



Municipality of Thames Centre Stormwater Rate Study

Council Workshop – Study Findings
December 3, 2024

Agenda



- Stormwater Management Funding Study Overview
- Rate Structure Options
- Customer Forecasts (for two Rate Structure Options)
- Capital Forecast
- Operating Forecast
- SWM Rates by Rate Structure Option
- Cost Share Between Residential and Non-Residential Properties
- Next Steps/Implementation
- Questions

2024 Stormwater Management Funding Study Overview

Study Goals, Scope, and Results



Study Goals

- Understand existing infrastructure
- Identify future needs, costs, and funding
- Recommend level of service and funding options



Scope

- Summarize expenses
 - Capital
 - Operating
 - Asset Management
- Evaluate funding options
- Prepare funding model



Results

- Approve capital and operating forecast
- Approved rate structure to be imposed

Proposed Rate Structure



Rates calculated based on a tiered flat rate, based on the size of a property, varied by type (for all properties within the urban areas of Dorchester and Thorndale)

Residential



- Tiered flat rate:
 - Small properties – less than or equal to 0.25 acres
 - Medium properties – greater than 0.25 acres, but less than 1 acre
 - Large properties – greater than 1 acre

Non-Residential



- Tiered flat rate:
 - Small properties – less than or equal to 5 acres
 - Medium properties – greater than 5 acres, but less than 15 acres
 - Large properties – greater than 15 acres

