

Stormwater Overview

What is stormwater?

Stormwater is water runoff after a rainstorm from streets, construction sites, parking lots, buildings, and other areas that goes directly into storm drains and eventually into local streams and rivers. This water can pick up pollutants along the way to these streams and rivers. Towson University has set up a program that seeks to protect this water from pollutants.

Why are stormwater and sewer systems separate?

Stormwater systems are not treated at the wastewater treatment facility. This water flows directly to the streams and rivers. Wastewater (sewage) is sent to the wastewater treatment facility and cleaned before it is released into the rivers.

What is a Municipal Separate Storm Sewer System (MS4)?

An MS4 is a conveyance or system of conveyances that is:

- Owned by a state, city, town, village, or other public entity that discharges to waters of the U.S.
- Designed or used to collect or convey stormwater (including storm drains, pipes, ditches, etc.)
- Not a combined sewer
- Not part of a Publicly Owned Treatment Works (sewage treatment plant)

Stormwater Management Program (SWMP) Components

The Phase II Permit is broken down into six components, and the implementation and enforcement of the six components is collectively referred to as a municipality's SWMP. The six components are:

1. Public Education and Outreach
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Stormwater Runoff Control
5. Post-Construction Stormwater Management for New Development and Redevelopment
6. Pollution Prevention and Good Housekeeping for Municipal Operations



Figure 1.
Drain Grate. The photo illustrates how clogged grates may pool water and increase issues related to stormwater runoff.



Figure 2. Parking Lot With Permeable Concrete. Permeable surfaces allow stormwater to pass through to the soil, decreasing runoff, improving water quality.



Figure 3.
Litter. The photo shows litter and debris, which may increase pollutants in water and contribute to blocking stormwater drains.

What is impervious surface area?

Impervious surfaces are areas constructed of infrastructure such as pavement, concrete, and buildings that do not allow water to penetrate into the ground.

What can I do to reduce pollution in stormwater runoff?

There are many things that we can do to help reduce pollution:

- Disposing of waste properly
- Placing litter in proper containers
- Never dump anything into a storm drain
- Check vehicles for leaking fluid
- Recycle used motor oil

What is an illicit discharge?

An illicit discharge is disposal of anything other than stormwater into the stormwater drainage system. This includes illegal connection or tie-ins to the storm sewer system.

Examples of illicit discharge to storm sewer system:

- Trash/Litter
- Sanitary wastewater (sewage)
- Septic tank waste
- Car wash, laundry, or industrial wash water
- Concrete truck washout
- Improper disposal of automotive fluids and household toxics
- Soapy water used to wash parking lots, sidewalks, buildings, and loading docks
- Grease trap overflows
- Sump pump with contaminated water flowing into storm drain
- Dirty water from mopping being dumped to a storm drain

To report an illicit discharge please contact the Towson University Police Department at (410) 704-4444.

Resources

For additional information regarding Stormwater Management education/research, go to <https://www.towson.edu/fcsm/centers/uebl/> or contact the Department of Environmental Health and Safety at (410) 704-2949.