

**Once introduced into an ecosystem, salt remains in water and soil. It is very difficult and costly to remove.**

Approximately 18,000 tons of salt is applied within the Wachusett Reservoir watershed each year. Most is applied to roadways and parking lots, but excess amounts of salt are also used on private driveways and walkways. Salt contaminates surface water and groundwater. The Wachusett Reservoir has been impacted.

DCR is working with Departments of Public Works, Highway Departments, and MassDOT to come up with creative solutions to the problem of salt contamination.

Your help and commitment are also needed to help reduce the impacts of salt on drinking water supplies.

Please be mindful of **where, when, and why** before using any chemical deicers.

**Reducing the use of winter deicing chemicals is something that everyone can do to make a difference in the quality of surface water and groundwater.**



**Individual actions can result in significant water quality improvements when carried out by a majority of people. Please follow the enclosed steps to help keep wildlife, infrastructure, and your drinking water safe.**

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## **WINTER SALT USE IN THE WACHUSETT WATERSHED**

Thousands of tons of salt are applied to roadways in your town each winter.



Almost all of it ends up in streams and groundwater and eventually reaches drinking water sources.

Salt now affects municipal water supplies, private wells, and Wachusett Reservoir throughout the year.

## Road salt is a contaminant in water supplies

The Department of Conservation and Recreation - Division of Water Supply Protection (DCR DWSP) routinely monitors the water quality of the groundwater, streams, and rivers that flow into the Wachusett Reservoir.



DCR DWSP has documented significant increases in specific conductance and chloride concentrations over the past thirty years. These are both indicative of salt amounts.



Elevated specific conductance measurements were originally linked to winter precipitation events, but now occur during low-flow conditions during the summer as well.



## Impacts of Road Salt

- The increasing concentration of sodium and chloride in drinking water is becoming a public health issue.
- Salt causes corrosion of bridges, buildings, vehicles, and pipes.
- Roadside vegetation can die and be replaced by salt-tolerant invasive species.
- Freshwater ecosystems are disrupted and aquatic organisms struggle to reproduce or survive.
- There is a greater risk of vehicle versus deer accidents due to their attraction to salt along roadways.
- The cost of road salt has a significant financial impact on both local and state budgets (and your taxes) and municipal water rates.

### **Here is more information on road salt:**

- [www.telegram.com/news/20191228/scientists-alarmed-by-massive-amounts-of-road-salt-used-in-northeast](http://www.telegram.com/news/20191228/scientists-alarmed-by-massive-amounts-of-road-salt-used-in-northeast)
- [cceanondaga.org/resources/best-practices-for-road-salt-and-deicers](http://cceanondaga.org/resources/best-practices-for-road-salt-and-deicers)

## How can you help?

Salt is applied to roads by your local DPW, but up to half of all salt is used on parking lots, sidewalks, driveways, and walkways.

Follow these tips to help minimize the impact of salt applications in the Wachusett Reservoir watershed.

- **Pretreat walkways with liquid brine or calcium chloride before the storm begins. This will reduce the amount of salt required.**
- **Always check instructions for temperature recommendations and application rates.**
- **Remove snow and ice without adding sand or more salt. Sand will actually reduce the speed of melting and is difficult to clean up. Pretreatment with salt will keep ice and snow from binding to pavement.**
- **Redirect gutters and downspouts away from sidewalks.**
- **Check the weather forecast and don't use deicers if rain is predicted.**
- **Purchase and use snow tires and drive slower on snow covered roads.**