

Clause 4 in Report No. 18 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on December 14, 2017.

4

2018 Budget – Environmental Services

Committee of the Whole recommends:

1. Receipt of the presentation by Erin Mahoney, Commissioner of Environmental Services.
2. Adoption of the following recommendations contained in the report dated November 21, 2017 from the Commissioner of Finance:
  1. The Committee of the Whole recommends the budget as submitted for Environmental Services as follows:
    - a. The 2018 operating budget as summarized in Attachment 1
    - b. The 2018 capital expenditures and the 2018 Capital Spending Authority, as summarized in Attachment 2
  2. The recommended budget be consolidated by the Treasurer for consideration for Council approval on December 14, 2017.
  3. The Regional Solicitor be directed to prepare the necessary water and wastewater rate bylaws to incorporate the discounted wastewater rates reflected in the budget.
  4. Regional Council authorize the revised terms of settlement contained in Private Attachment 1, which was presented at the December 7, 2017 Committee of the Whole meeting regarding the Administration cost escalation for the York Durham Sewage System Co-Owners' Agreement.

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Report dated November 21, 2017 from the Commissioner of Finance now follows:

## 1. Recommendations

It is recommended that:

1. The Committee of the Whole recommends the budget as submitted for Environmental Services as follows:
  - a. The 2018 operating budget as summarized in Attachment 1
  - b. The 2018 capital expenditures and the 2018 Capital Spending Authority, as summarized in Attachment 2.
2. The recommended budget be consolidated by the Treasurer for consideration for Council approval on December 14, 2017.
3. The Regional Solicitor be directed to prepare the necessary water and wastewater rate bylaws to incorporate the discounted wastewater rates reflected in the budget.
4. Regional Council authorize the revised terms of settlement contained in Private Attachment 1 for the Administration cost escalation regarding the York Durham Sewage System Co-Owners' Agreement.

## 2. Purpose

This report provides a summary of the 2018 Operating and Capital Budget for Environmental Services for consideration by Committee.

## 3. Background and Previous Council Direction

On [December 15, 2016](#) Council approved an operating outlook for 2018

As part of the 2017-2018 Budget, Council approved an outlook for the operating budget for 2018. This approved outlook formed the starting point for this year's budget. Evolving circumstances and emerging pressures are a natural part of a multi-year budget process. Absent of extraordinary pressures, departments were expected to stay within their outlook. The 2018 operating budget reflects any revisions that have been made to the previously approved outlook.

The 2018 Budget was tabled on November 16, 2017

The consolidated 2018 Operating and Capital Budget was tabled with Council on November 16, 2017. It was received and referred to the December meetings of Committee of the Whole for consideration and recommendation.

The 2018 Budget Direction report, approved by Council on [May 18, 2017](#), outlined the proposed timelines and indicated that the 2018 budget would be approved in December 2017, as long as Council is satisfied with it through the review process.

A one-year operating budget was tabled for Council's consideration

The operating budget presented is a one-year budget for the remaining year of Council's term. Council is asked to approve the budget for 2018.

Multi-year commitments for capital projects are proposed as part of the budget process

Many complex capital projects span several years of planning, design and construction, requiring multi-year spending authority.

Capital Spending Authority is requested for projects with contractual and other clear or certain multi-year commitments. As in previous years, Council is asked to approve multi-year Capital Spending Authority for capital projects.

#### 4. Analysis and Implications

Operating Budget (page 110)

Environmental Services is within the approved outlook

Environmental Services' proposed 2018 budget is within the outlook approved as part of the 2017 Budget.

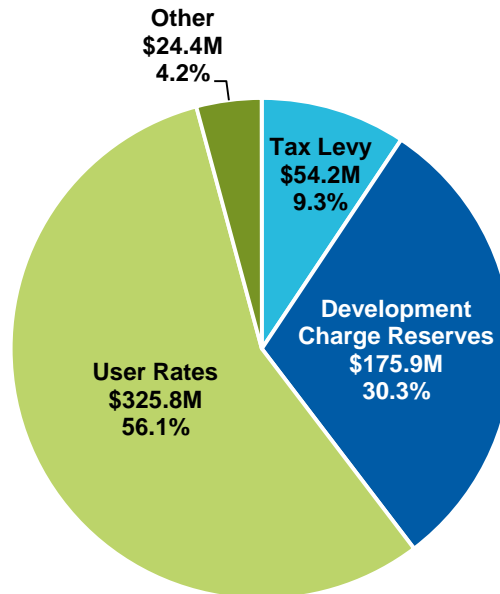
Environmental Services is largely funded through water and wastewater user rates

The budget shows both the gross operating expenditures (total budget) and the net tax levy (the portion of the budget paid for by the tax levy).

Environmental Services' total gross budget for 2018 is \$580.3 million. As shown in Figure 1 below, tax levy pays for 9.3% of the services provided by Environmental Services (primarily Waste Management and Forestry). Most of the expenditures

are funded from water and wastewater user rates and draws from the development charge reserve.

**Figure 1**  
**Gross Expenditures by Funding Sources**

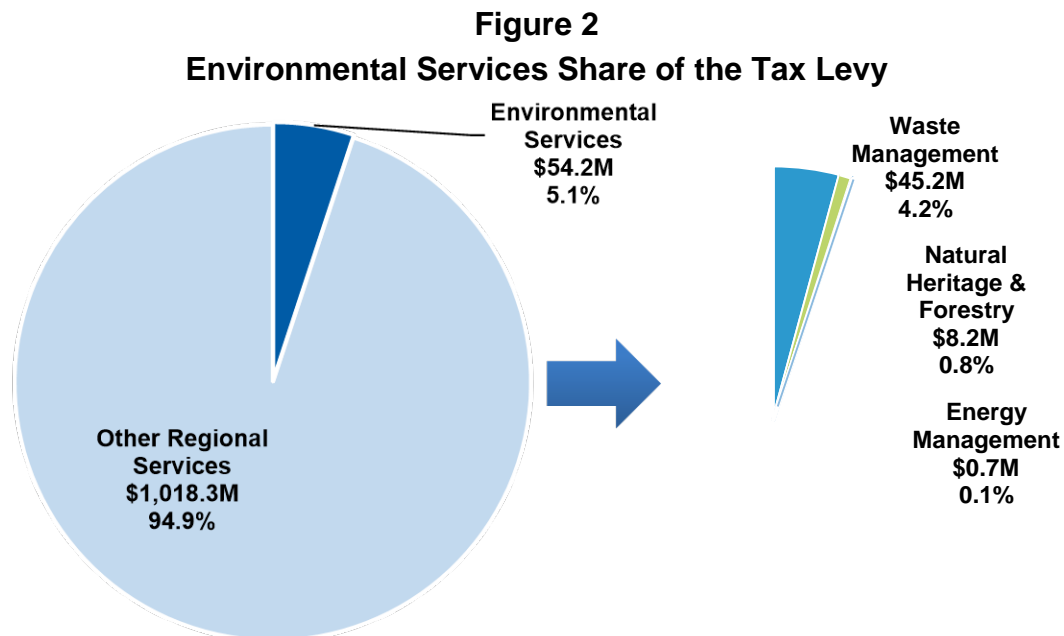


The proposed 2018 budget for Environmental Services reflects net operating expenditures of \$54.2 million

The 2018 operating budget includes the cost of providing:

- Base services
- Legislated and contractual requirements
- Fiscal strategy requirements
- Impact of capital
- Growth
- Service enhancements

The proposed net budget for Environmental Services is \$54.2 million, or 5.1% of the total 2018 proposed Regional net operating budget, as shown in Figure 2 below.



Attachment 1 summarizes the proposed gross and net operating budgets for 2018.

Approved water and wastewater user rates are expected to achieve full cost recovery in 2021

In [October 2015](#), Council approved multi-year user rates that are expected to achieve full cost recovery in 2021. The approved user rates provide funds for increased asset replacement and rehabilitation expenditures, and eliminate the need to issue rate-supported debt in the future. The capital budget includes over \$1 billion in spending on asset replacement and rehabilitation over the next ten years. The new rate structure also fairly distributes capital replacement costs over time, through equal per capita contributions once full cost recovery is achieved in 2021.

