



Northern Virginia Winter Salt Management Strategy (SaMS) Program

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Introduction to NVRC

The Northern Virginia Regional Commission (NVRC) is a regional council of 13 local governments in the Northern Virginia suburbs of Washington D.C., representing one of 21 planning districts that serve the Commonwealth of Virginia.

- NVRC is a political subdivision (a government agency) within the Commonwealth
- Environmental programming across Northern Virginia:
 - Watershed Programs
 - Stormwater Management
 - Litter and Waste
 - Trails and Heritage Resources
 - Energy
 - Coastal Program
 - Resiliency Planning



Winter Salt Impacts in Northern Virginia

- Increases in salt usage to ensure public safety and economic activity in winter months
- Persistence in groundwater
- Increasing trends in freshwater salinity, including in drinking water reservoirs
- Elevated concentrations in winter months with spike after winter storm events

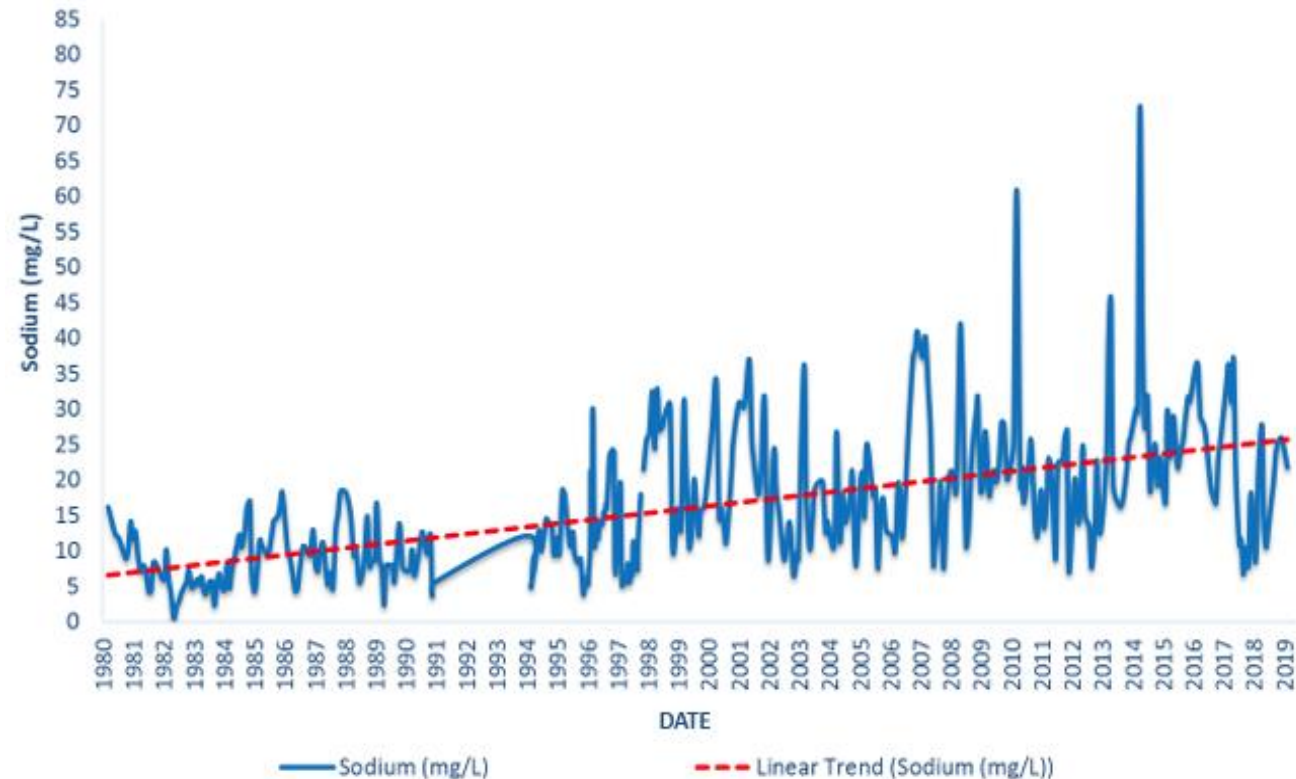
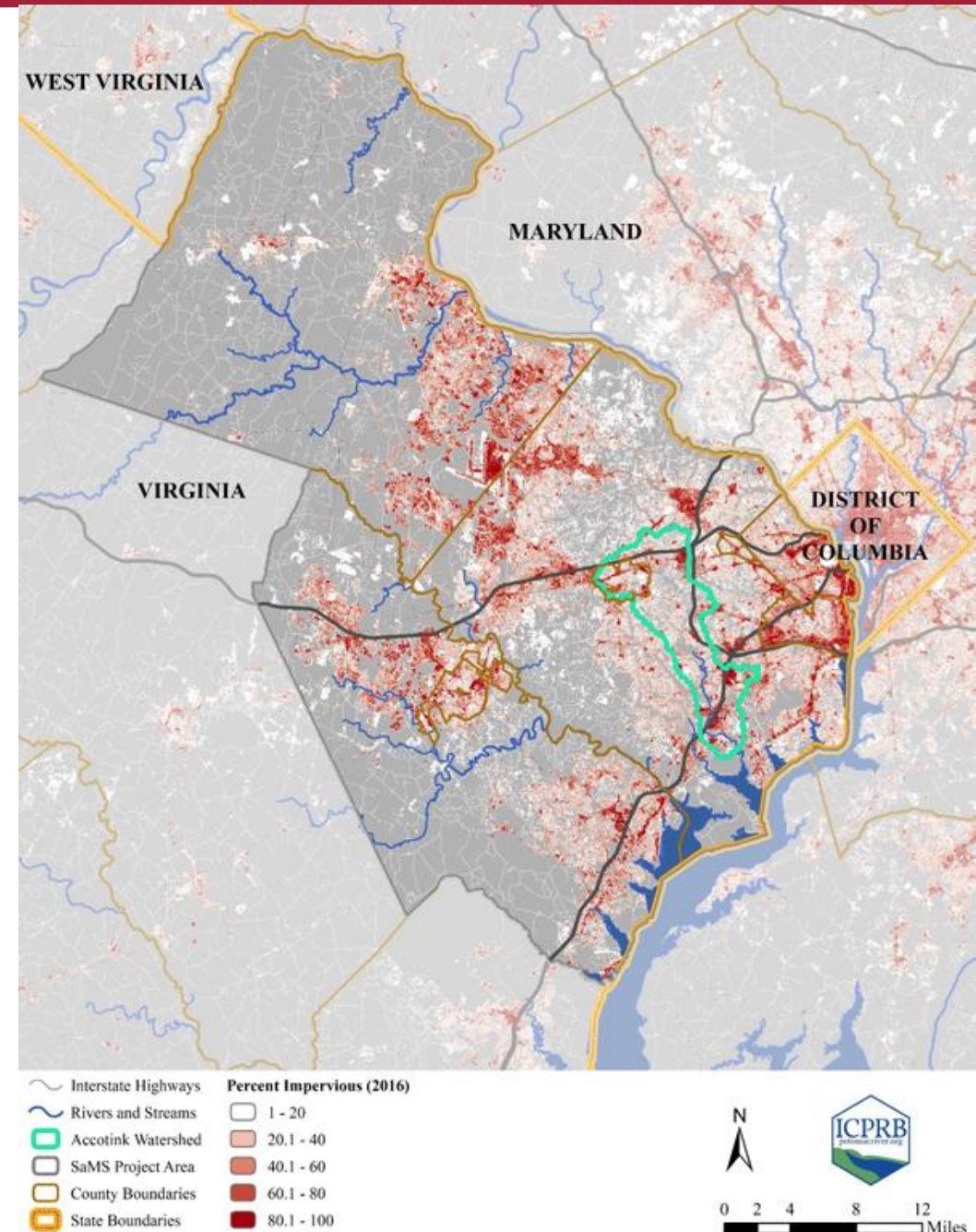


Figure 3. Trends in sodium levels at the drinking water intake on the Occoquan Reservoir.

