



STAFF REPORT ACTION REQUIRED

Future Options and Public Attitudes for Paying for Water, Wastewater and Stormwater Infrastructure and Services

Date:	October 16, 2013
To:	Executive Committee
From:	General Manager, Toronto Water Deputy City Manager and Chief Financial Officer
Wards:	All
Reference Number:	P:\2013\Internal Services\Cf\Ec13023cf (AFS #16812)

SUMMARY

The purpose of this report is to advise City Council about options to increase future capital funding for Toronto Water to continue with the renewal of drinking water, wastewater, and stormwater infrastructure and to accelerate the implementation of priority projects for managing the impact of severe storm events.

Over the last eight years, Toronto Water has implemented a sustainable infrastructure renewal program ensuring the continued safe delivery of services. Originally, after reaching an adequate funding level to ensure that Toronto Water assets are in a state of good repair, the capital plan was designed to increase funding for projects to address pollution caused by the overflow from both storm and combined sewers into the environment. In 1987, the International Joint Commission identified Toronto Harbour as an Area of Concern largely due to poor water quality in the Don River and Inner Harbour. The City's Wet Weather Flow Master Plan is designed as the cornerstone to delist Toronto Harbour as an Area of Concern in the Great Lakes Basin.

However, changing customer priorities and declining water consumption has impacted Toronto Water's long term capital plans. An increase in extreme weather events leading to extensive basement flooding, damage to city infrastructure and stream erosion has resulted in a demand for greater investment and a refocusing of stormwater management priorities. In addition, the consumption of water is being reduced through a greater awareness of the environment and the trend to more efficient fixtures and appliances. Less water consumption results in less future revenue to fund capital projects.

This report recommends that City Council (i) agree in principle to increased investments for Toronto Water; (ii) approve a study to determine and consult on the best way to pay for the higher level of investment particularly for flood protection and stormwater management; and (iii) consider the preferred funding strategy as part of the 2015 Toronto Water Capital Budget submission.

RECOMMENDATIONS

The General Manager, Toronto Water, and the Deputy City Manager and Chief Financial Officer recommend that City Council:

1. Request the General Manager, Toronto Water, and the Deputy City Manager and Chief Financial Officer to identify the most appropriate way to generate additional revenue for Toronto Water to fund its substantial infrastructure requirements through the use of one or more of the following options, and to conduct further detailed studies including stakeholder input on such options:
 - a. Water rate increases greater than the rate of inflation once the '9% for 9 years' increases end in 2014; and/or,
 - b. A separate stormwater management charge on the water bill; and/or,
 - c. Debenture financing for large scale, long service period projects, with all debt service costs to be paid from water rate revenue; and/or,
 - d. Local improvement charges for all or a portion of the Basement Flooding Protection Program.

2. The Deputy City Manager and Chief Financial Officer, and General Manager, Toronto Water, report back to Executive Committee, as part of Toronto Water's 2015 Capital Budget submission, with a recommended financing strategy to support Toronto Water's long term Capital Plan along with a detailed implementation plan.

Implementation Points

Staff will undertake the necessary detailed studies and stakeholder consultation on the funding options recommended for further consideration and will report back to Council as part of Toronto Water's 2015 Capital and Operating Budget submission with recommendations on the preferred option(s) or combination of options, along with an implementation plan for the recommended option(s).

Financial Impact

There are no direct financial impacts associated with adoption of this report. Any detailed studies and stakeholder consultation can be accommodated within existing budget envelopes.

Any financial impact arising from the recommended funding options will be reported through the 2015 Toronto Water Capital and Operating Budget Process.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

At the July 16, 2013 Toronto City Council meeting, in response to a Member Motion concerning a deferral of over \$1 billion in water capital projects due to declining consumption and an increase in extreme weather events, City Council adopted a Member Motion that:

- (1) Directed the General Manager, Toronto Water, in consultation with the Deputy City Manager and Chief Financial Officer, to report to the October 30, 2013 meeting of the Executive Committee with financing options for increased investment in Toronto Water Infrastructure, particularly for Wet Weather Flow Management Master Plan and Basement Flooding projects, as previously directed by Council; and,
- (2) Requested the General Manager, Toronto Water to undertake any necessary additional consultations with stakeholders and the public on the proposed options in preparation of the report requested in Part 1 above.

This motion can be viewed at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.MM37.45>

This direction followed an earlier report considered by Council at its meeting on October 30, 2012, headed "Toronto Water Capital Program Funding Pressures and Financing Options". This report presented the results of initial stakeholder consultation intended to allow Toronto Water to frame the challenges facing its capital program and gather initial feedback. That report can be viewed at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2012.EX23.3>

ISSUE BACKGROUND

Every day, Toronto Water provides safe drinking water for 3.4 million residents and businesses in Toronto and portions of York, safely treats wastewater from 2.8 million residents and businesses in Toronto and a portion of Peel, and provides stormwater management to protect private property and the environment. Toronto Water manages and maintains assets valued at \$28 billion in order to provide these services.

From a financial perspective, Toronto Water is a prudent custodian of public money. Operating costs have increased by an average of only 1% per year over the last twelve years. Capital spending, which has tripled over the last ten years, has been funded from revenues generated by yearly Council-approved rate increases.

At the same time, Toronto Water is facing a challenge keeping up with the level of service that is expected by Council and demanded by the public. There are a number of factors contributing to the challenge:

- Water consumption is declining and hence future revenues are impacted;
- New, unbudgeted capital projects are continually being identified to Toronto Water's capital program;
- Although it is being reduced over time, there is still a State of Good Repair backlog of \$1.6 billion, of which \$950 million is for underground assets;
- Priorities are rapidly changing, especially in relation to wet weather flow management and particularly the need to fix basement flooding; and
- Very large-scale capital projects deplete reserve balances to the point where there are insufficient reserves to deliver long term projects on a pay-as-you-go basis.

