

## Introduction to AECOM's Stormwater Financing Experience

The AECOM team brings an unparalleled experience in stormwater financing projects across Canada. Through this experience we have learned invaluable lessons that we hope can benefit the Town of Oakville.

Since 2007, our team has completed **over twenty stormwater funding studies across Canada**, including Canada's first implementation of a stormwater rate based on measured impervious area in **Kitchener**.

#### Other examples include:

Feasibility Study (Phase 1) and Stormwater Rate Implementation Strategy (Phase 2) – **Ajax 2023** 

Funding Feasibility Study (Phase 1) and Stormwater Climate Action Fund Implementation (Phase 2) – **Barrie 2022** 

Funding Review and Fee Implementation - **Hamilton**, **2023** (implementation ongoing)

Stormwater Financing Strategy - Thunder Bay 2020





# **Agenda**

- 1. Stormwater and Stormwater Management
- 2. Options for Funding Stormwater Management
- 3. Stormwater Fee Feasibility Study

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## What is Stormwater?

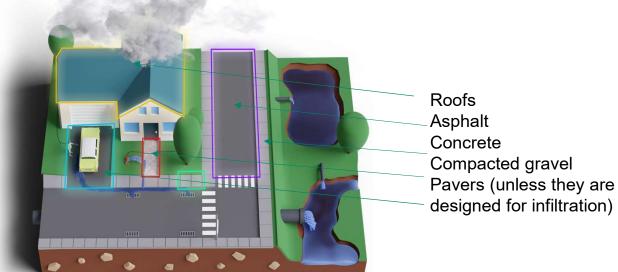
Stormwater is water that comes from rain and melted snow that falls on and flows over land and into storm drains, ditches, creeks and lakes.

#### Stormwater in Nature



**Stormwater in Built Landscapes** 





Hard surfaces (impervious area) create more runoff, transport it more quickly, and accumulate more pollutants than natural areas.

## What happens when stormwater and its infrastructure isn't managed?



**Erosion** 



**Debris in Creeks** 



Pollutants in creeks/lake



Road Flooding



System Surcharge/ Basement Flooding



Infrastructure Failure

**Impervious Areas** are surfaces that do not allow water to penetrate the ground, such as: Paved roads & parking lots, driveways, roofs.

**Infiltration** is the process where water soaks into the soil. Natural landscapes allow for high infiltration, while impervious surfaces do not.

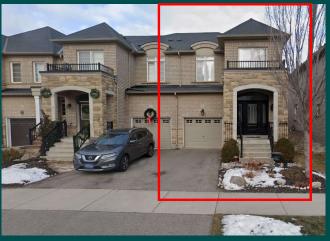
**Increased Runoff Means:** More water flows over surfaces, less soaks in, which can lead to higher Flooding Risk. Water Quality: Runoff can also carry pollutants (oil, grit and salt) into water bodies.

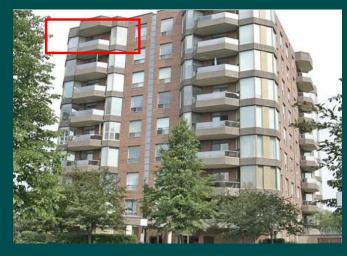


## **Properties Types Differ**

## **Residential Examples**







Single-Family Home Property Area: 1,050 m<sup>2</sup> Average Townhouse Property Area: 212 m<sup>2</sup> Average Condo Property Area: 126 m<sup>2</sup>

## **Properties Types Differ**

Non-Residential Examples – Industrial, Commercial, Institutional (ICI)



