
REPORT TITLE: **Toronto-Peel Cross-Boundary Wastewater Servicing Agreements**

FROM: Kealy Dedman, Commissioner of Public Works

RECOMMENDATION

That the Commissioner of Public Works be authorized to negotiate and execute a new agreement with The Corporation of the City of Toronto (Toronto), as well as any future amendments, renewals, extensions and/or termination thereof, on legal terms satisfactory to the Regional Solicitor and on business terms satisfactory to the Commissioner of Public Works, as may be deemed appropriate by the Commissioner of Public Works from time to time, based upon the principles set out in the report of the Commissioner of Public Works, listed on the October 28, 2021 Regional Council agenda, titled “Toronto-Peel Cross-Boundary Wastewater Servicing Agreements”, to address the cross-boundary wastewater servicing arrangements between Toronto and The Regional Municipality of Peel.

REPORT HIGHLIGHTS

- Cross-boundary wastewater servicing agreements between The Regional Municipality of Peel (Peel) and The Corporation of the City of Toronto (Toronto) have existed since the 1960s allowing the respective municipalities to receive and treat each other’s wastewater to take advantage of natural drainage characteristics and avoid significant capital and operational investments.
 - Peel and Toronto are currently operating under outdated terms and conditions which were last set out in the cross-boundary wastewater servicing agreement executed in 1981.
 - Peel staff, in collaboration with Toronto staff, completed a comprehensive review of the current state of the cross-boundary wastewater servicing, identified several areas for improvement, and agreed that a revised agreement was required.
 - Peel staff completed a study to evaluate the long-term wastewater servicing alternatives for the wastewater that Peel transfers to Toronto. The study concluded that building new infrastructure to redirect Peel’s wastewater into Peel has a return on investment of approximately six years with cost savings/cost avoidance in perpetuity.
 - Greater Toronto Airports Authority (GTAA) and a private sector renewable energy company are interested in working with Peel on a district energy initiative that uses municipal wastewater to provide heating and cooling to the GTAA facilities. This initiative would require the construction of a new sanitary sewer that would enable Peel to redirect the wastewater currently transferred to Toronto.
-

Toronto-Peel Cross-Boundary Wastewater Servicing Agreements

DISCUSSION

1. Background

a) Cross-boundary Wastewater Servicing Agreements

Township of Toronto and Metropolitan Toronto executed wastewater servicing agreements in the 1960's which enabled The Regional Municipality of Peel (Peel) and The Corporation of the City of Toronto (Toronto) to transfer, receive, and treat portions of each other's wastewater. This arrangement allowed wastewater to flow by gravity in the natural drainage area (which follows topography) minimizing the infrastructure and operating costs for both municipalities which would have otherwise been required to direct flows to each other's respective treatment facilities.

The cross-boundary transfer of wastewater occurs at three (3) locations listed in the table below. Please refer to Appendix I for a map of the interconnection locations.

Location	Wastewater	
	Transferred By	Received By
Lakeshore Road West & 41 st Street	Toronto	Peel
Rakely Court & Eglinton Avenue East	Toronto	Peel
Disco Road & Highway 427	Peel	Toronto

The volume of wastewater transferred at each location is metered. The volume of wastewater received by Peel from Toronto historically exceeds the volume of wastewater Peel transfers to Toronto. Each municipality bills the other quarterly for the total volume of wastewater they receive using a common wholesale wastewater rate agreed to in 2009. The following table summarizes the annual wastewater volumes received by each municipality and the net revenue received by Peel over the past three years. The average annual volume of wastewater received by each municipality has been consistent over the past decade.

Year	Annual Wastewater Volume Received by Peel from Toronto (millions of Litres)	Annual Wastewater Volume Received by Toronto from Peel (millions of Litres)	Annual Net Revenue Received by Peel
2018	10.5	7.3	\$ 788,480
2019	10.9	7.2	\$ 911,680
2020	9.9	6.4	\$ 862,400

b) History

The first cross-boundary wastewater agreement was executed between the Township of Toronto and Metropolitan Toronto in 1961. This agreement allowed the transfer of

Toronto-Peel Cross-Boundary Wastewater Servicing Agreements

wastewater from the Malton area to Toronto at a connection point located at Disco Road and Highway 427.

