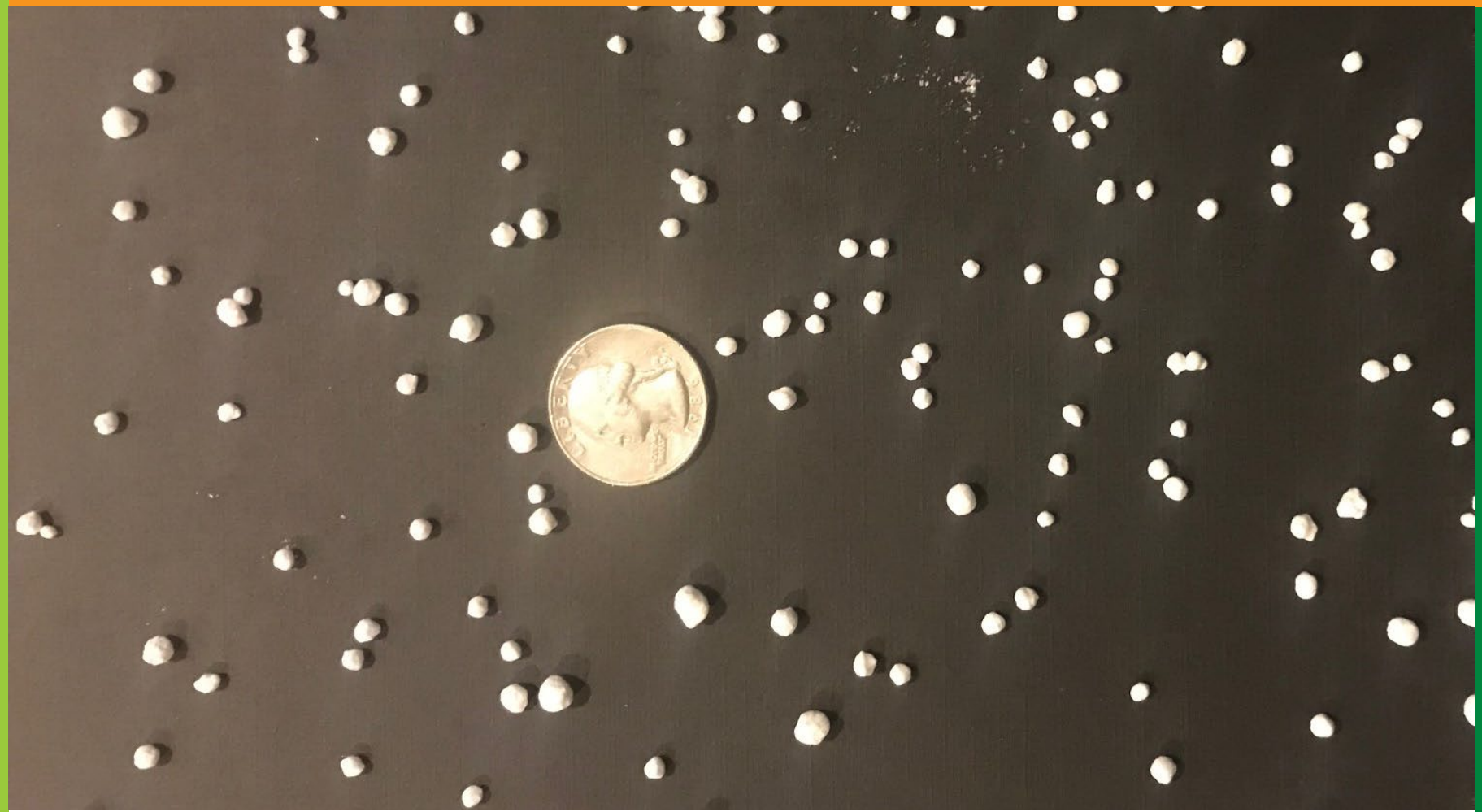
Montgomery County MS4 Permit Update

Winter Weather

2023 WSSC Salt Summit

January 12, 2023



DEPARTMENT OF ENVIRONMENTAL PROTECTION
MONTGOMERY COUNTY • MARYLAND

MS4 Permit Requirements

- MS4 Permit Part IV.D.4.d Management Programs, Property Management and Maintenance

- The County shall reduce the use of winter weather deicing and anti-icing materials, without compromising public safety, by developing a County Salt Management Plan to be submitted to MDE by December 31, 2024

- Salt Management Plan shall be based on the guidance provided on best road salt management practices described in the Maryland Department of Transportation, State Highway Administration's Maryland Statewide Salt Management Plan, Required by Maryland Code, Transportation Section 8-602.1

Salt Management Plan Requirements

- Evaluation of new equipment and methods, and other strategies for continual program improvements
- Training and outreach
  - Local “Salt Academy” that annually provides County winter weather operator personnel and contractors with the latest training anti-icing/deicer application, or
  - Participation in another MS4 jurisdiction “Salt Academy”
- Developing and distributing best salt management practices outreach for educating residents within the County

Salt Management Plan Requirements

- Tracking and Reporting
  - Beginning on November 5, 2025 (fourth year), track and record the amount of deicing or anti-icing materials used and snowfall in inches per event
  - Report the deicing or anti-icing application by event or date and the monthly and annual pounds used per lane mile per inch of snow

Transportation Section 8-602.1

SHA Road Salt Management Best Practices Guidance

(e) In the road salt management best practices guidance document required under this section, the Administration may:

1) Establish best management practices that protect the environment from the negative impacts of road salt;
2) Identify all activities that may result in the release of road salt into the environment, including road salt storage, the application of road salt on highways, and the disposal of snow that contains road salt;
3) Take into consideration highway safety to the greatest extent possible;
4) Establish standards and procedures for identifying:
    i. Areas that are particularly vulnerable to road salt runoff; and
    ii. Additional road salt management practices that need to be implemented in these areas;
5) Establish goals for achieving a reduction of the environmental impact of road salt released into the environment;
6) Include a training program for all State, local, and contract personnel who perform winter maintenance activities involving the use of road salt;
7) Establish response procedures to address uncontrolled releases of road salt that may adversely impact the environment; and
8) Establish record keeping and annual reporting procedures for the quantity of road salt used, the locations where the road salt is used, and any training conducted.

