



Addressing Winter Salts' Impacts on Water Quality: Virginia, Maryland, and the District of Columbia Plans

(as of November 16, 2018)

This is a brief overview of state plans to address the issue of salts and their impact on streams, and the salinity of drinking water. While wastewater is also impacted by salts, wastewater is currently not a direct focus of regional planning efforts.

MONITORING CHLORIDES (SALTS) IN STREAMS

Maryland

- Maryland Department of the Environment (MDE) released its 2018 Integrated Report, which included its 303d list of impaired watersheds. For 28 watersheds listed as impaired, MDE stated “salinization of state fresh waters due to road salt application continues to be a major challenge,” noting spikes in stream conductivity, and a decline in aquatic biological communities.
- Maryland Department of Natural Resources (MD DNR) has been monitoring chlorides at pilot stream sites near road crossings and should have preliminary data available in late 2018.
- There is ongoing salt management coordination between MDE, SHA, DNR.

Virginia

- Virginia Department of Environmental Quality (VA DEQ) issued a chloride TMDL for Accotink Creek in Fairfax County in 2017.
- Other northern Virginia streams have not had dedicated monitoring and DEQ focus, otherwise they too could be the focus for a chloride TMDL.

SALT MANAGEMENT STRATEGIES-CONTENT

Maryland

- Since 2017, Maryland State Highway Administration (SHA) has had a Salt Management Strategy in place.
- It is anticipated that plan could serve as a template for local salt management plans that will be required as part of the next generation Maryland MS4 Phase I permits. (In Maryland all local roads are managed by local government agencies.)
- The MS4 permits may:
 - Require tracking and reporting of salt usage: Amount applied by event or date, monthly/annual ton usage, and per lane mile, per inch of snow.
 - Training and outreach component: SHA has an annual “salt academy” for salt personnel and contractors. Developing Best Practices Outreach

Virginia

- DEQ plans to have a Salt Management Strategy (SaMS) for Northern Virginia developed by December 2019, via a Stakeholder Advisory Committee (SAC).
 - The SAC is comprised primarily of local governments and VDOT along with a few property owners/HOAs, salt applicators/contractors, academics, and watershed representatives.
 - The SAC has the following workgroups
 - Traditional Best Management Practices
 - Non-traditional Best Management Practices
 - Monitoring
 - Salt tracking and reporting

- Government coordination-impacts on permits, etc.
- Education/outreach
- Example of topics under discussion, with recommendations being developed by ~ May 2019
 - Evaluate and refine levels of snow removal service
 - Could we change public expectations through education—public survey
 - Winter driver education
 - Winter speed limits (storm curfew)
 - Certification/training programs for applicators/contractors
 - Promoting teleworking
 - Award/recognition programs for sound environmental practices
 - Slip/fall liability protection
 - Improved winter maintenance contract language/stipulations
 - Research alternative deicing compounds
 - Improve Information Systems for road condition sensing and reporting

District of Columbia

- DDOT received training by consultant, Diana Clonch, on best management practices for salting, such as equipment calibration; measure/apply according to storm; employee accountability; training; pre-treatment and pre-wetting of salt

POTENTIAL COG COORDINATION ROLES

1. Provide coordination between state agencies/local governments in MD and VA and DC
 - Host annually (or biannually) a regional meeting of state highway and local stormwater, and drinking water agencies to:
 - Review latest research findings
 - Report from state highways their salt management efforts
 - Share educational/outreach plans and materials
 - Share evaluation and adaptive management strategies (estimated timeframe April 2019).
2. Ground truth or pilot possible actions or policy recommendations from the VA Salt Management Strategy work groups (estimated timeframe May 2019).
3. Coordinate stream monitoring efforts across the region (either via current monitoring efforts or new sites).
4. Coordinate funding strategies.

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