New wastewater discount rates will form part of the updated wastewater bylaw to be approved early in 2018

A Region-wide 1:1 ratio is used to bill for wastewater volumes based on water consumption in each local municipality. The wastewater bylaw, which is updated annually, has also included a discounted rate for certain communities with some homes serviced by septic systems.

The Region is reviewing the volume of wastewater it bills to two local municipalities for customers who receive municipal water, but dispose of

wastewater using on-site private septic systems. This review is being completed in consultation with the Town of East Gwillimbury and the City of Vaughan. With continuing growth of municipal servicing in these communities, the percentage of residents on septic systems has decreased and continues to do so. Consultation with these two local municipalities and results of the review informed the 2018 Budget and will be reflected in the next wastewater bylaw.

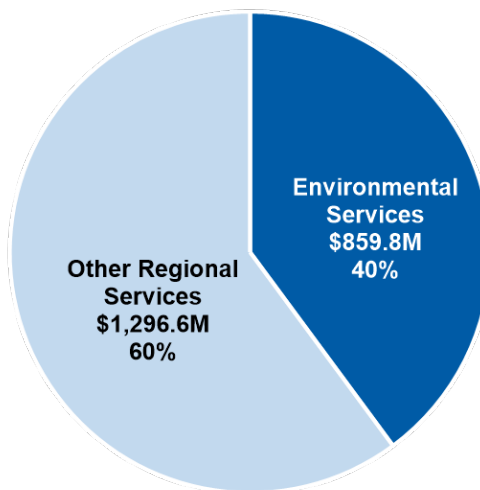
### Capital Budget (page 116)

Approval of 2018 capital expenditures of \$153.9 million and Capital Spending Authority of \$859.8 million is requested for Environmental Services

The capital budget includes new infrastructure projects in support of growth, rehabilitation and replacement of existing infrastructure and service enhancement.

The proposed Capital Spending Authority for Environmental Services is \$859.8 million, or 40% of the total 2018 Capital Spending Authority, as shown below in Figure 3.

**Figure 3**  
**Environmental Services Share of Capital Spending Authority**



In recent years, major capital investments have focused on securing long-term water supplies from the City of Toronto and the Region of Peel and removing major wastewater system conveyance and treatment constraints by building the new Southeast Collector and expanding the Duffin Creek Plant. The \$2.5 billion Ten-Year Capital Plan and requested CSA focuses on providing additional capacity and rehabilitating and replacing aging infrastructure.

Attachment 2 summarizes the 2018 Capital Spending Authority by program and shows the associated funding sources for Environmental Services. Details on the individual capital projects in Environmental Services are available in the 2018 Budget book starting on page 281.

Environmental Services capital budget includes \$7.7 million for Conservation Authorities

The Environmental Services capital budget also includes watershed initiatives of \$7.7 million for 2018, managed by the two Conservation Authorities for the Region, namely the Toronto Region Conservation Authority and the Lake Simcoe Region Conservation Authority. This work is funded through water and wastewater user rates. Administrative expenditures for both Conservation Authorities are funded by the Region's tax levy. This administrative portion of the Conservation Authorities budget totals \$6.2 million in 2018 and was presented for consideration on November 30, 2017 as part of the 2018 Budget – Conservation Authorities report.

The budget is informed by Council-approved strategies and plans

The 2018 budget for Environmental Services reflects the directions and strategies set out in Vision 2051, the York Region Official Plan 2010, the SM4RT Living Integrated Waste Master Plan, the Greening Strategy, the Energy Conservation and Demand Management Plan, and the Forest Management Plan. The budget also supports the Environmental Services objectives outlined in the 2015 to 2019 Strategic Plan. The approved Water and Wastewater Master Plan has provided input into the 2017 development charge bylaw update and informed the 2018 capital budget and 10-year capital expenditures.

## 5. Financial Considerations

The net operating budget for Environmental Services totals \$54.2 million in 2018, as summarized in Attachment 1.

The proposed 2018 Capital Spending Authority reflects a multi-year commitment of \$859.8 million, as summarized in Attachment 2. Expenditures not identified as part of Capital Spending Authority but contained within the Ten-Year Capital Plan are provided for planning purposes and will be brought forward for formal approval in subsequent budget years.

## 6. Local Municipal Impact

The Region provides essential services to the residents and businesses in York Region. The challenge of meeting growing demands for service and improving service delivery is addressed through the Region's business planning process. The Region's investments support local municipalities.

Consultation with the Town of East Gwillimbury and City of Vaughan has been instrumental in reviewing and updating the discounted wastewater rates.

## 7. Conclusion

This report sets out the proposed 2018 budget for Environmental Services. To facilitate the completion of the budget process, it is recommended that the Committee's recommendations be forwarded to Council for consideration on December 14, 2017.

For more information on this report, please contact Kelly Strueby, Director, Office of the Budget, at 1-877-464-9675 ext. 71611.

The Senior Management Group has reviewed this report.

November 21, 2017

Attachments (2)

Private Attachment (1)

8020565

Accessible formats or communication supports are available upon request



## 2018 Budget Summary for Enviromental Services

Proposed Operating Budget Expenditures

(in \$000s)

|  | Page<br>No. | 2018 Budget    |               |
|--|-------------|----------------|---------------|
|  |             | Gross          | Net           |
| Waste Management <sup>1</sup>              | 110         | 65,887         | 45,207        |
| Water & Wastewater Services <sup>1</sup>   | 110         | 504,048        | -             |
| Natural Heritage and Forestry <sup>1</sup> | 110         | 9,382          | 8,239         |
| Energy Management                          | 110         | 953            | 745           |
| <b>Total<sup>2</sup></b>                   | <b>110</b>  | <b>580,270</b> | <b>54,192</b> |

<sup>1</sup> Includes Contributions to Capital

<sup>2</sup> Numbers may not add due to rounding

Note: Net operating expenditures are tax levy funded

**2018 Capital Expenditures and Capital Spending Authority (CSA)  
Environmental Services**

| <b>Water</b>                      | <b>Page No.</b> | <b>2018<br/>\$000s</b> | <b>2018 CSA<br/>\$000s</b> |
|-----------------------------------|-----------------|------------------------|----------------------------|
| <b>Program Expenditures:</b>      |                 |                        |                            |
| Rehabilitation and Replacement    | 116             | 39,595                 | 89,757                     |
| Growth                            | 116             | 25,868                 | 82,688                     |
| <b>Total Program Expenditures</b> |                 | <b>65,463</b>          | <b>172,445</b>             |
| <b>Funding Sources:</b>           |                 |                        |                            |
| Asset Replacement Reserves        | 116             | 38,061                 | 88,193                     |
| Development Charge Reserves       | 116             | 24,068                 | 61,539                     |
| Other Recoveries                  | 116             | 3,334                  | 3,364                      |
| Planned Debenture Proceeds        | 116             | -                      | 19,349                     |
| <b>Total Funding Sources</b>      |                 | <b>65,463</b>          | <b>172,445</b>             |

| <b>Wastewater</b>                 | <b>Page No.</b> | <b>2018<br/>\$000s</b> | <b>2018 CSA<br/>\$000s</b> |
|-----------------------------------|-----------------|------------------------|----------------------------|
| <b>Program Expenditures:</b>      |                 |                        |                            |
| Rehabilitation and Replacement    | 116             | 55,931                 | 528,905                    |
| Growth                            | 116             | 24,721                 | 146,168                    |
| <b>Total Program Expenditures</b> |                 | <b>80,652</b>          | <b>675,073</b>             |
| <b>Funding Sources:</b>           |                 |                        |                            |
| Asset Replacement Reserves        | 116             | 55,628                 | 476,139                    |
| Development Charge Reserves       | 116             | 23,534                 | 123,616                    |
| Other Recoveries                  | 116             | 1,490                  | 55,556                     |
| Planned Debenture Proceeds        | 116             | -                      | 19,762                     |
| <b>Total Funding Sources</b>      |                 | <b>80,652</b>          | <b>675,073</b>             |