Toronto Water is currently fully funded on a 'pay-as-you-go' basis through a combined water and wastewater rate without any reliance on borrowing/debenture financing. The property tax supported budget is not impacted by adoption of the recommendations contained in this report.

Toronto Water is facing a funding shortfall of over \$1 billion over the next 10 years. Additional funding needs to be raised in order to maintain current level of service and to accelerate important projects such as the City's Wet Weather Flow Master Plan and to help prevent future basement flooding.

COMMENTS

In 1987, the International Joint Commission identified Toronto Harbour as an Area of Concern largely due to poor water quality conditions in the Don River and the Inner Harbour. The Great Lakes Water Quality Agreement commits Canada and the United States to actions that will restore and maintain the chemical, physical and biological integrity of the Great Lakes Basin Ecosystem. Pollution from industries, sewage treatment plants, landfills, wet weather flow and other sources have negatively impacted Toronto's waterfront.

Overflows from both storm sewers and combined sewers (sewers that contain both sanitary flows and stormwater) are the main sources of pollution. A multi-year Remedial Action Plan (RAP) has been developed to improve water quality and aquatic habitats in area watersheds and along Toronto's waterfront. The implementation of the City's Wet Weather Flow Master Plan, approved by City Council in 2003, supports the RAP and is the cornerstone of Toronto's efforts to delist Toronto Harbour as an Area of Concern in the Great Lakes Basin.

In 2005, City Council adopted the Toronto Water Capital Plan and funding strategy requiring a 9% annual rate increase over nine years ending in 2014 to address wet weather flow priorities established at that time as well as a state of good repair backlog. Since the adoption of the 10-year Capital Plan in 2005, several factors have changed,

including a decline in water consumption and changes in capital priorities which have resulted in lower than forecasted revenues and greater demands on capital funding. An increase in extreme weather events leading to extensive basement flooding, damage to city infrastructure and stream erosion has resulted in a demand for greater investment and a refocusing of stormwater management priorities.

Decline in Consumption and Revenues

Toronto Water, as is the case in many other municipalities, continues to experience a loss in forecasted revenue from a decline in water consumption. Over the last 10 years, there has been a drop in total water consumption of about 15 percent as shown in Figure 1. At the same time, the City has experienced a population growth of 7 percent.

Evolving technologies, the trend to more efficient fixtures and appliances, price sensitivity of consumers, and a greater awareness of the environment are all factors contributing to a reduction in water consumption.

In 2003, The City of Toronto Water Efficiency Plan was implemented. One component of the Plan offered financial incentives to customers to defray the cost of purchasing water-efficient appliances and fixtures, such as low-flush toilets. Another component of the plan emphasized the implementation of outdoor water audits and computerized irrigation systems, indoor water audits, and system leak prevention. The aim was to find “in-system” capacity to service future growth using existing infrastructure and thereby defer the cost of capital infrastructure expansion. The goal of the program in reducing consumption was reached, and elements of the program were discontinued in 2011. Figure 2 illustrates the decline in average household consumption between 2006 and 2013.

Figure 1 - Population Growth and Water Consumption (1980-2013)

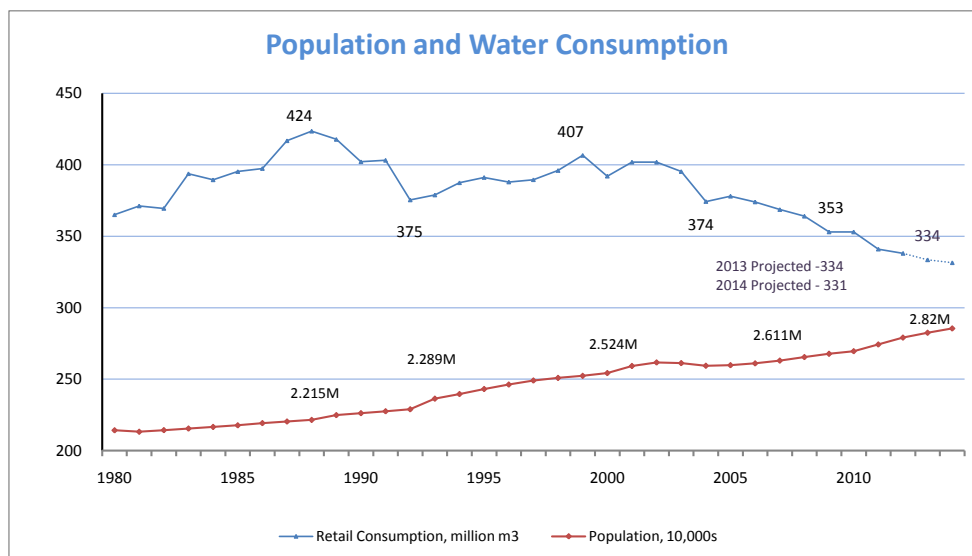
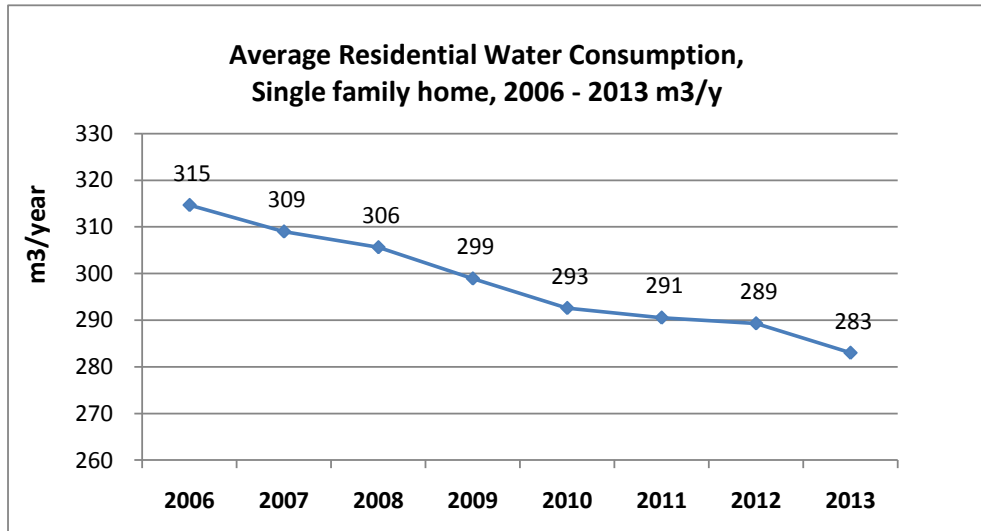


