



# Environmental Services Overview

Presentation to

**Committee of the Whole**

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# Programs and Services Overview



## Water

- Maintain water quality and compliance in an increasingly complex regulatory framework
- With our partners implement source to tap integrated approach to water management
- Build and maintain resilient treatment and distribution systems that ensure reliable services
- Deliver \$661M 10-year capital plan



## Wastewater

- Optimize system capacity
- Continue to prioritize new capital infrastructure to support planned growth and optimize community benefit
- Leverage technology and data to enhance our level of service
- Deliver \$1.2B 10-year capital plan



## Waste Management

- Continue to provide cost effective waste management services in partnership with local municipalities
- Operate Durham-York Energy Centre facility
- Drive waste reduction through SM4RT Living Plan implementation
- Achieve 90% waste diversion from landfill by 2016



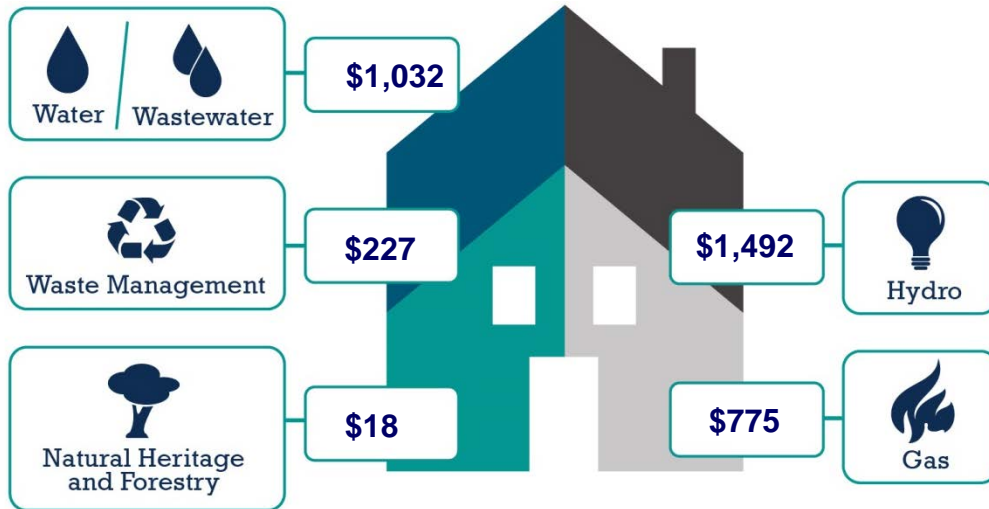
## Forestry

- Provide healthy communities by expanding our urban forests and green space
- Promote partnerships and tree planting program
- Manage new and existing invasive species threats
- Achieve 25% Regional forest cover by 2031

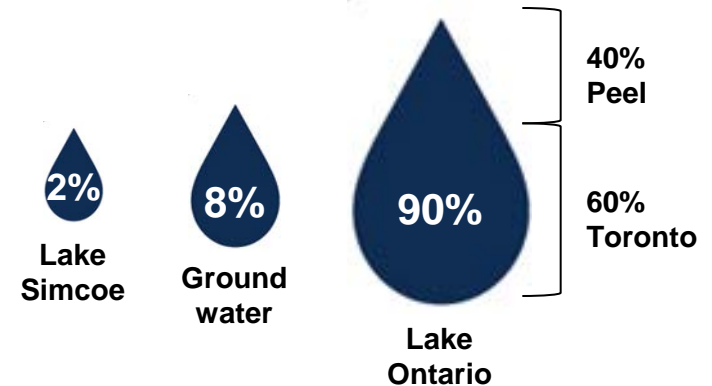
Environmental Services improves quality of life  
for York Region residents

# Programs and Services Overview

## Annual Environmental Services vs. Other Household Costs



## Sources of York Region Drinking Water



\*Average Hydro and Gas costs based on 2011 averages per household in Ontario per Statistics Canada

