Public Consultation on a Stormwater Charge and Water Service Charge

April 8, 11 and 16, 2024

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Purpose of this Consultation

City Council has directed Toronto Water and the Chief Financial Officer to consult the public about the possible implementation of:

- a stormwater charge for all property classes
- a stormwater charge credits program for large properties; and
- an administrative water charge (referred to as a “water service charge” in this Consultation)

The City is seeking feedback (questions, comments and suggestions) on the two potential charges and stormwater charge credits program.

Today's Agenda

- Provide an overview of the City's water, wastewater and stormwater services and current water rate structure
- Introduce the concepts of a stormwater charge, stormwater charge credits and a water service charge
- Provide details about what the City is considering:
  - what the potential charges would fund
  - how the potential charges would be calculated and charged
  - a framework for a potential stormwater charge credits program - guiding principles, eligibility and application requirements
- Present an analysis of cost impacts to water users

We want to hear from you!

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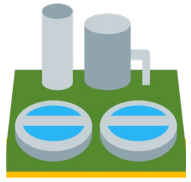
Toronto Water

Toronto Water manages one of the largest water, wastewater and stormwater systems in North America, providing safe drinking water, safely treated wastewater and stormwater management for over 3.6 million residents and businesses in Toronto, and portions of York Region and Peel Region.

Drinking Water

Supplies over 435 billion litres of safe potable water yearly which is distributed through more than 6,100 km of watermains and City-owned water service connections.



Wastewater

Collects and conveys wastewater through more than 5,600 km of sewers and treats over 400 billion litres of wastewater in a safe and environmentally sustainable way to protect public health.

Stormwater

Collects and conveys stormwater through 4,900 km of storm sewers to help prevent the risk of flooding, control erosion and improve water quality to protect public health and Toronto's waterways.

Funding water and wastewater services

The City's water and wastewater services (which includes stormwater management) are funded using a "pay-as-you-go" system which charges a water and wastewater consumption rate ("water rate") **based on the volume of water you use**. Water and wastewater services do not rely on any funding from property taxes or debt financing.

The water rate is comprised of two blocks.

Water Rate Blocks	2024 Water Rate*
Block 1 – Domestic Use, General Water Service Rate Applicable to all consumers of water, including the first 5,000 cubic metres per year (m^3/per year) consumed by Industrial users.	**$4.5178/$m^3$**
Block 2 – Industrial Process Use Service Rate Applicable to industrial process use for eligible property or portions of property and is applicable to volume of water consumed over 5,000 cubic metres per year (m^3/per year) of such use.	**$3.1624/$m^3$**

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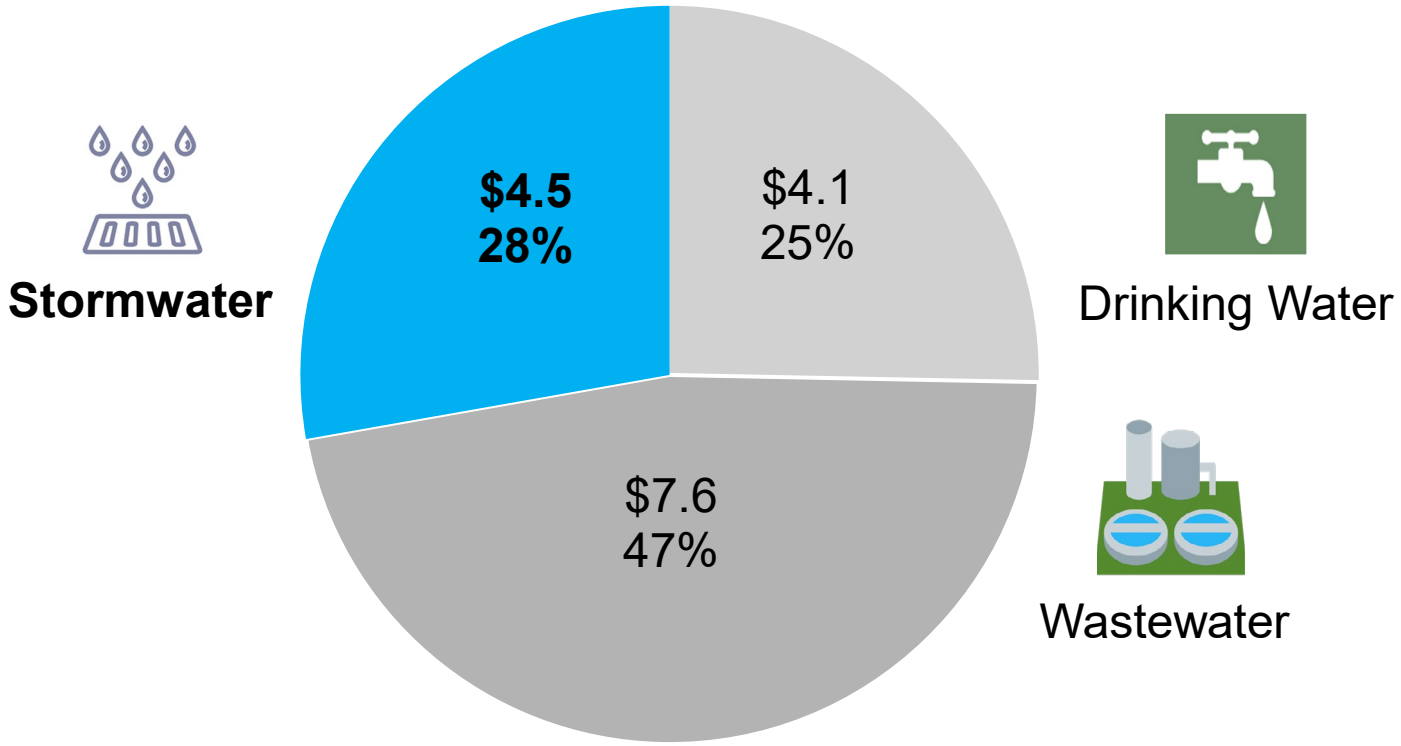
*this reflects the water rate if paid on or before the due date

