

Phase 2 - Stormwater Fee Implementation

General Issues Committee Presentation

City of Hamilton

June 5, 2024

Nancy Hill, P.Eng.

Agenda

1

How we got here

2

Public consultation results

3

What other municipalities have done

4

Recommended financial incentive program



Stormwater Funding Review Timeline

- June 2022** ● Council directed staff to perform a stormwater funding model review and report back by June 2024
- Nov 2022** ● Council approved Guiding Principles for stormwater model evaluation
- Jan 2023** ● Council directed staff to accelerate review and report back by June 2023
- June 2023** ● Council approved the new stormwater fee structure & directed staff to consult the public on a financial incentive program
- Oct 2023 – Jan 2024** ● Public consultation
- Jan 2024** ● Revised credit program developed and communicated
- June 5, 2024** ● **Report to Council with recommended incentive program**

Guiding Principles for Stormwater Funding

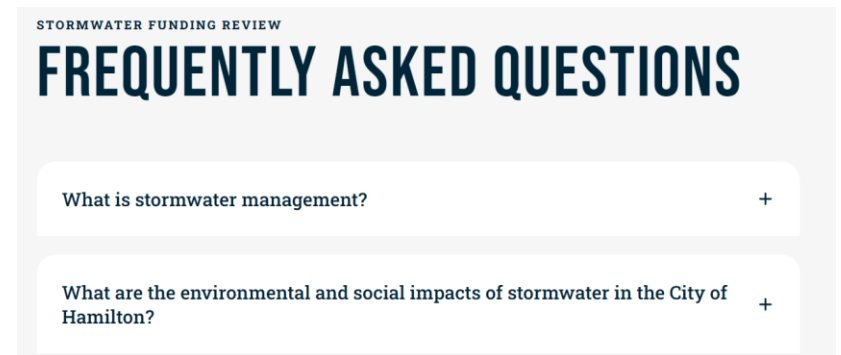
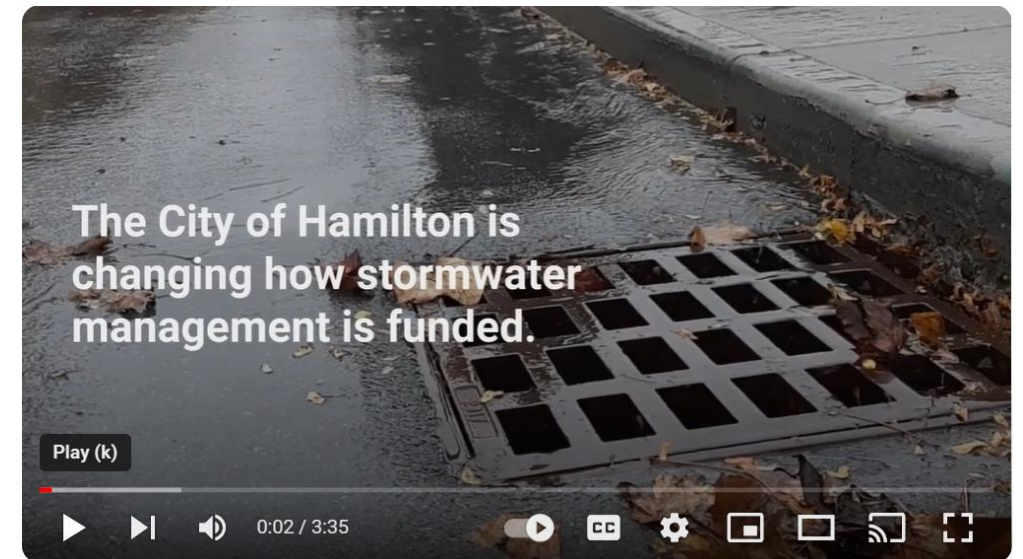
1. Fair & equitable (“user-pay”)
2. Climate resilient & environmentally sustainable
3. Affordable & financially sustainable
4. Justifiable
5. Simple to understand & manage

