

**BMP safety considerations**

It's important to always keep in mind the safety of both the people maintaining your stormwater BMP as well as the general public. Some important considerations include:

- Site conditions such as steep slopes, slippery surfaces, and vegetation debris can create a falling hazard.
- Do not enter any confined spaces or structures – specialized training and permits are required!
- Avoid performing maintenance activities in wet weather to reduce the risk of injury from slipping.
- Refer to the maintenance sheet specific to your community's BMP for an example inspection and maintenance checklist.
- Maintenance staff should always wear appropriate safety gear.

**Wildlife and mosquito control for BMPs**

Stormwater BMPs can be attractive habitat and breeding grounds for nuisance insects and animals.

To help control beavers and other burrowing animals:

- Look for animal droppings year-round.
- Check for structural indicators such as beaver dams and rodent holes and burrows.
- Fill in burrows right away.
- Remove plant debris that may provide shelter.
- Call a professional to trap and remove individual animals.

To help control mosquitoes:

- If your BMP is not draining properly, contact a licensed professional.
- Be sure that BMPs that maintain a permanent pool of water do not develop stagnant areas.
- Larger BMPs with permanent pools can also be stocked with fish that feed on mosquito larvae.
- Licensed professionals can apply pesticides to kill mosquito larvae in the water or adult insects in the air.

**BMP education tips**

There are many actions that homeowners and property owners can take on your own property to help minimize pollution from stormwater runoff:

- Keep landscaping debris (grass clippings, leaf piles, etc.) out of stormwater BMPs and storm drains.
- Collect and properly dispose of automotive fluids, paint, and other hazardous materials.
- Eliminate areas of standing water on your property (clean out clogged gutters and downspouts, drain unused swimming pools, empty bird baths regularly, etc.).
- Direct downspouts away from foundations to planting beds and lawns where water can soak into the ground.
- Clean up pet waste.
- Install a rain garden.
- Minimize the application of pesticides, herbicides, and fertilizers.
- Plant native vegetation.
- Wash cars on lawn or take them to a car wash.
- Cover bare soil with mulch or plants.

**Volunteer to help perform routine BMP inspection and maintenance!**

GWINNETT COUNTY  
DEPARTMENT OF WATER RESOURCES  
684 WINDER HIGHWAY, LAWRENCEVILLE, GA 30045  
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Cover photo courtesy of Pompeston Creek Watershed Association  
Prepared by Tetra Tech



**STORMWATER  
BEST MANAGEMENT  
PRACTICE (BMP)  
MAINTENANCE  
FOR HOMEOWNERS' ASSOCIATIONS &  
PROPERTY MANAGERS**

Learn more at [GwinnettCounty.com](http://GwinnettCounty.com)  
or call the 24-hour Stormwater Hotline: 678.376.7193



For more information about BMPs, links to County departments, and suggested readings, please visit: [GwinnettStormwater.com](http://GwinnettStormwater.com)  
Gwinnett County Stormwater Management Manual (2017 Edition): [GwinnettCountyStormwaterManagementManual.com](http://GwinnettCountyStormwaterManagementManual.com)  
For questions about maintenance of BMPs, contact: [DWRstormwaterBMP@gwinnettcounty.com](mailto:DWRstormwaterBMP@gwinnettcounty.com)

**Where can I find more information?**

Department of Water Resources  
684 Winder Highway  
Lawrenceville, GA 30045  
24-hour Stormwater Hotline: 678.376.7193

**Who can I contact with questions?**

## What is a stormwater BMP, and why do we have one?

Stormwater runoff is water that "runs off" the land after precipitation occurs. As development occurs, land is covered by streets, rooftops, driveways, and other hard (or "impervious") surfaces that do not allow stormwater to infiltrate (or soak) into the ground. The result is an increase in runoff.

Runoff picks up fertilizer, oil, pesticides, dirt, bacteria and other pollutants as it travels over land and through storm drains and ditches, untreated, to our streams, rivers, and lakes. According to the EPA, polluted runoff is one of the greatest threats to clean water in the U.S.

**Stormwater BMPs are approaches for managing stormwater to minimize the negative impacts of stormwater runoff. They can be engineered facilities such as detention basins, or non-engineered approaches such as preserving open space.**

Stormwater BMPs can be designed to meet a variety of management goals. Many are designed primarily to provide volume control to reduce flooding, while others are designed to help meet water quality goals, or both.

Many stormwater BMPs incorporate vegetation to help soak up and treat stormwater runoff.

**The five most common stormwater BMPs in Gwinnett County are Dry Detention Basins, Dry Extended Detention Basins, Wet Ponds, Wet Extended Detention Ponds, and Bioretention Areas.**

## Why should we maintain our stormwater BMP?

**No matter how well they are designed and constructed, BMPs will not function correctly or look attractive unless they are properly maintained.**

Without proper maintenance, the result could be increased flooding, reduced water quality, public safety hazards, and risks to human and ecosystem health and the environment.

