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**For Information**

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**REPORT TITLE: 2021 Annual Performance Review of the South Peel Water and Wastewater Agreement with the Ontario Clean Water Agency**

**FROM: Kealy Dedman, Commissioner of Public Works**

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**OBJECTIVE**

To report on the performance of the Management, Operations, and Maintenance Agreement between the Ontario Clean Water Agency and the Region of Peel as per Council Resolution 2018-321.

**REPORT HIGHLIGHTS**

- Region of Peel (Region) staff developed and implemented a process to evaluate Ontario Clean Water Agency (OCWA) performance on an annual basis based on the Region's Vendor Performance Evaluation template.
  - Over the next 12 months OCWA and Region staff will focus on maintenance management performance and the implementation of an asset management technology solution to achieve consistency with the Region's Enterprise Asset Management (EAM) Program.
  - Energy is used efficiently at the water and wastewater facilities. Participation in Ontario's Industrial Conservation Initiative resulted in electricity cost avoidance.
  - OCWA was subject to a Value-For-Money Audit by the Office of the Auditor General of Ontario which concluded that OCWA continues to provide safe and reliable drinking water and reliable wastewater treatment services in compliance with regulation.
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**DISCUSSION**

**1. Background**

Ontario Clean Water Agency (OCWA) operates and maintains the water and wastewater treatment facilities and water transmission system in South Peel on behalf of the Region of Peel (Region) under a 10-year service agreement (Agreement) which began January 1, 2020. Council Resolution 2018-321 requires that staff report back to Council on the overall performance of the Agreement on an annual basis. Region staff reported to Council on the regulatory compliance performance of the Agreement as required by legislation, however, due to the COVID-19 Pandemic response demands, Region staff did not report on the overall performance of 2020, the first year of the Agreement.

**Evaluation Process**

Region staff developed and implemented a performance evaluation process based on the Region's Vendor Performance Evaluation template. Fifteen evaluation criteria were used to

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evaluate OCWA's performance. The criteria are based on the Agreement's scoping statement which is aligned with the Region's Term of Council Priorities: To Build Environmental Resilience and Improve Service and Confidence and the principles of the Region's Strategic Plan. The evaluation criteria are as follows:

- Business Plan and Efficiency Improvement Commitments
- Regulatory Compliance
- Effectiveness of Quality Management Systems
- Wastewater Effluent Performance Criteria
- Drinking Water Performance Criteria
- Reporting Requirements
- Maintenance Performance
- Capital Improvement Support
- Major Capital Maintenance and Replacement Support
- Energy Use and Energy Code of Practice
- Process Chemical Use
- Cost of Service
- Indemnification of Peel and Insurance Claims
- Health and Safety
- Reliability & Continuity of Service

### **Agreement Oversight**

Region staff and OCWA staff collaborate daily on operational, maintenance, compliance, energy management, continuous improvement, and capital projects as both parties share water and wastewater service delivery responsibilities. The Agreement requires OCWA to provide monthly, quarterly, and annual performance reports which enable Region staff to effectively monitor and regulate OCWA's performance.

## **2. Findings**

Region staff undertook a thorough review of OCWA's 2021 performance. The results of the evaluation are summarized into three main categories described below.

### **a) Quality, Capital Improvements Support, Continuity of Service and State of Good Repair**

Drinking water and wastewater effluent quality continue to meet the Region's expectations. Detailed information on the regulatory compliance performance of the Region's drinking water systems was included in the Council Report "Drinking Water Systems 2021 Annual Drinking Water Systems Summary Report" and presented to Regional Council (for information) at its meeting held on March 24, 2022 (Resolution 2022-176).

Compliance requirements of the Region's wastewater systems were also successfully fulfilled in 2021. A summary of the wastewater monitoring data and maintenance programs, including any deviation from the prescribed conditions of environmental approval requirements was prepared and made available through the Region website at [peelregion.ca/wastewater/reports](http://peelregion.ca/wastewater/reports). This report is not required by legislation to be made available to the public; however, Region staff publish the report annually to keep

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residents and business owners informed and to increase public awareness and confidence in the Region's wastewater services.

