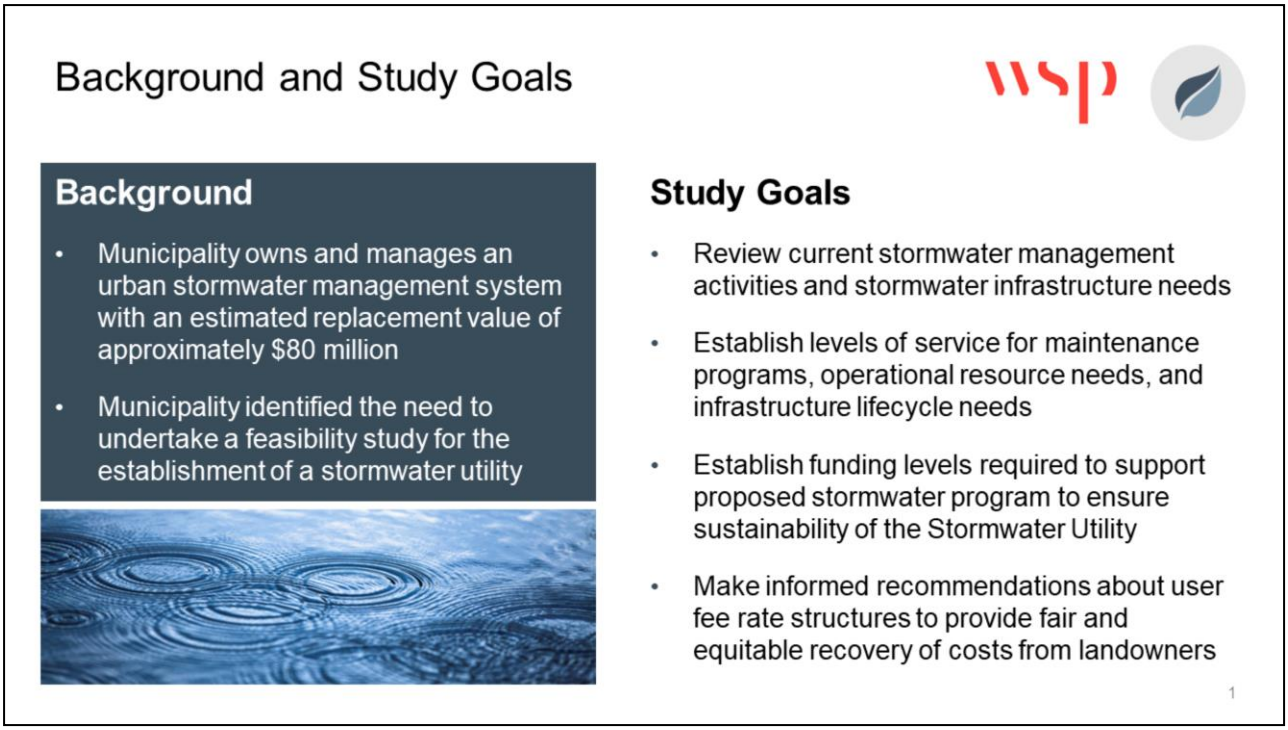
Slide Summary

Welcome to the Municipality of Strathroy-Caradoc's Community Engagement Presentation on the Municipality's Stormwater Utility Feasibility Study.

Through this presentation you will learn about the Municipality's current stormwater management program, the improvements to the program we are looking to make, including sustainable funding and proactive maintenance, and options to fund the modernization of the stormwater program.

This study is supported by the Municipality's Engineering and Public Works and Financial Services departments. An external consultant team composed of Watson & Associates Economists and WSP are also involved in the study.



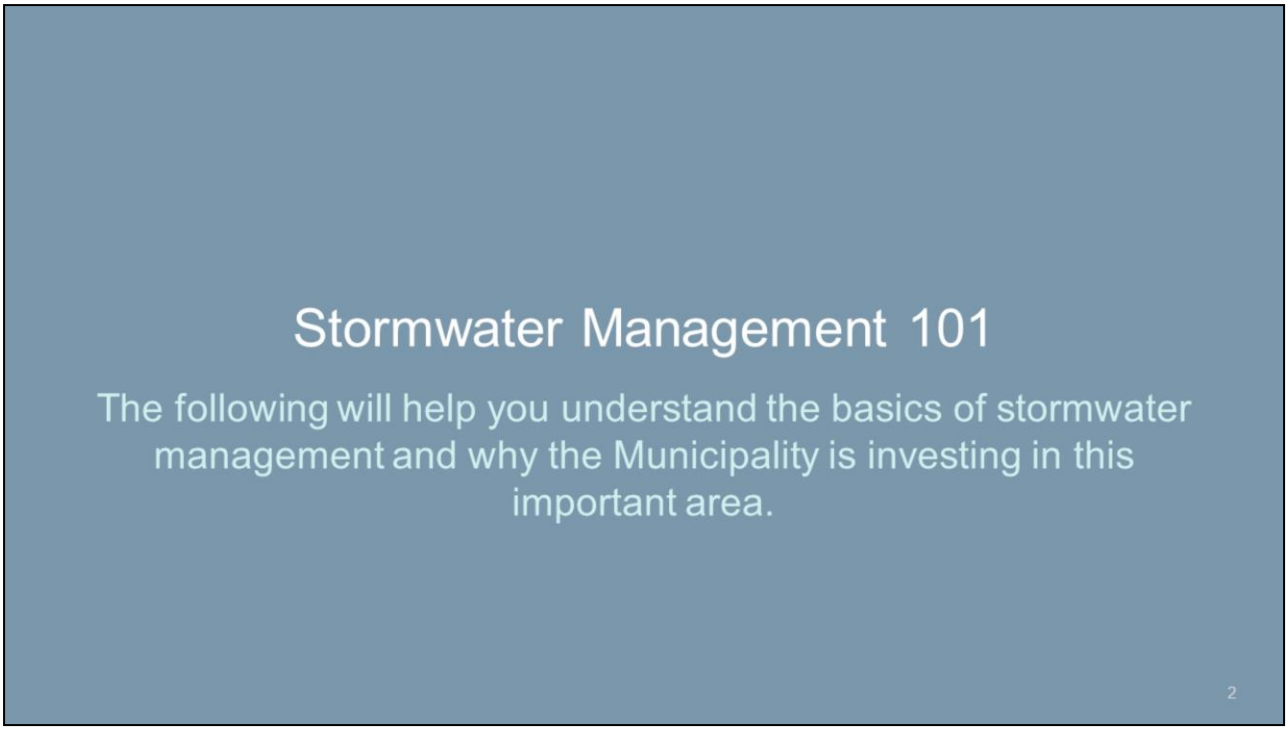
Slide Summary

The Municipality of Strathroy-Caradoc has an extensive stormwater management system. In 2022, the estimated replacement value of the system was approximately $80 million, however, the infrastructure is aging. The Municipality would like to take a proactive approach and invest in ongoing maintenance that will prevent potential emergencies, rather than spending more on costly emergency repairs. Furthermore, the Municipality needs to invest in improvements to the existing storm infrastructure to address flooding issues in existing neighbourhoods.

