Rain gardens are beautiful natural landscape features that require less maintenance and fewer chemicals than lawns. Rain gardens capture runoff from impervious areas such as roofs and driveways and allow it to seep slowly into the ground. Most importantly, rain gardens help preserve nearby streams and lakes by reducing the amount of runoff and filtering pollutants.

Rain gardens provide for the natural infiltration of rainwater into the soil. This helps to filter out pollutants including fertilizer, pesticides, oil, heavy metals and other chemicals that are carried with the rainwater that washes off your lawn, rooftop and driveway. Rain gardens also reduce peak storm flows, helping to prevent stream bank erosion and lowering the risk for local flooding. By collecting and using rainwater that would otherwise run off your yard, rain gardens allow you to have an attractive landscape with less watering.

A rain garden receives runoff water from roofs or other impervious (hard) surfaces such as driveways. The rain garden holds the water on the landscape so that it can be taken in by plants and soak into the ground instead of flowing into a street and down a storm drain or drainage ditch. The plants, mulch and soil in a rain garden combine natural physical, biological and chemical processes to remove pollutants from runoff. Many pollutants will be filtered out and break down in the soil over time.

Water should stand in a rain garden no longer than 24 hours after the rain stops. Mosquitoes cannot complete their breeding cycle in this length of time, so a rain garden should not increase mosquito populations.

Special thanks to Rose Mary Seymour, Ph. D., P.E. of the University of Georgia, College of Agricultural and Environmental Science, Biological and Agricultural Engineering, Cottin Campus, UW-Extension Office, the Pollution Prevention Assistance Division (P2AD), Alfred Vick, ECOs Environmental Designs and Maplewood, Minnesota (for photos).
Rain gardens are best located in natural depressions (low lying areas where water flows naturally). They should be sited at least 10 feet from a house or building. While they should not be next to building foundations, rain gardens near impervious surfaces such as driveways, patios and sidewalks help capture the runoff from these areas.

Sites with steep slopes (an elevation change of more than 12 feet down per 100 feet in length) may not be suitable for rain gardens. Further, if you have a septic system, avoid planting a rain system over the top of the drainfield. It is recommended that a landscape professional be consulted if you plan to build a rain garden larger than 300 square feet.

### How To Create a Rain Garden

1. Locate a site for a rain garden in a natural depression in the landscape.
2. Determine the size and shape of the rain garden.
3. Calculate the size of the area draining to a rain garden, including the roof area or impervious area that drains to the downspout and the area of land within 24 inches of the soil surface because the water table will prevent infiltration.
4. Establish a grass or groundcover border along the roof downspout to the rain garden.
5. A shallow swale or corrugated drain pipe should be set up to carry the water from the roof downspout to the rain garden.
6. Make sure that the ground slopes away from the house so that water does not collect around the foundation.
7. Select and plant drought tolerant, wet tolerant, and hardy plants. A mix of ornamental grasses, shrubs and self-seeding perennials are good choices. See chart of plants.
8. Once plants are in place, cover the garden with a 3-4” layer of mulch. Lighter mulches such as pine bark and straw will float in water and may be washed away to the edges of the rain garden. Better mulch choices for a rain garden are more dense materials such as pine straw, wood chips or shredded wood.
9. To maintain your rain garden, remove weeds on a regular basis as the landscape plants grow, and replenish mulch as needed.
10. Rain gardens should be relatively low maintenance if the correct plants are chosen.

### What Plants Should You Use?

Finding plants for your rain garden is not difficult. Many well-suited plants are available at your nearest landscaping supply store. Here are some suggested plants (common and scientific names):

#### Trees

- Bald Cypress
- Black Gum
- Crapemyrtle
- Fringetree
- Green Ash
- Muskwood/American Hornbeam
- Red Maple
- River Birch
- Sweetbay Magnolia
- Willow Oak
- Witch Hazel

- Taxodium distichum
- Nyssa sylvatica
- Lagerstroemia indica
- Chionanthus virginicus
- Fraxinus pennsylvanica
- Carpinus caroliniana
- Acer rubrum
- Betula nigra
- Magnolia virginiana
- Quercus phellos
- Hamamelis virginiana

#### Shrubs

- American Beautyberry
- Bottlebrush Buckeye
- Butterbush
- Common Wisteria/Winterberry Holly
- Inkberry
- Oakleaf Hydrangea
- Rose of Sharon
- Summersweet Clethra
- Virginia Sweetspire
- Wax Myrtle

- Callicarpa americana
- Aruncus parvifolius
- Cephalanthus occidentalis
- Box verticillata
- Box glabra
- Hydrangea quercifolia
- Hibiscus syriacus
- Clethra alnifolia
- Itea virginica
- Myrica cerifera

#### Perennials, Grasses and Groundcovers

- Asakens
- Blackeyed Susan
- Blue Lobelia
- Broadleaf Rumex/Indian Woodoats
- Broomedge
- Cardinal Flower
- Cinnamon Fern
- Clubed Bergonia
- Golden Ragwort
- Goldenrod
- Ironweed
- Joe-Pye Weed
- Liatris
- Narrowleaf Dragonhead
- New England Aster
- Red Columbine
- Royal Fern
- St. John’s Wort
- Scarlet Rosemallow/Swamp Hibiscus
- Swamp Milkweed
- Swamp Sunflower
- Switchgrass
- Wild Ginger
- Yellow Stargrass

- Asarum canadense
- Asters
- Black cohosh
- Blue lobelia
- Broadleaf Rumex
- Broomedge
- Cardinal Flower
- Cinnamon Fern
- Clubed Bergonia
- Golden Ragwort
- Goldenrod
- Ironweed
- Joe-Pye Weed
- Liatris
- Narrowleaf Dragonhead
- New England Aster
- Red Columbine
- Royal Fern
- St. John’s Wort
- Scarlet Rosemallow/Swamp Hibiscus
- Swamp Milkweed
- Swamp Sunflower
- Switchgrass
- Wild Ginger
- Yellow Stargrass

#### For help in finding a location to purchase native plants, go to the Georgia Native Plant Society’s website at www.gnps.org.

An additional list of plants suitable for rain gardens can be obtained through the University of Georgia Cooperative Extension Service. The bulletin, called “A Compilation of Low-Maintenance Plants for Georgia Landscapes” (F-79-009), lists both native and non-native plants that are drought and moisture tolerant. The bulletin can be found at a local extension office or online at www.ces.uga.edu.