The Region continues to benefit from the application of quality management system principles to the operations of the water and wastewater facilities OCWA operates on Region's behalf. OCWA is required to maintain Drinking Water Quality Management System (DWQMS) accreditation. DWQMS focuses on progressive enhancement of existing processes, improved documentation, and the application of best management practices which continually improve the operation and management of the South Peel Drinking Water System.

Continuity of water and wastewater services has been effectively maintained throughout the COVID-19 pandemic. OCWA responded effectively by implementing COVID-19 screening, enhanced security and cleaning. OCWA has maintained sufficient staff capacity throughout the pandemic. Additional costs, over and above the Agreement base fee, were incurred due to these safety measures and recovered through available provincial COVID-19 response funding. The Region and OCWA worked collaboratively on a Business Continuity Plan (BCP) during the pandemic. The BCP ensured staff was isolated from the general public and limited visits to the water and wastewater facilities by non-essential workers. Regular meetings took place between the Region and OCWA at a management level to ensure alignment with the provincial guidelines, and effective response to the evolving pandemic.

The Agreement requires OCWA to report to the Region on their employee training and development programs, including succession planning. Succession and workforce planning is reviewed as part of OCWA's performance management. Region staff reviews Staffing Optimization Plans provided by OCWA on an annual basis to ensure a proactive succession management program is in place. The review also ensures alignment with business priorities and the Region's needs.

OCWA continues to effectively support the Region's extensive capital expansion projects and improvements. The South Peel water and wastewater facilities continue to be some of the most modern and technologically advanced in the world. In addition to the capital expansions, OCWA supported over (80) state of good repair projects valued at approximately \$16M. Over the next three to five years OCWA will support an extremely robust capital expansion at the Region's main wastewater treatment facilities in addition to supporting the Region's enterprise asset management program. This includes a major \$215M plant expansion which was recently awarded for construction.

### **b) Asset Protection**

The South Peel Water and Wastewater Systems consist of more than 48,000 assets with an insured replacement value of \$9.6 billion. An additional \$1.5 billion in asset value is expected as part of the Region's 10-year capital program. Therefore, asset protection is a top priority for the Region in the Agreement with OCWA and as an organization through the Enterprise Asset Management (EAM) Program.

In 2021, the Region initiated the implementation of IBM Maximo, a modern enterprise-wide and integrated EAM system to manage assets effectively. Once the Region determined IBM Maximo was the future EAM technology solution, Region staff began scoping the requirements for the implementation of IBM Maximo for the South Peel

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water and wastewater facilities operated by OCWA to replace the existing outdated maintenance management software used by OCWA.

OCWA and the Region plan to initiate the implementation of IBM Maximo for the South Peel water and wastewater facilities in 2022 to achieve the Region's desired EAM business capabilities, consistent asset management, asset information and technology solution standards for all of the Region's assets. Having a modern asset management technology solution will also enable Region staff to monitor OCWA's asset protection performance more effectively and efficiently.

### c) Energy Management and Environmental Impact

Annual electricity consumption for 2021 was 289.3 MWh, at a cost of \$33,500,961 which represents 67.9 per cent of the total annual electricity consumed by the Region owned and operated facilities. The 2021 electricity consumption was approximately 1.5 per cent lower than 2020 mainly due to slightly lower water demand, enhanced energy management programs and energy efficient lighting retrofits. The 2021 electricity cost was approximately 6.2 per cent lower than 2020 due to lower electricity rates and the Region's participation the Industrial Conservation Initiative (ICI) demand response program, administered by Ontario's Independent Electricity System Operator.

	2020	2021	Variance
Electricity Consumption (MWh)	293.7 MWh	289.3 MWh	- 1.5%
Electricity Cost	\$ 35.7M	\$ 33.5M	- 6.2%
Natural Gas Cost	\$ 0.79M	\$ 0.86M	+ 8.9%

The Region and OCWA continue to explore and implement energy conservation, electricity demand management, and renewable power generation technologies to offset increases to electricity rates and lower environmental emissions. Energy use in the South Peel water and wastewater facilities continues to be managed well and metrics related to energy use per volume of water and wastewater treated continues to trend in a positive direction.