The purpose of the Stormwater Utility Feasibility Study is to better understand the Municipality's current stormwater management program, to identify what stormwater requirements the Municipality will have in the future and to investigate funding alternatives for these requirements.

Our goal is to evaluate the potential costs and funding impacts of a new stormwater management program so we can make informed recommendations about what to prioritize, how much to invest, and how to fund these investments.

Engaging the community as we conduct this study will help us better understand how to serve the Municipality's stormwater needs.



Slide Summary

Here are a few basics to help you understand stormwater management and why the Municipality is investing in it.

Stormwater Management 101

What is stormwater?

- Rainwater and melted snow that runs off lawns, streets and other land surfaces
- Hard surfaces such as pavement and roofs prevent precipitation from naturally soaking into the ground

Why do we need to "manage" it?

- Prevent the flooding of homes, roads and businesses
- Prevent creek erosion and stop harmful pollutants from entering local bodies of water

Visit the Study website to learn more:
www.strathroy-caradoc.ca/stormwater

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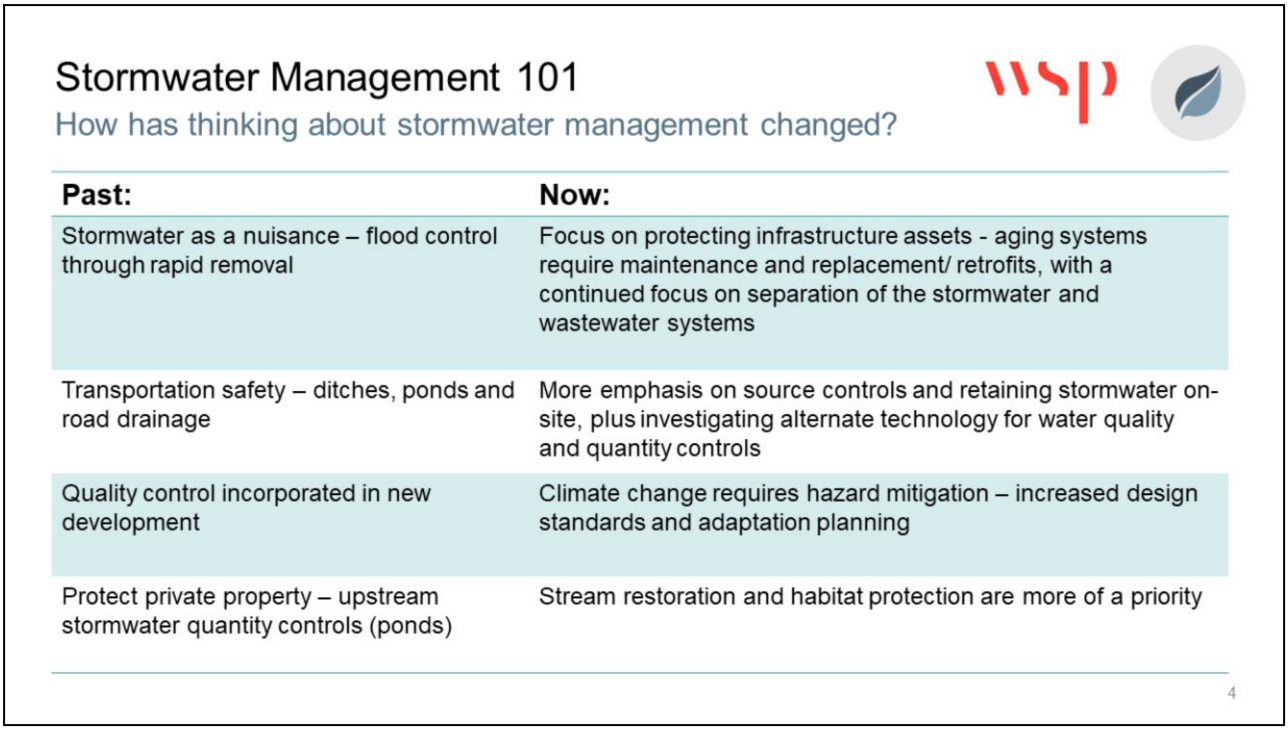
Slide Summary

Stormwater is rainwater and melted snow that run off lawns, streets and other surfaces. Hard surfaces like pavement and roofs prevent stormwater from soaking into the ground, increasing run off.

If is not managed in built environments, stormwater runoff can flood roads, homes and businesses

In the natural environment, failing to manage or treat stormwater runoff can contribute to creek erosion and may carry harmful pollutants to local bodies of water.

To learn more about stormwater and how it affects you and your community, visit the Municipality's Stormwater Utility Feasibility Study website.



Stormwater Management 101

How has thinking about stormwater management changed?

Past:	Now:
Stormwater as a nuisance – flood control through rapid removal	Focus on protecting infrastructure assets - aging systems require maintenance and replacement/ retrofits, with a continued focus on separation of the stormwater and wastewater systems
Transportation safety – ditches, ponds and road drainage	More emphasis on source controls and retaining stormwater on-site, plus investigating alternate technology for water quality and quantity controls
Quality control incorporated in new development	Climate change requires hazard mitigation – increased design standards and adaptation planning
Protect private property – upstream stormwater quantity controls (ponds)	Stream restoration and habitat protection are more of a priority

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Slide Summary

Over the past decade, there have been shifts in the way we think about stormwater management, as shown in this table.

For example, we have moved from seeing stormwater as a nuisance to be removed as quickly as possible to a focus on better managing existing infrastructure and handling stormwater on-site. Factors such as climate change and improving transportation safety have also influenced how we think about stormwater management.

