

Respect Our Waters

Stormwater Pollution Fact Sheet

Stormwater runoff is rain and melting snow that flows off building rooftops, driveways, lawns, streets, parking lots, construction sites, and industrial storage yards. Stormwater runoff becomes stormwater pollution when it picks up fertilizers, pesticides, pet waste, leaves, chemicals, and other contaminants. Unlike sewage, stormwater does not flow into a treatment plant to be cleaned. Stormwater pollution is currently one of the greatest threats to clean water in the Greater Milwaukee Watersheds. How we manage the pollutants that rain and snowmelt can carry has a clear impact on our local waterways and drinking water. The pollutants of greatest concern in our watersheds are:

Pet waste: Timely removal of pet waste has benefits for public and watershed health. Pet waste contains dangerous bacteria, diseases, and pathogens such as *E. coli* and roundworms. Additionally, it attracts rodents which can also carry disease. When pet waste gets washed into our rivers and lakes, it releases excess nutrients and *E. coli* into our waters. This can cause toxic algal growth and beach closures along Lake Michigan. Investment in pet waste stations is a common strategy for reducing bacteria loading in stormwater and can assist with meeting total maximum daily load (TMDL) requirements.¹

Leaves: Keeping storm drains and ditches clear of leaves or garbage prevents flooding and flood-related damage. Leaves are also a source of excess phosphorus which can lead to increased algal growth and degraded habitat for fish. A USGS study found that leaf litter and other organic debris accounted for 56 percent of the annual total phosphorus load in urban stormwater, compared to 16 percent when streets were cleared of leaves prior to a rain event.² Efficient leaf removal as well as reminding citizens to sweep leaves a foot away from the curb reduces the amount of leaves entering the rivers and improves water quality.

Salt: Limiting salt use on roadways helps slow salt-related damage to infrastructure, vehicles, and water distribution pipes as well as improving water quality. For residents, 12 oz of salt is sufficient for 10 sidewalk squares or a 20ft driveway, and residents are encouraged to sweep up and remove excess salt. Encouraging these practices in your community can limit salt from entering our rivers, lakes, and streams.

According to a Southeastern Wisconsin Regional Planning Commission (SEWRPC) report based on WisDOT and EPA data, \$1 spent on direct winter maintenance can cause between \$7 and \$15 of damages to motor vehicles and infrastructure.³ Spent salt enters our rivers and streams and eventually the lake, degrading water quality.

Furthermore, water treatment plants do not remove salt, which has the potential to cause further corrosion to water lines, potentially leaching heavy metals like lead out of our pipes and into our drinking water during the winter months.⁴

Preventing pollutants from entering our stormwater system is less expensive than restoring a polluted waterway. For more information on stormwater pollution and how to prevent it visit www.respectourwaters.org.

Sources ¹ Wisconsin Department of Natural Resources (WDNR). 2014. UTMDL Guidance for MS4 Permits: Planning, Implementation, and Modeling Guidance. Prepared by the Bureau of Watershed Management.

²Selbig, William. "Evaluation of leaf removal as a means to reduce nutrient concentrations and loads in urban stormwater" Science of Total Environment, Vol 571, November 15, 2016. P 124-133.

³Impacts of Chlorides on Infrastructure and the Built Environment." SEWRPC Technical Report No. 62 Chapter 4.

⁴E G Stets. "Increasing chloride in rivers of the conterminous U.S. and linkages to potential corrosivity and lead action level exceedances in drinking water" Sci Total Environ. 2018 Volumes 613-614, Pages 1498-1509, ISSN 0048-9697