

ENVIRONMENTAL SERVICES

2019 to 2022 Budget



Erin Mahoney | Commissioner, Environmental Services
February 14, 2019

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PROVIDING EVERYDAY SERVICES THROUGH COMPLEX OPERATIONS



DRIVING EXCELLENCE THROUGH OUR PEOPLE



LINA GAMBINO
ADMINISTRATIVE ASSISTANT



ERIN MAHONEY
COMMISSIONER

**STRATEGY
AND INNOVATION**

**OPERATIONS MAINTENANCE
AND MONITORING**

**CAPITAL PLANNING
AND DELIVERY**

**INFRASTRUCTURE
ASSET MANAGEMENT**

**ENVIRONMENTAL PROMOTION
AND PROTECTION**

**BUSINESS PLANNING
AND OPERATIONS SUPPORT**



DAVE SZEPTYCKI
DIRECTOR



ROY HUETL
DIRECTOR



MIKE RABEAU
DIRECTOR



JAMES STEELE
DIRECTOR



LAURA MCDOWELL
DIRECTOR



MICHELLE CANHAM
DIRECTOR

PROTECTING DRINKING WATER



ASSETS - \$2.1 Billion

- 3 Treatment Plants
- 40 Groundwater Wells
- 29 Elevated Tanks
- 22 Pumping Stations
- 16 Storage Reservoirs
- 360 km of Transmission Mains

ACCOMPLISHMENTS

- Achieved some of highest water quality scores in province
- Embraced the One Water concept to improve sustainability and manage costs
- Approved water and wastewater rate structure focusing on full cost recovery pricing in 2021

BUDGET ADDRESSES PRESSURES & RISKS

- Proactive asset management to manage aging and growing asset base

COLLECTING, PUMPING AND TREATING WASTEWATER



ASSETS - \$4.2 Billion

- 6 Water Resource Recovery Facilities
- 1 Treatment Lagoon
- 1 Treatment Plant
- 2 Equalization Tanks
- 8 Odour Control Facilities
- 21 Pumping Stations
- 132 km of Forcemains
- 225 km of Trunk Sewers

ACCOMPLISHMENTS

- “Infra-stretching” unlocks wastewater capacity and helps to reduce spending on new capacity-related infrastructure
- Region received \$34.8 million in Clean Water and Wastewater Funding approval for 29 projects
- Completed the Phosphorus Reduction Action Plan in 2018 to optimize Duffin Creek plant performance

BUDGET ADDRESSES PRESSURES & RISKS

- \$23M included in budget for Interim Servicing Solutions while awaiting advancement of the Upper York project

PROCESSING AND MANAGING WASTE



ASSETS - \$153 Million

- 5 Household Hazardous Waste Depots
- 2 Community Environmental Centres
- 1 Transfer Station
- 1 Material Recovery Facility
- 1 Energy from Waste Facility

ACCOMPLISHMENTS

- Ranked number one in Ontario for waste diversion
- Diverted over 90% of household waste from landfill
- Provided “one-stop-drop” at Community Environmental Centres

BUDGET ADDRESSES PRESSURES & RISKS

- Capital upgrades to Material Recovery Facility to manage volatility of global fibre market
- Actively working to shift management of blue box program and costs from tax levy to full producer responsibility

BUILDING, PROTECTING AND ENHANCING FORESTRY



Forestry

ASSETS - \$488 Million

- 65,000 Street Trees
- 2,400 hectares of York Regional Forest
- Land integral to York Regional Forest
- Forest Stewardship and Education Centre

ACCOMPLISHMENTS

- 1.5 million trees planted since 2001
- Secured 170 hectares of environmental land through partnerships
- Endorsed Green Infrastructure Asset Management Plan

BUDGET ADDRESSES PRESSURES & RISKS

- Ensure compliance with soil specs, watering and tree maintenance activities to increase street tree survival
- Proactive asset management to manage climate change impacts
- Future commissioning of Enhanced Streetscaping projects

MANAGING CORPORATE ENERGY AND ASSETS



ASSETS - \$2 Million

- 21 Solar Arrays
- 7 EV Charging Locations
- 11 Hybrid Vehicles

ACCOMPLISHMENTS

- First Regional Asset Management Plan approved by Council
- Installed and commissioned 16 new solar photovoltaic projects
- Awarded \$570K in funding for ambulance anti-idling project from Federation of Canadian Municipalities

BUDGET ADDRESSES PRESSURES & RISKS

- Assess emerging technologies to reduce energy use
- Building internal staff capacity to ensure leading edge asset management

