Toronto Water Budget

Budget Committee Presentation/ January 27, 2015

Recommended Operating Budget, Capital Plan & Water Rate



Presentation Agenda

- 1. Program Overview
- 2. Program Challenges
- 3. 2015 Recommended Operating Program
- 4. 2015-2024 Recommended Capital Program
- 5. 2015 Recommended Service Levels
- 6. 2015 Recommended Water Rate

Toronto Water Program Overview

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Toronto Water at a Glance

- Serve 3.4 million residents and businesses in Toronto, and portions of York and Peel
- Over \$28.2 billion in infrastructure
- Operates facilities 24 hours per day, 365 days per year
- Program is rate-supported—no reliance on the property tax base to support Toronto Water operating and capital budgets

Inventory of Assets

Replacement Value \$28.2 Billion

WASTEWATER/STORMWATER - \$19.1 Billion

- 4 wastewater treatment plants
- 7 storage and detention tanks
- 3,935 km of sanitary, 1,524km of combined and 386 km of trunk sewer
- 4,969 km of storm sewers
- 152,924 maintenance holes
- 507,026 sewer service connections
- 84 wastewater pumping stations
- 371 km of watercourses, 84 stormwater management ponds
- 1,841 outfalls & 171,156 catchbasins

WATER - \$9.1 Billion

- 4 water filtration plants
- 11 reservoirs and 4 elevated storage tanks
- 5,501 km of distribution watermains and 549 km of trunk watermains
- 63,539 valves and 41,349 hydrants
- 510,623 water service connections, plus York Region (population served 600,000)
- 18 water pumping stations

Strategic Actions 2013-2018

City Building

- 1. Implement Smart Urban Growth Strategies
- 2. Invest in Culture
- 3. Develop a Long-term Transportation Plan and Policies

Economic Vitality

- 4. Increase Employment Opportunities
- 5. Accelerate Economic Growth

Environmental Sustainability

- 6. Support Environmental Sustainability
- 7. Develop a Long-term Solid Waste Management Strategy

Social Development

- 8. Support Affordable Housing
- 9. Strengthen Neighbourhoods
- 10. Enhance the City's Quality of Life
- 11. Advance Toronto's Motto 'Diversity our Strength'
- 12. Improve Emergency Response and Prevention

Good Governance

- 13. Open Government by Design
- 14. Engage the Public
- 15. Strengthen Public Service Governance
- 16. Strengthen Intergovernmental Relationships
- 17. Enhance the City's Capacity to Serve Toronto's Diversity
- 18. Develop and Implement a Workforce Plan
- 19. Improve Customer Service
- 20. Enhance Performance Measurement
- 21. Improve Organizational Excellence
- 22. Implement Shared Services

Fiscal Sustainability

- 23. Update the Long-term Fiscal Plan
- 24. Improve Service and Financial Planning
- 25. Ensure State of Good Repair for Infrastructure
- 26. Finance the City's Growth

Toronto Water Strategic Plan 2010-2020

Mission Statement

To provide quality water services through supplying drinking water and the treatment of wastewater and stormwater to residents, businesses and visitors in order to protect public health, safety and property in an environmentally and a fiscally responsible manner.

Vision Statement

Toronto Water will be a leader in achieving excellence and efficiency in all aspects of water service delivery.

Guiding Principles

- I. Continuous Service Delivery Improvement
- II. Financial Vitality, Viability and Sustainability
- III. Operational Excellence
- IV. Infrastructure Management
- V. Employer of Choice



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Toronto Water – Key Services:

- Water Treatment & Supply: Treat and distribute drinking water in a safe, responsible manner in accordance with all legislated requirements.
- Wastewater Collection & Treatment: Collect and treat wastewater in a safe, responsible manner in accordance with all legislated requirements.
- **Stormwater Management**: Collect and treat stormwater in a safe, responsible manner in accordance with all legislated requirements.