Toronto Water budget

- Every year, Toronto Water brings forward a proposed operating and capital budget to the Mayor and Council for approval which includes a 10-Year Capital Plan for capital spending in the next ten years.
- 28% of Toronto Water's approved $16.19 billion 10-Year Capital Plan is dedicated to stormwater management projects (~$4.5 billion).

Toronto Water 10-Year Gross Capital Program ($ billions)



Stormwater

Stormwater is rain and melted snow

- When not absorbed into the ground, stormwater runs off hard (impervious) surfaces, down storm drains and through a complex network of sewer pipes that carry it to local waterways
- Stormwater picks up oils, greases, fertilizers, bacteria and other contaminants as it runs off hard surfaces

The impacts of stormwater

- In urbanized areas like Toronto, there are a lot of hard surfaces. When severe storms happen, more stormwater runs off hard surfaces and enters the City's sewer system
- Too much stormwater can overwhelm the City’s sewer system, which can lead to flooded basements and impacts to surface water quality in Toronto’s rivers, streams and Lake Ontario waterfront

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Managing stormwater

The City takes a multi-pronged approach to managing the adverse impacts of stormwater. The City's stormwater management initiatives include:

- multi-year capital programs (i.e., the Basement Flooding Protection Program)
- wet weather flow projects (Don River & Central Waterfront project, watercourse erosion control projects to protect city infrastructure)
- new and upgraded stormwater ponds, sewers, storage tunnels, tanks
- green infrastructure on City streets
- mandatory downspout disconnection
- public education and outreach

Managing Stormwater - Basement Flooding Protection Program

A multi-year program to help reduce the risk of basement flooding from severe storm events by making improvements to the City's stormwater and sewer infrastructure.

- The City has been undertaking basement flooding studies in 67 basement flooding study areas across Toronto. Studies for all 67 study areas will be completed in 2024.

- Basement Flooding Protection Program projects are being constructed across the City:
  - new and upgraded sewers
  - stormwater tunnels
  - stormwater ponds
  - underground storage tanks

- Toronto Water's 10-Year Capital Plan allocates **~$2.1 billion** to the Basement Flooding Protection Program

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Managing Stormwater - Don River and Central Waterfront Project

The City's largest stormwater infrastructure project which will significantly improve surface water quality in the Lower Don River, Taylor-Massey Creek and the Inner Harbour, when fully constructed.

- A system of underground storm sewer tunnels, storage shafts and a treatment facility that will collect and treat combined sewer overflows, a mixture of stormwater and sewage that is discharged to watercourses and Lake Ontario from combined sewer outfalls during wet weather events.
- First phase – the Coxwell Bypass Tunnel – is currently under construction. Other project components will be constructed in phases over the next 15 years.
- Toronto Water's 10-Year Capital Plan allocates **~$2.38 billion** to Wet Weather Flow projects, including the Don River & Central Waterfront.