Small Commercial/Retail Property Area: 165 m<sup>2</sup>



Medium Commercial/Retail Property Area: 24,059 m<sup>2</sup>



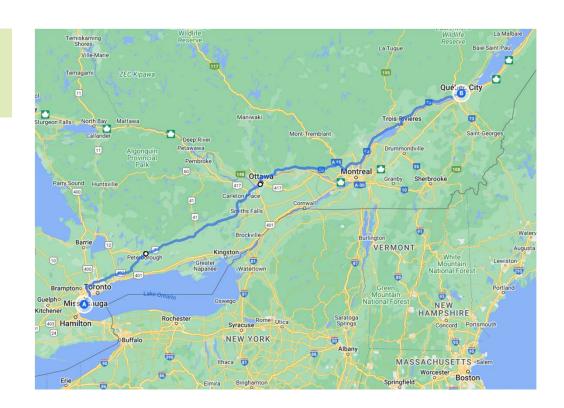
Large Commercial
Property Area: 72,900 m<sup>2</sup>

Non-residential (ICI) tend to be larger, have more hard surfaces, and uses that create more stormwater runoff (like parking lots)

## Oakville's Stormwater System

~240 km ditches

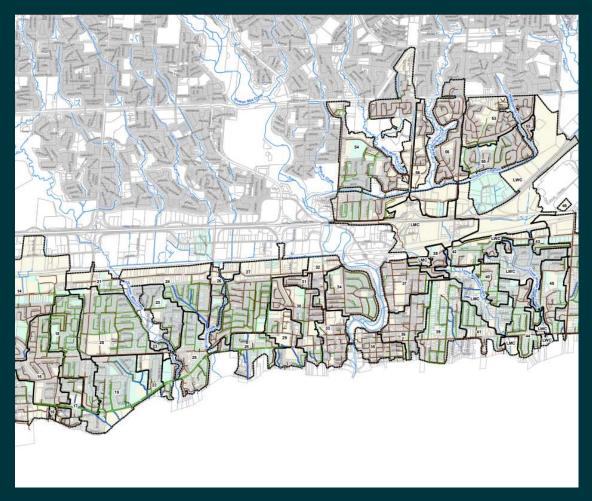
- Oakville to **Québec City**
- ~690 km storm sewers
- ~156 km creeks
- ~8.07 km of shoreline
- ~30,794 catch basins
- 67 ponds
- Value of \$963 Million\*



<sup>\*</sup> Natural assets are not included in this value.

## **Oakville's Stormwater Services**

- Asset Management Planning
- Assessments (flood risk, asset condition audits)
- Infrastructure inspections, cleaning, & repairs (grey and green)
- Infrastructure renewals and upgrades (grey and green)
- Climate resiliency improvements
- Emergency response (breakages, spills etc.)



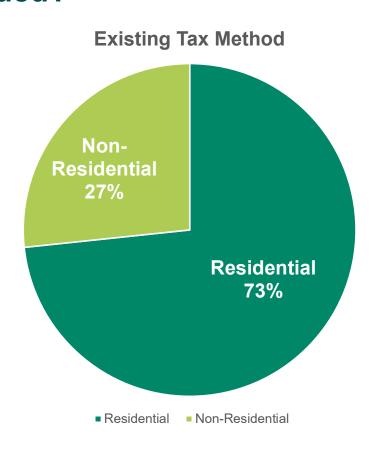
## Stormwater Fee Feasibility Study

- The Town of Oakville is reviewing its current stormwater funding model (property taxes) and exploring new ways to pay for stormwater services and climate change resiliency.
- This was first mentioned in the Town's 2015-2019 Stormwater Management Master Plan and is a critical aspect of the Town's Rainwater Management Financial Plan.

Why do we need to consider new ways to pay for stormwater?

- The way we currently pay for stormwater services in Oakville is not fair or equitable, and it is not enough.
- It will ensure we adhere to Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure
- Many municipalities across Canada are moving towards new funding models.

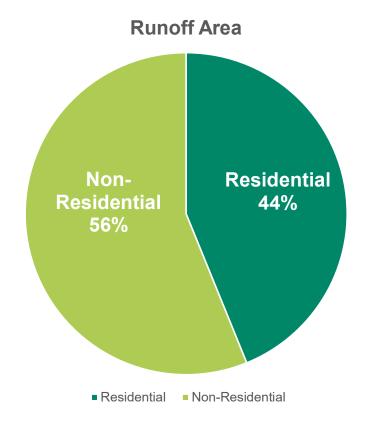
# How is Oakville's Stormwater Infrastructure Currently Funded?