| <b>Waste Management</b>           | <b>Page No.</b> | <b>2018 \$000s</b> | <b>2018 CSA \$000s</b> |
|-----------------------------------|-----------------|--------------------|------------------------|
| <b>Program Expenditures:</b>      |                 |                    |                        |
| Rehabilitation and Replacement    | 116             | 1,864              | 2,219                  |
| Growth                            | 116             | 780                | 4,895                  |
| <b>Total Program Expenditures</b> |                 | <b>2,644</b>       | <b>7,114</b>           |
| <b>Funding Sources:</b>           |                 |                    |                        |
| Program Specific Reserves         | 116             | 2,592              | 6,605                  |
| Development Charge Reserves       | 116             | 52                 | 509                    |
| <b>Total Funding Sources</b>      |                 | <b>2,644</b>       | <b>7,114</b>           |

| <b>Natural Heritage and Forestry</b> | <b>Page No.</b> | <b>2018 \$000s</b> | <b>2018 CSA \$000s</b> |
|--------------------------------------|-----------------|--------------------|------------------------|
| <b>Program Expenditures:</b>         |                 |                    |                        |
| Natural Heritage and Forestry        | 116             | 1,486              | 1,486                  |
| <b>Funding Sources:</b>              |                 |                    |                        |
| Pay-As-You-Go Tax Levy               | 116             | 800                | 800                    |
| Development Charge Reserves          | 116             | 686                | 686                    |
| <b>Total Funding Sources</b>         |                 | <b>1,486</b>       | <b>1,486</b>           |

| <b>Energy Management</b>     | <b>Page No.</b> | <b>2018 \$000s</b> | <b>2018 CSA \$000s</b> |
|------------------------------|-----------------|--------------------|------------------------|
| <b>Program Expenditures:</b> |                 |                    |                        |
| Energy Management            | 116             | 3,670              | 3,705                  |
| <b>Funding Sources:</b>      |                 |                    |                        |
| Asset Replacement Reserves   | 116             | 3,670              | 3,705                  |
| <b>Total Funding Sources</b> |                 | <b>3,670</b>       | <b>3,705</b>           |

An illustration on the left side of the slide features a vertical pencil with a white eraser at the top and a small circular window showing the number '7'. Below the pencil is a stack of several books with green covers and white pages. The background is a light green gradient.

# Environmental Services 2018 Business Plan and Budget

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Presentation to

**Committee of the Whole**

**Erin Mahoney**

December 7, 2017

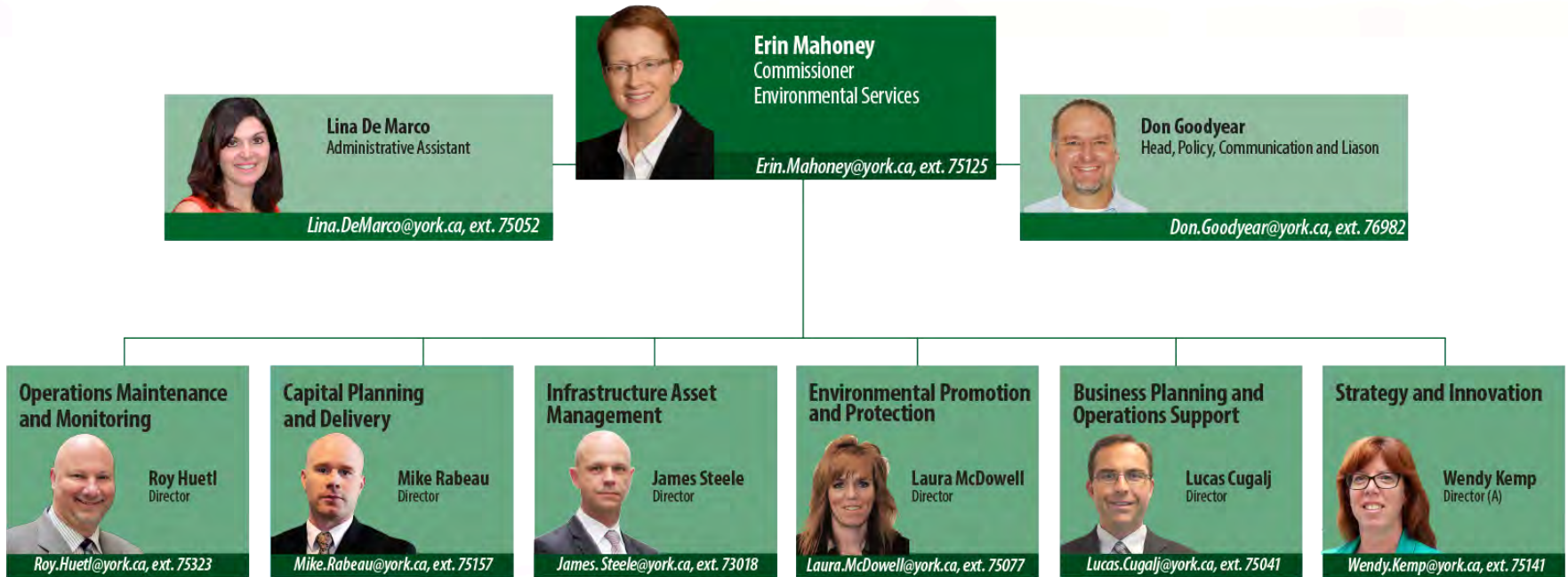


# Environmental Services



Vital every day to live, work and play in York Region

# Environmental Services



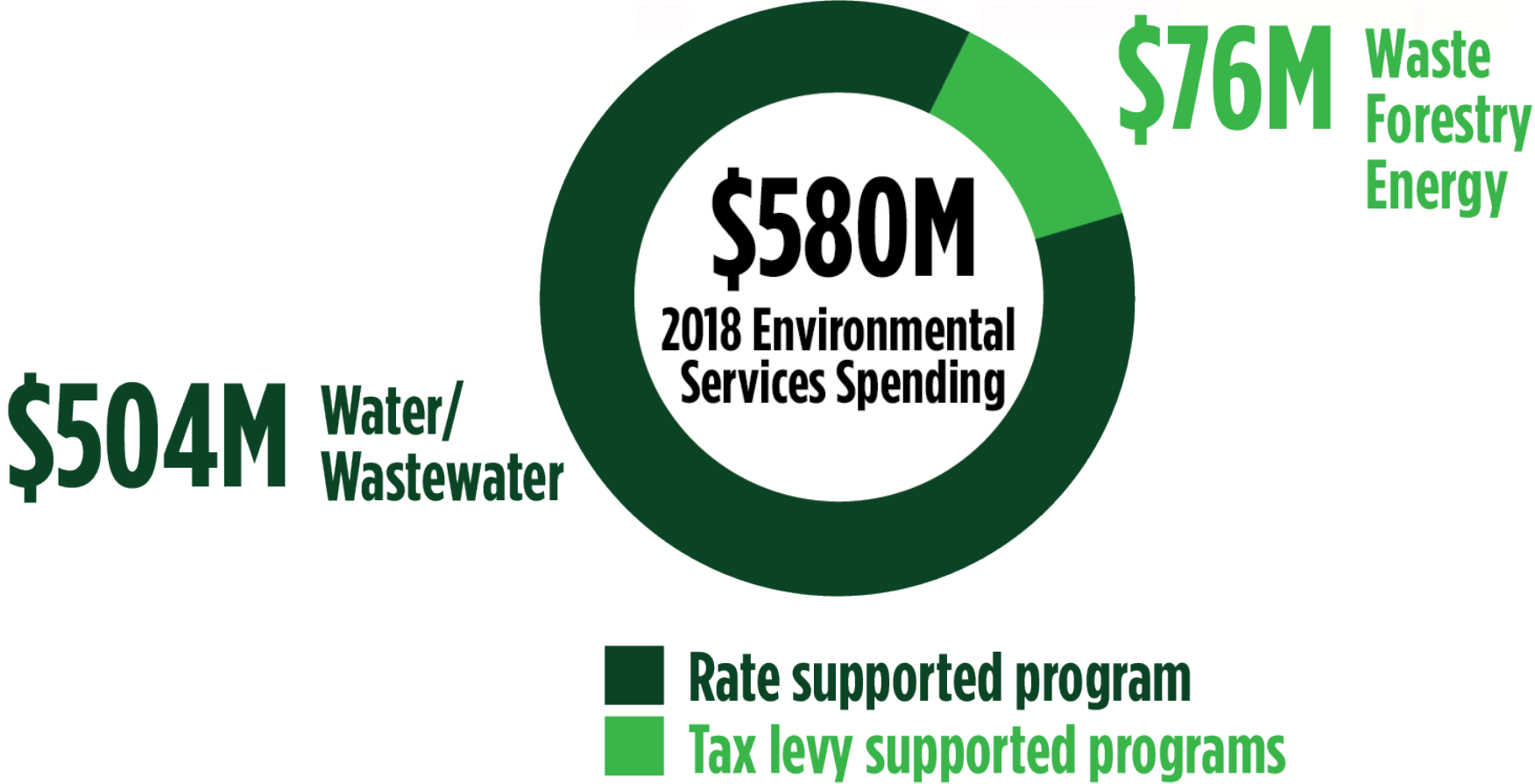
Driving excellence as a visible global leader in environmental services for our strong, safe, sustainable communities