Agriculture and Vacant Lands



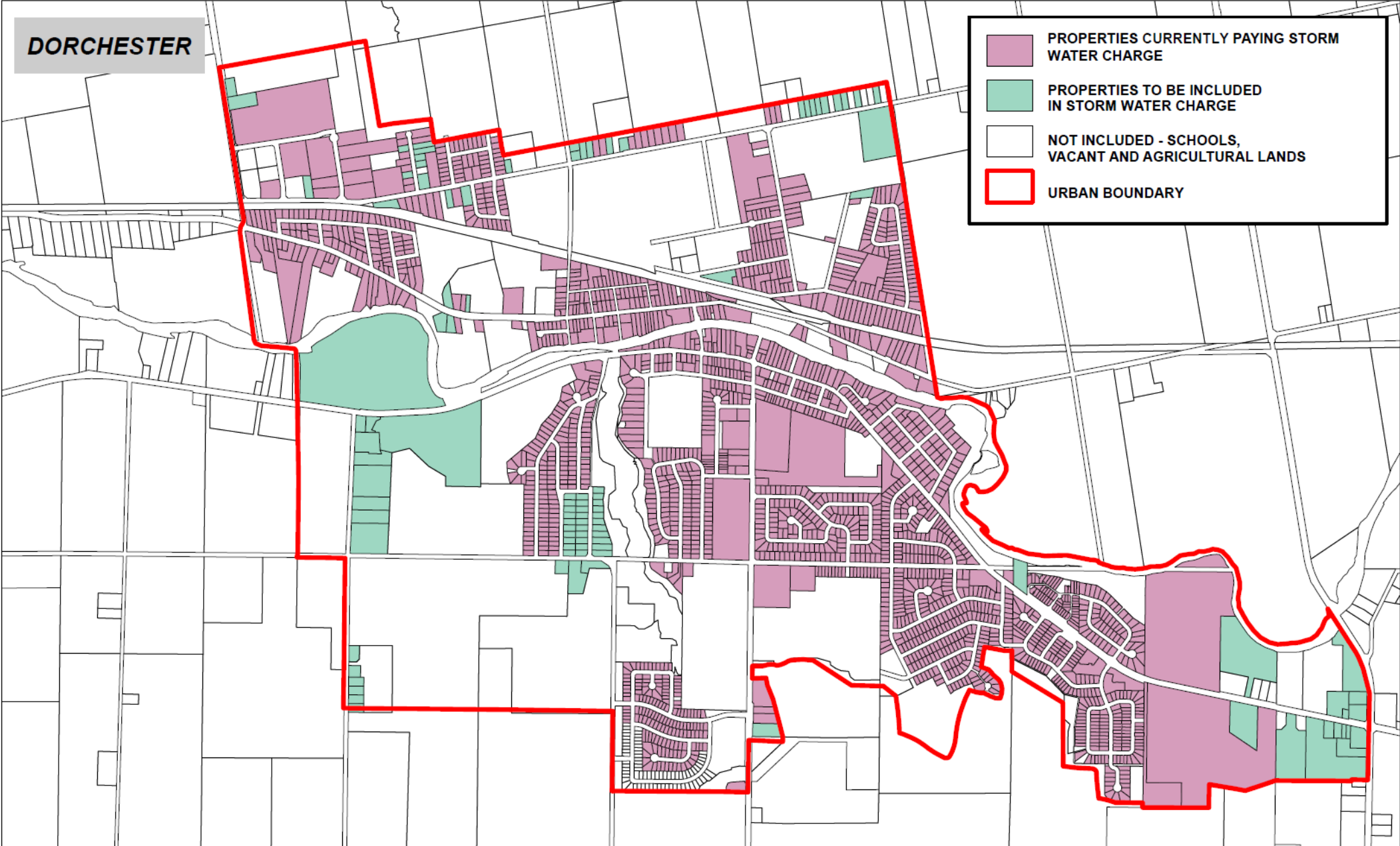
- Exempt from stormwater rates

Schools

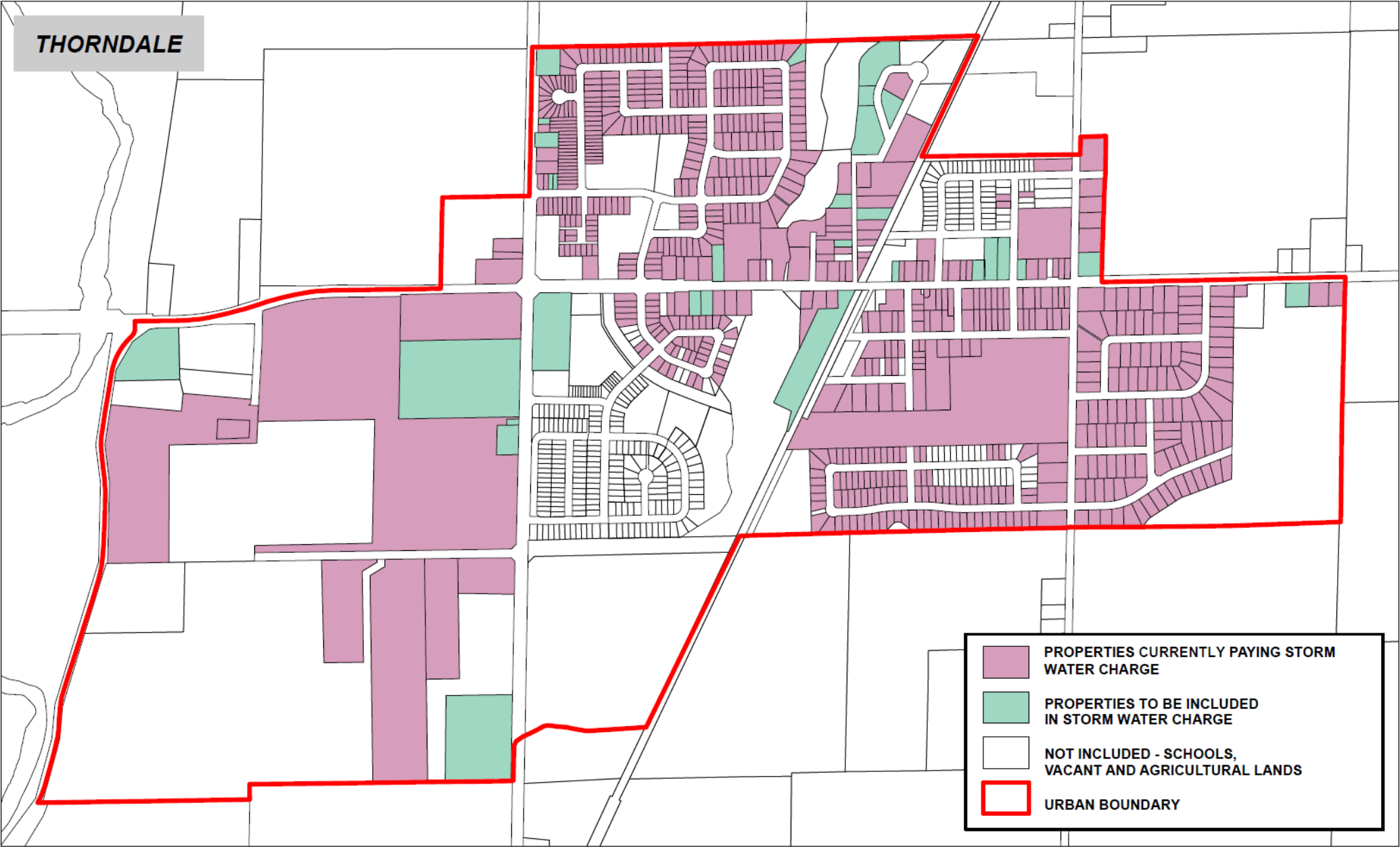


- Excludes School Lands for Public/Separate Schools under the Thames Valley Public School Board and the London District Catholic School Board that are mandatorily exempt

Dorchester Stormwater Map



Thorndale Stormwater Map



Customer Forecast – Current Flat Rate Structure In Place



Stormwater Customer Forecast	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Existing Urban Residential (Small)	2,094	2,094	2,094	2,094	2,094	2,094	2,094	2,094	2,094	2,094	2,094
Existing Urban Residential (Medium)	901	901	901	901	901	901	901	901	901	901	901
Existing Urban Residential (Large)	72	72	72	72	72	72	72	72	72	72	72
Existing Industrial	38	38	38	38	38	38	38	38	38	38	38
Existing Commercial	56	56	56	56	56	56	56	56	56	56	56
Existing Institutional*	2	2	2	2	2	2	2	2	2	2	2
Existing Government	3	3	3	3	3	3	3	3	3	3	3
