

# Toronto Water

Dedicated to providing  
service excellence



## Toronto Water 2013 Service Level Review

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# Presentation Overview

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1. Toronto Water Strategic Plan
2. Program Map/Overview
3. Key Service Levels

# Toronto Water Strategic Plan 2010-2020

## Mission Statement

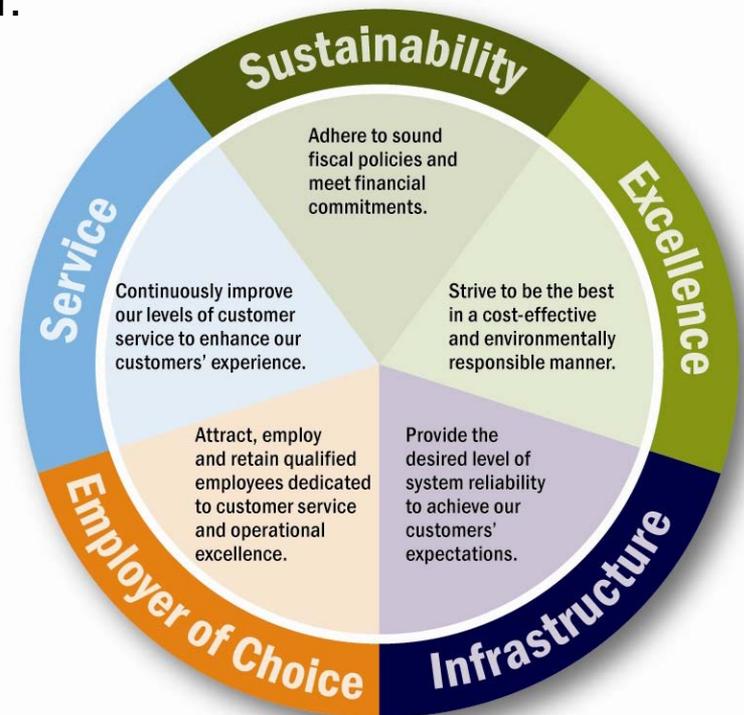
To provide quality water services through supplying drinking water and the treatment of wastewater and stormwater to residents, businesses and visitors in order to protect public health, safety and property in an environmentally and a fiscally responsible manner.

## Vision Statement

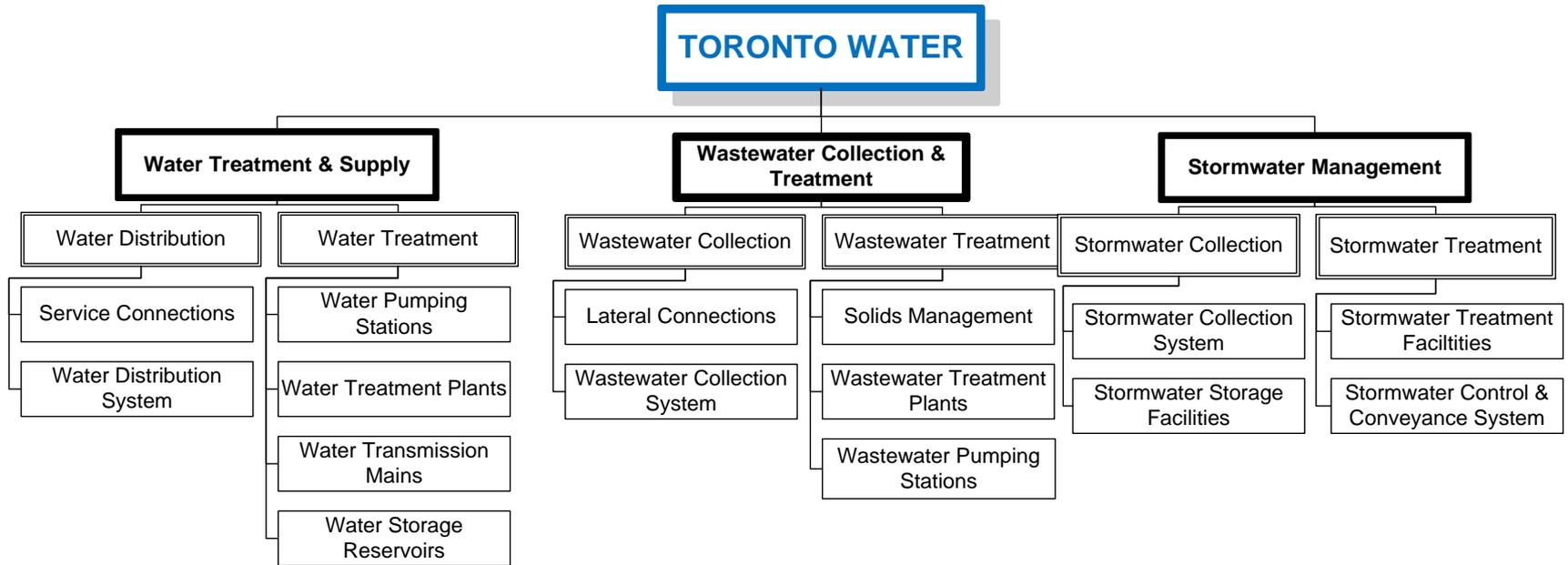
Toronto Water will be a leader in achieve in excellence and efficiency in all aspects of water service delivery.

