue to drive the need for additional resources (such as lead, frozen services, Ontario 1Call, metering, etc.).

N) THE RESULTS OF INFRASTRUCTURE REVIEW

On a regular basis (monthly meetings), Guelph's Engineering and Water Services departments review the condition of supply and distribution infrastructure and review: inventory, age, CAPS (capital asset prioritization system), criticality, soil type and diameter. From this evaluation, Engineering and Water Services develop a list of priority projects that also considers the priorities of wastewater and road reconstruction projects so that these projects can share the costs of excavation and rehabilitation. The priority list is updated (with considerations included) and presented in Annual Operating Budget and the Tri-Annual Capital Budget processes. New linear infrastructure reviews are primarily driven by Engineering Services.

Annual summaries of road reconstruction, sewer and watermain projects are identified annually on an infrastructure map that is released early spring each year.

An Asset Update Report was prepared to develop a funding strategy and to rate sustainability for various infrastructure programs across the City. Water Services' sustainability rating is A-.

Water Supply Master Plan - The Water Supply Master Plan (WSMP) Update Project will update the previous Council-approved Master Plan. For the timing of this report, the WSMP update was pending approval by Council in July 2014. Upon approval of the Water Supply Master Plan Update, the plan will be implemented with the first step being the approval of the capital budget for the Plan for the year 2015. More information will be available in the next report.

To find out more about the project, visit guelph.ca/water and follow the link to the Water Supply Master Plan webpage.

The Master Servicing Study is another infrastructure plan that is updated every five years and is used to identify new and replacement infrastructure priorities to include in the budgeting process. The development of a Facility Master Plan is also in progress, along with new initiatives related to property planning for expansions of facilities or to implement

new facilities, as required. The Owner (Council & CAO) is updated regarding any deficiencies or gaps.

Backflow Prevention Program

Preservation of drinking water quality within Guelph’s infrastructure is supported by the City of Guelph’s Backflow Prevention Regulations (“By-law”, Number (2008) – 18660). As per the By-law, “Backflow” means the flowing back of or reversal of the normal direction of flow of water. The By-law requires that no connections are made to the City’s water supply without the installation of a backflow prevention device to isolate premises, sources, and zones to prevent cross-connections in every building or structure where a City water supply or other potable water supply exists. Related to backflow prevention devices, the By-law requires owners to:

- ensure a qualified person conducts annual testing of backflow prevention devices,
- submit test reports within 14 days of the test being conducted for each backflow prevention device,
- survey and resurvey with respect to buildings’ or structures’ cross-connections (1:5 years)

2014 Backflow Report - Number of Letters Sent out for Annual Testing and Re-survey

	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL
Annual Testing - 1st Letter	89	110	93	197	291	166							946
Annual Testing - 2nd Letter	46	62	60	79	96	175							518
Annual Testing - 3rd Letter	18	20	19	27	29	28							141
Re-survey & Testing (combined) - 1st Letter	30	30	30	29	30	19							168
Re-survey & Testing (combined) - 2nd Letter	16	30	24	26	24	24							144
Re-survey & Testing (combined) - 3rd Letter	2	6	9	8	1	1							27
Water Service Disconnected	0	0	0	0	0	0							0
Number of permits for new installations	2	4	8	3	1	7							25
Number of new devices installed	5	4	10	4	3	7							33



O) OPERATIONAL PLAN CURRENCY, CONTENT AND UPDATES

See section “k) Expected Future Changes That Could Affect the DWS or the QMS” for Operational Plan updates.



P) STAFF SUGGESTIONS

Staff suggestions are discussed during staff and operational meetings and taken into account during annual budget processes. The table below includes a listing of various improvement items that were implemented by staff and communicated across Water Services.