Figure 2 – Decline in Average Household Consumption 2007 – 2013



The impact of this decline in consumption was that future water revenue forecasts were significantly adjusted. As noted in the 2012 Water and Wastewater Rates and Services Fees Report (November 2011), the full revenue effect of the 9% rate increase in 2012 was not realized because 2% was necessary to offset the reduction in forecasted consumption. Based on declining water consumption trends shown above, Toronto Water revised its 10 year revenue forecast, projecting a further decrease of 1.5% per year until 2015, which effectively reduced an estimated \$687 million in cumulative funding over the 10 year planning period.

Increase Budgeted and Unbudgeted Capital Pressures

In light of the above-noted funding pressure, Toronto Water’s 2012 to 2021 Capital Plan was adjusted in a balanced manner across many program areas. While state of good repair projects remains a priority given the significant backlog in infrastructure renewal, considerable funding is still required to support the implementation of the Wet Weather Flow Master Plan.

Notwithstanding the reductions incorporated into the Toronto Water 2012 to 2021 Capital Plan, additional financial pressures from recent Council decisions were also accommodated in the Toronto Water 2012 to 2021 Capital Plan. Cost increases to fund the Highland Creek Biosolids Disposal Truck Loading Facility and the Ashbridges Bay Wastewater Treatment Plant Effluent UV Disinfection System were incorporated into the 10 year capital plan.

Significant pressure also exists to support projects not currently contained within Toronto Water’s 2014 to 2023 Capital Plan Submission. Table 1 below provides a summary of these projects and the financial pressures they represent to the Capital Program.

Table 1 - Summary of Toronto Water Capital Budgeted and Unbudgeted Pressures

Project/Program	2014-2023 (\$ millions)	post 2023 (\$ millions)
Budgeted Pressures		
a) Highland Creek Wastewater Treatment Plant – Biosolids Handling Cost Increase	\$ 8.6	--
b) Ashbridges Bay Wastewater Treatment Plant – Disinfection Cost Increase	\$ 66.9	--
Total Budgeted Pressures:	\$ 75.5	
Key Unbudgeted Pressures		
a) Wastewater Treatment Plants		
i) Digester Cleaning & Upgrades	\$ 45.0	TBD
ii) HCTP Capacity Upgrades	\$ 24.0	--
iii) HTP Blower Replacement	\$ 18.0	--
b) Wet Weather Flow Master Plan		
iv) Don River & Central Waterfront Project	--	\$1,075.7
v) Basement Flooding Protection Program expanded to the City	\$ 326.0	\$ 674.0
vi) Etobicoke Waterfront Stormwater Control	--	\$ 70.2
vii) Waterfront Landforms	\$ 90.0	--
viii) Erosion control/trunk sewer protection	\$ 63.0	
c) Water Treatment and Supply – Standby Power	\$ 47.0	\$ 30.5
d) TRCA Priority Lakefront Erosion Control Projects	\$ 44.0	TBD
e) TRCA Scarborough Waterfront Trail	\$ 60.0	--
Total Unbudgeted Pressures:	\$ 717.0	\$ 1,850.4

The Need for Additional Capital Funding

The decline in water consumption revenue had necessitated a deferral of an estimated \$687 million worth of capital projects in the 2012-2021 Capital Plan, and there is also an expectation to find more than \$717 million to pay for important capital projects not currently included in the 2014-2023 Capital Plan. Together, this represents more than \$1.2 billion of deferred capital projects. There is an additional \$1.8 billion in unbudgeted project costs beyond the 10-year (2014-2023) planning period mostly related to the implementation of wet weather flow management projects (2024-2033).