Stormwater Management 101

Challenges

- Aging Infrastructure and Growing Community
- Legislated and Proactive Maintenance
- Flood Safety and Mitigation
- Regulatory Requirements
- Water Quality Protection

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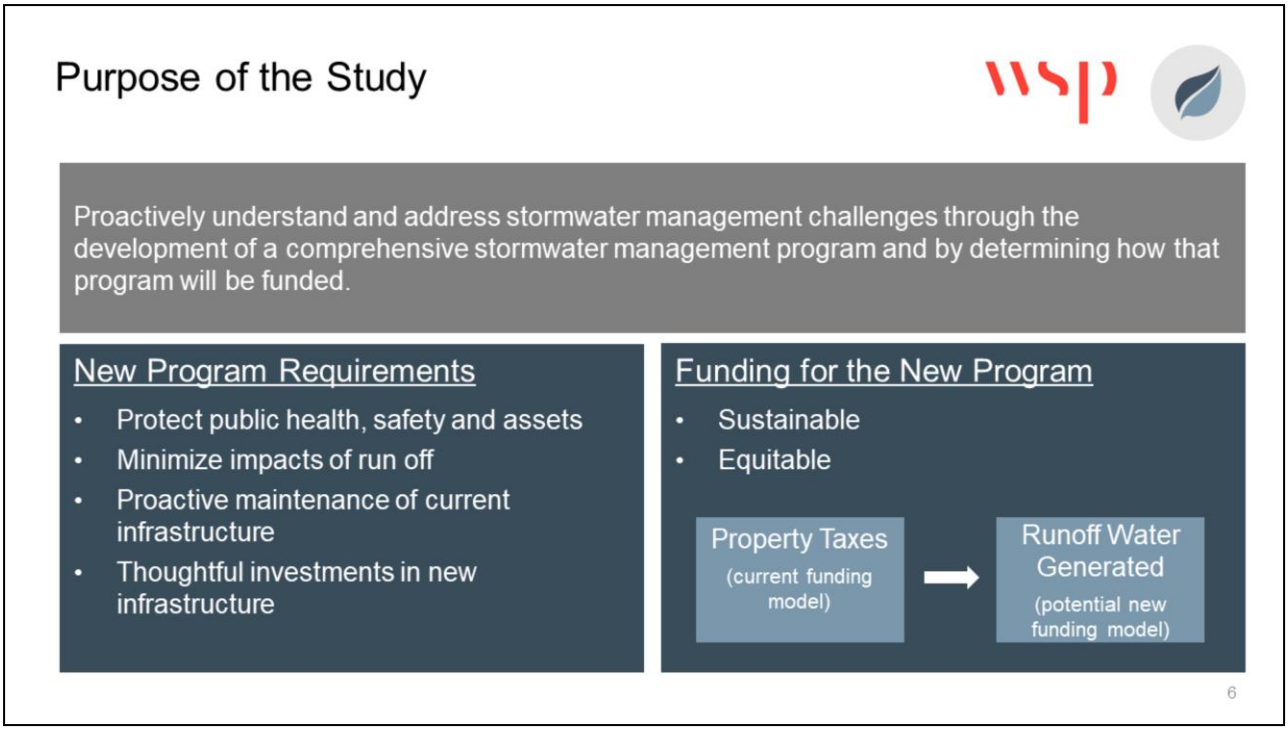
Slide Summary

Although the way we think about stormwater management has evolved, there are still challenges. These challenges can be grouped into five general areas: Aging Infrastructure and a Growing Community, Legislated and Proactive Maintenance, Regulatory Requirements, Flood Safety and Mitigation and Water Quality Protection.

In addition, the Municipality needs to expand and enhance storm infrastructure in existing neighbourhoods with flooding issues.

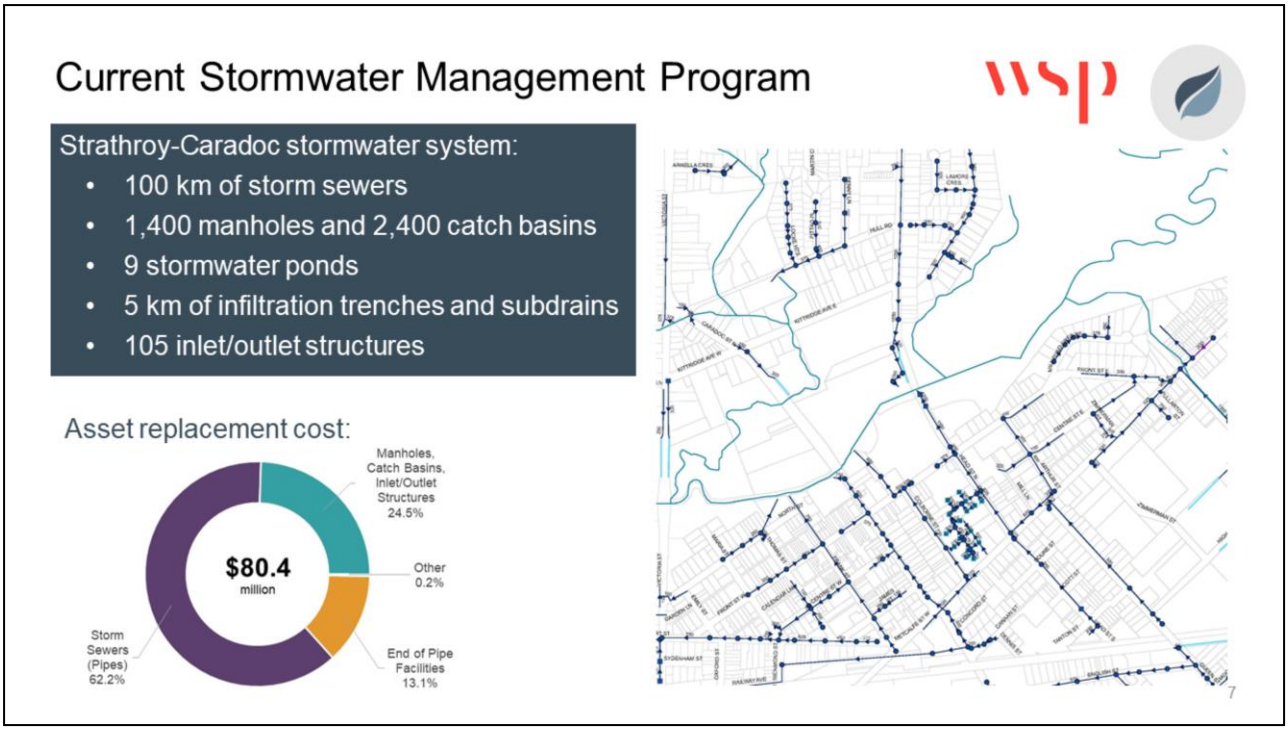


Slide Summary

The purpose of this study is to help the Municipality meet stormwater management challenges by developing a comprehensive stormwater management program and determining how the program will be funded.

The program must protect public health and safety, stakeholder investments and the Municipality's valuable constructed and natural resources. It will do this with proactive maintenance and operation requirements for existing assets and well-considered investments in system upgrades and expansions.

Funding for the stormwater management program needs to be sustainable and equitable. One idea is to shift from the current funding model, which is based on the general tax levy, and to move toward a model based on how much stormwater runoff a property generates.

