

Staff Report



To	Committee of the Whole
Service Area	Infrastructure, Development and Environment
Date	Wednesday, April 3, 2024
Subject	2023 Water Services' Annual Report, Summary Report and Water Efficiency Strategy Progress Report

Recommendation

1. That Guelph City Council approves the 2023 Water Services' Annual Report and Summary Report.
 2. That Guelph City Council receive the 2023 Water Efficiency Strategy Progress Report.
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Executive Summary

Purpose of Report

The Water Services' Annual Report and Summary Report (the Report) is a compilation of information that demonstrates to the water system Owner (City Council) and all stakeholders the ongoing delivery of an adequate and safe supply of drinking water to customers serviced by the City of Guelph Drinking Water System (Guelph DWS) and the Gazer Mooney Subdivision Distribution System (Gazer Mooney SDS, located in the Township of Guelph/Eramosa).

This report satisfies the regulatory requirements of the Safe Drinking Water Act (SDWA) including the Drinking Water Quality Management Standard (DWQMS); and regulatory reporting required under O. Reg. 170/03 – Section 11 and Schedule 22.

Through the report, the system owner, senior leaders, and customers are informed of the performance of Water Services for the period of January 1 to December 31, 2023.

Due to the regulatory requirements noted above, the Water Services' Annual Report and Summary Report are presented as a separate report from the Corporate Annual Report.

Council approved the 2016 Water Efficiency Strategy (WES) defined programs, policies, and resources to help the City meet reduction targets in average daily water production set-out in the 2014 Water Supply Master Plan. The 2023 WES Progress Report outlines the individual program successes and the progress to-date in achieving the reduction target of 9,147 cubic metres in average daily production by 2038.

Key Findings

- In 2023, Water Services maintained its commitment of providing consumers in the City of Guelph and the Gazer Mooney subdivision in Guelph/Eramosa Township with a safe, consistent supply of high-quality drinking water while meeting or exceeding, and continually improving on legal, operational and quality management system requirements.
- Since the implementation of the 2016 WES, the cumulative water savings achieved to date is 1,509 cubic metres per day.
- The total water savings achieved for 2023 was 84.2 cubic metres per day, falling short of the annual target (674 cubic metres per day). Challenges included staffing gaps and transitions and continuing to reestablish and adapt programs post-pandemic.
- Average daily residential water use in Guelph (166 L/person) remained the same in 2022, below the provincial (187 L/person) and national (223 L/person) averages that increased. 2023 consumption data is not finalized in time to include in the annual report.
- In 2023, 627 residential rebate applications and water audits were completed, and three business water audits were processed. For more information on the individual water efficiency programs available, visit guelph.ca/rebates.
- Various indirect water savings programs, public outreach and education programs were also delivered to Guelph residents to motivate water conservation and efficiency action.

Strategic Plan Alignment

The City's strategic plan theme 'Environment' supports the objective to conserve and protect Guelph's drinking water. [Ontario Safe Drinking Water Act \(2002\)](#) requires municipalities to prepare and submit Annual Report and Summary Report for review and approval by the system Owner (City Council).

Future Guelph Theme

Environment

Future Guelph Objectives

Environment: Empower the community to help create a sustainable city

Financial Implications

All financial implications of the Report were included as part of the Council-approved 2023 Water Services Non-Tax Operating and Capital Budgets.

Report

In satisfying the requirements of the Safe Drinking Water Act (2002), Environmental Services is pleased to present the 2023 Water Services' Annual Report and Summary Report for review and approval by the system Owner (City Council). Significant highlights of the report are described below. For Council and public reference, the complete reports are available for review at Guelph.ca/water-testing.

Water Services works closely with the Ministry of the Environment, Conservation and Parks (MECP) and Wellington Dufferin Guelph Public Health (WDGPH) to maintain and continuously improve the drinking water system and ensure safe drinking water.

Ministry of the Environment, Conservation and Parks Inspection Results

The 2023-2024 MECP Regulation 170/03 Inspection is ongoing, and an inspection score has not been obtained for the Guelph DWS or the Gazer Mooney SDS. Upon receipt of this report by end of Q1, any non-compliances identified through the inspection will be immediately addressed. For any issues that are identified, Water Services and Compliance, Programs & Performance will engage in (RCA), where continual improvement measures are identified and implemented, and new policies and procedures may be created to prevent such issues of non-compliance from reoccurring.

Through ongoing conversations with the MECP Inspector staff do not expect any major compliance issues or concerns.

Adverse Water Quality Incidents (AWQIs)

What is an AWQI? When something goes wrong with a Drinking Water System, the event may be referred to as an adverse drinking water quality incident (AWQI). An AWQI can be, but is not limited to, an adverse sample result, no free available chlorine (FAC) in a distribution system, or failure of a UV treatment device.

There were no AWQIs in the *Guelph Drinking Water System* in 2023.

