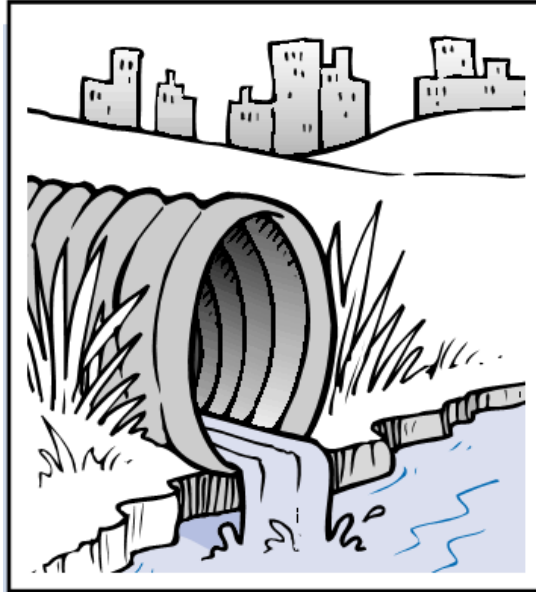


## SERIES #2: Maintaining Engineered Stormwater Controls



*Hands In for Healthy Streams is a cooperative effort between the City of Buford and the local business community.*

### HANDS IN FOR HEALTHY STREAMS

*NOTE:* This handbook is one in a series of handbooks that describe specific practices businesses can use to protect water quality. A complete list of all handbooks and fact sheets available through the *Hands In for Healthy Streams* program is provided on the back cover. To obtain other handbooks in this series, contact Buford City Hall at the address provided below.

City of Buford  
2300 Buford Highway  
Buford, GA 30518  
[www.cityofbuford.com](http://www.cityofbuford.com)

We hope you'll join with the City of Buford and other area businesses by participating in the *Hands In for Healthy Streams* program. Through this Program, you can help protect our local streams. To participate, review the enclosed Fact Sheets No. 2.1 and 2.2, and then fill out the self-assessment at the back of the Handbook. We appreciate your continued cooperation and stewardship in protection of our water quality.

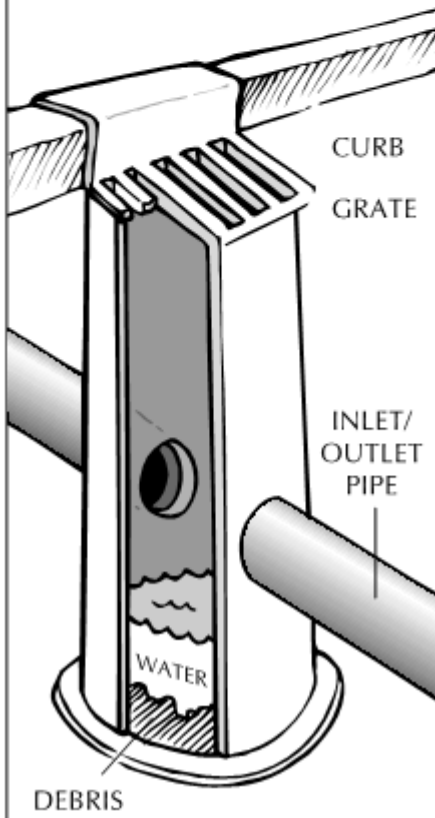
*This Program is modeled on the Community Partners for Clean Streams program created through a US EPA Clean Water Act Grant by the Office of Washtenaw County Drain Commissioner Janis A. Bobrin, Washtenaw County, Michigan. Portions of this Handbook are borrowed from the Community Partners for Clean Streams series, with designs and illustrations developed by David Zinn.*

## Fact Sheet No. 2.1 Catch Basin Care

### Why be concerned?

Catch basins are structures located where surface water enters a storm drain or where pipes intersect. Their main function is to collect runoff and convey it into the stormwater management system. Many are also designed to let sediment and other debris settle into a storage area at the bottom of the catch basin. This helps prevent debris from flowing into the drainage system.

It's important to maintain catch basins. In addition to preventing storm sewer blockages, proper maintenance prevents accumulated pollutants from being stirred up during storms and washed through the system into rivers and streams.



### Removing Debris from Storm Drain Grates

Storm drain grates can become clogged with litter or leaves, especially in the spring and fall. Regular inspection and removal of debris can help prevent blockages that can lead to localized flooding as well as downstream pollution.

### The Importance of Regular Inspections

If you own or maintain a business site, inspect catch basins at least twice a year to see if they need cleaning. Regular inspection and cleaning prevents debris from accumulating in the outlet pipe, and reduces maintenance expense.

To find out how much material has accumulated in the storage area of your catch basin, insert a long, thin probe into the storm drain grate. Notice where the probe hits the debris and continue probing to the bottom to estimate how deep the accumulation is.

### Cleaning Catch Basins

Catch basins should be cleaned out before the storage area is half full. Once this level is reached, solids begin to be washed out in rain storms. Cleaning should be done in the spring, after the first large rain event, in the fall after the trees have shed their leaves, and additionally if needed.

If the catch basin is shallow enough you may be able to clean it out yourself with a shovel and bucket. Be careful not to drop the basin's cover down the opening when you remove it — it can be extremely hard to retrieve. If you can't perform your catch basin maintenance, professional services are available.