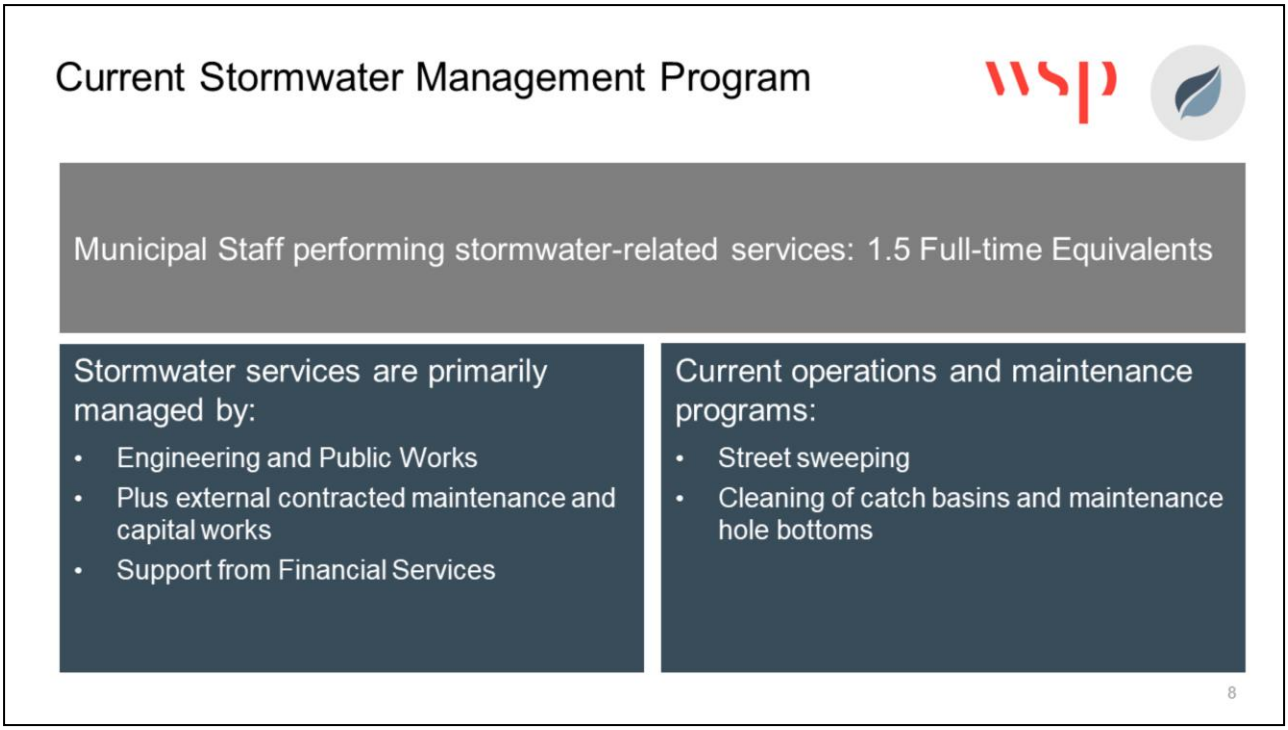


Slide Summary

To improve the Municipality's stormwater management, it is crucial to understand its current program.

The public portions of the Municipality's urban stormwater system include approximately 100 kilometers of storm sewers, approximately 1,400 manholes, over maintenance holes, 2,400 catch basins, 9 stormwater ponds, 5 km of infiltration trenches and subdrains, and 105 inlet/outlet structures.

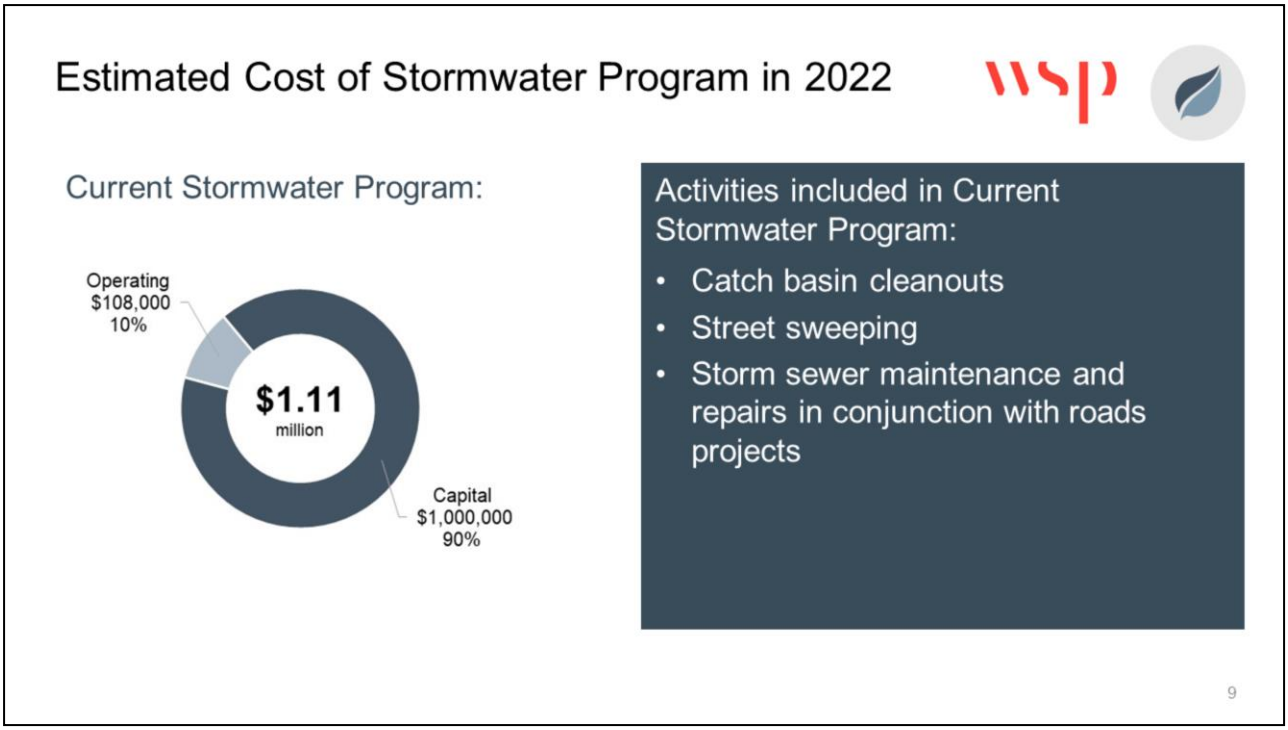
Replacing this infrastructure would cost approximately $80 million.



