

Pelham Distribution System

Town of Pelham

2024 Municipal Summary Report

(Prepared under Ontario Regulation 170/03)

January 1 to December 31, 2024

Municipal Drinking Water License # 072-101

Municipal Water Works Permit # 072-201

1. Purpose

This report was prepared by the Director of Public Works and Manager of Public Works for the Owner of the Pelham Distribution System, the Corporation of the Town of Pelham, to be presented to Council.

As legislated, Council is responsible as the Owner of the water system for ensuring these reports are prepared and available to the public each year.

To enhance the communication and understanding of these reports, this Municipal Summary Report contains additional non-legislated information on the drinking water system operations and water quality.

2. System Overview

The provision of drinking water for residents in the Niagara Region is a responsibility shared between two tiers of municipal government. The Niagara Region is responsible for treatment and supply of the water to the Town of Pelham via transmission mains. The Town of Pelham is responsible for distributing water to local consumers via its own network of distribution pipes.

The Pelham Distribution System is a Class 2 water distribution subsystem. The system consists of approximately 86 km of watermains varying in size from 50mm to 400mm diameter providing water to approximately 14025 residents through 5399 accounts within the general urban area.

3. Water Quality Testing

Ontario Regulation 170/03 prescribes water quality testing requirements for municipal drinking water systems.

In 2012, the Town of Pelham qualified for an exemption from collecting lead samples from residential or non-residential plumbing under the community lead testing program; however, reduced sampling must still take place in four locations within the distribution system. As such, the Town has continued with its lead testing program in the distribution system, with no concerns.

The Town carried out testing in **2024** as prescribed by legislation.

In addition to the prescribed sampling, the Town tested for water quality in response to complaints from consumers. Complaints generally refer to colour, odour, pressure, particulate, supply and/or taste.

The Town responded to **9** water quality/supply complaints in **2024**. Five were related to low pressure, three to water colour, and one taste/odour. All were resolved promptly.

4. Summary of Non-Compliance

The Town of Pelham Distribution System was operated in such a way that at no time did it fail to meet or exceed the requirements of the *Safe Drinking Water Act,* associated regulations, the system's approval or any order that may have been issued for this reporting period.

5. MECP Drinking Water System Inspection Report

The Town of Pelham Distribution System was granted a 100% inspection rating during the **2024** Ministry of Environment, Conservation and Parks annual drinking water system inspection.

The Pelham Distribution System Inspection Report is included as an attachment to Public Works Report 2025-0033 - 2024 Pelham Water Distribution System Summary Report.

6. Flow Data

Bulk treated water supplied to the Town of Pelham is measured by the Niagara Region and provided monthly to the Town. In **2024**, the total volume of treated drinking water supply was 1,533,320 cubic meters (m³).

The Town of Pelham's accounted water use, which includes metered revenue water and accounted for non-revenue water use, totaled 1,318,832m3. The total volume of unaccounted for water was 214,488m3. Water loss is the difference between the total flow input and the accounted for water volume shown as a percentage. In **2024** the Town of Pelham's water loss was 14%.

Table 2 – Annual Volume of Treated Water Supplied by the Region of Niagara

| Table 2 - Annual Treated Water Supply | | |
|---------------------------------------|--------------------------|--|
| Year | Supply (m ³) | |
| 2014 | 1,374,130 | |
| 2015 | 1,364,450 | |
| 2016 | 1,410,410 | |
| 2017 | 1,122,740 | |
| 2018 | 1,243,900 | |

| 2019 | 1,150,570 |
|------|-----------|
| 2020 | 1,473,630 |
| 2021 | 1,584,270 |
| 2022 | 1,509,890 |
| 2023 | 1,494,110 |
| 2024 | 1,533,320 |

The Town's Drinking Water License does not limit demand of flows to the Town, so a comparison to license limits is not required. The average daily consumptions are shown in **Table 3**, along with the maximum daily flows for each month.

Table 3 – Daily Water Consumption

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|-----------------------------------|-------------------------------|------------------------------------|
| Month | Average Daily Flow (m³) | Maximum Flow in One Day (m³) |
| January | 3647 | 4170 |
| February | 3596 | 4350 |
| March | 3389 | 3780 |
| April | 3582 | 4210 |
| May | 4619 | 6310 |
| June | 5004 | 6510 |
| July | 5498 | 7270 |
| August | 5280 | 7110 |
| September | 4632 | 6470 |
| October | 3900 | 4860 |
| November | 3488 | 3850 |
| December | 3628 | 4660 |

The highest demand day occurred in July, which aligns with the typical high monthly demands in the summer.

No servicing concerns are noted. The Niagara Regional Master Servicing Plan (MSP) lists the firm capacity of the Shoalts Drive Reservoir to be 19,400 m3 / day. The MSP has identified future projects including the replacement of the Pelham Elevated Water Tank and increased pumping capacity at the Shoalts Drive Reservoir to accommodate projected 2041 servicing needs. These projects, which are currently in the design phase, are being undertaken by the Regional Municipality of Niagara.

7. Municipal Drinking Water Licensing Program

The Municipal Drinking Water Licensing Program is a five-stage initiative by the MECP under the Safe Drinking Water Act, 2002. The Town of Pelham maintains its Certificate of Accreditation as an Operating Authority for its water distribution system, and the system license and permit(s) are in place. **Table 4** lists the status of the key elements for water licensing.

Table 4 - Municipal Drinking Water Licensing Program Status

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|---|--|--|
| Program | Status | |
| License #072-101 | Expires June 16 th , 2029 | |
| Permit #072-201 | Active and current – No expiry | |
| Operational Plan | Endorsed by Council March 21, 2021 | |
| Accreditation | Maintains full accreditation. Expires April 29th, 2027 | |
| Financial Plan | Updated in 2023, covering 2024 – 2029 inclusive | |