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TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON APRIL 8, 2015
FROM:	JOHN M. BRAAM MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	WATER AND WASTEWATER CUSTOMER SERVICE REVIEW - CUSTOMER REWARD PROGRAM

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to Water and Wastewater customer service programs:

- a) The following report **BE RECEIVED** for information;
- b) The Civic administration **BE DIRECTED** to undertake a review and report back on the use of reward points for water and wastewater customers that maintain certain levels of consumption.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
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- [Update on New Funding Model and By-law For Water, Wastewater and Stormwater Services, April 8, 2013, Civic Works Committee, Agenda Item #12.](#)
- [New "Value Based" Funding Model for Water and Wastewater Services, October 22, 2012, Civic Works Committee, Agenda Item #7](#)
- [Update to Water Efficiency Program, July 19, 2010, Environment and Transportation Committee, Agenda Item #14](#)

BACKGROUND

Purpose

Since 2011, when PricewaterhouseCoopers (PwC) undertook an internal audit of the water and sewer billing process, there have been significant changes to the billing rate structure, the process for dealing with major billing issues, and the state of water metering in London. This report provides Committee and Council with an update on these activities and some of the programs and policies in place to help improve the customer and citizen experience. Appendix 'A' depicts the numerous points of customer contact involving various London operating divisions and London Hydro. This report also identifies customer reward opportunities for further consideration and a brief discussion on the recent influx of frozen water services in London and across the province.

Value-based Funding Model - Rate Structure Changes

Water and wastewater services are critical services that are provided by the public sector and operate on a not-for-profit basis. The main purpose of the systems are to ensure a healthy community and environment which benefit from a sustainable water and wastewater system. These utilities ensure that wastewater is properly treated and that drinking water is safe for human consumption above all other components of the service. While safety is primary, the

systems are designed and constructed to provide consistent and reliable service and the citizens of London are benefiting from these systems even while they are away from their homes and not consuming water. The water system continues to provide fire protection and the stormwater drainage system continues to convey rain water and snow melt away from the property and reduces the potential for flooding in the roadway and in residential basements.

The visionary goals and objectives of the rate structure change in 2013 ensure that the water, wastewater and stormwater services which are billed to customers are:

- fair and equitable to all customers,
- the rates promote sustainability and conservation,
- they were affordable, and
- the billing structure is simple.

These were further refined into a main goal of the 2013 rate structure change which was to introduce and implement a “value based” funding model for water and wastewater services. This was accomplished with three main objectives which ensure the sustainability of the utilities, continue to promote conservation, and encourage and support economic growth and job retention. These objectives align very well with Council’s new Strategic Plan: strengthening our community, building a sustainable City, growing our economy and leading in public service.

When the final billing structure was implemented, four criteria determined how a customer is billed for these services: the water meter size, the volume of water consumed, the size of their property, and in some cases the type of customer they are. On the typical residential bill, there are three billing lines which sum the charges into water usage, wastewater usage, and infrastructure connection charges. Appendix ‘B’ includes the [rate sheet](#) that can be found on the City’s website and outlines the actual rates.

Charge on Bill	Type of Charge	How is charge determined?
Usage Charges		
Water and Wastewater	Variable based on use	Monthly volume of water determines charges and is calculated through 7 rate tiers depending on use.
Infrastructure Connection Charges		
Connection Charges	Fixed monthly	Size of water meter determines the system capacity a customer can access. Charges increase significantly from smallest to largest meter.
Stormwater Charges	Fixed monthly	Size of property determines if a customer pays the area or a flat monthly charge. Properties greater than 0.4 hectares (ha) pay based on the area.
Fire Protection Charges	Fixed monthly	Type of customer and size of property. Typically, ICI customers have higher fire protection needs and are assessed based on their property size. Greater than 5.0 ha pay the highest charge.
Customer Assistance Charges	Fixed monthly	Only single family residential pay the \$0.25 per month charge, but can apply for a ONE-TIME leak allowance if they suffer from an unexpected plumbing failure – typically a leaky toilet.