Winter Salt Impacts in Northern Virginia

- Monitoring conducted in the Accotink Creek watershed indicated that chlorides, hydromodification, habitat modification, and sediment were the most probable stressors of the biological communities across the watershed.
 - Exceeded aquatic life chronic and acute water quality standards for chloride
- Total Maximum Daily Loads (TMDL) finalized in 2017 to address sediment and chloride causing benthic impairments
 - Approved by EPA in May 2018
- First chloride TMDL in VA that addresses this type of pollution



SaMS Development

- With completion of TMDL, local, state, and regional stakeholders determined that a regional strategy focused on implementing a broad range of best management practices (BMP) would be the most effective strategy for addressing the TMDL
- **Non-regulatory, voluntary and largely proactive approach**
- **Three primary goals of the strategy:**
 - Use a stakeholder-driven process to proactively address salt loads in the region and address the Accotink Creek chloride (salt) TMDLs.
 - Generate increased public awareness that leads to positive behavior changes, and long-term support for the continual improvement of deicing/anti-icing practices and actions.
 - Ensure continued protection of public safety, improves water quality and terrestrial habitat, and lessens the effects of deicing/anti-icing salts on drinking water resources, property and road infrastructure through information sharing and implementation of best practices over time.

SaMS Toolkit

- Developed for a broad range of audiences to address salt management practices, ranging from winter maintenance professionals and businesses/other groups that contract services to the general public
- Provides a combination of technical information on winter BMPs as well as recommendations relating to outreach and education, water quality monitoring, and several other topics

Planning BMPs	BMPs	Potential Cost ¹		Potential Cost Savings ^{1, 2}	Are there opportunities to partner between organizations?
		On Staff Time	Other Costs ³		
Winter Operations Planning	Develop a winter maintenance plan	High	n/a	High	No
	Preseason meetings	Medium	n/a	Medium	Yes ⁴
	Postseason meetings	Medium	n/a	Medium	Yes ⁴
	Accountability at every level	Low	n/a	High	No
	<i>Transportation Audiences</i> - Plan snowplow routes	Medium	n/a	Medium	Yes
	<i>Property Management Audiences</i> - Visit the property before the season	Low	n/a	Medium	No
Levels of Service	<i>Transportation Audiences</i> - Communicate levels of service internally	Medium ⁵	n/a	Medium	No
	<i>Transportation Audiences</i> - Communicate levels of service externally	Medium	Medium	Medium	Yes ⁴
	<i>Property Management Audience</i> - Discuss and agree upon levels of service	Low	n/a	Medium	No

Key sections include:

Planning &
Application
Practices

Tracking &
Reporting

Best Practices
for the General
Public

Education &
Outreach

Water Quality
Monitoring

Inter-
Governmental
Coordination

Future Research
Needs

Funding Sources
& Financial
Consideration



Ongoing NVRC SaMS Programming: Northern Virginia Clean Water Partners

- A group of over 20 local governments, drinking water and sanitation authorities, schools, and businesses in the region.

Goals:

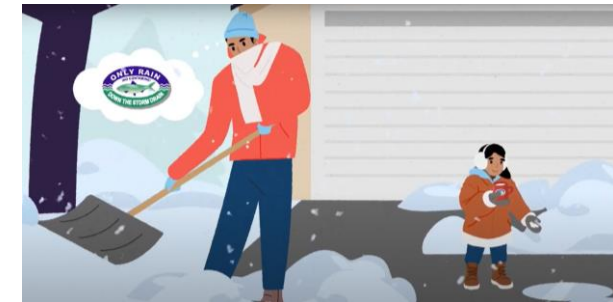
- Municipal Separate Storm Sewer System (MS4) Phase 1 and 2 Permit Compliance
- Keep Northern Virginia residents healthy and safe by reducing the amount of pollution from stormwater runoff that reaches local creeks and rivers.
- Empower individuals to take action to reduce pollution.

Funding:

- Each partner annually contributes funds to the program based on population size.

