

## Commercial and industrial source water protection

Drinking water sources or source water includes untreated water from ground water, streams or lakes. This water is used to supply both private wells and municipal drinking water systems.

## Water quality threats from commercial and industrial properties

Industrial and commercial activities often involve the production and use of chemicals that may have significant impacts on surface and groundwater sources if not properly handled, stored or disposed.

Commercial and industrial operations that handle and store commercial fertilizer, pesticides, fuels, and solvents could potentially release chemicals into the ground if these products are not properly managed. If these products do reach the ground, there is a risk of contaminating local water sources.

A common contaminant source comes from dense non-aqueous phase liquids,



or DNAPLs, which can be found in products used for dry cleaning, metal cleaning, electronics cleaning, wood preservation, automobile repair, and more. DNAPLs are heavier than water and sink quickly into the ground, where the compounds can dissolve into the groundwater, making DNAPLs more difficult to handle than petroleum spills.

## Potential causes of contamination

- Storage of fuel at locations such as bulk plants or gas stations that may lead to leaks or spills
- Handling and storage of DNAPLs
- Handling and storage of organic solvents
- Discharge of industrial effluent
- Improper handling and storage of commercial fertilizer
- Improper handling and storage of pesticides

- Application of road salt
- Storage of snow (chloride, sodium, and petroleum hydrocarbons)

## Managing risk on your property

Commercial and Industrial areas near municipal wells or other vulnerable areas need special attention when it comes to protecting source water. If your commercial or industrial property falls within vulnerable Wellhead Protection Areas or Intake Protection Zones, you may need to review and update your current regulatory approvals or obtain new regulatory approvals.

Regulatory approvals for significant threats can include prohibitions, risk management plans, environmental compliance approvals, permits to take water, and aggregate licenses. For prohibitions or risk management plans to apply

## DID YOU KNOW?

One litre of gasoline can contaminate 1,000,000 litres of groundwater.

# FACT SHEET 3

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under the Clean Water Act, a threat activity must be deemed significant as per the provincial Table of Drinking Water Threats. Briefly, this means an activity must meet a certain threshold for prohibition or risk management plans to apply. For example, fuel storage must be greater than 2500 litres in above ground storage tanks and must be located in the most vulnerable municipal Wellhead Protection Areas or Intake Protection Zones (score of 10). For more information, please visit [wellingtonwater.ca](http://wellingtonwater.ca).

### Prohibition

Prohibition is a tool introduced by the Clean Water Act that allows the Source Protection Committee to prohibit certain activities (including existing activities) that may become significant threats to source water protection. Municipalities will be responsible for enforcing these prohibitions through their Risk Management Official. The use of prohibition varies between the Source Protection Plans in Wellington County. Organic solvents and DNAPL handling and storage are examples of activities

that are prohibited in certain locations within Wellington County.

### Risk management plan

A risk management plan is another tool introduced by the Clean Water Act that requires an agreement be reached between a Risk Management Official (RMO) and the person engaged in the threat activity. This agreement creates a plan to manage the risk activity and is negotiated unless agreement cannot be reached. Once agreed to or established, these plans are legally binding. Contents of the plan may include the responsibilities and protocols of the person engaged in the activity or landowner/tenant to ensure that the activity does not become a significant threat. Municipalities will be responsible for negotiating and enforcing these risk management plans through their Risk Management Official.

### Prescribed instruments

Prescribed instruments are existing provincial regulatory tools that impose conditions on existing or future activities for the purpose of protecting

the environment. Examples of relevant prescribed instruments include the Aggregate Resources Act (1990), the Environmental Protection Act (1990), and the Ontario Water Resources Act (1990). Under these instruments, regulatory conditions may be imposed within environmental compliance approvals, permits to take water or aggregate licenses to ensure the risk activities do not become a significant threat to drinking water.

To find out if your commercial or industrial property falls within a vulnerable area like a wellhead capture zone, visit [wellingtonwater.ca](http://wellingtonwater.ca) or get in touch with your source protection Risk Management Official.

### For more information, contact:

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Website: [www.wellingtonwater.ca](http://www.wellingtonwater.ca)

Or your local municipal office.

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