

# Road Salt Reduction

## WHAT ARE THE OBJECTIVES OF A ROAD SALT REDUCTION PROGRAM?

Road crews across America use approximately 8 to 12 million tons of salt to treat roads annually. Northern New England relies heavily on salt applications during the winter months. The use of salt on roads leads to the potential for artificially high salinity levels in local surface water and groundwater resources and can be harmful to human and environmental health. Communities throughout New England seek to eliminate the use of road salt adjacent to community drinking water protection areas.

## HOW DOES A ROAD SALT REDUCTION PROGRAM WORK?

Towns must first identify water resources including past, present and future groundwater and surface drinking water supplies, and delineate and map the associated watersheds. Prioritize roads, parking lots and driveways within these watersheds for reduced-salt application or salt alternative policies. Towns taking this approach should recognize that low or no-salt applications may not be practical due to safety, cost and availability of salt alternatives, and environmental impact of salt alternatives. Reduced road-salt areas are often noted with signage to alter motorists to potential changes in road conditions due to these practices.



The following are practical approaches for municipalities and private citizens to individually reduce the use of salt:

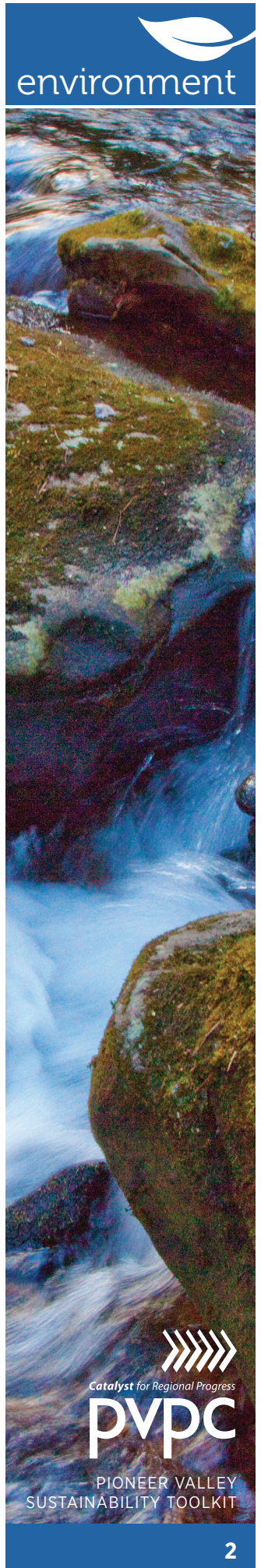
- » Salt application quantities should be determined by the temperature of the road surface.
- » Road salt should be properly handled and stored to reduce potential contamination and eliminate loss to runoff.
- » Evaluate salt alternatives and seek to use alternative road treatment chemicals in the most sensitive water resource areas. Many of the alternative chemical treatments require special consideration of how to handle and apply the chemicals effectively, whether there needs to be substantial equipment fit-up, and cost per ton.
- » Broader use of snow tires may have a positive impact on safety when salt reduction policies are in place. The use of snow tires is mandated in Quebec from December 15 to March 15.

## WHERE AND HOW IS ROAD SALT REDUCTION WORKING?

A road salt reduction pilot program exists on the Interstate 89 bridge across the Connecticut River between New Hampshire and Vermont. This program utilizes continuous roadway monitoring software to measure conditions on the bridge deck. When sensors indicate unsafe conditions the system automatically applies chemical treatments on the bridge deck; limiting environmental impacts to the Connecticut River below.

### Did you know that Towns can...

- » Implement regulations and bylaws for road salt application for town roads, private plowing contractors, parking-lot owners and residential driveways and walkways.
- » Pre-treat roads with salt brine to prevent ice buildup and reduce the amount of salt needed during a storm.
- » Equip plow trucks with slat calibration devices so that less salt can be applied in designated reduced salt zones.
- » Keep accurate records of salt application amounts per storm.
- » Prohibit dumping or plowing snow into rivers, streams, lakes or frozen water bodies or their buffer areas.
- » Recover sand and prevent it from running off to rivers, streams and lakes.



# CONTACT INFORMATION AND LINKS

BAYSTATE ROADS PROGRAM  
<http://baystateroads.eot.state.ma.us/>

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## FOR MORE INFORMATION, PLEASE CONTACT

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