Outreach Mechanisms:

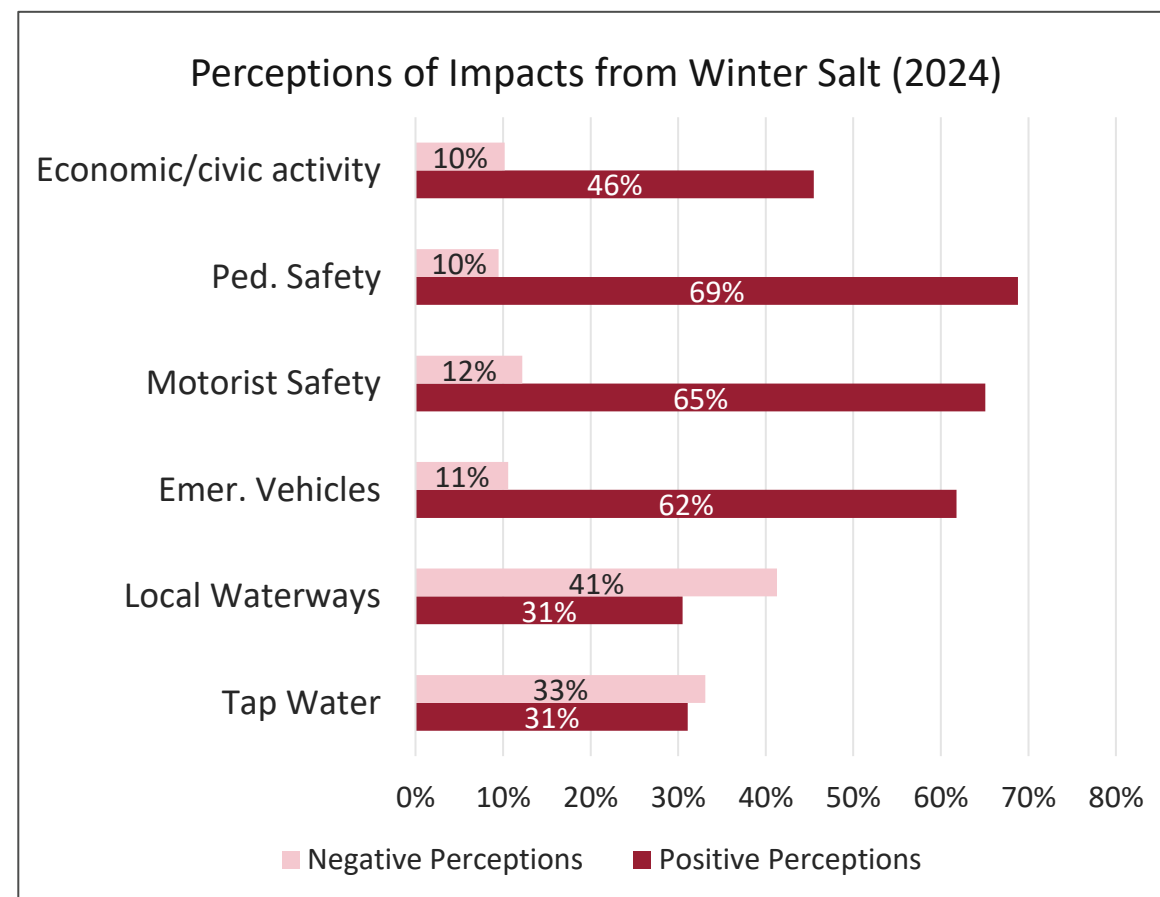
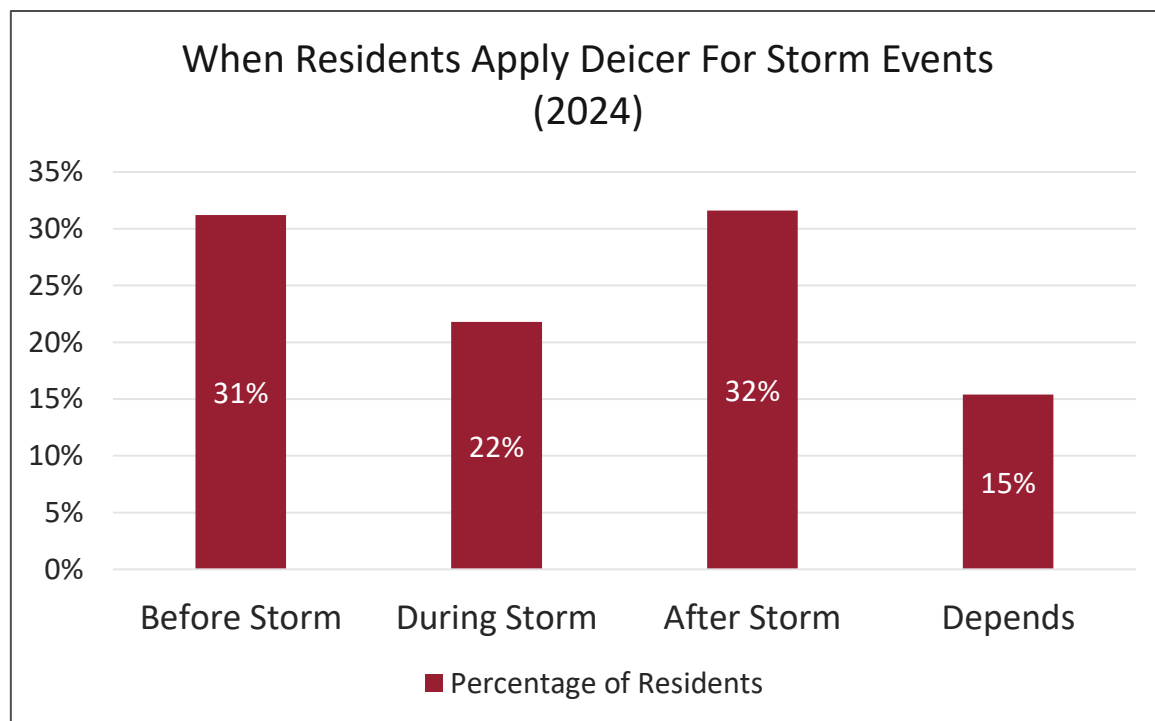
- Social Media (Twitter/X, FB, Instagram)
- E-Newsletters
- TV Advertisements
- Online Advertisements, e.g., Google Ads, Reddit Ads
- Local “reminders” (e.g., storm drain stenciling, markers)
- OnlyRain website
- Outreach at local events, sharing of materials and resources