Reminder: Funding Option Evaluation

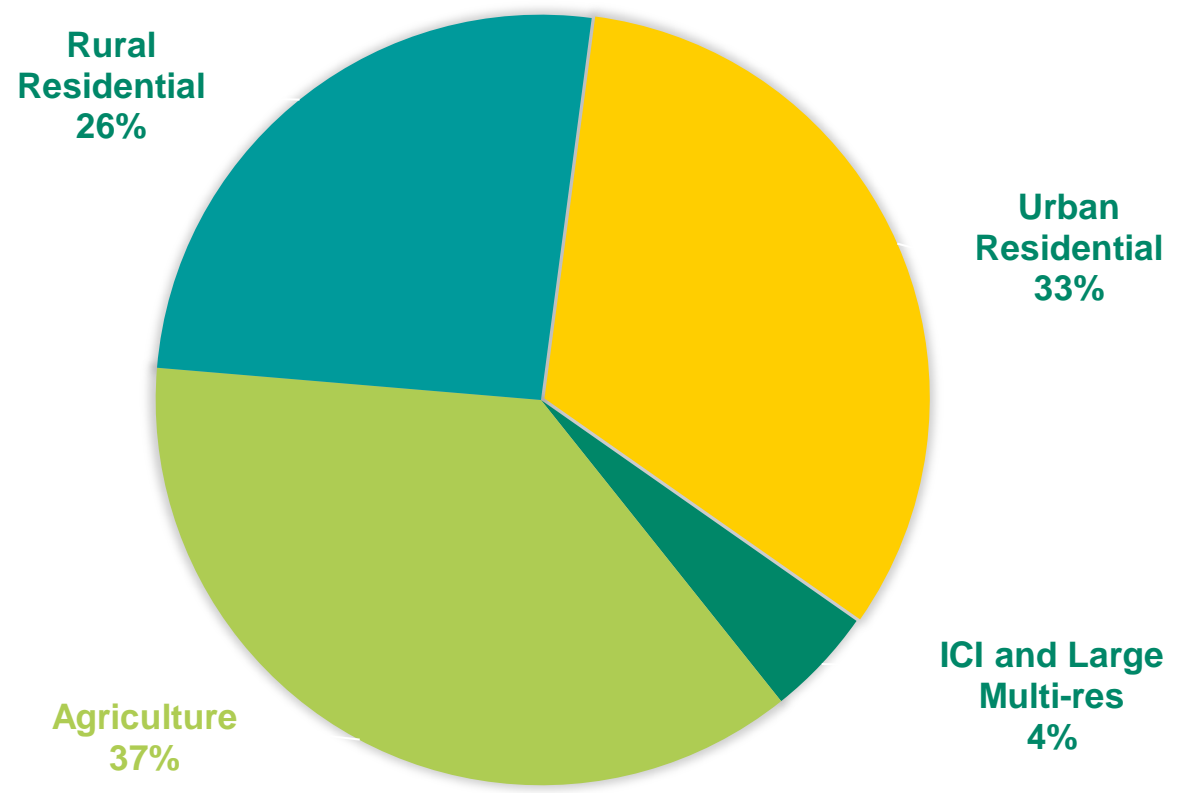
Stormwater Funding Model	Used By	Stormwater Rate Based On	Fair & Equitable	Climate Resilient	Environmentally Sustainable	Affordable	Financially Sustainable	Justifiable	Simple to Understand & Manage
General Tax Levy	Brantford Brant County	Assessed value	✗	✗	✗	⦿	✗	✗	✓
Dedicated Tax Levy	Markham	Assessed value	✗	✗	✗	⦿	⦿	✗	✓
Water/Wastewater Rate	Ex Hamilton Toronto	Water consumption	✗	⦿	✗	⦿	⦿	✗	✓
Stormwater Rate – Tiered Flat Fee	Ottawa Vaughan London	Property type, size	✗	⦿	⦿	⦿	✓	⦿	⦿
Stormwater Rate – Equivalent Residential Unit	Guelph	Impervious area (but all residential types pay the same)	⦿	✓	✓	⦿	✓	✓	⦿
Stormwater Rate – Single Family Unit	Future Hamilton	Impervious area (but all SFD pay the same)	✓	✓	✓	⦿	✓	✓	⦿
Stormwater Rate – Tiered Single-Family Unit	Mississauga Kitchener	Impervious area	✓	✓	✓	⦿	✓	✓	✗

Consultation Summary

- Hamilton webpage visits > 5000
- Survey responses – 781
- Public/Stakeholder Presentations – 7
- Traditional media releases (> 10 media articles)
- Social media releases (> 500 clicks/likes)
- Significant email correspondence (> 100)
- Communication update (Jan 16th)
- Other Councillor Communication (Town Halls etc)



