

REPORT Meeting Date: 2023-03-23 Regional Council

## For Information

REPORT TITLE: 2022 Water Compliance Update - Annual Summary

FROM: Kealy Dedman, Commissioner of Public Works

#### **OBJECTIVE**

To provide an update on the compliance status of the Region of Peel's drinking water systems and completion of the 2022 Summary Report.

#### **REPORT HIGHLIGHTS**

- The Region fulfilled the scope of its drinking water responsibilities as required by Ontario legislation, and maintained compliance, with the few minor exceptions listed in Appendix I, all of which represent low to no risk to drinking water quality.
- Ministry of the Environment, Conservation and Parks inspection ratings of the Region's drinking water systems show that the Region's Operating Authorities are performing very well and committed to delivering high quality drinking water.
- Region staff maintain customer confidence in water services through convenient online resources and exceptional customer service.
- The Region continues to effectively manage threats to drinking water quality, summarized in Appendix II, and will provide Regional Council with updates on regulatory and operational performance and resource needs to maintain service standards.
- Region staff are committed to support Regional Council to meet their legislated responsibilities of the Statutory Standard of Care under the Safe Drinking Water Act, 2002.

# **DISCUSSION**

## 1. Background

Schedule 22 of Ontario Regulation 170/03 under the *Safe Drinking Water Act, 2002* (the Act) requires a Summary Report to be prepared for Regional Council no later than March 31<sup>st</sup> of each year. The Summary Report is an overview of the Region's drinking water systems' regulatory performance with focus on events of non-compliance. It includes a summary of actions taken to implement corrective and preventative measures to eliminate or lower the risk to public health or the natural environment. The Summary Report is provided to Regional Council to support their Statutory Standard of Care responsibilities and decision-making authority over Peel's drinking water systems.

#### Statutory Standard of Care

Duties and responsibilities of the water system Owners and Operating Authorities are outlined in the Ontario Safe Drinking Water Act, 2002 (the Act).

Section 19 of the Act imposes a Statutory Standard of Care upon Regional Council which ultimately exercises decision-making authority over the drinking water systems. Regional Council must act honestly, competently and with integrity and exercise the level of care and diligence to protect drinking water consumers and the natural environment. Failure to carry out the requirements is deemed an offence under the Act.

Regional Council must be aware of drinking water system performance and the future needs that safeguard the integrity of water supply infrastructure. This is accomplished through various staff reports to Regional Council throughout the year including the annual budget to fund water and wastewater system maintenance, rehabilitation, and renewal as well as technologies to improve operation and management of drinking water systems.

Regional Council's support of work that mitigates the potential risks to water quality, public health, and the natural environment, as highlighted in Risks Considerations section of this report, fulfils many obligations of the Statutory Standard of Care.

# 2. Findings

## a) Statement of Compliance - Safe Drinking Water Act, 2002

The Region's drinking water systems consistently complied with the requirements of the Act, apart from the minor incidents summarized in Appendix I of this report. These events of noncompliance posed low risk to drinking water quality and public health.

# b) Water System Inspections by the Ministry

Municipal drinking water systems undergo annual inspection by Ministry of the Environment, Conservation and Parks (the Ministry) every nine to sixteen months. The inspection for each drinking water system is comprised of source-to-tap focused audits that yield findings and a score out of 100 per cent.

The Ministry inspection is comprised of several different categories each varying in weight as to potential impact on drinking water safety. While the findings of noncompliance influence the overall inspection score, a final rating below 100 per cent does not mean drinking water is unsafe. It does identify areas for improvement and encourages actions that allow staff to measure progress in water system performance.

The 2022 inspections of the Region's drinking water systems confirmed safe, high quality and consistent supply of drinking water to our communities. The scores of the 2022 Ministry inspections are presented in the table below:

Drinking Water System Name	Inspection Score
Caledon Village – Alton	100%
Cheltenham	100%
Inglewood	100%
Palgrave – Caledon East	100%
South Peel Distribution System	*
South Peel – AP Kennedy Water Treatment Plant	*
South Peel – Lorne Park Water Treatment Plant	*

<sup>\*</sup> the inspection was still ongoing at the time of preparation of this report

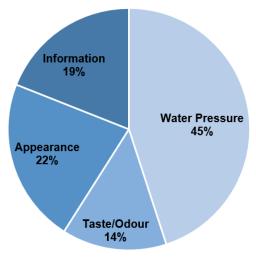
## c) 2022 Water Quality Reports

Provincial legislation requires Owners of drinking water systems to prepare an annual water quality report and make it accessible to the public. Region staff prepared the 2022 Water Quality Annual Reports and published them on the Region's website by the required date of February 28, 2023. Water Quality Reports summarize water quality monitoring and test results compared with Ontario Drinking Water Standards. These reports also provide details about Peel's treatment processes, water quality monitoring practices, staff competencies, and drinking water initiatives. The additional content raises awareness of service level and helps strengthen public confidence in the Region's water supply.

