



Environmental Services Overview and Outlook

Presentation to Environmental
Services Committee

Erin Mahoney
September 16, 2009

Overview



- Department Organization
- Innovative Service Delivery
- Committee Outlook

OUR MISSION

Our innovative people provide environmental services that protect public health and the environment and meet the needs of our thriving communities

Department Organization



A functional, streamlined organization focused on effective service delivery

Innovative Service Delivery

- ❑ Provide clean and safe drinking water
- ❑ Return good quality effluent to the environment
- ❑ Provide waste diversion and disposal services that ensure public health and safety



OUR VISION

We will provide sustainable environmental services through integrated efforts in an organizational culture of opportunity, trust, leadership and partnership.

What we do – water and wastewater



Complex water system includes:

- 2 treatment plants
- 37 wells
- 40 storage facilities
- 280 km of watermain

Water supply agreements with Toronto and Peel

Wastewater system includes:

- 5 local community treatment plants
- YDSS including Duffin Creek WPCP
- 200 km of sewer

Wastewater service agreements with Durham and Peel



State-of-the-art treatment ensures high quality drinking water is delivered to our customers and clean effluent is returned to environment.

Waste Management

How it all started in York Region



No curbside diversion programs



1970

Recycling Depots to capture bulky recyclables



1990

2006
York Region diverts **39.7%** from landfill
Ranking 3rd in large urban category



2000

2007
Region-wide launch of Green Bin Program



2007
York Region diverts **45.7%** from landfill
Ranking 1st in large urban category



2009
Regional Council endorses recovery as 4th R



2008
York Region advocates for increased Extended Producer Responsibility



Blue Box introduced