INVESTING FOR THE FUTURE

TAKES 5 TO 10 YEARS FROM APPROVALS TO INFRASTRUCTURE

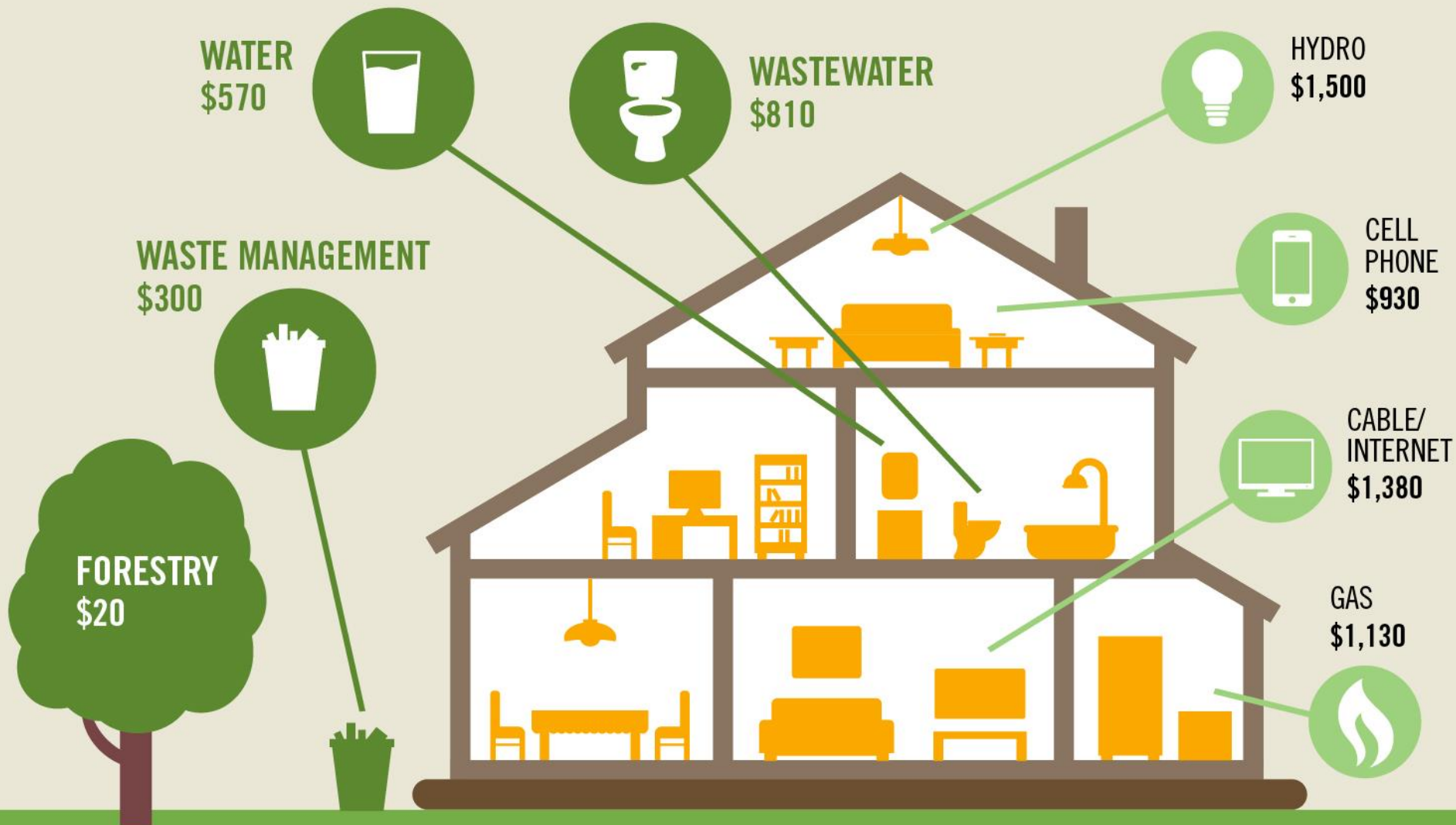


2007



2018

ENSURING AFFORDABLE SERVICES



PROVIDING QUALITY ENVIRONMENTAL SERVICES FOR LESS THAN \$5/DAY PER HOUSEHOLD

HOW DO WE MEASURE UP?

WATER AND WASTEWATER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME

Peel (0.38%)

Halton (0.60%)

York Region (0.71%)

Hamilton (0.71%)

Toronto (0.72%)

Durham (0.78%)

Ottawa (0.78%)

Waterloo (0.97%)

Niagara (1.05%)

Windsor (1.64%)



LEVERAGING PRIVATE AND PUBLIC SECTOR EXPERTISE IN DELIVERY

WATER/WASTEWATER



of direct costs are related to purchased water and treatment costs

WASTE



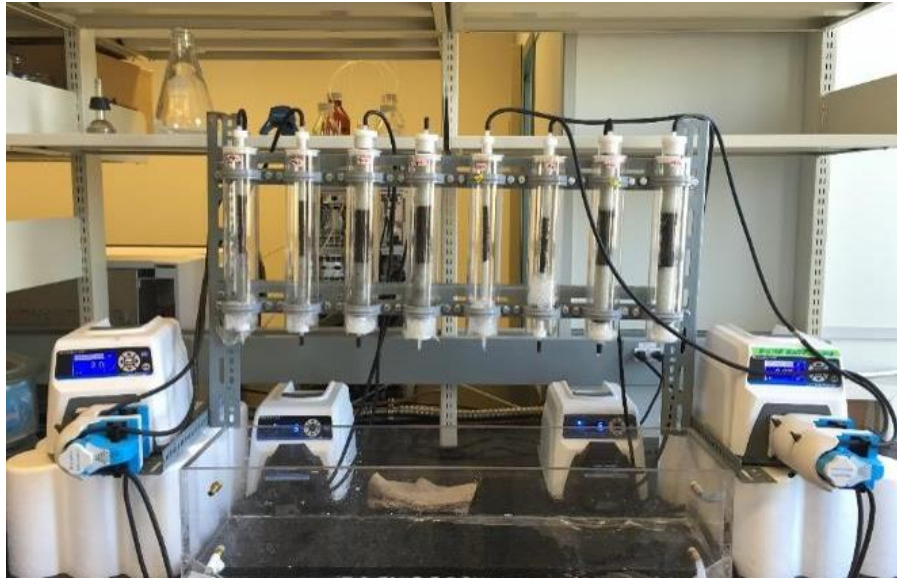
of waste management costs are third party contracts

FORESTRY



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

DRIVING INNOVATION



DRIVING BUDGET EFFICIENCIES



CUTTING COSTS

2019 - \$1.2M

- \$436K in Water and Wastewater
- \$664K in Waste Management
- \$81K in Forestry



INCREASING REVENUE

2019 - \$0.9M

- \$0.9M in increased revenue through increase in fees and charges at Community Environmental Centres



OPTIMIZING PROCESSES

- Automated Drinking Water Compliance Reporting
- Implementation of improved asset management tools
- Gravity Sewer inspections through latest technology

THE BUDGET SUPPORTS THE 2019 TO 2023 STRATEGIC PLAN

The focus and activities of Environmental Services align with the Community Result areas of “Sustainable Environment”, “Healthy Communities” and “Good Government” in the Strategic Plan through its core services:

