

Rain Gardens

Rain gardens are uniquely beneficial to your home and environment.

They provide:

- beautiful, low-maintenance landscaping
- habitat for native butterflies and birds
- increased groundwater recharge
- pollutant removal

Managing stormwater runoff from hard surfaces on your home site will protect your investment in landscaping and infrastructure such as driveways and culverts.

Managing stormwater runoff protects your planet.



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Websites
www.nyscdea.com



Backyard Conservation

Rain Gardens



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Rain Gardens

Creating a rain garden can be as simple as directing rain to an absorbent swale in your yard and putting in a few plants. If you have no existing place to direct your roof runoff, or you want a specifically designed garden, then this information is for you.



Step 1: Determine the best location

- Where does gravity take runoff water? Go with the flow.
- Stay at least 10 feet away from the foundation of your house.
- Don't install the garden over any part of a septic system.
- Check the location of utilities, stay away!
- A sunny or partially shaded location will work best.

Step 2: Check the soils

Soil types vary in how quickly they will absorb water. Dig a hole 8 inches wide, 12 inches deep and fill with water. If it takes more than an hour for the water to drop an inch, your soil will need amendment. Adding sand and compost will help.

Soils that have been compacted by heavy construction equipment need to be dug up and loosened to a depth of two feet or replaced with a mix of 50-60% sand, 20-30% topsoil, 10-30% compost.

Step 3: Determine the size

Recommendations vary, but a rule of thumb is to multiply square feet of roof area x soil factor = area of garden.

Soil factors: (Sand= .20) (Loam= .40) (Clay= .50)

Remember that different parts of your roof may drain to different downspouts. Estimate only the area that will drain into your rain garden—don't forget the overhangs.

Rain gardens for single-family homes will typically range from 150—400 square feet (e.g. 15'X 10' to 20'x20')

**ANY SIZE RAIN GARDEN
IS BETTER THAN NONE.**

Don't be discouraged if you can't manage a large installation. Even a small rain garden will help the environment.

Step 4: Design layout

The garden should be on a fairly level surface or a berm can be created on the downhill side so runoff can settle in the garden. A six inch depression near the center



will allow water retention and promote infiltration. A length of garden hose or rope laid on the ground can help you define the area you want to dig.

Direct drainage from the roof or downspouts to the garden.



Step 5: Choose the plants

This is the fun part. Native, non-invasive species that do not object to having their roots wet for a few days and are tolerant of dry spells are available. Extensive lists of such plants are available online and from Cooperative Extension services. Examples include Joe Pye, New York fern, buttonbush, New England aster, grasses, etc. The specific site of your garden will determine which plants you choose. Remember that the plants near the deeper part of the garden area will have longer periods of wetness.

Step 6: Plant, water, mulch and maintain

The garden will need to be weeded and mulched for the first couple of years until the plants are large enough to crowd out unwanted vegetation. Native plants do not require fertilization.

Step 7: Accept compliments, enjoy wildlife visitors, feel good about managing your own stormwater on your own home site.

(Don't worry about mosquitoes breeding in these gardens. The water soaks away in less time than it takes for insects to mature.)