York Region residents receive value for money as water, wastewater, waste management and forestry services are less than \$25/week per household

# Programs and Services Overview

## The Management Team



- Integrated Management System
- Management System Representative
- Regulatory compliance and reporting
- Advocacy and liaison
- Interdepartmental policy coordination
- Strategic departmental organizational planning
- Energy Management
- Departmental initiatives



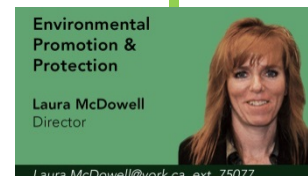
- Operate, maintain and monitor water and wastewater systems
- Inspect and maintain linear assets
- Preventative maintenance
- Calibration and process control
- Statutory training
- Water and wastewater research and innovation
- Sewer Use Bylaw administration and program development



- Capital planning
- Environmental assessments
- Infrastructure design
- Infrastructure construction and commissioning
- Project management office
- Project delivery support
- Construction administration
- Design standard specifications



- Water and wastewater service master planning
- Integrated capital and financial planning
- Infrastructure asset condition monitoring
- Asset data analysis
- System performance management and monitoring
- Capacity assignment
- Hydraulic modelling
- System quality, efficiency, energy and demand management



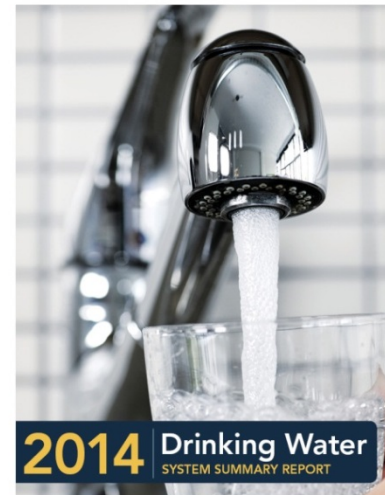
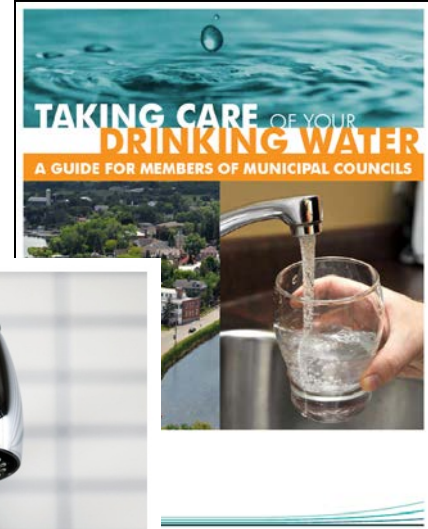
- Promotion and public education programs
- Forestry and natural heritage
- Communications and public outreach
- Source water protection
- Hydrogeological monitoring and analysis
- Waste diversion and contract management
- Waste disposal and contract management
- Operate and maintain Community Environmental Centres



- Strategic and business planning
- Financial management and reporting including PSAB
- Info and data management
- Administrative and business support
- Employee training and development
- Emergency planning and preparedness
- Contract management and monitoring
- Rates and reserves

# Council Responsibilities

- Statutory Standard of Care – Safe Drinking Water Act, 2002
  - Integrated Management System comprehensively manages risk
    - Drinking Water Quality Management Standard
    - ISO 9001 Quality Management Standard
    - ISO 14001 Environmental Management Standard
  - Water Financial Plan
  - Infrastructure Improvement Plan
  - York Region’s Annual Drinking Water Summary Report
- Forest Conservation By-law – restricts and regulates destruction of trees through Council authorization
  - Education and stewardship
  - Prevention and protection
  - Compliance



Environmental Services well positioned to meet regulatory requirements and beyond

# Committee Focus – 4 Year Outlook

- Multi-year capital and operating budget approval
- Water Rate Study Implementation of multi-year rate recommendations
- SM4RT Living Plan Implementation
- YDSS capital and operating policy decisions regarding service delivery
- Forestry program funding strategies regarding emerging pressures in VivaNext, including invasive species and climate change
- Asset management investment strategy
- Water and Wastewater Master Plan recommendations
- Environmental Services procurement decisions subject to council authority (large capital projects)