## Guiding Principles

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



# Program Map



## 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.

# Program Overview



*R.C. Harris Water Treatment Plant*



*Ashbridges Bay Wastewater Treatment Plant*

- Provide safe drinking water for 3.3 million residents and businesses in Toronto, and portions of York
- Safely treat wastewater from 2.7 million residents and businesses in Toronto and a portion of Peel
- Stormwater management to protect private property and the environment
- Operate many facilities 24 hours per day, 365 days per year
- Infrastructure renewal and state of good repair supported by multi-year business plan

# Program Overview (cont'd.)

## Employees

- Toronto Water has a budget for 1,727 employees working in approximately 30 locations (yards, treatment plants, etc.)

## 2013 Toronto Water Budget

- Operating budget \$394.4 million
- Capital budget \$657 million (gross)



# Staffing Complement

Toronto Water	Water Treatment and Supply	Wastewater Treatment	Stormwater Management
2013 Approved Operating FTE	767	806	123
2013 Approved Capital FTE	16	7	8
TOTAL	783	813	131

# Program Overview (cont'd.)



*GIS – managing water infrastructure*



*Tunnel boring machine – Gerrard Street Watermain Replacement*

## Water Treatment and Supply

- Treat and supply 454 billion litres of water (includes York Region)
- Manage/service:
  - 4 water filtration plants
  - 10 reservoirs and 4 elevated storage tanks
  - 5,466 km of distribution watermains and 548 km of trunk watermains
  - 60,933 valves and 40,817 hydrants
  - 470,202 water service connections, plus York Region (population served 600,000)
  - 18 water pumping stations

# Program Overview (cont'd.)

## Wastewater Treatment & Stormwater Management

- Collection and treatment of 438 billion litres of wastewater
- Manage/service:
  - 4 wastewater treatment plants
  - 5 storage and detention tanks
  - 3,930 km of sanitary, 1,511 km of combined and 4,954 km of storm sewers
  - 151,485 maintenance holes
  - 463,300 sewer service connections
  - 82 wastewater pumping stations
  - 371 km of watercourses, 89 stormwater management ponds
  - 2,300 outfalls & 165,662 catchbasins



*Highland Creek Wastewater Treatment Plant*



*Humber Wastewater Treatment Plant*

# Key Service Levels

Activity Type	Service Levels			
	2011	2012	2013	2014 Proposed
Pollution Spill Response	8 hours	8 hours	2 hours	2 hours
Construction-Unsafe/Untidy Condition	4 hours	4 hours	4 hours	4 hours
Fire Hydrant Damage	8 hours	8 hours	8 hours	8 hours
Fire Hydrant Leaking	24 hours	24 hours	4 hours	4 hours
Sewer Service Line-Blocked	24 hours	4 hours	4 hours	4 hours
Maintenance Hole-Overflowing	8 hours	8 hours	2 hours	2 hours
Watermain-Possible Break	8 hours	8 hours	2 hours	2 hours
Water Quality-Discoloured (Rusty/Dirty) Water	24 hours	8 hours	8 hours	8 hours
Water Service Line-Leaking	24 hours	24 hours	4 hours	4 hours

