

## 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 our sources of drinking water – groundwater aquifers and Lake Huron.

### Understanding the Threat

#### Salt Storage and Application:

Road salt is a tool to maintain safe roads and walkways but it is a water quality concern. Salt we spread on the ground does not go away. It can affect human health if it reaches waterways and groundwater, our sources of drinking water. It's not easy to remove it.

Under the Ontario *Clean Water Act, 2006*, salt storage and salt application are considered significant threats to drinking water in vulnerable areas close to the municipal well. This is true in zone A of the wellhead protection area (100-metre zone), or in Zone B (two-year time-of-travel), with a high vulnerability score of 10.

For maps of vulnerable areas, go to our website at [sourcewaterinfo.on.ca](http://sourcewaterinfo.on.ca) or contact staff of your source protection region.

#### 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 contaminants. Once the snow melts, these contaminants may reach groundwater or surface water.

Under Ontario's *Clean Water Act, 2006*, storage of snow in a wellhead protection area is a significant threat only for commercial and industrial properties located close to municipal water wells.



**ALWAYS SHOVEL OR PLOW FIRST,  
THEN APPLY SALT AS NEEDED**

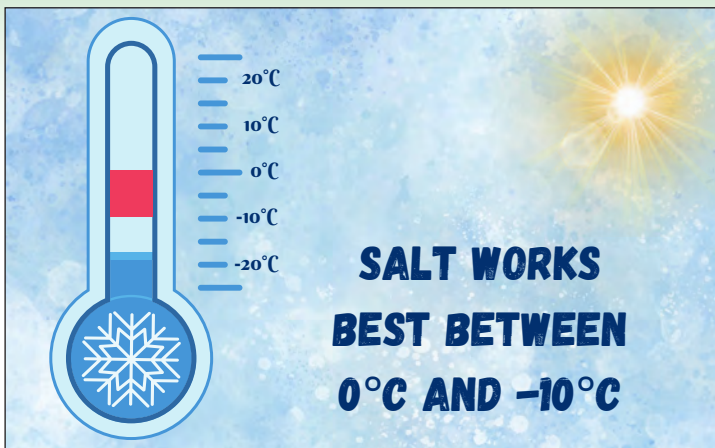
### Balancing Safety & Water Protection

#### Ways to reduce impacts of road salt and snow storage:

- Always shovel or plow first, then apply salt as needed
- A little goes a long way! A cup of salt is enough for a typical driveway
- Consider alternatives, such as sand
- Check the weather – salt is less effective at colder temperatures

#### For businesses and larger lots:

- Reduce salt use by closing areas not needed in the winter
- Redirect downspouts away from walkways
- Store salt indoors or in waterproof containers, and clean up spills
- Does your contractor have 'Smart about Salt', or other training? Learn more at [smartaboutsalt.com](http://smartaboutsalt.com)
- Guidelines on Snow Disposal and De-icing Operations: <https://www.ontario.ca/page/guidelines-snow-disposal-and-de-icing-operations-ontario>



## How are road salt and snow storage threats being addressed?

Local source protection plans use various tools to protect sources of drinking water:

### Education and Outreach

- Outreach increases awareness of the importance of water protection, and shares ways to reduce risk

### Risk Management Plan (RMP)

- RMP required for properties close to the municipal water well, with:
  - Salt storage more than 250 kg
  - Road salt application more than 1,000 m<sup>2</sup>
  - Snow storage, for parking lots more than 1,000 m<sup>2</sup>

### Prohibition

- Snow cannot be transported to wellhead protection area, zone A and B

### 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.

### Strategic Action

- Municipalities are encouraged to develop salt management plans.

## Other threats to water quality

### Activities that pose threats to drinking water sources include:

- Septic systems; On-site sewage
- Fuel oil (including home heating oil)
- Liquid fuel such as gas stations
- Chemicals (such as organic solvents and dense non-aqueous phase liquids (DNAPLs))
- Commercial fertilizer
- Pesticides
- Nutrients (manure, bio-solids, grazing)
- Waste disposal sites (including storage of hazardous waste)
- Sewage works (sewage treatment and collection, stormwater management)
- Road salt and snow storage
- Others: For the list of 22 provincially prescribed drinking water threats, go to this web page: <https://threats.swpip.ca/>

### Find out more online:

- **Plans and maps:**  
sourcewaterinfo.on.ca or County GIS websites
- **Province of Ontario:**  
[www.ontario.ca/page/source-protection](http://www.ontario.ca/page/source-protection)

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