



## What is source water?

Oxford County is wholly reliant on groundwater as its source of drinking water. Groundwater comes from underground aquifers, which supply water to municipal and private wells. Aquifers are shared water resources that are typically contained in sand, gravel and rock. Groundwater supplies are replenished by rain and snow melt that seeps into the ground.



## Why does it need protecting?

Groundwater has many advantages as a source for drinking water. It typically has lower levels of contaminants and requires less treatment than surface water. It is however susceptible to contamination from activities occurring on the surface such as leaky fuel tanks, overuse of fertilizers and pesticides, manure application, chemical leaks and spills, and poorly maintained septic systems. If groundwater becomes contaminated it will create long-term issues that are costly to fix. To ensure that drinking water is safe and clean it is important to prevent contamination at the source. Source water protection is the first step to protect existing and future sources of drinking water.



## What is the *Clean Water Act*?

The *Clean Water Act, 2006* is part of a multi-barrier approach to ensure clean, safe and sustainable drinking water by protecting sources of municipal drinking water. Under this legislation, the drinking water source protection program was established. This resulted in the development of science-based assessment reports and local source protection plans by multi-stakeholder source protection committees. Local Source Protection Plans describe the steps that must be taken to protect our groundwater sources. The Plans provide policies to ensure potential risks are managed.



## What activities can threaten drinking water?

A threat is an activity that has the potential to have a harmful effect on the quality of drinking water sources. The *Clean Water Act* regulates the following threat activities:

- The application, handling and storage of commercial fertilizers
- The application, handling and storage of pesticides
- The application, handling and storage of agricultural and on-agricultural source material
- Livestock confinement and grazing
- The handling and storage of fuel
- The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage
- The establishment, operation or maintenance of a waste disposal site
- The handling and storage of hazardous chemicals
- The storage of snow

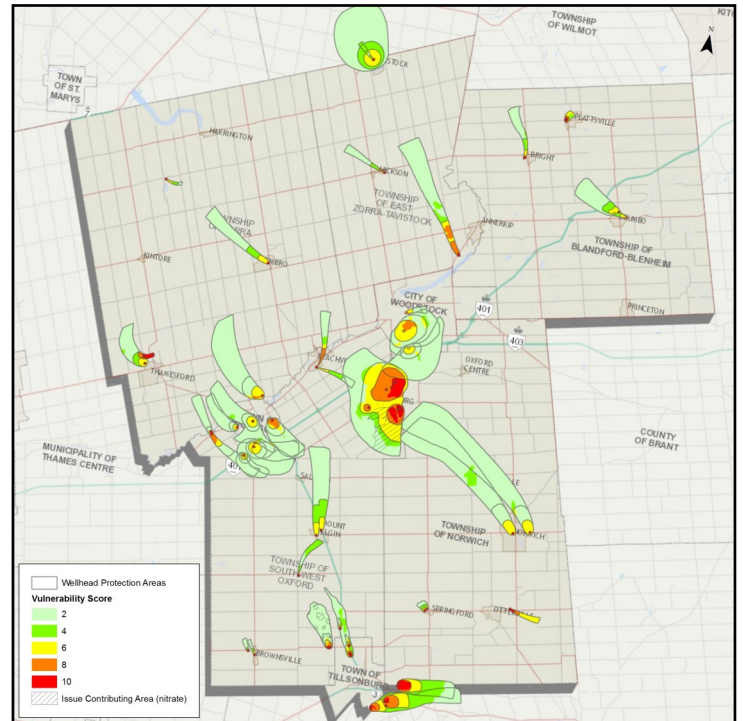
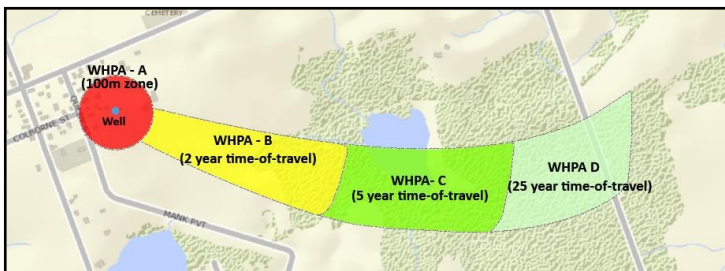
Within very vulnerable areas and under certain conditions, these activities may be classified as significant threats. Significant threats are subject to risk reduction policies in the Source Protection Plan.



## Where are the impacted areas?

Maps have been created to show the locations of municipal drinking water wells and the vulnerable areas that contribute water to the drinking water system.

The vulnerable areas around municipal wells are designated as wellhead protection areas (WHPAs) and issue contributing areas. WHPAs are based on time of travel and have been given scores (2 to 10) based on their vulnerability and susceptibility to contamination. It is these localized areas that need to be protected and managed to reduce the risk to drinking water.



You can access these maps at: [maps.oxfordcounty.ca](https://maps.oxfordcounty.ca)



## What if I have a “significant threat” on my property?

Source Protection Plans have been developed for Oxford County. The Plans include policies that address significant drinking water threats. The Plans manage threat activities using risk management, prohibition, and existing provincial requirements.

Before you are required to make any changes to the activities on your property, a County Risk Management Inspector will conduct a site visit to confirm whether the activity constitutes a significant threat under the *Clean Water Act*. Activities are determined to be significant based on the location within a wellhead protection area and if the activity meets specific circumstances. In most cases, the activity will be allowed to continue, but with some best management practices put into place. These best management practices will help to reduce the risk of groundwater contamination.

### For more information:

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