Long term planning has positioned the Region to meet the challenges over the next 4 years

# Staff Reports – 4 Year Outlook

Annual	2015	2016, 2017, 2018
<p>Greening Strategy Achievements</p> <p>Annual Waste Diversion Report</p> <p>Drinking Water System Summary Report</p> <p>Source Protection Plan Update</p> <p>Research and Innovation Update</p> <p>Capital Infrastructure Update</p> <p>Integrated Management System Update Report for Water, Wastewater and Waste Management</p> <p>Budget</p> <p>Energy Management Program Annual Update</p> <p>SM4RT Living Plan Achievements</p>	<p>Rouge National Urban Park – Supplemental Agreement</p> <p>Source Protection Plan Approval</p> <p>Corporate State of Infrastructure Report</p> <p>Water and Wastewater Master Plan Update</p> <p>Water and Wastewater User Rates</p> <p>Duffin Creek Outfall Environmental Assessment</p> <p>Upper York Sewage Solutions – Phosphorus Off-set Transfer from Local Municipalities</p> <p>Sutton Water Pollution Control Plant Rehabilitation</p> <p>Leslie Street Pumping Station Upgrades</p> <p>Elgin Mills Road Watermain Project</p> <p>Hydrogen Sulfide Reduction Systems at Newmarket and Aurora Pumping Stations</p> <p>Yonge Street/Highway 7 Water and Wastewater Servicing</p> <p>West Vaughan Water Servicing Environmental Assessment</p> <p>Stouffville Zone 2 Elevated Tank and Watermain</p> <p>Green Lane Leslie Street Northeast Watermain</p>	<p>Water and Wastewater Capacity Assignment</p> <p>Long Term Water Conservation Strategy and Inflow and Infiltration Reduction Strategy</p> <p>Duffin Creek Water Pollution Control Plant Reactors Replacement</p> <p>Southeast Collector Rehabilitation</p> <p>Ninth Line Trunk Sewer Rehabilitation</p> <p>Environmental Services State of Infrastructure Report</p> <p>Asset Management Plan</p> <p>Northeast Vaughan Water and Wastewater Servicing</p> <p>Newmarket West Yonge Watermain</p> <p>Sutton Water Pollution Control Plant Expansion</p> <p>Consulting Assignment for Water and Wastewater Master Plan Update</p> <p>Lab Expansion at Duffin Creek Water Pollution Control Plant</p> <p>Duffin Creek Water Pollution Control Plant Aeration Tank Optimization</p> <p>West Vaughan Water Servicing</p> <p>Council Achievements</p>

# Collaboration is Essential Partnerships and Alliances

Through over 75 partnerships we are working collaboratively to deliver complex and integrated services



## Local Community

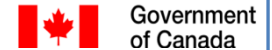
- Lake Simcoe Region Conservation Authority
- Toronto and Region Conservation Authority
- Local Enhancements and Appreciation of Forests
- York District and Catholic District School Boards

## Provincial



- Ministry of the Environment and Climate Change
- Water Technology Acceleration Project Board of Directors
- Lake Simcoe Coordinating Committee
- Source Protection Committees

## Federal



- Environment Canada
- Fisheries and Oceans Canada
- Parks Canada

## Additional Partners (i.e. associations, committees, alliances)

- Regional Public Works Commissioners of Ontario
- Invasive Species Centre Board of Directors
- International Society of Arboriculture Ontario Chapter Board of Directors
- Green Infrastructure Ontario
- University of Toronto
- Southern Ontario Food Collaborative
- Municipal Waste Association
- American Water Works Association/Ontario Water Works Association
- American Public Works Association/Ontario Public Works Association
- Ontario Municipal Benchmarking Initiative
- Canadian Water Network