Table 1 - Summary of monthly charges

Customer Water Usage Analysis

Since 2013, when the higher fixed charges and new “hump back” water and wastewater rate were implemented, there has been a further shift in the water use behavior of our customers. Part of this change can be attributed to the new rate structure and water rates that reward conservation. Table 2 identifies the range of cost calculated in 2015 water rate tiers and displays the total number of users in each tier of consumption for 2014. This table accounts for more than 97-percent of all individually metered residential (IMR) customers:

2015 Water, Wastewater, and Stormwater Monthly Fixed and Usage Charges				
	Up to 7 m³	8 to 15 m³	16 to 25 m³	26 to 35 m³
Bottom Range of Tier	\$42.11	\$45.89	\$77.19	\$126.29
Top Range of Tier	\$42.11	\$72.33	\$120.89	\$174.85
2014 Distribution of Residential Customers	17%	47%	28%	6%

Table 2 Monthly billing ranges

The customer distribution can be more clearly seen in Figure 1 which depicts the customer distribution of all IMR customers who use between 0 and 75 cubic metres in a month. The graph shows the change from 2012 to 2014 (pre and post rate change conditions) and the distribution of 2014 low income customers against the total residential user group. Through analysis of the data we can conclude:

- The residential customer group as a whole is using less water per household each month than it was in 2012,
 - Depicted in the difference between the dotted line and the coloured bars more heavily weighted to the lower monthly water use (to the left);
- The low-income user group represents less than 2% of all water customers,
 - This group is made up mostly of tenants;
- The low-income sample distribution is weighted more heavily to the right;
 - This group is mostly tenants, therefore this group has less flexibility to make fixture changes and reduce water use (the crisis prevention program discussed below is intended to assist this group),
 - This group has a very similar distribution to the residential IMR population and therefore the fixed charges do not adversely impact the low-income user group as a whole.