Stormwater charge

Stormwater charge

- The City is consulting on a potential **stormwater charge** that would be dedicated to funding the City's stormwater management initiatives.
- A stormwater charge is a charge based on the impact of property with respect to stormwater runoff to the City's storm sewer system, represented by the amount of hard surface on a property.
    - examples of hard surfaces include roofs, asphalt driveways and parking areas, concrete landscaping
    - generally, the more hard surface area a property has, the more stormwater runoff it contributes to the stormwater system

- Several municipalities across North America have implemented a stormwater charge - Mississauga, Brampton, Newmarket, Saskatoon, Halifax, Philadelphia, Seattle, and many others

About a stormwater charge

Dedicated Funding

- Would provide dedicated funding (the stormwater charge) for a dedicated service (stormwater management)

Basis of Charge

- Would link stormwater runoff from a property (represented by a property's hard surface area) to the City's sewer system and the cost to fund the infrastructure to manage it

Transparency

- Would provide transparency for cost of stormwater services provided

Awareness

- Could help raise awareness of stormwater management

City's proposal for a stormwater charge

- Costs for stormwater management would be removed from the water rate and the stormwater charge would appear as a separate line on the utility bill as a fixed charge (e.g. would not vary based on a property's water consumption)
- Properties without a water account would receive a stormwater charge-only bill
- Properties would be charged based on property type and size
- **City Council would need to approve a stormwater charge for it to be put into effect.**
    - Stormwater management expenditures are updated each year with the submission of Toronto Water's Budget to the Mayor and Council.

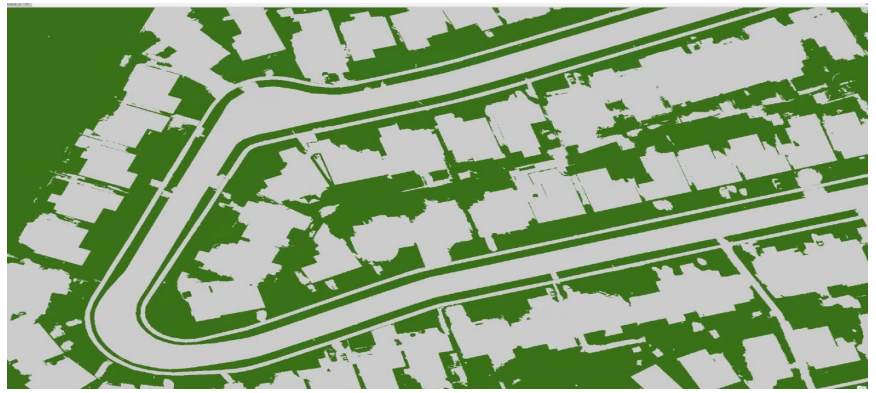
Stormwater charge analysis

- The analysis for a potential stormwater charge in this presentation is based on budget forecasts for the year 2027, which is the earliest year a stormwater charge could be put into effect
- The forecasted stormwater management expenditures for 2027 are $385 million.
- With the removal of stormwater management expenditures from the water rate, there would be a reduction of the water rate (Block 1 and 2) of approximately 25 per cent in the first calendar year the stormwater charge would take effect.
- Estimates of cost impacts to water users included in the presentation are based on properties with average water use. **Cost impacts to individual properties would vary depending on the property type, property size and yearly water use.**

Calculating a stormwater charge

- For the purposes of this Consultation, City staff have completed a geospatial analysis of hard and soft surface areas across Toronto using aerial photography:
  - **hard surfaces (shown in grey)** include roofs, driveways, and hard surface landscaping
  - **soft surfaces (shown in green)** include grass and other vegetation
- The geospatial analysis provides the basis for calculating the stormwater charge:
  - total hard surface area in Toronto = 22,857 hectares
  - stormwater charge is total stormwater management expenditures ($385 million) divided by total hard surface area in Toronto (22,857 hectares) = **$1.68 per square m² of hard surface area**
  - Hard surface area data is used to calculate the stormwater charge for different property types and sizes