Survey Results

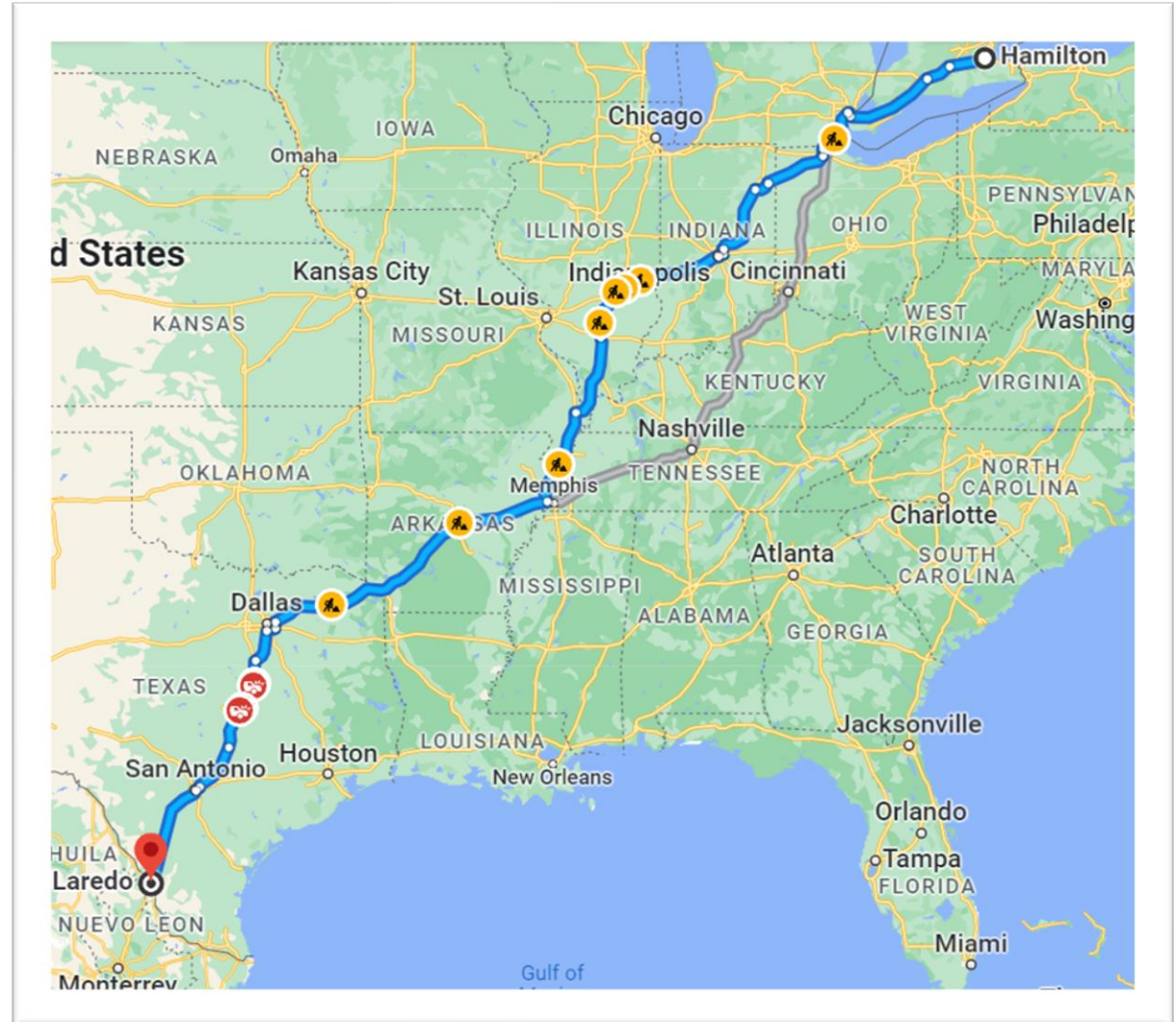


Total Responses: 781	Residential: 471	Rural: 192 Urban: 243
	Agriculture: 276	
	ICI & Large Multi-res: 34	

Hamilton's Stormwater System

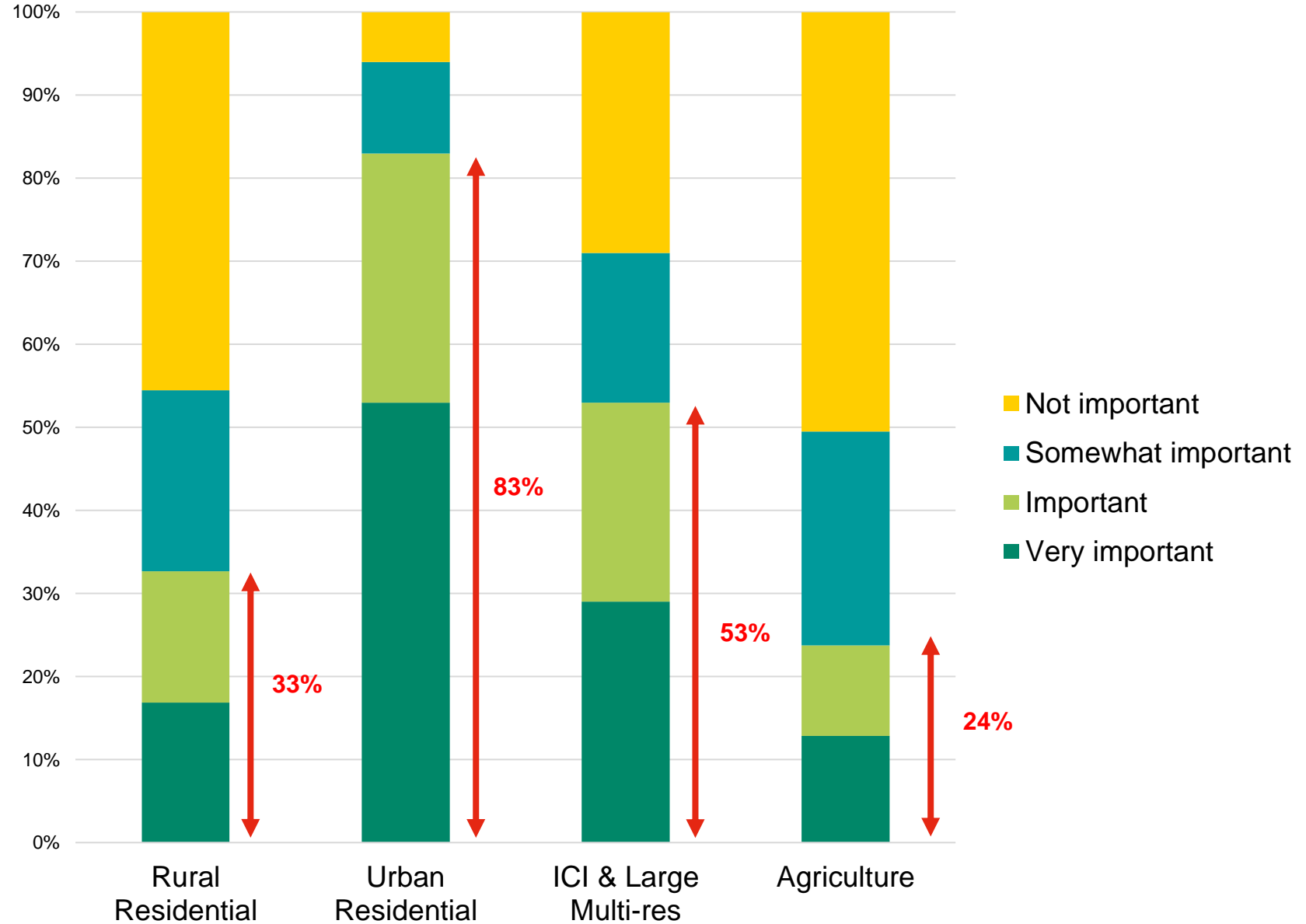
- 1,500 km ditches
- 1,200 km storm sewers
- 148 km watercourses
- 50,000 catch basins
- 3,500 culverts
- 4 infiltration facilities
- 126 ponds
- Value of **\$3.1 billion**

Hamilton
to
Mexico



How Important are the City's Stormwater Management Services to You?

