

# Managing Stormwater in Delaware

## Planning for Future Conditions

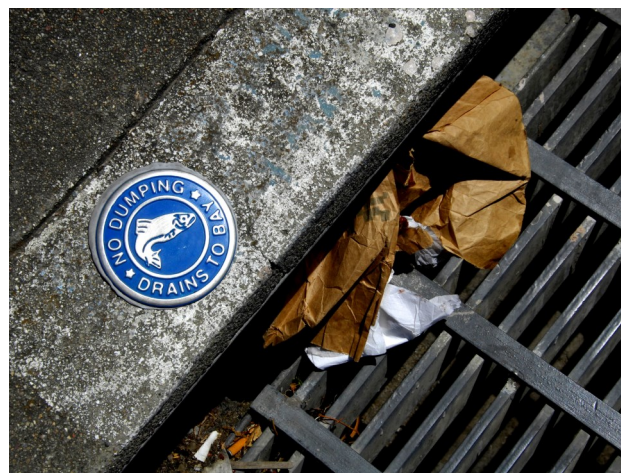
### Municipal Separate Storm Sewer Systems (MS4s)

Stormwater picks up litter, sediment, oil, grease, metals and other pollutants as it flows through communities. Stormwater management systems help reduce or slow the runoff to control flooding and limit pollutants that enter waterways. Effective planning and management of these systems is critical for both healthy communities and healthy waterways in Delaware.

Urban areas have municipal separate storm sewer systems (called MS4s) which convey stormwater through drains, pipes, ditches, or other means through a community and eventually discharge into surface waters such as rivers, streams and bays. Certain organizations responsible for the administration of a developed area, such as cities or towns, are required to obtain MS4 permits from DNREC to protect our waterways from stormwater pollution.

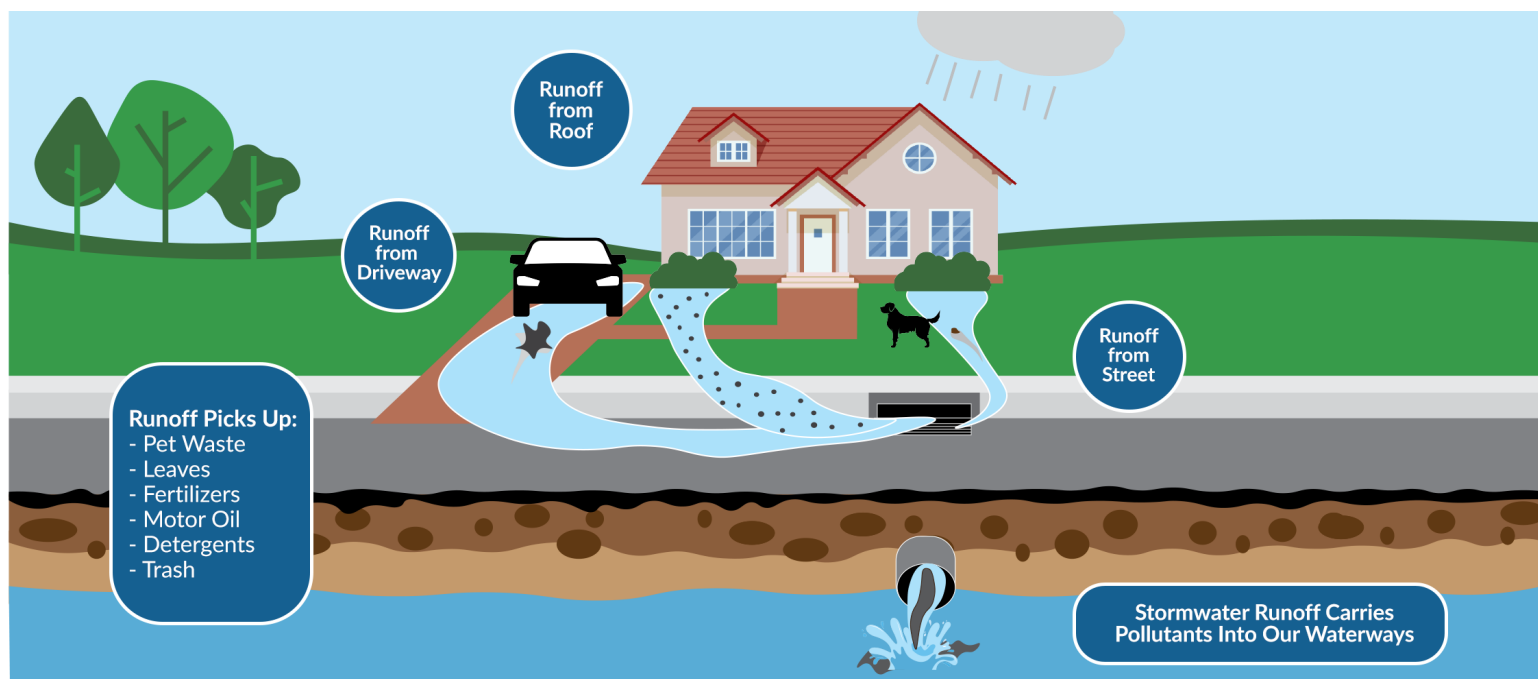
MS4 permits require the development of stormwater management plans. These plans detail pollution prevention measures such as the installation and maintenance of stormwater management structures, education and public participation opportunities, illicit discharge detection and response, good housekeeping practices for roadways, parks and other public places, and training for municipal staff. MS4 general permits for small and medium sized urban communities will be available for [public review](#) in early 2022. The draft permits and other MS4 related information can be found at [DNREC's MS4 webpage](#).