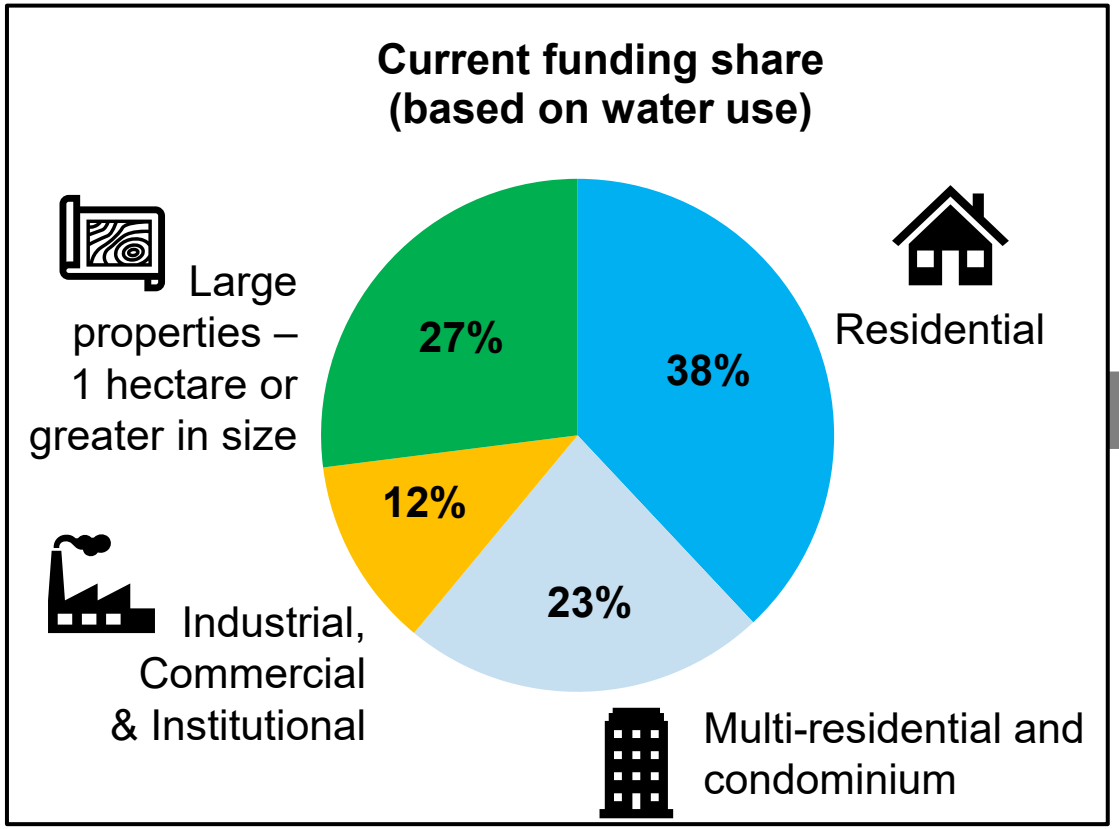
Aerial image of properties

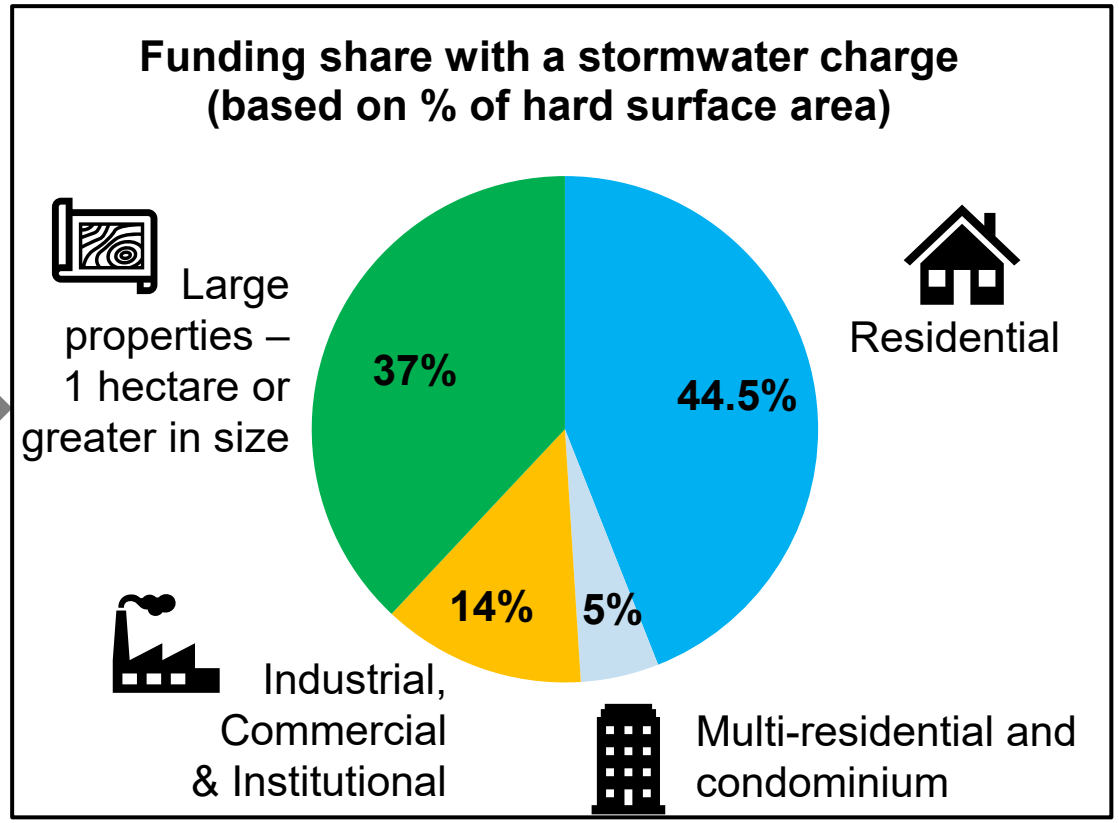


Aerial image showing hard surfaces (in grey) and soft surfaces (in green)

Funding share of stormwater management

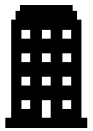
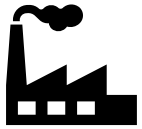
The funding share (percentage) for the City's stormwater management initiatives would shift to property types with more hard surface area.





