



Every Rain Garden is Site Specific

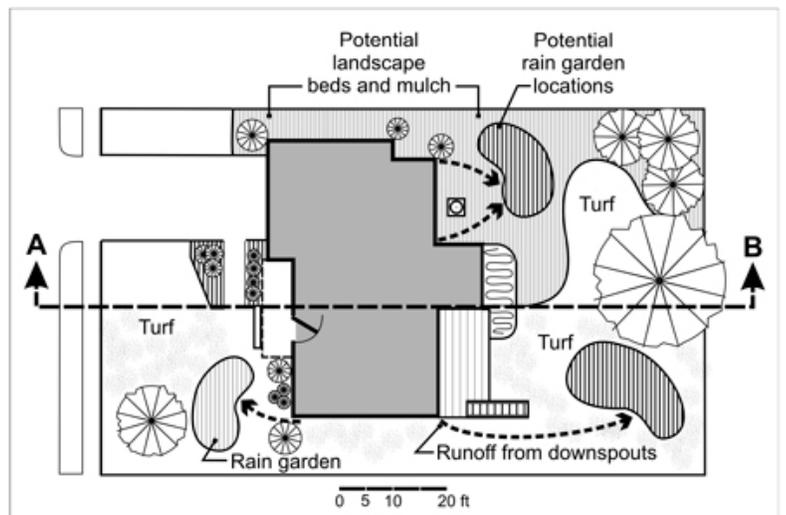
The rain garden you have in mind may be almost any shape you desire as long as you consider a few simple things:

- Soil type
- Location of rain garden
- Size & Depth
- Species to plant

Location, Location, Location

Place a rain garden along a gentle slope where it can capture the most runoff from the roof or other impermeable areas. Examine the layout of down spouts from the roof and determine which ones drain the most roof area. Also, look at the lay of the landscape and determine if water collects and flows to certain spots. Rain gardens can be placed near a single down spout or located away from the house to capture runoff from more than one downspout and from other impervious areas in the yard, such as a patio. Also, consider how a proposed location fits into the overall landscape features of the yard as you want it to complement the house and other yard features and be a source of enjoyment for the homeowner and others.

Locate rain gardens at least 10 feet away from the house to avoid water draining toward the foundation. Rain gardens should be located on gently sloping ground with less than 12 percent slope. If your selected location is greater than 30 feet from the house and additional yard area will drain to the rain garden, be sure water from downspouts will reach the rain garden. Often a small swale can be constructed for this purpose. If a swale is not desirable, a buried pipe can transport water from a downspout to the rain garden.



Comparison of rain garden in turf lawn (below AB line), with rain garden in mulch bed, non-turf area (above AB line).

Locate rain gardens based on drainage patterns, slopes and aesthetic considerations. Rain gardens may be situated within turf areas or in mulched landscape beds that contain other plants and landscape features. Although rain gardens surrounded by turf may be easy to install, gardens more effectively enhance landscape structure and space definition when they are located at the edge of a lawn area rather than in the middle of a turf space.

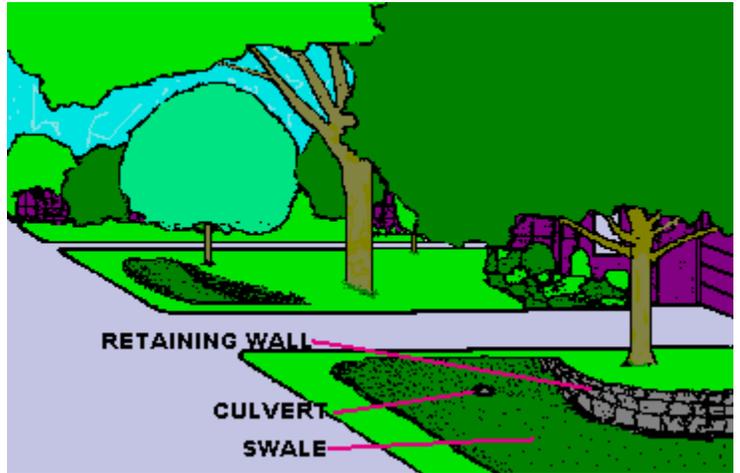
Front Yard Gardens

Gardens along the front of homes and businesses are particularly useful from a water quality and aesthetic standpoint. Their proximity to the street makes front

yard gardens an effective place to collect water that has run off of your roof, yard and sidewalk before it hits the storm water system. Because they are highly visible to people passing by on the street, front yard gardens also add to the beauty of the neighborhood.

Front yard gardens can be created:

- At the end of the roof gutter to capture run off from the roof
- Along front walk way to keep runoff from traveling down the sidewalk and into the storm sewer
- Along the city sidewalk to act as a buffer between your lawn and the street.
- On the city-owned boulevard to stop runoff from entering the street



This front yard garden includes a culvert to move water to neighborhood nature gardens, a storm water infiltration swale and a stone retaining wall.