In 1970, a second cross-boundary wastewater agreement was executed between Ontario Water Resources Commission (OWRC) (the former Owner and Operator of the South Peel Water and Wastewater system) and Metropolitan Toronto to allow the transfer of wastewater from Etobicoke to the G.E. Booth (Lakeview) Wastewater Treatment Plant located in Peel. OWRC owned and operated the wastewater treatment plants in Peel in the 1960's and early 1970's. This agreement was amended in 1981 and remains the most current version.

The cross-boundary connection at Rakely Court and Eglinton Avenue was placed in service in 1976 to transfer wastewater from Etobicoke to Peel. However, an agreement for this connection was never executed.

2. Findings

a) Agreement Improvements

It has been 40 years since the last cross-boundary agreement was executed and the terms and conditions are outdated. Toronto and Peel staff have been intermittently addressing the complexities of the arrangements, the agreements and the infrastructure involved for some time. During this time, staff completed a comprehensive review of the current state and identified several areas for improvement including:

- alignment with Council's endorsed Guiding Principles for inter-municipal water and wastewater servicing established in 1996 (see Appendix II);
- wastewater rate calculation methodology that accounts for reserve contribution requirements, operations and maintenance costs, and inflation;
- incentives for both parties to effectively manage the quality of wastewater transferred;
- commitments for both parties to effectively manage the quantity of wastewater transferred, including considerations for future growth and inflow and infiltration;
- inter-municipal communication protocol to effectively respond to emergency circumstances;
- formal governance structure and Terms of Reference to administer a new comprehensive agreement for all three connection points;
- clear wastewater flow measurement specifications for reliable billing;
- updated legislative requirements; and
- updated dispute resolution language.

b) Wastewater System Study

Peel staff retained Black & Veatch in 2019 to assess, in part the technical feasibility and cost of redirecting Peel's wastewater that is currently transferred to Toronto back into Peel. The major challenge associated with this alternative in the past has been that Peel would be solely responsible for the funding to design, construct and operate the new infrastructure needed. Even with the capital investment in new infrastructure, the study concluded that the return on investment at the current rates paid by Toronto, would be approximately six years.

Toronto-Peel Cross-Boundary Wastewater Servicing Agreements

c) Thermal Energy Initiative with Greater Toronto Airport Authority

In addition to the study completed in 2019, Peel staff have recently been approached by the Greater Toronto Airports Authority (GTAA) and a private sector renewable energy company to discuss potential involvement in a district energy initiative that uses municipal wastewater to provide heating and cooling to the GTAA facilities, including ultimately to both Terminal 1 and Terminal 3.

For the initiative to be viable, construction of a new sanitary sewer to direct Peel's municipal wastewater along the perimeter of the GTAA property would be required. The alignment of this sanitary sewer would follow the recommendation from the 2019 Black and Veatch study described above. The new sanitary sewer would benefit the district energy project of the GTAA and would, in the process, enable Peel to redirect the wastewater currently transferred to Toronto. In addition, Peel would not be financially responsible for the capital cost of designing and constructing the new sanitary sewer. Subject to further discussions and commitments from the parties, staff will report to Regional Council in early 2022 regarding the overall project viability and the development of a Memorandum of Understanding/ Agreement.

3. Proposed Direction

Staff recommend that Regional Council authorize the Commissioner of Public Works to negotiate, enter into, and execute a new agreement, including any future amendments, renewals, extensions, or termination thereof, on legal terms satisfactory to the Regional Solicitor and on business terms satisfactory to the Commissioner of Public Works, based upon the principles set out in this report to address the cross-boundary wastewater service arrangements between Toronto and Peel.

Staff will collaborate and negotiate with Toronto to amend current operating arrangements and record future operations in a new form of agreement which includes wastewater flows at all three connection points, all to address the following challenges:

a) Predetermine Growth and Wastewater Flow Projections

The current agreements do not include any limitations or consideration for growth and associated variability of the wastewater flows that each municipality may transfer. Staff propose adding a schedule to the revised agreement that outlines each respective municipality's growth and wastewater flow projection for the term of the agreement. This will provide each municipality with a line of site on the future impacts of development which could alter the wastewater flow rates being transferred.