Improvement Actions Summary

OFI #	Suggestion Title	Improvement Action Description
14-01	New SCADA Operator duties	The new SCADA Operator role was created to improve efficiencies in data review. Supply Operators will be rotated into this position on a monthly basis.
14-02	Improvements to Supply's 2014 Work Orders	Supply facilities are now task-based so that these designations remain the same from year to year and the type of work is designated with the Work Order #. Maintenance work orders now have four subcategories: emergency, urgent, corrective and preventive. New tasks include Water Quality Monitoring for SCADA Operator and for Non-Compliance Investigative Sampling. Operator-based Operations Maintenance is a new work order added.
14-03	Installation of Pressure Reducing Valve at Paisley Well for Queensdale Subdivision isolation	Installed a Pressure Reducing Valve at Paisley Well so that the Queensdale Subdivision could be isolated to allow for a watermain repair on a transmission main.
14-04	Improved Snow Clearing at Arkell with McKenzie Bros.	Contacted McKenzie Brothers to assist with large amount of snow clearing at Arkell Spring Grounds.
14-05	Improved Meter Inventory Tracking	A new sign-out program exists for improved tracking of the meter inventory. The name, date and meter serial number is tracked; and meter installation sheets are now submitted through the Water Distribution Technician.
14-06	Returned Speedvale Tower PLC and heater to station power and replaced unreliable UPS	The Speedvale Tower PLC and heater was returned to station power to prevent communications to fail repeatedly. The unreliable UPS was also replaced in the PLC cabinet.
14-07	Improved "Source and Distribution Sampling Procedure"	The "Source and Distribution Sampling Procedure" was improved to include three new elements: 1. Nitrile gloves while handling sample bottles and during the sampling process; 2. Place the necessary empty sample bottles for the sampling event (including a few extra) in plastic re-sealable zipper storage bags within an appropriately sized cooler; 3. When a station POE Booster Pump must be started prior to sampling, allow to run for a minimum of one hour before a sample(s) is taken.
14-08	Improved University Setpoints	Since University's contribution to overall volume and pressure is more relevant at night, University's fill and draw time cycles will be run in reverse at night. This will help optimise the low zone performance overnight and keep Burke's station off.
14-09	Distribution Map Book in PDF	The Water Distribution Technician has created (in PDF) an electronically searchable distribution map book. A new grid now exists so that all pages are the same scale and at a scale that is easier to read than the previous books. On the first page (of 195 pages) is the index map. Clicking on a grid on this page will take you to that map page. In the bottom-right corner of each map page, is a link to the "Index Map" on the first page.
14-10	Increased response to "Frozen Services"	With the increase in frozen services this past winter (due to extreme cold leading to deeper than average frost depth), staff spent considerable time investigating frozen services, thawing service lines or installing temporary water services where possible. A web page dedicated to answering frequently asked questions was also developed.
14-11	New logsheet in Facility Logbooks to document quarterly verifications of facility colorimeters.	A new logsheet exists in the Facility Logbooks to document the quarterly verification of facility colorimeters. The Water Services Master Logbook has a similar section for Operators' Colorimeter reference checks - these checks are performed by the owners of the individual Colorimeters. Entries for three quarters are provided for in the Logbook and the fourth quarter is covered by the Annual Calibration schedule.
14-12	Paisley Well Operations &	Clarified the maximum number of Pumps/Combinations at Paisley Well so as not to exceed the power draw that trips

