



Steve Nadeau
Superintendent of Streets

Town of Stow HIGHWAY DEPARTMENT

88 South Acton Road
Stow, Massachusetts 01775
(978) 897-8071
FAX (978) 897-5682

Mailing Address:
88 South Acton Rd
Stow, MA 01775

Salt Reduction Plan

Nearly five hundred thousand tons of rock salt is used annually in Massachusetts alone for snow and ice control. Rock salt is very effective at melting snow and ice and relatively inexpensive, hence its long history of use in treating roadways during winters. However, the unrealized cost of using rock salt is much higher – it can have a negative impact on both public and private property and vehicles, harm wildlife and livestock, contribute to soil erosion, and most importantly to a town like Stow, contaminate drinking water supply. Chloride is not significantly removed by chemical reactions, evaporation, or vegetation. Therefore, nearly all of the chloride applied to the land surface as road salt will eventually end up in the nearby surface waters or groundwater. As Stow is entirely on well water, and those wells all draw from the same aquifer, it is critical to reduce salt contamination in our drinking water.

To that end, the Town of Stow, MA Highway Department is working to decrease salt usage during winter operations such that there are fewer negative impacts to the environment in town, while still ensuring safe driving conditions during snow and ice events.

The Town of Stow's Salt Reduction Plan will include the following steps:

1. Careful calibration of salting units on Highway trucks each November and after any maintenance and/or repairs. Multiple calibrations per winter season will ensure that the correct tonnage per lane-mile is accurate each and every storm so that roads are not oversalted.
2. Utilization of information provided by our weather service (Precision Weather Forecasting) as well as air temperature, road temperature, and historical data to guarantee that salt rates in the Town of Stow will be between 100 to 200 lbs. per lane-mile; and never exceed 400 lbs. of salt per lane-mile per winter weather event.
3. Research and propose a capital article to purchase liquid brine storage and applicators for use in pre-treating the roadways of Stow, thereby not giving snow & ice a chance to 'stick' to roadways and thus make removal operations easier, faster and require less chemicals post-storm.
4. Look into live-edge snowplows for Highway Department trucks, these better conform to roadway surfaces, reducing the need for chemical treatment of problem areas after snow removal has been completed.