- Water and Wastewater
- Waste Management
- Forestry
- Energy

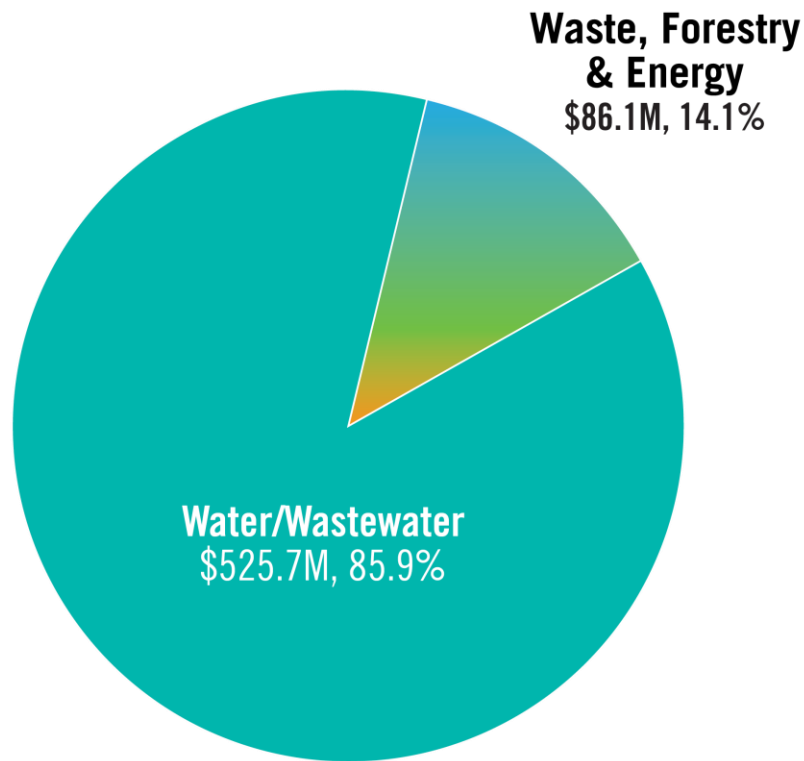


BUDGET OVERVIEW

2019 OPERATING EXPENDITURES

Gross Operating Expenditures

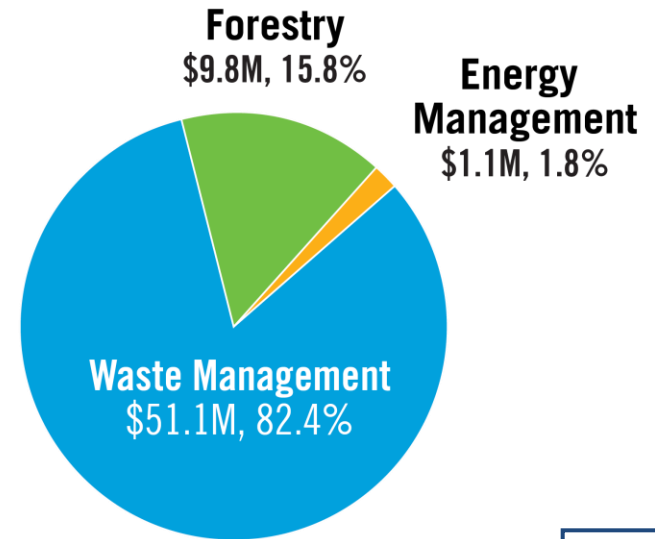
\$611.8M



- Rate supported program
- Tax levy supported programs

Net Tax Levy

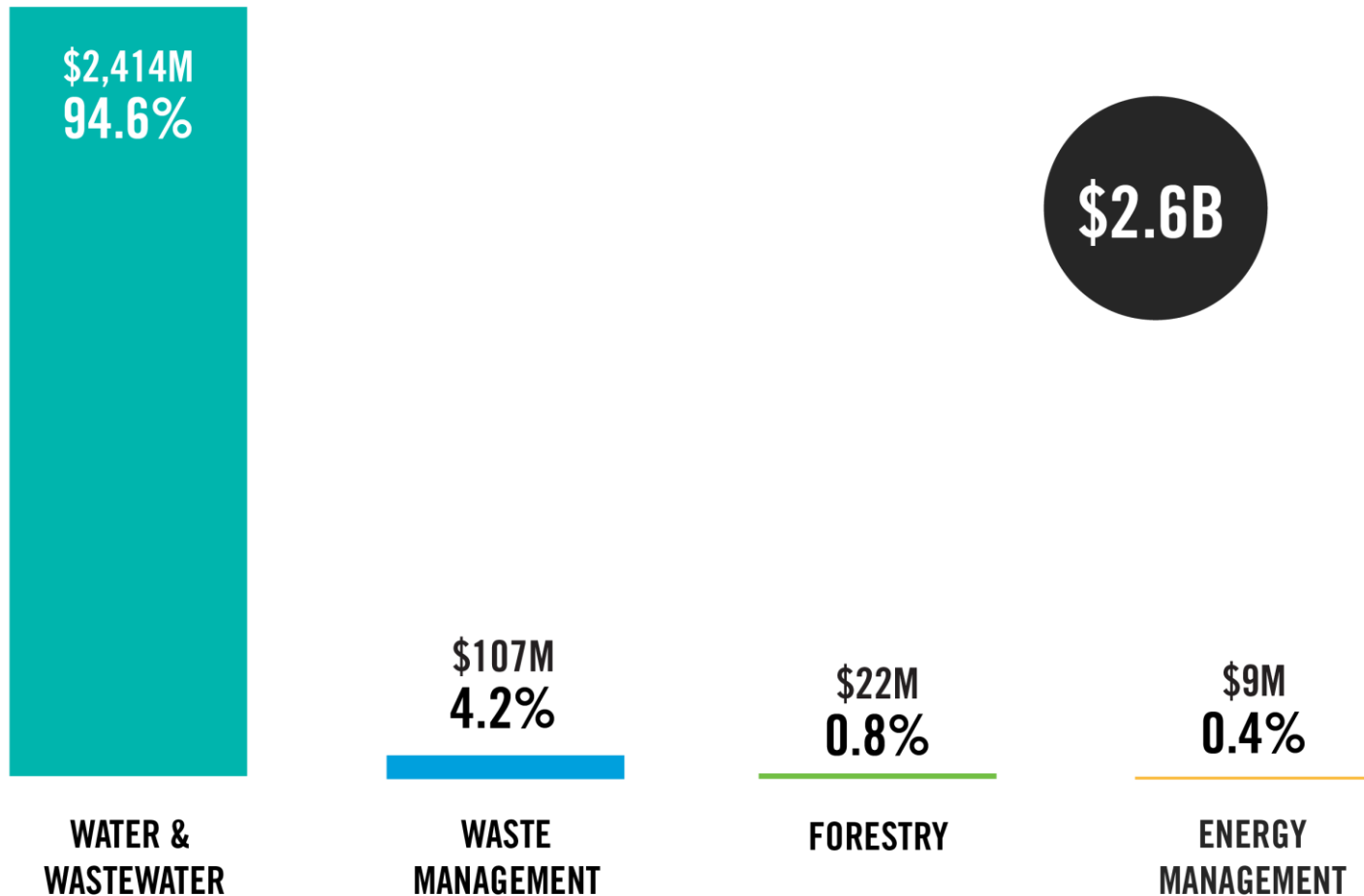