### Disposing of Excavated Material

Solids removed from catch basins may be high in pollutants such as oil, metals, chemicals, nutrients, and bacteria. To determine how to properly dispose of these solids, contact the waste disposal facility where you expect them to be taken. Hiring a professional service to maintain your catch basins can help to ensure that solid wastes are properly disposed.



Consider applying a stencil or decal message with adhesive to the storm drains on your site with the message

**DUMP NO WASTE  
 DRAINS TO RIVER**

This is a good reminder that nothing except water belongs down a storm drain.

### Herbicide-Free Algae Control

Herbicides and algicides used to control plant growth in ponds can pollute both retention ponds and waters downstream. Algae and aquatic plants can be controlled by limiting the input of nutrients (such as fertilizers, leaves and lawn clippings) and providing aeration.

### GETTING HELP

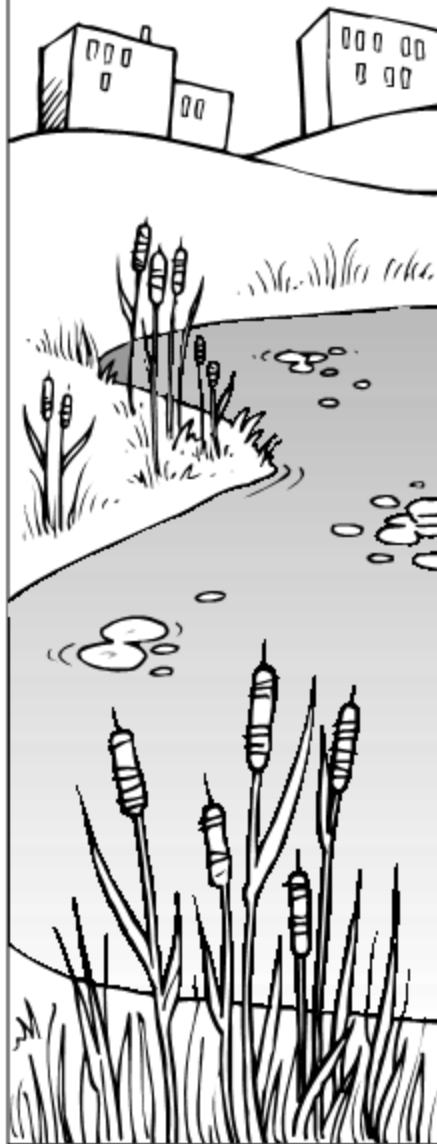
GA Dept. of Natural Resources  
 Pollution Prevention  
 Assistance Division ..... (404) 651-5120  
 (P2AD) or (800) 685-2443

## Fact Sheet No. 2.2

# Maintaining Stormwater Management Systems

### Why be concerned?

The importance of maintaining stormwater management systems can't be overemphasized. No matter how well designed, without regular maintenance drainage systems will eventually stop functioning properly, losing their ability both to control flooding and to remove pollutants from stormwater.



For additional information on maintaining your stormwater management system, reference the *Gwinnett County Stormwater Design Manual*.

The City of Buford *Stormwater Operations and Maintenance Activities Manual* is also under development.

### Maintaining Your Detention System

**Retention** ponds are designed to store stormwater runoff without releasing it (except through evaporation, soil infiltration, or emergency bypass).

**Detention** ponds are designed to store stormwater runoff and release it at a controlled rate to systems that ultimately lead to rivers and streams. In order to function properly, retention and detention systems must be rigorously maintained. Your system may have special maintenance requirements; however, in general:

- Maintain thick, native vegetation around ponds to slow and filter stormwater before it enters them. Avoid mown lawn to the water's edge.
- Regularly remove accumulated sediment and debris, especially around outflow control devices.
- Regularly check and clean inlet sedimentation basins to ensure that there's sufficient storage volume for proper function.
- Inspect the entire system at least once a year. If possible, inspections should be carried out by a professional engineer.
- Immediately repair or replace any damaged or defective structural components.

### Developing and Implementing a Maintenance Plan

A plan will help to expedite proper maintenance. Plans will vary, depending on the business and site; however every plan should contain the following:

1. A delineation of all stormwater management facilities (including maintenance access and vegetated buffer areas).
2. Provision for the routine and non-routine inspection of every component within the system. A professional engineer should be retained to inspect structural facilities and to conduct emergency inspections.
3. A list of the tasks required to maintain each component of the stormwater management system and a schedule for completing these tasks. This should include both preventative and corrective activities.
4. The party responsible for performing each of the maintenance activities described.
5. A description of on-going landscape maintenance needs, including soil erosion control.

**This concludes Fact Sheets 2.1 and 2.2 of the Housekeeping Practices series.**

**To create your own Water Quality Action Plan, please complete the Water Quality Assessment provided on the following page.**



## SERIES #2 Assessment

The following Assessment and Action Plan asks you to evaluate your current activities and identify any specific actions needed to prevent pollution. For each question, check the appropriate box in the Assessment column. Next, in the corresponding box in the Action Plan column, fill in the proposed *date* by which the activity will be completed. Thank you for your good faith commitment to water quality.

Series #2, Housekeeping Practices: Maintaining Engineered Stormwater Controls	ASSESSMENT			ACTION PLAN	
	Not Applicable	Needs Improvement	Always	Plan to Improve	Plan to Continue
1. Leaves and other debris are regularly removed from storm drain grates.					
2. Catch basins are regularly maintained, and wastes are disposed of at an approved site.					
3. Oil/water separators are regularly maintained, and wastes are disposed of at an approved site.					
4. Detention and retention systems are regularly inspected and maintained.					