

## FACT SHEET: RAIN GARDENS

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Although not yet a common term in Florida, rain gardens are a popular landscape element in many other parts of the country. As urbanization continues and natural areas decrease, there is increased stormwater runoff from impervious surfaces like roofs, driveways, and streets. This runoff contributes to flooding and carries pollutants into local ponds, lakes, and rivers. Rain gardens, if designed and maintained correctly, may reduce stormwater runoff by as much as thirty percent.

Rain gardens have multiple functions. They recharge the local aquifer by increasing the amount of water that filters into the ground; reduce the amount of urban pollutants – fertilizer, pesticides, car oil, etc. – that get carried away by stormwater runoff and enter nearby surface water bodies; provide habitat for birds, butterflies, and beneficial insects; and improve property value by adding curb appeal to the landscape.

The first step in creating a rain garden is deciding where it should go. A rain garden can be built in the front or back yard and can be near the house to catch only roof runoff or farther out in the yard. Keep the following considerations in mind:

- Consider an existing low spot in your yard to place the rain garden.
- Place the rain garden at least 10 feet from the house to keep water away from the foundation.
- Place the rain garden in full or partial sun, away from large tree roots.
- Do not place the rain garden directly over a septic tank.
- Do not place the rain garden on a steep slope. The purpose is to capture runoff and help with infiltration.

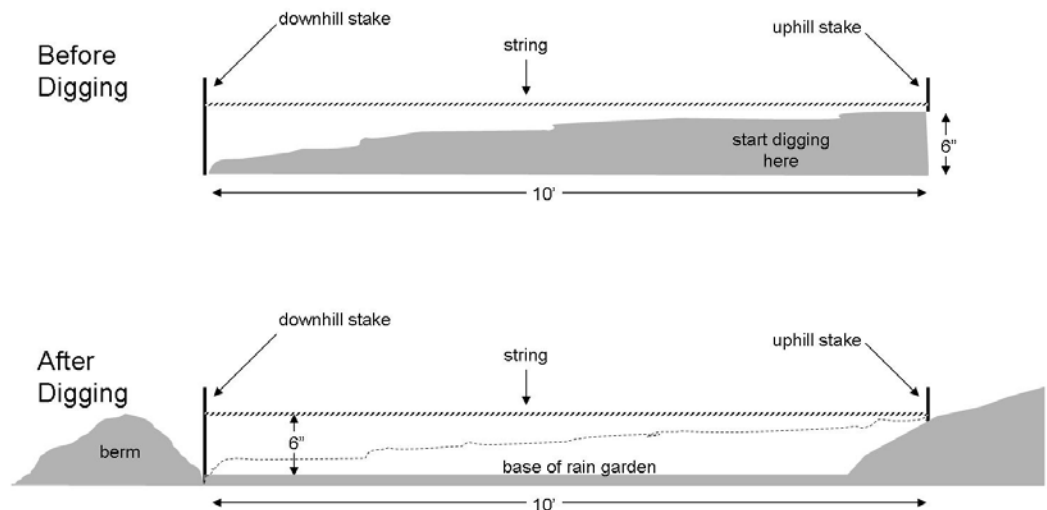
To calculate how large the rain garden will be, decide how much roof area will be contributing to the proposed rain garden. For sandy soil, calculate twenty percent of the targeted roof area; for peat or clay soils, calculate thirty percent. This will give you an approximate size of the rain garden.

**Example:** Sample roof area contributing to one downspout = 250 ft<sup>2</sup>

Sandy soil – 250 ft<sup>2</sup> x 20% = 50 ft<sup>2</sup> (This would be a 10 ft x 5 ft garden, approximately)

Peat/Clay soil – 250 ft<sup>2</sup> x 30% = 75 ft<sup>2</sup> (This would be a 12 ft x 6 ft garden, approximately)

A typical rain garden is between six and twelve inches deep, depending on the slope and the type of soil. The sandier the soil, the better the drainage; thus the rain garden can be shallow. Make sure that the garden is level and slope the outer edges like a pie pan. At the bottom of the hole, add two inches of substrate for proper drainage (50% sand, 30% soil, and 20% compost).



The larger the rain garden, the greater the diversity of plants that can be used. For grasses and bulbs, plant on one-foot centers. For larger plants, increase the spacing. Try not to step in the garden when planting to avoid soil compaction. See the list at the end of this fact sheet for suggested plants for a rain garden.

Once the plants are installed, apply a large chip, hardwood mulch, two to four inches deep throughout the entire rain garden. If the rain garden is installed during the dry season, hand water the new plants every day for at least two weeks to get the roots established.

During the first two years of installing the rain garden, regular maintenance will be required to keep out the weeds and replenish the mulch. Once the plants fill in, the system will be relatively sustainable.

### Suggested Plants for a Rain Garden in Central Florida

	Common Name	Botanical Name
<b>FLOWERS</b>	African Iris	<i>Dietes iridoides</i>
	Blue Flag Iris*	<i>Iris virginica</i>
	Canna Lily	<i>Canna spp.</i>
	Goldenrod*	<i>Solidago spp.</i>
	Milkweed	<i>Asclepias spp.</i>
	Shrimp plant	<i>Justicia brandegeana</i>
	Swamp sunflower*	<i>Helianthus angustifolius</i>
<b>GRASSES</b>	Florida gamma grass*	<i>Tripiscicum floridana</i>
	Muhly grass*	<i>Muhlenbergia capillaries</i>
	Virginia Willow*	<i>Itea virginica</i>
	Wiregrass*	<i>Aristida stricta var. beyrichiana</i>
<b>GROUND COVERS</b>	Holly Fern	<i>Cyrtomium falcatum</i>
	Periwinkle	<i>Vinca major</i>
	St. Bernard's Lily	<i>Anthericum sanderii</i>

\* Indicates a Florida native species