

Drinking water threats from road salt and snow storage

Road salt storage, road salt application, and snow storage are three activities that pose potential threats to the safety and quality of our municipal drinking water sources.

We need your help to protect our local water supply from these threats.

Understanding the threat

Storage of snow:

Snow removed from roads and parking lots may be contaminated with salt, oil, grease and heavy metals. Storing large amounts of snow in one area concentrates the contaminants. Once the snow melts, these contaminants may reach groundwater or surface water. This poses a threat to drinking water sources.

Under Ontario's *Clean Water Act, 2006* storage of snow in a wellhead protection area is a significant threat only where:

- The storage area, below grade, is larger than 0.01 hectares, or;
- The storage area, above grade, is larger than 1 hectare.

No existing significant threats for snow storage have been identified in the Maitland Valley or Ausable Bayfield source protection areas.

Salt storage and application:

Road salt is a tool to maintain safe roads but it has the potential to affect human health if it reaches sources of drinking water. Salt storage and application are considered a significant threat in wellhead protection areas when:

- Salt storage is greater than 5,000 tonnes, or
- Salt is applied where the impervious (for example paved) surface is greater than 80 per cent

No existing significant threats for salt storage or application have been identified in the Maitland Valley or Ausable Bayfield source protection areas.



Will plans affect me?

Policies in the local source protection plans do not require actions on all properties that store salt or snow. Only in areas where this threat is considered to be significant is it required to comply with the policies. However, we encourage you to find out more about best management practices for reducing the impacts of snow and salt activities. (For more information, download or ask for the fact sheet on vulnerability, threats, and risks.)

Where could salt and snow pose a significant threat?

- On properties located within 100 metres of the municipal well (Wellhead Protection Area A), or in the two-year time-of-travel zone (Wellhead Protection Area B) where the vulnerability score is 10.
- For maps showing vulnerable areas, go to our website at sourcewaterinfo.on.ca or contact staff of your source protection region.

No existing significant threats for snow or salt have been identified for this region. To learn more about protecting drinking water, please contact your local risk management official or staff of the source protection region.



How are road salt and snow storage threats being addressed?

Local source protection plans use a variety of tools to protect municipal drinking water sources:

Storage of snow:

Prohibition

- Any new snow storage will be prohibited only where it poses a significant threat.

Restricted Land Use

- This is a 'flag' that helps municipalities identify properties where snow storage could require a risk management plan or could be prohibited.

Storage, handling and application of salt:

Education and Outreach

- Staff in this region are reaching out to people like you in order to let you know how you can help to protect local drinking water sources.

Restricted Land Use

- This is a 'flag' that helps municipalities identify properties where the activity requires a risk management plan or is prohibited.

Strategic Action

- Where salt storage is a low or moderate threat the municipality will ask commercial landowners to develop salt management plans.

Examples of threat activities

Activities that pose threat to drinking water sources include:

- Septic systems; On-site sewage
- Fuel oil (including home heating oil)
- Liquid fuel such as gas stations
- Chemicals (toxic chemicals such as organic solvents and dense non-aqueous phase liquids or DNAPLs)
- Commercial fertilizer
- Pesticides
- Nutrients (manure, bio-solids, grazing)
- Waste disposal sites (including storage of hazardous waste)
- Sewage works (sewage treatment plants, municipal sewers)
- Road salt and snow storage
- Others: For the list of 21 provincially prescribed drinking water threats, go to this web page:
ontario.ca/document/tables-drinking-water-threats

Find out more online:

- **Plans and maps:** sourcewaterinfo.on.ca
- **Province of Ontario:** ontario.ca/environment-and-energy/source-protection
- **Smart About Salt Program:** smartaboutsalt.com
- **Guidelines on Snow Disposal and De-icing Operations in Ontario:** ontario.ca/document/guidelines-snow-disposal-and-de-icing-operations-ontario

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