

Snow Storage

In Canadian climates, the need for snow removal and storage is imperative to ensure that roadways are safe for public travel. Snow ploughed and removed from roads and parking lots can be contaminated with road salt, oil, grease, litter, and heavy metals from vehicles and airborne pollutants. When the snow melts, these contaminants are released and can enter nearby surface or groundwater sources creating a concern for drinking water contamination.

Snow Storage as a Drinking Water Threat

Since snow from roads and parking lots have the potential to carry and release contaminants into their surrounding environments, it must be stored and disposed of in an appropriate manner. Storing large quantities of snow in one location can increase the concentration of contaminants. A significant concern is increased concentration of sodium and chloride from road salt entering the drinking water sources.



Where is Snow Storage a Drinking Water Threat?

Snow storage is considered significant drinking water threats when they occur in the most vulnerable areas around municipal drinking water sources called Wellhead Protection Areas (WHPAs), Intake Protection Zones (IPZs) and Issue Contributing Areas (WHPA-ICA or IPZ-ICA). There are significant drinking water threats for snow storage in:

- WHPA A, and B for wells in Deloro, Madoc, Peats Point, Point Anne, and Tweed.
- WHPA E in Madoc and Peats Point.
- IPZ 1 and 2 in Ameliasburgh, Belleville, Deseronto, Napanee, Picton, and Point Anne.
- IPZ 3a in Picton.
- WHPA-ICA in Tweed.
- The Hamlet of Point Anne has both WHPAs and IPZs because of the infrastructure of the system. Due to the uniqueness of this system, significant threats can occur in both WHPAs and IPZs.

Risk Management Plans

Risk Management Plans are required for snow storage in vulnerable areas (WHPAs A and B with a score of 10, WHPA-ICA in Tweed, and IPZs 1, 2 and 3a with a score of 8-10). RMPs are negotiated with the people engaged in the threat activity and Risk Management Officials. The RMPs include management measures related to the threat(s) on the property. These measures may include relocation of storage facilities, training of personnel handling and removing snow, and/or adoption of best management practices.



Restricted Land Use

Restricted land use allows municipalities to identify areas where the storage of snow should be either prohibited or require a risk management plan (WHPAs A-E with a score of 8-10, and IPZ 1, 2, and 3a with a score of 8-10). This allows municipalities to create their own process to ensure that future development complies with the Quinte Source Protection Plan.



Prohibition

Snow Disposal Facilities are prohibited for future snow storage in:

- WHPAs A and B with a score of 10 in Deloro, Madoc, Peats Point, Point Anne, and Tweed.
- IPZ 1 with a vulnerability score of 8 or higher in Ameliasburgh, Belleville, Deseronto, Napanee, Picton, and Point Anne.
- WHPA-Issue Contributing Area in Tweed.
- Snow dumps are further prohibited in IPZ 2 and 3a with a score of 8 or higher in Ameliasburgh, Belleville, Deseronto, and Napanee, Picton, and Point Anne.