Slide Summary

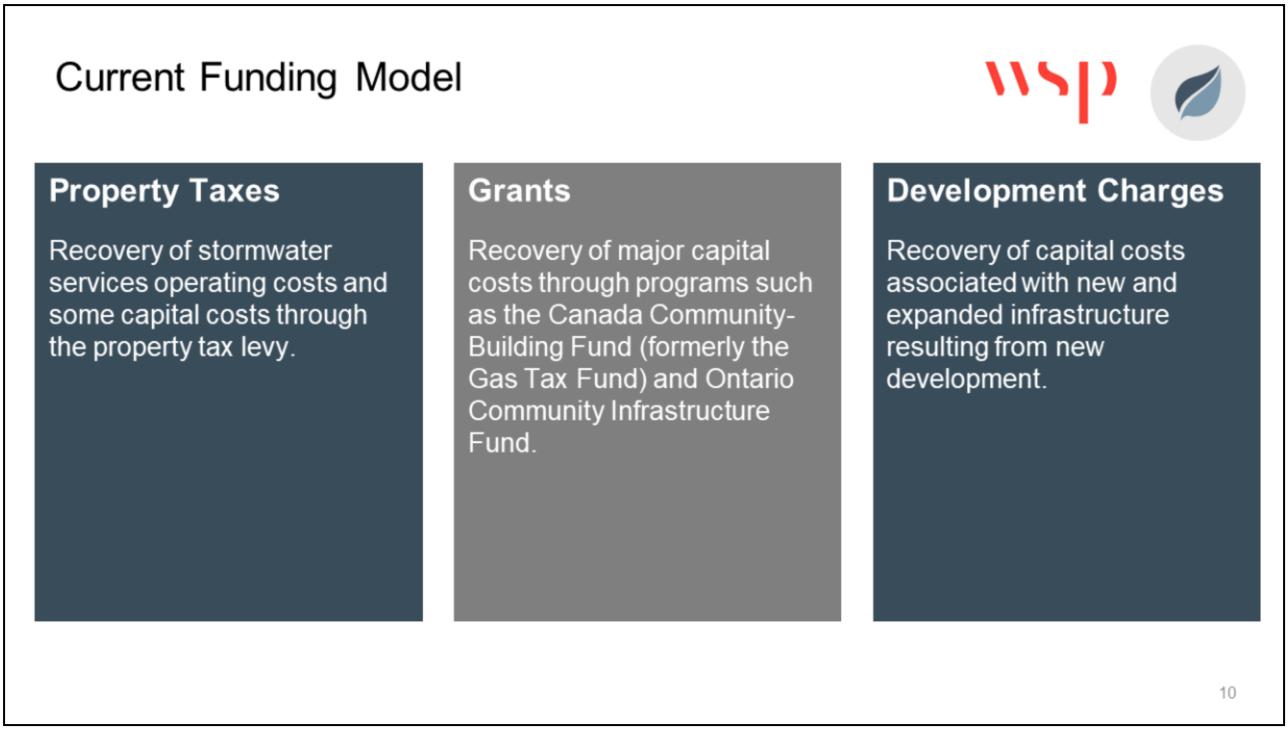
In addition to infrastructure, the approximately 1.5 full-time equivalent staff resources are dedicated to stormwater-related activities.

These services are managed primarily by the Municipality's Engineering and Public Works department. The Municipality may request additional support from external contractors to support maintenance and capital works projects. Staff from Financial Services provide support with financial aspects of service delivery – including budget preparation and funding.



Slide Summary

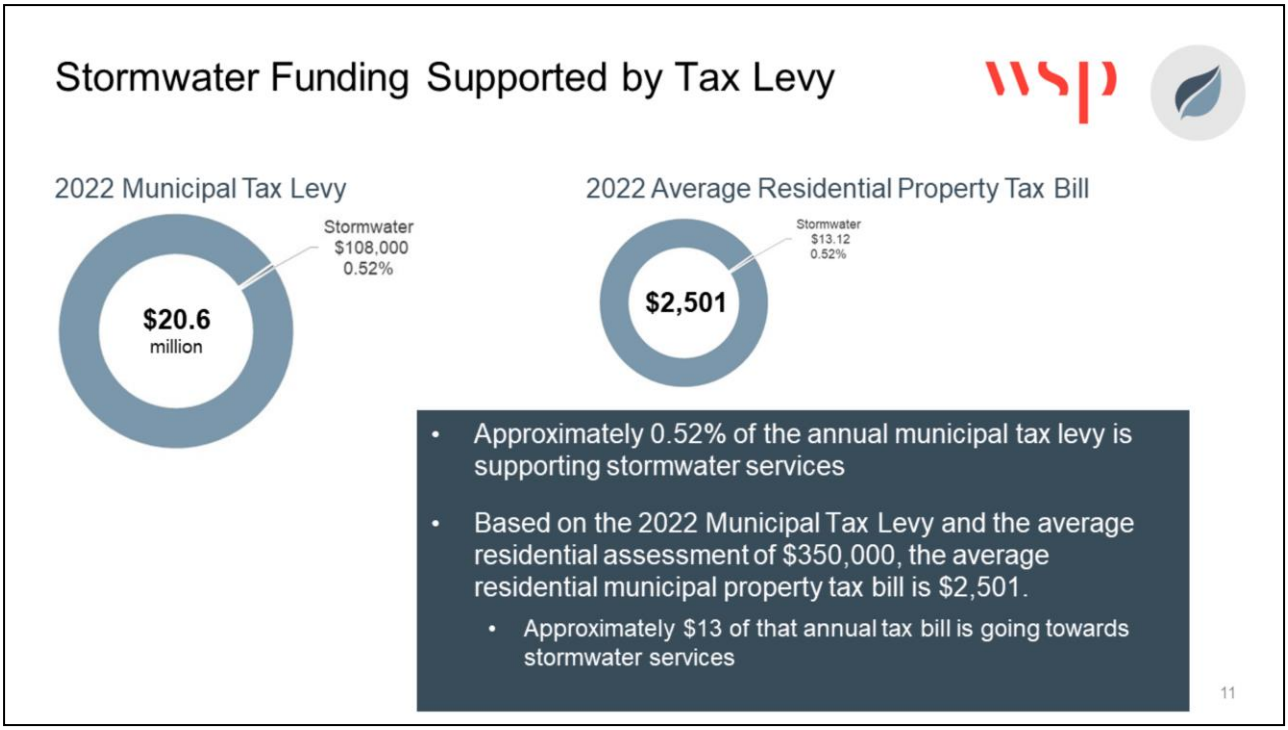
The Municipality currently spends about $108,000 on operations and $1 million dollars on capital work. This means that the Municipality's current stormwater program costs about $1.1 million dollars each year.



Slide Summary

The current stormwater program is funded in three ways:

1. Through property taxes, which primarily fund day to day operating expenditures;
2. Through grants, from programs including the Canada Community-Building Fund (formerly the Gas Tax Fund) and Ontario Community Infrastructure Fund, which have been used by the Municipality to fund major capital investments related to improvements and replacements of existing infrastructure; and
3. Through Development Charges, which can help recover costs associated with new and expanded infrastructure resulting from new development.