\$62.0M



2019 CAPITAL BUDGET

WATER AND WASTEWATER ACCOUNTS FOR NEARLY 95% OF CAPITAL SPENDING

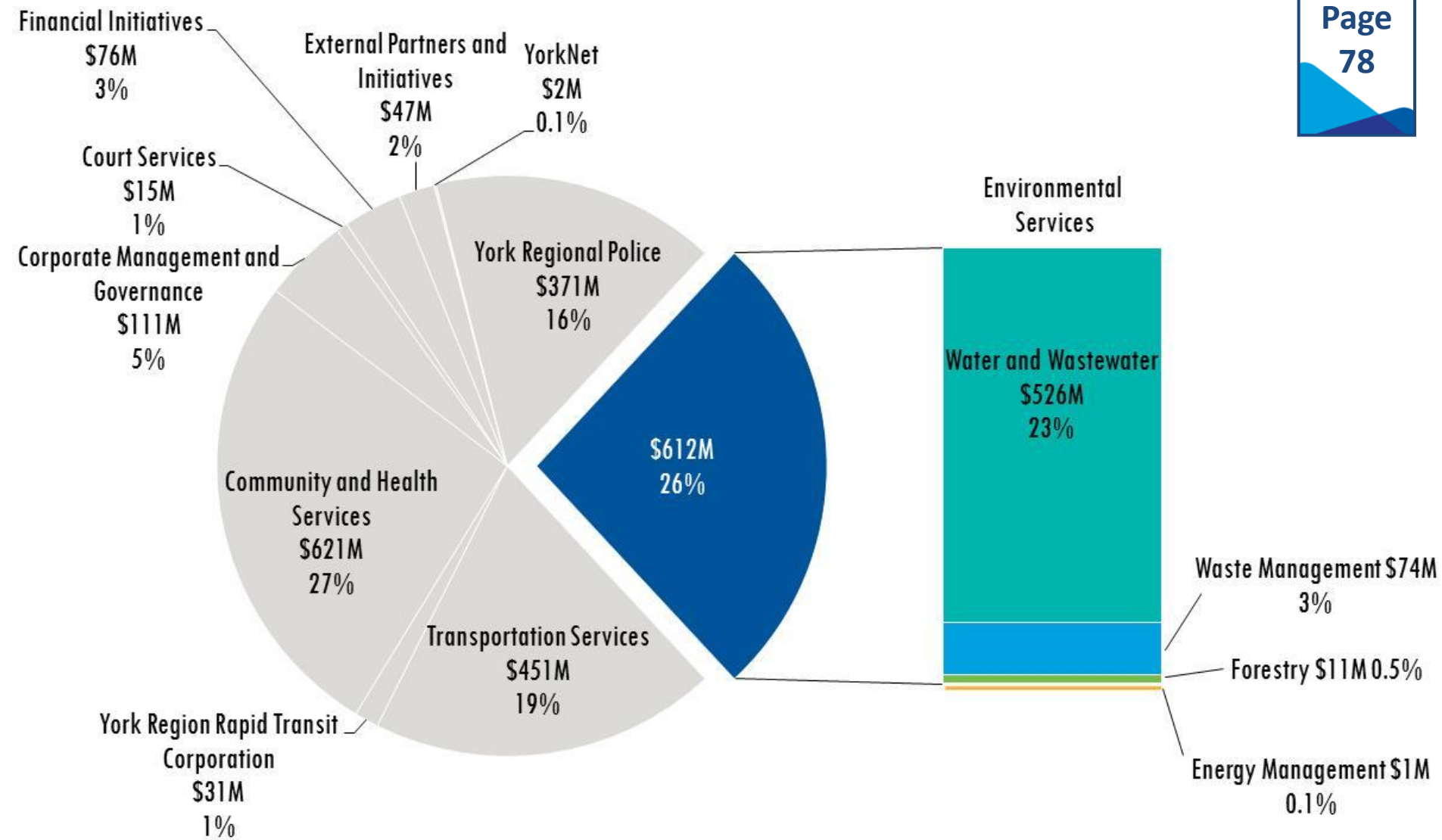
10-YEAR CAPITAL PLAN



OPERATING BUDGET

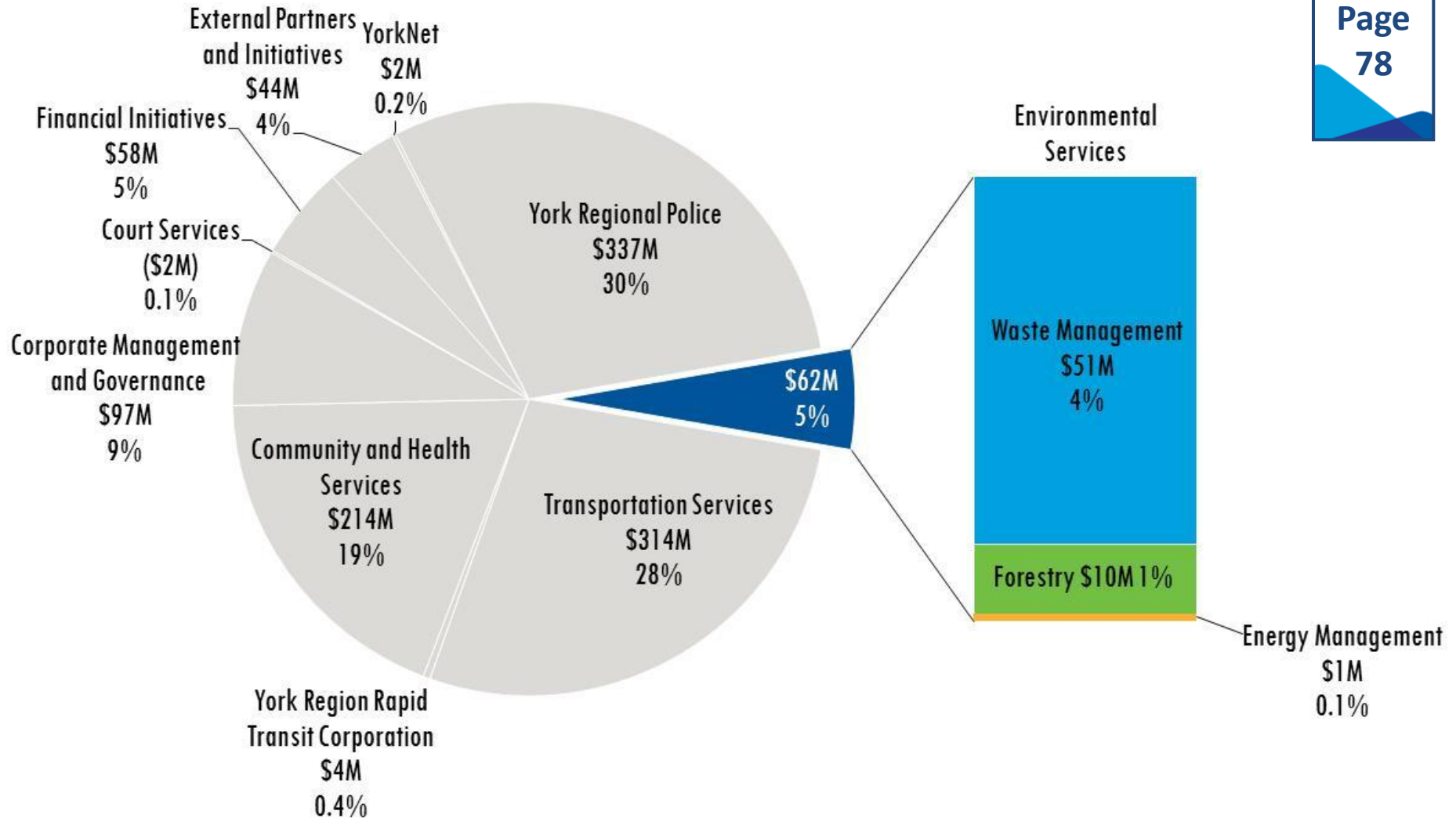
DEPARTMENTAL SHARE OF GROSS EXPENDITURES

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DEPARTMENTAL SHARE OF NET TAX LEVY