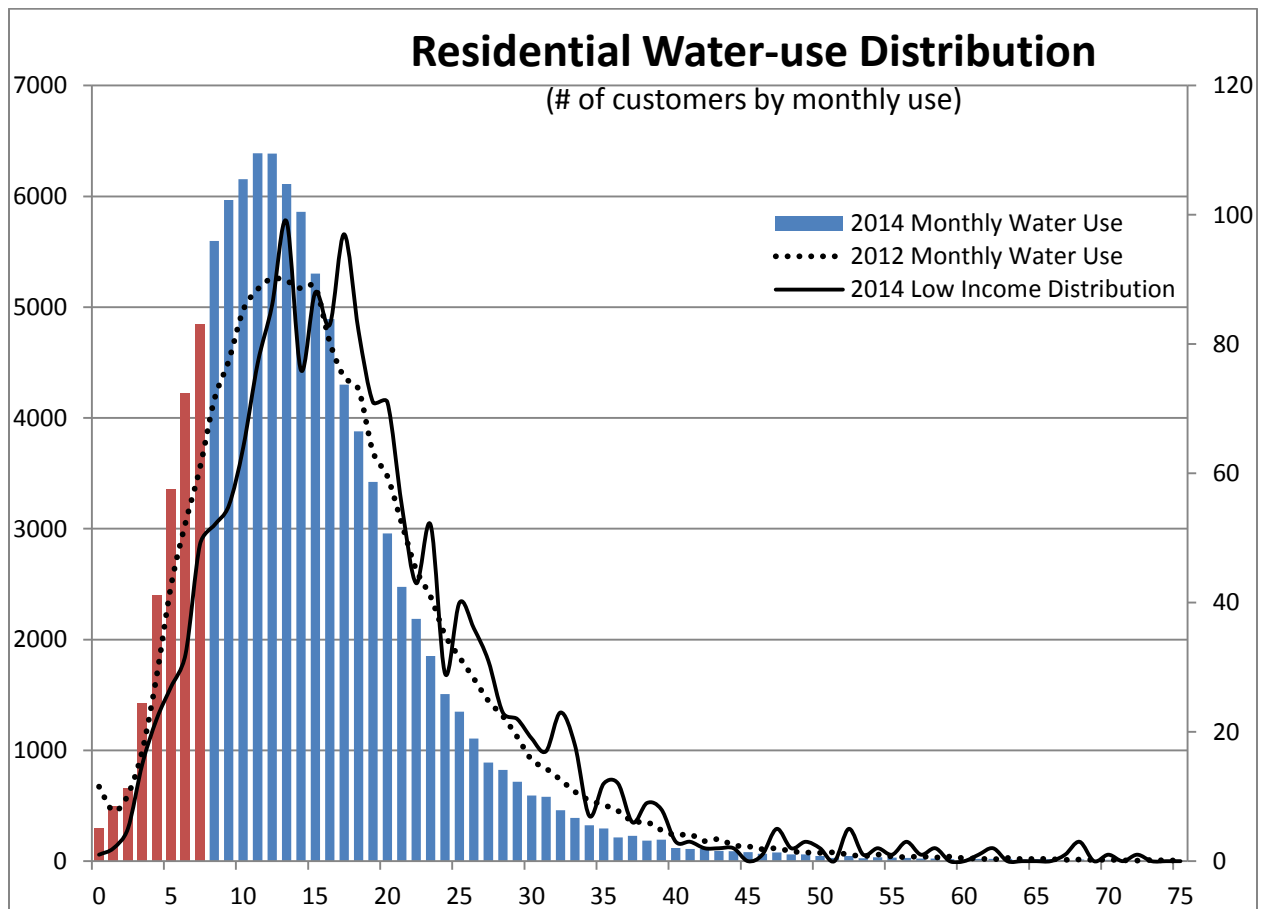


Figure 1- Residential water-use distribution

Customer Assistance Program Summary

The Customer Assistance Program (CAP) has been a very successful administrative tool to raise the level of service on billing related issues for the City's water and wastewater customers. The program is funded by collecting 25-cents from each IMR customer per month which is deposited into a special reserve fund specifically set aside for the CAP. In total, approximately \$300,000 is collected per year and is dispersed through the three components of the CAP:

1. Low-income crisis assistance – \$100,000 allocated to assist registered low-income customers who are in need of financial assistance. The program is administered by the Salvation Army through an agreement for service originally developed for the Housing Stability Fund. There is a \$15,000 administrative fee paid to the Salvation Army to review applications and disperse the crisis support funds.
2. Low-income crisis prevention - \$100,000 allocated to assist registered low-income customers who would not otherwise be able to remedy a major plumbing issue, i.e. non-functioning toilet. The London Hydro HAP program is helping direct those funds into the community and replacing leaky toilet and fixtures in low-income housing. Additional opportunities will be investigated in 2015.
3. Leak allowance program - \$100,000 is allocated to help City staff provide one-time assistance to customers who experience a major plumbing failure in their home. There are specific criteria that must be met to qualify for a leak allowance including no outdoor water use or a property being vacant when the failure occurred. The [leak allowance form](#) is attached in Appendix 'C'.

Table 3 provides an overview of the amount spent through the 2014 Customer Assistance Programs. These values may vary slightly from year end accrual through Finance and represent actual values that were available prior to when the books were closed for 2014.

	Total Assistance Output	# of Customers	Average Amount
Crisis Assistance	\$85,253	366	\$232.93
Crisis Prevention	\$19,457	NA	NA
Leak Allowance	\$52,979	144	\$367.91

Table 3 - 2014 CAP Summary

Customer Call Centre at London Hydro

London Hydro provides customer service for billing related matters on behalf of the City. These activities are tracked to gain a better understanding of why customers are calling. Table 4 provides an overview of the various interactions and represents an increase of 1.7-percent over 2013. The change from 2012 in the number of “billing inquiries” and “rate changes” can be attributed to the rate structure change in March of 2013.

