

Introduction

Stormwater is water that is generated from rain and snow melt—which is commonly referred to as stormwater runoff. We generally do not think about stormwater runoff until an issue arises such as flooding or water enters your basement. However, the quality of water in stormwater runoff is an important consideration as stormwater can directly affect the quality of the drinking water supply, the health of local streams used for fishing or recreation, and overall atmosphere of a locality. In turn, we attempt to manage the stormwater runoff to protect the water quality and reduce the potential for damages associated with flooding. Stormwater management has consistently followed the same general concepts for centuries:

Collect ▶ Convey ▶ Discharge to nearby stream

Over the past few decades as flooding became more problematic and water quality degraded, the use of Best Management Practices—or BMPs—was introduced into the stormwater management mechanism. BMPs are structural and/or non-structural practices that are considered an effective and practicable set of means of preventing or reducing water pollution and potentially helping with flooding issues. As a result, the stormwater management concept has evolved into the following:

Collect ▶ Manage ▶ Discharge to nearby stream

The manage portion covers a gamut of tools. One of the most important tools is structural BMPs for stormwater management such as dry detention basins, rain gardens, and infiltration trenches. As suburban and urban areas are further developed or re-developed, BMPs are required for implementation to continually manage stormwater runoff and build upon the improvements that have occurred over the past 30+ years. The odds are good that you have a BMP on your property to manage stormwater if you have been provided this manual by your local municipality.

The Homeowner's Guide to BMP Operation and Maintenance includes detailed maintenance tables by different types of stormwater management BMPs, background considerations for your BMP's O&M Plan, and example pictures to help assist with your long-term maintenance activities.



Once a BMP is implemented, an important consideration is the long-term maintenance of the BMPs. BMPs are required to be maintained not only to preserve its function as filtering pollutants and improving water quality, but also as a regulatory requirement of your local municipality's (Township or Borough) Municipal Separate Storm Sewer System (MS4) Permit. This permit not only requires the BMP to be installed in strategic locations, but also to be maintained for the long-term.

A Municipal Separate Storm Sewer System Permit, or MS4 Permit, is a permit that establishes conditions your township or borough must meet for the quality and quantity of stormwater runoff to local streams.

The Homeowner's Guide to BMP Operation and Maintenance was developed to assist a homeowner, small business, or other local entity with maintenance of stormwater management BMPs they own. Maintenance requires periodic inspections and activities by the BMP's owner to ensure the BMP continues to function and manage stormwater as it was originally intended to—and as it was presented and approved for permit approvals.

Each BMP presented in the guide includes a maintenance table that outlines common or required indicators that would trigger a maintenance activity. The indicators are essentially the same issues, such as erosion, that your local municipality will be referring to if they inspect your BMP. Pictures of example common issues with a type of BMP are provided as well to help you identify issues that would need attention. Indicators are conditions that can lead to more problems or inhibit the BMP's ability to function, and include conditions such as erosion or blocked pipe openings.