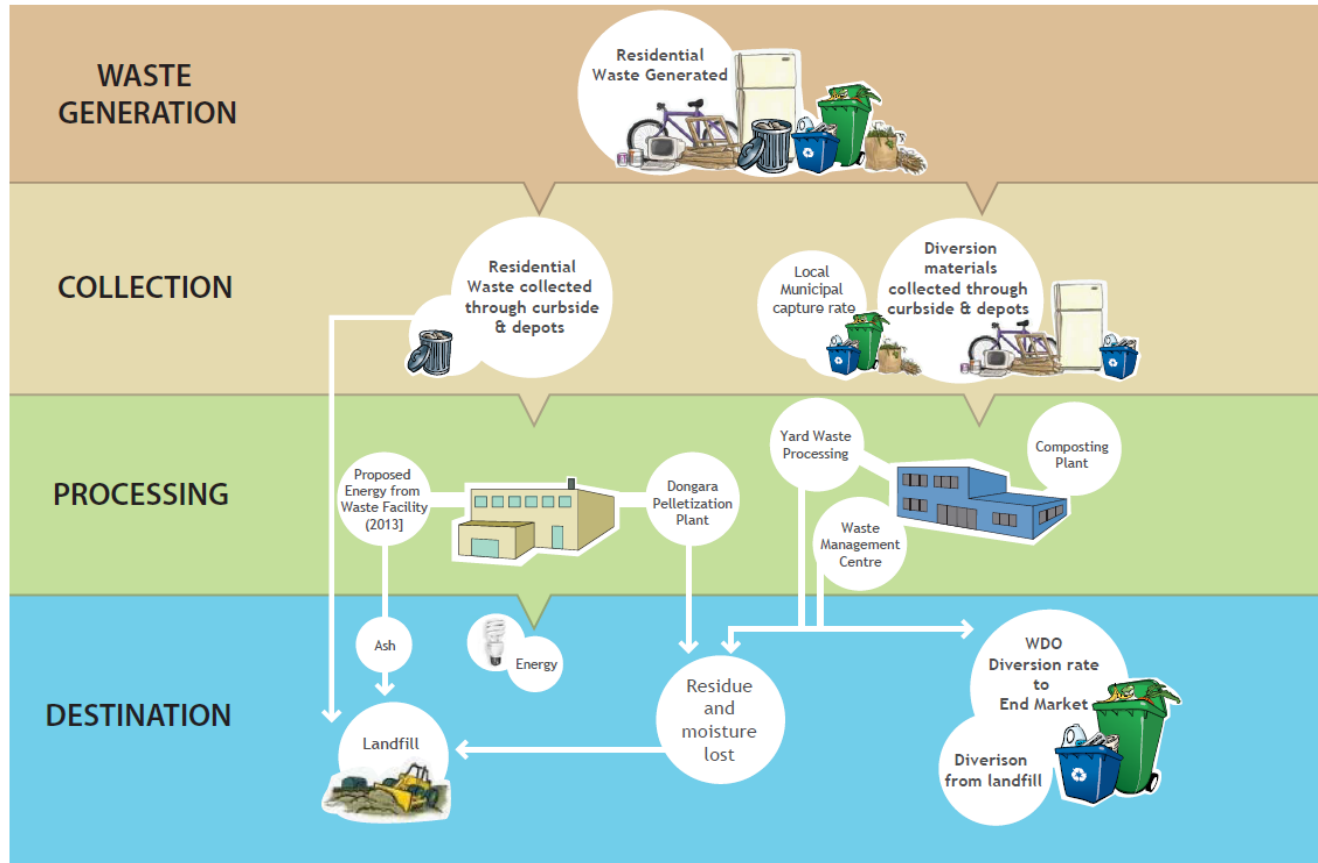
1980

2004
York Region diverts **25%** from landfill

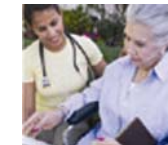


Upcoming Environmental First Symposium - "The First 'R' - The First Discussion"

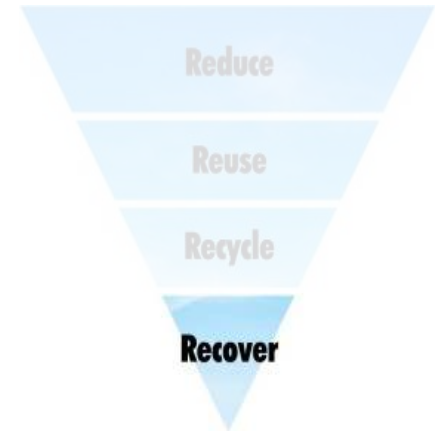
What we do – waste management



Our diverse, resilient waste management system delivered in partnership with our area municipalities



Waste Management



Energy recovery from residual waste is a key resource opportunity

Water and Wastewater

- York Region delivers over 119 **billion** litres of water a year to one million customers
 - That's 326,027,397 litres a day or 130 Olympic sized swimming pools
 - A 500 ml container (size of a water bottle) can be refilled with tap water over 20 times for less than a penny
 - Every person in York Region uses about 260 litres of water a day (enough to fill a bathtub twice)

Aggressive conservation programs, wise management of ground water resources, and long term inter-municipal agreements assure access to a sustainable supply of drinking water



Drinking Water Facts

- Over 50,000 water tests are performed every year on drinking water in York Region

ISO 9001
& 14001
REGISTERED

100%
OF OPERATORS MET
REGULATORY TRAINING
REQUIREMENTS

99.9%
OF SAMPLES MEET
PROVINCIAL WATER
QUALITY STANDARDS

99.8%
COMPLIANCE SCORE
ON MOE INSPECTIONS



Bringing certainty to delivery of water services in compliance with all regulatory requirements



Legislative Changes Driving New Servicing Strategies



- ❑ Ontario Water Resources Act
- ❑ Clean Water Act
- ❑ Safe Drinking Water Act
- ❑ Lake Simcoe Protection Act
 - ❑ New phosphorus limits for Sewage Treatment Plants
- ❑ Waste Diversion Act
 - ❑ Extended Producer Responsibility
 - ❑ Waste electronics & electrical equipment



Ongoing advocacy with the Province and stakeholders on key environmental priorities affecting York Region

