
DOES RUNOFF FROM YOUR HOME, SCHOOL OR PLACE OF WORK BENEFIT FROM STORMWATER BMP TREATMENT?

About a third of all homes, schools and businesses drain to ponds and other stormwater Best Management Practices (BMPs). These BMPs can trap large amounts of pollution, making the difference between waters suited or unfit for childhood play and a Chesapeake Bay that is recovering or dying. In this factsheet we'll show you how to determine if BMPs are present and, if so, how to tell if they are still working. We'll also explain how to get BMPs installed if none are present or improve upon existing BMPs.

Impacts of Untreated Runoff

Stormwater runoff washes a tremendous amount of pollution from lawns, streets, sidewalks, rooftops and parking lots. Street gutters and storm drains ensure that this highly-contaminated runoff quickly enters a nearby waterway. The sediment, nutrients, toxics and other runoff-entrained pollutants can do serious harm to fish and other aquatic organisms while causing nuisances such as excessive algae growth. The sheer volume of runoff will erode stream channels and flood areas never inundated prior to development.

Poorly treated suburban-urban runoff accounts for a third to half of the most serious pollutants entering the Bay and her tributaries. This runoff has severely degraded the quality of the Chesapeake more than 10,000 miles of Bay tributaries from New York to Virginia and from Delaware to West Virginia. Chances are the waters nearest your home are among those polluted by stormwater runoff.

Are BMPs Present?

Most existing Bay watershed BMPs are ponds, but only a third of these hold water all the time. Photos of common BMPs appear on the other side of this factsheet. The newest development projects may have small BMPs at the end of roof downspouts in the form of stone-filled pits (dry wells) or landscaped depressions (rain garden, bioretention). So, begin your search for BMPs at the end of a roof downspout and follow the path that runoff would travel. Of course, finding this path is easiest during when runoff is flowing. You'll be looking for any human-made structure that stores runoff.

Since most BMPs are ponds you're likely to find the structure at the end of the storm drain system. To get there follow runoff from the downspout, across a lawn, into a street, to the point where it drops into a storm drain inlet. The underground path of the storm drain system is frequently marked by manhole covers with words like "Storm Drain" or "Storm Sewer." Follow manhole covers downhill looking for a low spot where the storm drain system veers off towards a stream. The storm drain system ends at the outfall where an open pipe discharges runoff. Look around for a pond.

Is the BMP Working Properly?

Accompanying the photos on the other side of this factsheet is a brief description of the more common BMP problem indicators. Further detail is provided in the following factsheets:

Ponds: ceds.org/audit/FS-Ponds.pdf

Infiltration Trench: ceds.org/audit/FS-Infiltration.pdf

Rain Gardens: ceds.org/audit/FS-RainGarden.pdf

Additional advice for finding BMPs, assessing their condition and getting ailing facilities fixed, is provided in *Auditing Chesapeake Bay Watershed Stormwater Best Management Practices*:

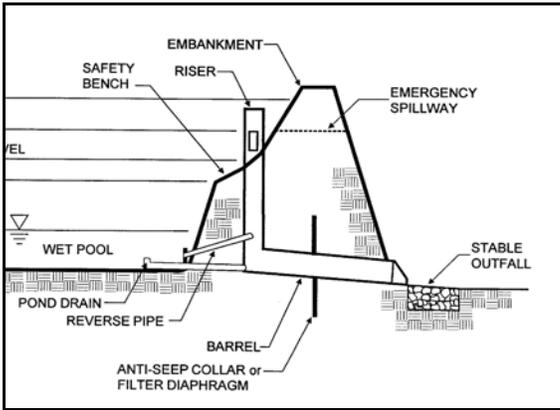
ceds.org/audit/ChesaBaySWMBMPAudit.pdf

BMP Retrofits For A Home, School or Business

If your home, school or business lacks stormwater BMPs, then consider a retrofit project. One of the best How-To guides is the [*Community-Based Restoration Project Manual*](#) published by the Chesapeake Bay Trust (cbtrust.org). The Trust also offers grants to help defray the cost of some projects. Additionally, a growing number of local governments and watershed groups offer retrofit assistance.

Ponds and other, older BMPs only trap a third to half of stormwater pollutants, whereas retrofit measures can retain 70% to 90%. So consider retrofits even if older BMPs are present.

Finally contact CEDS if you'd like to schedule a workshop in your area on maximizing BMP benefits.



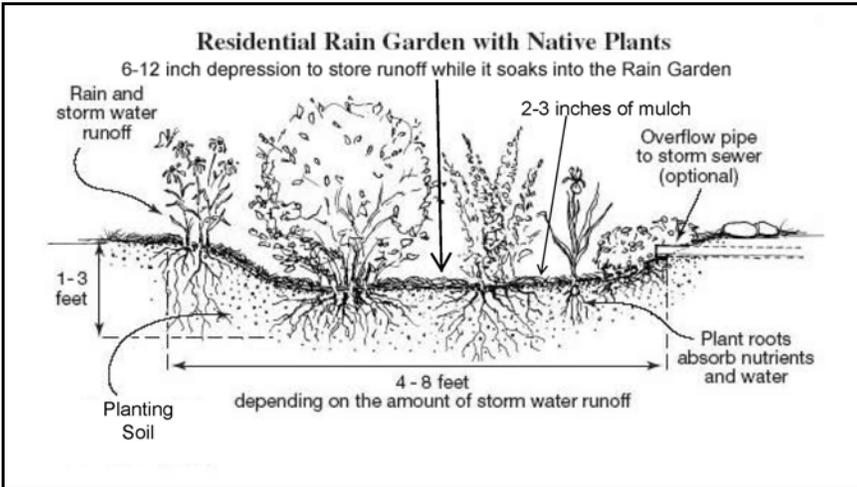
Sideview of Pond Embankment



Pond must be cleaned to original capacity when half- full of sediment, cattails or other plants



Top of pond embankment should be straight and level; No low spots; No trees or animal burrows



Rain Garden In Front Of A Home

Is there at least 6 inches of surface storage with 2-3 inches of wood mulch? Is wetland vegetation absent?



Minimum 6 inches storage, 2-3 inches mulch; must drain in 48 hrs; wetland plants indicate poor drainage, failure



Infiltration trench with exposed stone; must drain in 48 hrs