

Salt Management Strategy (SaMS)

1st Traditional BMP Workgroup Meeting

September 13, 2018

The first Traditional BMP Workgroup meeting for the Salt Management Strategy (SaMS) was held from 9:30 am – 12:00 pm on September 13, 2018 at the Virginia Department of Environmental Quality (DEQ) Northern Regional Office at 13901 Crown Court, Woodbridge, Virginia.

Attendance

Nineteen (19) individuals, including two DEQ staff and two staff from the Interstate Commission on the Potomac River Basin (ICPRB; DEQ's contractual support), participated in the meeting. Four of the participants joined the meeting via teleconference.

Christina Alexander, City of Fairfax
Brice Boyd, Fairfax County Public Schools†
John Burke, Fairfax County
Dave Evans, DEQ*
Camila Goncalves Diaz, Fort Belvoir
Norm Goulet, NVRC#
Gabe Guevara, FHWA†
Ashley Hall, Stantec†
Jeremy Hassan, Arlington County
Will Isenberg, DEQ*

Steve Kirkpatrick, Metropolitan Washington
Airport Authority
Max Kuker, GKY Associatesⁱ
Neely Law, Center for Watershed Protection†
Tony Migliaccio, George Washington
Memorial Parkway
Heidi Moltz, ICPRB*
Edward Rodrigues, Washington REIT
Erfaneh Sharifi, ICPRB*
Kevin Utt, City of Fredericksburg
Greg Waters, Snow and Ice Management Co.

*Facilitator

#Stakeholder Advisory Committee member

ⁱ General public (Non-Member of Traditional BMP Workgroup)

†Participated via teleconference

Meeting Highlights

At this meeting, members focused on articulating the scope of the workgroup, identifying the audiences that the recommendations will target, determining the level of evaluation for the recommended BMPs, brainstorming potential products of the workgroup, and identifying next steps. The main take-aways from this meeting are:

- The members identified three tiers of audiences, which are Tier 1) decision-makers, Tier 2) supervisors, and Tier 3) applicators. BMPs will need to be communicated differently to these three tiers.
- Special consideration will be needed to effectively identify and communicate BMPs for public versus private entities.
- An overarching policy, such as target application rates, is necessary for driving the adoption of BMPs by public entities. This policy can influence the private entities indirectly.
- The members recommended developing a list of BMPs with sufficient information for the various audiences to evaluate pros and cons of each BMP and any associated changes in levels of service.

- Funding, incentives, and cost savings will be considered when evaluating BMPs, and should be included for the different BMPs with input from other workgroups.

Notes for Other Workgroups / Potential Areas of Overlap:

- Measuring and reporting actual salt use is critical for understanding the benefits of implementing BMPs and evaluating progress towards targets (e.g., application rates). The Salt Tracking and Reporting workgroup should consider recommendations for determining baseline salt use.
- Public expectations need to change so that the recommended BMPs can be implemented and supported. Therefore effectively communicating the salt application needed to achieve the intended level of service should be addressed by the Education and Outreach workgroup.
- Education, incentives, and funding of the different BMPs will need to be discussed in this and other workgroups to promote successful implementation.
- Two (2) recommended topics for discussion in the Non-Traditional BMP Workgroup are certification programs for private winter maintenance professionals and best practices related to contracts for snow and ice management.

Follow-up Action Items:

Workgroup volunteers are pursuing two follow-up action items prior to the next meeting of the Traditional BMP Workgroup:

1. Compile application rate guidelines from other regions to inform the development of target application rate goals for the SaMS. (Volunteers: John Burke, Fairfax County; and Camila Goncalves Dias, Ft. Belvoir)
DEQ will obtain information on application rates from the Snow Institute as a starting point.
2. Compile lists of currently used BMPs in the region. (Volunteers: Tony Migliaccio, George Washington Memorial Parkway; and Greg Waters, Snow and Ice Management Company)
DEQ will also compile and provide a list all known BMPs.