Operate, Maintain and Protect our Infrastructure Assets

- ❑ Certified operators for both water and wastewater systems
- ❑ Third party operators for waste management facilities



Estimated Value (millions)

Watermains	\$410
Water Facilities	\$344
Wastewater Collection	\$504
Wastewater Facilities	\$167
Duffin Creek WPCP (YR's share)	~\$450
Waste Management Facilities	~\$ 35

Total \$1,910

**Sustainable management of \$1.9 billion
in environmental assets - meeting the needs of a growing Region**

Working Partnerships

□ Ensuring resiliency through partnerships with:

- Region of Durham
- City of Toronto
- Region of Peel
- Conservation Authorities
- University of Toronto
- University of Waterloo



Long-term municipal partnerships
vital for sustainable servicing



Working Partnerships continued...

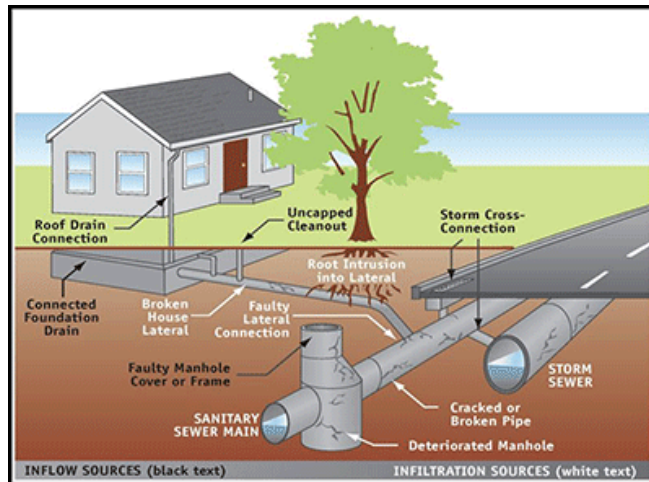
- ❑ Strong partnerships with local municipalities to deliver water, wastewater and waste management services
- ❑ New partnerships with Goodwill and Habitat for Humanity



Addressing Our Challenges Together

Inflow and Infiltration Reduction Program

- York Region and Local Municipalities commitment to reduce amount of rainwater and/or groundwater that enters sanitary sewers



Regional investment to reduce I/I in municipal and private systems

Addressing Our Challenges Together

Water Conservation and Efficiency

- ❑ Water for Tomorrow is York Region's innovative water efficiency program
- ❑ Provides tools our residents need to conserve water in the home, in the garden and at work