Charging a stormwater charge

The potential stormwater charge would be charged based on **property type, property size and hard surface area**. For properties less than 1 hectare, the stormwater charge would be applied according to tiers within each property type.

Property Types	Stormwater Charge
Properties less than 1 hectare in size	
Residential 	A **tiered, flat rate stormwater charge** based on the average hard surface area of all properties in each tier multiplied by **$1.68 per m² of hard surface area**.
Multi-residential and condominium 	
Industrial, Commercial & Institutional (ICI) 	
Large Properties - 1 hectare in size or greater	
Any property type 	An **individualized stormwater charge** based on the amount of hard surface area on the property multiplied by **$1.68 per m² of hard surface area**.

Stormwater charge for residential properties (<1 ha)

Residential properties (less than 1 hectare in size) would have **seven tiers** based on property size ranges. *Note: 1 square metre (m2) = approximately 11 square feet (sq ft)*.

Tiers	Property size	Percentage of residential properties	Average hard surface area	Stormwater charge per year	Yearly cost impact on utility bill*
1	0 – 213 m^2	18%	113 m^2	**$191**	$65 decrease
2	214 - 313 m^2	20%	173 m^2	**$291**	$7 increase
3	314 - 444 m^2	18%	219 m^2	**$369**	$63 increase
4	445 - 557 m^2	18%	265 m^2	**$446**	$147 increase
5	558 – 743 m^2	18%	304 m^2	**$512**	$184 increase
6	744 – 932 m^2	4%	352 m^2	**$593**	$212 increase
7	933 – 9,985 m^2	4%	511 m^2	**$862**	$262 increase

* Estimated yearly cost impact on the utility bill (water and sewer services portion) **with a stormwater charge and a reduced water rate.** Estimates are based on average water consumption for properties in each tier.

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Examples of residential property tiers (< 1 ha)

A residential property 144 m^2 (1,550 sq. ft) in size would fall under **residential Tier 1** (0 - 213 m^2) or (0 to 2,293 sq. feet)

A residential property 387 m^2 (4,166 sq. ft.) in size would fall under **residential Tier 3** (314 - 444 m^2) or (3,380 – 4,779 sq. feet)

A residential property 1,512 m^2 (16,275 sq. ft.) in size would fall under **residential Tier 7** (933 - 9,985 m^2) or (10,043 – 107,478 sq. feet)

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Note: *Images are not to the same scale*

Cost impact on average residential property (<1 ha)

A residential property of **average property size (387 m^2)** would fall under residential tier 3. The example below is based on **average water use (246 m^3 per year)**.

Current: stormwater management included in the water rate	Proposed: stormwater charge + reduced water rate
Water consumption cost: 246 m^3 x 4.9726 m^3 = $1,223	Water consumption cost: 246 m^3 x $3.7278 m^3 = $917
	Stormwater charge (residential tier 3) = $369
Total yearly cost = $1,223	Total yearly cost = $1,286
Yearly cost difference is a $63 increase	

Aerial image of an average size residential tier 3 property

Stormwater charge for multi-residential properties (< 1 ha)

Multi-residential properties (e.g., apartment building and condominium properties) would have **five tiers** based on the property size ranges. *Note: 1 square metre (m2) = approximately 11 square feet (sq ft)*.

Tiers	Property size range	Percentage of multi-residential properties	Average hard surface area	Stormwater charge per year	Yearly cost impact on utility bill*
1	0 – 625 m^2	17%	329 m^2	**$555**	$3,739 decrease
2	626 – 1,317 m^2	22%	754 m^2	**$1,270**	$5,153 decrease
3	1,318 – 2,837 m^2	24%	1,508 m^2	**$2,541**	$10,435 decrease
4	2,838 – 5,674 m^2	22%	2,823 m^2	**$4,757**	$17,796 decrease
5	5,675 – 9,999 m^2	15%	4,659 m^2	**$7,850**	$27,600 decrease

* Estimated yearly cost impact on the utility bill (water and sewer services portion) **with a stormwater charge and a reduced water rate.** Estimates are based on average water consumption for properties in each tier.