Toronto Water Program Challenges

DEDICATED TO PROVIDING SERVICE EXCELLENCE: QUALITY DRINKING WATER · WASTEWATER TREATMENT · STORMWATER MANAGEMENT

Program Challenges

Long-term Financial Stability	Existing 10-year financial plan relies primarily on successive water rate increases to fund continued infrastructure investment and conform with pay-as-you-go financing strategy.
Declining Water Consumption	Downward trend over the last decade, despite population growth. Anticipate base water consumption will flatline.
Aging Infrastructure	Significant state of good repair backlog for underground assets; water/wastewater treatment plants and facilities. Currently updating condition assessments on major assets.
Basement Flooding	Significant investment required to manage basement flooding issues across the city.
Strict Regulatory Control & Oversight	Water and wastewater industry continues to experience increased legislative and regulatory reform impacting both operating and capital budgets – i.e. the Federal Effluent Regulations, enacted on July 18, 2012, includes new enforcement activities and potential penalties for non-compliance.
Managing Reserve Balances	Ensuring positive reserve balances during major capital spending years. Simultaneous large scale projects are planned for the next five years.

Financial Performance - Actual Costs



Stable Operating Costs

- Operating costs at or below the rate of inflation
- Operating impact of capital investments partially offset with efficiencies

Capital Spending

- Additional revenue generated by rate increases has been reinvested in infrastructure
- Capital investment has tripled over the last ten years

Toronto Water 2015 Recommended Operating Budget

DEDICATED TO PROVIDING SERVICE EXCELLENCE: QUALITY DRINKING WATER · WASTEWATER TREATMENT · STORMWATER MANAGEMENT

Operating Budget Challenges

Maintaining stable operating costs	Continue to find efficiencies while ensuring legislative compliance.
Managing the continuous increase in costs from internal and external sources	Increase in personnel costs, service providers and materials and supplies due to inflation (electricity, chemicals, parts and machinery).
Operating impact of completed capital projects	Process improvements require additional resources.
Asset management & critical response processes	Ensuring operational resilience and minimizing risk to assets during extreme weather occurrences.
Ongoing service priorities	Ensuring efficient and effective response time to customer service demands.
Workforce planning & development	Developing hiring strategies for critical, vulnerable and hard to fill positions including on the job training programs.

2014 Budget Variance (forecast December 31, 2014)

	2012 Actuals	2013 Actuals	2014 Approved Budget	2014 Projected Actuals	2014 Approved Budget ve Projected Actual Variance	
(\$000s)	\$	\$	\$	\$	\$	%
Gross Expenditures	350,354.5	374,001.9	407,716.1	398,640.0	(9,076.1)	(2.2)
Revenues	911,377.3	975,629.9	1,022,086.5	1,016,228.5	(5,858.0)	(0.6)
Capital Contribution	561,022.8	601,627.9	614,370.4	617,588.5	3,218.2	0.5
Approved Positions	1,365.0	1,534.0	1,751.6	1,556.7	(195.0)	(11.1)

- Toronto Water is projecting a \$3.218 million surplus
- Lower expenditures relate to savings in salaries & benefits associated with vacancies — savings are offset by higher energy and utilities costs in wastewater treatment processes and water transmission
- Year–end results can vary significantly due to the uncertainty with revenue from the sale of water

2015 Operating Budget Funding Sources \$1.081 Billion User Fees



2015 Operating Budget by Service \$1.081 Billion



2015 Operating Budget by Expenditure \$422.5 Million (Gross)



Budget Summary

			Chan	ge
(In \$000s)	2014 Budget	2015 Budget	\$	%
Gross Expenditures	407,716.1	422,451.7	14,735.6	3.6%
Revenue Excluding Sale of Water	42,432.9	54,265.9	11,833.0	27.9%
Net Expenditure	365,283.2	368,185.8	2,902.6	0.8%
Sale of Water/Wastewater Surcharge	958,102.8	1,003,796.8	45,694.0	4.8%
Sale of Water Revenue - Region of York	21,550.7	22,610.0	1,059.3	4.9%
Total Sale of Water Revenue	979,653.6	1,026,406.8	46,753.3	4.8%
Capital Contribution	614,370.4	658,221.1	43 <i>,</i> 850.7	7.1%