Meeting Summary

Introductions

The meeting opened with brief introductory remarks from DEQ highlighting the collaborative, adaptive approach to SaMS development and implementation. Participants then introduced themselves and discussed their expectations of the Traditional BMP Workgroup. Some common themes included the need to balance the environment with public safety and liability, the general over-use of deicing agents, the desire to get educated and share knowledge via the workgroup, and the need to develop end products that will be useful to the various audiences capable of implementing the BMPs.

Membership, Purpose, and Meeting Goals

DEQ presented their vision of the roles and expectations of Traditional BMP Workgroup members and the workgroup purpose and meeting goals, with general agreement from the group. The roles, expectations, purpose, and meeting goals can be found on this meeting [handout](#).

Workgroup Scope

DEQ provided a brief overview of the scope of the Traditional BMP Workgroup as envisioned by DEQ and supplemented with Stakeholder Advisory Committee (SAC) member feedback. The group agreed that the proposed scope was broad with many potential areas of BMPs to consider. The identified areas include BMPs for storage, handling, and application of salts in addition to practices related to winter

maintenance plans and levels of service. Workgroup members also discussed the need to consider two tracks of BMP recommendations; one for public entities and another for private entities.

On multiple occasions the workgroup acknowledged the need for training programs. Similarly, the need for measuring and reporting salt use was identified in order to document baseline salt use and identify the potential for improvement through BMP implementation. These concepts were identified as areas where the Education and Outreach workgroup and the Salt Tracking and Reporting workgroup could overlap with the Traditional BMPs workgroup, respectively. When discussing the benefit of reporting salt use, a workgroup member highlighted the impracticality of cumbersome reporting requirements for private winter service providers. Instead, it was recommended that reporting remain simple and be tied to incentives such as liability protections in order to incentivize the reporting. However, after discussing potential certification programs, the workgroup decided that this concept would be better handled by another workgroup, such as the Non-Traditional BMPs workgroup.

The workgroup agreed that there are many BMPs that are already well documented and the group should aim to not “reinvent the wheel.” Documenting the existing BMPs was identified as an important first step, while some workgroup members recommended that the focus remain on a small set of essential practices that will get the most reductions.

An attendee emphasized the need for more prescriptive policy from DEQ to guide BMP implementation. This policy was suggested as a resource for Municipal Separate Storm Sewer System (MS4) permittees in order to assist them in meeting their permit requirements if subject to a chloride Total Maximum Daily Load (TMDL). The workgroup agreed that application rates could provide reasonable targets for public entities such as MS4s.

Ultimately, the workgroup decided that BMPs will need to be identified for the different implementing audiences, and that currently, the workgroup will focus on application BMPs. It was also agreed that funding and incentive opportunities will be explored secondarily as the workgroup identifies and characterizes the different recommended BMPs.

Content Development

DEQ asked for input on audiences to target, the scope of the workgroup including high priority topics, and the final products of the workgroup.

Audiences

The group developed tiered levels of audiences. Tier 1 includes the “decision-makers,” which includes leadership positions like politicians, government agency leaders, and property managers. Tier 2 includes “supervisors” such as program managers and crew chiefs. The Tier 3 audiences includes the “applicators” who are the operators, both truck and hand/push applicators. Each of the tiers is responsible for different aspects of winter maintenance. For example, Tier 1 is expected to be responsible for setting the level of service. Tier 2 is responsible for establishing routes, setting application rates, and identifying alternative products. Tier 3 operators are responsible for calibration and on-the-ground application. There were cases made to begin developing recommendations for either the Tier 1 or Tier 3 audiences. However, since the Tier 1 audience is mostly concerned with levels of service, the workgroup agreed that awareness of BMP impacts on levels of service is an important area of consideration for the Education and Outreach workgroup. Therefore, there was general agreement that work should begin on BMP recommendations for Tier 3 audiences.

