

Help protect your local drinking water sources

in highly vulnerable aquifers, significant groundwater recharge areas and other vulnerable areas



Vulnerable areas

Clean Water Act, 2006 names four types of vulnerable areas:

- **Intake protection zone (IPZ)**, for surface sources of drinking water, such as a Great Lake or large river.
- **Highly vulnerable aquifer (HVA)**.
- **Significant groundwater recharge area (SGRA)**.
- **Wellhead protection area (WHPA)**, a zone protecting a municipal well's groundwater.

Activities that may pose a threat to water

These activities could threaten drinking water sources in vulnerable areas:

- Septic systems; On-site sewage.
- Fuel oil (including home heating oil).
- Liquid fuel such as that stored at gas stations.
- Chemicals (toxic chemicals such as organic solvents & dense non-aqueous phase liquids).
- Commercial fertilizer; and pesticides.
- Nutrients (manure, bio-solids, grazing).
- Waste disposal sites (including storage of hazardous waste)
- Sewage works.
- Road salt and snow storage.
- **Others:** For list of 22 provincially prescribed significant threats to drinking water, visit: <https://swpip.ca/>

Highly vulnerable aquifer

Aquifers store water. Aquifers are areas of soil or rock under the ground where cracks and spaces allow water to pool.

Aquifers are considered highly vulnerable based on factors such as how deep it is underground, what sort of soil or rock covers it, and the characteristics of the soil or rock around it.

Soil or rock that has large cracks and spaces, and is looser rather than more compact, determines how easy and how quickly water flows into an aquifer. The faster water is able to flow through the ground to an aquifer, the more vulnerable it is to contamination.

Significant groundwater recharge area

Recharge is water, often from rain and melting snow, seeping into the ground, into aquifers. Recharge areas often have loose or permeable soil, such as sand or gravel. This allows water to seep easily into the ground.

Areas with shallow fractured bedrock are often recharge areas as well. A recharge area is significant when it helps maintain water levels in an aquifer supplying drinking water.

Where do planning policies apply?

In a **wellhead protection area** you are required, by law, to comply with the policies in the source protection plans.

Where there are no WHPA zones, the policies in **highly vulnerable aquifers** and **significant groundwater recharge areas** are only recommendations. Still, you should have regard for these policies, whether you are an individual, business or organization, municipality, or an implementing body.

For definitions, legislation, and source protection plans, visit: <https://www.sourcewaterinfo.on.ca>

Things you can do at home and work to protect water

If you live, work, or own property in a highly vulnerable aquifer or significant groundwater recharge area, you are in a vulnerable area. That means what you do at home and at work has a greater chance of having an impact on your local drinking water sources.

Anything going on the ground or down your sink or toilet could affect local water sources. Help keep drinking water safe and clean:

- 1** If it's something you don't want in your water then please don't put it on the ground, down the sink, or in the toilet. Dispose properly at hazardous waste days or approved sites: paints; thinners; furniture strippers; coolants; cleaners; glues, adhesives; gasoline; oil; diesel; heating fuel; de-greasers; resins; creosote; etc.
- 2** If you have a septic system, have it inspected and pumped every three to five years.
- 3** Prevent and contain spills. Report spills if they happen to Ontario Spills Action Centre: **1-800-268-6060**. Visit: <https://www.ontario.ca/page/report-pollution-and-spills>
- 4** Protect and maintain your private well. Wells provide pathways for contaminants to enter groundwater. If you have a well, be sure it is sealed properly. If you no longer use the well, have it properly decommissioned by a licensed well technician.
- 5** Ask your local conservation authority about stewardship guides and best practices for your home, cottage, farm, or business. Technical advice and grants may be available.
- 6** Take used engine oil to recycling facilities.
- 7** If you can reduce quantities of, or find alternatives to, harmful chemicals, please do so. If you apply pesticides or fertilizers or nutrients make sure you follow best practices.
- 8** Visit mvca.on.ca or abca.ca or sourcewaterinfo.on.ca to find out other ways to help.

To learn more contact your local source protection region:



Ausable Bayfield Maitland Valley Drinking Water Source Protection Region

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