# Departmental Accomplishments



Environmental Services is leading the charge

# 2018 Operating Gross Spending





# Overview of 2018 Capital Budget



Water and Wastewater accounts for nearly 96% of capital spending in Environmental Services

# Driving Budget Efficiencies



CUTTING COSTS



INCREASING  
REVENUE



OPTIMIZING  
PROCESSES

2018

\$0.7M

\$0.3M

\$0.4M

2015 to 2018

\$10.0M

\$13.5M

\$5.1M

# 2015 – 2019 Strategic Plan Activities

## Environmental Services Department



ECONOMIC  
VITALITY



HEALTHY  
COMMUNITIES



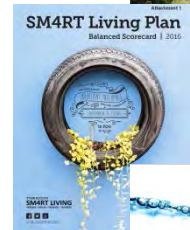
SUSTAINABLE  
ENVIRONMENT



GOOD  
GOVERNMENT

### Community Indicators / Performance Measures

- Maintain percentage of samples that meet Ontario drinking water standard
- Maintain percentage of treated water returned to environment within regulated standards
- Reduce quantity of inflow and infiltration in Regional and local wastewater systems
- Measure percentage of capital budget spent on renewal/asset management
- Increase percentage of solid waste diverted from landfill
- Increased percentage of assets with real condition assessment data
- Average residential water demand (litres / capita / day)