Ongoing NVRC SaMS Programming: Northern Virginia Clean Water Partners



- Serves as a mechanism to measure long-term changes in Northern Virginia residents' knowledge and behaviors
 - Social Media Tracking
 - Annual Resident Survey



2024-2025 SaMS Implementation Activities

Received funding from Virginia DEQ in June 2024 to support and expand implementation of SaMS programming in Northern Virginia

Five primary goals:

Gauge interest and opportunities around expansion of SaMS programming both within the Northern Virginia region and throughout other regions of the Commonwealth.

Develop and update outreach tools around SaMS, including factsheets, social media ads, and other materials to engage residents as well as professional winter salt applicators.

Collaborate and engage with localities and other winter salt management stakeholders in Northern Virginia and the DMV around winter salt outreach and education.

Host educational events for the public, including webinars and local events

Conduct radio advertising to share winter salt management messaging to the public.

2024-2025 Activity Highlights

1. Sharing opportunities around expansion of SaMS programming both within the Northern Virginia region and throughout other regions of the Commonwealth.

- Hosted meetings with other Virginia PDCs to assess interest in SaMS programming, including informational meetings with PDC representatives

2. Collaboration with localities and other winter salt management stakeholders in Northern Virginia and the DMV around winter salt outreach and education.

- Hosting meetings with current SaMS outreach group to collaborate on salt management outreach activities and regional programming.
- Monthly regional coordination meetings with salt management stakeholders in Maryland and Washington D.C. to coordinate on relevant activities

