

## Storm Water Pollution Prevention Clean Water: Our Only Choice

The City of Bartlett has two drainage systems—the sanitary sewers and the storm drains. The storm drain system was designed to prevent flooding by carrying excess rainwater away from streets, homes and businesses. However, as development occurs, the amount of impervious surface such as parking lots, roof tops and roads increases. Impervious surfaces prevent storm water from filtering into the ground. Instead they increase the amount of water leaving an area. This often leads to increased flooding downstream.

Another problem caused by impervious surfaces is that any pollutant that is placed on these surfaces stays there until it is “washed” into our streams and eventually the Mississippi River during the next rainstorm. The pollutants include: oil, other automobile fluids, paint and construction debris, yard and pet wastes, pesticides and litter. The mixing of rain water and these pollutants causes storm water pollution.

To help reduce storm water pollution, the City of Bartlett requires that there is no significant increase in the amount and velocity of storm water leaving the development after the development work is complete as there was before the development.

The most common approach to meeting these requirements is the installation of a detention basin.

Detention basins can be designed and constructed to be aesthetically pleasing. They can also be vegetated and irregularly shaped with landscaping around the edges.

This pamphlet provides general information for how you can properly maintain your detention basin. These Best Management Practices (BMPs) will help reduce downstream flooding and will ensure cleaner streams and rivers.

**Hazardous Spill Response**  
City of Bartlett Fire Department  
911 or (901) 385-5555

**Recycling and Household Hazardous  
Waste Disposal**  
Memphis and Shelby County Household Hazardous Waste Collection Facility (901) 222-7729

**To Report Illegal Dumping**  
City of Bartlett  
(901) 385-5555

**To Report a Drainage Problem**  
Department of Public Works  
(901) 385-5570

**Mosquito Control**  
Memphis & Shelby County Health and Sanitation Dept.  
(901) 222-2300

Material printed by City of Bartlett  
Department of Engineering and Utilities



This brochure is one of a series of pamphlets describing storm drain protection measures. Other pamphlets include:

**Landscaping, Gardening & Pest Control**  
**Food Service Industry**  
**Automotive Maintenance & Car Care**  
**Heavy Equipment & Earth-Moving Activities**  
**Home Repair & Remodeling**

For more information or assistance, call or write:

**City of Bartlett**  
**Department of Engineering & Utilities**  
6382 Stage Road  
Bartlett, TN 38134-3739  
**1-901-385-6499**  
<http://www.cityofbartlett.org>

SWBMP5-05/13

City of Bartlett Storm Water Management Division  
6382 Stage Road  
Bartlett TN 38134-3739  
(901) 385-6499

## Storm Water Best Management Practices (BMPs)



## Detention Basin Maintenance

Brochure 5

**City of Bartlett Businesses,  
Neighborhood Associations and  
Private Homeowners with  
Detention Basins**

# Detention Basin Maintenance

## 1. Pollution Prevention Plans

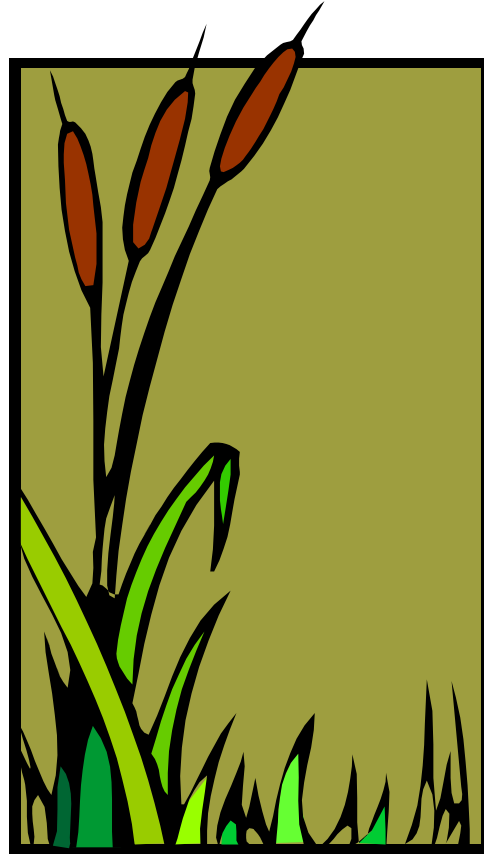
Often the easiest way to maintain a detention basin is to develop and implement a pollution prevention plan at your establishment or neighborhood. A pollution prevention plan drastically reduces the amount of pollution entering your detention basin; thus reducing the amount of time and money necessary to maintain the basin.