Working together to create strong, caring and safe communities

# Accelerating Innovation to Meet Customer Needs



Environmental Services is bringing innovation to life

# OPERATING

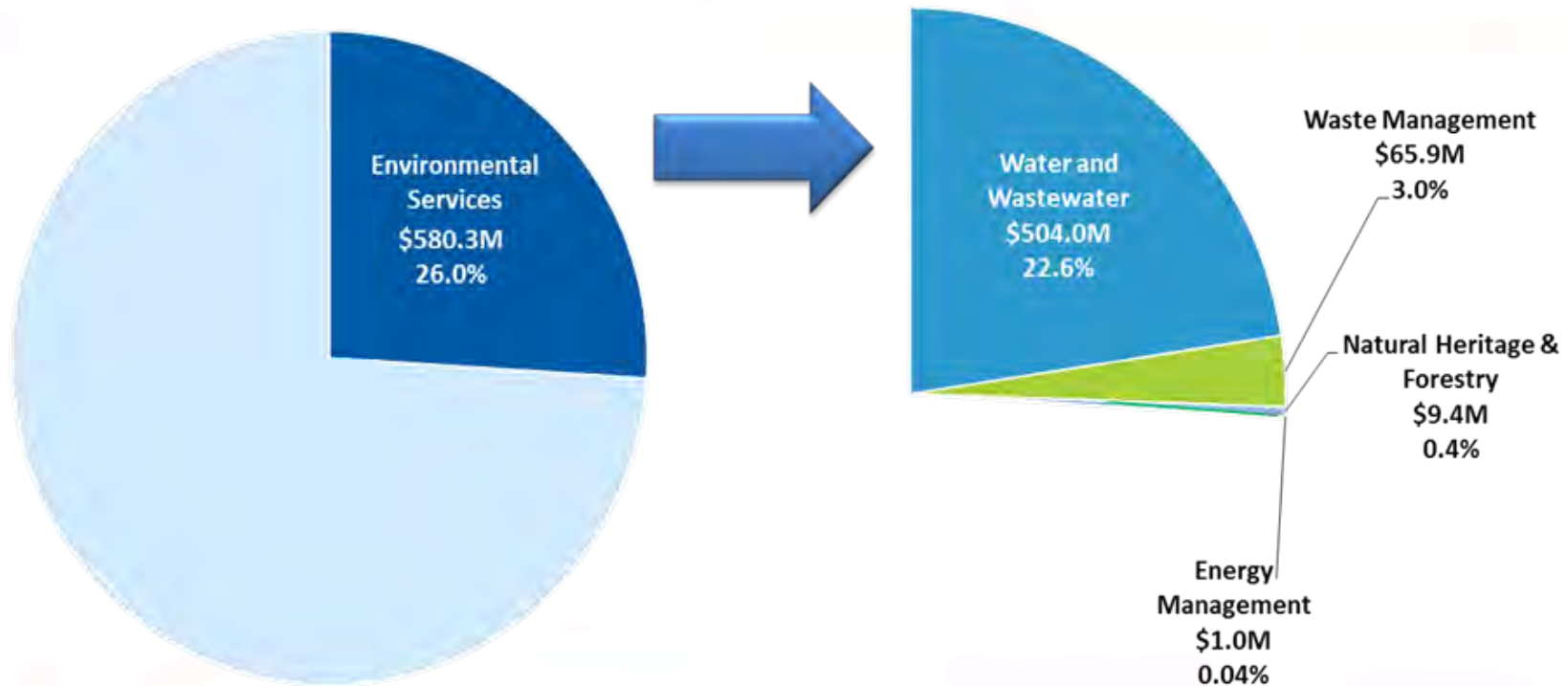
ENVIRONMENTAL SERVICES DEPARTMENT

# Environmental Services: Providing Vital Expertise



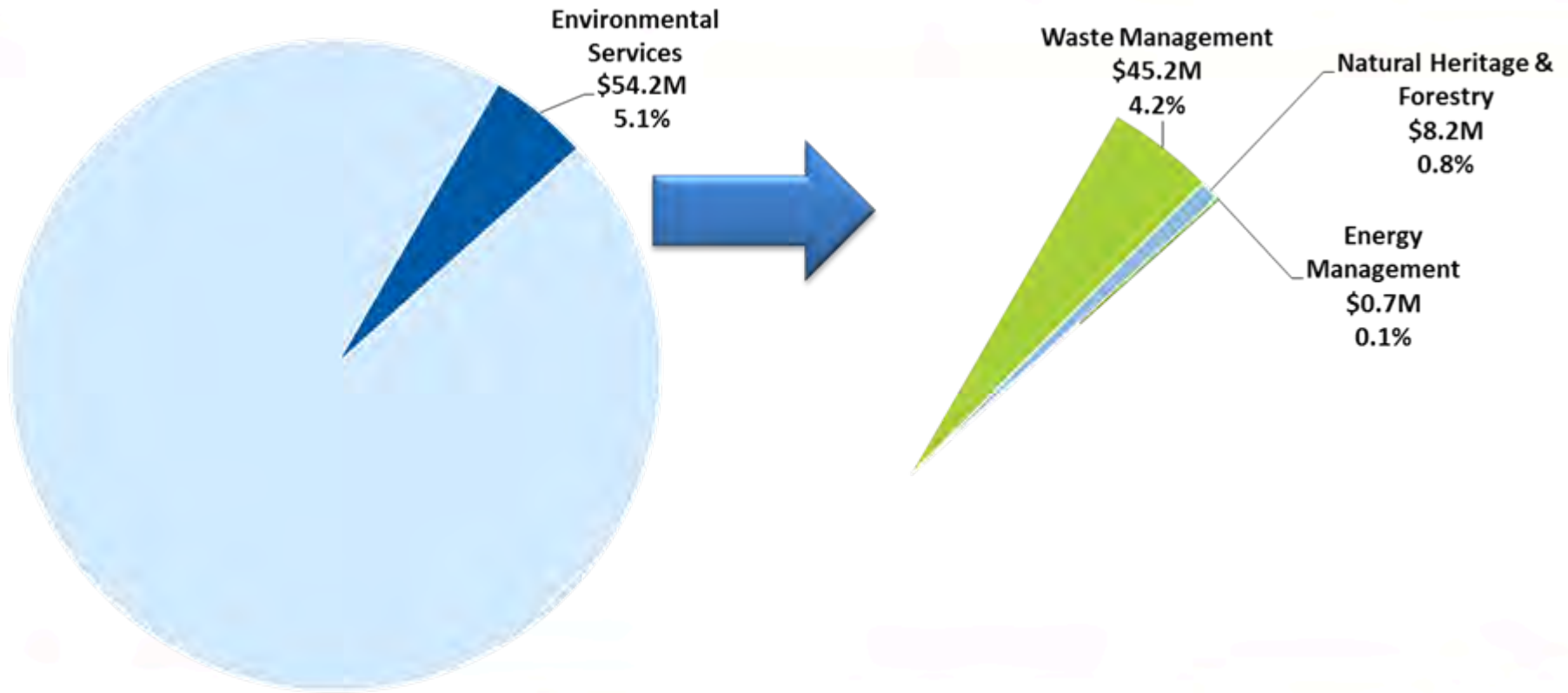
Operating our complex systems 24/7

# 2018 Operating Share of Total Gross Spending



Water and Wastewater accounts for 87% of total gross spending in Environmental Services in 2018

# 2018 Operating Share of Total Net Spending



Environmental Services represents only 5.1% of total Regional net spending



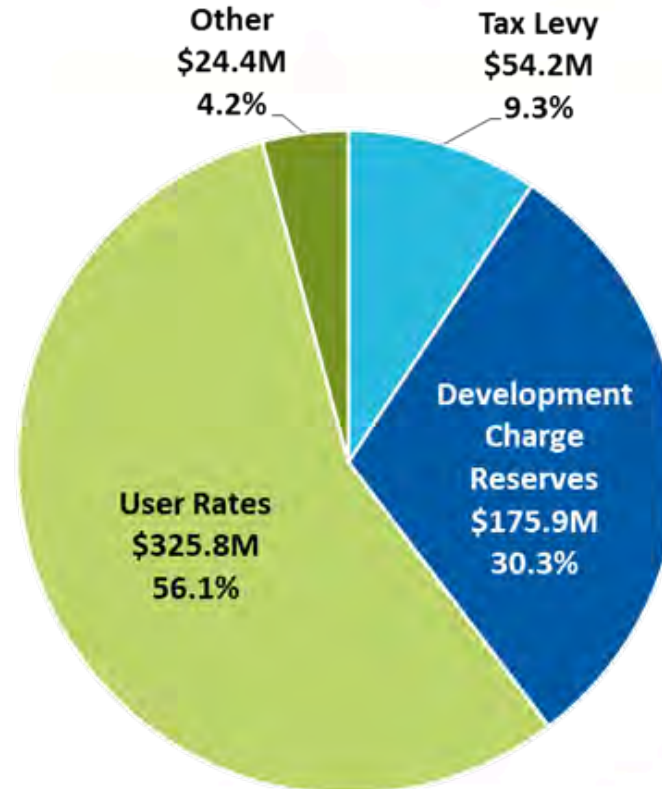
# Operating Budget Summary

|                                      | 2017<br>Approved | 2018<br>Proposed |
|--------------------------------------|------------------|------------------|
| Gross Expenditures (\$M)             | 563.8            | 580.3            |
| Non-Tax Revenues (\$M)               | (511.1)          | (526.1)          |
| Net Expenditures (\$M)               | 52.7             | 54.2             |
| Increase/(Decrease) (year over year) |                  | 2.82%            |
| 2017 Approved Outlook                |                  | 2.82%            |
| Total FTEs                           | 394.0            | 412.0            |
| 2018 New FTEs                        |                  | 18.0             |
| 2017 Approved Outlook New FTEs       |                  | 18.0             |

No changes from 2018 outlook

# How the 2018 Operating Budget is Funded

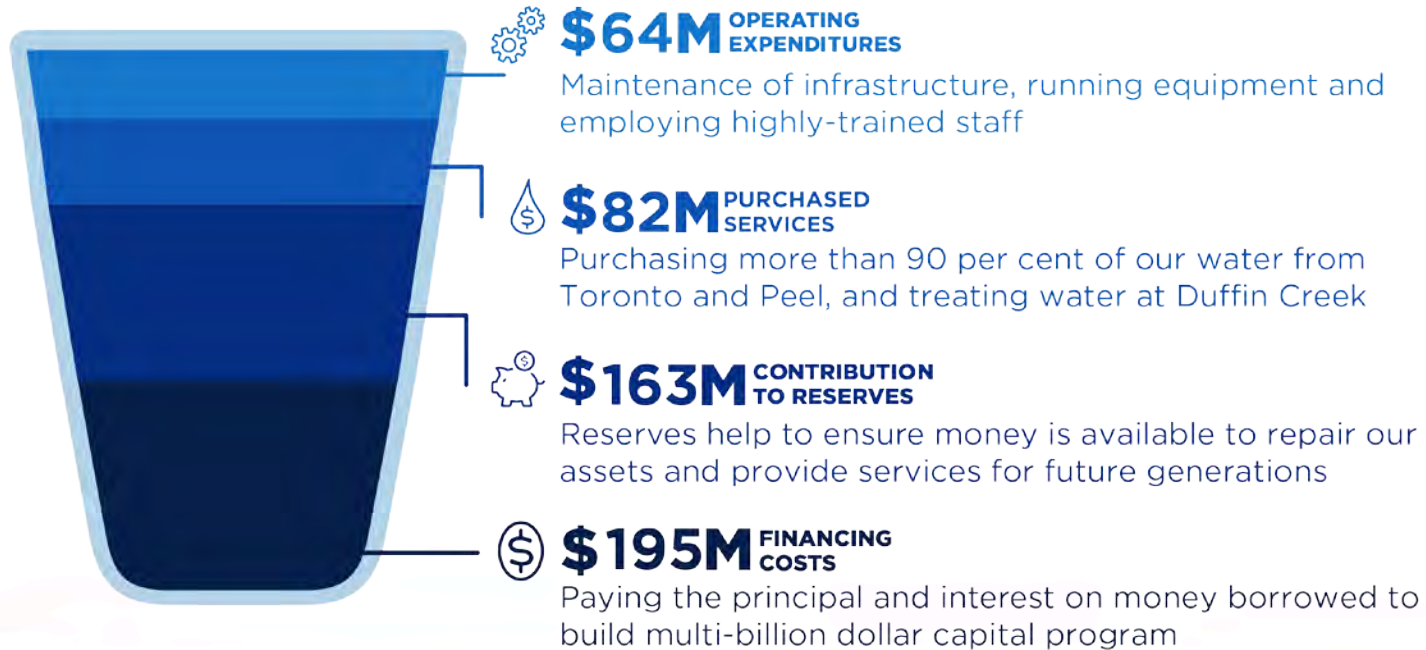
Total Funding Requirements:  
\$580.3M



User rates account for 56.1% of required funding

# Water and Wastewater Costs

What does **\$504 million** pay for in 2018?