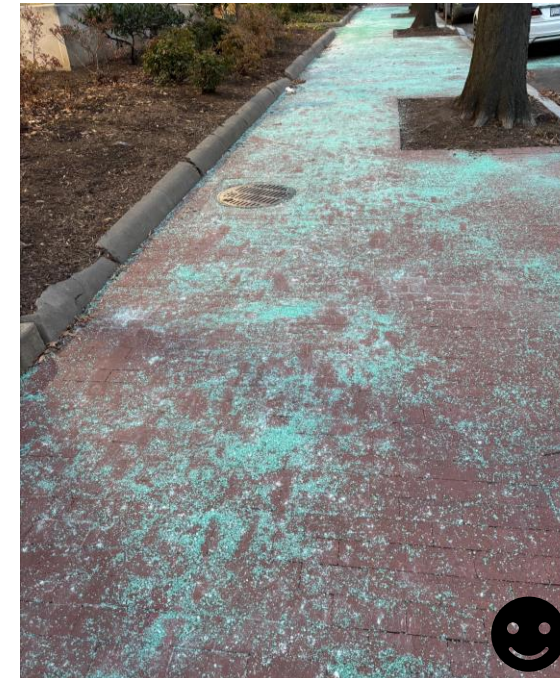
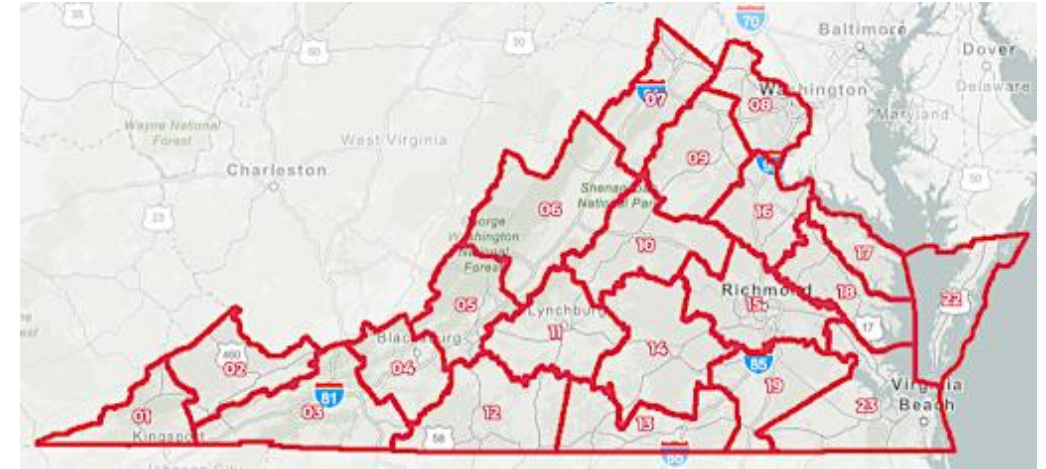


Photo Credit: ICPRB

2024-2025 Activity Highlights

3. Ongoing radio advertising to share winter salt management messaging to the public.

- DMV-based salt coordination group, including NVRC, developed radio advertisement messaging to share over the Washington D.C. based radio station, WAMU, to promote smart salt application practices to the public
- Able to schedule before winter storm events

4. Provide public education opportunities around winter salt management through webinars and other activities:

*Winter Salt Awareness Week: January 27th – 31st

DMV-focused Webinar: January 29th | 2:30 – 3:15 PM → Scan QR Code to access link for YouTube Livestream!

- Collaboration on press release, social media toolkit, etc. to share messaging for the week

WAMU 88.5
AMERICAN UNIVERSITY RADIO

A promotional poster for the 2025 Winter Salt Week. The top half features a blue background with white text. The bottom half has a dark blue background with white text and logos. A QR code is visible on the right side of the poster.

2025 WINTER SALT WEEK
Perspectives from the DMV
1.29.25 | 2:30 - 3:15 PM (EST)

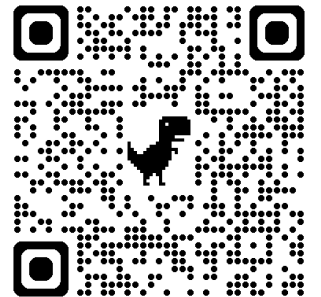
[REGISTER HERE](#)
or scan the QR code

Join representatives from Maryland, Virginia, and Washington D.C. on January 29, 2025 from 2:30 - 3:15 PM (EST) to learn how the states and D.C. are working to implement winter salt management strategies that limit the negative effects of winter salt on the environment while balancing public safety. This event will also share actions that you can take to reduce salt impacts in your community. Speakers include:

- Interstate Commission on the Potomac River Basin
- Center for Watershed Protection
- Northern Virginia Regional Commission
- Chesapeake Conservation Landscaping Council

Learn more about **Winter Salt Awareness Week**, including additional events and ways to get involved, at wintersaltweek.org.



