
2015 CAPITAL BUDGET BRIEFING NOTE

Lead Water Service Replacements

Background:

- Budget Committee, at its meeting of February 4, 2015, during consideration of the 2015 Rate Supported Budgets - Toronto Water and 2015 Water and Wastewater Rates and Service Fees, requested a briefing note on:
 - a) the number of lead water service replacements that will be included in the projected 10 year plan with the projected growth in water main work and a revised lead service plan
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.BU4.1>

Issue:

- In 2011, City Council adopted the "Lead in Drinking Water Mitigation Strategy", which recommended the replacement of the City-owned portion of lead water service connections in conjunction with the City's planned watermain renewal projects.

Key Information:

- The City of Toronto replaces the City-owned portion of substandard water services, including lead services, through Toronto Water's Water Service Replacement Program, which consists of the following elements:
 - **Capital Water Service Replacements** - planned replacement of City-owned substandard water services, on a street-by-street basis. Approximately 3,000 replacements are done per year in coordination other City watermain renewal programs (watermain replacement, watermain structural lining, road reconstruction, or sewer reconstruction) and where the existing water service is lead, or smaller than 19 mm in diameter, or is at the end of it's service life.
 - **Emergency water service replacements** of the City-owned portion, on an address specific basis, where the water service is broken or cannot deliver the minimum flow of seven litres per minute. Approximately 500 emergency replacements are done per year.
 - **Priority lead water service replacements** of the City-owned section, on an address specific basis, and only if the City side is lead and the property owner replaces the

private side of the lead service, prior to or at the same time the City-owned section is replaced. Approximately 1,500 priority lead water services are replaced per year.

Water Service Replacements and Lead Services in the City

- The replacement of City-owned substandard water services (which includes lead services) is done in coordination with planned infrastructure state of good repair renewal works.
- From 2010 to 2014, Toronto Water replaced approximately 33,300 water services as part of the Water Service Replacement Program.
 - In 2010 and 2011 the Lead Water Service Replacement Program replaced approximately 19,600 water services.
 - From 2012 to 2014 approximately 4,000 to 5,000 water services were replaced annually.
- In 2014, the Lead in Drinking Water Strategy Update estimated that approximately 35,000 lead water services were remaining in the City. This was down from the estimated 65,000 lead water services in 2007.
- With respect to lead service replacements within the next 10 years, the Water Service Replacement Program in the 10-Year Capital Plan is not expected to significantly impact the current rate of lead water service replacements. This is because most of the planned watermain renewal projects are focused in areas of the City that have metallic watermains that are in poor condition. These areas have fewer lead services than the older parts of the City (e.g. downtown core).

Lead in Drinking Water Mitigation Strategy

- In addition to the replacement of lead water services, the City is taking other measures to reduce exposure to lead in drinking water through the Lead in Water Mitigation Strategy.
- As part of the City's Corrosion Control Plan, Toronto Water has implemented corrosion control at the City's four water treatment plants. Corrosion Control involves adding phosphate at the water treatment plants in the form of phosphoric acid. Phosphate forms a protective coating inside water pipes that reduces corrosion and the leaching of lead from surfaces in contact with drinking water. The City's Corrosion Control Plan was accepted by the Ministry of Environment and Climate Change in April 2011.

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