Property owners with front yards that slope to the sidewalk may choose to incorporate stone walls. With the addition of wall features, collection points can become deeper and more useful from a water filtration stand point. If the wall is decorative and combined with nearly edged turf, the area will be beautiful throughout the year.



Gardens along the side of your home or business can catch runoff from your roof, create a “living fence” between properties and channel runoff to front or back yard gardens. Some homeowners create wide side yard gardens that become wider still in the back yard. This style of garden can minimize the amount of ‘turf’ in your back yard that needs to be mowed. Creating wild areas along the side of your house ensures that you can look out your window and see beautiful plant, birds and butterflies. Don’t plant tall shrubs right next to your windows if you are concerned about people hiding there. Also, make sure dips for capturing runoff channel water **away** from your house to avoid basement flooding problems.

Back yard gardens can keep water from running down the alley and into storm sewers. Like the side yard gardens, back yard gardens can also help minimize the amount of high-maintenance turf-style lawn on your property. Most people place their largest gardens in the back yard. If you already have a large back yard garden, you can easily add a water filtration component by creating dips that will hold and filter water.

Back Yard Gardens

How Big Should the Rain Garden Be?

Determining the size of a rain garden is not an exact science. The surface area of the rain garden can be almost any size, but time and cost will always be important considerations in sizing decisions. Any reasonably sized rain garden will provide some storm water runoff control. A typical residential rain garden ranges from 100 to 300 square feet. Rain gardens can be smaller than 100 square feet but very small gardens have little plant variety. If a rain garden is larger than 300 square feet it takes a lot more time to dig, is more difficult to make level and could be hard on your budget.

What Shape Should My Rain Garden Be?

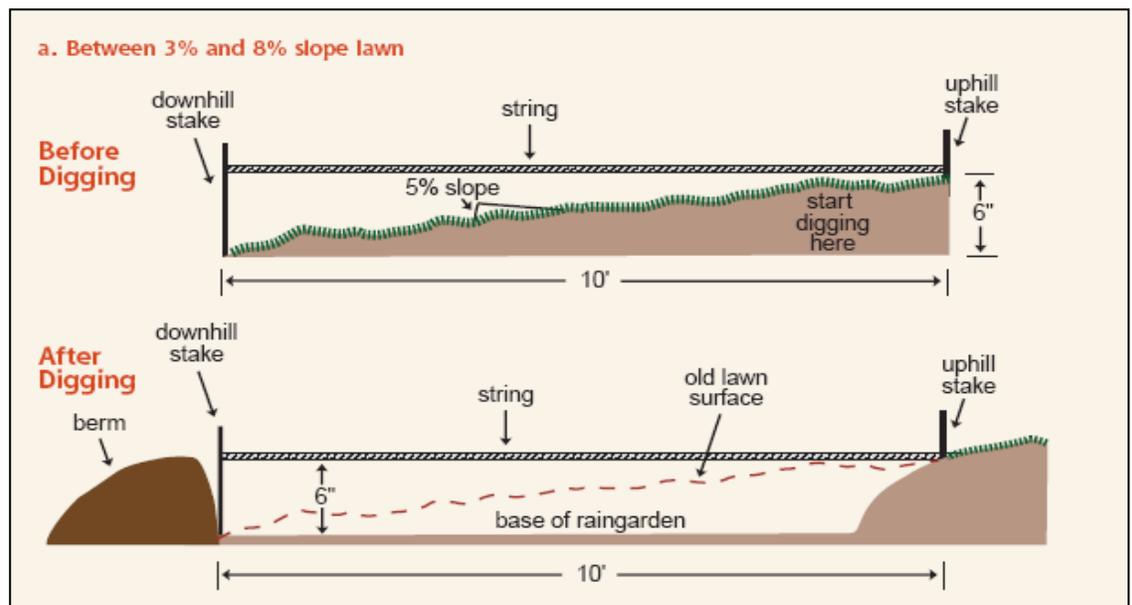
The shape of your rain garden should be dictated by the context of the garden location and the eye of the homeowner. Shapes such as a crescent, oval, teardrop, or kidney are generally more appealing than a rectangle. Shapes that contain curves also better fit with the flow of plant groupings found in many residential landscapes. A general rule is to keep the ratio of length to width at least 2:1, with the longer length dimension running perpendicular to the water entering the rain garden. This orientation maximizes the amount of water the rain garden can hold.

Tools Needed for Building Rain Garden

- Tape measure
- Stout spring or rope (layout)
- Leather work gloves
- Shovel and rakes
- Hand trowel
- Carpenter level (4 ft.)
- String level
- Wood stakes, 2 ft. long
- String
- Hand tamping device
- 2x4 board approx. 6 ft. long
- Small backhoe, or friends

Determining Rain Garden Depth

The existing slope of the proposed rain garden site determines how deep to dig the garden. The bottom of the garden need to be flat so water spread out and does not puddle. When digging your garden, you will be removing soil from the top of the slope and adding it to the bottom end. See figure A. Because



of this change in grade you must calculate the depth of the garden based on the slope. Generally the greater the slope the deeper the garden. A 4% slope equals a 3-5" deep garden.