Over 71% of gross operating costs relate to financing and reserve contributions

# Sources of Drinking Water

## Sources of York Region Drinking Water 2016

3%  
LAKE  
SIMCOE

7%  
YORK REGION  
GROUNDWATER

90%  
LAKE  
ONTARIO

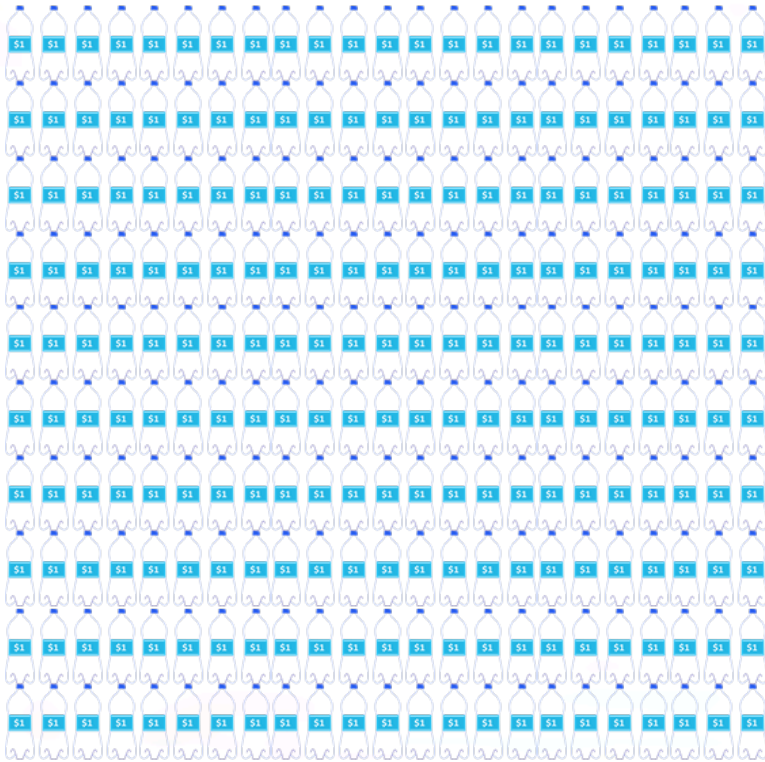
30%  
PEEL  
REGION  
SUPPLY

60%  
CITY OF  
TORONTO  
SUPPLY



90% of drinking water in York Region is purchased from Peel and Toronto

# Water is Affordable



**400 x  
500 ml  
refills**

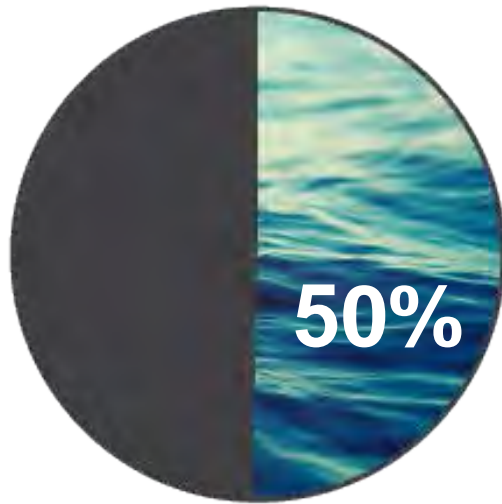
**=**



**\$1 spent on a 500 ml bottle of water refills it 400 times with tap water and includes wastewater costs**

# Leveraging Private and Public Sector Expertise in Delivery

## WATER/WASTEWATER



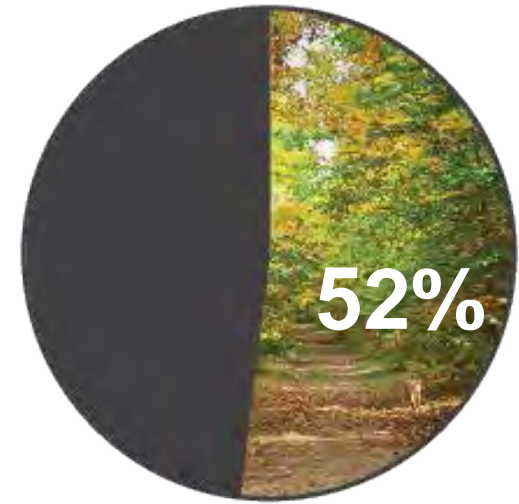
of direct costs are related to purchased water and treatment costs

## WASTE



of waste management costs are third party contracts

## FORESTRY



of direct costs are contracted services for planting, maintenance and partnerships

Diversification is resilience in service delivery

# CAPITAL

ENVIRONMENTAL SERVICES DEPARTMENT

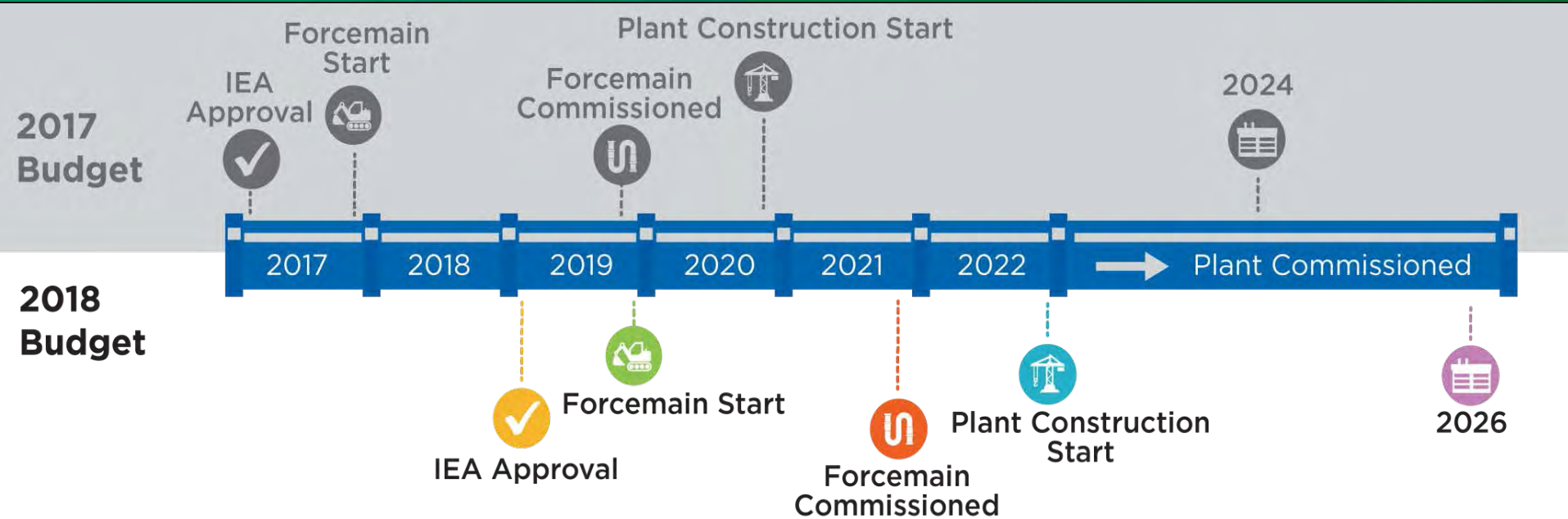
# Continued Commitment to Infrastructure