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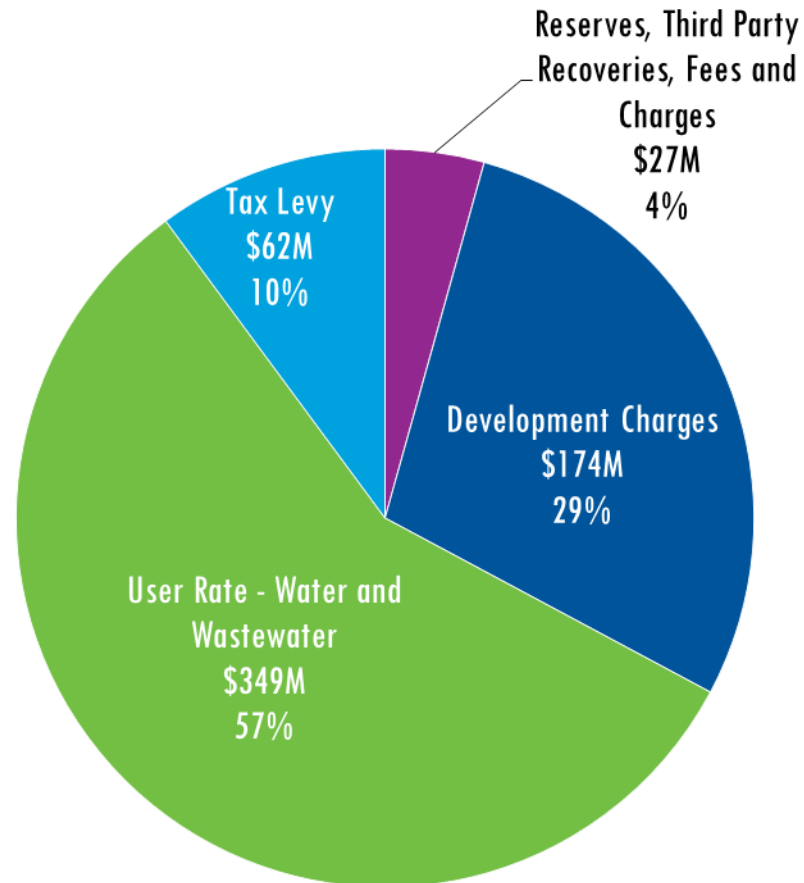


FOUR-YEAR OPERATING BUDGET OVERVIEW

	APPROVED 2018	PROPOSED 2019	OUTLOOK		
	2020	2021	2022		
Gross Expenditures (\$M):					
Water and Wastewater	504.0	525.7	561.1	579.8	601.6
Waste Management	72.8	73.7	75.7	79.0	82.3
Forestry	10.3	10.9	11.6	12.2	13.6
Energy Management	1.4	1.5	1.5	1.5	1.6
	588.5	611.8	649.9	672.5	699.1
Non-Tax Revenues (\$M)	(526.1)	(549.8)	(585.3)	(603.8)	(626.9)
Net Expenditures (\$M)	62.5	62.0	64.6	68.7	72.1
Increase/(Decrease)		-0.8%	4.2%	6.3%	5.1%
FTEs - Total	412.0	428.0	444.0	459.0	474.0
- New		16.0	16.0	15.0	15.0

THE BUDGET IS FUNDED MOSTLY BY USER RATES

Environmental Services' gross spending of \$612M in 2019 is funded through user rates, development charges, tax levy and non-tax revenues



INCREMENTAL ANNUAL BUDGET CHANGES

\$M	PROPOSED	OUTLOOK		
	2019	2020	2021	2022
Status Quo	(14.4)	(21.8)	(11.1)	(9.4)
Efficiencies & Program Reductions	(2.1)	-	(0.1)	-
Capital Reserves & Debt Servicing	(0.4)	0.4	(0.6)	0.1
Fiscal Strategy	14.5	21.4	13.4	9.8
Maintaining Service Levels for Growth	2.0	2.7	2.1	3.0
Enhancement and Transformation	-	-	0.2	-
Budget Change	(0.5)	2.6	4.1	3.5

WATER AND WASTEWATER COSTS

WHAT DOES **\$526 MILLION** PAY FOR IN 2019?



\$70M OPERATING EXPENDITURES

Maintenance of infrastructure, running equipment and employing highly-trained staff

\$83M PURCHASED SERVICES

Purchasing more than 90 per cent of our water from Toronto and Peel, and treating wastewater at Duffin Creek and Peel

\$180M CONTRIBUTION TO RESERVES

Reserves help to ensure money is available to repair our assets and provide services for future generations

\$193M FINANCING COSTS

Paying the principal and interest on money borrowed to build multi-billion dollar capital program

ENSURING AFFORDABLE WATER



Spending
\$1
on water
gets you:

