

# Sustainable Winter Salting

## Information for Municipalities



Department of  
Environmental  
Conservation

### Introduction

The all-weather use of transportation corridors and privately owned paved surfaces is essential. During winter months, the application of rock salt to roads and other surfaces to control ice and snow for the safety of the traveling public has become an established practice. However, the environmental impacts from road salt can be long term. Once road salt dissolves, it can run off into surface waters through snow melt and stormwater or find its way onto surfaces where, even later in the year, it can continue to leach further into groundwaters. As a result, the rock salt applied for public safety during the winter can cause wide-ranging threats to aquatic and terrestrial ecosystems and sources of drinking water. These threats are mostly associated with chloride, a primary component of NaCl (sodium chloride, a.k.a. "salt"), which is the main component in common rock salt.



### Recommended Best Management Practices

Implementing efficient practices to reduce runoff of road salt can lead to long-term, successful balance of safety and environmental protection using the best available science and management practices.

Implementing best management practices (BMPs) affords an opportunity to reduce road salt application while still meeting a high level of service expectation and providing safe winter travel. The *Adirondack Road Salt Reduction Task Force Assessment and Recommendations* report contains many recommended BMPs to reduce road salt. While the report is specific to the Adirondacks, these practices are applicable and encouraged statewide. The BMPs are intended to improve upon existing practices and to be easily adopted by private, state, and local snow and ice removal practitioners. Examples include segmented plow blades, salt brine application to roadways, and establishing salt application rates. To view the report, visit [dec.ny.gov/reduce-rock-salt](http://dec.ny.gov/reduce-rock-salt).



### Available Funding

The DEC's Division of Water has two grant programs to help fund road salt reduction practices:

- the Water Quality Improvement Project (WQIP) program, an implementation grant program; and
- the Non-agricultural Nonpoint Source Planning and MS4 Mapping grant (NPG), a planning grant.

Funding through these programs is available to municipalities and Soil and Water Conservation Districts.

# WQIP Salt Pollution Reduction Funding Opportunities

## Salt Storage:

- Salt is best stored out of the weather to prevent the salt from dissolving due to exposure to rain or snow, avoid contamination of groundwater or streams from salt runoff, and to decrease clumping of salt.
- WQIP provides funding for the construction of a structure to cover a salt or sand-salt mixture storage pile; to expand capacity of a current structure; or to construct a structure for an uncovered pile currently located near a groundwater drinking water source or surface water system used for a public water system, or within a primary, principal, or sole source aquifer.



## Road Salt Reduction Practices:

- While direct application of rock salt to roadways can result in environmental and public health risks, it can also be inefficient at snow and ice reduction due to the “bounce and scatter” of rock salt particles when applied to roads, requiring several applications to achieve the desired effect.
- WQIP provides funding for projects that minimize or replace traditional road salt (rock salt) application to reduce chloride pollution in surface waterbodies or groundwater. Eligible practices include:
  - Brine making equipment and brine storage tanks
  - Live edge or segmented plow blades and plow guards
  - Truck-mounted brine spreading equipment
  - GPS equipment and sensors to track road salt or brine application, or pavement temperature

## NPG Funding for Road Salt Reduction

### Winter Road Maintenance Planning Report:

- Plans for winter road maintenance are to outline proposed road salt reducing practices at the municipal level. The plan must identify current practices, environmentally sensitive areas, and proposed BMPs to reduce road salt application.
- The winter road maintenance report is intended to prepare a municipality to implement road salt reduction practices through WQIP.

### CONTACT INFORMATION

On the web:

[dec.ny.gov/reduce-rock-salt](http://dec.ny.gov/reduce-rock-salt)

<http://on.ny.gov/wqip>

<http://on.ny.gov/npg>

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