

# **The Regional Municipality of York**

Committee of the Whole  
Environmental Services  
January 10, 2019

Report of the Commissioner of Environmental Services

## **Toronto-York Water Servicing Agreement Update**

### **1. Recommendations**

1. Council authorize an amendment to the Toronto-York Water Servicing Agreement based on the terms set out in this report and authorize the Commissioner of Environmental Services to execute the amended Toronto-York Water Servicing Agreement.
2. The Regional Clerk forward a copy of this report to the City of Toronto's Clerk.

### **2. Summary**

This report seeks Council authorization to amend the Toronto-York Water Servicing Agreement.

#### **Key Points:**

- Renewal of the Toronto-York Water Servicing Agreement and introduction of the perpetuity clause will support long-term water supply to York Region residents and businesses.
- Update of asset management contributions integrated into the Toronto water rate will fund a portion of maintenance of Toronto's shared infrastructure, securing continued supply of water to York Region.
- This report and the Sanitary Sewer Ownership Transfer to the City of Toronto report, also included on the January 10<sup>th</sup>, 2019 Committee of the Whole agenda, should be considered in tandem as recommendations from both reports include complimentary negotiated terms required to execute the necessary agreements.

### 3. Background

On April 19, 2018, Council authorized staff to negotiate amendments to the Toronto-York Water Supply Agreement, including the ownership transfer of the Maple Collector Sewer, south of Steeles Avenue (as described in Attachment 1) to Toronto and report on the outcome of negotiations.

The water supply agreement and sewer transfer were negotiated at the same time, allowing the Region to leverage ownership of the Maple Collector Sewer south of Steeles to negotiate a perpetuity clause in the water supply agreement.

#### **Agreed upon principles include automatic and perpetual renewals of the agreement**

The private report contained guiding principles to be used by both parties during negotiations including: introduction of perpetual renewals, an amendment to the calculation of York Region's asset management contributions and ownership transfer of the Maple Collector Sewer. These guiding principles are included as Attachment 2.

#### **Supply of water from Toronto plays a key role in supporting existing population and future growth**

The Toronto-York Water Supply Agreement expires on May 31, 2025.

In 2018, more than 70 per cent of the Region's purchased water was supplied by Toronto. Based on forecasted demand, the Region will rely on Toronto to supply 509 million litres of water per day by 2031. To date, the Region has invested more than \$230 million in Toronto's infrastructure that services York Region. Continued supply of water from Toronto plays a critical role in servicing both existing residents and businesses and future planned growth for the Region.

#### **Toronto requested re-evaluation of asset management contributions**

As a result of an internal audit review, Toronto staff approached York Region staff in 2017 to discuss asset management contributions for the water supply system. In the current agreement, the Region pays Toronto a unit rate per cubic metre for water, calculated using the following four parameters:

- a) **Operating Costs** – prorated share of operating costs net of capital funding, debt repayment, reserve contributions and additional hydro costs for pumping to York Region;
- b) **Operating Surcharge** – hydro surcharge to compensate for additional hydro costs incurred to pump to higher elevations in York Region;

- c) **Return-On-Investment** – a return, based on the depreciated value of existing capital assets not subject to cost sharing under this agreement; and
- d) **Replacement Allowance** – a contribution representing 2.5 per cent of the depreciated value of assets used by York Region (based on annual usage), which acknowledges a life expectancy of assets.

Both “Return-on-Investment” and “Replacement Allowance” components of the water rate are intended to fund asset replacement, however, the structure of the existing agreement uses depreciated asset values. The use of depreciated asset values forces a downward trend on asset management contributions, despite costs to replace the assets increasing over time. Left uncorrected, this contradictory relationship will result in a shortfall in funding for asset replacement.

Despite adhering to the current agreement, Toronto advised that based on flows, the Region’s contributions for asset management appeared low and requested support in arriving at a mutually beneficial solution to address the potential contribution gap.

### **Council authorized staff to review and negotiate asset management contributions**

Through its asset management planning staff, the Region develops and implements long term asset management plans (as most recently brought before Council in May 2018) for Regional infrastructure. These plans consider requirements to build reserves to support future asset management needs, with contributions proportional to asset replacement value.

With more than 70 per cent of York Region’s purchased water supplied by Toronto, it is in York’s interest to ensure more advanced asset management practices are in place to maintain security of supply, mainly by ensuring contributions to asset management are generally proportional to asset replacement value.

Recognizing the importance of Toronto supply, Council authorized staff to review and negotiate amendments to the asset management components of the agreement in April 2018.