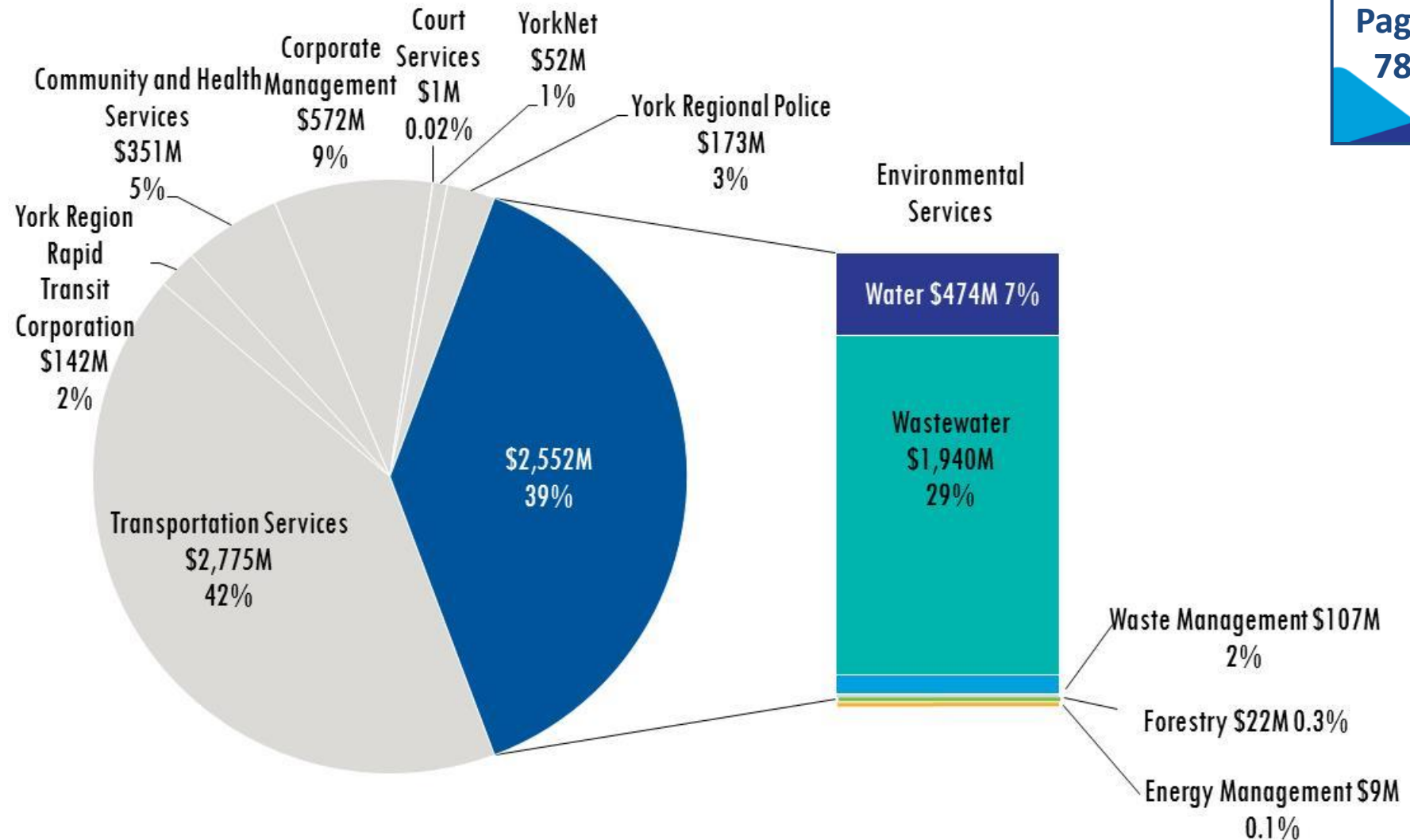
1 OR **650**

bottle of water

bottles of tap water

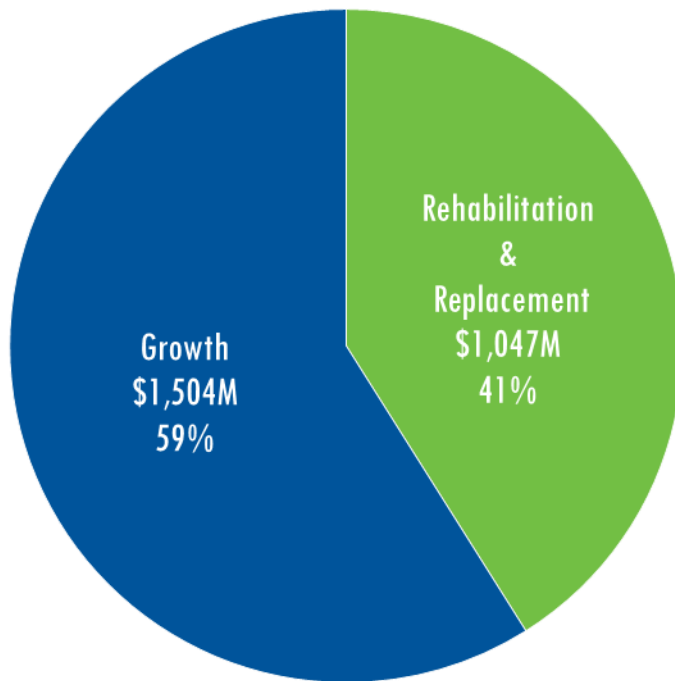
CAPITAL BUDGET

TEN-YEAR CAPITAL IS 39% OF THE REGION'S PLAN

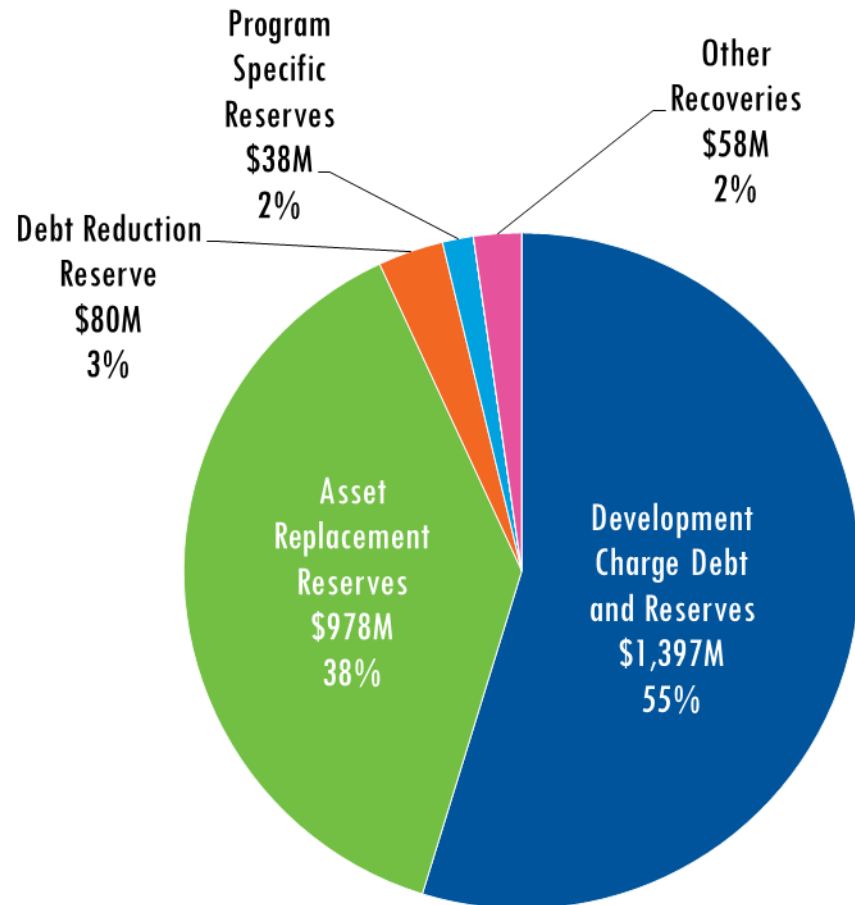


CAPITAL EXPENDITURES AND FUNDING

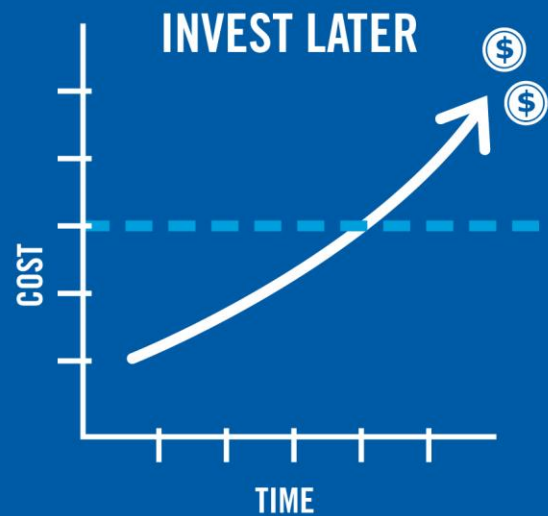
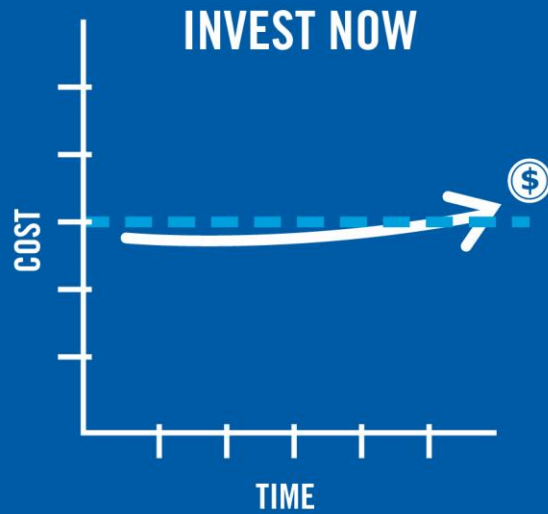
Gross Expenditures
\$2,552 Million