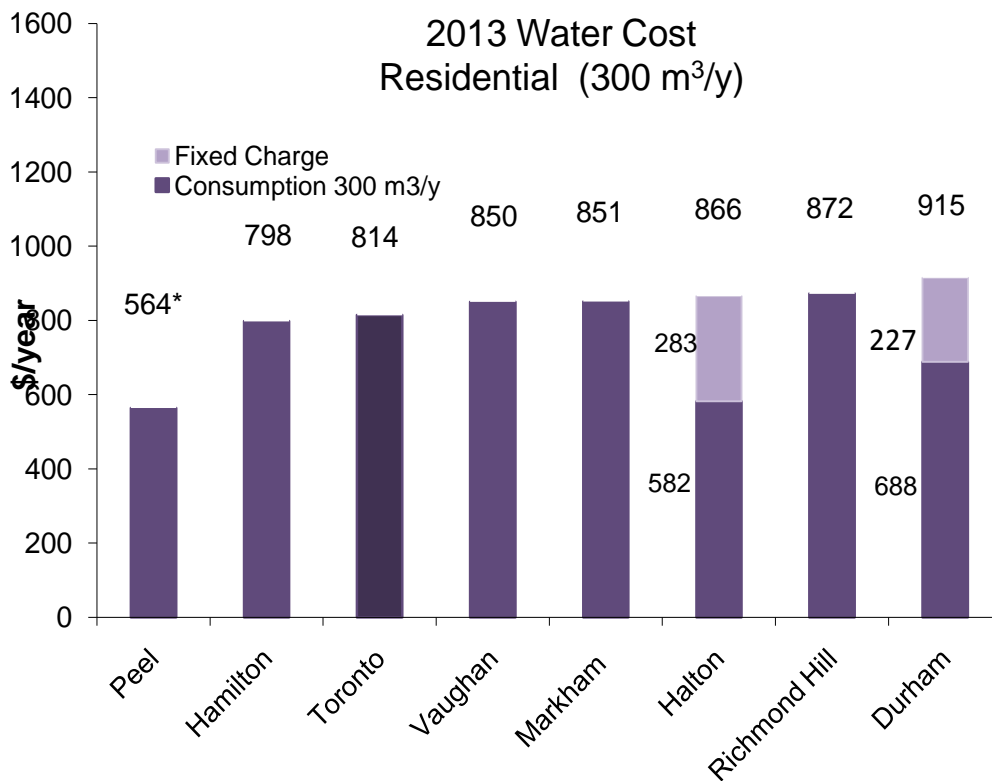
If Toronto Water is to address these capital projects as priorities, then additional funding must be identified. The current capital funding strategy of 9% rate increases ends after 2014 and, without amending the existing financing strategy, these unfunded projects will not be accommodated within the current 10-year projected funding envelope. The alternatives are to: (1) re-prioritize projects, with the result that funded projects would be deferred in order to accommodate the unfunded projects; or, (2) increase revenues so that priorities can be addressed.

Toronto's Water Rates are Low in Comparison with GTHA Municipalities

Toronto's water rate for residential and industrial consumers is low in comparison to surrounding municipalities. With the exception of Peel Region, where storm water

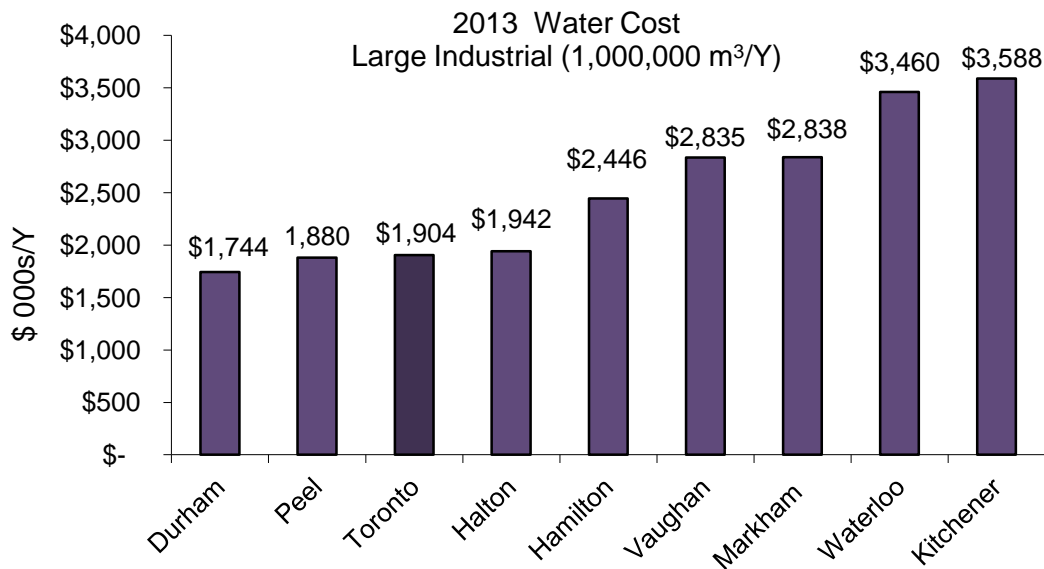
related projects are funded from property taxes, based on the average household consumption of 300 cubic metres, Toronto is amongst the lowest water cost jurisdictions for residential consumers in southern Ontario, as shown in Figure 3. Figure 4 provides a similar comparison for large industrial users, and shows that Toronto is also amongst the lowest water cost jurisdictions for that sector.

Figure 3 – GTHA Residential Water Cost



**Note: Peel stormwater funded from property tax*

Figure 4 – GTHA Industrial Water Cost



Financing Options

A number of financing options have been considered which could be introduced to support Toronto Water's long term Capital Plan, and help address the unbudgeted pressures noted above. They include:

Financing options recommended for further review:

1. Water rate increases greater than the rate of inflation once the '9% for 9 years' increases end in 2014; and/or,
2. A separate stormwater management charge on the water bill; and/or,
3. Debenture financing for large scale, long service period projects, with all debt service costs to be paid from water rate revenue; and/or,
4. Local improvement charges for all or a portion of the Basement Flooding Protection Program.