- The Town currently allocates taxes collected to stormwater infrastructure needs
- Approximately 4% of total taxes collected go toward funding the Town's \$8.9M SWM program
- Currently, residential properties fund over 70% of the total property taxes collected.

How do Oakville Properties Contribute to Stormwater

**Runoff?** 



Distribution of costs by runoff area can be used for Stormwater Fee

Based on land area and land use:

- Residential properties contribute to 44% of the total runoff area
- Non-residential properties contribute 56% of the runoff area
- SWM costs can be distributed to better represent contribution to stormwater system.
- Runoff area ratios can be used to determine what proportion of funding should be collected from different property types.

## Ways to Fund Stormwater Management

Tax Revenue: Allocating a portion of the general municipal taxes collected or a separate dedicated levy.

**Development-Related Charges:** Imposing charges on new developments to cover the costs of stormwater infrastructure necessary for growth.

## Fees & Charges: Like the Region's Water Rate Charge

Property owners are charged based on their relative contribution to the town's stormwater system.

## Types of stormwater fees:

- 1) Flat Fee every property pays the same fee
- 2) Fee based on Property Area and Land Use
- 3) Fee based on Impervious Area

**Grants and Subsidies:** Applying for provincial and federal grants, such as the Ontario Community Infrastructure Fund (OCIF), Green Municipal Fund (GMF) & Disaster Mitigation and Adaptation Fund (DMAF).

## **Flat Fee Methods**

**Simple Flat Fee -** All properties pay the same



**Tiered Flat Fee –** Can be structured to be based on property types:

- Low-density residential pay one fee
- High-density residential pay one fee
- Non-residential pay one fee



## **Variable Fee Methods**

- Everyone pays a different fee based on property type & size
- Fee is based on a measured area (i.e property size, run off area, impervious area)
- Non-residential (ICI) tend to be larger and create more stormwater runoff therefore fees tend to be higher

#### Variable Tiered Fee

same as above but fees can be structured into payment tiers (ie. small, medium, large)



## **Other Municipalities**

Residential Rates	
Flat Rate (\$/property)	Aurora, Ajax, Guelph, Markham, Orillia, St. Thomas
Variable Tiered Rates	Mississauga, Kitchener (based on impervious area)
Variable Tiered Rates	London, Newmarket, Waterloo (based on property size)
Variable Rate	Richmond Hill (based on property size)

## **Non-Residential Rates**

Flat Rate (\$/property)	Aurora, Orillia, St. Thomas
Variable Tiered Rates	Kitchener (based on impervious area) Newmarket, Waterloo (based on property area)
Variable Rate	Ajax, London, Richmond Hill (based on property size)
Variable Rate	Guelph, Mississauga (based on impervious area)

## **Guiding Principles for Selection of Funding Method**

- o Fair and Equitable fee is non-discriminatory amongst customers and sectors and considers the financial impact on various customer sectors.
- o Affordable and Financially Sustainable provides sustainable, predictable and dedicated funding to address stormwater infrastructure needs and allows for regular fee reviews to adjust for cost-of-delivery and/or service level changes.
- o **Justifiable** residents and businesses understand why the fee is needed, how much the fee is and what the fee is being used for. Funding structure is justifiable and transparent.
- Climate Change Resiliency encourages customers to be more resilient to climate change through on-site controls to reduce run-off while still providing the necessary funding for town stormwater infrastructure needs.
- Simple to Understand and Manage fee structure is simple to understand by staff, Council and customers. The administration of the fee can be efficiently managed by town staff.

