

# Drinking Water in VARS

## 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*.

## VARS

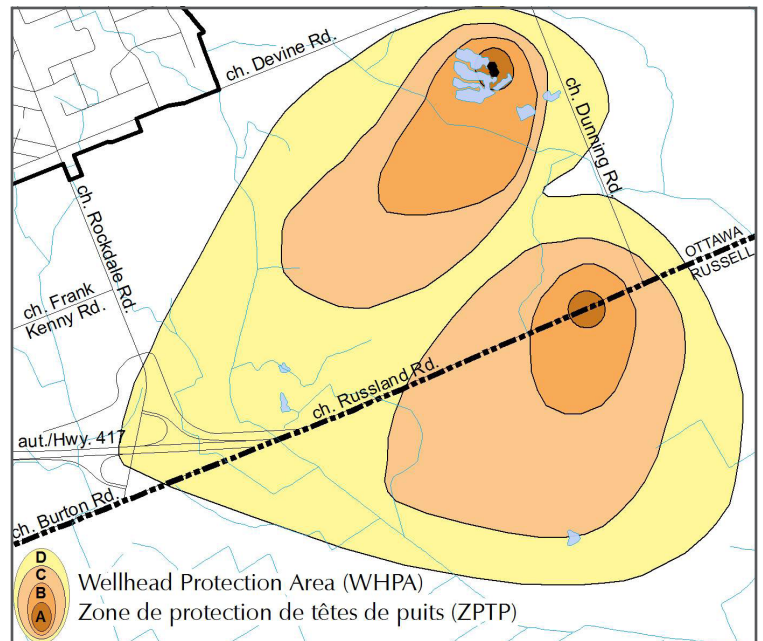
The village of Vars is located in the eastern portion of the City of Ottawa. Owned and operated by the city of Ottawa, the two wells serve a population of approximately 1,150. The Vars wellheads are located 1.3 km away from the municipal wells that service the village of Limoges. Both systems draw their drinking water supplies from the Vars-Winchester esker aquifer.

## What is a Wellhead Protection Area?

A wellhead protection area (WHPA) is the area around a well where land use activities have the potential to affect the quality of water that flows into the well. The size and shape of a WHPA is determined by the amount of water being pumped and the direction and speed at which the groundwater travels through the aquifer to get to the well.



Vars Pumping Station



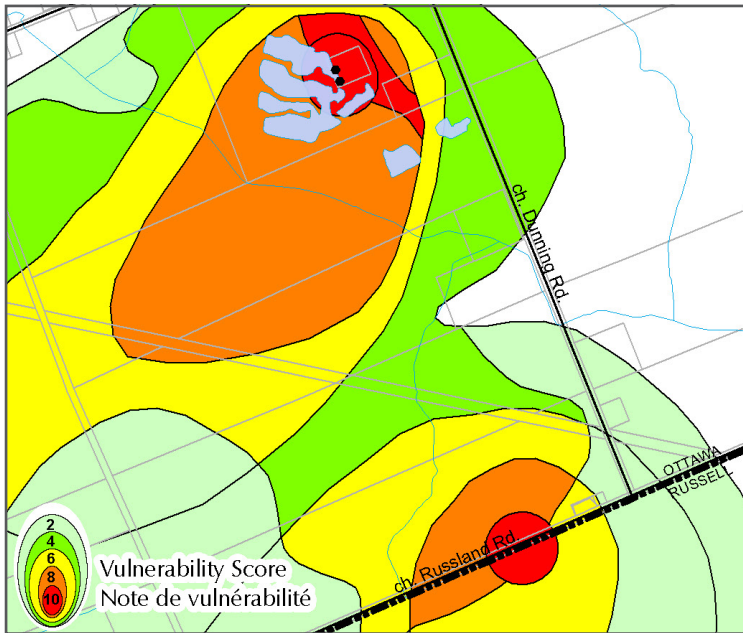
Wellhead Protection Areas - Vars

## 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

## Vulnerability Scores

Vulnerability scores are used to indicate how 'at risk' the drinking water source is to contamination. High scores mean that a contaminant could quickly get into the drinking water supply. Each WHPA has been assigned one or more vulnerability score(s) based on the characteristics of the ground overlying the aquifer. The higher the vulnerability score, the higher the concern for possible source water contamination.



Vulnerability Scores – Vars Wellhead Protection Area

### Source Protection Plan for the Raisin-South Nation Source Protection Region

Policies to protect vulnerable drinking water areas, such as the Vars Wellhead Protection Area, are specified in the *Source Protection Plan for the Raisin-South Nation Source Protection Region*. 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 Vars 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 [Ottawa.ca/sourceprotection](http://Ottawa.ca/sourceprotection).

### Do the same policies apply throughout the Wellhead Protection Area?

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.

### 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 groundwater that supplies Vars:

1. **Conserve water.** Using less water reduces the burden on the aquifer.
2. **Properly handle and dispose of hazardous substances.** Everything from paints to pharmaceuticals and 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 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. **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.