# Key Service Levels

Activity/Type	Service Levels			
	2011	2012	2013	2014 Proposed
Water Service Line-Low Pressure, Low Flow	40 business days	40 business days	24 hours	24 hours
Water Service Line-No Water	24 hours	24 hours	4 hours	4 hours
Water Service Line-Turn Off/Burst	8 hours	8 hours	2 hours	2 hours
Water Service Line-Turn Off (non emergency)	24 hours	24 hours	8 hours	8 hours
Water Service Line-Turn On	24 hours	4 hours	8 hours	8 hours
Lead Service Replacement Program (priority, emergency, capital -- total planned 5,000)	Priority Program 8-12 weeks (Total replaced: 6,000)	Priority Program 10-12 weeks (Total replaced: 4,838)	Priority Program 12 weeks (Approx. total replaced to date: 2,400)	Priority Program 12 weeks (Total planned: 5,000)

# Key Service Levels

Activity/Type	Service Levels			
	2011	2012	2013	2014 Proposed
Sewers By-law Inspection Completion Rate	83% High Risk 85% Medium Risk	135% High Risk 80% Medium Risk	100%	100%
Cross connections found*	40	83	n/a	n/a

\* Since the start of the program in 2005, 634 cross connections have been found and 592 corrected. Cross connections are found using dye-testing and/or CCTV and are complaint driven or as a result of routine monitoring.

# Issues, Challenges, Opportunities

- Service levels can be met during normal business activity, however, they will change during serious emergencies such as a severe storm
- District Operations receives over 100,000 customer service requests annually -- high expectations from the public to be onsite and resolve problems quickly.
- Social media expectations for continued engagement and customer service response.
- Reorganization of District Operations will see continued efficiencies and improved service.
- Aging workforce requires increased needs for recruitment and training.

# Service Performance

<b>WATER TREATMENT AND SUPPLY</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Operating Cost for the Distribution/Transmission of Drinking Water per km of Water Distribution Pipe	\$24,722.11	\$23,160.32	\$18,410.19
Number of Watermain Break per 100 km of Water Distribution Pipe (excluding connections)	20.8	21.6	27.3
Operating Cost for the Treatment of Drinking Water per Megalitre of Drinking Water Treated	\$209.47	\$149.64	\$182.85
Operating Cost for the Treatment and Distribution/Transmission of Drinking Water per Megalitre of Drinking Water Treated	\$572.73	\$498.53	\$462.60

<b>WASTEWATER COLLECTION AND TREATMENT</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Operating Cost of Wastewater Collection/Conveyance per km of Pipe	\$19,706.93	\$15,816.40	\$18,041.34
Annual Number of Wastewater Main Backups per 100 km of Wastewater Main	5.27	8.01	10.79
Operating Cost of Wastewater Treatment/Disposal per Megalitre Treated	\$403.99	\$434.59	\$389.21
Operating Cost of Wastewater Treatment/Disposal and Collection/Conveyance per Megalitre Treated	\$646.47	\$641.16	\$616.99

<b>STORMWATER MANAGEMENT</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Operating Cost for Urban Stormwater Management per km of Drainage System	\$1,232.23	\$4,708.70	\$7,718.16
Total Costs of Urban Stormwater Management per km of Drainage System	\$1,232.23	\$5,105.55	\$8,250.51

# Issues, Challenges, Opportunities

## Reductions in the 10 Year Capital Plan

- As a result of declining consumption and unfunded new projects an additional \$1 billion is needed over the next 10 years.

## Significant Long-Term Unbudgeted Pressures (20 years)

- Additional \$640 million in unfunded capital pressures
- Wet Weather Flow Master Plan \$1.3 billion

## Basement Flooding Protection

- Significant investment required to manage basement flooding
- At present, basement flooding study areas cover 26% of the city; 74% of the city remains unassessed.



July 8 storm—Humber River at Dundas Street West



Earl Bales Park Stormwater Management Pond

# Issues, Challenges, Opportunities (cont'd.)



*Watermain break/sinkhole*



*Completed Coxwell Sanitary Trunk Sewer Bypass*

## State of Good Repair Backlog

- 2013 year-end renewal backlog has decreased to an estimated \$1.499 billion (\$950 million backlog for underground assets)
- New state of good repair asset issues are being identified:
  - Wastewater treatment plants digester refurbishment (\$52 million)
  - Trunk sewer renewal program (\$200 million)

## Maintaining Adequate Reserve Balances

- Large scale capital projects depleted reserve balances in 2011-2012.
- Insufficient reserves to properly manage pay-as-you-go funding model to complete very large capital projects over the next few years.