Financing options not recommended for further review:

5. Moving funding for the stormwater management program from water rates to the property tax; and/or,
6. Moving funding for the basement flooding protection program from water rates to the property tax; and/or,
7. Area special property tax levy for the basement flooding protection program; and/or
8. Area based water surcharge.

A brief summary of these options is presented in the following section.

Financing options recommended for further review:

1. Water rate increases greater than the rate of inflation after 2014

Toronto Water's Capital Program has traditionally relied on water rate increases to address Capital Budget pressures and, as noted earlier, a series of 9% rate increases from 2006 to 2014 were planned to support an aggressive infrastructure renewal program, directed at eliminating Toronto Water's infrastructure renewal backlog by 2016. Beyond 2014, rate increases of 3% per year had been planned, to keep pace with expected inflationary pressures over time.

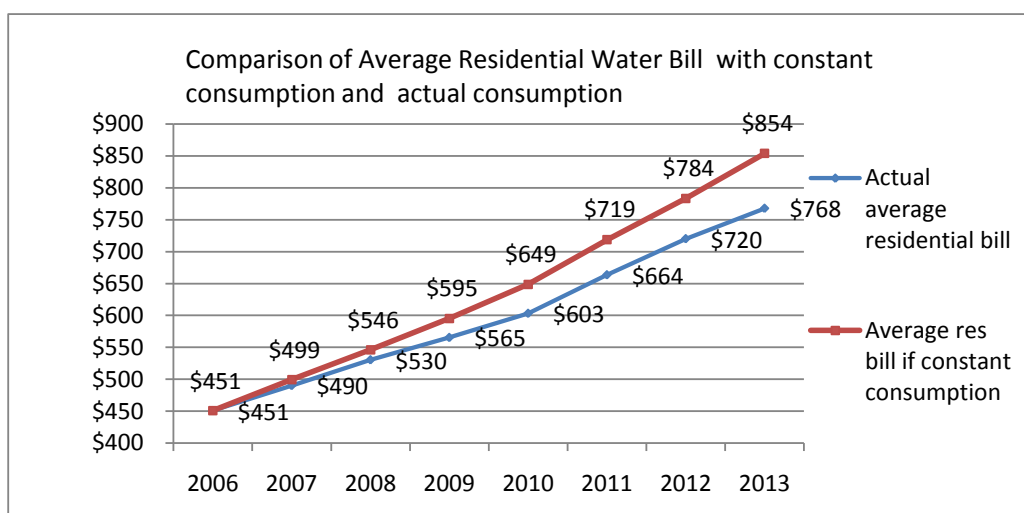
Various rate increase scenarios for the period 2015 to 2021, beyond the 3% inflationary rate increases, could generate the \$1.1 billion shortfall. Table 2 summarizes two scenarios. Option 1 includes a series of 6% per year increases beginning in 2015 and ending after 2021. Option 2 includes rate increases of 8% per year for the years 2015 to 2017 inclusive, followed by inflationary rate increase of 3% per year to 2021 inclusive. The Options would reinstate funding of an estimated \$952 million and \$990 million, respectively. Water rate increases greater than inflation is the simplest option to implement.

Table 2 - Summary of Rate Increase Options Beyond 2015

	2005-2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-2021
Approved Rate Increase	9%	9%	9%	9%	3%	3%	3%	3%	3%	3%	3%	
Revenue \$M's		893.3	961.8	1,038.9	1,050.6	1,085.8	1,117.1	1,149.3	1,177.0	1,216.5	1,251.6	10,941.9
Rate Increase Option 1		9%	9%	9%	6%	6%	6%	6%	6%	6%	6%	
Revenue \$M's		893.3	961.8	1,038.9	1,074.6	1,146.0	1,211.4	1,280.6	1,341.8	1,431.6	1,513.9	11,893.8
Difference		-	-	-	24.0	60.2	94.3	131.4	164.8	215.1	262.3	952.0
Rate Increase Option 2		9%	9%	9%	8%	8%	8%	3%	3%	3%	3%	
Revenue \$M's		893.3	961.8	1,038.9	1,090.5	1,187.1	1,277.3	1,314.2	1,346.0	1,391.4	1,431.7	11,932.1
Difference					39.9	101.2	160.2	164.9	169.0	174.9	180.1	990.3

As part of the discussion on water rate increases, it is important to note that consumers can and have adapted their behaviour to reduce the impact of such water rate increases. While water rates have increased in the past by 83% over the period 2006 to 2013, the average cost per household has gone up only by 70%, which is less because consumption has declined. This lower average household cost is illustrated in Figure 5.

Figure 5 – Water Rate Increases vs. Household Impacts



2. A dedicated stormwater management charge on the water bill

Toronto Water’s Capital Plan includes funding for wet weather flow management projects, related both to water quality (impacts of stormwater runoff and combined sewer overflow discharges) and quantity (e.g., the Basement Flooding Protection Program). In total, these projects represent about 14% of the 2013 Capital Budget. While the funding to implement these projects is largely provided through water revenues, there is no direct relationship between the amount of water consumed for a given property, and the amount of stormwater runoff generated. A more direct relationship is associated with lot size and hard surface (impervious) area. In this “user pay” principle model, the revenue generated by the stormwater management charge would be directed to wet weather flow projects exclusively. Any desire to accelerate implementation of certain projects would require a corresponding increase in the stormwater management charge.

Many municipalities across North America have pursued the application of a separate stormwater charge to their water bill to generate funding necessary to deal with the impacts of stormwater runoff. A summary of stormwater management models adopted by large municipalities across Canada is shown in Table 3. There is no common or standardized approach, although they are generally based on the property land area. They vary in complexity of calculation and administration.