## d) Consumer Confidence

Staff maintain a customer-focused approach in addressing enquiries, managing resolution of public complaints, creating awareness of new initiatives, making information accessible and timely, and responding to service interruption or requests for water quality checks.

In 2022, staff responded to 1,433 enquires (representing ~1 per cent of the Region's population serviced) related to drinking water quality, aesthetics, and continuity of supply, as depicted in the chart below.



2022 Water Quality and Supply Enquiries

Many enquiries reflected issues associated with internal plumbing and not related to the Region's drinking water supply. Staff investigate complaints to ensure safety of drinking water and compliance with the Ontario legislation. Staff aim for every outcome to be positive and for every complaint to be resolved to the customer's satisfaction. Customer enquiries and feedback help to identify gaps and improve our programs for future years.

Through online annual water and wastewater system reports and service webpages, staff provide clear information on the processes involved in the delivery of safe drinking water, overall regulatory compliance, and emergency preparedness. Format and content of annual reports demonstrates transparency and serves as a great resource to help customers find answers or tips to issues encountered in their homes or businesses.

# e) Water Management and Production

## Water Taking

Water taking for municipal water supplies in Ontario is legislated through a Permit to Take Water, which sets limits on the total quantity and pumping rate of groundwater or surface water (source water) taking. The permitted volumes are based on community water consumption rates, the environmental considerations for the area and potential impact of water takings on natural water flows, the ecosystem, and water source availability.

Compliance with the source water taking limits is continuously measured and monitored to ensure environmental protection and long-term availability of our groundwater and surface water resources for future generations.

In 2022, a single, brief exceedance of the maximum pumping rate occurred at the Caledon East Well No. 3, as documented in Appendix I of this report.

## Water Production

The Region measures volumes and flows of treated drinking water leaving each treatment plant using continuous flow measuring equipment, as required by the Municipal Drinking Water Licence. In 2022, the Region's drinking water systems treated over 211 billion litres of water. All the drinking water treated and directed to the distribution system achieved compliance with treatment facility-specific rated capacity limits.

## **RISK CONSIDERATIONS**

An important part of responsible delivery of any municipal service is identifying threats and assessing risk. The Region's Drinking Water Quality Management System (DWQMS) requires regular drinking water system risk assessments and the implementation of effective control measures to ensure consistent and reliable water and wastewater services.

The table below provides a high-level summary of the key risks to drinking water quality to ensure Regional Council is informed and support Council's Statutory Standard of Care duties under the *Safe Drinking Water Act*, 2002. More detailed information about each of these risks and the Region's control measures is available in Appendix II.

Risk Consideration	Description
Sustainable	The Drinking Water Quality Management System (DWQMS)
Management and	provides a framework for ensuring the consistent operation and
Oversight of Drinking	sustainability of water systems and delivery of quality drinking
Water systems	water to customers.
Lead in Drinking Water	Lead-based municipal service pipes and private plumbing can
	leach toxins into tap water.
Water Sector	Cyber attacks on water and wastewater utilities are becoming
Cybersecurity	more common.
Source Protection and	Region undertakes programs and initiatives to protect our water
Climate Change	sources from contamination and safeguard our infrastructure from
Adaptation	the impacts of climate change. Through regular forecasting and

Risk Consideration	Description
	careful planning, the Region assures adequate water supply and
	wastewater servicing capacity.
Contaminants of	As scientific knowledge grows, so does staff awareness of
Emerging Concern	additional health risks. It is important to know the prevalence of
	these substances in our water and potential treatment methods to
	reduce human exposure.
Aging Infrastructure	Region's State of Good Repair program ensures proactive
	replacement or rehabilitation of aging infrastructure to avoid
	service interruptions and costly emergency repairs.
Backflow	Region's Backflow Prevention Bylaw enforcement staff work to
(Contaminants from	prevent contamination from entering the drinking water system.
private plumbing into	
the municipal system)	

## CONCLUSION

The Region's water systems are well managed and operated to maintain compliance with provincial and federal legislative requirements. Knowledgeable and dedicated staff ensure protection of drinking water safety and the environment. Financial resources may be required in coming years to mitigate potential risks and ensure the long-term safety and sustainability of our water systems.

#### **APPENDICES**

Appendix I – 2022 Summary of Non-Compliance Events Appendix II – Risk Considerations

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