	Maintenance Manual clarification re: pump run combinations; and SCADA logic also updated.	the 400 amp breaker that feeds all of the Booster Pumps (1, 2, 3, 4, 5, 6 and 7) and the Well Pump; as well as the maximum number of Pumps/Combinations with the Well Pump off. Also, the auto logic was updated in SCADA so that when running Vertical Turbine Pumps in Auto, duty pump 4 will no longer start – in order to meet electrical code legal requirements.
14-13	Clarification of Well Minimum Pumping Levels	Operations and Maintenance Manual sections that refer to the MPLs (Minimum Pumping Levels) at a given site have been replaced by the Operators to reflect the standard ‘3 metres above pump inlet’. There are some Logbooks where the MPL is referenced on each page of the ‘Weekly P.M. Data Sheet’ – the Logbook electronic files were updated to reflect the changes.
14-14	Various upgrades towards possibility for Zone 2 “Closed Pressure System”	Various upgrades towards implementation of the Zone 2 “Closed Pressure System” includes installation of new equipment; diesel generators’ automatic transfer switches wired and tested; training; pressure monitoring through installation of data loggers at hydrants; and replacement of valves at Robertson Booster Station inlet and point-of-entry. A draft control narrative for Paisley and Robertson under a Zone 2 Closed Pressure System is also proposed.
14-15	Larger network cabinet implemented	In order to accommodate growing computer & networking needs, the IT department removed the main network cabinet from the Library to a new larger network cabinet in the SCADA server room.
14-16	eRIS SCADA upgrade to new 1.2 release	New features in the 1.2 release are: <ul style="list-style-type: none"> Upgraded Data Query tag selection interface Upgraded Data Query Charts with new selection features and zoom capabilities Upgraded Calculation interface with easier user ability New eRIS support forum with embedded access in eRIS
14-17	Manual Booster Operation on Station Re-start Checklist	The ‘Manual Booster Operation Re-start Checklist’ was created to cover all the compliance procedures and necessary documentation required to bring a Facility back on-line after the following: <ol style="list-style-type: none"> 1. Post Auto Low Chlorine Shutdown Condition. 2. Facility off-line resulting in non-representative values @ Analyzer
14-18	Water Meter Testing Pilot	Installed a meter testing station at Water Services for a demonstration project that the metering group is developing.
14-19	Expansion of the Rainwater Harvesting Rebate Program	The Rainwater Harvesting Rebate Program now offers two different rebates: <ol style="list-style-type: none"> 1) Seasonal outdoor system: Install an approved rainwater harvesting seasonal tank and receive a one-time rebate of \$0.10/litre of tank storage (to a maximum of \$400); or 2) All-season indoor/outdoor system: Install an approved all-season rainwater harvesting system and receive a \$2,000 rebate.
14-20	Improved process for Operator comments regarding alarms	The SCADA Operator now completes the twice daily eRIS Facility Trend Reviews; and alarm comments can be limited to “reportable” or “non-reportable” with an indication as to where more information can be found.
14-01	New SCADA Operator duties	The new SCADA Operator role was created to improve efficiencies in data review. Supply Operators will be rotated into this position on a monthly basis.
14-02	Improvements to Supply’s 2014 Work Orders	Supply facilities are now task-based so that these designations remain the same from year to year and the type of work is designated with the Work Order #. Maintenance work orders now have four subcategories: emergency, urgent, corrective and preventive. New tasks include Water Quality Monitoring for SCADA Operator and for Non-Compliance Investigative Sampling. Operator-based Operations Maintenance is a new work order added.

14-03

Installation of Pressure Reducing Valve at Paisley Well for Queensdale Subdivision isolation

Installed a Pressure Reducing Valve at Paisley Well so that the Queensdale Subdivision could be isolated to allow for a watermain repair on a transmission main.

WATER SERVICES' KEY CHALLENGES

1. Financial sustainability and rising rates.
2. Water demand reduction, optimization and development of local groundwater supplies to support provincially mandated growth.
3. Source protection to ensure quality and quantity sustainability of existing supplies.
4. Infrastructure sustainability and asset management.
5. Maintaining and growing an effective work force.
6. Existing system optimization, including:
 - Adding redundancy to distribution system
 - Adding treatment for Iron & Manganese removal
 - Potential to add treatment for VOC removal
 - Optimization of chlorination to improve water taste
7. Ensuring a lead free water system.
8. Maintaining and improving customer service.
9. Reduction of non-revenue water through leak reduction and accurate metering.



Office of the City Clerk

September 24, 2014

Stephen O'Brien, City Clerk
City of Guelph
1 Carden Street
Guelph, ON N1H 3A1

RECEIVED
SEP 29 2014
CITY CLERK'S OFFICE

Dear Mr. O'Brien:

RE: KINGSTON CITY COUNCIL MEETING – SEPTEMBER 23, 2014

I would confirm that Kingston City Council at its regular meeting held on September 23, 2014, approved the following resolution, being New Motion 2:

Moved by Deputy Mayor Neill

Seconded by Councillor Hutchison

Whereas it has been more than two decades since the Westray mine disaster in Nova Scotia and a decade since amendments were made to the Criminal Code of Canada to hold corporations, their directors and executives criminally accountable for the health and safety of workers; and

Whereas many police and prosecutors are not utilizing the Westray amendments, and not investigating workplace fatalities through the lens of criminal accountability; and

Whereas more than 1,000 Canadian Workers a year are killed at work;

Therefore Be It Resolved That Kingston City Council supports the campaign that urges our provincial/territorial government, specifically the Ontario Attorney-General and Labour Minister, to ensure that:

Crown attorneys are educated, trained and directed to apply the Westray amendments;

- Dedicated prosecutors are given the responsibility for health and safety fatalities;
- Police are educated, trained and directed to apply the Westray amendments;
- There is greater coordination among regulators, police and Crowns so that health and safety regulators are trained to reach out to police when there is a possibility that Westray amendment charges are warranted; and