Slide Summary

So, how does the Municipality currently pay for the stormwater management program?

While capital projects have historically been funded from grants, the current operations and maintenance program is primarily funded through property taxes paid by residents and businesses.

As illustrated on this slide, approximately $13 (0.52%) of the average residential property tax bill is invested stormwater services.

Future Program

Areas of Focus

Increased funding will help the Municipality accomplish several future program goals in the follow areas:

- Operation and maintenance
- Upgrades and retrofits
- New infrastructure that incorporates more low impact development best management practices and green infrastructure solutions

Overall, these measures will support a more sustainable long-term stormwater management program.

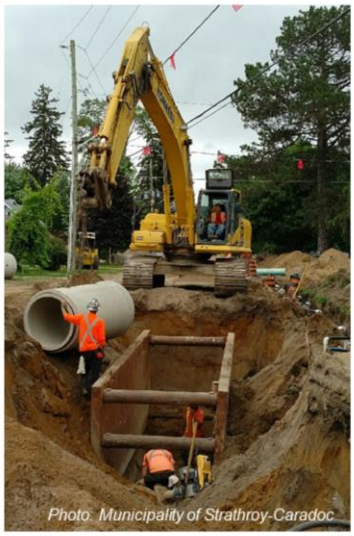


Photo: Municipality of Strathroy-Caradoc

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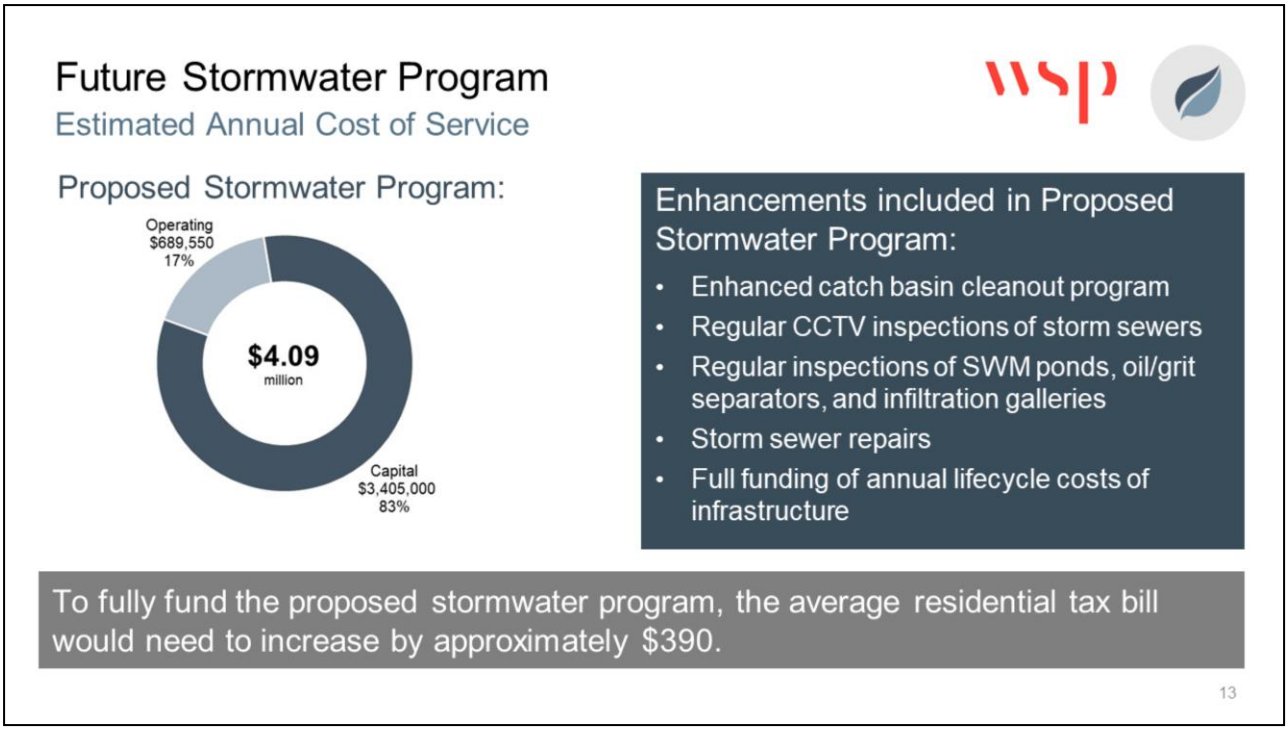
Slide Summary

Funding increases will help the Municipality operate and maintain existing infrastructure in a way that keeps the system in good repair. In addition, these increases will support upgrades and retrofits that consider climate change, legislative requirements, and incorporate low impact development and green infrastructure solutions into new developments.

Overall, these measures will support a more sustainable long-term stormwater management program.