Funding Sources
\$2,552 Million



PROACTIVE COMMITMENT TO INFRASTRUCTURE



2019 TO 2028 CAPITAL PLAN

WATER **\$474M**

Rehabilitation &
Replacement
\$276M

North-East
Vaughan
\$91M

Toronto and Peel
Cost Shared
\$57M

WASTEWATER **\$1,940M**

Rehabilitation &
Replacement
\$739M

Upper York
\$600M

West Vaughan
\$246M

North-East
Vaughan
\$161M

WASTE **\$107M**

Rehabilitation &
Replacement
\$17M

Source
Separated
Organics Facility
\$80M

Markham HHW
Relocation
\$7M

FORESTRY **\$22M**

Street Tree
Planting
\$14M

Regional Forest
Property
Upgrade
\$5M

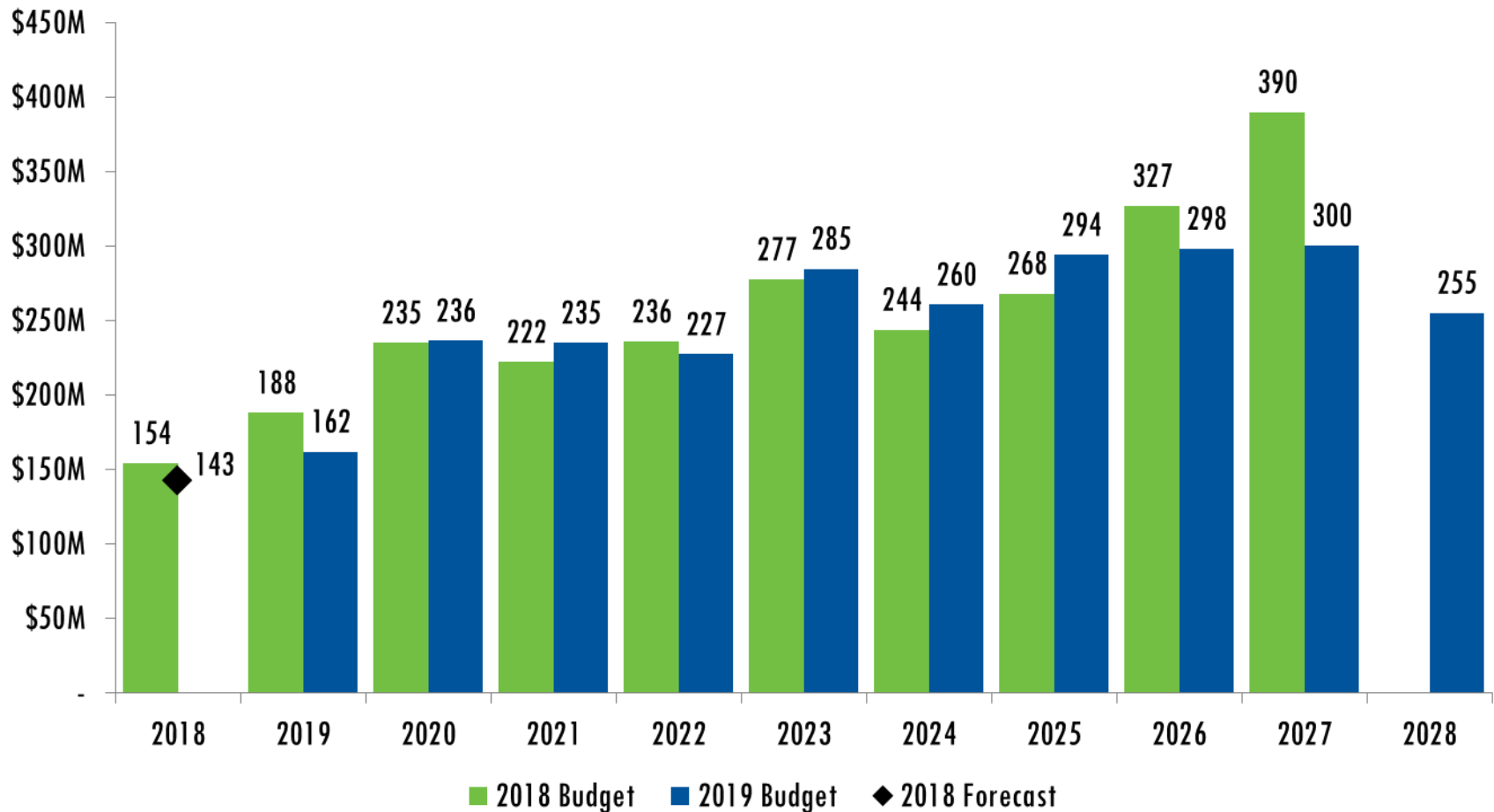
Asset
Management
Rehabilitation
\$1M

ENERGY **\$9M**

Energy
Retrofits –
Various
Existing
Buildings
\$9M

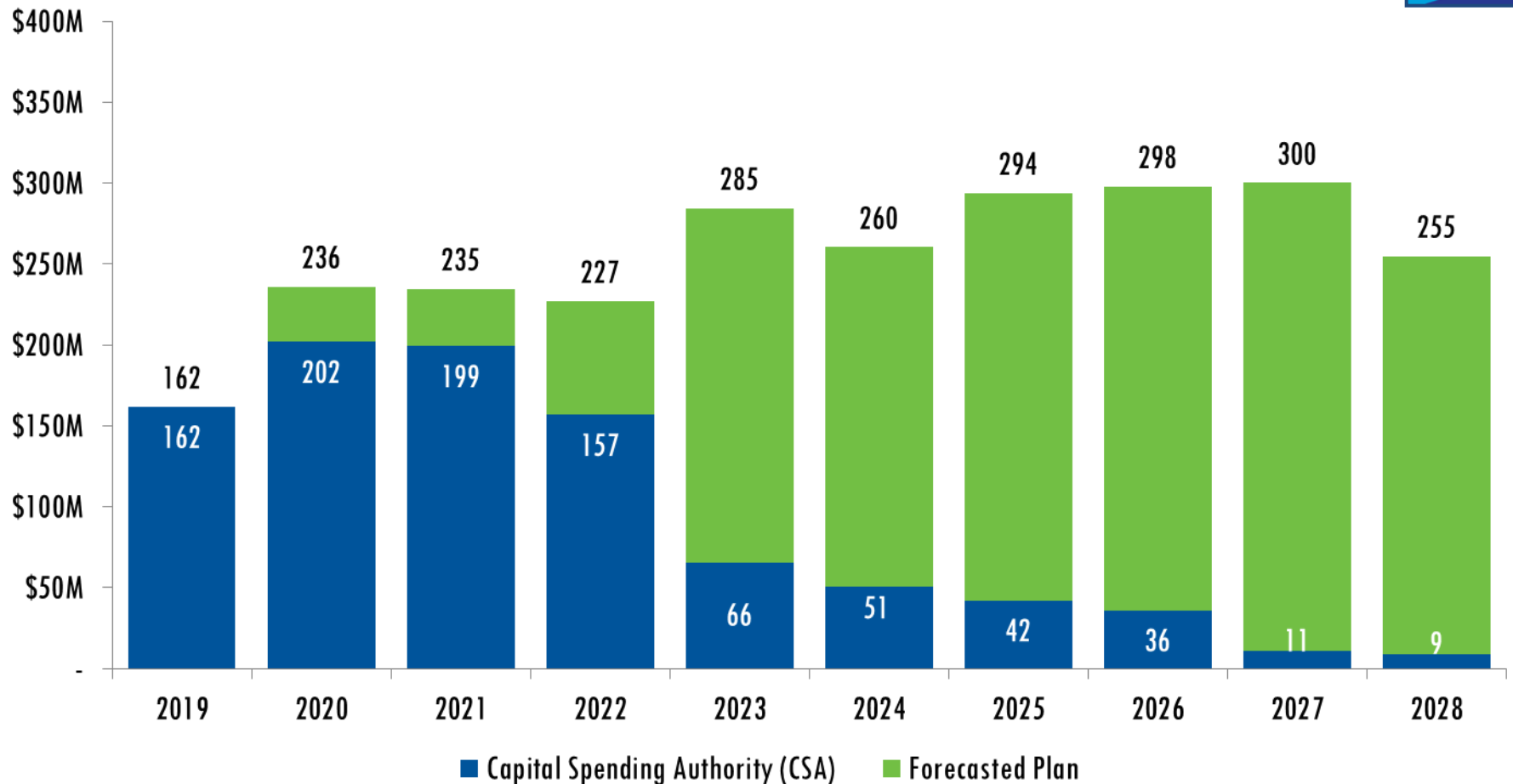
2019 PROPOSED BUDGET COMPARED TO 2018 BUDGET

Environmental Services 2019 ten-year capital budget is \$2,552M which is \$13M more than the 2018 ten-year capital budget of \$2,539M



CAPITAL SPENDING AUTHORITY (CSA)

Capital Spending Authority \$934M
Ten-Year Capital Expenditures \$2,552M



WRAP UP

THE BUDGET SUPPORTS THE 2019 TO 2023 STRATEGIC PLAN

TOP 5 INITIATIVES IN BUDGET ALIGNED WITH 2019 TO 2023 STRATEGIC PLAN:

- Ensuring 100% of drinking water samples meet Ontario Drinking Water Standards
- Ensuring 100% of wastewater receives treatment
- Diverting over 90% of residential solid waste from landfill
- Planting 70,000 trees and shrubs annually through the Regional Greening Strategy