Annual Salt Management Plan Training

- ✓ 2022/2023 Road Salt Management Plan and Training held on Oct. 6
- ✓ Elements Covered
  - ➢ Public safety
  - ➢ Organization of DOT
  - ➢ Expectations for contractor
  - ➢ Plowing Best Practices
  - ➢ Salt Management Plan
  - ➢ Salt and brine application best practices
  - ➢ Automatic Vehicle Location (AVL)
  - ➢ Contractor equipment inspection

MCDOT Salt Management Plan

- Adoption of Salt Management Plan
  - Continuous operator training
    - An experienced operator knows when to apply salt, and when not to
    - Use the correct amount of salt necessary to get the job done
    - Using more salt than necessary works against you and damages the environment
  - Improve record keeping
    - Measure outputs
    - Application target rates of 400 to 600 pounds per lane mile per inch of snow
    - MCDOT will be closely monitoring salt applications
  - Good house-keeping of salt storage facilities
  - Identification of snow dump sites
  - Report spills and excessive salt on roadway
  - Contractors are responsible for cleanup of spills and excessive salt.
  - Quality Control inspection routes

Outreach – Salt Wise Campaign

MontgomeryCountyMD.gov/salt

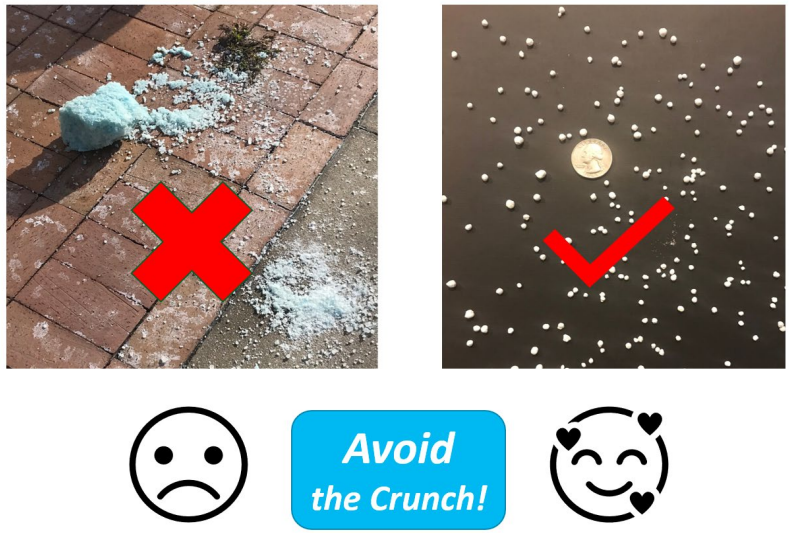
Outreach – County Employees 2022-2023

Salt is a pollutant causing a public health crisis for our drinking water.

- **Plan Ahead**
  - Telework, when possible
  - Make note of the Weather
- **Be Patient/Slow Down**
  - Buildings could open later if weather is improving
  - Drive safe & responsibly
  - Take your time and walk on shoveled pathways
- **Report Oversalting to 311**
  - More salt does not mean more melting!

Less salt is better for all of us.

What's the right amount?



Monitoring

- Conductivity Monitoring
  - Continuous Monitoring via HOBO loggers starting in 2018
  - In Situ monitoring as part of the Biological Monitoring starting in 2001 (Countywide)
- Where are we monitoring continuously?
  - 5 Locations in Ten Mile Creek
  - 2 Locations in the Patuxent
  - 1 Location in the Hawlings River
- Why are we Monitoring
  - Ten Mile Creek- monitoring impacts of a large greenfield development
  - Mainstem Patuxent and Hawlings Rivers- Monitoring reservoir impacts with The Patuxent Rivers Watershed Protection Group”
  - One Control site on a small undeveloped Upper Patuxent River Tributary.

HOBO U24 Continuous Conductivity Logger


Patuxent Mainstem Logger Location

Next Steps

- Salt Management Plan - submit with FY24 MS4 annual report
- Expand salt management plan to include County municipal properties, including school properties
  - At least, 6 different departments and school system applies salt in the County to sidewalks and parking lots
- Expand annual training to include those employees and contractors applying salt to sidewalks and parking lots
- Expand salt management plan to include outreach and education to commercial businesses and property managers
- MS4 Monitoring (2024), Two new locations in an impaired watershed
  - One in a first order tributary
  - One in a 3rd order tributary/mainstem
- Reporting/tracking (2025)

Questions?

Contact: Amy Stevens

Section Chief, Planning Outreach and Monitoring, Watershed Restoration Division

Amy.stevens@MontgomeryCountyMD.gov

240-777-7766