### **Maintaining partnerships with multiple municipalities allows the Region to be more resilient to system risks**

The Region has long term partnership agreements with the City of Toronto (water), Region of Peel (water and wastewater) and Region of Durham (wastewater). Maintaining partnerships with neighbouring municipalities allows growth, while improving operational flexibility and system resiliency.

## **Collaborative working group established to review and evaluate the agreement**

In mid-2018, an agreement review working group, composed of staff from both municipalities was formed. The working group included an appropriate mix of subject matter experts (operational, administrative and legal) to ensure a comprehensive review of the agreement was completed, culminating in negotiations of parameters related to asset management contributions in October 2018.

## **4. Analysis**

### **Proposed change to methodology will address future contribution gap**

Toronto's asset management expenditures are planned to increase over the next ten years due to aging infrastructure and improvements in asset management planning. This, along with the downward trend of York Region's contribution to Toronto's assets serving the Region, will result in a contribution gap. To help address the future contribution gap, a revised calculation methodology for asset management contributions was negotiated. This updated methodology will ensure fair and proportional contributions to future asset management needs for Toronto's shared assets.

### **Asset replacement values are essential in forecasting asset management funding requirements**

R.V. Anderson Associates Limited was engaged by Toronto to prepare a replacement cost evaluation of Toronto's water supply infrastructure, informing asset management requirement calculations. Region staff engaged GM BluePlan Engineering Limited to peer review Toronto's report and evaluate the asset management needs for Toronto's assets supporting York Region.

Through extensive technical evaluations and further negotiations, staff from Toronto and York Region agreed on a replacement value for the water supply infrastructure of \$9.4 billion.

Asset management contributions will be calculated using this replacement value, which will be reviewed and updated as required and once every five years at a minimum. The update will consist of any added or decommissioned assets and account for changes in construction costs and methodologies.

### **Proposed Replacement Factor is consistent with industry best practice**

Negotiated changes to the calculation of asset management contribution incorporate a Replacement Factor of 1 per cent. This corresponds with, on average, fully replacing each asset once every hundred years. This Replacement Factor is on the low end of those outlined in the Canadian Infrastructure Report Card, ranging from 1.0 to 2.5 per cent. Based on the analysis completed through review and negotiations, it has been determined to be appropriate, considering Toronto's asset mix and its proposed 10-year Capital Plan. As a

comparison, the Region's Replacement Factor for its water and wastewater assets is approximately 2 per cent.

To help inform further refinement of the Replacement Factor, annual contributions will be tracked against York Region's portion of Toronto's actual capital asset management expenditures. Variances will be considered as part of future analysis to determine the most appropriate next five-year Replacement Factor. For example, if the total contributions for the period are greater than York Region's share of Toronto's asset management expenditures, the net over-contribution may suggest downward movement of the Replacement Factor (e.g. 1 per cent to 0.95 per cent).

### **Increased contributions will be phased in over the next three years**

Staff negotiated a three year phase-in period for the increased asset management contributions, which will take place in 2019 and 2020, with the full rate not applied until 2021.

### **York Region's total capacity entitlement was increased to 535 million litres per day at no additional capital cost to the Region**

During the course of negotiations, staff were able to secure an increase in the Region's capacity entitlement from 509 million litres per day to 535 million litres per day. This increase will provide additional water supply to support growth beyond 2031, requiring no additional capital investment.

### **Toronto will continue to provide fluoridated water to York Region**

York Region staff negotiated with Toronto staff to ensure that water supplied to the Region will continue to be fluoridated, in the event that Toronto changes its current practices. The agreement includes terms that will allow York, at its sole discretion, to fund and implement the design, construction, operation, maintenance and replacement of equipment required to continue fluoridation, should Toronto discontinue the practice.

### **Balance of amendments recommended in this report are largely administrative in nature**

The last update to the Toronto-York Water Supply Agreement was in 2005. Since that time, administrative and operational practices have evolved. Updates to the agreement and aligning it with current practices will provide clarity to staff, reduce the administrative burden on both municipalities and ensure operational efficiency. These updates include clarification of items such as data sharing and communication protocols.

## 5. Financial

### **Asset management contributions paid to Toronto for purchased water will increase over a three year phase-in period**

The negotiated asset management contributions will increase the cost of water purchased from Toronto from approximately \$0.35 per cubic metre to \$0.46 per cubic metre in 2021. Staff have negotiated a three year phase-in period for these additional contributions. Approximate unit rates for 2019 and 2020 are \$0.41 per cubic metre and \$0.43 per cubic metre, respectively.

