

## Why has my water service frozen?

Most water services in the County of Brant are deeply buried for protection against frost. Some water service lines, however, are historically installed at a shallow depth by today's standards. Extremely cold temperatures, or fluctuations between warm and cold temperatures, can sometimes push frost to a depth that will freeze water services. This winter has created the kind of conditions that cause water service lines to freeze. Extreme cold temperatures can also cause internal freezing where service would not normally be interrupted.

### Water temperature

With the water already being cold as it enters the water distribution system, it takes very little exposure to colder temperatures for it to freeze. That is why it is important to make sure your water service lines are not exposed to colder air during winter months.

### Frost depth

This is the depth to which the ground is frozen. In the County of Brant, frost depth usually does not reach the level of our buried water infrastructure. However, with extremely cold conditions, frost may reach these levels towards the end of winter, usually in late February or early March.

In early spring, it may seem warmer, but frost is still deep in the ground and remains as long as the temperature continues to drop below freezing at night. If the ground surrounding the service lines becomes frozen, it will cool the already cold water in the pipes. When the water stops moving, as when water is turned off overnight, the temperature can lower quite quickly and freeze the water.

