Mississippi Mills

Drinking Water in Almonte

The municipality (the Town of Mississippi Mills) supplies drinking water to approximately 5,350 people in Almonte. There are five municipal wells constructed between 1948 and 1991 varying in depth from 38 to 79 metres.

Where does the water come from?

The municipal wells draw groundwater from the Nepean Sandstone Aquifer which is well-known for supplying a good volume of quality drinking water.

Almonte Pumping Station

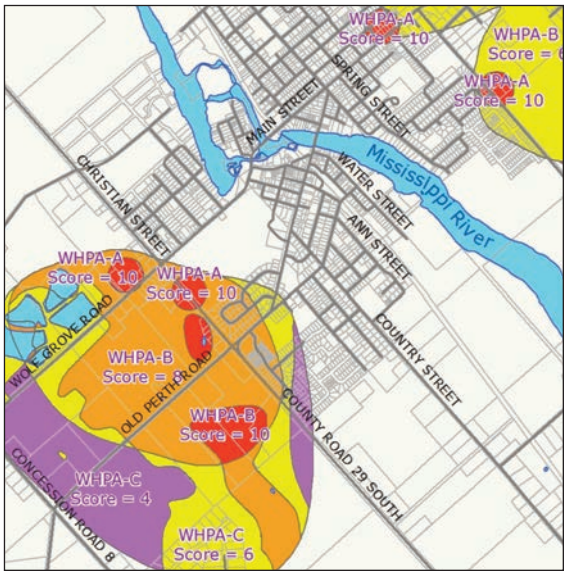
How is the water treated and distributed?

Chlorine is added to the well water to disinfect it before it enters the distribution system of piping to serve individual residences and businesses. Excess water is stored in an elevated water tower for periods of peak demand. The Town of Mississippi Mills 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 with the exception of naturally occurring high levels of sodium.

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,* Almonte now has a mapped Wellhead Protection Area (WHPA) that is protected through policies in the *Mississippi-Rideau Source Protection Plan.*

The Almonte Wellhead Protection Area



Understanding the Areas…	
WHPA-A	100 metre radius around the well where contaminants can easily reach the well
WHPA-B	Contaminated groundwater would take less than two years to reach the well
WHPA-C	Contaminated groundwater would take two to five years to reach the well
WHPA-D	Contaminated groundwater would take five to 25 years to reach the well

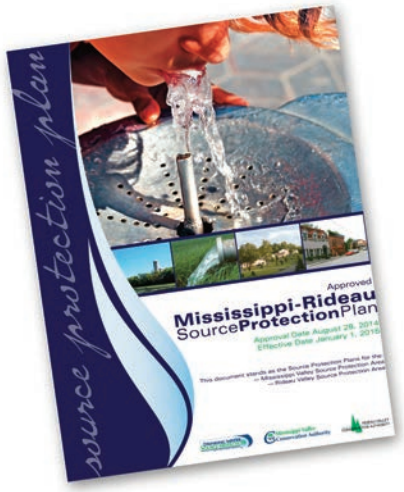
Understanding the vulnerability scores…	
10	All of the WHPA-A and WHPA-B where the vulnerability is high
8	WHPA-B where vulnerability is medium or WHPA-C where vulnerability is high
6	WHPA-B where vulnerability is low or WHPA-C where vulnerability is medium or WHPA-D where vulnerability is high
4	WHPA-C where vulnerability is low or WHPA-D where vulnerability is medium
2	WHPA-D where vulnerability is low

What is a Wellhead Protection Area?

A Wellhead Protection Area (WHPA) is the area around a municipal well where activities and land uses have the potential to affect the quality of water that flows into the well. The size and shape of the WHPA and its vulnerability score (between two and 10) are determined by factors such as the amount of water being pumped, the type of aquifer, the type and depth of soil surrounding the well and the direction and speed that the groundwater travels. All of these factors contributed to determining how much land around the wellhead needs protection to keep the drinking water clean.

The Mississippi-Rideau Source Protection Plan

The policies to protect the vulnerable drinking water areas such as the Almonte Wellhead Protection Area 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 Almonte Wellhead 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 Wellhead Protection Areas 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 Wellhead Protection Area?

Different policies apply in different parts of the Wellhead Protection Area. This is because science shows us that certain parts are more vulnerable to contamination so stronger protection policies are needed there. With a couple of exceptions, mandatory policies apply only in the area with a vulnerability score of 10 (shown in red on the map).

How can I help protect the drinking water source?

Most people will not be affected by mandatory policies that apply in the Wellhead Protection Area. 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 groundwater that supplies Almonte's municipal wells:

1. **Conserve water.** Using less water reduces the burden on the aquifer. 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 groundwater 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 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. **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!