In 2017, York Region paid Toronto \$25.3 million for purchased water and approximately \$8 million was earmarked out of this payment for asset management. Based on the 2017 purchased water volume, annual payments to Toronto for asset management are anticipated to increase from \$8 million to approximately \$12.5 million in 2019, \$14 million in 2020 and \$15.5 million in 2021.

### **No impact on York Region's wholesale water rate to the Local Municipalities**

Environmental Services and Finance staff have reviewed the proposed increase and evaluated its impact on the current water rate model. Evaluation of the updated rate's impact on York Region's wholesale water rate and Council approved increases, has determined that the Region remains on track to achieve full cost recovery for water and wastewater services in 2021.

The financial model developed for the [October 2015](#) approved water rate schedule anticipated some increases in purchased water cost. Environmental Services has developed a Water Purchasing Strategy initiative to optimize purchased water costs. Considering both of these, the current wholesale rate structure is able to support this rate increase.

Increased costs associated with purchased water from Toronto are included in the proposed 2019-2022 multi-year operating budget.

## 6. Local Impact

Changes to the wholesale cost of water from Toronto will not impact the currently approved Regional water and wastewater user rates to the local municipalities. Introduction of perpetual renewal of the agreement provides a significant benefit to local municipalities by enhancing security of long term water supply.

## 7. Conclusion

The Region relies on Toronto to supply a key portion of its current and future water supply.

Automatic and perpetual renewals of the Toronto-York Water Servicing Agreement will ensure security of supply to York Region's existing and future water users.

The Region's capacity entitlement was increased to 535 million litres per day, supporting growth beyond 2031 requiring no further capital investment.

Increasing asset management contributions will ensure that proper rehabilitation and replacement of Toronto's assets servicing York Region can take place as planned. Appropriate rehabilitation of these assets will help protect the Region's capital investments and provide for long-term water supply. Furthermore, increased contributions will not affect the target of reaching full cost recovery for water and wastewater services in 2021.

Recommendations contained in this report, along with those contained within the Sanitary Sewer Ownership Transfer to the City of Toronto report on this Committee agenda are supported by negotiated terms (perpetual renewals, increased asset management contributions and the ownership transfer of the Maple Collector Sewer) to maintain long-term water security for the Region.

Staff do not recommend proceeding with the water agreement update independent of the sewer transfer.

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For more information on this report, please contact James Steele, Director, Infrastructure Asset Management, Environmental Services at 1-877-464-9675 ext. 73018. Accessible formats or communication supports are available upon request.

The Senior Management Team has reviewed this report.

Recommended by:

**Erin Mahoney, M. Eng.**  
Commissioner of Environmental Services

Approved for Submission:

**Bruce Macgregor**  
Chief Administrative Officer

December 13, 2018  
Attachments (2)  
YORK #9036401








## Location of Maple Collector

Toronto-York Water Servicing Agreement Update

January 10, 2019

## Legend

-  Sanitary Sewer to be transferred
-  YDSS
-  Access Chamber

0 0.1 0.2  
Kilometers



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## York-Toronto Water Supply Agreement Update and Sanitary Sewer Ownership Transfer to the City of Toronto – Guiding Principles

### Term of Water Supply Agreement

- The initial term of the Agreement shall commence on the Effective date of signing and will run until May 31 2040, and
- The term of the Agreement shall be automatically renewed for successive twenty year periods in perpetuity unless both parties, at any time prior to the date which is three months prior to expiry of the then current Term agree not to renew (the “Notice of Non-Renewal”).

### Contributions to Asset Management for the Water Supply Agreement

- The rate calculation schedule will be amended to remove all costs and references to “Return on Investment” and “Replacement Allowance” portions of the rate calculation.
- Rate calculation schedule will be amended to include costs associated with Asset Replacement Contributions. The Asset Replacement Contribution will be calculated as follows:

#### **Asset Replacement Contribution (\$/ML)**

$$= \frac{\text{Replacement Value (\$)} \times \text{Replacement Factor (/year)}}{\text{Toronto Water Production } \left( \frac{\text{ML}}{\text{year}} \right)}$$

Where:

**Replacement Value** - replacement value, as agreed by both parties and updated every five years, at a minimum

**Replacement Factor** – fraction of Replacement Value to be contributed to asset replacement as agreed by both parties

**Toronto Water Produced** –total water produced by Toronto

- Asset Replacement Contributions (and associated withdrawals) shall be tracked and monitored by financial representatives from Toronto and York and reported to the Toronto/York Water Supply Agreement Committee on an annual basis.

### Transfer of Maple Collector Sewer

- The Region will transfer ownership of the Maple Collector Sewer, South of Steeles Avenue, to the City of Toronto "as is, where is and at no cost"