

Staff Memorandum



To	Mayor A. Nuttall and Members of Council
Subject	Water Quality Sampling Dyments Creek – E. coli
Date	September 10, 2025
Ward	All
From	B. Araniyasundaran, P. Eng., General Manager of Infrastructure and Growth Management
CAO Approval	M. Prowse, Chief Administrative Officer

The purpose of this memorandum is to provide members of Council with an update regarding surface water quality sampling which was conducted along Dyments Creek on August 22, 2025. The samples, taken at four (4) culverts in the general vicinity of George Street, Anne Street South, Innisfil Street, and Bradford Street, were tested for Escherichia coli (E. coli) given new information regarding environmental conditions at the former encampment west of Anne Street South in the vicinity of John Street.

Background

It is noted that E. coli testing is undertaken weekly for the City's surface and groundwater drinking water systems, at our public beaches during the summer months, and in the effluent at the Wastewater Treatment Facility (WwTF). This monitoring is undertaken to protect human health and ensure regulatory compliance.

Additionally, the City undertakes a monthly surface water quality monitoring program of creeks as part of our source water protection program and to ensure compliance with provincial Environmental Compliance Approvals (ECAs). E. coli analysis is not generally included as part of regular creek monitoring compliance programs.

Results

The following table outlines the results from water samples obtained on August 22, 2025 from Dyments Creek. For reference, a map outlining the sampling locations is provided in Appendix A.

Location	Analytical Result (E. coli per 100 mL)
DC1 - Bradford Street	727 per 100 mL
DC2 - Innisfil Street	921 per 100 mL
DC3 - Anne Street S	291 per 100 mL
DC4 - George Street	201 per 100 mL

As reference, the following standards are applied to water quality tests conducted by the City for E. coli:

- drinking water – the Ontario Drinking Water Standard for E. Coli in drinking water is “none detectable per 100 mL”
- beach water quality – the recreational water guideline of 200 E. coli per 100 mL (5 sample geometric mean concentration) is applied to determine if a swimming advisory is posted by the Simcoe Muskoka District Health Unit (SMDHU)
- effluent from the WwTF – must be below a concentration of 200 E. coli per 100 mL

Next Steps/Follow-up

Given that the City has limited background data/analysis of E. coli in Dyments Creek and other City creeks, staff will be advancing a more robust sampling program over the coming weeks which will include E. coli in all monitored City creeks – with consideration for multiple sampling locations and different weather conditions. It is intended that this data will provide additional insight into surface water quality, potential sources of contamination, and determine if any mitigation is warranted to ensure protection of public health and the environment.

Appendix:

Appendix A – Map of Dyments Creek Sampling Locations (August 22, 2025)

Memo Author:

Stephanie Mack, P.Eng., Associate Director of Waste Management and Environmental Sustainability

File #:

E12 – CWQMP
“Dyments Creek”

Pending #:

Not Applicable

Appendix A – Map of Dyments Creek Sampling Locations (August 22, 2025)