OCWA, in collaboration with the Region, resumed participation in the ICI demand response program in 2021 and achieved Global Adjustment (GA) cost avoidance. GA represents the portion of electric utility bills that is used to recover the costs to build new electrical infrastructure, maintain existing resources and fund renewable energy projects. GA cost avoidance is achieved by voluntarily reducing electricity loads at the water and wastewater facilities during peak electricity demand periods in the province. The table below summarizes the electrical loads that OCWA reduced during the top five electricity demand peak periods and associated cost avoidance.

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<b>System</b>	<b>No. of Peaks Captured*</b>	<b>Total Load Reduced (MW)</b>	<b>Approx. Cost Avoidance</b>
Water (Treatment & Transmission)	5	37.8	\$3,690,755
Wastewater (Treatment)	5	4.2	\$410,473
<b>Total</b>		<b>42.0</b>	<b>\$4,101,228</b>

*\*Period captured is from May 1, 2021 to April 30, 2022*

**d) Value-For-Money Audit Report, The Office of the Auditor General of Ontario**

In 2021, OCWA was subject to a Value-For-Money Audit by the Office of the Auditor General of Ontario. Key findings from the audit report include the following:

- OCWA provides safe and reliable drinking water and reliable wastewater treatment services in compliance with regulation.
- OCWA does well in treating drinking water compared to other private operators and municipally-operated facilities.
- For each of the last five years, municipal drinking water facilities that were operated by OCWA had fewer adverse water quality incidents than those run by either municipal or private operators.

The audit report also made several recommendations for improvement on areas that OCWA will be acting upon, including:

- Improving internal systems for tracking and monitoring adverse test results.
- Following-up with clients on corrective actions and testing where required.
- Working with clients to ensure treatment facilities can handle the impacts of climate change through enhanced asset management and capital planning processes.
- Improving cybersecurity plans.
- Region staff have been working with OCWA to prepare a plan to implement the recommendations outlined in the audit report.

**3. Proposed Direction**

Region staff will continue to utilize the evaluation process to measure performance and discuss contract deliverables and service delivery with OCWA at regular intervals. Interim evaluations will be conducted, and results will be shared with OCWA staff to provide full transparency of their performance and to provide ample opportunity to improve.

Region staff will also meet with internal stakeholders on a regular basis to ensure the evaluation process captures the necessary criteria and to continuously improve the process.

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### RISK CONSIDERATIONS

The Agreement with OCWA includes the strategic sharing of risk. The Region and OCWA agreed that specific risks should be borne by the party best able to manage and mitigate risks. This performance review identified opportunities for improvement and risk mitigation to ensure the Region's objectives continue to be met over the long-term including asset maintenance service level optimization.

Initiatives to further reduce risk and enhance operations form part of OCWA's Three-Year Business Plan. The challenges and opportunities identified in the first two years of the agreement are being managed successfully by the Region and OCWA.

### FINANCIAL IMPLICATIONS

The Service Fee is the fixed annual cost for OCWA's services and any adjustments to their scope of services approved by the Region. The Annual Fee represents the Service Fee plus the pass-through costs of insurance, process chemicals and fuel. Costs for electricity and natural gas are not included in the Annual Fee as the Region will continue to pay these costs directly. As part of the Agreement, OCWA provided annual projections of the Service Fee for 2020 to 2029.

The Service Fee of the first year of the Agreement (2020) was \$41,916,515 and the Service Fee for the second year of the Agreement (2021) was \$42,718,677. The increase to the Service Fee was driven by a fixed inflation rate built into the terms of the agreement, additional services for managing planned, actual infrastructure growth within the treatment systems and operations and maintenance costs of process enhancements. Furthermore, the actual annual invoices received from OCWA for the first year and second year of the Agreement have been under budget. The table below demonstrates the variance between the years 2021 and 2020 for both projected fees and actual fees:

	2020	2021	Variance
<b>Projected Service Fee</b>	\$42,483,358	\$43,198,154	+ 1.7%
<b>Actual Service Fee</b>	\$41,916,515	\$42,718,677	+ 1.9%

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### **CONCLUSION**

Region staff found that the objectives of the Agreement, for the second year (2021) of the 10-year term of the Agreement, have been satisfied, and further, that risk is being managed appropriately. Region staff continue to foster the partnership with OCWA to seek areas where continuous improvement initiatives can further reduce risk and to ensure required control over the South Peel water and wastewater facilities.

Region Staff will continue to report to Regional Council on the performance of the agreement on an annual basis.

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