Managing system risk and performance through sustainable  
asset management



# Upper York Sewage Solutions

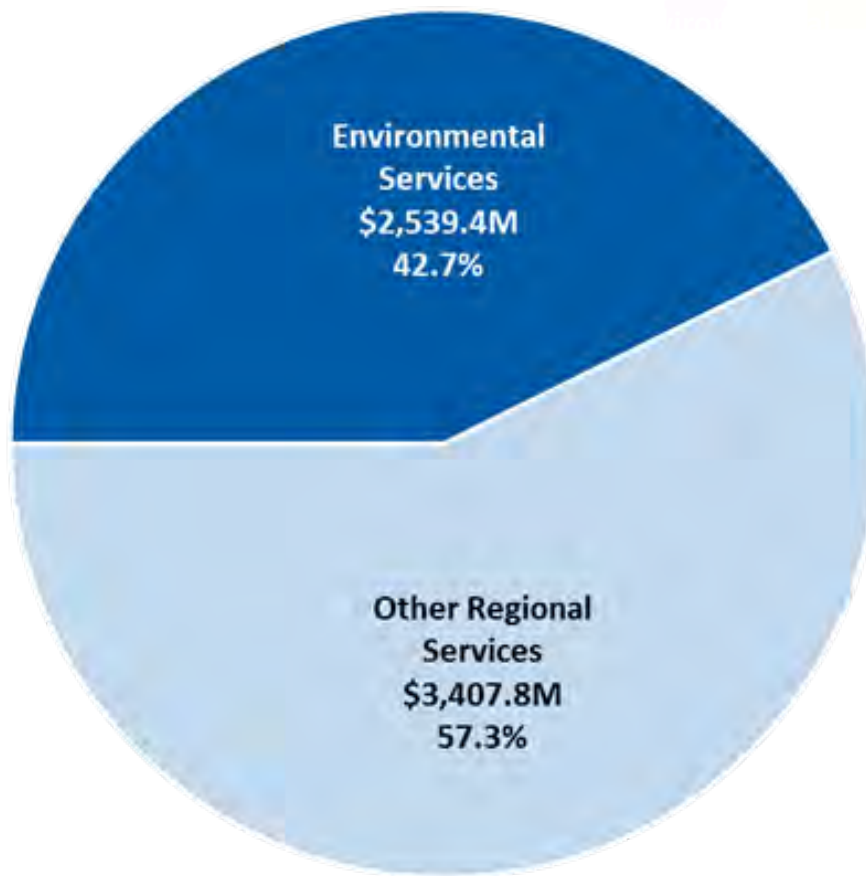


- IEA Approval still outstanding
- Approval now programmed for early 2019

- Property acquired and design advancing
- Two year delay in project completion

Interim strategies budgeted to help mitigate impact

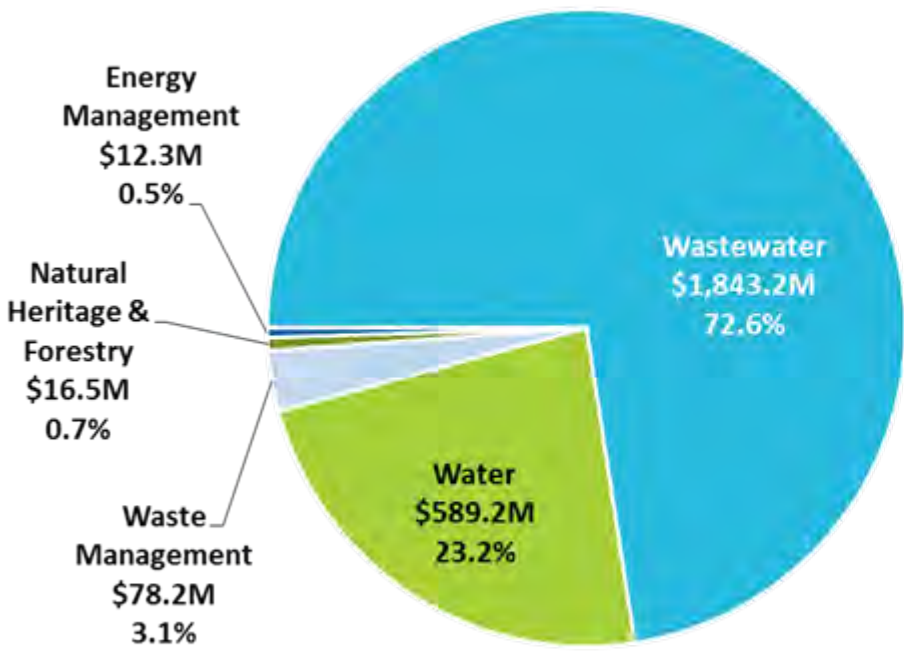
# York Region 10-Year Capital Plan



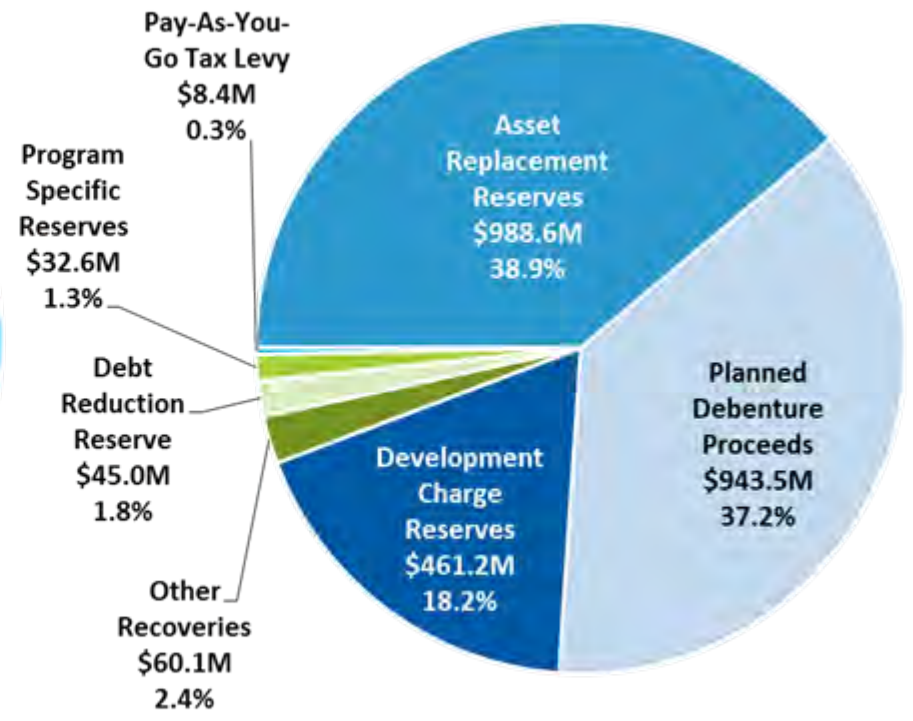
York Region 2018 10-Year  
Capital Plan: \$5,947.2M