- The total cost to deliver this service to Toronto residents in 2015 is \$422.452 million
- Through on-going operational efficiencies the initial pressure of \$22.129 million was reduced to \$2.903 million, reflecting a 0.8% increase over 2014

2015 Operating Budget Changes \$2.903 Million

Significant Budget Changes for 2015

Increases:			Cost Reductions/Savings:	
Prior Year Council Approvals & Annualizations	\$	3.450	Extreme Weather One-Time Funding	\$ 3.621
Operating Impact of Capital	\$	1.151	Business Process Restructuring	\$ 0.824
Production of Water – Volume	\$	1.258	Optimization of hydro & Parts	\$ 1.949
Infrastructure Repairs & Restorations	\$	1.179	Space Rationalization	\$ 0.855
Environmental Monitoring & Protection	\$	0.268	Line by Line Expenditure Review	\$ 0.502
Contributions & Transfers	\$	0.437	Water Meter Program	\$ 0.331
Inter-divisional Charges	\$	2.636	Revenue Changes:	
New: Emergency Preparedness/Planning	\$	0.095	Industrial Waste/ Private Water Agreements	\$ 2.597
Economic Factors:			User Fees - Inflation & Volume	\$ 0.679
Payroll: COLA, Merit & Progression Pay	\$	4.728	New Service Connections/Third Party	\$ 7.397
Non-Payroll Inflation: Energy, Utilities, Materials, Equipment & Services	\$	6.927	Other Revenue & Recoveries	\$ 0.471
Total Pressure	s: \$	22.129	Savings & Revenue Changes:	\$ 19.227

2015 New Initiatives

	Total 2015	New/Enhance	d Requests	Net Incremental Impact				
				2016 F	Plan	2017 F	Plan	
Description	Gross Exp.	Capital Contribution	New Positions	Capital Contribution	New Positions	Capital Contribution	New Positions	
	\$	\$	\$	\$	# Pos	\$	# Pos	
Enhanced Services:								
Emergency Preparedness/Planning	95.3	95.3	1.0	(107.6)	1.0			
Sub-Total Enhanced Services	95.3	95.3	1.0	(107.6)	1.0	0.0	0.0	
New Services: (a) New Services (b) New Fees								
Sub-Total New Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Enhanced/New Services	95.3	95.3	1.0	(107.6)	1.0	0.0	0.0	

2015 Recommended Operating Budget Summary by Expenditure Category

				2014	2015	2015 Chang	e from		
	2012	2013	2014	Projected	Rec'd	2014 Appr	oved	Pla	an
Category of Expense	Actual	Actual	Budget	Actual*	Budget	Budget		2016	2017
(\$000's)	\$	\$	\$	\$	\$	\$	%	\$	\$
Salaries and Benefits	138,181.5	147,132.6	164,734.7	154,663.2	170,674.4	5,939.7	3.6%	174,777.6	179,592.2
Materials and Supplies	78,187.2	86,247.1	94,631.4	96,196.6	101,269.5	6,638.1	7.0%	109,531.4	115,779.2
Equipment	2,387.9	2,119.8	2,600.0	2,600.0	2,489.9	(110.1)	(4.2%)	2,537.8	2,592.0
Services & Rents	39,483.9	41,339.8	51,981.5	51,838.2	51,664.4	(317.1)	(0.6%)	52,930.3	54,127.9
Contributions to Capital	561,022.9	601,627.9	614,370.4	614,370.4	658,221.1	43,850.7	7.1%	658,221.1	658,221.1
Contributions to Reserve/Res Funds	6,965.4	7,628.8	8,328.8	8,328.8	8,828.8	500.0	6.0%	9,478.8	9,478.8
Other Expenditures	19,707.1	25,544.3	20,271.4	19,844.9	19,958.4	(313.0)	(1.5%)	19,958.4	19,958.4
Interdivisional Charges	65,441.4	63,989.6	65,168.4	65,168.4	67,566.5	2,398.1	3.7%	68,142.5	68,142.5
Total Gross Expenditures	911,377.3	975,629.9	1,022,086.5	1,013,010.3	1,080,672.7	58,586.3	5.7%	1,095,577.9	1,107,892.1
Interdivisional Recoveries	74.5	72.7			25.0	25.0	-	25.0	25.0
Provincial Subsidies									
Federal Subsidies									
Other Subsidies									
User Fees & Donations	36,730.3	43,654.2	35,303.0	44,378.0	39,831.4	4,528.3	12.8%	39,925.3	39,925.3
Transfers from Capital Fund	2,412.1	2,692.7	2,013.0	2,269.3	2,522.5	509.5	25.3%	2,522.5	2,522.5
Contribution from Reserve Funds			195.0	195.0	195.0		0.0%	195.0	195.0
Contribution from Reserve									
Sundry Revenues	872,160.3	929,210.3	984,575.4	969,386.2	1,038,098.9	53,523.4	5.4%	1,038,098.9	1,038,098.9
Total Revenues	911,377.3	975,629.9	1,022,086.5	1,016,228.5	1,080,672.7	58,586.3	5.7%	1,080,766.6	1,080,766.6
Total Net Expenditures				(3,218.1)			n/a	14,811.2	27,125.4
Approved Positions	1,365.0	1,534.0	1,751.6	1,556.7	1,754.6	3.0	0.2%	1,754.6	1,754.6

