

PROTECTING KANSAS WATERWAYS

We all play a role

When it rains, water that falls on our roadways runs off into either storm drains or off the edge of the roadway. This is known as stormwater runoff. As this water moves, it picks up anything that's on the road, including trash, motor oil, road salt and other pollutants. These pollutants are then carried by the stormwater into the nearest river, creek or stream, contributing to water quality issues.

What is KDOT doing to reduce stormwater pollution?

Stormwater management is the process of controlling stormwater runoff. This includes a wide range of techniques and practices, with the goal of both reducing the quantity of stormwater runoff and improving the quality of stormwater that does runoff. Two of the largest stormwater management efforts KDOT implements includes:

- Managing stormwater from construction sites to prevent disturbed material, such as dirt and construction waste, from polluting waterways. This is known as construction-site stormwater management, or temporary stormwater management.
- Managing stormwater from completed sites long-term to reduce the amount of pollutants, primarily from **impervious surfaces***, from entering waterways. This is known as post-construction stormwater management, or permanent stormwater management.

**Impervious surfaces are constructed with hard materials, such as traditional asphalt or concrete, that prevent water from passing through them and absorbing into the soil below. Roads, buildings, and parking lots are typically built using impervious surfaces*

Not only is stormwater management a good practice in environmental stewardship, it is also a regulatory requirement.

What is an MS4 Permit?

The Environmental Protection Agency (EPA) requires public entities to develop, implement and maintain stormwater management programs. This requirement is enforced by issuing Municipal Separate Storm Sewer System (MS4) permits.

- Public entities that receive MS4 permits include municipalities, counties, military bases, universities and transportation agencies.
- The Kansas Department of Health and Environment (KDHE) is the permitting agency for all permittees in the state. They enforce this requirement and regulate permittees on behalf of the EPA.



An MS4 permit is issued to the agency as a whole, they are NOT issued for individual projects. However, projects DO have to follow the applicable requirements of KDOT's stormwater management program. If they don't, then KDOT is not meeting the MS4 permit requirements.

The MS4 permit requires six different components, called “minimum control measures”, to be included in KDOT’s stormwater management program. Each component is a different technique or practice of stormwater management:

- Public education and outreach
- Public involvement and participation
- Illicit discharge detection and elimination
- Construction site stormwater runoff control
- Post-construction stormwater management
- Pollution prevention and good housekeeping

For each component, the permit provides different options, called “best management practices”, that KDOT can implement. KDOT submits a **Stormwater Management Plan (SMP)** to KDHE that describes which best management practices KDOT has chosen to implement, including how and when they will be implemented.

- KDOT must demonstrate measurable progress each year towards implementing the SMP in an **annual report** to KDHE. KDOT must collect documentation along with the annual report to prove that best management practices are being implemented.
- At any time, KDHE or EPA can audit KDOT’s stormwater management program to evaluate progress and success in implementing the SMP.

What are stormwater control measures?

Stormwater control measures (SCMs) are techniques used for post-construction stormwater management to reduce the volume of stormwater runoff from impervious areas. The MS4 permit requires that the first 0.5” of rainfall be captured and prevented from leaving the right-of-way. To accomplish this, certain projects must build SCMs designed to infiltrate stormwater.

- SCMs may also be known as post-construction best management practices or BMPs, permanent stormwater BMPs, stormwater treatment facility or green infrastructure.
- SCMs incidentally improve water quality by filtering out pollutants from stormwater runoff before the runoff enters our rivers, creeks and streams.

KDOT projects must include SCMs depending on the project location and type. For guidance, see the Stormwater Control Measure Manual:

<https://www.ksdot.gov/bureaus/burMaint/StormWater/StormwaterControlMeasureManual.asp>