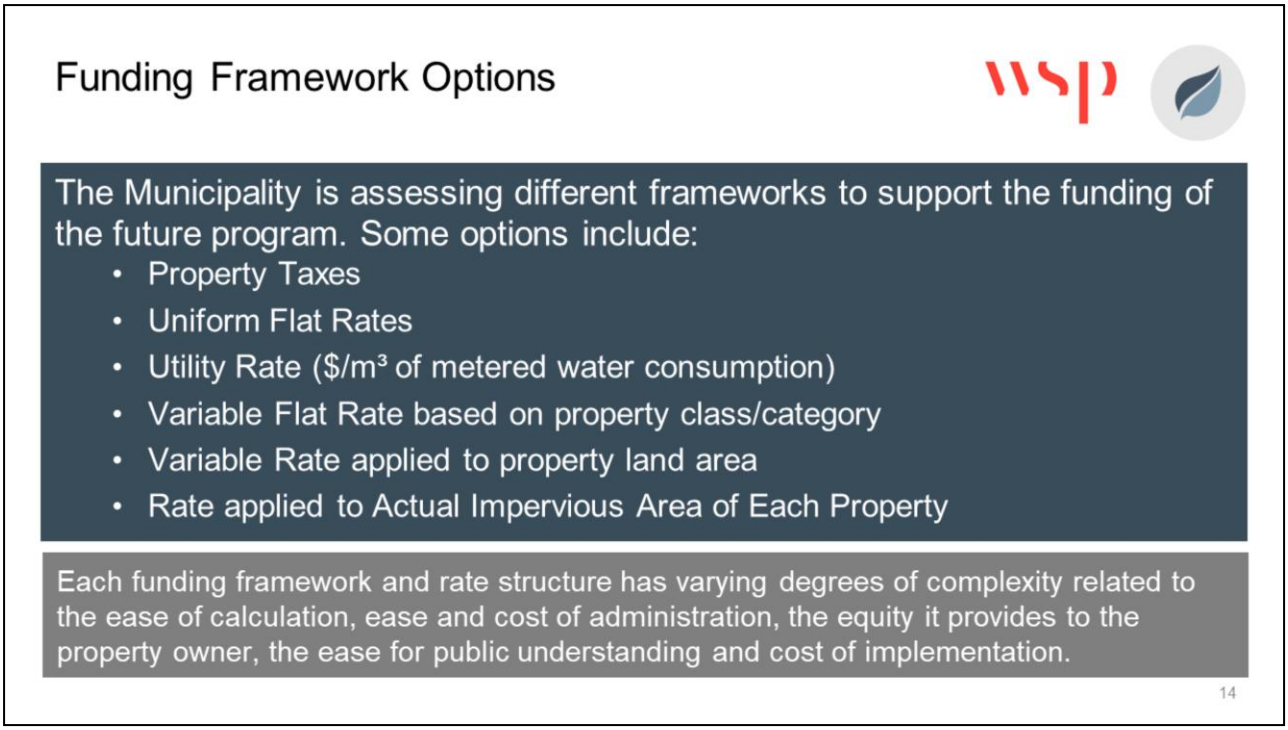


Slide Summary

The Municipality's stormwater management program requires a funding boost to modernize and reach recommended levels of service.

The preliminary cost estimate to get the Municipality up to recommended levels of service is $4.1 million annually. In order to support the proposed stormwater program, the Municipality would need to annually raise an additional $3.2 million through property taxes. This is a significant increase, and the amount does not include billing administrative charges, program support from other departments and any additional infrastructure costs that result from new developments.

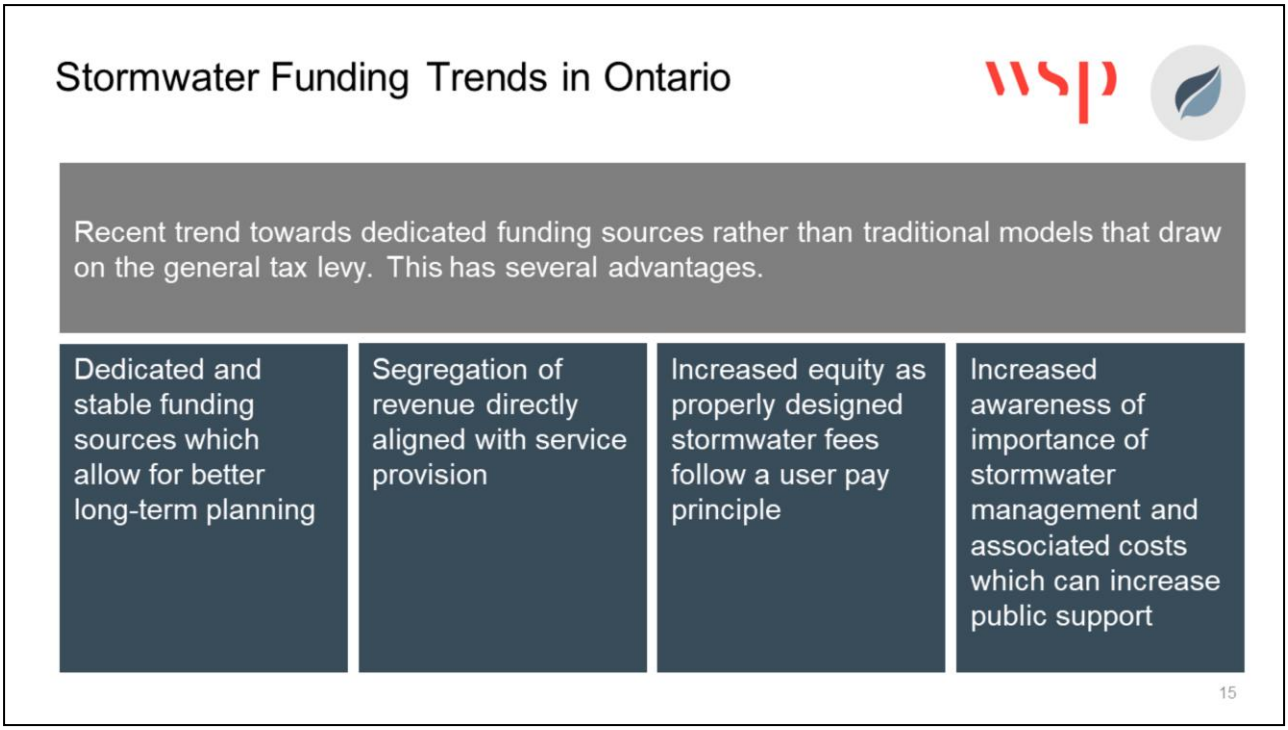
It has been estimated that the impact on the average residential property would be an additional $390 in property taxes annually.



Slide Summary

The Municipality is assessing different frameworks to support the funding of the future program. Some options being discussed include:

- Property Taxes
- Uniform Flat Rates
- Utility Rate
- Variable Flat Rate based on property class/category
- Variable Rate applied to property land area
- Rate applied to Actual Impervious Area of Each Property



Slide Summary

The Municipality is also exploring how funds are acquired in other municipalities.

In general, municipalities in Ontario tend to fund stormwater programs from the general tax levy. There is a recent trend toward more dedicated funding sources. Some advantages to this model include:

- Dedicated and stable funding sources, which allow for better long-term planning
- Segregation of revenue directly aligned with service provision
- Increased equity as properly designed stormwater fees follow a user pay principle
- Increased awareness of the importance of stormwater management, and associated costs, which can increase public support

Funding Trends – Examples

Municipality	Type of Rate Based Structure	Rate Categories
Aurora	Flat Rate Charge per Unit	Residential and condominium properties
		Non-residential and multi-residential properties
Brampton	Tiered Flat Fee (based on roof area)	5 categories for Single Residential properties
	Rate per m² of impervious area (impervious area individually assessed for each property)	Multi-residential & non-residential properties
Cobourg	Rate per hectare	3 Residential categories (low , medium, and high)
		Agricultural/vacant
		3 Non-Residential categories (commercial, institutional, industrial)
Guelph	Flat Rate Charge	Residential - applied to every detached home, tow nhouse, apartment, and condo
	Rate per Equivalent Residential Unit (ERU) based on impervious area (ERU multiplier = impervious area/188 m²)	Industrial, commercial, and institutional properties
Hamilton	Utility Rate - Monthly Fixed Rate and Volume Rate (based on w ater consumption)	Residential - separate rates for large and small units (based on monthly consumption)
		Non-residential
Kitchener	Tiered Flat Fee (based on property type and size of impervious area)	10 residential categories
		6 non-residential categories
London	Flat Rate Charge per Property	Land area 0.4 hectares or less
		Residential land area 0.4 hectares or less w ithout a storm sew er
	Rate per hectare	Land area above 0.4 hectares
Markham	Flat Rate Charge per Property	Residential
	Current Value Assessment (CVA)	Non-residential - fee based on CVA
Middlesex Centre	Flat Rate Charge per Property	Land area 0.4 hectares or less
	Rate per hectare	Non-residential land area above 0.4 hectares - flat rate plus rate per hectare
Mississauga	Tiered Flat Fee (based on roofprint area)	5 categories for Single Residential properties
	Rate per m² of impervious area (impervious area individually assessed for each property)	Multi-residential & non-residential properties

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Slide Summary

This table outlines some examples of the different funding models other municipalities across Ontario have implemented. Please note that the examples are continued on the next slide.