Staffing Trends Since Amalgamation



Toronto Water 2015 – 2024 Recommended Capital Budget

DEDICATED TO PROVIDING SERVICE EXCELLENCE: QUALITY DRINKING WATER · WASTEWATER TREATMENT · STORMWATER MANAGEMENT

Capital Budget Challenges

Project Coordination	Extensive work on capital coordination within the division and with other City divisions, utilities and organizations is an ongoing focus. However, with an asset base of \$28.2 billion and a large capital program, the complexity of scale must be taken into consideration.
Traffic Management	An increasing capital budget to address priorities including aging infrastructure, basement flooding protection and stormwater management means more construction and traffic impacts.
Servicing Growth	Higher than expected density on recent planning applications in the downtown core are causing pressure on servicing plans. A review is required of the Waterfront Master Sewer Servicing Plan to identify servicing options and costing.
Responding to Climate Change	Extreme weather is putting unprecedented pressure on infrastructure resulting in higher frequency and intensity of basement flooding, frozen water services, watermain breaks.

2014 Key Accomplishments

Program Area	Key Accomplishment
Water Treatment & Supply (\$223 Million)	 38 km of watermain replacement (\$57M) and 42 km of structural watermain lining (\$26M) Corrosion control system on-line at all four water treatment plants (\$8M) Clark WTP – Filter Rehab (awarded in 2014) Gerrard St. transmission watermain - to be completed in 2015 (\$85M) Water Meter Program - ongoing 158,000 meters installed in 2014 (\$47M)
Wastewater Treatment & Collection (\$390 Million)	 15 km of sewer replacement (\$30M) and 85 km of sewer rehabilitation (\$27M) ABTP - P Building Upgrades, Fine Bubble Aeration, Standby Power Generation - ongoing (\$35M) HCTP - Biosolids Upgrades, Odour Control Upgrades - ongoing (\$9M) HTP - Chlorine Facility Upgrades, New Substation, Gas Compressor Upgrades, Odour Control - ongoing (19M)
Stormwater Management (\$102 Million)	 Basement Flooding Protection Program - ongoing (\$61M) Wet Weather Flow Master Plan - ongoing (\$41M)

2002-2014 Capital Budget Expenditure Rate (\$millions)



2015 Capital Budget \$782 Million (Gross)



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2015 Capital Budget by Project Category & Funding Source



10-Year Capital Plan Comparison (\$000s)



2015-2024 Capital Plan by Asset Category (\$000s)



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2015-2024 Capital Plan by Asset Class (\$000s)



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Summary: Major Capital Projects (10 Years)

