Rain Gardens, also known as bioretention facilities, are designed to treat runoff from homes and other buildings, driveways, sidewalks, streets, parking lots and other impervious surfaces. You’d be amazed by the amount of pollution settling from the atmosphere onto these surfaces. More pollution comes from other sources: vehicle exhaust and engine leakage, lawn equipment, pet waste, and lawn-care chemicals drifting onto the surfaces. The pollutant level in rainwater runoff from these surfaces can be so high that fish would die if it were used to fill an aquarium. Rain Gardens are among THE most effective measures for preventing runoff pollution.

Rain Gardens are created by locating a point where runoff from impervious surfaces collects. A pit three- to four-feet deep is then excavated at this runoff collection point (see illustration on other side). Most of the pit is filled with a sandy planting soil much like that used in any other garden. Flowering plants, shrubs, and other attractive vegetation are established within the Rain Garden then two- to three-inches of mulch is placed upon the surface. The surface of a Rain Garden is depressed six- to twelve-inches below adjacent areas. This six- to twelve inch depression is extremely important since it serves to store runoff for the six hours or so it takes for the runoff to soak into the mulch layer and down through the underlying planting soil. As impervious surface runoff passes through these layers up to 95% of the pollutants are removed. The water flowing from the bottom of the Rain Garden is extremely clean. Since every home is within a 15-minute walk of some waterway, our children benefit through cleaner streams in which to play, our drinking water is more healthful, and our beaches, rivers, lakes, and bays are more enjoyable for swimming, fishing, and boating.

KEEPING A RAIN GARDEN HEALTHY IS EASY

1. Is there a depth of at least 6-inches from the Rain Garden surface to the first point where runoff could flow from the facility? If no then the facility must be cleaned to restore a minimum 6- to 12-inch storage depth.
2. Replace any dead or dying plants. A list of suitable plants can be found in Rain Gardens Across Maryland, available online at: http://extension.umd.edu/sites/default/files/_docs/articles/Rain_Gardens_Across_MD.pdf
3. Remove trash washed or blown into the Rain Garden.
4. If underlying soil is visible then cover the soil with mulch using well aged (6- to 12-month old) shredded or chipped hardwood mulch.
5. Watch for indications of clogging such as water standing in the Rain Garden when a day or more has passed since the last storm ended. If clogging does occur then see Rain Gardens Across Maryland for advice.
EXAMPLES OF HOW RAIN GARDENS ENHANCE THE ATTRACTIVENESS OF A HOME

Did You Know: Compared to a patch of conventional lawn, a rain garden allows about 30 percent more water to soak into the ground.