Another way to group audiences is either “public” or “private” since the ways the SaMS is anticipated to be used will be different for each group. Public audiences may be interested in assistance for meeting any requirements associated with a chloride TMDL, such as guidance on developing local TMDL action plans. According to one workgroup member, approximately 75% of the issue stems from practices on unpermitted, private properties and, therefore, is not within the oversight of government entities. Providing those private entities and individuals with information on practices in a way that makes them easy to evaluate and implement will be most helpful. It is expected that once public audiences (i.e. government entities such as localities) implement improved practices, private entities may feel more comfortable to follow suit.

High Priority Topics

Workgroup members generally agreed to focus on operations measures, understanding that there is a need to identify the different drivers and needs of the public and private sectors. Education, incentives, and funding of the different BMPs will need to be discussed in this and other workgroups to promote successful implementation. It is also important to compile BMP pros and cons from existing sources to assist the plan's users in selecting BMPs to implement.

Products

While a SaMS report is an important/central product, a report or manual will not drive changes by itself. The products of this workgroup should include (1) general guiding statement(s) (e.g. application targets), (2) BMPs that will help achieve the conditions described in the statements, and (3) an easy way for the audiences to evaluate BMPs including the pros and cons of each BMP (e.g. costs, ease of implementation) and any potential impacts on levels of service associated with each BMP. These products should take into consideration that the guiding statement(s) may be the same for all audiences, but that different groups may require different tools to achieve goals. Similarly, the framing of BMPs may be different for the public and private sectors.

It was proposed that the general guiding statement take a broad policy stance like:

The region will work to limit winter salt applications to [X] pounds per [unit area] per [unit time].

Other Comments:

- The SaMS should lay the groundwork for a statewide strategy.
- The primary importance of equipment calibration was discussed.
- Simple things to do include housekeeping at salt loading sites and reduce salt loss en-route to application sites.
- Salt management is one area where more can be done with less.
- Reducing the amount of salt used improves the environment and has the added economic benefit of saving money.
- BMPs do not have to be measureable. Integrated practices help achieve goals too.
- Regulated entities need guidance on what action plans will look like.
- Level of service and prioritizing areas of service are important discussion topics. The public is not used to letting ice and snow bond to the road surface, but the amount of salt being applied can often be reduced while still achieving the same level of service. Salt applications can be further reduced by not treating areas that are rarely used (e.g. unfrequented parking lots).
- Social media can complicate the level of service issue because the public readily compares streets/neighborhoods/cities and may feel that their area should be as good as everyone else's, even if they live on a low priority road such as a cul-de-sac.

- Adjusting existing priority service areas would require that the public adjust behavior in some areas. This may not be acceptable in the Northern Virginia region. If the public does not adhere to travel safety recommendations associated with various levels of service, it can create a public safety hazard.
- Addressing expectations of seeing salt and feeling the crunch under foot is a big challenge.
- Mitigating liability is an important component to prevent lawsuits against operators or others due to reduced salt applications.
- One member proposed that maybe this group should be called "Operations" instead of "Traditional BMPs".
- Operations cannot change without the endorsement of policy-makers.
- The unique perspective of airports should be included in the SaMS and in this workgroup.
- Alternatives to salt should be explored. An example of applying alternatives in the region was provided.

Meeting Wrap-up:

The next meeting of this workgroup is expected in or around January 2019. The group agreed that 3-hour meetings may be needed in the future.

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

All information, questions, additional resources, etc. should be emailed to Will Isenberg (william.isenberg@deq.virginia.gov) and Dave Evans (david.evans@deq.virginia.gov). DEQ will consolidate information received and distribute it to workgroup members as needed.

Meeting notes were prepared and submitted 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:

Additional Thoughts (not a part of the agenda):

“The DEQ SaMS team wants to ensure there is adequate private sector representation in the workgroup and is looking into ways to accommodate this need. In advance of the 2nd Traditional BMP workgroup meeting, we plan to hold a meeting or call with the private sector representatives to draw out their perspectives and insights in a more focused manner.”

“With the broad scope of this workgroup becoming clear, the DEQ SaMS team is considering ways to allow for adequate focus on a useful final product while not stretching the focus too thin. The DEQ SaMS team is open to any suggestions SAC members may have on how to do this.”