External Audit Results

The third-party external reaccreditation audit was completed in person between October 2 and October 4, 2023, by. The auditor looked at 23 processes at Water Services and participated in a variety of facility tours. Reaccreditation to the DWQMS Version 2.0 was achieved.

The auditor noted there continues to be strong evidence of ongoing commitment to the DWQMS at the City of Guelph. System strengths observed during the audit included:

- Team: Commitment and passion
- Staff engagement and participation in internal audit and Management Review
- SCADA improvements
- Continual Improvement
- DWQMS documentation: management review, risk assessments, internal audit, updated QMS Policy statement

Two (2) minor non-conformances were identified for the Guelph Drinking Water System. One (1) minor non-conformance was identified for the Gazer Mooney Subdivision Distribution System.

A root cause analysis was performed, and a corrective action plan was submitted to the external DWQMS auditor for each non-conformance. The external DWQMS

auditor accepted the submitted corrective action plans, except for one and additional information was required. The additional information was prepared and submitted to the auditor as requested.

Resolution of the identified non-conformance will occur at the next external DWQMS audit (October 2024), the external DWQMS auditor will follow-up to ensure that the corrective action plan that was submitted for each non-conformance has been effectively implemented.

The external DWQMS auditor recommended to NSF that Water Services achieve re-accreditation to the DWQMS (version 2.0).

Annual Water Services' Management Review

Water Services conducts an annual Management Review, as required under the DWQMS. The Management Review meeting was conducted on February 12, 2024. Through the management review process, top management assesses the continuing suitability, adequacy, and effectiveness of the QMS. The results of the management review including any identified deficiencies, decisions and action items are reported to the Owner (Council). For more information, please see the Management Review meeting minutes appended to the Summary Report.

Municipal Drinking Water Licence

For Water Services' to be the Operating Authority for the Guelph Drinking Water System, the Corporation is required to obtain and maintain a Municipal Drinking Water Licence. The Municipal Drinking Water Licence must be renewed every five years. Water Services' Municipal Drinking Water Licence expires in July 2024.

There are five components that make up the licence that must be in place. They are:

A Drinking Water Works Permit

The Drinking Water Works Permit is issued by the Ministry of the Environment, Conservation and Parks and provides a description of the overall water system, including treatment, storage, and distribution and will include, when applied for, an authority to alter the system in a specified way.

Permits to Take Water

A Permit to Take Water is required for any water takings in Ontario that exceed more than 50,000 L of water per day. The purpose of the Ministry's Permit to Take Water (PTTW) program is to ensure the conservation, protection, wise use and management of the waters of the province. Permits are controlled, and not issued if the taking of more water in a given area would adversely affect existing users or the environment. The requirements of the Permit to Take Water reflect the Ontario government's continuing efforts to safeguard the province's water supply and detailed information is requested about individual water takings so that Ontario's water resources may be protected for all users. The City of Guelph holds 18 permits to take water for our drinking water sources that have different requirements, including different pumping rates and required monitoring of the environment in the surrounding area.

An Operational Plan

An Operational Plan is a plan prepared in accordance with the Drinking Water Quality Management Standard (DWQMS) and is required under the Safe Drinking Water Act. This plan documents Water Services' Quality Management System. To fulfill the requirements of the Municipal Drinking Water Licence, the Operational Plan must be endorsed by Council once per term. The updated Operational Plan was endorsed by council in June 2023.

The Operating Authority must be accredited

For Water Services to be an Accredited Operating Authority, the City must be accredited to the Drinking Water Quality Management Standard. Water Services has been accredited since 2009.

In order to maintain our accreditation, every year we complete a comprehensive audit and review of the Operational Plan along with our programs and processes by an independent certified accreditation body that is appointed by the province. Water Services completed this audit in October 2023 and achieved reaccreditation to the Drinking Water Quality Management Standard, version 2.0.

Financial Plan

The final requirement of the Municipal Drinking Water License is a long-range water financial plan as defined under [Ontario Reg 453/07](#) to advise the Owner of financial resources needed to sustain compliance and a fit state of repair of the water system.

As your operator representative, Water Services, Wastewater Services and Compliance, Programs & Performance staff have brought the [Financial Plan for Water and Wastewater Services](#) before Council through Committee of the Whole (February 6, 2024) and approval by Council (February 27, 2024).

Financial Implications

All financial implications of the Report were included as part of the Council-approved 2023 Water Services Non-Tax Operating and Capital Budgets.

Consultations and Engagement

Staff in the City's Engineering and Transportation Services and Planning and Building Services departments were consulted in support of the 2023 Water Services Annual Report and Summary Report.

Attachments

Attachment-1 2023 Water Services' Annual Report Guelph and Gazer Mooney

Attachment-2 2023 Water Services' Summary Report

Attachment-3 2023 Water Efficiency Strategy Progress Report

Departmental Approval

Engineering and Transportation Services

Planning and Building Services

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