b) Establishing a Fair Wastewater Rate

The current cross-boundary wastewater servicing agreements do not include clear terms for adjusting the wastewater rate. In 2009, Toronto and Peel agreed to a revised wastewater rate, however there were no provisions established at that time to adjust the wastewater rate for inflation. As a result, the 2009 wastewater rate remains in effect. In 2015, Peel staff, in cooperation with Toronto staff, retained a consultant to review the financial and servicing components of the current agreements. The findings and recommendations of the consultant are considered sound by Peel staff and should be used to help draft the financial terms and conditions of the revised agreement. Some of the recommendations include:

Toronto-Peel Cross-Boundary Wastewater Servicing Agreements

- A new wastewater rate cost model to reflect current best practices in infrastructure asset management and alignment with the policies and principles within both Toronto and Peel
- Periodic review of the wastewater rate and inflation rate

Staff estimate the amount of lost revenue to Peel due to this static wastewater rate since 2015 is \$2 million. Staff intend to negotiate a retroactive payment, as determined and derived through a comprehensive calculation, to address amended rates as per the recommendations of the 2015 study.

c) Establish Wastewater Surcharge

Staff also propose to include the ability for a receiving municipality to recover treatment costs if a discharging municipality exceeds the quality limits of the wastewater by-law, Bylaw 53-2010 (Parts 2 and 6) as part of the industrial wastewater surcharge program.

d) Sole Receiving Municipality Wastewater Rate

As previously noted above, Peel has potential future opportunities to redirect wastewater that is currently transferred to Toronto. If a new sanitary sewer were to be constructed to redirect Peel's wastewater then Peel would no longer need to divert wastewater at the Malton location to Toronto. Peel would then be the sole receiving municipality and Toronto would be the sole discharging municipality in the agreement. There would no longer be a reciprocal relationship between Peel and Toronto. Peel and Toronto would no longer share risk and benefits equitably. Peel staff will propose an adjusted wastewater rate (the "Sole Receiving Municipality Wastewater Rate") to be included in the terms and conditions of the revised agreement should this rate be required in the future.

RISK CONSIDERATIONS

A revised cross-boundary wastewater servicing agreement between Peel and Toronto is required to address the outdated terms and conditions of the current agreements. If the parties fail to come to consensus in a timely manner then Peel, as the net receiver of wastewater, will continue to lose revenue because the current fixed wholesale wastewater rate established in 2009 is not adjusted for inflation.

If a new agreement cannot be agreed upon in the current negotiations process, the options for Peel to obtain appropriate cost recovery would involve use of the dispute resolution process outlined in the original agreement.

FINANCIAL IMPLICATIONS

a) New Wastewater rate

The joint review completed by Peel and Toronto in 2015 recommended a new wholesale wastewater rate model. The current fixed wholesale wastewater rate, agreed to in 2009, is \$0.2464 per cubic meter. The calculated 2021 wholesale wastewater rate, in accordance with the proposed model, is \$0.3619 per cubic meter. Therefore, Peel as the net receiving municipality, would receive an increase in revenue (approximately

Toronto-Peel Cross-Boundary Wastewater Servicing Agreements

\$365,000 more per year) from the proposed revised agreement which would help reduce the retail wastewater rate for Peel residents and businesses.

b) Wastewater Surcharge

If wastewater surcharge terms and conditions for wastewater by-law exceedance are introduced to the revised agreement, staff estimates that Peel could collect an additional \$300,000 per year from Toronto.

c) Sole Receiving Municipality Wastewater Rate

If a new sanitary sewer is constructed in the future which enables Peel to cease transferring wastewater to Toronto, Peel staff propose establishing a Sole Receiving Municipality Wastewater Rate which would account for administrative and corporate overhead costs as well as risk which would no longer be shared equitably. This rate would be applied to the volume of wastewater received from Toronto. Staff estimate that the Sole Receiving Municipality Wastewater Rate, using 2020 financial information and based on full cost recovery, would be approximately \$0.7277 per cubic meter or a \$7 million revenue based on Toronto 2020 flow to Peel.

CONCLUSION

Peel and Toronto have benefited from the reciprocal cross-boundary wastewater servicing agreements for several decades. Revising the agreement is necessary to effectively address the challenges and opportunities summarized in this report and to ensure the long-term success and sustainability of this agreement for decades to come.

APPENDICES

Appendix I - Wastewater Servicing Agreement Discharge Locations

Appendix II - Provision of Water & Wastewater Services to Adjacent Municipalities

Authored By: Frank Pugliese, Manager of Contract Administration and Oversight