

# **Salt Management Strategy (SaMS)**

## **1<sup>st</sup> Non-Traditional BMPs Workgroup Meeting**

October 24, 2018

The first Non-Traditional BMPs (NTB) Workgroup meeting for the Salt Management Strategy (SaMS) was held from 1:00 pm – 3:30 pm on October 24, 2018 at Northern Virginia Regional Commission at 3040 Williams Drive, Fairfax, Virginia.

### **Attendance**

Eleven (11) individuals, including three DEQ staff members and one staff person from the Interstate Commission on the Potomac River Basin (ICPRB; DEQ's contractual support), participated in the meeting. Three of the participants joined the meeting via teleconference.

Heidi Bonnaffon, MWCOG  
Glenda Booth, Friends of Dyke Marsh  
Scott Crafton, Virginia Department of  
Transportation (VDOT) †  
Dave Evans, DEQ†  
Martin Hurd, Fairfax County  
Will Isenberg, DEQ\*

Mary Mahoney, VDH  
Lauren Mollerup, Virginia Department of  
Transportation (VDOT)  
Erfaneh Sharifi, ICPRB\*  
Sarah Sivers, DEQ\*  
Greg Waters, Snow and Ice Management Co.†

\*Facilitator

†Participated via teleconference

### **Meeting Highlights**

At this meeting, members focused on articulating the scope of the workgroup recommendations, exploring the process to develop recommendations, and identifying the expected workgroup outcomes. The workgroup began to work on the proposed topics by prioritizing tasks/research to be conducted. The main take-aways from this meeting are:

- The BMPs this workgroup is focused on are those that are more societal in nature and “outside of the box” methods or alternatives to current operations.
- Content, including recommendations and certification programs, should address the possible needs of the private and public sectors. For example, a private sector contract may be different from a public sector contract.
- High priority workgroup topics identified are certification/training program, winter maintenance contracting, alternative deicing compounds, and behavioral BMPs (such as promoting teleworking, etc.).

### *Notes for Other Workgroups / Potential Areas of Overlap:*

- Accountability, through tracking and reporting salt application, is an important component identified by members. This topic will be looked at by the Salt Tracking and Reporting Workgroup.
- The workgroup members recommended looking into certification and training programs, which may overlap with the Traditional BMPs workgroup due to the need to understand if the content of any such program is in line with their recommendations.

- The members recommended studying alternative compounds and practices that are on the cutting edge of technology. It was recommended that the Traditional BMPs workgroup review alternative compounds currently identified by the industry for their pros and cons and conditions under which they are best used.
- Identifying behavioral BMPs, such as promoting teleworking or storm preparation messages, may provide information to the Education and Outreach Workgroup for “actions” content in the messages they are developing.
- Because this workgroup may recommend legislative initiatives, it was recommended that the Education and Outreach Workgroup see what proposals have support.

### **Follow-up Action Items:**

Workgroup volunteers are pursuing six follow-up action items prior to the next meeting of the NTB Workgroup:

1. Research and compile information on cutting edge, non-traditional deicing compounds and practices. (Volunteer: Glenda Booth, Friends of Dyke Marsh)
2. Review available contracting tools and mechanisms and identify which work best for various scenarios. (Volunteer: Martin Hurd, Fairfax County; DEQ)
3. Compile a list of messages to encourage societal behavior changes (i.e. behavior BMPs) such as teleworking. Build off those used by VDOT to inform people before or during winter storm events of recommended actions to take during such events. (DEQ; Lauren Mollerup, VDOT, VDOT developed messages)
4. Conduct research on existing training and certification programs and compare with SaMS goals and objectives and anticipated recommendations. Consider the role these programs may have in enhancing corporate image/marketing, and liability protection/relief. (DEQ/ICPRB)

## **Meeting Summary**

### **Introductions**

The meeting started with brief introductory and opening remarks from DEQ, with a focus on collaborative, stakeholder-driven, and adaptive process for BMPs implementation. The NTB Workgroup is more abstract compared to other workgroups. The NTB Workgroup aims to “look outside the box” and bring all thoughts to the table. DEQ noted that there are other programs available as resources (e.g. Minnesota, Canada, and New Hampshire) that are addressing the issue, but the SaMS project is unique in terms of location and management. Participants then introduced themselves and provided their expectations and interests in the NTB workgroup. Some common themes included discussing creative ideas for BMP implementation and winter maintenance practices, cleaning up waterways, exploring meaningful ways to optimize salt use, developing ideas to be used in source water protection plans, and representing private sector interests.