That copies of this motion be distributed to Kingston and The Islands Member of Provincial Parliament Sophie Kiwala, Member of Parliament Ted Hsu, Premier

The Corporation of the City of Kingston

216 Ontario Street, Kingston ON K7L 2Z3

Phone: (613) 546-4291 ext. 1247

Fax: (613) 546-5232

jbolognone@cityofkingston.ca

City of Kingston Council – September 23, 2014 – New Motion 2

Kathleen Wynne, Ontario Attorney General, Madeleine Meilleur, Ontario Minister of Labour, Kevin Flynn, Ontario Minister of Community Safety and Correctional Services, Yasir Naqvi, Interim Leader of the Official Opposition, Ontario Progressive Conservative Jim Wilson, Ontario New Democratic Party Leader Andrea Horwath; and to all Ontario Municipalities of over 40,000 people.

Should you have any questions or concerns regarding this matter, please do not hesitate to contact me.

Sincerely,



John Bolognone
City Clerk
/s

September 12, 2014

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: EB-2014-0271 – Union Gas Limited – 2015 Rates Application

Please find attached an application from Union Gas Limited ("Union") seeking changes to Union's regulated gas distribution, transmission and storage services effective January 1, 2015.

Union's supporting evidence will be filed at a later date. The application has been filed in advance of the evidence to expedite the application process.

If the proposed rate changes are approved by the Board the total bill increase for a typical Southern Operations residential customer consuming 2,200 m³ per year would amount to \$2 - \$3 per year. For a typical Northern or Eastern Operations customer consuming 2,200 m³ per year, the total bill increase would amount to \$3 - \$5 per year.

Union seeks the Board's issuance of the final Rate Order by November 30, 2014 to ensure the implementation of 2015 rates by January 1, 2015. In the event that the Board does not issue a rate order by November 30, 2014 for implementation by Union on January 1, 2015, Union seeks an Order of the Board declaring Union's rates in effect as of December 31, 2014, interim as of January 1, 2015. It will be Union's proposal in this matter to deal with any retrospective impact of the delayed implementation through a rate rider for general service rate classes and a one-time adjustment for all other rate classes, which will recover any changes in rates ultimately approved by the Board's order with effect from January 1, 2015.

Yours truly,

[Original signed by]

Chris Ripley
Manager, Regulatory Applications

c.c.: EB-2013-0365 Intervenors
Crawford Smith, Torys

ONTARIO ENERGY BOARD

IN THE MATTER OF the Ontario Energy Board Act, 1998, S.O. 1998, c.15 (Sched. B);

AND IN THE MATTER OF an Application by Union Gas Limited, pursuant to section 36(1) of the *Ontario Energy Board Act, 1998*, for an order or orders approving or fixing just and reasonable rates and other charges for the sale, distribution, transmission and storage of gas as of January 1, 2015.

APPLICATION

1. Union Gas Limited (“Union”) is a business corporation incorporated under the laws of the province of Ontario, with its head office in the Municipality of Chatham-Kent.
2. Union conducts both an integrated natural gas utility business that combines the operations of distributing, transmitting and storing natural gas, and a non-utility storage business.
3. Union was an applicant in a proceeding before the Board for an order of the Board approving or fixing a multi-year incentive rate mechanism (“IRM”) to determine rates for the regulated distribution, transmission and storage of natural gas. The Board assigned EB-2013-0202 to Union’s application.
4. Union filed an IRM application with the Board on July 31, 2013. The application was supported by a comprehensive Settlement Agreement (the “Agreement”) between Union and stakeholders. The stakeholders party to the Agreement were parties who participated in Union’s 2008-2012 IRM proceeding and in the annual rate proceedings throughout the last IRM term. The proposed IRM parameters found in the Agreement were further supported by evidence and reports. The Board approved the Agreement on October 7, 2013.

