



# Urban Stormwater Program

## An Overview

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The Municipal Separate Storm Sewer System (MS4) general permit is mandated by federal regulations under the Clean Water Act and administered by the Montana Department of Environmental Quality.

The MS4 permitting program gives owners or operators of certain storm sewer systems approval to discharge stormwater to lakes, rivers and wetlands in Montana.

### Environmental Harm

Urban stormwater frequently contains litter, oil, chemicals, toxic metals, bacteria, and excess nutrients, like nitrogen and phosphorous. Polluted stormwater contributes to swimming-beach closings, fish-eating advisories, excess algae growth and poor water clarity in urban water resources, especially lakes.

In addition to human effects, poorly managed urban stormwater can drastically alter the natural flow and infiltration of water, scour stream banks and harm or eliminate aquatic organisms and ecosystems.

The primary goal of the MS4 general permit is to improve water quality by reducing pollutants in stormwater discharges. Specifically, the program aims to ensure proper management of stormwater discharges into waters of the state.

### Defining MS4s

In general terms, MS4s are publicly owned or operated stormwater infrastructure, used solely for stormwater, and which are not part of a publicly owned wastewater treatment system. Examples of stormwater infrastructure include curbs, ditches, culverts, stormwater ponds and storm sewer pipes. Common owners or operators of MS4s include cities, counties, and public institutions. The Montana Department of Transportation (MDT) was designated as the owner of a non-traditional MS4.

The MS4 general permit focuses on reducing the pollution that enters these public systems and discharges to wetlands, streams and lakes (“waters of the state”).

Owners and operators of MS4s which are required to get a permit are determined by federal rule (40 CFR § 122.34 (a) and (b) -- the Clean Water Act) or by state rule (Administrative Rules of Montana 17.30.1102(23) and 17.30.1107).

By federal rule, stormwater systems in urban areas are labeled Mandatory MS4s. In addition to these, Montana added other stormwater systems (Designated MS4s) to the list. These MS4s are only added if the stormwater system is located in an urban area that meets the criteria established in the State Rule for population or discharge conditions. The number of regulated MS4s in Montana will grow as urban areas expand. As of January 2009, there are 7 regulated MS4 areas in Montana.

### Public Process

The MS4 general permit is issued for a term of five years. The current permit expires on December 31, 2009. The permit will be improved and revised, if necessary, and re-issued. Public comment is encouraged before the re-issuance of new MS4 general permits and before the creation of new MS4s. In addition, the public is asked each year to share its opinion on plans the owner or operator of their local MS4 has made to manage stormwater.

The Montana Department of Transportation welcomes public comment and provides opportunities, such as meetings for upcoming construction projects, for citizens to voice their concerns and provide input on a wide range of topics including stormwater and the MS4.

## Requirements of the MS4 General Permit

All owners or operators of MS4s are required to satisfy the requirements of the MS4 general permit. Basically, the permit requires the MS4 operator or owner to create a Storm Water Management Program with six important components:

1. Public education and outreach, which includes teaching citizens about better stormwater management.
2. Public participation: Include citizens in solving stormwater pollution problems. This includes providing opportunities to participate in the development and implementation of the storm water management program.
3. A plan to detect and eliminate illicit discharges to the stormwater system, like chemical dumping and wastewater connections.
4. Construction-site runoff controls. MDT has an extensive program for ensuring proper permitting and addressing erosion, sediment and other pollutants on their construction projects.
5. Post-construction runoff controls. These are long-term structures and practices to address stormwater management, like vegetative buffers and ponds.
6. Pollution prevention and municipal “good housekeeping” measures, like covering salt piles and street-sweeping.

## Reducing Stormwater Pollution

The MS4 general permit is a requirement, but also a tool in the hands of city, county, and MDT officials who want to improve the quality of lakes and rivers that receive their stormwater discharges. MS4 administrators can improve the quality of life for their citizens by protecting and restoring local water quality.

Citizens served by an MS4 are invited to encourage the MS4 administrators to tackle stormwater pollution problems, but the responsibility for water quality is not only in the hands of public officials.

Both public and private spaces contribute to urban stormwater pollution. While MS4 administrators

control the public sources of stormwater pollution, it’s ultimately in the hands of private citizens to change the way they do small things that will have a dramatic effect on the quality of their favorite fishing spot or swimming beach.

## Simple Steps for Better Water Quality

You can make simple changes to reduce stormwater pollution and improve the quality of your local lake or river by following these tips:

- Fertilize established lawns with phosphorous-free fertilizer and don’t overspray fertilizer into the street.
- Use dry methods to clean your driveways and sidewalks. Rake leaves and sweep grass clippings away from curbs. Clean curbs mean clean water.
- When you wash your car or truck, direct water onto your lawn to soak up soap. Or use a commercial car wash instead. They use less water, and the wastewater generated is treated rather than discharged to the stormwater system.
- Properly dispose of household items such as paint, used oil, and other chemicals. Never dump these materials down a storm drain or in an area where they can enter the storm system.
- Direct your home’s gutters onto your lawn. Water that doesn’t make it to the curb can’t carry pollutants to lakes and streams.
- Clean up after your pets. Pet waste left on the ground will wash into the stormwater system when it rains and contribute harmful bacteria, parasites and viruses to our waterways.

## Detailed Information

For more detailed information about the MS4 general permit or for further information about reducing stormwater pollution, please visit the MDT stormwater program Web site:  
[www.mdt.mt.gov/pubinvolve/stormwater.shtml](http://www.mdt.mt.gov/pubinvolve/stormwater.shtml)