Funding Trends – Examples
Continued

Municipality	Type of Rate Based Structure	Rate Categories
Newmarket	Tiered charge per unit of land area	3 tiers by runoff level group
Orillia	Flat Rate Charge per Property	Residential
	Tiered Flat Fee (based on impervious area)	Multi-residential & non-residential properties
Ottawa	Residential - Flat Rate per Property (by property type, Urban & Rural)	Residential (RS) and Multi-Residential (RA) - Urban/Rural
	Non-Residential - Tiered Flat Fee (based on CVA, Urban/Rural)	ICI - 8 CVA ranges/categories - Urban and Rural
Richmond Hill	Tiered Rate per 1,000 square feet (sq.ft.) of land area	Residential (up to a maximum of 43,560 sq.ft. per year)
		Agricultural/vacant land (up to a maximum of 435,600 sq.ft. per year)
		Golf courses (up to a maximum of 435,600 sq.ft. per year)
		Multi-Residential and Commercial/Industrial
St. Thomas	Flat Rate Charge per Property	Residential & commercial/institutional
	Rate per Hectare	Industrial
Thames Centre	Flat Rate Charge per Property	All properties
Vaughan	Flat Rate Charge per Property	3 Residential categories (low , medium, and high)
		Agricultural/vacant land
		3 Non-Residential categories (based on acres)
Waterloo	Flat Rate per Property (by property type & size)	3 Residential categories & 3 Multi-residential categories
		3 Institutional categories & 4 Industrial/commercial categories
Windsor*	Tiered Flat Fee (based on roofprint area)	3 categories for Single Residential properties
	Rate per m² of impervious area (impervious area individually assessed for each property)	Multi-residential & Non-residential properties
Whitchurch-Stouffville	Flat Rate Charge per Property	Residential and Commercial

*Currently, the City of Windsor funds stormwater services through the sewer surcharge. In 2021, Council approved (in principle) moving to a dedicated stormwater charge - Anticipated implementation early 2024.

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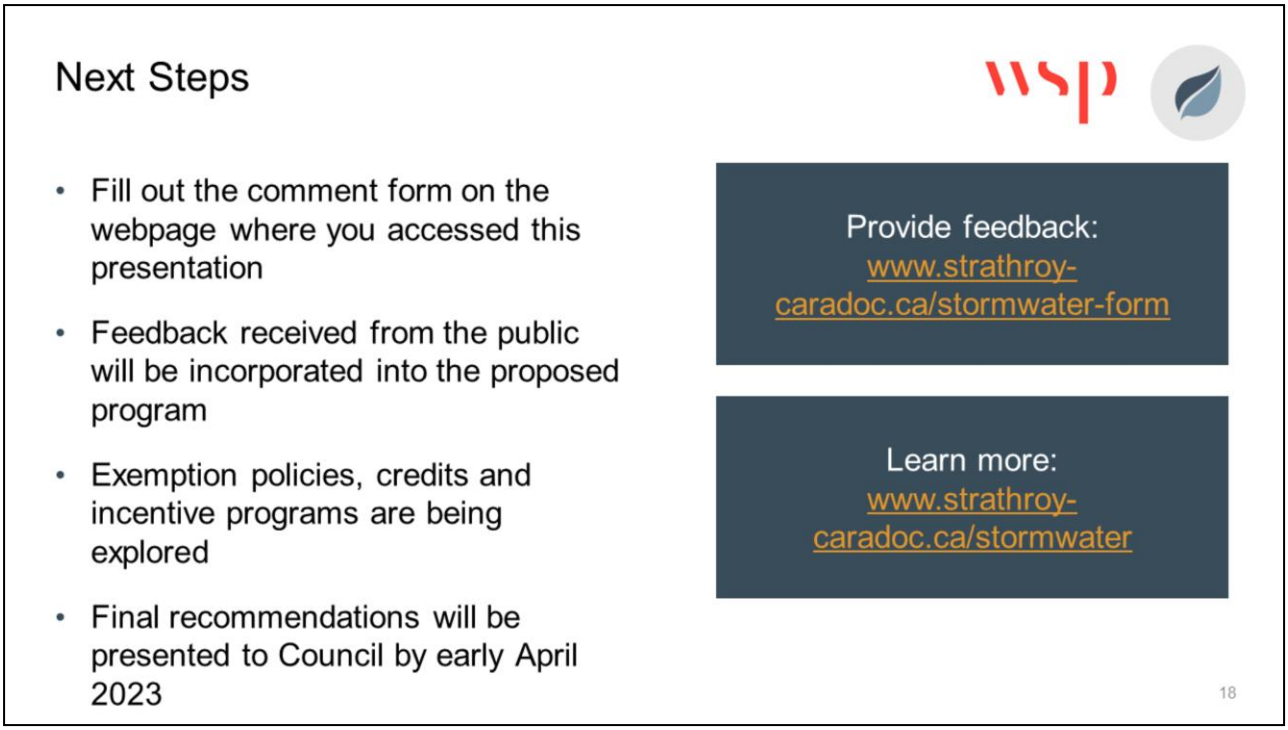
Slide Summary

This is a continuation of the table from the previous slide, showing some examples of the different funding models other municipalities across Ontario have implemented.



Slide Summary

To move forward with the new stormwater management program, the Municipality needs to hear from you! We are seeking your feedback to better inform the proposed program. In addition, the Municipality is exploring exemption policies, credits and incentive programs, such as credits for rain barrels or on-site stormwater controls.

Once a preferred rate structure is selected and if a decision is made by Council to move ahead with the new stormwater management program, an implementation phase will follow this Study. This implementation phase would include detailed rate calculations and development of a billing structure. This implementation phase would be expected to take approximately six months.

Please be sure to complete the survey related to this Study. You can find a link to the survey online on the same webpage where you accessed this presentation. There is a PDF of the survey available for download on the same webpage that can be printed and submitted via mail by March 24, 2023.

To provide additional feedback or to learn more about the program, please visit the webpage or send an email to weaster@strathroy-caradoc.ca.

Thank you for your time and we look forward to hearing from you!