Public Consultation on Stormwater Management Incentive Programs



October 2024





The land we are standing on today is the traditional territory of many nations including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples and is now home to many diverse First Nations, Inuit and Métis peoples.

We also acknowledge that Toronto is covered by Treaty 13 signed with the Mississaugas of the Credit, and the Williams Treaties signed with multiple Mississaugas and Chippewa bands.





The City of Toronto is reviewing City programs that provide incentives such as subsidies or grants (stormwater management incentive programs) to help property owners take actions that reduce basement flooding risks and/or stormwater runoff on their property.

The City of Toronto is seeking public feedback on:

- challenges property owners face in taking actions to manage stormwater on their properties
- current City stormwater management incentive programs for private property
- stormwater management features that would be of interest to property owners for potential new or expanded stormwater management incentive programs

A report to Executive Committee and City Council is planned by the end of 2024 on the consultation feedback and opportunities for potential new or expanded stormwater management incentives for private property.





Stormwater and its impacts

Stormwater is rain and melted snow

- When not absorbed into the ground, stormwater runs off hard impermeable surfaces, down storm drains and through the City's network of sewer pipes that carry it to local waterways
- Stormwater picks up oils, greases, fertilizers, bacteria and other pollutants as it runs off hard surfaces

The impacts of stormwater

- In urbanized areas like Toronto, there are a lot of hard surface areas that are impermeable (e.g., asphalt and concrete). Impermeable surfaces do not allow water to penetrate through and result in stormwater runoff.
- When severe storms happen, more stormwater runs off hard surfaces and enters the City's sewer system which can overwhelm the sewer system. This can lead to basement and surface flooding, poor surface water quality, and watercourse erosion that puts City infrastructure at risk.







Managing stormwater

The City takes a **multi-pronged approach to manage the negative impacts of stormwater**. The City is investing **\$4.5 billion over the next 10 years** for stormwater adaptation and mitigation:

- multi-year capital programs such as the Basement Flooding Protection Program to reduce basement flooding
- wet weather flow projects such as Don River & Central Waterfront project to improve surface water quality, and watercourse erosion control projects to protect city infrastructure
- new and upgraded stormwater ponds, sewers, tunnels and tanks
- green infrastructure on City streets
- incentive programs for private property
- public education and outreach







Stormwater runoff on private property

Generally, the more impermeable surface area on a property, the more stormwater that runs off the property to the City's sewer system.

Examples of impermeable surfaces on private property include:

- asphalt parking areas and driveways
- concrete landscaping (e.g. patios, decks, walkways)
- building roofs with impermeable materials

Actions to manage stormwater on private property can help reduce stormwater runoff to the City's sewer system, which complements the City's stormwater management initiatives and climate resilience efforts.







City incentives for stormwater management

The City has several programs that offer financial incentives such as subsidies or grants to help property owners take actions to reduce stormwater runoff and basement flooding risks on their property.

Different types of financial incentives for stormwater management actions on private property include:

- Subsidy provides funds to eligible property owners to help offset a portion of the cost for work or service on their property, e.g., installation of a green roof or basement flooding protection devices. Subsidy programs typically involve an application by the property owner, review and approval by the City. The subsidy funding for approved applications is issued after completion of the work or service.
- Grant provides funding to eligible individuals and/or organizations for projects that help manage stormwater on private property. This involves an application and review and approval by the City. The grant funds for approved applications may be provided before and after the project is completed.

In the past, the City has also offered products (like rain barrels) to the public at a subsidized or reduced cost.





