SMITHS FALLS
RISE AT THE FALLS

October 2019

Drinking Water in Smiths Falls

The Smiths Falls Drinking Water System is comprised of the water treatment plant and distribution system which together provide a supply of potable drinking water to approximately 10,000 people in Smiths Falls as well as to the residents of the Atironto Subdivision in Montague.

Where does the water come from?

An intake draws water from the Rideau River and directs it into the water treatment plant.

Smiths Falls Water Treatment Plant

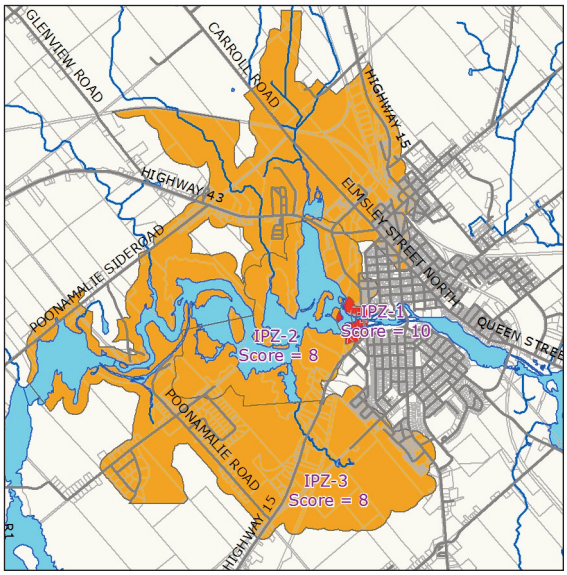
How is the water treated and distributed?

Water is treated by a high rate dissolved air floatation clarifier (which floats particles to form a sludge which can be removed). This is followed by carbon and sand filtration where further particle removal takes place. Other treatment processes involved include UV disinfection, chlorination with chlorine gas, corrosion control, fluoridation, residue management and de-chlorination. The distribution system includes many kilometres of pipes and a water tower for storage. The Smiths Falls Drinking Water System operators must adhere to the strict requirements for the treatment, testing and distribution of drinking water specified in the *Safe Drinking Water Act.* The water is consistently in compliance with Ontario Drinking Water Quality Standards.

How is the drinking water source protected?

Ontario's *Clean Water Act* was created specifically to protect drinking water at the source rather than simply relying on water treatment to deliver safe, clean water. Because of work completed under the *Clean Water Act,* Smiths Falls now has a mapped Intake Protection Zone (IPZ) that is protected through policies in the *Mississippi-Rideau Source Protection Plan.*

The Smiths Falls Intake Protection Zone

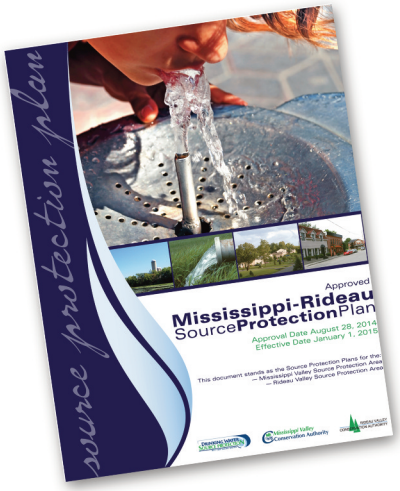


What is an Intake Protection Zone?

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 flow downstream to the intake. The different parts of the IPZ have different vulnerability scores (between two and 10) 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.

The Mississippi-Rideau Source Protection Plan

The policies to protect the vulnerable drinking water areas, such as the Smiths Falls Intake Protection Zone, are specified in the *Mississippi-Rideau Source Protection Plan.* The Plan was developed by a local committee made up of representatives from municipalities, small business, industry, agriculture, First Nations, environmental groups and the general public.



Source Protection Policies in the Smiths Falls Intake Protection Zone

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 www.mrsourcewater.ca

Do the same policies apply throughout the Intake Protection Zone?

Different policies apply in different parts of the Intake Protection Zone. This is because science shows us that certain parts 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 and this affects where the policies apply as well.

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 Rideau River, which is the drinking water source for Smiths Falls:

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 can 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 your drain and back into the environment.
4. **Prevent contaminated runoff.** 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 car, boat and motorcycle maintenance prevents oil and other fluid leaks. One litre of gas or oil can contaminate a million litres of water!