

Categorization of Stakeholder Responses to Question 8: What would you like to see come out of a SaMS?

The information below attempts to categorize the responses submitted by SaMS Stakeholders to question 8 of the stakeholder survey that was administered from November 2, 2017 to February 14, 2018. Overall 61 individuals provided responses to question 8, which asked “What would you like to see come out of a Salt Management Strategy (SaMS)?” While many of the respondents are members of the Stakeholder Advisory Committee (SAC), some are not. Due to the free response nature of the question, the categorization of the responses is a best-fit approach intended to help summarize overarching themes. It is worth noting that some responses placed under certain categories could also fit under other categories. Thus, all SAC members are encouraged to read through the responses to appreciate the breadth of perspectives and preferred outcomes for the SaMS that are present in the stakeholder community.

- **Public Safety**
 - Traffic Safety should be number one concern. Doing it safely number two.
- **A Balanced and Comprehensive Plan**
 - A well balanced Salt Management Plan with clearly defined performance measures, performance targets, and accountability. I'd rather see a TMDL range rather than a number- one that is arrived at taking safety, mobility, economic and environmental sustainability issues into account. Not all winters are the same in terms of severity, so the Plan is more important to me than a TMDL number.
 - A systemic framework for reducing over application of de-icers to include: public education, legislation protecting applicators from litigation, a well-defined progress tracking/monitoring framework, and a strong, enforceable policy to execute the stated goals. Something that will work and has both incentives and punitive measures to ensure progress.
 - A balance between environmental security, safety and public expenditures.
 - A well balanced approach to salt management that accounts for safety, mobility and cost
 - I would like to see improved water quality, but not jeopardize the safety of the traveling public.
 - I would like to see a reasonable balance between expectations of public safety and protection of watersheds and water quality.
 - Collaboration to work towards more education, alternative methods and a decrease in salt releases to the environment.
 - I would like to see more emphasis on the streamlining of technology that can be used, at a modest and reasonable cost, to assist with capturing snow application data. This could in the long run help to calibrate municipalities' use of salt; however, public safety and expectations to have roadways cleared must not be sacrificed or lowered in priority as compared to salt usage.
 - Three things I would like to see from this effort - public education for the impact of salts on our water supply and environment, optimized salt application and management

practices, and increased knowledge/research on anything that can limit salt after it's been released to the environment (e.g. stream buffers, etc.).

- A smarter strategy that acknowledges the costs of extensive salt use and looks to minimize or replace it where it makes sense to do so.
 - Effective and reasonable methods for ensuring traveler safety while minimizing adverse impacts to the natural and anthropological environments.
 - Increased public knowledge of salt impacts (environmental and financial), alternatives that can be used that maintain safety, and application tips. Incentives offered to retailers who sell chemical free alternatives. Improved compliance of existing regulation on use of salts. Enforcement of existing regulations for those who violate regulation.
 - A clear understanding of the sources, a clear plan for reducing the sources, clearly outlined mechanisms for how the sources may be reduced, and increased public awareness of these impacts.
 - Better understanding of how to write RFP's that help mitigate salt's impact. Better understanding of how salt products actually work and the impact of surface temperatures and air temperatures on salt's effectiveness. Plus an understanding that higher price salt products actually work at lower temperatures and often require less application. Very little has been discussed about the economic impact on service providers who will get hit with the brunt of the costs, changes and administrative/regulatory red-tape. I would hope to see a process that considers how to obtain these worthwhile environmental goals but mitigates the impact on the providers who are typically small business owners. Potential tax incentives, low-cost loans or grant programs for providers to help defray costs of either higher liability insurance or front-end costs for new equipment. Training program for providers to help them understand any changes, any legislative remedies put in place to help them avoid the legal issues that lesser treated services will inevitable cause, or any financial options to help them capitalize new equipment or tax incentives to help defray the costs of more environmental friendly chemicals. Better understanding and sensitivity on the liability impact to the service providers where this would most impact. Recommendations for legislative changes to liability laws regarding snow and ice management.
 - I am concerned that the strategy be equally applied to all landholders, not just MS4 permit holders and others that are easiest to regulate. Documenting the use of BMPs should be acceptable.
- **BMP List or Guidance**
 - Guidelines that need to be followed for proper containment of salt usage. Types of salt to use to lessen impact to environment. BMPs that should be installed/in place to minimize impact to an already strict water quality. Applying of salt and mechanics Where and when or when not to salt Guidelines for cleaning maintenance vehicles from the salt dispersion
 - 1. Publication of concrete ways to minimize the use of salt in public and commercial winter maintenance. 2. Publication of best practices and success stories from public and commercial entities that have reduced and eliminated salt dispersion. 3. Regulatory proposals for the Commonwealth, armed with sanctions for egregious violations.
 - Clear brief standards of product information and application rates and quantities, concise and clear for the layperson/applicator