Existing Special & Exempt	13	13	13	13	13	13	13	13	13	13	13
New Residential - Urban Growth (Small)	-	6	41	111	199	301	419	551	699	861	1,038
New Residential - Urban Growth (Medium)	-	-	3	10	23	40	60	80	103	128	153
New Residential - Urban Growth (Large)	-	-	2	6	12	19	27	37	52	72	93
New Non-Residential - Urban Growth	-	-	27	81	135	189	243	297	351	405	459
Total	3,179	3,185	3,252	3,387	3,548	3,728	3,928	4,144	4,384	4,645	4,922

* Excluding School Lands Public/Separate Schools under the Thames Valley Public School Board and the London District Catholic School Board

- Growth in 2024 assumed to be 6 based on new accounts already added in to the analysis for 2024
- Growth in each future year assumes 50% of new properties will generate stormwater revenue in the first year (due to various times throughout the year that units will be occupied and begin being billed)
- Quantum of the Growth Forecast based on D.C. growth forecast targets, adjusted for anticipated timing of new units

Customer Forecast – Land Area Categories



Customers	2025	2026	2027	2028	2029	2030	2031	2032	2033
Residential:									
Residential <=0.25 acres	2,135	2,205	2,293	2,395	2,513	2,645	2,793	2,955	3,132
Residential >0.25 & < 1acre	904	911	924	941	961	981	1,004	1,029	1,054
Residential >=1 acre	74	78	84	91	99	109	124	144	165
Non-Residential:									
Non-Residential <=5 acres	118	172	226	280	334	388	442	496	550
Non-Residential >5 & <= 15 acres	11	11	11	11	11	11	11	11	11
Non-Residential >15 acres	10	10	10	10	10	10	10	10	10
Total Customers	3,252	3,387	3,548	3,728	3,928	4,144	4,384	4,645	4,922

- Growth in new residential properties assumes average land sizes to similar existing developments (e.g., Small residential at 0.2 acres, medium at 0.43 acres, Large at 2.3 acres)
- Growth in non-residential properties assumes average land coverage to similar existing developments (e.g., 20% land coverage for new industrial developments, 25% land coverage for new commercial/institutional developments).