Water Interaction	No. of Interactions		
	2014	2013	2012
Billing Inquiry	2,592	2,541	1,956
General Information	331	286	325
High/Low Bill	1,942	1,911	1,771
Primary Deduct Meter	0	3	2
Quality/Pressure/No Water	99	72	87
Rate Change	17	113	16
Total	4,981	4,898	4,157

Table 4 - Water customer interactions

The information in Table 4 identifies that almost half of all calls are related to some kind of billing inquiry. This could be clarification on a charge or confirmation of payment received and would be considered part of day to day business. In an effort to reduce some of these inquiries, enhancements to the [MyLondonHydro](#) portal are currently in the scoping phase and could be implemented by late 2015. This would help answer some billing inquiries, but there are still customers that do not want to use electronic media to conduct their affairs and continue to rely on face to face or over the phone contact. A 2014 water and wastewater customer service survey identified that 24-percent would use the internet to learn about their drinking water supply.

Service Level Agreement

The current Service Level Agreement (SLA) for meter reading and billing with London Hydro expires on December 31, 2015. The current agreement has been in place since 2012 and has benefitted the electricity and water customer through economies of scale in the service that is provided. Through the agreement London Hydro provides a customer service call center, meter reading and validation, and collects the funds for water and wastewater usage on the City’s behalf. In 2014, a process was established to implement projects outside the framework of the current SLA. Through this process two projects are currently moving through the business planning steps to develop a detailed project plan and cost:

1. A new web-presentment project for water and wastewater customers that will enhance the current [MyLondonHydro](#) portal to provide more detailed water information including community benchmarking, and more detailed descriptions of the rates and charges on the water bill. The web-portal will also include a series of customized alerts and messages that will help customers identify potential water use issues, such as leaks.

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- This project is being developed with flexibility to display and extract interval water data when available.
2. A new single screen project for London Hydro's billing system which will help increase efficiency in the City's Water Meter Shop. Currently there are fifteen separate screens required to complete water meter service orders that are used regularly, and fifty-two that could be used from time to time. The project will also incorporate the day to day activities required for meter replacement appointment booking and automatically trigger letters for issuance.

Water Meter Reading and Replacement

In 2008, review of the water meter records indicated that approximately 51,000 meters were beyond their optimum replacement age. These meters were in a deteriorating state of condition and were a source of non-revenue water resulting in a missed revenue opportunity for both Water and Wastewater Service Areas. Many of the old water meters require access to the customer's basement to physically read the meter which is disruptive or often results in numerous estimated water reads. The Water Meter Replacement and Meter Reading Strategy was developed as a 10-year program, designed to eliminate the meter replacement backlog, and to provide the lowest cost solution to obtain accurate monthly water meter readings for billing purposes using unobtrusive "drive-by" technology.

Over the past 6 years, through an aggressive meter change-out program which targets 10,000 meters per year, the Water Service Area has been able to reduce the backlog of meters due for replacement down to 29,000. Although slightly behind schedule, the program is on track to eliminate the backlog by 2020.

Aeroplan

The City is actively exploring reward points for our residential customers through a partnership with Aeroplan for "conserving behaviour". London Hydro currently provides points for customers who sign-up for paperless billing and already has an agreement with Aeroplan which provides the City with an opportunity to build on their existing program. One possible scenario would be to reward customers who have consecutive months of consumption above zero but below seven cubic metres. This would help eliminate those who are simply on vacation and reward those who are actually maintaining some conserving behavior in the home. There would be some cost associated with the program, but some of the CAP funds could be repurposed to cover the fees associated with providing Aeroplan points.

The use and application of Aeroplan points as a conservation reward will be the subject of a future report once the analysis of the program is complete and a recommendation can be made.

Frozen Services

London, like every municipality in Ontario, faced record cold temperatures in February 2015, which led to more than 500 customers experiencing frozen water services, and no running water. During the previous winter ending March 2014, extreme cold weather negatively impacted many customers to a somewhat lesser extent. The causes of frozen services from these unprecedented, back-to-back cold weather events are currently being analyzed. Remedial solutions, preventative measures, and a communication plan will be developed for implementation prior to the next winter season to mitigate future occurrences.

