

Drinking Water in OTTAWA

Drinking Water Source Protection

Ontario's Clean Water Act helps protect drinking water from source to tap by preventing contaminants from entering sources of drinking water like lakes, rivers and groundwater aquifers. Scientific studies were completed to characterize the local drinking water source. These studies also identify the activities that could adversely impact the quality of the drinking water source. The technical studies can be found in the comprehensive *Assessment Report*.

Ottawa Drinking Water

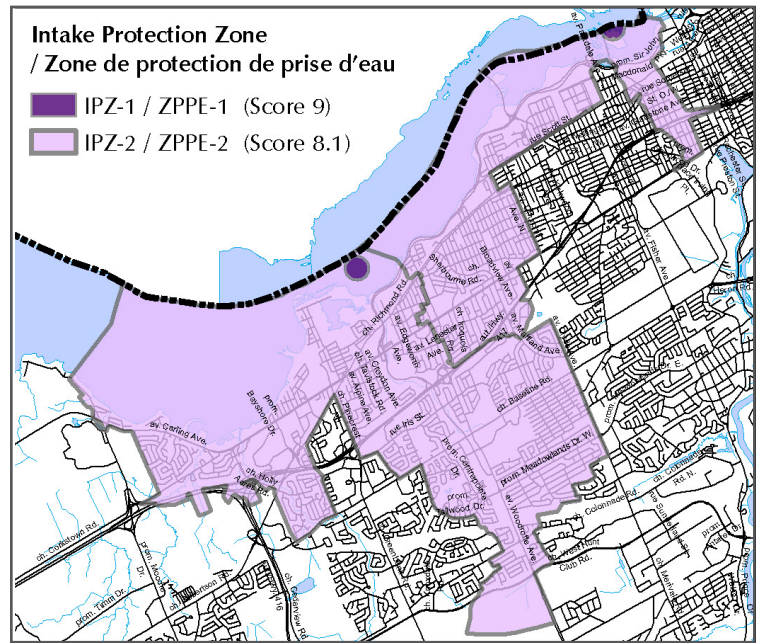
The Ottawa Drinking Water System consists of the Lemieux Island Water Purification Plant and the Britannia Water Purification Plant that supply approximately 867,000 people with drinking water. The Intakes draw water from the Ottawa River and direct it into the water treatment plants.

What is an Intake Protection Zone?

An Intake Protection Zone (IPZ) is the area around a surface water intake (the pipe in the lake or river that draws water into a municipal drinking water treatment plant). This is the zone where activities and land uses have the potential to affect the quality of water at the intake. The size of the IPZ is determined by a variety of factors such as the amount of time it would take for a spill in or near the river to reach the intake. Different parts of the IPZ have different vulnerability scores which are determined by factors such as the depth of the intake, distance of the intake from land and the water quality history. A higher vulnerability score means a higher level of concern for possible contamination at the intake.



Britannia Water Purification Plant



Ottawa Intake Protection Zones

Understanding the Areas...

- IPZ-1** This is the area closest to the intake and is the area of highest concern because contaminants entering this zone can reach the intake quickly with little or no dilution.
- IPZ-2** This area is calculated based on how far water can travel in a two-hour time period. The zone is determined by considering flow, wind and transport pathways.

The Mississippi-Rideau Source Protection Plan

Policies to protect vulnerable drinking water areas, such as the Ottawa Intake Protection Zones, are specified in the *Mississippi-Rideau Source Protection Plan*. The Plan was prepared by a local committee made up of representatives from municipalities, small business, industry, agriculture, environmental groups and the general public.

Source Protection Policies for the Ottawa Protection Area

The Source Protection Plan:

- Prohibits the future establishment of incompatible land uses such as landfills near drinking water sources
- Requires governments to ensure that services such as sewers and winter road maintenance do not contaminate drinking water sources
- Ensures that safeguards are in place to reduce the risk of activities such as fuel storage and chemical use
- Encourages all residents and businesses in Intake Protection Zones to take voluntary action to protect the drinking water source

This is a summary only, for information about specific policies and where they apply, please visit Ottawa.ca/sourceprotection.

Do the same policies apply throughout the Intake Protection Zone?

Different policies apply in different parts of the Intake Protection Zone. This is because certain areas are more vulnerable to contamination so stronger protection policies are needed there. Also, different types of contaminants pose varying degrees of risk because of how they behave in the environment when released, which affects where policies apply.



The Ottawa River

How can I help protect the drinking water source?

Most people will not be affected by mandatory policies that apply in the Intake Protection Zone. However, it is important that we are all aware of where our drinking water comes from and how to protect it.

Here are some ways we can protect the drinking water that supplies Ottawa:

1. **Conserve water.** Using less water reduces the burden on the river. Also, too little water in a source can mean contaminants are more concentrated and therefore may be above acceptable levels.
2. **Properly handle and dispose of hazardous substances.** Everything from paints to pharmaceuticals and impact drinking water if not handled and disposed of safely.
3. **Use environmentally friendly products for cleaning and personal care.** Remember that what you use in your house goes down the drain and back into the environment.
4. **Prevent contaminated runoff that may soak into the ground.** You can do this by reducing or eliminating your use of fertilizers and sidewalk salt, not over-watering your lawn, cleaning up pet waste and by taking your car to a commercial car wash.
5. **Reduce stormwater.** Use rain barrels, plant trees and minimize hard surfaces such as pavement and patio stones.
6. **Maintain your vehicles and take care when handling fuel.** Proper vehicle maintenance prevents oil and other fluid leaks. One litre of gas or oil can contaminate a million litres of water.