### **Membership, Roles and Expectations**

DEQ explained the roles and expectations of primary and alternate workgroup members. The roles, expectations, workgroup purpose, and meeting goals can be found on DEQ’s [Salt Management Strategy Meeting Materials Webpage](#).

### **Workgroup Scope**

DEQ presented the SaMS objectives that the NTB workgroup is purposed to address. These objectives include developing best practices to minimize the negative effects of salt, identifying incentives such as certification/training programs and potential tort reform, and exploring funding opportunities. It was

mentioned that some topics in this workgroup have overlap with Traditional BMPs Workgroup. In the Traditional BMPs Workgroup, the focus is more on the operational side. The focal points of the Non-Traditional Workgroup are societal, legislative, and other “out of the box” initiatives.

DEQ provided the proposed scope, such as lower levels of service, alternative deicing materials or pavement types, societal and behavioral BMPs, contract templates, certification/trainings, award/recognition programs, and promoting a long-term and continuous improvement program.

Feedback from workgroup members included:

- Separate alternative compounds and pavement types as two different non-traditional management practices, and focus initially on alternative compounds.
- Study alternative deicing compounds to progress the understanding of cutting edge/non-traditional deicing alternatives. It was proposed that a university should be approached to learn more about these non-traditional deicing alternatives and explore the potential for a pilot project in their use.
  - This includes following up with Virginia Tech’s Transportation Institute and piloting a project in the region based on their research into salt tolerant plants and biochar as an alternative deicing compound.
- Evaluate levels of service considering the effects of behavioral BMPs
- Identify behavioral BMPs such as crowd sourced reporting of exposed piles or large buildups of salt and crowd sourcing the cleanup of those exposed salts, which could help improve awareness.
- Develop template winter maintenance contracts and consider ways to accommodate liability protections in them
- Outcomes for the workgroup can include exploring a contract template and evaluating potential legislation options.

### **Content Development**

DEQ asked for input on audiences to target, priority topics for workgroup discussion/assignments, approach to completing tasks, and final product of the workgroup. Discussion then ensued on developing content for the private and public sectors as well as other topics like behavioral BMPs, contracts, certification programs, and training processes.

#### *Audiences*

The workgroup members agreed that their audience includes both the private and public sectors. SaMS recommendations should address the possible needs of the private and public sectors.

#### *High Priority Topics*

High priority topics of the workgroup are the certification program, winter maintenance contracting, alternative compounds, and behavioral BMPs. The workgroup discussed different types of contracts and suggested looking at existing winter maintenance contract examples to meet different needs. It was identified that different operations have different contractual needs, which should be considered when proposing recommended contractual best practices. For example, flat rate contracts work well for parking lots and sidewalks, whereas hourly rate contracts work well for transportation winter maintenance.

Certification programs were discussed as a possible recommendation for the workgroup. It was mentioned that there are existing certification programs related to snow and ice management (e.g. New Hampshire) that have liability protections written into law. The workgroup acknowledged that legislative proposals are hard to make happen. However, it was agreed that even in the absence of liability protections, the marketing potential of certifications may work as an incentive to seek certification. One workgroup member asked, "Who is going to manage the state-wide certification" and workgroup members exchanged ideas on possible answers (e.g. Department of Environmental Quality, third party, or some existing programs). The discussion also covered considerations for private versus public certification programs.

Behavioral BMPs should be included as part of the message the Education & Outreach workgroup is preparing. Preparing storm kits, a potential snow curfew for the public (while weighing the economic impact), and slower driving speeds are some examples that were suggested.

VDOT shared some of the recommendations they give to people before or during the storm. They use social media to inform the public to encourage people to telework, not to drive if possible, prepare medication beforehand, and use social media to stay informed.

#### *Approach to Completing Tasks*

DEQ asked the participants about their thoughts on tasks to complete before the next meeting. The actions that the workgroup agreed to are summarized on page 2 of this summary in the section titled "Follow-up Action Items."

#### *Final Product*

DEQ asked the audience about their thoughts and recommendations for the final product of this workgroup. Members agreed that the final product of this workgroup should include recommendations for behavioral BMPs, certification programs, a winter maintenance contract template, and state of the art alternative deicing compounds.

#### **Meeting Wrap-up:**

The next meeting of this workgroup is expected in February 2019.

Handouts from the meeting are available on the SaMS Meeting Materials [webpage](#).

All information, questions, additional resources, etc. should be emailed to Sarah Sivers ([sarah.sivers@deq.virginia.gov](mailto:sarah.sivers@deq.virginia.gov)) and Will Isenberg ([william.isenberg@deq.virginia.gov](mailto:william.isenberg@deq.virginia.gov)). DEQ will consolidate information received and distribute it to workgroup members as needed.