Basement Flooding Protection Subsidy Program

The <u>Basement Flooding Protection Subsidy Program</u> offers a subsidy of up to \$3,400 per property for eligible homeowners (single-family, duplex, triplex or fourplex residences) to **reduce the risk of basement flooding on their properties by installing flood protection measures** including:

- A maximum of \$1,250 for the installation of a backwater valve, which is designed to close the home's sewer line during heavy rain to prevent stormwater from entering your home
- A maximum of \$1,750 to help offset costs for the installation of a sump pump, which pumps water collected by the home's weeping tile system, to an area outside
- A maximum of \$400 to offset costs for the **pipe severance and capping of a home's foundation drain (weeping tile) system**



Potential incentives for basement flooding protection

The City is seeking feedback on potential new or expanded subsidies that could be offered by the <u>Basement Flooding Protection Subsidy Program (BFPSP)</u> to reduce the risk of basement flooding.

Options being considered include:

- A new subsidy for a home stormwater assessment by a certified professional to advise on potential factors that could contribute to basement flooding on the property:
 - sewer lateral connections
 - weeping tiles/foundation drain connections
 - downspouts connections
 - surface grading around the home
- Expanding current subsidies offered by the BFPSP including:
 - Modifying the backwater valve subsidy to cover more than one backwater valve installation and a sensor
 - Modifying the sump pump subsidy to include backup power (battery back-up)





Mandatory Downspout Disconnection Financial Assistance Program

The <u>Mandatory Downspout Disconnection Financial Assistance</u> <u>Program offers a reimbursement to eligible low-income</u> <u>seniors or low-income persons with a disability</u> for the costs of labour and materials for performing downspout disconnection

The **City requires all property owners in Toronto to ensure their downspouts are disconnected** from the City's sewer system (except by approved exemption)

Downspout disconnection reduces stormwater discharged to the City's sewers and basement flooding risks by allowing stormwater runoff from a roof to flow away from a home or building foundation onto gardens, lawns and landscaped areas where it can be absorbed into the ground







Eco-Roof Incentive Program

The <u>Eco-Roof Incentive Program</u> helps fund the expansion of green roofs and cool roofs on Toronto homes and buildings across the city.

- green roofs, also known as living roofs or vegetated roofs, support the growth of vegetation and help manage and reduce runoff from home and building roof tops by helping absorb rainwater
- the program offers a financial incentive of \$100 per m² of green roof area installed, up to a maximum of \$100,000 per green roof project
- the green roof incentive is available to eligible buildings including:
 - o all existing buildings
 - \circ new buildings with a gross floor area of less than 2,000 sq. m
 - all new construction projects by Toronto School Boards and not-for-profit organizations



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PollinateTO Grants

<u>PollinateTO Grants</u> offers grants up to \$5,000 to groups of three or more people to support community-led projects that:

- o create a new pollinator garden or rain garden
- expand or enhance an existing garden by adding native pollinator-friendly plants
- convert a lawn area, boulevard or hard surface to a pollinator garden
- pollinator projects contribute to resilient ecosystems, enhance urban biodiversity and help reduce runoff by allowing it to be absorbed into the ground
- all Toronto neighbourhoods are eligible for the program, projects can be on private and/or public land (all sites must be publicly visible)







Tree Planting Programs for Private Property

<u>Tree Planting Programs for Private Property</u> provide grants to support tree planting projects and supply free native trees and shrubs for community-led tree giveaways and planting events on private property.

- trees help reduce runoff by providing surface areas where rainwater lands and evaporates, reducing soil erosion, and increasing the soil's capacity to absorb runoff
- tree planting incentive programs for private property include:
 - <u>Backyard Tree Planting Program</u> in partnership with Local Enhancement and Appreciation of Forests (LEAF), this program offers backyard tree planting services at a subsidized cost to Toronto residents
 - <u>Community Canopy Program</u> in partnership with the Arbor Day Foundation, this program connects Toronto residents with free trees through an online mapping tool that provides information on where to plant a tree on a specific property





Potential incentives for reducing stormwater runoff

The City is exploring and seeking feedback on opportunities to reduce impermeable surfaces and stormwater runoff by offering new incentives such as subsidies or grants through a new program or expanded programs for private property.