## **Finding Balance**

**Existing Tax** Method

**Flat Fee** 

Variable Fee based on **Property Area** and Land Use

Variable Fee based on **Impervious Area** 



## What is a Financial Incentive Program?

Provides incentives to property owners for reducing their impact on the stormwater system:

- Credits: reduced stormwater fee
- Grants/subsidies: reduced implementation cost for on-site measures





## Taxes – General or Dedicated Tax Levy

#### **PROS**

- Generally accepted by public
- Simple to administer
- Can designate funds to Stormwater Levy (provides a dedicated source of funds)

#### CONS

- Property Assessment doesn't correlate to a property's runoff
- High distribution to residential (80/20) not equitable
- Tax-exempt or capped properties do not contribute
- Annual budget pressures to maintain minimal tax increases
- Difficult to implement incentive programs to reduce stormwater runoff
- Would require a significant tax increase to fund the desired funding amount

# Stormwater Fees

#### **PROS**

- Fee can be better proportioned to reflect benefit/usage
- Provides a sustainable dedicated source of funds collected for specific purpose
- Accountable to public, can easily demonstrate how funds are used
- Easier to implement credit incentives to promote reduced stormwater quantity or improved quality

#### **CONS**

- Will require public consultation/engagement on why new fee is required and to get buy-in
- Requires additional administration and set up of a new billing method

## **Stormwater Fee Misconceptions**

Stormwater fees are just another tax ('rain tax', 'roof tax') – stormwater fees serve a very specific purpose - they fund stormwater management infrastructure and services

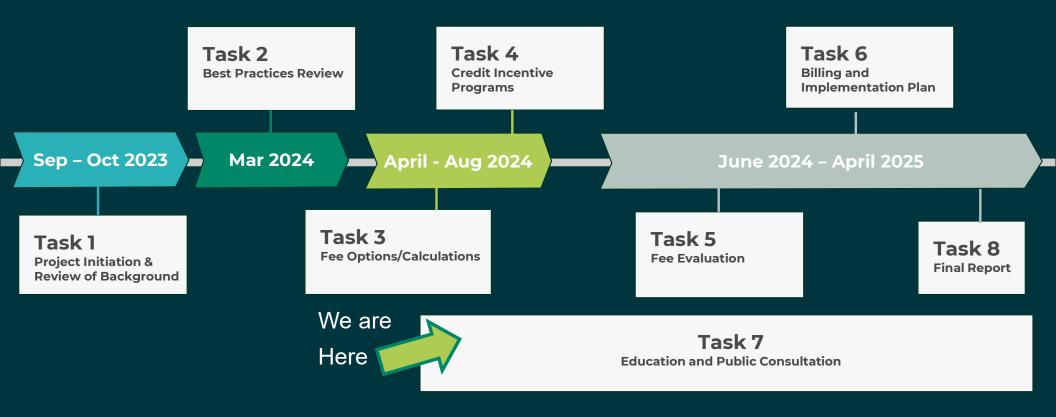
Stormwater fees are arbitrary – most fees are related to an aspect of stormwater - like impervious area or estimated runoff

Stormwater fees don't benefit property owners – all property owners benefit from a resilient stormwater management system



Kitchener Record, editorial cartoon (7-Apr-2006)

## **Stormwater Fee Feasibility Study**



## **Engagement Objectives**



Strengthen stakeholder and community understanding and appreciation of stormwater, stormwater management and the need for stormwater funding.



Gather feedback and insight to help inform an equitable and sustainable stormwater funding option.



Build public trust through demonstrating transparency and sharing how feedback and insight was used in the stormwater funding development process.

## **Key Stakeholders & Audiences**



- Churches
- School boards
- Utilities
- Hospitals
- Colleges



# Large Property Owners

- Industrial e.g., Ford
- Commercial e.g., Malls
- Institutional e.g., Colleges/ Universities, Hospitals



- Council
- Indigenous groups
- Developers



#### **Environmental Groups**

- **Conservation Authorities**
- Oakville-green



### Residential/ Business Property Owners

- Resident Associations
- BIAs/ Chamber of Commerce
- Multicultural groups
- Senior groups
- Residents/ businesses who outlet to the lake
- Small Businesses (not represented by BIAs)

## **Engagement Approach**

#### Round 1

#### Education

- What is stormwater and stormwater management?
- · How much do we need and how do we currently pay for stormwater management?
- Why are we exploring other ways to pay for stormwater management (Guiding Principles)?
- How else can we pay for stormwater management (i.e., stormwater fee)?

