# Background

The Accotink Creek chloride Total Maximum Daily Load (TMDL), located in Fairfax County, was the first time the Virginia Department of Environmental Quality (DEQ) identified chloride (salt) associated with winter storm activities as contributing to a water quality impairment, and developed a pollutant reduction plan (the TMDL) to address it. The TMDL was developed with the understanding that its implementation will focus on best management practices, such as training programs and improved salt application equipment and practices. Given that existing snow and ice management practices are not limited to watershed boundaries and the urban/suburban nature of the Northern Virginia region, the issues identified in the Accotink Creek chloride TMDL are not likely isolated to this urban watershed. As a result, the Salt Management Strategy (SaMS) is being developed by a broad coalition of stakeholders with the entire region in mind.

## What is SaMS?

While salt (chloride) products used during winter storm events help to keep us safe during winter storms, they have a number of harmful impacts to the environment, water quality, infrastructure and public health. SaMS is a proactive, largely non-regulatory, approach to address this emerging issue in Northern Virginia. It will also serve as a framework for implementing the Accotink Creek chloride TMDL. The term "strategy" is intentional. It aims to identify a variety of issues that stem from winter salt use in our urban and suburban watersheds. This strategy will include recommendations to citizens, businesses, governmental agencies and non-governmental organizations for improving winter practices that promote an efficient and effective use of salt. Recommendations will also be developed for raising awareness of these impacts, ways individuals can make a difference, and for monitoring and research activities to advance adaptive implementation of the SaMS by stakeholders across the Northern Virginia region.

A SaMS Stakeholder Advisory Committee (SAC), made up of state and local government agencies, water maintenance providers, homeowners, citizens and other associations, was formed to develop this strategy and recommendations.

# SaMS Goals and Objectives

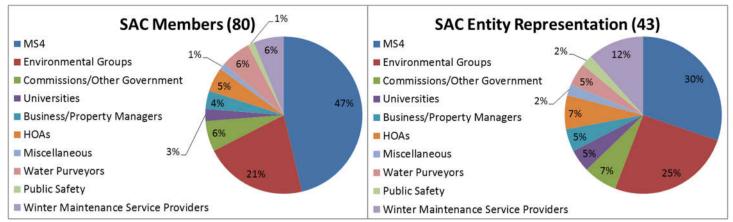
- 1. Use a stakeholder-driven process to proactively address salt loads in the region and address the Accotink Creek chloride (salt) TMDLs.
- 2. Generate increased public awareness that leads to positive behavior changes, and long-term support for the continual improvement of deicing/anti-icing practices and actions.
- 3. 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.

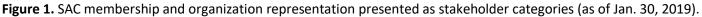
To accomplish the above <u>goals</u>, a document is under development that will outline all aspects of the issue (environment, public safety, infrastructure, health and cost) and will provide recommendations and resources that meet the following SAC approved <u>objectives</u>:

- 1. Comprehensively describe the effects of deicing/anti-icing salt use and identify and summarize the costs and benefits of winter storm operations.
- 2. Collaboratively develop a suite of best practices to minimize the negative effects of deicing/anti-icing salts.
- 3. Develop a comprehensive education and outreach plan to increase awareness of the benefits and impacts of winter salt use for both the public and political leaders to promote positive behavioral changes.
- 4. Explore funding opportunities, operational cost savings, and broader incentives, such as certification requirements/tort reform, to support implementation.
- 5. Develop recommendations for a monitoring and research program to better understand water quality patterns and impacts related to salt application throughout Northern Virginia.
- 6. Develop options to assess effectiveness and methods to track and report salt usage.

## **Stakeholder Involvement:**

SaMS uses a stakeholder-driven approach to foster collaboration among all stakeholder groups involved in or impacted by snow and ice management. This approach encourages long-term support for improved practices that protect public safety and lessen environmental, infrastructure and public health effects. A large and diverse (see Figure 1 below) 80-member SAC, facilitated by DEQ, is working to collaboratively develop recommendations for SaMS to meet SAC developed and approved goals and objectives.





#### **Development Approach:**

In order to facilitate stakeholder input and support future funding for implementation of the Accotink Creek TMDL, development of SaMS follows DEQ public participation processes and guidelines consistent with TMDL Implementation Plan development. This includes a public meeting and comment period at the onset of the project, various workgroup and SAC meetings throughout the development process, and concluding with a public meeting and comment period to present the draft SaMS document.

Six workgroups were formed and are tasked with developing recommendations that address various SAC approved objectives. Collectively, the recommendations from each workgroup will achieve the SAC approved goals for SaMS. Because this is the first time a strategy is being developed to address salts used in snow and ice management practices, and because of the wealth of knowledge and perspective that exists in the stakeholder community, there is a large reliance on stakeholder input for this project. Each workgroup is collaboratively developing recommendations (scope as of 12/3/18) for review by the SAC that will ultimately comprise the content in the SaMS document.

#### SaMS Workgroups:

- 1. Traditional Best Management Practices
- 2. Non-Traditional Best Practices
- 3. Education & Outreach
- 4. Water Quality Monitoring & Research
- 5. Salt Tracking & Reporting
- 6. Government Coordination

## **Project Timeline:**

The project kicked off with a public meeting in January 2018 and will wrap-up in mid-2020 with a final public meeting. To date, there have been two <u>SAC meetings</u> (February and June 2018), one <u>training event</u> (May 2018) and the first round of meetings for each of the <u>six workgroups</u> (September to December 2018). The second round of workgroup meetings is currently underway (January to April 2019). (Click <u>here</u> for a timeline.)

# **Additional Information:**

For more information, visit: <u>https://www.deq.virginia.gov/SaMS.aspx</u>