Effective stormwater management also includes planning for future conditions and needs. Municipalities are encouraged to plan for sea level rise, more frequent and intense precipitation events, flood control measures, pollution prevention, environmental justice considerations and long-term urban development plans.



### Benefits of Stormwater Management Planning

- Involving the community in reducing water pollution
- Mitigation measures for flooding and sea level rise
- Economic benefits of having clean recreational waters
- Develop and strengthen partnerships to collaborate and reduce costs
- Grant funding support for stormwater and flood control projects



# Stormwater Technical Support and Resources For Delaware Communities

DNREC and other organizations offer technical and financial assistance to Delaware communities in stormwater management planning and implementation, flood mitigation and coastal hazards planning.

## MS4 Permit Program

DNREC staff provide [technical assistance](#) and support to MS4 operators in permit compliance, outreach and plan development.

## Coastal Resilient Communities Program

The [Resilient Community Partnership](#) program provides technical assistance and potential funding to plan for and reduce the impacts of coastal hazards related to flooding from sea level rise, coastal storms and climate change through the development of planning strategies at the local level.

## Chesapeake Bay Trust Green Street, Green Jobs, Green Towns Grant Program

The Trust's grant-making strategies are shaped by three core objectives: environmental education, demonstration-based restoration, and community engagement. The [Trust awards more than \\$10 million](#) in grant funding each year throughout the Chesapeake Bay region.

### Example Projects:

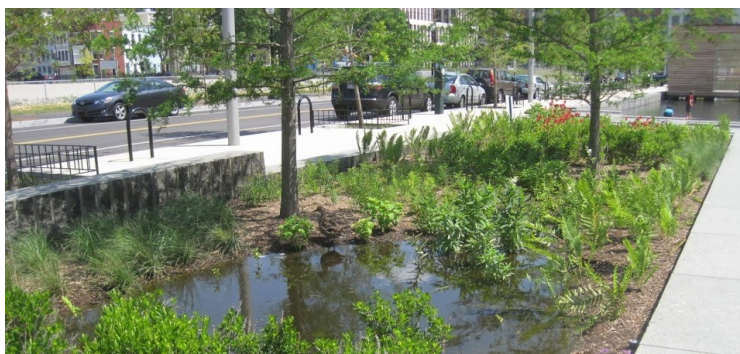
- Bethel Gardens of Broad Creek: The Fund provided a \$100,000 grant to install several rain gardens totaling 2,929 square feet, planting over 30 trees and 600 native plants, along Main Street in Bethel.
- Dunbar Building: The Fund provided \$159,000 in grants to develop a green streets conceptual plan, engineered drawings and installation of a bioretention stormwater management system at the former Paul Laurence Dunbar Elementary School as it transitioned into the new headquarters of the Laurel Police Department.
- South Conwell Street Green Infrastructure: The Fund provided a \$100,000 grant for the implementation of a green stormwater retrofit for South Conwell Street in Seaford.

## Delaware Pollution Control Revolving Fund

The Fund, commonly known as the [Clean Water State Revolving Fund](#) is made available to municipalities, private organizations and others in the form of low-interest loans and grants to promote water quality improvement projects. Funded projects include municipal wastewater treatment, nonpoint source pollution abatement, watershed protection, restoration and estuary management.

### Example Projects:

- The City of Newark used the Fund to convert the site of the Rodney Dormitory into a multi-faceted stormwater park to capture localized flooding within the city. The stormwater park features a trail, pier, playground and pavilions.
- Municipalities of Camden, Laurel, Seaford, and Smyrna received Surface Water Matching Planning Grants for surveying, mapping, and assessing their existing stormwater infrastructure along with identifying areas for future green stormwater retrofit projects.
- The Town of Laurel used their Surface Water Matching Planning Grant to address untreated stormwater runoff into Broad Creek with the design of Tidewater Park, a nature-based park featuring constructed wetlands and bioswales.



Contact the MS4 program for more information on stormwater management in your community at [StormwaterMS4@delaware.gov](mailto:StormwaterMS4@delaware.gov) or 302-739-9946.