Survey Results



Reminder: Draft Financial Incentives Residential \leq 6 dwelling units

Grants/Subsidies:

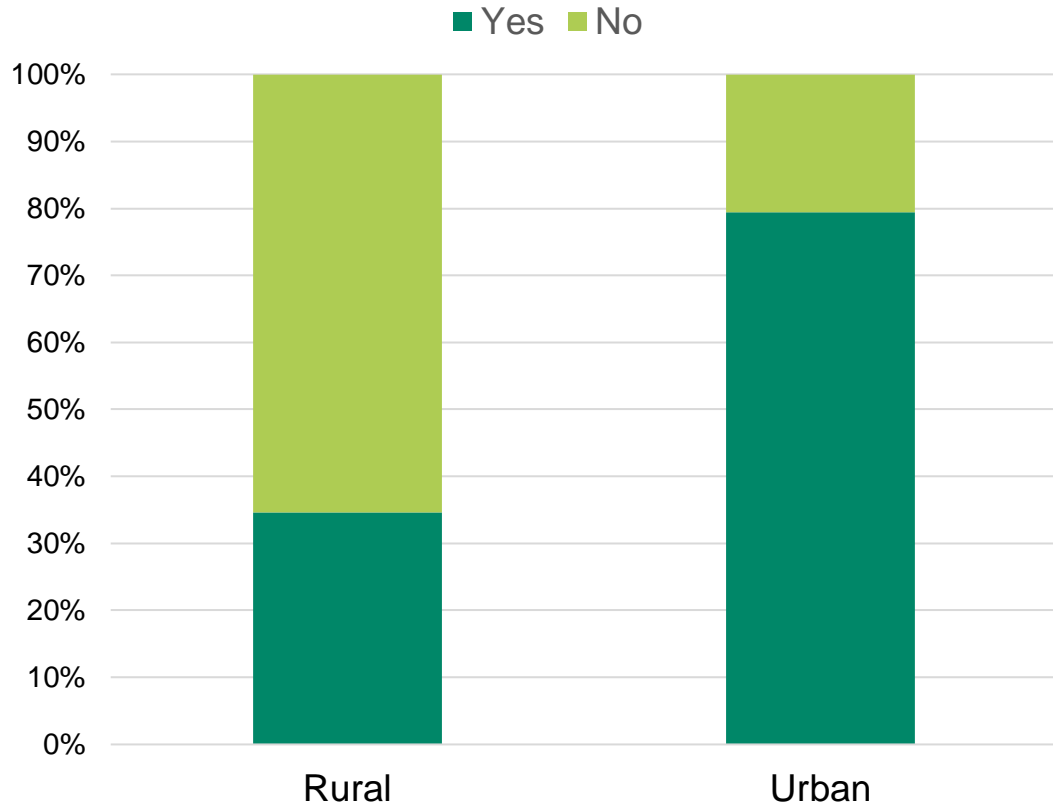
- Rain barrels
- Disconnect downspouts, backwater valves etc.
- Green Venture (in-person 'how-to' advisory services, 'how-to' information, grants & subsidies for rain gardens, permeable surfaces etc.)



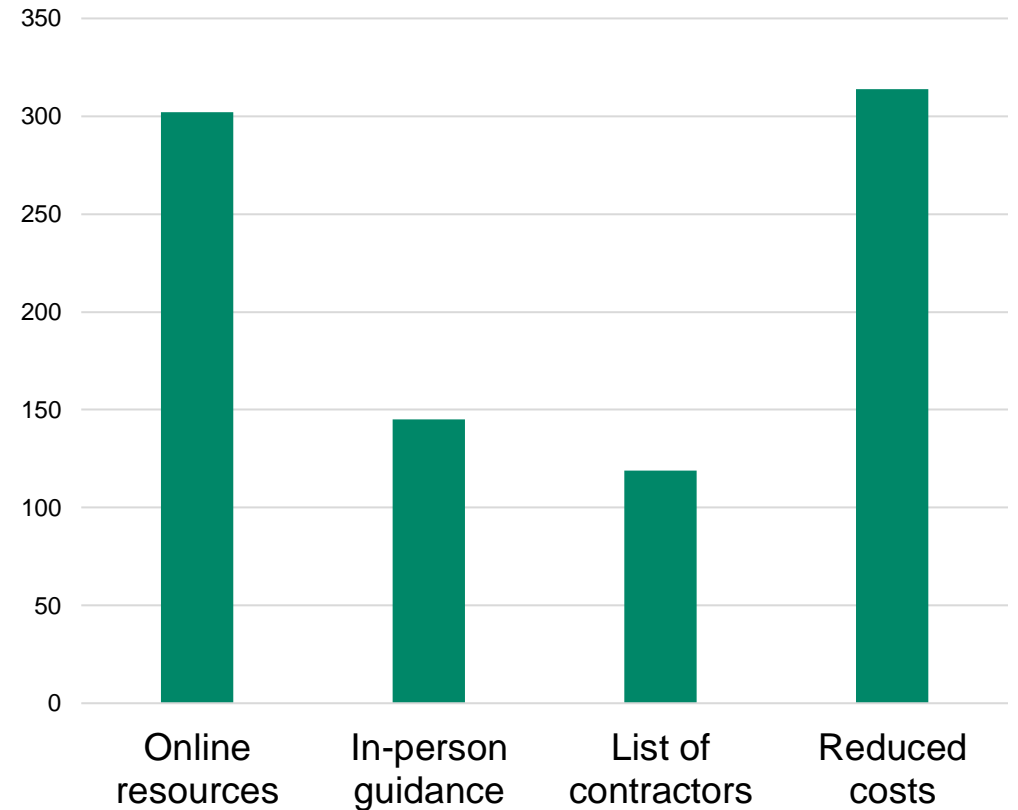
Reduce the quantity and improve the quality of stormwater runoff from residential properties

Survey Results – Draft Residential Incentive Program

Do you Agree with Providing Residential Properties Subsidies Rather than Credits?