Important aspects of a pollution prevention plan:

- ◇ Dry sweep parking lots and driveways on a regular basis. This prevents solids from entering the basin and can reduce the need for future basin maintenance.
- ◇ Keep cat litter, sawdust or cornmeal handy to absorb small spills. Properly dispose of the collected material.
- ◇ Materials that could pollute storm water should be stored inside a protected, roofed building.
- ◇ Educate employees or association members to be aware of potential storm water pollution and how to report potential problems.

## 2. Maintaining the Basin

- ◇ Conduct routine inspections.
- ◇ Remove any trash that may have accumulated.
- ◇ Make sure that the basin's banks and bottom are stable. There should be no active erosion in the basin.
- ◇ Remove excess sediment, trash or other debris that may be blocking discharge pipes or the emergency spillway.
- ◇ Remove and properly dispose of any pollutants such as oil that may have been trapped in the basin.
- ◇ Excessive vegetation such as willows or other large trees and shrubs should be removed unless they serve some part of your treatment plan.
- ◇ Minimum maintenance requirements include outlet cleaning, mowing, litter control, removal of sediment from basin and outlet structures and repair of structures.



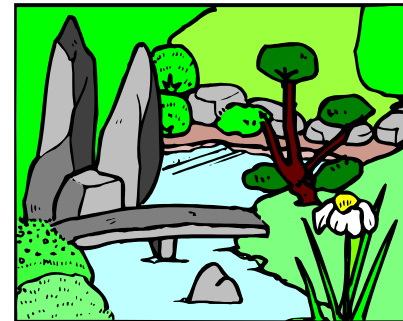
## 3. Additional Detention Basin Hints

- ◇ Detention basins can be designed and constructed to be aesthetically pleasing. Basins can be vegetated and irregularly shaped with landscaping around the edges.
- ◇ All basins can be made to be both functional and attractive. Many colorful and unusual aquatic plants can be used along the edges of a wet or partially wet basins. City ordinance allows a constructed wetland to be used to improve water quality in lieu of a basin.

- ◇ Do not use pesticides, herbicides or fertilizers in your basin. These products will leach from the basin and pollute our streams and rivers.
- ◇ If you must use fertilizers, only use low-phosphorus, slow release varieties. Keep fertilizers on the lawn and not on paved or other impervious surfaces.
- ◇ Make sure your basin is draining properly. Detention basins are designed to release storm water slowly, not hold the water permanently. Improperly maintained basins can harbor breeding areas for mosquitoes and reduce the storage volume of the pond.
- ◇ Do not place yard waste such as leaves, grass clippings or brush in basins or in the storm drains located in the streets. These materials release excess nutrients as they decompose.
- ◇ Pick up and dispose of pet waste with your weekly garbage.

## 4. Additional Information

A permanent maintenance agreement for storm water detention/retention facilities may be required, including those components required for water quality control. Maintenance will be the responsibility of the property owner on which the facility is located or a homeowners association and will be recorded as such on the plat with the appropriate notation on the particular lot unless that responsibility has been legally transferred to another person or entity by a properly recorded legal agreement.



The registered professional engineer who designs the facility may develop minimum maintenance requirements of the water quality for such facility to ensure that the facility is kept functional. The maintenance agreement may specify minimum maintenance requirements and intervals to be performed by the property owner. Minimum maintenance requirements should include outlet cleaning, mowing, litter control, removal of sediment from basin and outlet structures and repair of structures.

The maintenance agreement should also grant permission to the City of Bartlett to enter the subject property and to inspect the storm water detention/retention facilities as deemed necessary. If the facility is not being maintained, the City Engineer or his designee will notify the property owner to repair/maintain the facility within a reasonable period of time. If the property owner fails to repair/maintain the facility within the allotted time, the City Engineer can authorize the required maintenance to be performed by or paid by the City of Bartlett and bill the cost to the property owner.

Interested in learning more about detention basins? Visit the EPA basin website, <http://cfpub.epa.gov/npdes/stormwater/>

Visit the City of Bartlett official website, <http://www.cityofbartlett.org>, to view or download copies of the city's Storm Water Ordinance and Subdivision Ordinance.

For more information, call the City of Bartlett Storm Water Coordinator at (901)385-6499 or visit the Storm Water Management Division section of the City of Bartlett official website: <http://www.cityofbartlett.org/index.aspx?nid=915>.