

Threats to Municipal Drinking Water Sources

The Clean Water Act (Act) was created in response to the Walkerton Inquiry to protect sources of municipal drinking water systems, now and in the future.

The Trent Conservation Coalition (TCC) Source Protection Committee was established under the Act to develop policies to eliminate drinking water threats to municipal drinking water systems. These policies are contained in the Trent Source Protection Plan which was approved by the Ministry of the Environment and Climate Change (MOECC) and came into effect on January 1, 2015.

The Trent Source Protection Plan applies to municipal drinking water systems across the Trent Conservation Coalition Source Protection Region.

The Otonabee-Peterborough Source Protection Area (3,365 km²) includes 12 municipal drinking water systems and is 1 of 5 source protection areas in the Region.



What is a Drinking Water Threat?

Under the Act, a Drinking Water Threat is an **activity that can impact the quality or quantity of a municipal drinking water source.**

The MOECC has identified 21 drinking water quality and quantity threats. The location, scale and nature of an activity determine if it is a low, moderate, or *significant* drinking water threat. Policies in the Trent Source Protection Plan apply to *significant* drinking water threat activities only.

Drinking water threats occur in Vulnerable Areas such as an Intake Protection Zone for a surface water system or a Wellhead Protection Area for a groundwater system.

Types of Drinking Water Threats

- ✓ Waste
- ✓ Sewage
- ✓ Nutrients
- ✓ Road Salt
- ✓ Fuel
- ✓ Livestock
- ✓ Pesticides
- ✓ Fertilizer
- ✓ Snow Storage
- ✓ Other Chemicals

Additional details on reverse

The presence of a drinking water threat activity does not mean the municipal drinking water source has or is being contaminated. Simply put, it means that an activity listed by the MOECC is occurring (or may in the future) that could impact the municipal drinking water source.

Trent Source Protection Plan policies use a variety of tools to address drinking water threats including:

- ✓ Education and Outreach
- ✓ Land Use Planning
- ✓ Risk Management Plans

In limited areas, some activities may be prohibited from being established in the future.

Where do Policies Apply?

Policy Applicability Maps in the Trent Source Protection Plan illustrate where policies apply.

The Trent Source Protection Plan is available at:
<http://www.trentsourceprotection.on.ca/theplanningprocess/sourceprotectionplan/trentspp/>

Drinking Water Threats in the Otonabee-Peterborough Source Protection Area

Threat Activity Description	Examples
The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the <i>Environmental Protection Act</i> .	Storage of PCBs, waste oil and other hazardous waste; landfilling of hazardous, non-hazardous, municipal or commercial waste; land application of untreated septage.
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage .	Septic systems, stormwater ponds, discharge of industrial effluent, sewage treatment plants and sanitary sewer systems.
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm animal yard.	Livestock grazing and confinement areas.
The application of agricultural source material to land.	Manure produced by farm animals, run-off from farm yards and manure storages, wash water such as milking centre waste, or compost (such as mushroom compost). Facilities that cultivate fish or other aquatic organisms in a controlled environment also produce agricultural source material.
The storage of agricultural source material .	
The management of agricultural source material .	
The application of non-agricultural source material .	Land application of sewage bio-solids or other similar wastes such as materials from food processing.
The handling and storage of non-agricultural source material .	
The application of commercial fertilizer to land.	Contaminants include nitrogen and phosphorus (agricultural and non-agricultural use).
The handling and storage of commercial fertilizer .	
The application of pesticide to land.	Pesticides used to control weeds (herbicides) or fungi (fungicides) and those used as a soil fumigant to control fungi, nematodes and weeds.
The handling and storage of pesticide .	
The application of road salt .	Contaminants include chloride and sodium.
The handling and storage of road salt .	
The storage of snow .	Contaminants include chloride, sodium, and petroleum hydrocarbons.
The handling and storage of fuel .	Bulk plants or facilities where fuel is manufactured, gas stations and card/key locks, marinas, private storage such as farms and contractor yards, and heating oil tanks for homes and businesses.
The handling and storage of a dense non-aqueous phase liquid .	Dry-cleaning chemicals, paint and spot removers, rug cleaning fluids, and varnishes.
The handling and storage of an organic solvent .	Paints, varnishes, lacquers, adhesives, glues, degreasing or cleaning agents, and substances used to produce dyes, polymers, plastics, textiles, and printing inks.

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The Trent Source Protection Plan is available at www.trentsourceprotection.on.ca

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