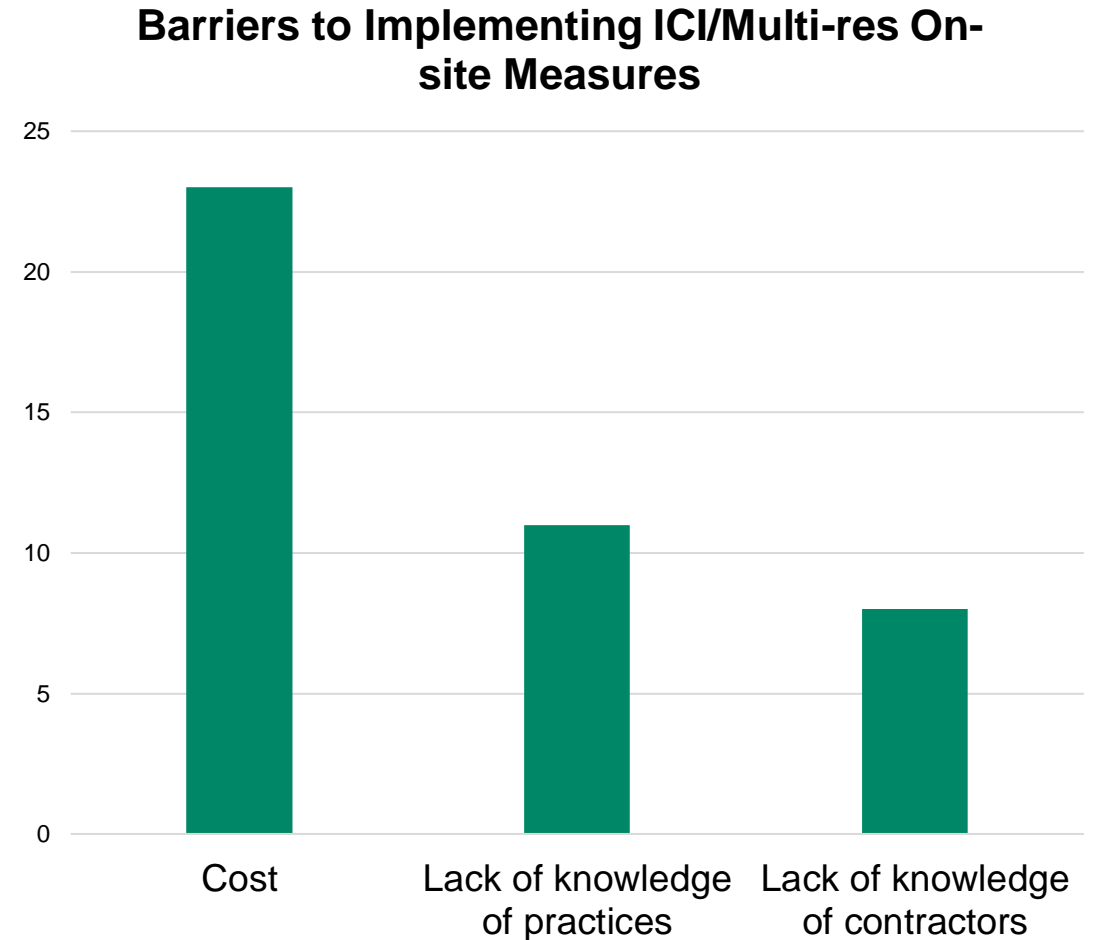
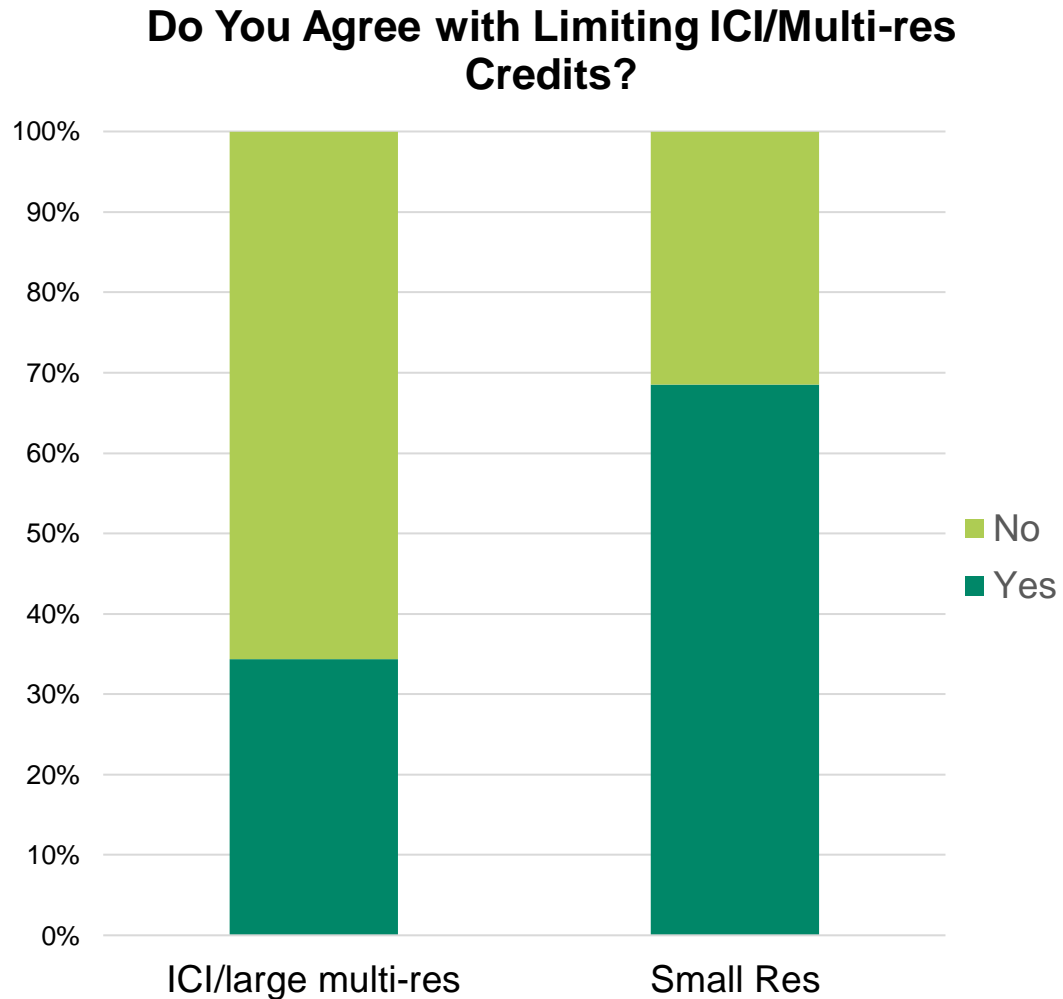
What support should the City provide to encourage good residential stormwater management practices?