- Maintaining 100% of ENV assets with a condition assessment of fair or better condition



HEALTHY
COMMUNITIES



SUSTAINABLE
ENVIRONMENT



GOOD
GOVERNMENT

MULTI-YEAR BUDGET OVERVIEW

OPERATING BUDGET	APPROVED	PROPOSED	OUTLOOK		
	2018	2019	2020	2021	2022
Gross Expenditures (\$M)	588.5	611.8	649.9	672.5	699.1
Non-Tax Revenues (\$M)	(526.1)	(549.8)	(585.3)	(603.8)	(626.9)
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- New		16.0	16.0	15.0	15.0

CAPITAL BUDGET

2019 Capital Expenditures (\$M)	162
Total Capital Spending Authority (\$M)	934

SERVICES DELIVERED FOR LESS THAN \$5 A DAY

Operating & maintaining
over **\$6.5 BILLION**
in assets

Providing over
120 MILLION
cubic metres of safe
drinking water

Proactively managing over
**140 CAPITAL
PROJECTS**

Managing and protecting
over 41,000
hectares of woodlands
across the Region

Harvesting solar
energy from
21 long-term
contracts

Managing
**365,000
TONNES**
of waste

BUDGET RECOMMENDATION

1. Committee of the Whole recommends the budget as submitted for Environmental Services as follows:
 - a. The 2019 operating budget and 2020 to 2022 operating outlook as summarized in Attachment 1
 - b. The 2019 capital expenditures and the 2019 Capital Spending Authority, as summarized in Attachment 2.
2. The recommended budget be consolidated by the Commissioner of Finance and Regional Treasurer for consideration for Council approval on February 28, 2019.