

Impact of Road Salt in Baltimore County: Overview and Recommendations for Best Practices, December 2024

This CEQ report is submitted in response to a 2024 request from a member of the County Council for an update on the previous CEQ road salt report. The concentration of salt in our county's drinking water has continued to rise since the original report was submitted, and this requires the attention of our elected official and County agencies. This introduction briefly summarizes the history of CEQ engagement and presents our recommendations for action.

In 2009, in response to a request from a County Councilman to investigate the environmental impacts of road salt used to melt snow and ice, the CEQ issued a report emphasizing the effects of rising salt levels on water quality; specifically, increased risks to human health, negative impacts on aquatic and plant life, and deterioration of roads and bridges. In 2010, the State legislature enacted bills to mandate a statewide Salt Management Plan as well as the development of local salt management plans.

County Council Resolution 15-10 mandated that an ongoing Road Salt Task Force be established, but this did not happen. Fourteen years after the resolution was passed, a member of the Council requested an update on the County's progress. In the last several years, the Baltimore County DPWT has worked to decrease the amount of salt that is spread, utilizing technologies, materials, and training that have lessened the amount needed for road safety, and reducing the proportion of salt that is lost to spillage and other wastage. These efforts are consistent with the terms of the County's MS4 permit issued by Maryland Department of Environment (MDE) in 2021, which required a Salt Management Plan within three years.

Nonetheless, the concentration of salt in our county's drinking water has continued to rise, both in the tributaries and in the reservoirs themselves. The MDE integrated report of 2020-22 on water quality found that seven watersheds in Baltimore County were impaired by chloride from road deicer salt.

The CEQ has gathered information on salt levels in our reservoirs and their tributaries, and reviewed comprehensive documents and strategies from Northern Virginia and others.

To decrease the use of road salt, the CEQ recommends that the County:

1. **Establish** an ongoing Road Salt Task Force, to educate the public about impacts of road salt (on drinking water systems, health, property, and environment), on best practices to minimize the use of road salt, and on how to report salt spills;
2. **Document** and publicize road salt use on County roads, facilities and properties (e.g. schools, parks, buildings);
3. **Monitor** DPWT's progress as they implement best road salt practices (e.g. purchase trucks with advanced road salt calibration capabilities, train workers, track road salt use);
4. **Strategize** and coordinate regional and commercial efforts to monitor and implement BMPs, including State Highway Department cleanup of spilled salt on State roads; Baltimore City limitation of road salt near the three drinking water reservoirs; commercial sites' decreased use of road salt (including developing enforcement strategies);
5. Review and implement public education, Best Management Practices, and other recommendations from the Northern Virginia Salt Management Strategy Toolkit (<https://www.novaregion.org/1498/SaMS-Toolkit>).

6. Participate in regional efforts to monitor and implement BMPs across Maryland and shared watersheds of the Chesapeake and Delaware Bay.

Read the full report on Impact of Road Salt in Baltimore County: Overview and Recommendations for Best Practices, December 2024.