Table 3 - Summary of Stormwater Management Charge Models Adopted Across Canada

City	Start Date	Charge Base	Billing
Fixed Charge			
St. Thomas	January 2001	Residential charge for storm drainage of \$7.12/month in 2013 (\$85.44 per year)	Monthly storm drainage charge on water bill.
Calgary	January 2004	Flat Drainage Charge, 2012 - \$8.36 per 30 days (~\$101.16 per year)	Monthly Drainage Service Charge on utility bill
London¹	January 2013	Based on property's total square metre area. Residential properties less than 0.4 ha = \$13.11/month (\$157.32 per year); greater than 0.4 ha = \$35.10/month (\$421.20 per year). In 2015, customers without a storm sewer within 90m of their frontage will be eligible for a 25% reduction in their monthly storm charge.	Monthly on water bill.
Halifax	July 2013	Residential properties (up to four units) pay based on an average impervious area of 224 m ² , while all other customer types (ie. multi-residential, commercial, industrial and institutional with large impervious surfaces such as parking lots) pay based on site specific surface area (square metres) of impervious area. For residential customers, the charge is \$7.47/quarter (\$29.86 per year), increasing to \$8.35/quarter (\$33.39 per year) on April 1, 2014,	Annually or semi-annually on water bill; for residents receiving only stormwater service, the charge is on the property tax bill
Lot/Impervious Area Charge			
Edmonton	January 2003	Model uses property area (A), intensity of development (I) and runoff factor R. Fee = A x I x R. The average residential homeowner pays about \$6 per month (\$72 per year), depending on lot size and land zoning.	Monthly land drainage utility
Regina	January 2008	Tiered property area based rate structure. Up to 1000 m ² (most res lots) are charged 38 cents per day in 2012 (\$132 per year).	Storm drainage charge monthly on water bill
Kitchener	January 2011	Transferred from property taxes to a user-fee program. Based upon stormwater runoff, as amount of impervious surface area on the property. Average single dwelling homeowner charge -\$10.50 per month (\$126 per year).	Monthly water utility bill
Saskatoon	January 2012	Based upon the number of <i>Equivalent Runoff Unit</i> (ERUs) a property has, e.g. \$4.40/month (\$52.80 per year) per ERU of 265.3 square metres.	On Utility bill

¹http://www.london.ca/d.aspx?s=Water/Clear_Choice/Services_FundingModel/Current_Rate_Structure.htm#Stormwater

City	Start Date	Charge Base	Billing
Richmond Hill ²	October 2013	Residential and farm rate is apportioned quarterly on each water bill based on days in the billing cycle, approximately \$11.86 (\$47.62 per year) effective October 1. Non-residential, multi-residential and condominium rate apportioned bi-monthly based on days in the billing cycle, approximately \$23.12 (\$138.36 per year) effective November 1. Property owners who do not currently receive a water bill will be issued an annual stormwater management rate bill. Education facilities and places of worship are exempt.	On water bills. Quarterly for residential and farm, and bi-monthly for non-residential, multi-residential and condominiums. If not presently billed for water, an annual stormwater bill will be issued.
Mississauga ³	Under Development (est. 2013)	Based on number of tiered single family unit (SFUs) per property, and accounts for imperviousness. 1 SFU captures all but the 10% smallest and 10% largest single family properties. Typical single family dwelling homeowner charge = \$7.80/per month (\$93.60 per year), based on "interim" level of service. Mississauga Council voted to exempt places of religious assembly. Federal and provincial crown lands are exempt. Mississauga staff have been quoted as saying that school board properties are exempt.	Preferred method is to administer the billing for the Stormwater User Fees with the Region of Peel water bill.

A main reason to support a stormwater management charge is equity, in that the charge is based on the contribution of stormwater generated by each property or class of properties. As it stands, customers with higher than normal water consumption, are paying a disproportionate share of stormwater project costs, while property owners with large hard surface areas and relatively low water consumption are not paying their fair share towards stormwater management.

The development of a stormwater management charge that is fair, transparent and easily implemented is a very complex exercise. Different approaches have been taken depending on the unique circumstances of each municipal jurisdiction. In all cases, however, implementation followed extensive analysis and consultation. It is premature to estimate the stormwater management charge at this time, as there are many methods for calculating the potential fee. Staff will need to undertake the necessary analysis and consultation, and report back on a recommended approach and implementation plan.

²http://www.richmondhill.ca/documents/meetings/council/4_22_2013_19_30/meeting_4_22_2013_19_30_bylaws_council_25-2013.pdf

³ Council endorsed in principle moving from a property tax supported program to a stormwater rate funded program, using a tiered single family unit rate structure (see http://www.mississauga.ca/portal/cityhall/pressreleases?paf_gear_id=9700020&itemId=800112r&backUrl=%2Fportal%2Fcityhall%2Fpressreleases%3Fpaf_gear_id%3D9700020).

3. Debenture financing for large scale, long service period projects

Debenture financing is not a funding source, but rather a financing strategy that can raise capital funds quickly, which are then repaid over time. The last time debenture financing was used by Toronto Water was in 1996 under the jurisdiction of the former Metropolitan Toronto. That debt was fully paid off by 2006. Since then, Toronto Water has been operating on a pay-as-you-go basis with funding derived primarily from water rate revenue.