- Clarify benefits to community of SaMS. Clear demonstration of efficacy of SaMS. Clarity on application rates, most effective delivery mechanism and procedure.
- A best practices guide for roadway maintenance operations similar to the Salt Management Plan created by the Maryland Department of Transportation and the Maryland Department of the Environment. We have adopted the Maryland Plan and are implementing it this winter.
- A workable program that is efficient, contains a variety of BMP options, and easy to implement without being burdensome to monitor or administrate.
- Provide specific guideline on salt storage, application, etc. Provide awareness training to staffs. Provide list of preferred salt products
- Guidance on alternative strategies accepted by State regulatory agencies. Description of full impacts of use of road salts on stream health.
- **Reduction in Salt Loads**
 - Reduced salt use by private property managers.
 - Lower levels of salt reaching area streams and damaging biota.
 - Exclusively use salt solution in moderate amounts.
 - Two things: 1) a plan for how to minimize use of road salts; and 2) a program for piloting new techniques or technologies that help the state minimize the use of road salts.
 - Reduction in the over use of salt in the winter months.
 - Use the money we can save on paying people to stay home. No one has any patients or skills to drive around the metro area. Less applied materials
 - Use only as much salt and other chemicals really needed to keep commerce and citizens mobile without doing unnecessary damage to the environment and without wasting tax dollars.
 - A collaborative initiative to reduce road salt runoff into Accotink Creek
 - A significant reduction in the use of salt.
- **Alternatives**
 - More environmentally sensitive alternatives to salt. The excessive piles of salt that build up on the roads and sidewalks create an environmental disaster.
 - Alternatives to salt or ways to reduce salt use.
 - An honest effort to either completely substitute salt for road applications or significantly reduce it. There are far too many salt clumps where salt was applied unevenly. Also contractors hired by jurisdictions to apply salt on cul-du-sacs are left to their own devices to apply as much salt as they like -- often far too much than needed.
 - A list of desirable (e.g., environmental friendly) deicing products with comparable effectiveness, availability and pricing. New regulations will encounter resistance if comparable alternatives are not presented, readily available and can be applied with existing equipment.
 - Awareness of alternatives and the need for them during different situations. A way to hold organizations/companies responsible for over salting.
 - Alternatives to using salt or use less salt. Also may be new ways to build/pave street. One problem a lot salt does not solve is when part the street has poor drainage. The excessive salt in the low spot does not do any good where it collects water. Perhaps those spots like could have something that is permeable to help drain the water. For hilly streets, how about something that provides more traction. It would slow down the car speed. But in Arlington, it should not be a problem other than I66 and 395.

- A less dangerous/damaging alternative
- How do we do the least harm while ensuring public safety? What are the alternatives to salt?
- Alternative sea salt use and ways to reduce
- **Education**
 - Education about “safe” de-icing agents and easy availability for Arlington residents
 - Public awareness of the pros and cons of salt usage for winter road treatment, behavioral change in regards to winter driving and salt application, no additional regulatory controls, continued highway safety
 - No policies at this time, until technology catches up with the demands that are currently being given. Only provide guidance to applicators on the salt. If there is a policy and/or training, there should be a strong educational piece attached to this to help educate. Testing would not be necessary at this time.
 - Improved stream water quality and safe drinking water. No matter how much de-icer or other treatment you throw down on our roads, it’s the idiot drivers who will continue to cause accidents. How do we educate them?
 - I'm open to learn new ways to manage salt applications
 - At this point, I have no expectations. I need more information.
- **Environmental Protection**
 - Keep waterways safe for people and fish
 - A de-icing strategy that is not harmful to our natural resources.
 - Less "trickle down" environmental effects.
- **Drinking Water Protection**
 - We would like to see the SaMS address potential drinking water chloride issues such as corrosion or potential exceedance of the chloride SMCL (250 mg/L)
- **Road Focused Strategies**
 - Road maintenance and safety
 - An approach to road safety under both ice and snow conditions that does not add pollutants to our rivers and streams.
 - Environmentally sound winter road/street management
 - Exploration of road maintenance techniques that utilize less chemical salt application
 - More environmentally friendly treatment of roads in winter
 - Buy-in from VDOT! Reduction in applications before and during winter storm event. Often brine is applied when no event materializes. Target only key sections of roadways, e.g. hilly areas, access ramps, bridge and over-passes. Mechanically clean roadways after applications of chlorides. VDOT's street-sweeping program is pathetic. Again, think outside the box to find organic alternatives to chlorides. Offer a prize for solutions that dramatically reduce or eliminate the use of chlorides.
- **Regulation**
 - Salt application reduction and over-site regulations, to reduce the environmental impact caused by salt.
 - An achievable and realistic means of regulating salt application for local jurisdiction and private entities with end goals and compliance quotas that are specific and measurable.
 - State regulation requiring BMPs in regards to salt application management.