

Staff Report

Report To: Operations Committee
Report From: Bryce McDonald, Manager of Water and Wastewater
Meeting Date: February 20, 2025
Report Code: OP-25-004
Subject: 2024 Annual Report – City of Owen Sound Water System

Recommendations:

THAT in consideration of Staff Report OP-25-004 respecting 2024 Annual Report – City of Owen Sound Water System, the Operations Committee recommends that City Council receive the report for information purposes.

Highlights:

- Treated water production decreased by 5.72% in 2024 along with billed water consumption down 1.73%.
- A leak detection survey was not completed in 2024; as these investigations are undertaken every three years, the next one is scheduled for 2026.
- The mild 2024 winter required only one customer to run water for freezing prevention.
- Unaccounted-for water in 2024 remains consistent at 19.4%, but still well above industry standards.
- The number of main breaks was representative of a typical year.
- In 2024, there was an increase in complaints of an aesthetic nature of taste and odour relating to sustained high source water temperatures. This is not uncommon and is not a health concern.

Strategic Plan Alignment:

This report supports the delivery of Core Service.

Climate and Environmental Implications:

This supports the objectives of the City's Corporate Climate Change Adaptation Plan by considering climate adaptation in the development of the City's strategies, plans, and policies.

Previous Report/Authority:

A report is presented annually to Council as the "Owner" of the system and to satisfy regulatory requirements.

Background:

Annually, the Owen Sound Water System is required, under O. Reg. 170/0 Schedule 22, to present Summary Reports to Council by March 31 of each year. Once presented, they are legislatively required to be made public by posting the report on the City's website. The reports describe the treatment and distribution components of each water system, their compliance status, and flow rate results. The City also prepares a yearly Annual Report that conforms to the requirements of Section 11 of the Regulation. While the Section 11 information is not required to be accepted by Council, for completeness, they are traditionally included with the Annual Summary Report.

Analysis:

The 2024 Annual Summary Report for the City of Owen Sound's Water System is attached. The summary includes the following information:

- Any requirements of the Act and Regulation, Orders or System Approval(s) that the system failed to meet during the reporting period and the measures taken to correct each failure.
- A summary of the quantities and flow rates of water supplied during the reporting period, including monthly averages and maximum daily flows.
- A comparison of the average and monthly maximum daily flows to the approved capacity specified in the System Approval.

Water Treatment Volume

Total treated water production was down 5.72% from 2023, and the billed consumption decreased by 1.73%. Based on the previous ten years of data there is no appreciable trend. Unaccounted-for water in 2024 remains

consistent at 19.4%, but still well above industry standards. Following the water meter replacement project, some deviation from these values is expected.

There were three (3) adverse water quality incidents reported in 2024, down from five (5) in 2023. Two (2) related to low free chlorine residual in the distribution system and one (1) was related to a total coliform adverse sample result. All incidents were reported and rectified as per standard procedures.

There was a significant increase in taste and odour complaints in 2024. 12 complaints have been attributed to sustained high source water temperatures. It should be noted that these complaints of organic, musty, or “swampy” water are aesthetic qualities only and are not a health concern.

Water Distribution

There were 17 main breaks in 2024, which also decreased from 2023 (20 main breaks). Despite the minor decrease, this is still representative of a typical year.

Leak detection was not undertaken in 2024. Leak detection surveys are scheduled for every three years; the next scheduled survey is to be undertaken in 2026.

In 2024, there were 28 “dirty water” complaints, mostly related to scheduled hydrant flushing.

The City continues to monitor the total number of accumulated “Negative Degree days” to determine when to deliver running water notices. Running water notices are issued for properties with known shallow services prone to freezing under low-temperature conditions; the occupant is requested to allow a faucet to remain constantly running to keep the water flowing through the pipes and prevent freezing. Only one property was required to run water in 2024.

In 2024, the City issued a request for a proposal for water meter replacement and automated meter reading integration. The successful vendor was Neptune Technology Group, which was selected in late 2024; the project will begin in Q1 2025 with an anticipated completion of Q4 2025. It is expected that the radio water meter replacement project will assist in bringing this water loss to a more reasonable level through the following benefits:

- More accurate readings for consumption calculations when using estimated usage during frost-prevention periods.
- More accurate readings at low flow rates; older meters tend to “slow down” and therefore under-report consumption, particularly at low flows.
- More immediate feedback of silent leaks, allowing occupants to act sooner on repairs/mitigation prior to accumulating a massive water bill, prompting them to apply for bill forgiveness, among others.

Financial Implications:

There are no budgetary implications as this report is a regulatory requirement provided to Council for information purposes, identifying a summary of water-related activities in 2024.

Communication Strategy:

The attached Annual Summary Report must be posted on the City’s website and be available for viewing upon request.

Consultation:

This report was prepared in consultation with Mark Hill, Water Distribution Superintendent, and Troy Pelletier, Water Treatment Superintendent.

Attachments:

Owen Sound Drinking Water System Annual Summary Report 2024

Recommended by:

Bryce McDonald, Manager of Water and Wastewater
Lara Widdifield, Director of Public Works and Engineering

Submission approved by:

Tim Simmonds, City Manager

For more information on this report, please contact Bryce McDonald, Manager of Water and Wastewater at bmcdonald@owensound.ca or 519-376-4440 ext. 3224.