Poorly maintained stormwater BMPs can also lead to nuisance conditions including mosquito habitat, odors, and undesirable aesthetics (e.g., stagnant water, overgrowth of vegetation, trash accumulation, etc.).

## Stormwater BMP "lingo"

**Best management practice (BMP):** An engineered facility that is designed and constructed to manage stormwater runoff to reduce flooding and improve water quality.

**Detention:** The temporary storage of runoff.

**Impervious:** Hard surfaces such as roofs, driveways, sidewalks, and streets that prevent rainfall from soaking into the ground.

**Infiltration:** The process by which water on the ground surface soaks into the soil.

**Invasive:** Species which are not native to a specific location and may cause harm to native species and ecosystems.

**Nuisance:** A species that may cause harm to native species and ecosystems; may be native or non-native.

**Orifice:** A small opening in the outlet control structure (see definition below) of a stormwater BMP that allows water to flow out of the BMP at a controlled rate.

**Outlet control structure (OCS):** The structure through which water leaves a BMP.

**Retention:** The storage of runoff in a permanent pool which fluctuates in response to rainfall and runoff.



## Who is responsible for maintenance?

When a property is developed, the developer must incorporate stormwater BMPs and provide a plan for these BMPs to be properly maintained over time. When the developer finishes the project, ownership of the stormwater BMPs is turned over to the Homeowners' Association (HOA) or property owner.

**Property owners are legally responsible for ensuring that stormwater BMPs on their sites are properly inspected and maintained.**

Every stormwater BMP in Gwinnett County comes with a **Maintenance Agreement**. A Maintenance Agreement is a legally binding document signed by the HOA or property owner that provides information on who is responsible for maintenance, a schedule for maintenance, and tasks to be performed. Contact the Gwinnett County Department of Water Resources to obtain a copy of the Maintenance Agreement for BMPs on your property.

## When should I call a professional?

There are many routine maintenance tasks that can be safely and effectively performed by owners. However, there are many tasks that should only be performed by trained professionals. Refer to the maintenance sheet specific to your community's BMP for detailed information.

A professional should be consulted periodically to ensure that all needs of the BMP facility are met. Some developing problems may not be obvious to the untrained eye.

**Trained professionals can help identify problems early on, saving expensive repairs later.**

HOAs and property managers may elect to contract with a professional landscaper or lawn care company to provide some of the required vegetation management for a stormwater BMP. However, it's important to remember that landscapers are not typically trained specifically for BMP maintenance. The company performing the work must understand the purpose and function of the BMP and strict maintenance requirements prior to performing any maintenance activities.

## When should we maintain our BMP?

**Most maintenance problems with BMPs are less costly to correct when they are caught early. The important of regular inspections and routine maintenance for stormwater BMPs cannot be understated.**

Large engineered facilities that incorporate vegetation (such as Wet Ponds, Wet Extended Detention Ponds, Bioretention Areas, and Stormwater Wetlands) typically require inspections monthly and after large storm events to catch any problems before they become serious. All other BMPs should be inspected quarterly and after large storm events.



There are several common maintenance indicators that are applicable to many BMP types. These conditions are signs of diminished BMP performance that indicate maintenance and repairs are needed. Refer to the maintenance sheet specific to your community's BMP for detailed information.

## How do we maintain our BMP?

Effective maintenance programs include both "routine" and "non-routine" maintenance tasks. Typical maintenance activities vary based on BMP type. Routine maintenance includes regularly scheduled tasks that are necessary to maintain the function and desired appearance of your BMP, such as regular inspections and removing trash. "Non-routine" maintenance involves more complex maintenance tasks that are typically performed on an as-needed basis after a regular inspection identifies a problem.

In addition to routine and non-routine maintenance, BMPs may occasionally need emergency (i.e., unscheduled) maintenance, which typically requires maintenance crews to mobilize immediately. For example, following an emergency such as a flood, BMPs may require debris removal, replanting, and repairs to structures.

All inspection and maintenance activities should be recorded. Refer to the maintenance sheet specific to your community's BMP for an example inspection and maintenance checklist.

**Your BMP's Maintenance Agreement includes requirements for documentation and reporting frequency.**

## Paying for maintenance

The expenses associated with maintaining a BMP are highly dependent on the BMP type and design.

**A general rule of thumb is that annual maintenance costs will be 5 to 10% of the facility's total capital cost. Routine, regularly scheduled maintenance can help keep overall costs down by addressing problems before they require major attention.**

Establishment of a maintenance fund is recommended for both routine and non-routine maintenance. For HOAs, this could be funded by a combination of an initial payment by the developer and regular contributions from the HOA (e.g., a portion of homeowner fees).