Highlight: HOA Smart Salt Management Strategies

Engaging HOAs through resource sheet to highlight smart salting policies, contracts, and effective resident engagement tools

- Balance of education between the environmental and health consequences of road salt and encouraging smart salting practices

Other Audience Specific Education and Outreach Materials:

- Resident Snow and Ice Maintenance Tip Sheet (multi-lingual options) and video
- Property Management Snow and Ice Maintenance Tip Sheet (multi-lingual options)

General Resources:

- SaMS Toolkit and Outreach Materials
- More information: www.wintersaltsmart.com

Smart Snow and Ice Maintenance Resource Sheet for HOAs and Civic Associations Winter 2024

Smart snow and ice maintenance during the winter is crucial for homeowner associations (HOAs) and civic associations to ensure residents' safety, maintain property values, and prevent liability, while also limiting the impacts of winter salt on the environment and reducing long-term maintenance and improvement costs to vehicles and infrastructure. The following resource list provides information and links for HOA leaders to make informed decisions when they are preparing for snow and ice in the winter months. From maintenance contracts to member resident education and outreach, these tools will serve as a foundation for smarter salt management in every community.

Frequently Asked Questions

How does winter salt impact the environment?

While salt on our roads and sidewalks helps to keep us safe in the wintertime, it only takes one teaspoon of salt to permanently pollute 5 gallons of water. In particular, salt that enters the environment can raise sodium levels in our drinking water and harm fish, plants, and other wildlife that are adapted to freshwater environments.

Does excess winter salt financially impact our HOA?

Salts causes corrosion to vehicles and infrastructure, including sidewalks, roads, and bridges, and can lead to costly maintenance and repairs around your community. There are also a number of direct costs from winter salt application, including costs for materials (salt, brine, fuel etc.), equipment (trucks, plows, spreaders, etc.), and labor that increase with excess salt application. Without the use of optimal products and smart application practices, winter salt can result in greater costs to HOAs to maintain levels of service and replace infrastructure over time.

What actions can my HOA/civic association take to ensure smart salt management?

There are a number of ways that you can reduce the impacts of winter salt in your community:

- Engage member residents through workshops, newsletters, flyers, and other outreach tools to educate them about the environmental consequences of road salt and smart salting practices.
- Create a salt use policy that assesses current salt usage, adopts best practices for application, and ensures that your community is engaged around responsible salting practices.
- Develop a winter maintenance contract that reflects your salt use policy while also maintaining public safety and quality levels of service.
- Promote landscaping with native plants, which are typically more resilient to salt damage, and buffer zones to mitigate salt damage.

Developing a Smart Salting Policy

A salt use policy for an HOA or civic association outlines guidelines and best practices for the application of de-icing materials during winter months. Components of a policy may include assessment and monitoring guidelines, application practices, resident education, community involvement, and future adaptation. Overall, having a salt use policy helps to protect the environment and community health, while also enhancing property values, cost savings, and long-term sustainability. See below for two examples of these policies:

- [University of Wisconsin Madison Outdoor Salt Use Policy](#)
- [Village of Shorewood Hills Salt Use Policy](#)

1



Stay home, avoid non-essential travel and telework if possible.



Plan travel times to avoid driving during and immediately after a storm.



If you must go out, take public transportation.



Wait to drive until road conditions improve.



Monitor weather closely, as forecasts can change quickly.



VIRGINIA
SaMS

Activities in 2025 and Beyond

Based on interest and engagement from PDCs, collaborate with SaMS stakeholders and participating PDCs to SaMS programming to other regions of the Commonwealth

Development of new education and outreach materials and activities for the general public as well as specific audiences, including private contractors, HOAs, and commercial property owners

- Identification of future training opportunities for local staff and private contractors

Continued engagement to build an active, ongoing SaMS coordination workgroup in Northern Virginia

Continue radio advertisements over WAMU and other stations at applicable

Ways to Stay Involved With SaMS



Follow and share posts from the Northern Virginia Clean Water Partners (NVCWP) social media pages



Participate in and share information for local events and education opportunities, such as Winter Salt Week!



Subscribe to quarterly NVCWP e-newsletters for local activities and project updates



Find additional resources and news at www.wintersaltsmart.com



Connect with other SaMS partners!

Thank You!

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