

Staff Report

Report To: Council

Report From: Geoff Aitken, CET – Director, Infrastructure & Public Works

Meeting Date: March 18, 2025

Subject: IPW-2025-07 – 2024 Drinking Water Systems-Annual/Summary Reports

Recommendations:

That in consideration of staff report ‘IPW-2025-07 – 2024 Drinking Water Systems-Annual/Summary Reports’, Council receives the report for information purposes.

Highlights:

- Both Drinking Water Systems (Durham and Neustadt) operated within the constraints of provincial requirements.
- Both Drinking Water Systems (Durham and Neustadt) operated within their respective Drinking Water Works Permits.
- Both Drinking Water Systems (Durham and Neustadt) operated within their respective Municipal Drinking Water Licenses.
- Both Drinking Water Systems (Durham and Neustadt) operated within their respective Permits to Take Water.

Previous Report/Authority:

[2023 Drinking Water Systems – Annual/Summary Reports](#)

[2022 Drinking Water Systems – Annual/Summary Reports](#)

Analysis:

In Ontario, Municipal Drinking Water Systems are governed by Ontario Regulation (O. Reg.) 170/03, titled *Drinking Water Systems*, as currently amended to O. Reg. 269/22. Section 11, titled *Annual Reports*, requires that an annual report be prepared each year, covering the period from January 1 to December 31 and be prepared by February 28 of the following year. Further, Schedule 22 of the same regulation, titled *Summary Reports*

for *Municipalities*, requires that a summary report be prepared for the preceding calendar (January 1 to December 31) and that the said report be issued not later than March 31 of the following year.

The annual report focuses on and summarizes: the treatment system and chemicals used; reports made to the Ministry; results of tests required by the regulation, approval, and license etc.; any corrective actions taken, any major expenses incurred; where the summary report is available for review; and the number of sample locations for lead. The summary report lists: the requirements of the Act, approvals, water works permit, license etc. For any clause not met in the requirements, it specifies the duration of the failure and the measures taken to correct the failure; a summary of the quantities and flow rates of the water supplied; and a comparison of the flow data with the rated capacity of the system.

The preparation of both the annual report and the summary report is part of the service agreement with Veolia Water Canada (Veolia). The discussion in the annual report and the discussion in the summary report naturally overlap; therefore, most operating authorities produce one report titled *Annual/Summary Report*. This is the case for both the Durham Drinking Water System (DWS) and the Neustadt DWS.

Neustadt Drinking Water System

The 2024 annual/summary report for the Neustadt DWS meets the requirements of both the annual and summary reports. In 2024 there were no issues of non-compliance. All microbiological and physical/chemical sampling occurred as per O. Reg. 170/03 and were found to be within compliance.

The 2024 treated water flow data is as follows: total flow for the year, 44,712 m³; average day flow was 122.2 m³/day, which is 13.3 percent of the rated capacity. The max day, 662.3 m³ occurred on September 6, 2024, while refilling the water tower over the course of three days. However, the data recorded while refilling the tower is considered an outlier to a normal consideration of max day, based on demand. See attached updated Reserve Capacity assessment for the Neustadt water works. The max day based on demand was 339.2 m³ which occurred in October 2024. The total volume of water treated, the average day, and the max day flows are reasonable considering the population served.

For 2024, the major capital investment in the Neustadt DWS was the refurbishment of the water tower itself. A tender was issued and awarded. Construction was completed in September 2024. Additionally, during 2024, the Permit to Take Water (PTTW) and the Drinking Water License were renewed.

Durham Drinking Water System

The 2024 annual/summary report for the Durham DWS meets the requirements of both the annual and summary reports. In 2024 there were no issues of non-compliance. All

microbiological and physical/chemical sampling occurred as per O. Reg. 170/03 and were found to be within compliance.

The 2024 treated water flow data is as follows: total flow for the year, 330,784 m³; average day flow was 904 m³/day, which is 30.0 percent of the rated capacity. The max day occurred in December and was 1,192 m³, which is 39.6 percent of the capacity. The total volume of water treated, the average day, and the max day flows are high considering the population served.

Caution should be used when reviewing the flow data, caution should be used as a portion of the flow is committed. See attached 2024 Reserve Capacity Assessment which shows that there is capacity for approximately 100 houses. This is an improvement over 2023 but is attributed to the allocation reduction to one of the proposed developments. To address the capacity issue, the Municipality of West Grey (West Grey) initiated a Municipal Class Environmental Assessment (EA) to increase hydraulic reserve capacity. To create capacity, three actions need to occur: add another source (a well); expand pumphouse two; and add water storage. Further, West Grey has enhanced the ultrasonic leak detection survey to minimize water loss. This will likely result in the need to replace aged cast iron watermains.

Some monies were allotted in the 2024 capital budget to further the EA process and a new well was drilled. An aggressive schedule to full build-out of the well and pumphouse is three years with an estimated budget of +/- \$3 million. Additionally, the Durham standpipe is past its expected service life and is in very poor condition. Replacement of some description is a needed. The estimated cost is a minimum of \$6 million. During 2024, the Drinking Water License was renewed. The primary focus of 2025 is to complete the PTTW application for the new well and complete the design of the addition to the South Street pumphouse.

Financial Implications:

There is no direct cost as the result of the 2024 annual/summary reports. In 2024, major expenses were \$1.6 million to refurbishing the Neustadt Water Tower; \$313,000 for the Durham DWS to drill a new well; \$440,000 for various works associated with servicing Rockwood Terrace; and, \$150,000 to replace the UV unit at Pumphouse two.

In 2024, there were two funding opportunities through Housing Enabling Water System Fund. The Durham waterworks fit the criteria and was an ideal candidate. Specifically, drilling the well, addition to the pumphouse and water storage were all considered. Neither application was successful.

Climate and Environmental Implications:

The most significant climate and environmental implications are found around the concepts of environmental stewardship and public health and safety. In fact, some might

argue that public health and safety is directly connected to being good environmental stewards. It begins with the wells themselves: the construction of a well so it is secure from contamination, setting the pump at an elevation where there is sufficient capacity to serve the community while balancing those needs against the aquifer and its importance to the various ecosystems that rely on it.

Sound environmental stewardship is the guiding principle for developing a source supply of water for the community while ensuring the health and safety of the community. Failure to construct, maintain and operate the source supply (in the case of both Durham and Neustadt) in a responsible manner would have repercussions for both the environment and those served by the water system.

Communication Plan:

Communication of this report is through the posting of council meeting agendas on the Municipality of West Grey's website. Upon approval, staff will post the annual/summary reports on West Grey's website.

Consultation:

Supervisor, Urban Operations, Infrastructure and Development
Veolia North America

Attachments:

2024 Annual/Summary Report – Neustadt Drinking Water System
2024 Annual/Summary Report – Durham Drinking Water System
Reserve Capacity Assessment – Durham Water Works
Reserve Capacity Assessment – Neustadt Water Works

Recommended by:

Geoff Aitken, CET, Director, Infrastructure and Public Works

Submission approved by:

Michele Harris, Chief Administrative Officer

For more information on this report, please contact Geoff Aitken, Director, Infrastructure & Public Works at publicworks@westgrey.com or 519-369-2200 Ext. 227.