Program Area	Major Capital Projects
Water Treatment & Supply (\$2.95 Billion)	 Treatment Plants - rehabilitation of filters, process & equipment upgrades (\$307M) Storage & Pumping - reservoir & PS rehab, water quality protection, standby power (\$245M) Transmission watermains - expansion and replacement (\$271M) Watermains - replacement, rehabilitation, TCHC, WSR (\$2.067B) Water Meter Program - to complete program (\$60M)
Wastewater Treatment & Collection (\$3.857 Billion)	 Ashbridges Bay - M&T, UV disinfection, outfall, odour control upgrades (\$1.7B) Highland Creek - biosolids beneficial use, odour control upgrades, liquid train rehab (\$590M) Humber Treatment - odour control upgrades, secondary treatment upgrades (\$442M) Sanitary/storm sewers - replacement, rehabilitation, Waterfront Toronto (\$1.125B)
Stormwater Management (\$2.682 Billion)	 Basement Flooding - subsidies, EA's, engineering, construction (\$1.547B) Wet Weather Flow - ponds, CSO's, TRCA, trunk sewer crossings in watercourses \$882M) TW Erosion Control Sites - to protect infrastructure in ravines (\$117M) TRCA Operating Funding – to support operating requirements (\$46M) TRCA Capital Funding - to fund maintenance and erosion sites (\$90M)

State of Good Repair Funding & Backlog



Toronto Water 2015 Recommended Service Levels

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FPARS – Program Service Levels

	Sub-	Approve	d Service Levels	Recommended
Activity	Activity/Type	2012 2013	2014	2015
Wastewater	Lateral Connection	Basement flooding being	reduced through capital investment	Basement flooding being reduced through capital investment
Collection	Wastewater Collection System	5.27 mainline b	ackups per 100 km of pipe	5.27 mainline backups per 100 km of pipe
	Solids Management		ig compliance limits in Nutrient nagement Act	Consistently meeting compliance limits in Nutrient Management Act
Wastewater Treatment	Wastewater Treatment Plants	In compliance w	ith all applicable legislation	In compliance with all applicable legislation
	Wastewater Pumping Stations	Meeting le	gislative compliance	Meeting legislative compliance
Water	Service Connections	Meeting the 4	0 to 100 psi requirement	Meeting the 40 to 100 psi requirement
Distribution	Water Distribution System	20.8 mainbre	eaks per 100 km of pipe	20.8 mainbreaks per 100 km of pipe
	Water Pumping Stations	317 kWh/ML of water pumped	340 kWh/ML of water pumped	340 kWh/ML of water pumped
	Water Treatment Plants	In compliance w	ith all applicable legislation	In compliance with all applicable legislation
Water Treatment	Water Transmission Mains	Meeting velocity and headloss guidelines	Meeting velocity and headloss design guidelines	Meeting velocity and headloss design guidelines
	Water Storage Reservoirs	Storage Consistently maintain 24 emergency storage		Meeting requirements for emergency storage and fire flows (consistently maintain 24 hours of storage capacity)
Stormwater	Stormwater Collection System	Cost of storm pip	bes maintained is \$1232/km	Cost of storm pipes maintained is \$1232/km
Collection	Stormwater Storage Facilities	Meeting all Certific	ate of Approval requirements	Meeting all Certificate of Approval requirements
Stormwater	Stormwater Treatment Facilities	Meeting all Certific	ate of Approval requirements	Meeting all Certificate of Approval requirements
Treatment	Stormwater Conveyance & Control System	Meeting all Certific	ate of Approval requirements	Meeting all Certificate of Approval requirements