20 million litres of water
already saved

Another 23 million litres of
water to be saved each day
over the next 10 years

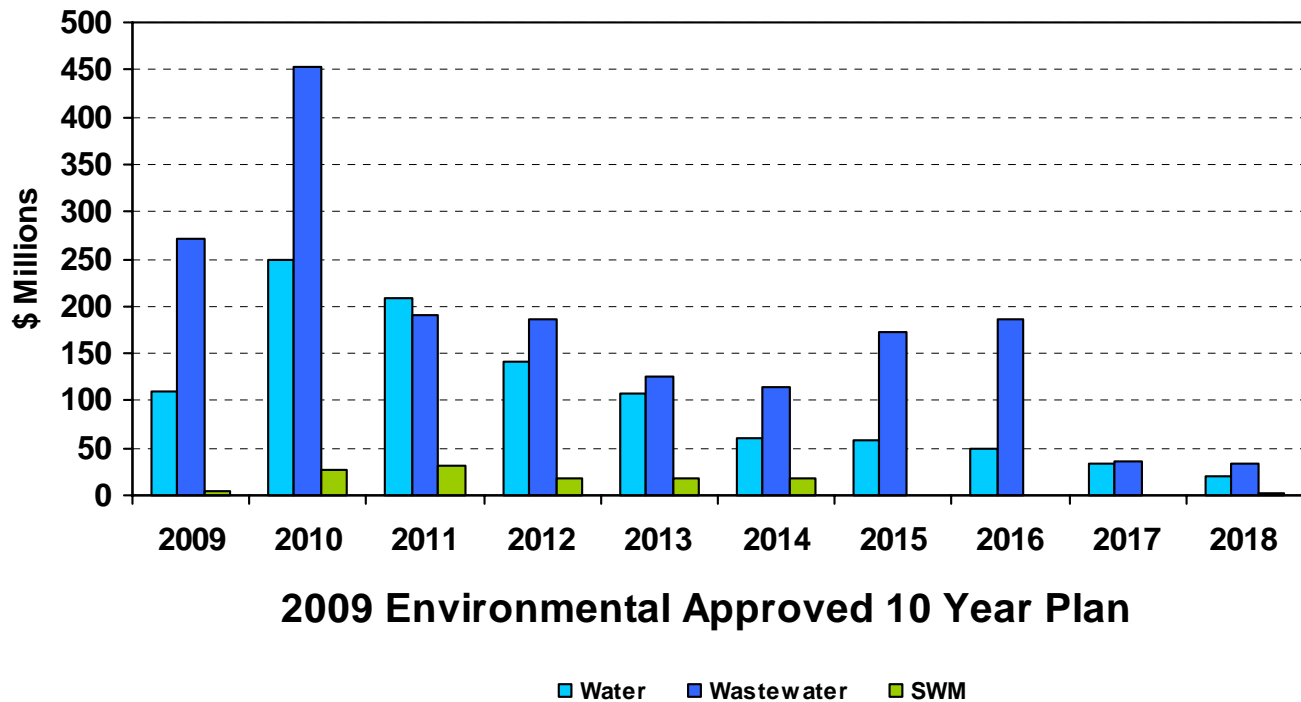


Protecting the Environment

- ❑ Sewer Use By-law
- ❑ Source Water Protection
- ❑ Household Hazardous Waste
- ❑ Construction Contractor Training and Inspection
- ❑ Ongoing System Monitoring
 - ❑ **S**upervisory **C**ontrol **A**nd **D**ata **A**cquisition (SCADA)



Capital Delivery – A Key Priority



2009 Environmental Approved 10 Year Plan

\$3 billion 10-year capital program

Funding Capital Delivery



- ❑ Waste Management growth related capital projects funded by tax levy
 - ❑ Listed as ineligible cost in the Province's Development Charges Act

- ❑ Water and Wastewater capital projects funded 95% by development charges, 5% by rates
 - ❑ Updated project costs in W&Ww Master Plan and legislative changes puts pressure on current DC rates

Continue to interface with Province on sustainable infrastructure funding

Stimulus & Building Canada Funding Projects



- ❑ Richmond Hill Community Environmental Centre
 - ❑ \$9,750,000
- ❑ Garfield Material Recovery Facility Upgrades
 - ❑ \$7,600,000
- ❑ Georgina Water Treatment Plant Upgrades
 - ❑ \$7,200,000
- ❑ Water & Wastewater Instrumentation & Control Replacement
 - ❑ \$1,100,000
- ❑ Duffin Creek Water Pollution Control Plant
 - ❑ \$93,000,000



Accelerated delivery required for these projects

Committee Outlook

1. 2010 Operating and Capital budget review
2. Diversifying our long-term waste management program
 - *Energy from waste initiative*
 - *Composting facility initiative with Dufferin County*
3. Certainty in capital delivery
 - *South East Collector Individual Environmental Assessment submission to MOE*
 - *Upper York Sewage Solutions Individual Environmental Assessment*
 - *Cost shared capital projects with Peel, Toronto and Durham*
 - *Stimulus funding for projects valued at \$118.65 million*
4. Sustainable water and wastewater servicing
 - *Intra-Basin transfer*
 - *Source Water Protection*
 - *Lake Simcoe Servicing*
 - *Inflow & Infiltration Reduction and Water for Tomorrow*

**Continued focus on advocacy
with the Province is key to success**