#### Round 2

#### Education

- How can we fund stormwater in the future?
- · What funding methods are under consideration & how do they meet the Guiding Principles?
- How much will it cost me?
- · What are the credit incentive program options?

#### **Engagement**

 Feedback and input into the funding methods and credit incentive program options

#### Round 3

#### Education

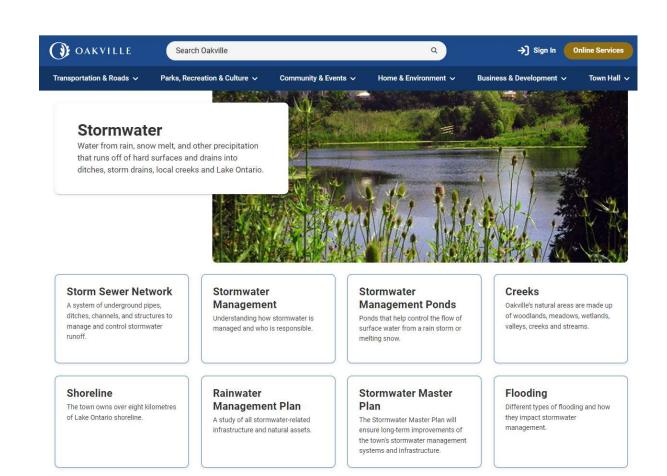
- · What is the recommended funding method and why? (what we heard)
- What are the recommendations for the credit incentive program and why? (what we heard)
- What are the implementation timelines and process?

#### **Engagement**

• Feedback and input into the implementation plan

## Round 1 Engagement – Starting in June!

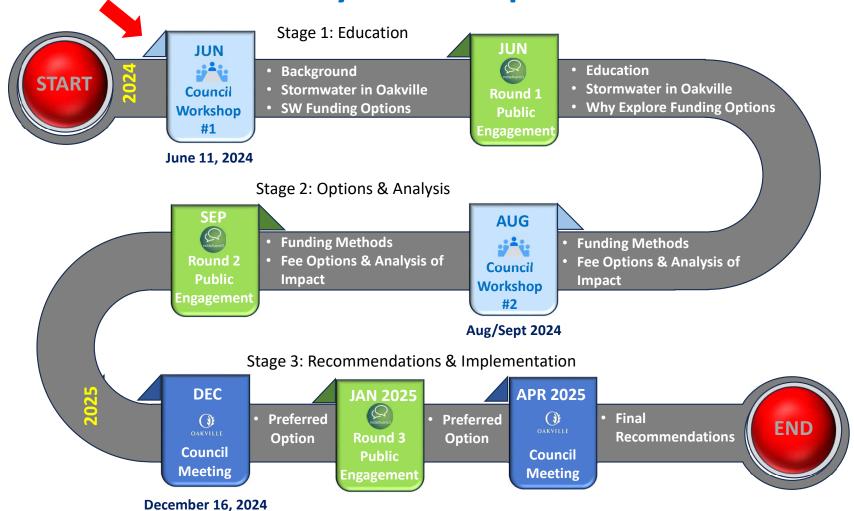
- Launching the Project Webpage
- Promoting Education Materials on Social Media
- Including Shareable Video



## Thank you!



## **Stormwater Fee Feasibility Road Map**



## Next Steps

- Round 1 Public Engagement (Informational / Educational materials) mid-June
- Next Council workshop August / Sept
- Round 2 Public Engagement September / October
- Council Recommendation of Preferred Funding Method to develop implementation plan
   Dec 2024
- Round 3 Public Engagement Jan 2025
- Council approval of Final Fee Recommendation and Implementation plan April 2025