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## **2008 BUDGET BRIEFING NOTE**

# **Impact of Changes to Provincial Regulations on the Toronto Water Capital and Operating Budgets and the Related Water Rate Impact**

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### **Issue/Background:**

- There have been a number of changes in Provincial Legislation affecting the operations of Water and Wastewater Systems in the Province of Ontario.
- Funding for these legislative changes has come from the users of the Water and Wastewater systems and impacts the rates which are charged to the municipal residents.
- Key acts and regulations that impact the water and wastewater services industry in Ontario are:
  - Ontario Water Resources Act;
  - Bill 195, Safe Water Drinking Act;
    - Ontario Regulation 169/03 - Ontario Drinking-Water Quality Standards
    - Ontario Regulation 170/03 - Drinking-Water Systems
  - Bill 81, Nutrient Management Act;
  - Bill 43, Clean Water Act;
  - NFPA 70E, Standards for Electrical Safety in the Workplace
  - Occupational Health and Safety Act
    - Ontario Regulation 278/05, Designated Substance — Asbestos on Construction Projects and in Buildings And Repair Operations

### **Key Points:**

- For the years 2004 through 2008, the impact on the Toronto Water capital and operating budgets resulting from Provincial Regulations have been \$237 M and \$14 M respectively.
- The largest capital expenditures are as follows:
  - \$117.4 M is related to the construction of new Residue Management Facilities at the R.C. Harris and R.L. Clark Water Treatment Plants in order to comply with regulations relating to the Safe Drinking Water Act and the Ontario Water Resources Act.

- \$66.9 M for implementing projects under the Wet Weather Flow Master Plan as part of the new Clean Water Act and the Ontario Water Resources Act.
- \$50.9 M for the Lead Services Repair Program under the Safe Drinking Water Act.
- The impact on the operating and capital budgets for 2008 is \$70 M which represents 11% of total water rate revenues.
- The forecasted impact for capital and operating budgets for the years 2009-2012 resulting from Provincial Regulations is estimated at \$260 M and \$20 M respectively.

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## **2008 BUDGET BRIEFING NOTE**

### **Application of *Toronto Green Development Standard* to Major Capital Upgrades undertaken by Toronto Water**

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#### **Issue/Background:**

- The Toronto Green Development Standard provides an integrated set of targets, principles, and practices to guide the development of City-owned facilities and to encourage sustainable development amongst the private sector.
- Toronto Water's 2008-2017 Capital Program includes many new and retrofit projects that incorporate green development principles

#### **Key Points:**

- Ongoing retrofit projects such as the HVAC Rehabilitation and Upgrades at the F.J. Horgan Water Treatment Plant comply with green building standards by replacing aging and inefficient equipment with new units including high-efficiency motors, reducing energy demand and eliminating use of CFC-based refrigerants
- The following chart demonstrates how the Toronto Water Centre Renovations and the upcoming F.J. Horgan Water Treatment Plant expansion are incorporating green development standards

<b>Environmental Driver</b>	<b>Toronto Water Centre Renovations</b>	<b>F. J. Horgan WTP Expansion</b>
Better air quality	<ul style="list-style-type: none"><li>• Construction activities are specified to control dust, noise, construction vehicular traffic and storm water issues</li><li>• Site design supports cycling and pedestrian activity</li></ul>	<ul style="list-style-type: none"><li>• Construction activities are specified to control dust, noise, construction vehicular traffic and storm water issues.</li><li>• New water treatment building will incorporate green roof technology.</li><li>• Continues to offer passive public access to property</li></ul>

<b>Environmental Driver</b>	<b>Toronto Water Centre Renovations</b>	<b>F. J. Horgan WTP Expansion</b>
Reduced greenhouse gas emissions and urban heat island effects/ Energy efficiency	<ul style="list-style-type: none"><li>• Design maximized to take advantage of natural lighting where available.</li><li>• Roller shades and lamination included on windows to reduce cooling needs</li></ul>	<ul style="list-style-type: none"><li>• High energy efficiency motors are specified for new equipment and pumps</li><li>• Skylight structures are being upgraded with improved R values and incorporation of argon gas – low E skylights</li></ul>
Improved water quality and water efficiency	<ul style="list-style-type: none"><li>• High efficiency fixtures and appliances included</li><li>• Low water use landscaping incorporated</li></ul>	<ul style="list-style-type: none"><li>• High efficiency fixtures and appliances included</li><li>• Existing treatment residuals outfall diverted from Lake Ontario to nearby Highland Creek WWTP for treatment</li></ul>
Less solid waste	<ul style="list-style-type: none"><li>• Retrofit of existing facility allows for reuse of significant portion of base building and recycling of base materials</li></ul>	<ul style="list-style-type: none"><li>• New building structures are designed using durable materials for lifespans in excess of 50 years</li></ul>
Protection of the urban forest and wildlife habitat/Reduced light pollution	<ul style="list-style-type: none"><li>• Existing site trees protected during construction</li></ul>	<ul style="list-style-type: none"><li>• Design has been revised to protect existing tree grove on property</li><li>• Additional tree planting opportunities will be explored through continuation of participation in Tree Advocacy program</li></ul>

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