

What is an MS4?

MS4 is short for municipal separate storm sewer system. The storm system collects mostly rainwater and is separate from the sanitary sewer system. The sanitary sewer flows to a treatment facility where the water is cleaned before it is discharged into a waterway. Unlike the sanitary sewer, water in the MS4 is not treated before it is discharged into a waterway.

What does it mean that the City is under an MS4 permit?

Stormwater from the MS4 that discharges into natural water bodies is regulated under the Federal Clean Water Act and the Virginia Stormwater Management Act to help protect the City's natural waterways from pollutants. The Virginia Department of Environmental Quality oversees MS4 permitting and requires the City to take steps to reduce the discharge of pollutants into natural waterways through the MS4. These steps can be summarized in five categories.



Stormwater Pollution Reduction

The City administers many programs that help keep pollutants out of the MS4, including:

- Erosion and sediment control programs
- Floatable litter reduction program
- Programs to reduce illegal dumping and ensure proper disposal of household hazardous wastes
- Stormwater management programs for new construction
- Retrofit programs for previously developed lands
- Spill prevention and response
- TMDL Action Plans ("pollution diets") for the Chesapeake Bay and other impaired waterways
- Pesticide, herbicide, and fertilizer management programs
- Programs to address discharges from industrial facilities

MS4 Program Administration and Reporting

As an MS4 permittee, the City is required to keep records of everything it does to comply with the permit and report on those efforts annually to the state.

Infrastructure and Operations Management

The City regularly inventories, inspects, and maintains the MS4 infrastructure. Stormwater management facilities are incorporated into the City's capital improvement projects to capture and treat rainwater before it leaves the site. The City also trains its employees on proper facility maintenance practices to reduce stormwater pollution.

Public Outreach and Education

The City coordinates public outreach and education on stormwater issues through civic leagues, HOAs, schools, and public events. The City also partners with local nongovernmental organizations to provide resources and promotional materials at public events.

Water Quality Monitoring

The City performs monitoring of the MS4 to characterize stormwater and identify pollutants. It also collects data from stormwater pollution mitigation areas to measure the effectiveness of pollution reduction efforts.

Did you know



The City follows a regular inspection and maintenance plan for stormwater infrastructure. There are more than...

46,000
INLETS

993
MILES OF PIPES

610
MILES OF DITCHES

3,573
OUTFALLS

3,145
STORMWATER FACILITIES

Be a water watcher.

The City is committed to preserving and restoring our water resources. Join the effort by reporting pollution from spills and engaging in the following activities.

Help prevent contaminated water from entering the stormwater system.

- Wash your car on the lawn or at a commercial car wash.
- Drain untreated pool water to your lawn instead of the gutter.
- Sweep up anything that spills on the sidewalk or driveway.
- Properly dispose of household hazardous waste.
- Don't flush wipes, feminine products, medications, etc. down the toilet.
- Always remember, "only rain down the storm drain."

Keep bacteria and nutrients, e.g. nitrogen and phosphorus, out of the storm drain.

- Pick up after your pets on walks and in your yard at home.
- Don't feed geese and ducks.
- Test your soil to avoid over-fertilizing.
- Plant native flowers, trees, and shrubs.
- Mulch grass clippings back into your lawn.

Take steps to reduce erosion and control sediment in the stormwater system.

- Seed bare patches on your lawn at the appropriate time.
- Set your mower blades higher than 2.5-3 inches.
- If you have waterfront property, leave a buffer of tall plants at least 10-feet wide along your waterline.



Call 311 to report stormwater pollution. For more information:

Contact Public Works Engineering Department (757) 385-4131 or the Surface Water Regulatory Compliance Division at VBStormwater@VBgov.com.