Capital Forecast (inflated\$)



Description	Budget 2023	Total	Forecast									
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Capital Expenditures												
Porter Subdivision Watermain Replacement - Phase 2 Stormwater component (Combination with Roads and Water)	420,543	-	-	-	-	-	-	-	-	-	-	-
Porter Subdivision Watermain Replacement - Phase 3 Stormwater component (Combination with Roads and Water)	-	700,000	50,000	-	650,000	-	-	-	-	-	-	-
Upper Queen Street/Railway Street - Design	-	1,050,000	150,000	900,000	-	-	-	-	-	-	-	-
2022 & Prior Year Commitments	440,238	-	-	-	-	-	-	-	-	-	-	-
Storm Pond Inspections	-	60,000	-	-	-	60,000	-	-	-	-	-	-
Thorndale Industrial Drain	-	1,700,000	-	-	1,700,000	-	-	-	-	-	-	-
Thorndale Road/King Street Urbanization	-	877,900	-	420,000	457,900	-	-	-	-	-	-	-
Dale Drive Reconstruction	-	225,000	-	-	-	25,000	200,000	-	-	-	-	-
Mill Road Urbanization	-	725,000	-	-	-	-	-	-	50,000	675,000	-	-
Studies:	-	-	-	-	-	-	-	-	-	-	-	-
Stormwater Rate Study	-	105,000	-	-	-	-	41,000	-	-	-	-	64,000
Asset Management:	-	-	-	-	-	-	-	-	-	-	-	-
Stormwater Facilities	-	183,000	-	-	-	-	74,000	-	-	-	109,000	-
Linear Inventory	-	55,000	-	-	55,000	-	-	-	-	-	-	-
Manholes	-	-	-	-	-	-	-	-	-	-	-	-
Catch Basins	-	7,000	-	-	-	-	-	7,000	-	-	-	-
Total Capital Expenditures	\$860,781	\$5,687,900	\$200,000	\$1,320,000	\$2,862,900	\$85,000	\$315,000	\$7,000	\$50,000	\$675,000	\$109,000	\$64,000
Capital Financing												
Provincial/Federal Grants	846,795	3,020,000	-	1,320,000	1,700,000	-	-	-	-	-	-	-
Middlesex County Loan Requirements	-	935,000	-	-	935,000	-	-	-	-	-	-	-
Lifecycle Reserve Fund	13,986	1,732,900	200,000	-	227,900	85,000	315,000	7,000	50,000	675,000	109,000	64,000
Total Capital Financing	\$860,781	\$5,687,900	\$200,000	\$1,320,000	\$2,862,900	\$85,000	\$315,000	\$7,000	\$50,000	\$675,000	\$109,000	\$64,000

- Debt Assumed to be required in 2026 through a loan from the County of Middlesex
- OCIF Grant Funding assumed for 2025 & 2026
- Reserve Funding anticipated to fund the balance of the Capital program

Operating Forecast (inflated\$)



Description	Actual 2023	Forecast										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	
Expenditures												
<u>Operating Costs</u>												
Benefits	3,340	2,911	2,351	2,400	2,500	2,600	2,700	2,800	2,900	3,000	3,100	
Studies / Assessments / Surveys	17,444	45,000	5,000	5,200	5,400	5,600	5,800	6,000	6,200	6,400	6,600	
Sub-Contract / Contracted Services	1,674	35,000	35,000	36,100	37,200	38,300	39,400	40,600	41,800	43,100	44,400	
Wages - Regular	17,327	9,617	9,622	9,900	10,200	10,500	10,800	11,100	11,400	11,700	12,100	
Sub Total Operating	\$39,786	\$92,528	\$51,973	\$53,600	\$55,300	\$57,000	\$58,700	\$60,500	\$62,300	\$64,200	\$66,200	
<u>Capital-Related</u>												
New Non-Growth Related Loan (Principal)	-	-	-	-	62,333	62,333	62,333	62,333	62,333	62,333	62,333	
New Non-Growth Related Loan (Interest)	-	-	-	-	-	-	-	-	-	-	-	
New Non-Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-	-	
New Non-Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-	-	
Lifecycle Charge - Reserve Contribution (\$)	138,486	132,780	293,098	359,706	380,262	482,294	607,956	761,605	857,810	966,446	1,087,533	
Sub Total Capital Related	\$138,486	\$132,780	\$293,098	\$359,706	\$442,595	\$544,628	\$670,290	\$823,938	\$920,143	\$1,028,779	\$1,149,866	
Total Expenditures	\$178,272	\$225,308	\$345,071	\$413,306	\$497,895	\$601,628	\$728,990	\$884,438	\$982,443	\$1,092,979	\$1,216,066	
Revenues												
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-	-	
Total Operating Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Stormwater Billing Recovery - Operating	\$178,272	\$225,308	\$345,071	\$413,306	\$497,895	\$601,628	\$728,990	\$884,438	\$982,443	\$1,092,979	\$1,216,066	