\*\*\*

Meeting notes were prepared and submitted to DEQ by the Interstate Commission on the Potomac River Basin.

---

## **Additional Feedback Contributed to the Follow Up Survey:**

A survey was shared following the meeting to capture any additional thoughts workgroup members had following the meeting. Feedback is arranged below based on the sections of the agenda. Only sections where additional thoughts were provided are included:

### **Purpose and Scope**

*“Regarding the legislative item for winter speed limits, keep in mind that optimal driving speed will vary depending upon conditions -- the best a legislative fix could do is something like require a specific lower speed during snow/ice conditions, but good judgment is still a necessity. Also, a lower speed limit won't address other foolish driver behaviors such as following too close. Also, it is not clear to me how lowering the speed limit will actually result in lower chloride applications. Regarding the discussion of alternatives to salt, keep in mind that VDOT has already tried some of these and found that they either did not work as well or created other problems (e.g., Beet Juice = higher BOD) or were so expensive that they were not feasible within our budget, which must address the 3rd most extensive road system in the nation for which VDOT is responsible.”*

### **Content Development**

*“For the Certification (training) Programs, is the idea that the applicator would be trained in the most efficient salt application, for both the environment, but also for safety? I could see government agencies possibly/eventually requiring contractors to be certified. But for the small business or HOAs, what incentive would they have to hire the certified contractor? Maybe if they're "environmentally minded" but it would be probably more attractive if they knew the Certified Applicator was going to meet their expectations for service/safety. That ties into whether there could be guarantees/liability protection tied to the certification.”*

*“Regarding content recommendations, it will be important to associate the recommendations with tangible benefits to the individual or organization, since we will be aiming at behavior change. Also, regarding Certifications, if this is being considered as a legislative proposal, keep in mind that the legislature is historically resistant to expanding regulation and certification of professions, trades, and businesses, so that won't be an easy sell. Also, regarding the process to develop recommendations, if smaller task teams are contemplated, it will be important to have a mix of people with relevant experience on the topic to prevent developing recommendations that may be infeasible.”*

### **Workgroup Communications and Decision-Making**

*“For the behavioral BMPs I am wondering (skeptical) whether education can change certain behaviors...like driving in less-than-ideal conditions, speeds, and expectations about levels of service. It is hard to roll back levels of service, or roll back snow/ice behaviors. Snow and salt treatment has been so augmented that even when schools are closed, people don't stay home...they're out driving on pretty well-treated roads. It would be hard to scale this back. I don't know if speeding laws/snow curfews would change this? Would education about the environmental/health impacts change this? I am dubious. I think this is where about a public survey about willingness to change behaviors, and under what circumstances, would be valuable...It ties with the Education group's plan for a January survey. Can/will that survey ask questions about likelihood to change behaviors under different circumstances? Teleworking sounds good/is a low-hanging fruit, but even without work and school, people still "expect" to get out of the house, and the roads are [generally] clear enough to do so.”*

*“Regarding the idea of cooperative funding programs, this is something that the Government Coordination Workgroup should also discuss. Also, regarding question 11 about critical expertise, we*

*need to be sure to account for the recommendations that have already been tried and eliminated for various reasons, to save ourselves from wasting a lot of effort going over the same ground.”*

### **Next Steps**

*“Regarding future meetings, if Workgroup meetings will continue to be located in Northern Virginia, I would prefer to have the meetings begin earlier, so that those of us who have to escape NOVA to return to Richmond can get out before the traffic thickens up. Also, 2.5 hours seems right to me for the meeting length.”*

*“More lead time to set meetings so people can attend”*

### **Comment from Members of the Public**

*“Just item 4 above [Workgroup Communications and Decision-Making]. I am getting more eager for public survey(s) because I want to see what they say if they would be willing to change, and why/how.”*

*“More lead time to set meetings so people can attend”*

### **Additional Thoughts**

*“Need to set meeting times for remaining of schedule, so these meetings can be put on schedules. Please note that Operations divisions schedules become unpredictable between December 1 to March 15th (+/-).”*

*“We primarily discussed certification in the context of the operator. However, at an earlier DEQ SaMS workshop, Wit Advisors gave an interesting presentation on the SWiM certification (Sustainable Winter Management) Program, which certifies a “Site” or “Portfolio of Sites” at various certification levels, using automated monitoring devices, by setting salt reduction targets, and tracking cost savings. That might be a useful non-traditional tool to have in the toolbox.”*