

# GUILFORD COUNTY ENVIRONMENTAL BULLETIN

## GENERAL STORMWATER BMP MAINTENANCE

Stormwater Management/Watershed Protection regulations were adopted in Guilford County to protect the drinking water supply reservoirs and surface waters from pollutants caused by storm water run-off.

Best Management Practices (BMPs) are techniques used to control the quantity of stormwater runoff, sediment, and to prevent or reduce non-point source pollution. The EPA defines a BMP as a "technique, measure or structural control that is used for a given set of conditions to manage the quantity and improve the quality of stormwater runoff in the most cost-effective manner." When a Best Management Practice (BMP) was selected for your property, it should be the most effective device to protect your business, the environment, and your community from the harmful effects of stormwater runoff.

## FACT: However, Best Management Practices will fail if not properly maintained.

The impact of a poorly maintained BMP can be devastating to a business, neighborhood, and community. Improperly maintained devices not only decrease the efficiency of removing pollutants, they also can create flooding and contamination, potentially placing an owner at risk for liability.

It is the responsibility of the property owner to maintain these run-off control structures, so maximum efficiency of the device will continue. To protect your business, neighborhood, and the environment, study the Operation and Maintenance Manual prepared by your engineer, learn about the maintenance costs of the device, and ask questions before you accept ownership of a BMP.

An effective maintenance program will extend the life of stormwater controls, avert expensive repair costs and prevent adverse downstream impacts.

## Steps to Create a Maintenance Plan

- 1. Identify the location of all BMPs on your property
- 2. Review the Operation & Maintenance Manual for a schedule and procedure
- 3. Create a maintenance plan & checklist
- 4. Identify key parameters to measure
- 5. Train people to handle the maintenance and reporting

Once a monitoring program is established, reviewing reports will assist in determining when a BMP needs maintenance. This will help in developing a solid plan and budget for future needs to keep a BMP working properly.

### Who Needs a BMP Monitoring Plan?

Best Management Practices require skillful installation, application and maintenance to be effective. Once implemented, they require routine maintenance to ensure that they are operating effectively and efficiently.

#### What is BMP monitoring?

Monitoring BMPs typically involves inspecting the device and evaluating the results or performance.

BMP monitoring also involves scheduling of inspections on routine intervals and after storms to ensure that the BMP meets expectations.



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#### When to Monitor

Schedules for BMP effectiveness monitoring will be determined by the nature of the BMP itself and by the consequences of failure. Thus, a practical solution would be to have a regular schedule, such as monthly in the dry season and weekly in the wet season, but with the ability to add extra monitoring in response to identified events, such as following major storms.

Monitoring can generally be completed during normal daylight hours and while processing is at normal levels, noting certain exceptions as illustrated above.

The following is a summary of typical problems an owner may generally encounter with a water quality device.

Oil sheen or discoloration

Debris

Eroded slopes Fallen trees

Leakage or seepage Burrowing animals

Sediment Algae

Piping system
Unusual odors
Displaced rip-rap
Dead plants

Bare areas Bare or displaced mulch
Cracks Contaminated or crusty sand
Overgrowth

The Guilford County Planning Department is required to inspect all permanent run-off control structures in its jurisdiction on an annual basis to ensure the devices are being properly maintained. After each annual inspection, an inspection report and a cover letter will be mailed to the responsible party if any maintenance/repairs are required. Any maintenance or repair needs noted on the inspection report must be completed within 90 days of the dated report. Any enforcement by this Department to gain compliance for these structures will be issued through a Notice of Violation, with subsequent fines, legal action or both.

#### FOR ASSISTANCE

The Watershed Protection/Stormwater Management Section Department for Guilford County is available in the Planning and Development Department to answer specific questions regarding the watershed ordinances and development.