



**What is stormwater and how is it managed in Medway?**

Stormwater is the runoff from rainfall and snowmelt. Impervious surfaces, such as rooftops, driveways, and parking lots create the most runoff because the water cannot penetrate into the ground. Stormwater picks up debris and pollutants along the way from where it falls to where it enters Medway’s stormwater management system.



The system is a network of catch basins, yard inlets, and pipes which keep water from flooding roads and property. Eventually the stormwater flows to the Town’s streams, ponds and the Charles River. Medway’s stormwater program is

responsible for the maintenance and improvement of these drainage systems.

**What are the stormwater issues in Medway?**

As is the case in many nearby communities, Medway’s stormwater problems and challenges primarily include:

- ▶ Pollution from various sources including eroded land, yard waste, pet waste, and fertilizers.
- ▶ Regulatory mandates and permit compliance
- ▶ Capacity for future development (overall water resource management)
- ▶ Aging stormwater drainage infrastructure



In order to position Medway for a strong future and protect our water resources, additional effort is needed to address these issues.



**How do we solve these problems?**

The Town has developed a list of activities that incorporate best management practices (BMPs) to begin solving these problems. This is based on an understanding of the current drainage system and new regulatory requirements. In general, these BMPs include:

- Public education and involvement activities
- Pollution prevention practices for residential, business and municipal properties
- Increased street sweeping and cleaning of catch basins
- Increased rehabilitation of deteriorated drainage structures
- Retrofitting of existing drainage systems to improve water quality



- Enforcement of construction site stormwater management practices and stormwater design standards
- Developing engineering designs for stormwater treatment structures like the pictures below



Underdrained Bioretention Swale, South Portland, ME      Rain Garden at Fletcher Field Recreation Area, Franklin, MA

### **Regulatory Requirements**

The Town of Medway has an existing stormwater permit from the U.S. Environmental Protection Agency (EPA), known as the Municipal Separate Storm Sewer System (MS4) Permit. The Town reports its stormwater activities to EPA every year and these reports are publicly available for all regulated cities and towns. <https://www.epa.gov/npdes-permits/2003-small-ms4-general-permit-archives-massachusetts-new-hampshire>

EPA re-issued the MS4 Permit in April 2016 and it contains new requirements that the Town must meet over the next several years. The goal of the MS4 Permit is to improve water quality through more robust stormwater management activities, such as those outlined above. On July 1, 2018, the MS4 permit went into effect and efforts have been underway to ensure the Town's stormwater management program meets the new permit requirements. <https://www.epa.gov/npdes-permits/massachusetts-small-ms4-general-permit>

### **What is the stormwater management program going to cost?**

The Town's current stormwater management program costs approximately \$275,000 annually. The estimated annual cost to improve the stormwater management program to comply with the new MS4 Permit over the next 5-year period is estimated to be in excess of \$1.5M.

This does not include major capital costs for construction projects that may be needed after the initial 5-year period. The Town is developing a better understanding of these costs, which is largely driven by the MS4 Permit requirements related to protecting the Charles River. Initial estimates are on the order of several million dollars over a 10-15 year period.

### **Next Steps**

The Town of Medway will continue to evaluate the most cost-effective approaches to manage stormwater, the Town's storm drain infrastructure and its water resources.