

Drinking Water Treatment & Distribution

Take a Tour During Drinking Water Week

To recognize Drinking Water Week, take a tour of Barrie's Surface Water Treatment Plant on **May 8 at 11am or 1pm**.

[Get Full Tour Details](#)

The City is fortunate to have access to two sources of drinking water: groundwater from a deep aquifer and surface water from Kempenfelt Bay. Before reaching the consumer this water is treated to protect public health.



Drinking Water Sources

The source of the water that comes out of your tap depends on where you live in Barrie. **Groundwater** comes from groundwater that is extracted from the ground by municipal wells. **Surface water** is obtained from Kempenfelt Bay through an intake pipe. Access the interactive [Water Supply Zones map](#) to determine the source of water you receive.

Water Treatment Processes

Treatment of water depends on its source. Groundwater is naturally filtered through layers of rocky sediment and therefore requires less treatment than surface water.

- [Diagram: Groundwater Treatment Process](#)
- [Diagram: Surface Water Treatment Process](#)

Take a tour of Barrie's Surface Water Treatment Plant! [Get tour details.](#)

Water Distribution Infrastructure Maintenance

The City ensures that the infrastructure which directs water to your home is regularly maintained. As such, the distribution system, consisting of approximately 4,000 hydrants and 672 km of watermain, continues to reliably direct potable water to the community.

[Hydrant Maintenance](#) >

[Watermain Swabbing](#) >

[Watermain Flushing](#) >

Water Meters & Shut-Off Valves

Every customer connected to Barrie's municipal drinking water system is equipped with a water meter and internal shut-off valve. Please ensure your water meter and shut-off valve are always accessible, ready for use in case of an emergency. [See full details about water meters and shut-off valves.](#)

Prevent Backflow at Home

Backflow preventers installed on your water outlets ensure that water flows in ONE direction. Through unprotected plumbing connections—such as a lawn irrigations system or hose connections—reverse flow can cause contaminants and pollutants to enter your drinking water system. *The Backflow Prevention and Cross Connection Control By-law applies to all industrial, commercial, institutional, and multi-unit residential properties.*

[How to Prevent Backflow at Home](#) >

Reports

Every year the City prepares reports in accordance with [Safe Drinking Water Act](#) regulations:

- [Drinking Water System Annual Report \(PDF\)](#)
- [Water & Wastewater Financial Plan \(PDF\)](#)

Hard copies of either document can be obtained under request at the Branch Administration Building, 20 Royal Parkside Drive, during normal business hours (8:30am–4:30pm, Monday–Friday)

Bulk Water Requests

The City's Water Operations Branch staff are available to assist residents and contractors with obtaining water in bulk supply.

[Pool Fill](#) >

[Option for Contractors: Bulk Water Filling Station](#) >

[Option for Contractors: Hydrant Metered Gate Valve](#) >

[Option for Contractors: Temporary Metered Device](#) >


Equipment used to launch swabs into watermain.

Frequently Asked Questions

General

Does the drinking water source impact water hardness? >

Yes, the source water impacts hardness levels.

Essentially, areas serviced by the ground water system can expect to see a higher mineral content (hardness) with the range typically being 13–20 grains per gallon, while in the areas serviced by surface water an average hardness of 3–8 grains per gallon can be expected. (The "grains per gallon" value is generally used by softener manufacturers and installers and is referenced within the instruction manuals for softeners.)

The reason for the increased hardness is due to the fact that ground water (in deep aquifers) has accumulated there over extremely long periods of time after filtering through layer upon layer of sand, soil, clay and rock, picking up various minerals like iron, calcium, manganese, etc.

For both drinking water sources, the water provided is of the highest quality and meets the regulatory requirements imposed by the Ministry of the Environment, Conservation and Parks.

Is Fluoride added into Barrie's drinking water? >

Why is my tap water pressure low? >

My tap water is discoloured. What should I do? >

Why does my tap water and/or sink smell? >

Why is my water bill higher than normal? >

Service Requests

What should I do if water is leaking by the shut off valve on my water pipes? >

What do I do if my water meter is leaking? >

I need my water turned off to have work completed. Who do I contact? >

My curb box cap is missing or raised in my driveway and needs to be fixed. Who do I contact? >

What can I do if I see water bubbling out of the ground on my property or pooling on the road? >

How do I get a locate completed? >

How do I book a fire flow test? >

Related Files

[Municipal Drinking Water Licence](#)
[Drinking Water Works Permit](#)
[Groundwater Treatment Process](#)
[Surface Water Treatment Process](#)
[Water Distribution Services](#)

Related Links

[Source Water Protection](#)
[Water Outage Viewer Map](#)
[Annual Flushing Progress Map](#)
[Quality Management System Policy \(Water Operations\)](#)
[Water and Wastewater Billing By-law](#)