Reminder: Draft ICI, Multi-res Financial Incentives

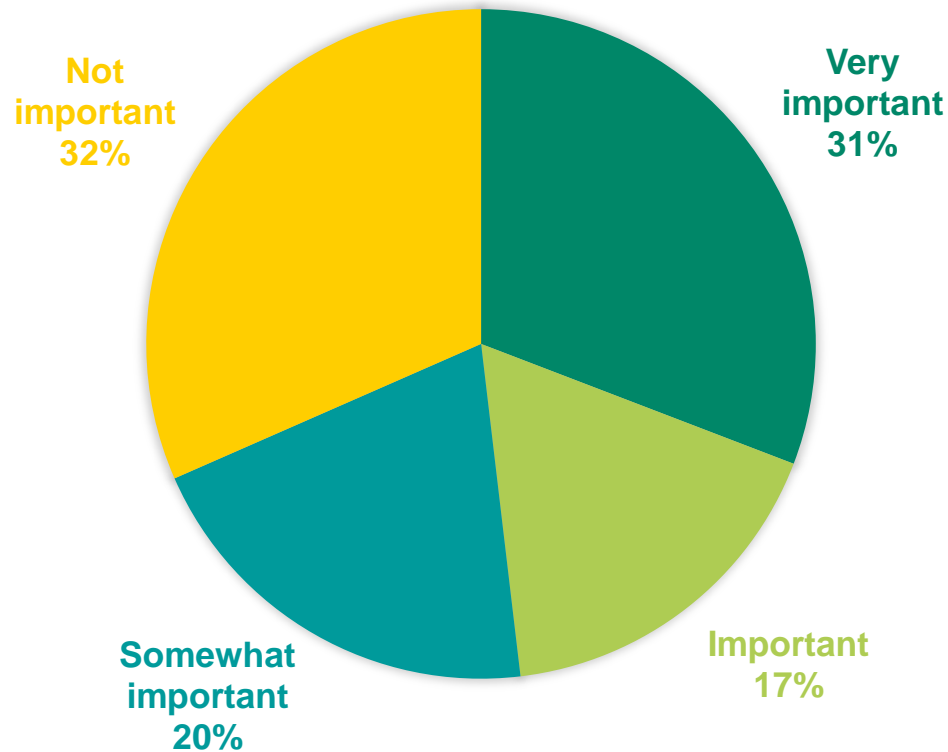
Objective		Maximum Credit Amount		Description
1	Slow it down	40%	Total max. 50%	Percent reduction of the 100-year storm post-development flow to pre-development conditions of the site
2	Clean it up	25%		Remove ammonia, sediment, and phosphorous
3	Soak it up	40%		Percent capture of first 28 mm of rainfall during a single rainfall event
4	Prevent it first	15%		Develop and implement a pollution prevention plan (e.g., salt management plan, pesticide/manure management, sweeping, spill response plan, public education etc.)