SWM Rates by Rate Structure Option



Alternative 1 – Status Quo

Stormwater Rate Forecast - Uniform Flat Rate per Customer
Inflated \$

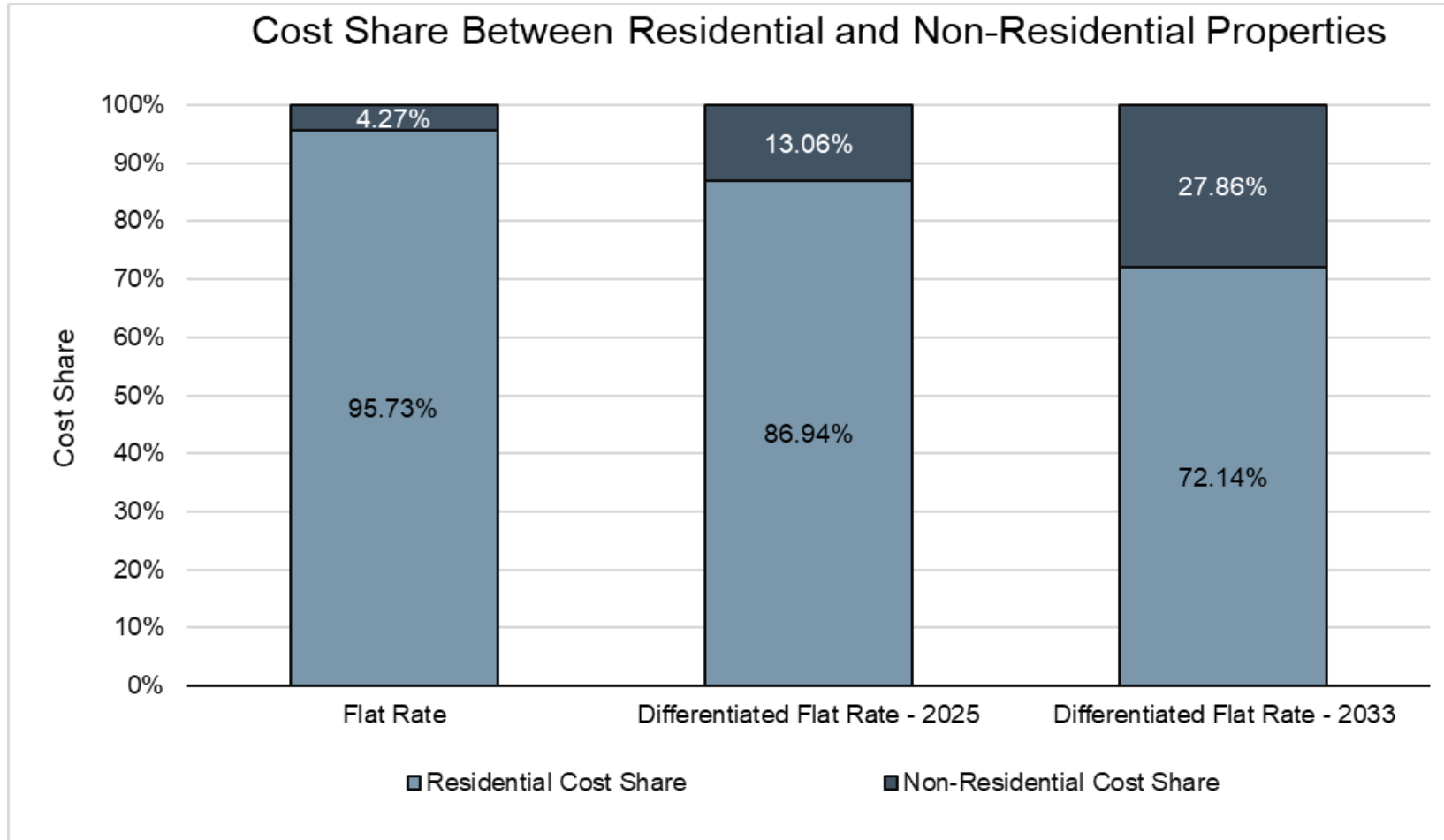
Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Total Stormwater Billing Recovery	\$178,272	\$225,308	\$345,071	\$413,306	\$497,895	\$601,628	\$728,990	\$884,438	\$982,443	\$1,092,979	\$1,216,066
Total Number of Properties	2,615	3,185	3,252	3,387	3,548	3,728	3,928	4,144	4,384	4,645	4,922
Uniform Flat Annual Rate	\$68.16	\$70.74	\$106.11	\$122.03	\$140.33	\$161.38	\$185.59	\$213.43	\$224.10	\$235.30	\$247.07
Uniform Flat Monthly Rate	\$5.68	\$5.90	\$8.84	\$10.17	\$11.69	\$13.45	\$15.47	\$17.79	\$18.67	\$19.61	\$20.59
Annual Percentage Change - Per Property		4%	50.0%	15.0%	15.0%	15.0%	15.0%	15.0%	5.0%	5.0%	5.0%