# 10-Year Capital Plan Overview

**Gross Expenditures**  
\$2,539.4 Million



**Funding Sources**  
\$2,539.4 Million



# 2018 to 2027 Capital Plan

## **WATER** **\$589M**

Rehabilitation & Replacement  
**\$339M**

North-East Vaughan  
**\$78M**

Toronto and Peel  
Cost Shared  
**\$55M**

Green Lane / Leslie  
Street Watermain  
**\$36M**

## **WASTEWATER** **\$1,843M**

Rehabilitation & Replacement  
**\$687M**

Upper York  
**\$587M**

West Vaughan  
**\$217M**

North-East Vaughan  
**\$118M**

Primary Trunk Sewer  
**\$82M**

## **WASTE** **\$78M**

Rehabilitation & Replacement  
**\$19M**

Source Separated  
Organics Facility  
**\$45M**

Community  
Environmental  
Centre  
**\$7M**

## **FORESTRY** **\$17M**

Street Tree  
Planting  
**\$11M**

Regional Forest  
Property Upgrade  
**\$3M**

Urban Forest  
Studies  
**\$1M**

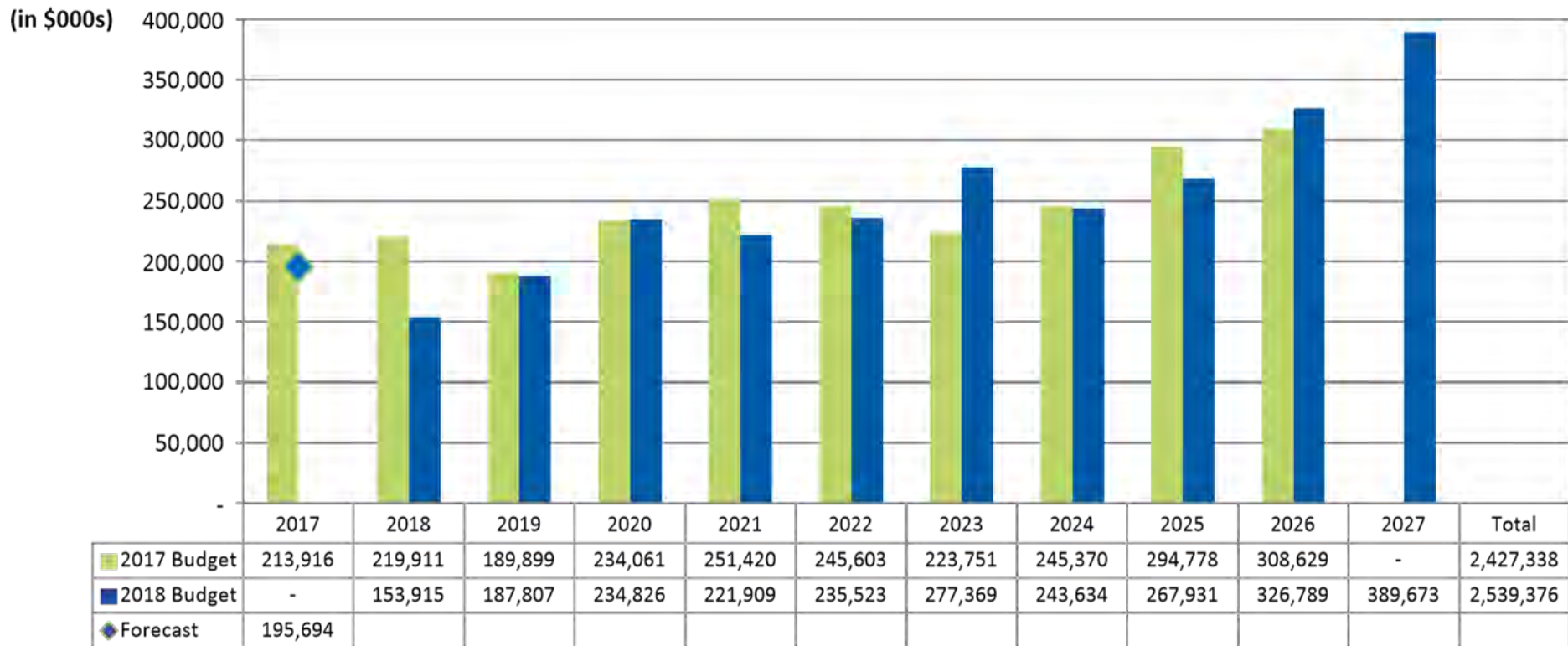
## **ENERGY** **\$12M**

Energy  
Retrofits –  
Various Existing  
Buildings  
**\$12M**

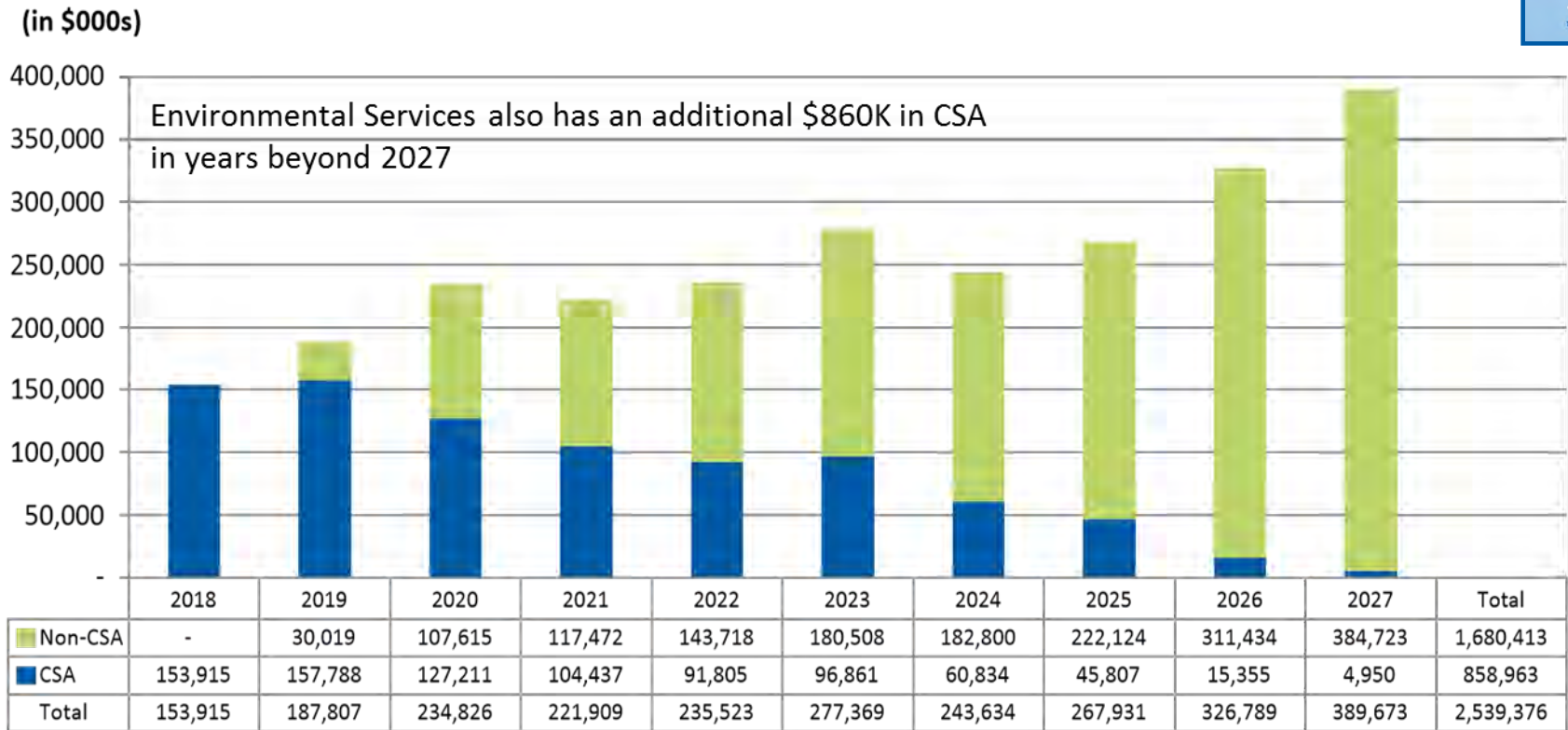


Growing and sustaining over \$6B in built infrastructure

# Comparison of 10-Year Capital Plan 2017 vs. 2018



# 10-Year Capital Plan and Capital Spending Authority (CSA)



# 2018 Proposed Budget Summary

|                                 | 2018       |
|---------------------------------|------------|
| 2018 Net Operating Budget       | \$54.2M    |
| 2018 Capital                    | \$153.9M   |
| 10-Year Capital Plan            | \$2,539.4M |
| 2018 Capital Spending Authority | \$859.8M   |

No change in net operating budget compared to approved outlook

# Services delivered through 2018 budget

Operating & maintaining over **\$6 billion** in assets

Proactively managing over **140 capital projects**

Providing over **120 million cubic metres** of safe drinking water

Managing **387,000 tonnes of waste**

Managing and protecting over **23,000 hectares** of York Regional Forest

**Moving forward** with the Energy Plan to reduce Greenhouse Gas Emissions



# Multi Year Budget Summary

| (\$ in Millions)           | 2015     | 2016     | 2017     | 2018     |
|----------------------------|----------|----------|----------|----------|
|                            | Approved | Approved | Approved | Proposed |
| Gross Expenditures         | 519.8    | 542.9    | 563.8    | 580.3    |
| Net Tax Levy               | 48.8     | 51.1     | 52.7     | 54.2     |
| 10-Year Capital Plan       | 2,261.8  | 2,322.0  | 2,412.2  | 2,539.4  |
| Capital Spending Authority | 1,228.0  | 968.7    | 973.9    | 859.8    |

Departmental business aligned with Corporate Fiscal Strategy

# Budget Recommendations

1. The Committee of the Whole recommends the budget as submitted for Environmental Services as follows:
  - a) The 2018 operating budget as summarized in Attachment 1
  - b) Capital Spending Authority, as summarized in Attachment 2.
2. That the recommended budget be consolidated by the Treasurer for consideration by Council on December 14, 2017.
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Services are vital to meeting customer needs within financial limits