Toronto Water's Capital Program contains many large scale projects with long service life, benefiting multiple generations. It can be argued that the "pay as you go" model used to finance large expansion projects that support future growth has "crowded out" some of the core programs designed to provide service to existing residents, such as state of good repair projects. An argument can be made that larger infrastructure expansion projects which benefit not only current but future residents, should be financed over the useful life of the asset. For practical reasons, debenture financing typically spans from 10 years to 30 years, and the cost would be recovered through an annual debt charge.

While it is recognized, that debt charges add to the total cost of infrastructure, the debt charges are more appropriately assigned to future residents that benefit over time, rather than just existing residents, who's funding, through water rate revenues, should more appropriately be directed towards the renewal of aging infrastructure.

This financing strategy is an option that can be implemented along with other funding options.

4. Local improvement charges for all or a portion of the Basement Flooding Protection program

Local improvement charges are special levies on properties within a defined geographic area, wherein the funds generated from the levies are used to fund an identifiable capital improvement that benefits the property owners within the defined area. Authority to levy local improvement charges is provided under Section 287 of the *City of Toronto Act*. It allows the City to identify a "special service" which is not being provided throughout the whole of the City or is being provided at different levels throughout the City, and to designate an area of the City in which the residents and property owners receive (or will receive) an additional benefit from the special service that is not received in other areas of the City. To the extent that basement flooding mitigation measures can be considered a "special service" not being provided throughout the City, the costs associated with the projects to alleviate basement flooding could be paid using local improvement charges.

Local improvement charges are typically based on lot frontage, which is used to apportion costs. If a special service was identified, such as basement flooding protection, a local improvement charge could be imposed on the benefiting homeowners, after the necessary process is followed and the majority of homeowners support it. The homeowner would contribute to the cost of the project through a local improvement

charge, which would then be collected as an additional amount on their property tax bill for a period of time, typically 10 or 20 years

It is possible in many cases that the cost of remediating basement flooding in a certain area may be so high as to be prohibitive for homeowners to consent to repaying it through a local improvement charge on their tax bill.

The City is required to give notice of its intention to pass a local improvement by-law. A poll must be taken, and at least two-thirds of the homeowners representing at least half of the assessed value must support the local improvement charge. Owners may petition against undertaking the work as a local improvement, but such a petition can be overcome by a successful application to the OMB for approval to undertake the work as a local improvement or by a sufficient petition in favour of undertaking the work as a local improvement.

Before the levy can be imposed the City Treasurer must prepare a local improvement roll, and the Committee of Revision must confirm the roll.

This funding option is highly localized, so would not be appropriate for many of the capital projects that Toronto Water undertakes which benefit the entire City. Thus, it is best used as one of a number of options that can be incorporated into an overall financing strategy.

Other financing options not recommended for further review

5. Moving funding for the stormwater management program from water rates to the property tax

To the extent that stormwater runoff is not related to water consumption, and that everyone benefits from the protection of the environment that a stormwater management program provides, an argument can be made that it should be funded from the property tax base. This is consistent with the City's User Fee Policy, which suggests where the benefit is more towards the community than to identifiable entities, and when the service is directed to the public at large, than property tax based funding is preferred.

The challenge with such a broad based funding approach, however, is that it does not generally provide opportunity to target identifiable entities that perhaps contribute more than the general public towards stormwater runoff, such as from properties with large paved or impervious services. It is possible that property tax based funding together with a penalty charge or incentive bonus could be used to modify the actions of such large property owners.

However, more and more jurisdictions are taking the opposite approach and are removing stormwater funding from the property tax base and instead funding it through a utility charge.

For the above reasons, this option is not recommended for further consideration.

6. Moving funding for the basement flooding program from water rates to the property tax

This option is a sub-component of the above. For the reasons explained above, this option is not recommended for further consideration.

7. Area special property tax levy for the basement flooding program

Another mechanism available to accelerate the basement flooding protection program could be through the imposition of an area special property tax levy.

Section 287 of the City of Toronto Act, 2006(COTA) allows the City to impose a special tax rate in a designated geographic area to recover all or a portion of the costs of providing a "special service".

A "special service" is defined as a service or activity of the City that is, (a) not being provided or undertaken generally throughout the City; and (b) being provided or undertaken at different levels or in a different manner in different parts of the City.

The City may only impose a special tax rate for a special service in an area designated by the City in which the residents and property owners receive or will receive an additional benefit from the special service that is not received or will not be received in other areas of the City. A "benefit" is defined as a direct or indirect benefit that is currently available or will be available in the future. In order to include in a designated area property owners who do not currently received an additional benefit but will do so in the future, the expenditures for the additional benefit must either be in the current year's budget or a reserve fund must be established to fund the expenditures over a number of years.

The special tax rate is levied on assessed value in the same proportions based on tax ratios as is the general municipal tax levy by way of a special levy. The special tax rate must be imposed on all property classes within the designated area.

It is then arguable that the residents in certain areas experiencing basement flooding could receive an additional benefit from the special service of basement flooding protection that is not received in other areas of the City, qualifying as a 'special service'.

This funding strategy is an option that can be incorporated with other options, if City Council so wishes to include it for consideration.

8. Area-based Water Surcharge

Similar to the concept of a special area levy, the City may be able to impose an area-based water surcharge, as provided for under Section 259 of the *City of Toronto Act, 2006*. Such fees or charges can be imposed on persons for services or activities provided

or done by or on behalf of the City. The flood protection services to be provided by the City are services or activities for which the City can impose fees.

The costs of storm water management capital works including flood protection are included, at least in part, in the water rates currently charged by the City for the supply of water. To be a cost eligible to be added to water rates, however, the cost must relate to work for the treatment of or diversion of the treatment of storm water. There is no legislative impediment to adding a surcharge to water rates charged to water users in a particular geographic area of the City. Such a surcharge, however, must be linked to the cost of providing the service and cannot be set so as to exceed such costs for the purpose of raising revenue.