Current standards for water service designs, construction practices, and programs in other municipalities across Ontario and Canada are being examined to determine a long term plan of action to reduce the impact that extreme cold can have on individual customers. In the short term, customers who have experienced a frozen water service and neighbors who are providing a temporary water supply are being charged the fixed charge on their monthly bills until City staff can thaw or repair the service.

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Conclusion

The current water and wastewater rate structure has proven an effective conservation tool that has helped reduce average residential use even further over the past two years. The rates have helped stabilize the revenue source and provide a sustainable funding model to meet the social and economic needs of both the citizens and the water and wastewater utilities in London.

To further advance the City’s standing as a leader in public service, and following the success of the Customer Assistance Program, staff are requesting direction to undertake a detailed review of the use of Aeroplan points as an incentive for low-volume users.

Acknowledgements

This report was prepared within the Water Engineering Division by Matt Feldberg, Water Demand Manager.

SUBMITTED BY:	SUBMITTED BY:
ROLAND WELKER, P.ENG. DIVISION MANAGER, WATER ENGINEERING	JOHN LUCAS, P.ENG. DIRECTOR, WATER AND WASTEWATER
RECOMMENDED BY:	
JOHN BRAAM, P.ENG. MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER	

March 20, 2015

Attach:

- Appendix ‘A’ – Customer Service - Points of Contact
- Appendix ‘B’ – [Water Utility Rates for the City of London](#)
- Appendix ‘C’ – [Leak Allowance Form](#)

Cc: Orest Katolyk
Karen Kosir
George Kotsifas
Paul Kilbourne
John Simon

Appendix 'A' – Points of Contact



	London Hydro		City of London – Water Operations
	City of London – Water Engineering		Salvation Army (with direction from London Hydro)
	Development and Compliance Services		

Colour indicates lead organization, but most projects involve partnerships between the different groups listed above.



Water Utilities Rates for the City of London
Effective January 1, 2015

2015 Monthly Charges



Average monthly water user for residential customers is about **14m³**

Charges Based on Monthly Consumption (m³)

Cubic Metres (m ³)	Cubic Metres In Tier	Water Rate (\$/m ³)	Wastewater Rate (\$/m ³)
0 - 7	7	\$ 0.00	\$ 0.00
8 - 15	8	\$ 1.9996	\$ 1.7772
16 - 25	10	\$ 2.5710	\$ 2.2850
26 - 35	10	\$ 2.8567	\$ 2.5389
36 - 250	215	\$ 1.0856	\$ 0.9647
251 - 7,000	6,750	\$ 1.0284	\$ 0.9140
7001 - 50,000	43,000	\$ 0.9371	\$ 0.8328
over 50,000	all above 50,000	\$ 0.8343	\$ 0.7414

Adjusted Water and Wastewater Rate Tiers for Multi-unit LDM Customers

Cubic Metres (m ³)	2	3	4	5	6
0 - 7	7	7	7	7	7
8 - 15	16	24	32	40	48
16 - 25	20	30	40	50	60
26 - 35	20	30	40	50	60
36 - 250	430	645	860	1,075	1,290
251 - 7,000	13,500	20,250	27,000	33,750	40,500
7001 - 50,000	86,000	129,000	172,000	215,000	258,000
over 50,000	over 100,000	over 150,000	over 200,000	over 250,000	over 300,000

Appendix 'B'



Water Utilities Rates for the City of London
Effective January 1, 2015

2015 Monthly Charges



Average monthly water use for residential customers is about
14m³

Charges Based on Monthly Consumption (m³)

Cubic Metres (m ³)	Cubic Metres In Tier	Water Rate (\$/m ³)	Wastewater Rate (\$/m ³)
0 - 7	7	\$ 0.00	\$ 0.00
8 - 15	8	\$ 1,999.96	\$ 1,777.2
16 - 25	10	\$ 2,571.0	\$ 2,285.0
26 - 35	10	\$ 2,856.7	\$ 2,538.9
36 - 250	215	\$ 1,085.6	\$ 0.9647
251 - 7,000	6,750	\$ 1,028.4	\$ 0.9140
7001 - 50,000	43,000	\$ 0.9371	\$ 0.8328
over 50,000	all above 50,000	\$ 0.8343	\$ 0.7414