OMBI – Performance Measures

Number of Watermain Breaks per 100 km of Water Distribution Pipe



Operating Costs of Urban Stormwater Management per km of Drainage System



Operating Cost of Waterwater Collection/Conveyance per km of Pipe



Toronto Water Strategic KPIs



Guiding Principle	Strategy	Performance Measure	2014 Q1	2014 Q2	2014 Q3
		Response Time - Water Main Breaks			
Continuous Service Delivery Improvement	Customer Satisfaction	Customer Satisfaction	Anr	nual	
		Customer Enquiries/Complaints by Type			
	Public Health and	Drinking Water Incident Rate			
	Safety Protection	Wastewater Treatment Non- Compliance Events Basement Floodings			
Financial Vitality,		CIP Expenditures	Annual		
Viability and	Fiscally Responsible	Reserve Levels	7 411144	Annual	L
sustainability	Cost Savings	Overtime Hours			
Operational Excellence	Environmental Stewardship	Electrical Energy Consumption			
	Optimal Technology	Water Meter Program			
	Infrastructure Reliability,	System Renewal Backlog (\$M)	Anr	nual	
	Rehabilitation and	Water Main Breaks			
Infrastructure	Replacement	Sewer Main Blockages			
Management	Періасетіент	Planned Maintenance Ratio			
management	Minimize Expansion	Residential Per Capita Consumption	Annual		
	Minimize Expansion	Infrastructure Leakage Index	Annual		
	High Performing	Vacancy Rate			
	Workforce	Management Training	Under review		ew
Employer of Choice	Effective Leadership	Talent Management Program	No Target/ under revi		r review
	Safe Workplace	Injury Performance			

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Service Standards

Service Standards measure response times to 311 Customer Service Requests. These measures an indication of how we are able to respond to operational and environmental issues.

Activity Type	Service Levels							
	2012	2013	2014	% within Standard	Target Performance			
Watermain-Possible Break	8 hours	2 hours	2 hours	71%	85%			
Water Service Line-Leaking	24 hours	4 hours	4 hours	60%	75%			
Water Service Line -Low Pressure, Low Flow	40 bus days	24 hours	24 hours	84%	75%			
Water Service Line - No Water	24 hours	4 hours	4 hours	55%	75%			
Water Service Line - Turn Off/Burst	8 hours	2 hours	2 hours	83%	75%			
Water Service Line -Turn Off (non emergency)	24 hours	8 hours	8 hours	89%	75%			
Water Service Line -Turn On	4 hours	8 hours	8 hours	94%	75%			

Toronto Water 2015 Recommended Water Rate

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Water Rate Model Assumptions for 2015

Consumption Forecast

- 2014: 2% below 2013 actual (\$15.9 million revenue impact)
- 2015 and forward: flat line to the 2014 actual consumption

Capital Expenditure Rate Forecast

- 2014:88%
- 2015 and forward: 85%

Rate Increases

- 2015-2016: 8% (net effect in 2015 is 6.5% due March implementation)
- 2017-2018: 5%
- 2019-forward: 3%

Population and Water Consumption



Water Production



Toronto Water Production 2005-2013, m³ Bi-monthly

How Does Toronto Compare?



* Note: Peel stormwater funded by property tax in 2014 which will change for Mississauga in 2016

How Does Toronto Compare?



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2015 Water Rate Increase Impact

Type of Property	Average Consumption (m ³)	2014 Cost	2015 Projected cost			2015 Rate Increase Impact			
Residential	280	\$ 828	\$	882	\$	54	6.5%		
Commercial	100,000	\$ 295,790	\$	314,915	\$	19,125	6.5%		
Industrial	100,000	\$ 212,374	\$	226,106	\$	13,732	6.5%		
Commercial	1,000,000	\$ 2,075,824	\$	2,210,042	\$	134,218	6.5%		

• Daily cost for all residential drinking water, wastewater and stormwater services only \$2.42 per day.

Projected Water Rate Increase

			2015 - 2024 Plan									
TORONTO WATER	2014 Budget	2014 Projected	2015	2016	2017	2018	2019*	2020	2021	2022	2023*	2024
Water Rate Increase	9%	9%	8%	8%	5%	5%	3.6%	3%	3%	3%	3.6%	3%
WATER RATE REVENUE, \$M	958.10	940.50	1,003.80	1,097.35	1,151.78	1,208.91	1,244.64	1,289.03	1,327.21	1,366.53	1,406.94	1,457.15
Water Rate Revenue Increase, \$M			6.5%	9.3%	5.0%	5.0%	3.0%	3.6%	3.0%	3.0%	3.0%	3.6%
CAPITAL RESERVE CLOSING												
BALANCE, \$M	457.72	484.52	531.01	481.66	439.92	335.82	196.22	99.28	9.04	6.79	100.42	231.22

N.B. After election year water rates effective in March

Thank you

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