

WINTER IS COMING:

Environmental and Economic Impacts of Over-Salting and How You Can Make a Difference



Rock salt helps keep roads safe when winter storms hit, reducing winter road accidents. Unfortunately, salt has some serious, negative effects on water quality and aquatic ecosystems that are all too often ignored for the sake of how well it works:

HOW DOES SALT GET INTO THE WATER?

Salts applied prior to and during winter storm events increases the amount of chlorides in the environment. Salts are applied for the important purpose of maintaining public safety during winter storm events; however, the components are subsequently washed off into local waterways or seep through soils into groundwater systems with numerous negative impacts. On top of that, salts are often cost prohibitive to remove and can cause salt levels in local streams to remain elevated year-round — resulting in contaminated drinking water sources and harm to local plants and animals.

ECONOMIC COSTS OF SALT APPLICATION

The application of salt impacts infrastructure, vehicles and other private property. Due to their corrosive nature, salts increase the costs to maintain, repair, and replace infrastructure like roads, sidewalks, driveways, bridges and pipes. Maintenance needs for water supply, wastewater and stormwater systems due to increased pipe corrosion results in higher cost repairs or more frequent replacement of pipes.

PROTECTING YOUR PETS

Using salt around your house may have other unintended consequences. Salt can be harmful to pets, who may lick it from their paws or fur after being outside. Even a small amount can be dangerous when ingested, causing vomiting, diarrhea, lethargy, disorientation, and even death (by sodium toxicosis) in high amounts. Salt can also irritate your pet's paws, causing dryness, cracking and burns; when it enters cuts or blisters, salt causes further pain and irritation.

SMART SALT APPLICATION

Improved management of winter salt use can balance the dual goals of public safety and minimizing the negative impacts of salt runoff. The use of alternative products can decrease the amount of salt used, thus reducing costs and environmental impacts all while maintaining the public's expected level of service. While many of the problems with too much salt in our environment come from municipalities and businesses applying salts in large amounts, individual homeowners can make a difference. In fact, individual people like you are the foundation of large-scale behavior change. Your family, friends and neighbors that are following your lead are the same folks who work at local businesses, staff our municipal departments, and who we elect to office to implement smart decisions.

HOW CAN YOU MAKE A DIFFERENCE?

We can begin to reduce salt runoff through smart salting application strategies at home. Each person contributes to the attitudes and practices that have created a high and steadily growing volume of salt runoff each year. Using alternatives to salt, and employing smart salting practices will also save money!

Prevent chloride pollution from your property by following these simple tips:

- **Shovel.** The more snow and ice you remove manually, the less salt you will have to use and the more effective it will be.
- **Apply less.** More salt does not mean more melting. Use less than 4 pounds of salt per 1,000 square feet. One pound of salt is a heaping 12-ounce coffee mug. Leave about a 3-inch space between granules. Use a hand-held spreader to help you apply a consistent amount.
- **Be patient.** Just because you don't see instant results from salt you have applied doesn't mean it isn't working. **These products take time to work.**
- **Sweep up extra.** If salt or sand is visible on dry pavement it is no longer doing any work and will be washed away. Use this salt or sand somewhere else or throw it in the garbage.

Like to learn more on how to stop salt pollution? The Virginia Department of Environmental Quality (DEQ) is looking for Homeowner Association (HOA) members to join the Northern VA Salt Management Strategy (SaMS) team to help scale up community-level best practices. As part of that effort, DEQ and SaMS partner organizations will share guidelines on improved winter use practices and recommended actions for HOAs in the near future. In the meantime, please share this flyer with your HOA. [To learn more or to get involved, contact Will Isenberg at \[William.Isenberg@deq.virginia.gov\]\(mailto:William.Isenberg@deq.virginia.gov\).](#)