Cost impact on average multi-residential property (< 1 ha)

A multi-residential property of **average property size (2,738 m^2)** would fall under multi-residential tier 3. The example below is based on **average water use (12,106 m^3 per year)**

Current: stormwater management included in the water rate	Proposed: stormwater charge + reduced water rate
Water consumption cost: 12,106 m^3 x 4.9726 m^3 = $60,198	Water consumption cost: 12,106 m^3 x $3.7278 m^3 = $45,129
	Stormwater charge (multi-residential tier 3) = $2,541
Total yearly cost = $60,198	Total yearly cost = $47,670
Yearly cost difference is a $12,528 decrease	

Aerial image of an average size multi-residential tier 3 property

Stormwater charge for ICI properties (< 1 ha)

ICI properties would have **five tiers** based on property size ranges. *Note: 1 square metre (m2) = approximately 11 square feet (sq ft)*.

Tiers	Property size range	Percentage of ICI properties	Average hard surface area	Stormwater charge per year	Yearly cost impact on utility bill*
1	0 – 184 m^2	17%	131 m^2	**$220**	$294 decrease
2	185 – 314 m^2	22%	215 m^2	**$363**	$340 decrease
3	315 – 946 m^2	22%	489 m^2	**$824**	$415 decrease
4	947 – 2,927 m^2	20%	1,529 m^2	**$2,577**	$727 decrease
5	2,928 – 9,999 m^2	19%	4,704 m^2	**$7,927**	$3,173 increase

* Estimated yearly cost impact on the utility bill (water and sewer services portion) **with a stormwater charge and a reduced water rate.** Estimates are based on average water consumption for properties in each tier.

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Cost impact on an average ICI property (< 1 ha)

An ICI property of **average property size (1,614 m^2)** would fall under ICI tier 4. The example below is based on **average water use (1,638 m^3 per year)**

Current: stormwater management included in the water rate	Proposed: stormwater charge + reduced water rate
Water consumption cost: 1,638 m^3 x 4.9726 m^3 = $8,145	Water consumption cost: 1,638 m^3 x $3.7278 m^3 = $6,106
	Stormwater charge (ICI tier 4) = $2,577
Total yearly cost = $8,145	Total yearly cost = $8,683
Yearly cost difference is a $538 increase	

Aerial image of an average size ICI tier 4 property

Stormwater charge for large properties (1 ha in size or greater)

Large properties 1 hectare or greater in size represent approximately one (1) per cent of properties in Toronto, but account for 37 per cent of the total hard surface area in Toronto.

Of these large properties, approximately 80 per cent are ICI and about 20 per cent are multi-residential or residential.

Stormwater charge for large properties

- The City would undertake a hard surface area (m^2) assessment of each property using aerial photography
- The stormwater charge would be charged based on the hard surface area (m^2) on each property multiplied by a stormwater charge rate of **$1.68 per m^2 of hard surface area**
- It is estimated yearly costs with a stormwater charge and a lower water rate would:
  - Decrease for approximately 32% of large properties
  - Increase for approximately 68% of large properties

Aerial image of a large property greater than 1 hectare in size

Cost impact on an average large property (1 ha or greater)

The example below is for a large property with an average hard surface area (14,402 m^2) and average water use (12,995 m^3 per year).

Current: stormwater management included in the water rate	Proposed: stormwater charge + reduced water rate
Water consumption cost: 12,995 m^3 x 4.9726 m^3 = $64,621	Water consumption cost: 12,995 m^3 x $3.7278 m^3 = $48,443
	Stormwater charge 14,402 m^2 x $1.68 m^2 of hard surface area = $24,266
Total yearly cost = $64,621	Total yearly cost = $72,709
Yearly cost difference is an $8,089 increase	

Stormwater charge credits program

Stormwater charge credits program

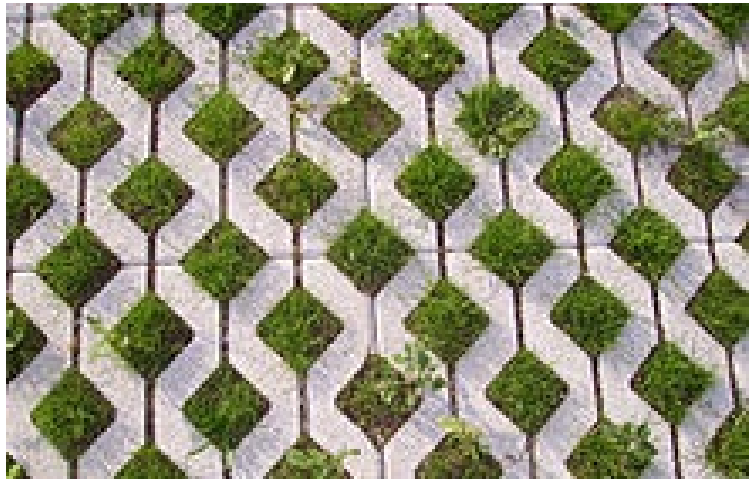
The City is consulting on a potential stormwater charge credits program for large properties in conjunction with a potential stormwater charge.