Survey Results on Proposed ICI/Multi-res Incentive Program

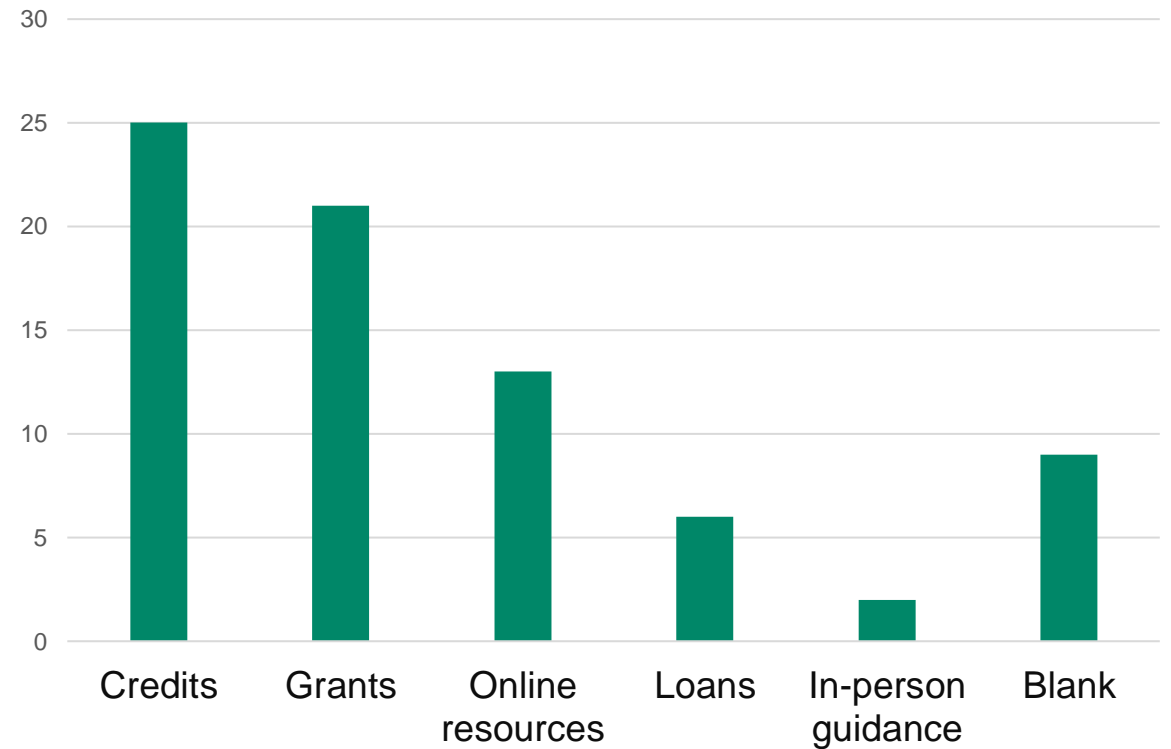


Agricultural Survey Results on Proposed Incentive Program

How important are incentive programs to encourage on-site measures to reduce the amount of stormwater runoff?



What kind of support could the City provide to encourage good stormwater management practices on agricultural properties?



New ICI, Agriculture, Large Multi-res Incentive Program Options

Made in Hamilton 3 credit stream approach based on feedback received and Council direction

Green Space Credit

- Considers percentage of property that is green space
- Automatic enrollment – no application needed
- Only available for properties with no direct stormwater connection and only contribute overland flow via green space

Hamilton Harbour Discharge Credit

- Property owners can apply for up to a 90% credit if they can demonstrate that the property's stormwater fully discharges to Lake Ontario which is provincial jurisdiction

Stormwater Management Infrastructure Credit

- Property owners will be able to apply for a credit of up to 50% if they reduce the quantity and/or improve the quality of stormwater that runs off their property

A property will not be eligible for more than one stream. Appeals process will be developed.

Green Space Credit

- No application involved, automatically applied
- Based on ratio of green vs. hard surfaces
- Only applies to non-residential impervious areas
- 1 billing unit per dwelling unit

14,300 properties outside the urban boundary

- 9,500 residential
- 1,300 undeveloped
- **1,000 ICI, agriculture**
- **2,500 mixed use (e.g., farm with a residence)**

Calculation

Fee = (# of residential dwellings * rate for 1 billing unit) +

$$\text{non-res rate} \times \left[\frac{\% \text{ imp of property}}{\% \text{ imp of avg SFD (60\%)}} \right] \times \left[\frac{\text{run-off coeff from green space (0.1)}}{\text{run-off from avg SFD (0.6)}} \right]$$

Varies by
property



Reduces
by 83%



Estimated Fee for Example Agricultural Properties that Discharge all Stormwater to Large Green Areas

	Example Agricultural Property						
	1	2	3	4	5	6	7
property size (acres)	104	48	135	49	145	6	158
% imperviousness	0.4%	2%	7%	8%	1.6%	65%	21%
total # billing units	6.2	14.2	129.9	56.2	34.1	56.3	455.3
Fee Type	Proposed annual rate						
Base Fee with no credit	\$1,054	\$2,584	\$22,082	\$9,554	\$5,798	\$9,570	\$77,402
Fee with Green space credit	\$171	\$182	\$915	\$381	\$196	\$2,009	\$4,455
% credit	84%	93%	96%	96%	97%	79%	94%

Based on **\$170** per unit

Minimum charge of 1 billing unit

Sample Agricultural Property 1

- 1 res billing units
- 5.2 non-res billing units
- 0.4% imperviousness
- \$171 prop fee with credit



Sample Agricultural Property 4

- 1 res billing unit
- 33.1 non-res billing units
- 6.8% imperviousness
- \$381 prop fee with credit



Sample Agricultural Property 7

- 453 non-res billing units
- 21% imperviousness
- \$4,455 prop fee with credit



Estimated Fee for Other Properties that Discharge all Stormwater to Large Green Areas

	Ancaster Fairgrounds	White Brick Church & Cemetery	Bellstone Christian School
property size (acres)	98.6	1.5	8.9
% imperviousness	26%	6%	14%
total # billing units	358	1.3	17.8
Fee Type	Proposed Annual Rate		
Base Fee with no credit	\$60,873	\$218	\$3,027
Fee with Green space credit	\$4,415	\$170	\$170
Wastewater restatement			
	-\$8,268	n/a	n/a
Net change in SW funding			
	-\$3,853	\$170	\$170

Based on
\$170 per
unit

How other Ontario Municipalities Address Agricultural Properties

Municipality	Basis of Charge for Non-Residential	Exempt/ Subsidize Agricultural Properties?	Farm-specific Credits	Eligible for General Credits	Other	Comment
Vaughan	Land Use				Flat rate for all agricultural properties	Looking to change rate structure
London	Land Use	Charge only applies to urban areas				First stormwater rate > 15 years ago
Kitchener	Impervious Area			Y (quality only)	Treated as residential	
Guelph	Impervious Area			Y		
Ottawa	Land Use, Assessed Value		50% rate reduction for non-connected rural properties			Looking to change rate structure
Brampton	Impervious area			Y		Looking at implementing farm specific credit Legal team concerned about exemptions and bonusing under the Municipal Act
Waterloo	Impervious area			Y		
Brant County	Proposed fee	Yes				Rural properties mostly served through municipal drains, which they fund
Cobourg	Land Use/Area				Ag charged \$400 per ha	SFD charged \$900 per ha