The difficulty with this approach that it may not be possible to define a specific boundary that sets out the limit of an area that benefits from the stormwater or basement flooding protection amenities and to link it to cost of the service. This approach has never been previously used in the City of Toronto, and for these reasons, it is not recommended for further consideration.

Consultation and Public Attitudes for Paying for Water, Wastewater and Stormwater Infrastructure

An initial consultation process was undertaken in the summer of 2012 to inform and engage the public and stakeholder groups on future options for paying for water, wastewater and stormwater infrastructure and services. This process involved:

- ***Stakeholder consultation:*** Invitations were sent to more than 40 stakeholders groups and associations, representing commercial, industrial, institutional, apartment and environmental interests. Six stakeholder meetings were held in June 2012.
- ***General public consultation:*** Four public meetings were held across the City in July and August, 2012. There were a number of tactics to encourage attendance at the public meetings, including direct mailings, social media, outreach via Councillors, advertising in local community newspapers and online notices on the City's website.

The outcome of the consultations in 2012 were outlined in the staff report 'Toronto Water Capital Program Funding Pressures and Financing Options' adopted by City Council on October 30, 2012. A copy of the report can be viewed at:

<http://www.toronto.ca/legdocs/mmis/2012/ex/bgrd/backgroundfile-50536.pdf>

As per the July 2013 Council Directive, Toronto Water, Corporate Finance and Strategic Communications staff embarked on a series of further consultations, building on the findings of 2012 and to gain more, specific and in-depth insight into the questions and concerns of the general public (via focus groups) and other key stakeholders and solicit feedback on the alternate financing options.

Stakeholder consultation:

Invitations were sent to more than 27 stakeholder groups and associations, representing commercial, industrial, institutional, apartment and environmental interests. Three stakeholder meetings took place on September 11, 18 and 26.

The format of the meetings involved a presentation by the General Manager, Toronto Water, providing background information and highlighting the key issues and the options under consideration. Participants were encouraged to ask questions, provide feedback and make written submissions by mail or email following the meeting.

Seventeen representatives representing seven stakeholder groups attended these sessions. Generally speaking, the institutional sector expressed concern around the ability of their funding model to absorb higher costs, and tended towards the 'stay the course' option, but were also open to the idea of a stormwater charge if there were opportunities for credit for initiatives or uses that benefit stormwater management. The NGO sector felt that a stormwater charge was fairest approach best reflecting the cost of stormwater management. The industrial sector agreed with the stormwater charge in principle, and supported credits where stormwater initiatives were undertaken by industries, but felt further analysis was needed. The commercial sector expressed a concern around a stormwater charge, and generally advocated a billing system that was fair and transparent and where everyone shared the cost.

While there was varying opinion on the preferred financing method, there was general consensus that each stakeholder group would like to have further analysis and details around the impacts of each of the funding option for their organization or organizations they represent.

General residential public consultation:

Ipsos Reid, a market research and public polling firm, was commissioned to conduct focus group consultations in order to review possible solutions to address Toronto Water's funding shortfall of \$1 billion over the next 10 years.

Using focus groups to gain insight into the general public allowed for diverse opinions and feedback from a broad cross section of residents. They also ensured context could be provided and dialogue could be had — important given the complex nature of the issue and proposed solutions. The use of focus groups had the added benefit of providing an independent, third-party analysis of the residential group response.

Through two focus groups with residential utility bill payers, Ipsos Reid explored attitudes towards the following three options:

- Option 1: 'Stay the course', keep water rate increases at 3% annually in line with inflation
- Option 2: Introduce 6% water rate increases annually for 10 years
- Option 3: Introduce a separate charge for stormwater

There was widespread agreement that Toronto Water needs to raise the additional funds required to maintain existing levels of service and to fund projects, even if this means increasing charges for residents. The responses were somewhat divided between increasing water rates versus introducing a stormwater management charge. There was no support for ‘stay the course’ (option 1).

Generally speaking, those who favoured a water rate increase over a stormwater charge felt the water rate increase was simpler and easier to understand. Those who favoured the introduction of a stormwater charge felt that it was more transparent and fair to have a separate stormwater charge related to the actual runoff generated by a property.

Feedback summary

Option	Notes
Option 1: 3% rate increase	No support for this option
Option 2: 6% rate increase	Those in favour of this option generally felt the water rate increase was simpler and easier to understand.
Option 3: Stormwater charge	Those in favour of this option generally felt that it was more transparent and fair to have a separate stormwater charge related to the actual runoff generated by a property.

The focus groups also highlighted the need for widespread public education if Toronto Water were to introduce a separate stormwater charge. Many participants did not easily understand what stormwater was and many openly admitted to not paying much attention to their water bill or being aware of what services they were paying for via the water rate.

This report seeks City Council direction to proceed with more extensive research and consultation with a view towards introducing of a stormwater charge in some form. Given the complexities in the calculations and implementation, changes in the way consumers pay for water, wastewater and stormwater services could not be introduced before 2015 at the earliest.

Implementation Issues and Next Steps

Staff will undertake the necessary detailed studies and stakeholder consultation on the funding options during 2014. The consultation will include meetings with stakeholders, open houses, and information sessions with the public. The results of the consultation and analysis will be reported to Council as part of Toronto Water's 2015 Capital and Operating Budget submission with recommendations on the preferred option(s) or combination of options, along with an implementation plan for the recommended option(s).

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