

## SaMS Workgroups Scope/Focus (July 2019)

Education and Outreach: *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.*

### Action Items:

- Pilot Outreach Campaign (On the ground: Long Branch Watershed, Internet based: region wide)
- Pilot Survey
- Over-Arching Message
- Outreach Materials
- Social Media Tool Kit

Traditional (Operational) BMPs: *Develop and communicate operational BMP information to (1) decision-makers, (2) supervisors, and (3) applicators in both Public and Private sectors. BMP information must be sufficient for the various audiences to evaluate pros and cons of each BMP and any associated changes in levels of service.*

### Action Items:

- BMP Implementation and Winter Maintenance Planning Process
- Application Rate Evaluation Process
- BMP Pros and Cons list
- Summary of Application Rates Survey for Public Operations

Non-Traditional BMPs: *The non-traditional BMPs workgroup is focused on “outside of the box” methods or alternatives to current practices, including (1) Alternative deicing compounds. (2) General Public actions (i.e., teleworking, homeowner BMPs, etc.), (3) Certification/training programs, and (4) Winter maintenance contracting (public & private)*

### Action Items:

- Alternative deicing compounds: Table with Pros/Cons/Needs
- Behavioral BMPs (Teleworking, storm preparation kits, snow curfew), built off of VDOT’s social media examples
- Homeowner/Commuter BMPs
- Analysis of 10 operator certification programs, 5 seem applicable to Virginia
- Compile example winter services contract language for private properties

Salt (&BMP) Tracking and Reporting: *Offer recommendations on: Salt use tracking - Uniform metrics for data comparability and Region-wide trend analyses, and BMP Tracking – (1) Process for tracking iterative BMP adoption for continuous improvement , and (2) Monitoring success of BMPs.*

Action Items:

- Matrix to guide tracking/reporting efforts: Tier 1 (Coarse) to Tier 3 (Fine/Detailed) with Example Forms , 6 key categories
- Salt product use reporting: List primary products used; solids and liquids, at varied levels of frequency/detail.
- BMP Tracking: Document use and success/lessons learned of BMPs relative to achieving Level of Service (LOS) goals
- Reporting Incentives: Private sector: contracts, certification, and liability relief. Public sector: operational improvements and address future reporting needs.

Water Quality Monitoring and Research: *Provide recommendations for monitoring the effectiveness of best management practices (BMPs) on water quality: (1) Identify reporting standards for data comparability, (2) Identify existing data, (3) Highlight needed data, and (4) over long-term, better understand the origin, fate, and transport of deicing salts.*

Action Items:

- Develop & refine conceptual model of salt movement through watersheds to inform monitoring and pilot projects
- Document availability of water quality data and monitoring programs with local agency survey (18 responses)
- Develop a trends analysis for specific conductance and metrics to characterize each winter in order to evaluate changes in water quality over time.
- Develop 2 regional regressions for specific conductance and chloride so that chloride concentrations can be estimated in watersheds where a watershed specific relationship has not yet been developed. One model will be for watersheds mostly (>60%) draining Triassic Basin soils, and the other will be for watersheds draining soils mostly comprised of soils from other physiographic provinces.
- Develop criteria for a monitoring program: general criteria for use by an organization doing monitoring, and resources and partners for organizations interested in WQ monitoring.
- Option(s) for a monitoring pilot project to measure effectiveness of BMPs on water quality
- Identify funding resources and partner organizations/researchers that can carry out the monitoring recommendations; in particular the pilot project.