Stormwater charge credits would provide a reduction of a potential stormwater charge on the utility bill for large properties.

Objectives of a stormwater charge credits program

- Provide a financial incentive for large properties to implement and maintain sustainable long-term stormwater management solutions on their properties
- Recognize the reduced stormwater impacts from large properties that have implemented stormwater management solutions
- Encourage use of lot-level at-source controls, including the use of low impact development and green infrastructure, such as permeable pavement, bioretention units, and rain gardens on private property

City Council would have to approve a stormwater charge credits program for it to take effect.



Permeable pavement

Bioretention infrastructure

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Guiding principles for stormwater charge credits

City staff have developed a framework for a stormwater charge credits program that outlines proposed eligibility, application requirements and credit categories **based on the following guiding principles:**

1. Advance the City's Wet Weather Flow Policy objectives to reduce the quantity and improve the quality of stormwater runoff

2. Align credits with performance-based stormwater management objectives for stormwater runoff that apply to development

3. Ability to quantify stormwater benefits and verify stormwater management controls on a property

4. Cost-effectiveness and administrative practicality for the operation of a potential stormwater charge credits program

Proposed framework for stormwater charge credits

Eligibility:

- Large properties – 1 hectare in size or larger would be eligible to apply for stormwater charge credits

Application:

- Interested property owners would need to apply to the City at their own expense
  - application form and submission of an engineer certified stormwater management report acceptable to the City
  - if a credits application is approved, credits would be applied annually to the utility bill and would require renewal every 5 years by application

Verification:

- Potential site inspections of and/or desktop audits by the City to verify the proper installation and ongoing maintenance of stormwater management infrastructure

Implementation:

- If approved by Council, it is anticipated that the stormwater charge credits program would be targeted to be in place in the first-year of operation of a potential stormwater charge

Proposed framework for stormwater charge credits

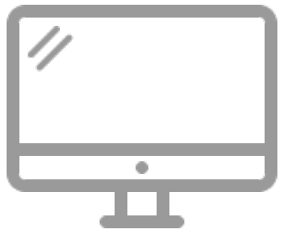
Stormwater charge credits would be performance-based

Applicants would have to demonstrate achievement of stormwater management controls based on credit categories with criteria that align with the City's stormwater management guidelines for development

Maximum 50 per cent credit would be offered based on three proposed credit categories:

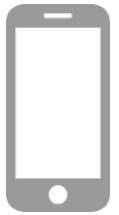
1. **Water balance** – Controls that reduce stormwater runoff volume from a property to the City's sewer system or retain stormwater on site
2. **Water quality** – Controls that treat or improve stormwater quality (total suspended solids) on a property
3. **Water quantity** – Controls that reduce stormwater peak flow or improve flood control on a property

Questions and Comments



Computer / smartphone / tablet

- Use Q & A panel to type questions.
- For verbal questions, use the ‘Raise Hand’ function.



Phone (call-in) participants

- Press *3 to let the moderator know you want to ask a question.