Alternative 2 – Differentiated Flat Rate (by Use and Property Size)

Description	2025 Number of Customers	2025	2026	2027	2028	2029	2030	2031	2032	2033
Residential <0.25 Acre	2,135	\$72.03	\$81.28	\$91.94	\$104.24	\$118.50	\$134.97	\$140.54	\$146.49	\$152.97
Residential >0.25 and <1 acre	904	\$144.07	\$162.56	\$183.87	\$208.49	\$236.99	\$269.95	\$281.09	\$292.98	\$305.94
Residential > 1acre	74	\$216.10	\$243.84	\$275.81	\$312.73	\$355.49	\$404.92	\$421.63	\$439.48	\$458.91
Non Res <5 Acre	118	\$265.00	\$299.01	\$338.21	\$383.49	\$435.93	\$496.54	\$517.03	\$538.92	\$562.75
Non Res >5 Acre < 15 Acre	11	\$530.00	\$598.02	\$676.43	\$766.99	\$871.85	\$993.09	\$1,034.07	\$1,077.84	\$1,125.51
Non Res >15 Acre	10	\$795.00	\$897.03	\$1,014.64	\$1,150.48	\$1,307.78	\$1,489.63	\$1,551.10	\$1,616.76	\$1,688.26

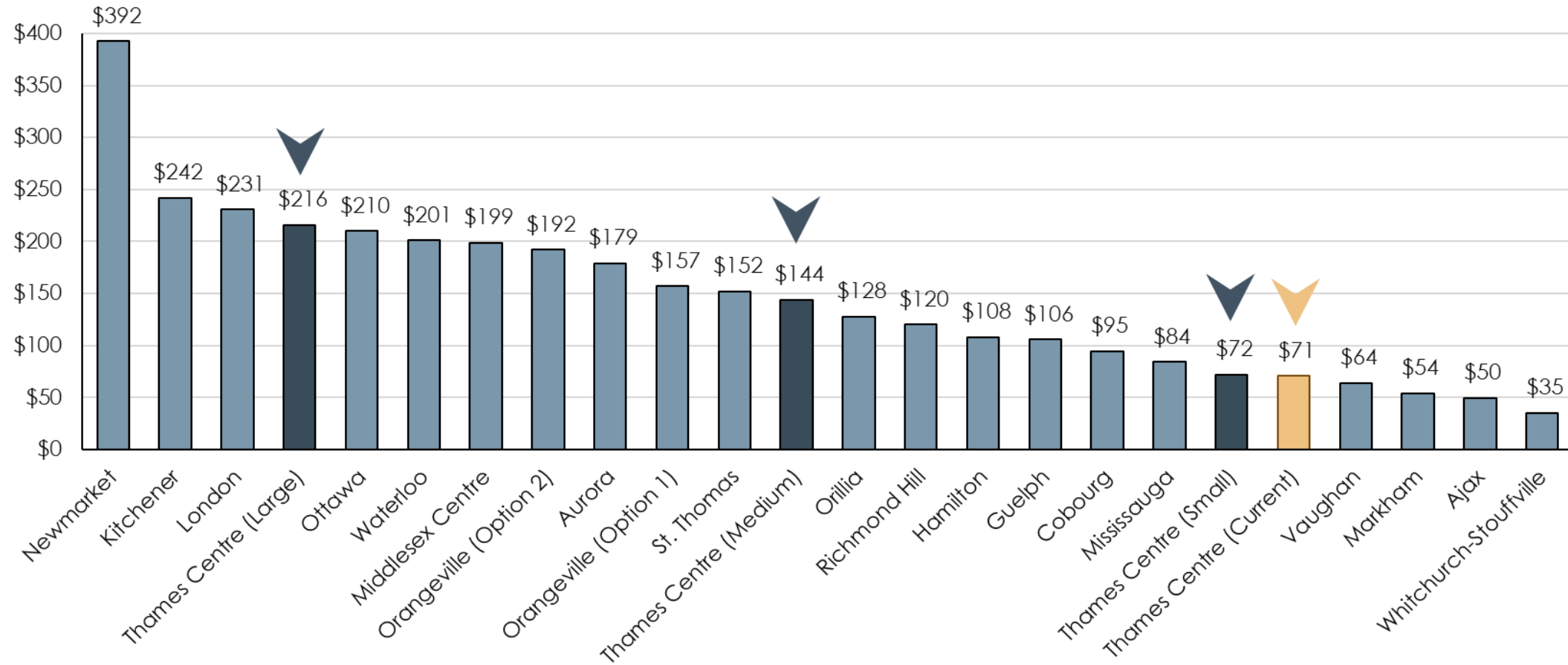
Percentage Increase			13%	13%	13%	14%	14%	4%	4%	4%
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Cost Share Between Residential and Non-Residential Properties



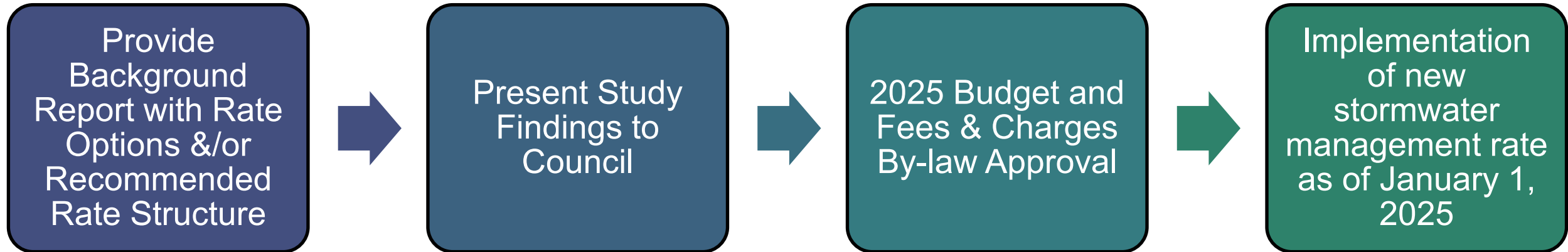
- Uniform Rate – Majority of burden is on residential properties
- Differentiated Flat Rate - Shift in cost allocation from residential to non-residential

Survey of Stormwater Rates



- The comparison is based on rates imposed on an average single detached home that is 0.25 acres in size, therefore, the Thames Centre Medium and Large proposed rates are being compared to small properties.
- Orangeville has not implemented a dedicated rate for 2024, Options have been provided to their Council for consideration with the 2025 budget.

Next Steps





Questions?