Incentives could support the installation of green infrastructure which refers to systems and technologies that use vegetation, soils, and natural elements that:

- allow rainwater or stormwater runoff to be absorbed into soils
- treat or filter pollutants found in stormwater

There is a range of green infrastructure encompassing natural, enhanced and engineered features that may be suitable for private property depending factors such as property type, size, grading and soils.



Examples of green infrastructure



Natural features – Parks, trees, natural lawns and gardens

Enhanced features – rain gardens and bioswales, green roofs, urban trees and naturalized stormwater ponds











Engineered features – permeable pavement, rain barrels and soakaway pits





Green infrastructure benefits

- For typical rainfalls events, green infrastructure can help:
 - reduce the volume of stormwater runoff entering municipal sewer systems and surface waters
 - reduce the negative impact of stormwater runoff on surface water quality
- Green infrastructure can also help:
 - reduce higher air temperatures in cities,
 - o improve air quality
 - support biodiversity and habitat
 - o improve climate resiliency
 - support community well-being
- Green infrastructure on private property needs to be regularly maintained by property owners to ensure it is functioning as designed.







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Rain gardens and bioretention units

Rain gardens and bioretention units are sunken planting beds with highly permeable and nutrient-rich soils that collect, absorb and treat runoff from roof downspouts, driveways and parking areas.

Rain gardens and bioretention units help reduce stormwater runoff and filter pollutants in stormwater.







Soakaway pits

Soakaway pits are underground storage systems that receive runoff on a property and allow it to absorbed into the ground, helping reduce the stormwater runoff from a property. They are typically lined with geotextile fabric and are filled with granular stone or other materials that allow water to travel through the pit.

Soakaway pits may be suitable for residential properties to receive roof or walkway runoff depending on property size and the area being drained, as well as soil conditions. They must be placed a certain distance from a home or building foundation.



Image courtesy: https://www.coastaldrains.co.uk/b log/soakaway-construction-uk/





Pavement removal or permeable pavement

Pavement removal is the removal of impermeable pavement such as concrete walkways, patios and other landscaping, and replacement with soft surfaces like grass or native vegetation.

Permeable pavement is a type of hard surface such as permeable interlocking pavers and porous asphalt or concrete that allows rainwater and stormwater to seep into and in between the paving materials and be absorbed into the ground.

Impermeable pavement removal and permeable pavement help reduce runoff and filter pollutants in stormwater runoff.



Image courtesy: Sustainable Technologies Evaluation Program



Rain barrels are typically plastic barrels that collect and temporarily store runoff that flows off a home or building roof through the downspout.

Rain barrels are limited in how much water they can store depending on the rain barrel size and volume of the rainfall event. They include an overflow hose or diverter that allows the collected water to safely overflow to a soft surface area away from the home or building foundation when the rain barrel is full.

The rainwater collected in the rain barrel can be reused for watering plants and landscaping on the property.



Image courtesy: Raincheck (pwdraincheck.org)

Public awareness and communications

The City aims to enhance public awareness and understanding of the impacts of stormwater on the environment and property through public education and outreach efforts, including:

- Multi-media advertising campaigns, such as those about basement flooding and the City's stormwater projects
- Comprehensive content on stormwater management on the City's <u>website</u>
- <u>How-to video series</u> to help homeowners with basement flooding prevention and stormwater management and tips on how to manage stormwater
- In-person outreach at community events





Next steps

Public Consultation: October 23 - November 5, 2024

The City of Toronto is seeking public feedback on:

- Challenges property owners face in taking actions to manage stormwater on their properties
- Current City stormwater management incentive programs for private property
- Stormwater management features that would be of interest to property owners for potential new or expanded stormwater management incentive programs

The public is encouraged to participate in the consultation by completing an online survey or providing feedback through email or phone.

Report back to City Council: December 2024

Staff will present a report to Executive Committee and City Council on the consultation feedback and opportunities for potential new or expanded stormwater management incentives for private property.







Provide your feedback by November 5, 2024



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

toronto.ca/StormwaterIncentives

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