

Stormwater- What can I do?

Assessing your property:

1. Find an aerial map of your property (Google maps is a useful tool). This map can either be printed or saved for step two.
2. Either by hand or using drawing tools on your computer, outline and label all of the different features on your property, including: roofs, driveways, walkways, patios, lawn, landscaped areas, and water features.
3. Approximate the size of each of these features in order to determine how many gallons of stormwater is generated by your property.

Square Feet of Impervious Area	Gallons of Runoff to be Managed
500 or less	less than 312
501 – 1,000	312 – 624
1,001 – 2,000	624 – 1,246
2,001 – 3,000	1,246 – 1,869
3,001 – 4,000	1,869 – 2,492
4,001 – 5,000	2,492 – 3,115
5,001 – 10,000	3,115 – 6,231
10,001 – 20,000	6,231 – 12,462
20,001 – 43,000	12,462 – 26,793

4. Locate all of your roof downspouts and determine which direction stormwater flows from them. Take note of any areas that are prone to flooding or standing water.

Types of Stormwater Best Management Practices:

1. **Rain Barrel:** a barrel that captures rainwater from a roof and stores it for later use.

Pros: minimal cost, conserves water to water plants or gardens, can be artistic/aesthetically appealing

Cons: must be emptied regularly (especially before freezing temperatures), captures a minimal amount of stormwater, can lead to mosquitos if not maintained properly

Things to consider: must be placed on a level surface, heavy when full

For tips on installation, go to this website: <http://chesapeakestormwater.net/wp-content/uploads/downloads/2013/11/6.-Section-4.4-Rainwater-Harvesting.pdf>

2. Rain Garden: a depressed garden that uses mulch, soil, and deep-rooted native plants to capture and infiltrate stormwater.

Pros: filters pollutants, provides wildlife habitat, requires little maintenance, aesthetically pleasing

Cons: plants take 2-3 years to establish (more maintenance required during that time period), can be costly

Things to consider: location very important- must be constructed downslope of runoff to be captured, at least 10 feet from building foundations, and not over wells or septic systems

For tips on design and installation, go to this website: <http://chesapeakestormwater.net/wp-content/uploads/downloads/2013/11/3.-Section-4.1-Rain-Gardens-w-Appendices.pdf>

3. Native Meadow: an area planted with native grasses and wildflowers that is kept as a natural area. “No mow” areas can also develop into meadows.

Pros: increases infiltration and evapotranspiration of stormwater, filters pollutants, requires little maintenance, provides wildlife habitat, aesthetically pleasing

Cons: site preparation (removal of turf grass), maintenance- mowing twice per year for the first two years and then annually after that, control invasive plant species

Things to consider: best on a 5% slope or less

For tips on choosing a location, installation, and maintenance, go to this website:

<http://chesapeakestormwater.net/wp-content/uploads/downloads/2013/11/4.-Section-4.2-Conservation-Landscaping-w-Appendices.pdf>

4. Tree planting/ Riparian Buffer: planting native trees and shrubs to restore a portion of your property to forested conditions (especially important alongside streams)

Pros: increases infiltration, filters pollutants, provides wildlife habitat, controls erosion, requires little maintenance, aesthetically pleasing, usually low cost depending on the species of tree planted

Cons: takes several years for trees to develop to maximize benefits, invasive plants must be controlled, trees must be defended against deer and vole damage in order to succeed

Things to consider: trees should be planted in the spring or fall at least 10 feet away from building foundations

For tips on tree planting and care, go to this website: <http://chesapeakestormwater.net/wp-content/uploads/downloads/2013/11/5.-Section-4.3-Tree-Planting.pdf>

5. Pervious Pavers: impervious building materials, such as stone, concrete, or brick, laid with space in between to allow for pervious areas (gravel, sand, or vegetation) in driveways, parking areas, or walkways

Pros: increases infiltration, reduces volume and rate of runoff, can be artistic or have an aesthetically appealing design

Cons: labor intensive to install, more costly, must be maintained (look for signs of clogging, control vegetation between pavers)

Things to consider: need to install permeable sub-base, must be located 10 feet from building foundations