Water Service Charge

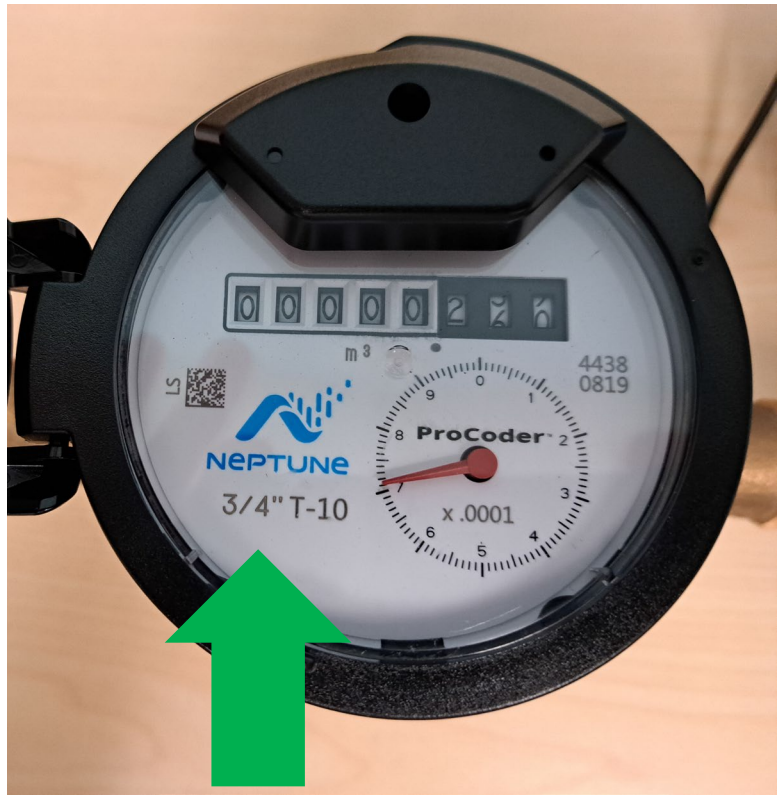
Water service charge

- The City is consulting on a potential **water service charge** which would **recover certain fixed costs for the administration of water and wastewater services,** which are currently included in the water rate.
- **Fixed administrative costs** do not vary with the volume of water produced or volume of wastewater treated by the City. They include:
  - Insurance, real estate, water meter servicing, utility billing (for water and sewer services) and corporate charges from City Divisions to Toronto Water
- A water service charge:
  - Provides transparency of fixed costs not related to the volume of water use by water users
  - Can help support economic competitiveness, particularly for large volume water users (e.g. industrial and commercial water users)

Municipalities such as Hamilton, Durham Region, Halton Region and Halifax, among others, have implemented a water service charge to fund their fixed costs.

City's proposal for a water service charge

- Would recover certain fixed costs for the administration of water and wastewater services.
- The costs included in a water service charge would be removed from the water rate and the water service charge would appear as a separate line on the utility bill.
- The water service charge would be a flat rate charge based on a property's water meter size
  - Water meter size can be found on a meter's top panel and/or stamped on the side of the base
- The water service charge would be charged for each water meter on a property
- **City Council would need to approve a water service charge to proceed with its implementation.**
  - Fixed operating and capital costs for water services are updated each year with the submission of Toronto Water's Budget to the Mayor and Council.



¾ inch water meter

Water service charge analysis

- The analysis for a potential water service in this presentation is based on budget forecasts for 2026, the earliest year a water service charge could be implemented.
- The 2026 forecasted expenditures for certain fixed administration costs of water and wastewater services is $64 million.
- With the removal of certain fixed administration costs from the water rate, there would be a reduction of the water rate of approximately 4.3 per cent for both Block 1 and Block 2 in the first calendar year a water service charge would take effect.
- Estimates of cost impacts in this presentation are based on properties with average water use. **Cost impacts to individual properties would vary depending on the property's water meter size and yearly water use.**

Water service charge tiers

There would be **five tiers.** Almost all residential properties (99%) would be in Tier 1. Other property types such as multi-residential and ICI would be in Tiers 2 to 5.

Water service charge tier	Water meter size	Percentage of properties	Water service charge per year	Yearly cost impact on utility bill*
Tier 1	1 inch or less	97%	**$95**	$44 increase
Tier 2	1 ¼ and 1 ½ inches	1%	**$490**	$33 increase
Tier 3	2 inches	1%	**$740**	$389 decrease
Tier 4	3 and 4 inches	< 1 %	**$1,665**	$ 3,417 decrease
Tier 5	6, 8 and 10 inches	< 0.1%	**$6,500**	$ 5,151 decrease

* Estimated yearly cost impact on the utility bill (water and sewer services portion) **with a water service charge and a reduced water rate.** Estimates are based on average water consumption for properties in each tier.

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Cost impact on an average residential property

A residential property with a water meter size one inch or less and average water use (248 m^3 per year) would fall in Tier 1.

Current: fixed costs included in the water rate	Proposed: water service charge + reduced water rate
Water consumption cost: 248 m^3 x 4.8161 m^3 = $1,194	Water consumption cost: 248 m^3 x 4.6089 m^3 = $1,143
	Yearly water service charge (Tier 1) = $95
Total yearly bill = $1,194	Total yearly bill = $1,238
Yearly cost difference is a $44 increase	

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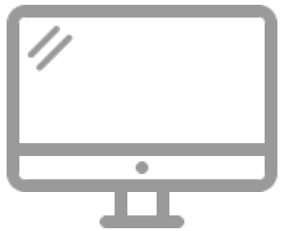
Questions and Comments



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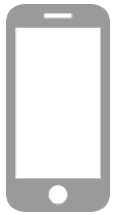

Phone (call-in) participants

- Press *3 to let the moderator know you want to ask a question.

Next steps

- City staff are planning to report back to the Executive Committee and Council in July 2024 on the Consultation feedback and outcomes
- Participants who provide contact information will receive an email notification advising when the staff report is available
- Interested individuals will have an opportunity to make a deputation to the Committee or provide written comments

Public Consultation closes April 30, 2024

Complete an online survey or submit comments by email or phone.

toronto.ca/stormwatercharge

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