Provincial Support

- April 2024 letter from the Ministry of Agriculture, Food and Rural Affairs asking for “**special consideration for agricultural properties**”
- Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure. “*All Asset Management Plans must include information about the levels of service that the municipality proposes to provide, the activities required to meet those levels of service, and **a strategy to fund activities by 2024.***”
- November 2022, Office of the Auditor General of Ontario: “**Majority of municipalities do not have reliable sources of funding to finance stormwater infrastructure**”
- In 2021 signed the 9th Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health that “*focuses on understanding and reducing excessive nutrients, reducing or eliminating releases of harmful pollutants, improving wastewater and stormwater management and protecting the Great Lakes*”. “**Promote eligible investments, including investments in green infrastructure, that support the reduction of excess nutrients from non-point sources such as urban and rural stormwater (including stormwater from agricultural landscapes), as priority considerations under applicable infrastructure and other funding programs**”

Implementation & Staffing

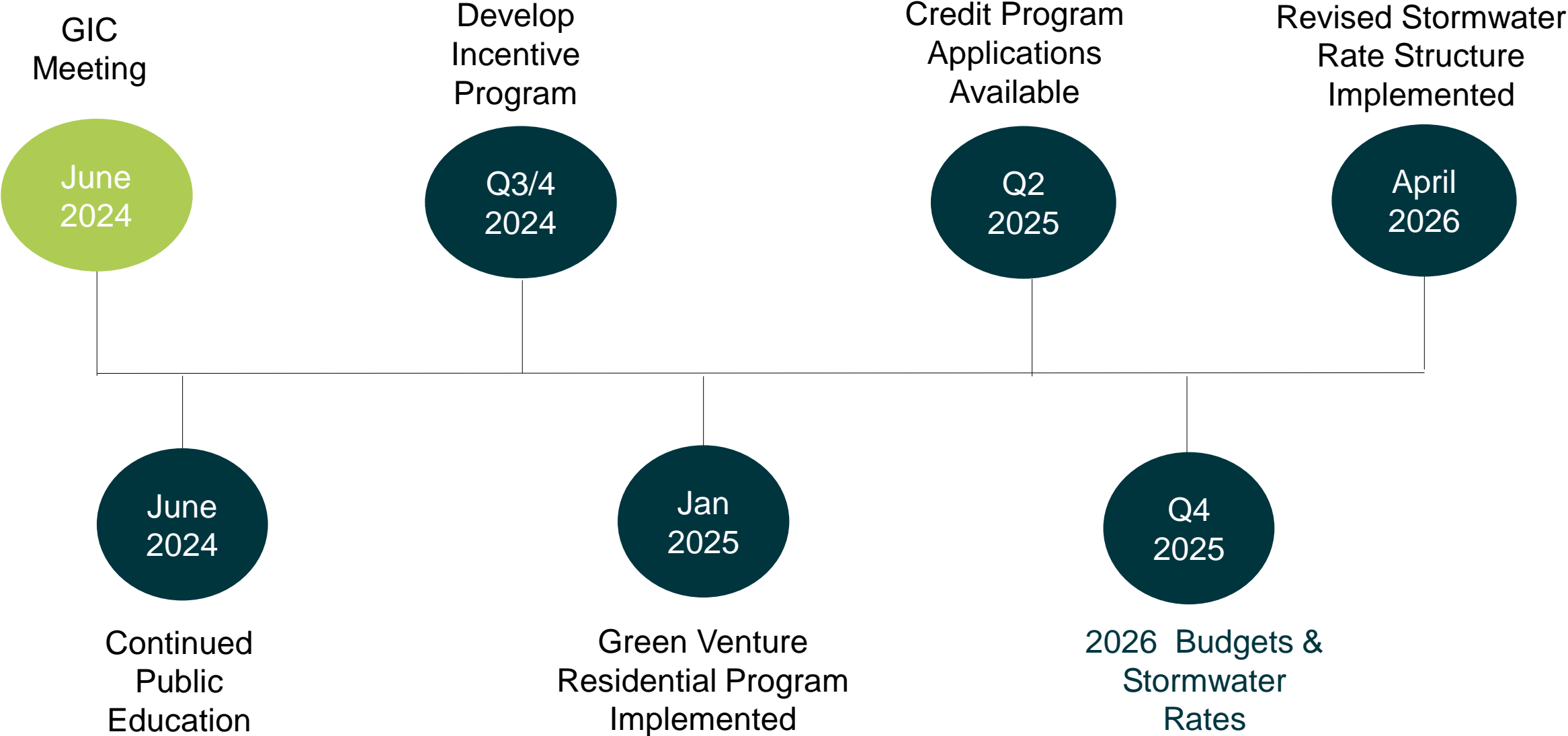
1 FTE

- Manage contracts/coordinate residential stormwater programs
- Develop policies, procedures and forms for financial incentives, appeals, new development and rate reviews
- Coordinate with new utility billing system implementation
- Coordinate public communication (web-page, inserts, queries etc.)
- Review credit applications and oversee green space credit application
- Confirm stormwater budget and billing rate
- Develop billing file
- Preparation of new stormwater only accounts and test billing
- Respond to queries and appeals

Recommended Financial Incentive Program

Financial Incentive Program	Fair & Equitable	Climate Resilient	Environmentally Sustainable	Affordable	Financially Sustainable	Justifiable	Simple to Understand & Manage
Approved Stormwater Funding Model with Revised Financial Incentive Program	✓	✓	✓	✓	✓	✓	✓
Justification	Rewards those that reduce their load on the system.	Encourages on-site measures that increase resiliency and provides sustainable funding for climate measures.	Encourages on-site measures and provides sustainable funding to protect natural water bodies.	Reduces costs for those with on-site measures. No application for green space credit.	Balances long-term funding needs with credits.	Based on user pay principles and legal considerations. Balances Hamilton specifics with industry best practices.	Balances simplicity with equity. Considered implementation & on-going administration costs.

Next Steps



The background of the image is a scenic view of a lake with a stone pier and trees on the far shore. The sky is clear and blue. In the foreground, there are green plants and flowers. The AECOM logo and tagline are overlaid in white text.

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