

# SALT MANAGEMENT STRATEGY: TRADITIONAL BMP WORKGROUP

## CURRENT AND COMMON METHODS FOR WINTER MAINTENANCE

A summary of Traditional BMP categories is provided below. The categories listed are not exhaustive. Instead, they are meant to initiate workgroup discussions on the topic. "Salt Application Standard BMPs" are those activities expected to be broadly applicable while "Other BMPs" may be selected based on available funding and other considerations.

The decision to implement a particular BMP or suite of BMPs is dependent on a number of factors including budgets, availability of incentives, resistance to change, and liability issues. There is no one-size-fits-all solution. As such, the objective of this workgroup is to compile a suite of applicable BMPs for use by winter maintenance decision-makers and other stakeholders.



### Level of Service

- Public expectations
- Budgets
- Prioritizing service areas
- Identifying environmentally sensitive areas

### Salt Application Standard BMPs

- Calibration: Quantifying material dispensed
- Measurement: Tracking salt usage, installing automated systems
- Accountability: All levels of managers and operators held accountable, e.g. material used, level of service
- Level of Service: See box to left
- Training: Managers/operators in classroom and field

### Salt Storage BMPs

- Select the right site
- Safety**
- Accessibility**
- Legality**
- Tidiness**
- Economics**
- Drainage**
- Put it on a pad
- Put it under a cover
- Build it strong
- Design for efficient/effective receiving
- Avoid groundwater contamination

### Salt Application Other BMPs

- Variable Application Rates: Event-specific characteristics, level of service
- Forecasts: Integrating and improving key data
- Cold Temperature Usage: Use alternative chemicals, access pavement temperature data
- Liquid Usage: Anti-icing and other liquid approaches to reduce material usage
- Pre-wetting: Add brine to salt prior to application
- Anti-icing: Apply chemicals (either solid, liquid, or pre-wetted) prior to winter storm event
- Alternative Products: Acetates, formates, succinate-based, glycol-based
- Reduce Bounce and Scatter: Reduce speed, lower spinner elevation, target center of road, include materials that increase adhesion

The information in this flier was compiled from existing materials in the sources listed below.

**References:**

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2. Clonch, D. 2018. Alternative Chemical Products and Treatments. Presentation to: Stakeholder Advisory Committee, Northern Virginia Salt Management Strategy, May 24, 2018, Lorton, Va.
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5. Salt Institute. 2015. Salt Storage Handbook. 24p. <http://www.saltinstitute.org/wp-content/uploads/2013/09/Salt-Storage-Handbook-2015.pdf>, accessed 7/16/2018.
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