Adjusted Water and Wastewater Rate Tiers for Multi-unit LDM Customers

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7001 - 50,000	86,000	129,000	172,000	215,000	258,000
over 50,000	over 100,000	over 150,000	over 200,000	over 250,000	over 300,000

Appendix 'B'

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Appendix 'C'



300 Dufferin Avenue
P.O. BOX 5035
London, ON
N6A 4L9



Customer Assistance Program

Customers who experience a severe plumbing failure inside their homes can apply for assistance for the water and wastewater charges on their bill. This program is a **one-time grant** and **any future charges shall be paid for in full by the customer**. This program does not cover costs associated with the repair, replacement, or any other costs associated with the failure. Only the volumetric charges on the Water Utilities Bill during the period of the failure are eligible. Water and wastewater charges incurred as a result of irrigation, filling pools or hot tubs, car washing, and other outdoor or discretionary water uses are not eligible for assistance.

Please fill out the application and submit all required documentation within 2 months of the repair. A Water Service Area representative will attempt to be in touch with you within 72 hours of your submission to discuss your application.

To be eligible to receive assistance:

- The volume must be at least twice the average use;
- Only 3 months of volumetric charges are eligible for assistance;
- Plumbing must be in compliance with government regulations;
- Cannot be a result of pool or hot tub filling, irrigation, car washing, or other outdoor or discretionary water uses;
- Homes cannot be vacant or premises unattended when the failure occurred;
- There must be proof of the repair; which can be in the form of pictures, receipts, invoice from licenced plumber
- **ONE TIME** relief of the issue

Please provide the completed application with the below information within 2 months of the repair.

- Photos before the repair
- Photos after the repair (showing the repair)
- Copies of receipts for supplies bought to fix the leak
- If a licensed plumber was used, a copy of the licensed plumber's invoice

It is expected that customers who have left their homes for extended periods will take precautions to prevent unnecessary water use. Closing the service valve at the meter is one way to prevent these issues, but the customer should take care to ensure that the pipes in the home do not freeze and any appliances or fixtures that require water will not be affected.

Notice of Collection of Personal Information

The personal information collected on this form is collected under the authority of Water By-Law W8 and as amended, and will be used to administer the leak allowance grant under the customer assistance program. **Questions about the collection of this data should be addressed to the Manager of Water Demand at 300 Dufferin Ave., London, ON N6A 4L9. Tel: 519-661-2500 ext 5081.**

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Leak Allowance Request

London
CANADA

Billing number found on London Hydro bill	Complete property address Unit no. Street no.	Street name including suffix	Direction	City	Postal code
London					
Account holder name <input type="radio"/> Mr. <input type="radio"/> Mrs. <input type="radio"/> Ms.					
Daytime contact number			/ extension		Contact e-mail address
Please provide a brief description of the issue that required the repair and how it occurred					
Date of repair (YYYY/MM/DD)		Meter number W-		Meter reading at time of repair	
Location of leak (Check all that apply) <input type="checkbox"/> Pipe <input type="checkbox"/> Valve <input type="checkbox"/> Fitting <input type="checkbox"/> Toilet <input type="checkbox"/> Other- explain:					If pipe, what type of pipe was the leak on?
What repairs were made?					

Attachments

Indicate below what attachments you have included with this request.

Plumber's invoice(s) Hardware receipt(s)
 Photographs of leak area

NOTE: Please scan and attach invoices, receipts and photos of the repairs to email or mailed paper copy. To open email program, click **Submit by email** button below.

Mailing address: Leak Allowance Request
 Water Engineering, 8th Floor City Hall
 300 Dufferin Ave.
 PO Box 5035
 London, ON N6A 4L9

Submit by email