5. Union's Board-approved Agreement sets out a multi-year incentive ratemaking mechanism ("IRM") for calendar years 2014 to 2018. The framework includes a price cap index ("PCI"), where rates are a function of: an inflation factor ("I"), a productivity factor ("X"), certain non-routine adjustments (Z factors), certain predetermined pass-throughs (Y factors), and an adjustment for normalized average consumption ("NAC") to reflect changes in consumption in the General Service rate classes.
6. The IRM approved for Union contemplates the filing by Union of an application for Z factor adjustments, structural rate design changes or the pricing of new regulated services in a time frame that will enable these issues to be resolved in sufficient time to be reflected prospectively in the next year's rates. This requires the filing of a draft Rate Order with supporting documentation which reflects the impact of the PCI pricing formula so that a final Rate Order will be issued for implementation by January 1, 2015.
7. Union hereby applies to the Board, pursuant to section 36 of the Act and pursuant to the annual rate-setting process underlying the IRM in the Agreement, for an order or orders approving or fixing just and reasonable rates and other charges for the sale, distribution, transmission and storage of gas effective January 1, 2015.
8. Union further applies to the Board for all necessary orders and directions concerning pre-hearing and hearing procedures for the determination of this application.
9. This application is supported by written evidence that will be filed with the Board and may be amended from time to time as circumstances may require.
10. The persons affected by this application are the customers resident or located in the municipalities, police villages and Indian reserves served by Union, together with those to whom Union sells gas, or on whose behalf Union distributes, transmits or stores gas. It is impractical to set out in this application the names and addresses of such persons because they are too numerous.

11. The address of service for Union is:

Union Gas Limited

P.O. Box 2001
50 Keil Drive North
Chatham, Ontario
N7M 5M1

Attention: Chris Ripley
Manager, Regulatory Applications
Telephone: (519) 436-5476
Fax: (519) 436-4641

- and -

Torys

Suite 3000, Maritime Life Tower
P.O. Box 270
Toronto Dominion Centre
Toronto, Ontario
M5K 1N2

Attention: Crawford Smith
Telephone: (416) 865-8209
Fax: (416) 865-7380

DATED September 11, 2014.

UNION GAS LIMITED

[Original signed by]

Chris Ripley
Manager, Regulatory Applications

ONTARIO ENERGY BOARD NOTICE TO CUSTOMERS OF UNION GAS LIMITED

**Union Gas Limited has applied to raise its natural gas rates effective
January 1, 2015
Learn more. Have your say.**

Union Gas Limited has applied to the Ontario Energy Board to increase its natural gas rates effective January 1, 2015. Under the proposal, an average residential customer of Union Gas in Southern Ontario (from Windsor to Hamilton) would see an increase ranging from \$2 to \$3 to the annual bill. Residential customers in all the other areas served by Union Gas would see an increase ranging from \$3 to \$5 to their average annual bill. Other customers, including businesses, may also be affected.

The requested rate increase is set using a formula previously approved by the Board for the period 2014-2018. The formula is tied to inflation and other factors intended to promote efficiency.

THE ONTARIO ENERGY BOARD WILL HOLD A PUBLIC HEARING

The Ontario Energy Board (OEB) will hold a public hearing to consider Union Gas' request. We will question the company on its case for a rate change. We will also hear arguments from individuals and from groups that represent Union Gas customers. At the end of this hearing, the OEB will decide what, if any, rate changes will be allowed.

The OEB is an independent and impartial public agency. We make decisions that serve the public interest. Our goal is to promote a financially viable and efficient energy sector that provides you with reliable energy services at a reasonable cost.

BE INFORMED AND HAVE YOUR SAY

You have the right to information regarding this application and to be involved in the process. You can:

- review Union Gas Limited's application on the OEB's website now.
- file a letter with your comments, which will be considered during the hearing.
- become an active participant (called an intervenor). Apply by **October 20, 2014** or the hearing will go ahead without you and you will not receive any further notice of the proceeding.
- at the end of the process, review the OEB's decision and its reasons on our website.

LEARN MORE

Our file number for this case is EB-2014-0271. To learn more about this hearing, find instructions on how to file letters or become an intervenor, or to access any document related to this case please enter that file number at the OEB website: www.ontarioenergyboard.ca/notice. You can also phone our Consumer Relations Centre at 1-877-632-2727 with any questions.

ORAL VS. WRITTEN HEARINGS

There are two types of OEB hearings – oral and written. The OEB will determine at a later date whether to proceed by way of a written or oral hearing.

PRIVACY

If you write a letter of comment, your name and the content of your letter will be put on the public record and the OEB website. However, your personal telephone number, home address and email address will be removed. If you are a business, all your information will remain public. If you apply to become an intervenor, all information will be public.

This rate hearing will be held under section 36 of the Ontario Energy Board Act, S.O. 1998 c.15 (Schedule B).



Ontario Energy Board Commission de l'énergie de l'Ontario