

Garden for Cleaner Water

What is stormwater runoff?

Stormwater runoff is the water that runs over and off the land during a rainstorm or snowmelt, rather than soaking in.



What's the problem?

As stormwater runs over streets, parking lots, and lawns it can pick up and carry many kinds of materials that get washed into nearby streams and lakes. This leads to stormwater pollution!



Where do these pollutants come from?

Stormwater picks up contaminants that come from all of us-

- Fertilizers
- Pesticides
- Bacteria from pet waste
- Eroded soil
- Road salt
- Grass clippings
- Litter

**Rain gardens
capture and filter
stormwater**

Just to name a few!
These pollutants wash into ditches & down storm drains, and end up in local waterways.



Rain gardens are a beautiful and beneficial addition to any landscape. By capturing rain water, they help to reduce stormwater pollution and protect local streams, lakes, and rivers.



BUILD A RAIN GARDEN OF YOUR OWN!



For more information about rain gardens, or how to design and construct one for your own yard, contact:

RUTGERS COOPERATIVE RESEARCH & EXTENSION WATER RESOURCES PROGRAM

Department of Environmental Sciences
14 College Farm Road
Phone: (732) 932-4917
Email: obropta@envsci.rutgers.edu
<http://www.water.rutgers.edu>



An Introduction to Rain Gardens



Published by:



Originally developed by:



Cornell University
Cooperative Extension

What is a Rain Garden?



Rain gardens are where form meets function and the gutter meets the ground. Simply put, rain gardens are gardens that are specifically designed to soak up rain water, mainly from roofs, but also from driveways and lawns. Rain gardens look like regular flower gardens but they are more. When it rains, a rain garden fills with a few inches of water and allow the water to slowly filter into the ground rather than running off to the storm drains. Compared to a patch of lawn, a rain garden allows about 30% more water to soak into the ground! They also add beauty to neighborhoods and provide wildlife habitat!



Plan



Choosing a Spot

Rain gardens can be designed to catch water from a roof or even a driveway. When choosing a location for your garden, pick an area that is relatively flat or that has a slight slope. Keep the following considerations in mind:



- Rain gardens are **NOT** a solution to wet areas! The garden must have good drainage so that water can soak in within 24 hours after a rainfall. This will also prevent your garden from becoming a mosquito haven!
- The garden should be at least 10 feet away from the house.
- The garden should receive full or partial sunlight.
- Avoid the area over a septic system.
- The garden must include an overflow structure that will allow heavy rains to divert to a natural drainage pattern (not your neighbors lawn!)

Prepare

How Big?

The size of your garden will depend on 3 main factors:

- 1) *The size of the area draining into it.*
- 2) *The type of soils on the site.*
- 3) *The depth of the garden.*

A typical residential rain garden ranges from 100 to 300 square feet. Depth of the depression can range from 3 to 8 inches.



Ready to Dig?

- Use spray paint to outline the shape of your garden.
- On a slope, more digging will be required on the uphill side. Use extra soil to build a berm on the downhill side.
- The bottom of the garden must be flat & level.
- Don't forget to make an overflow for heavy rain events!



Before you dig call
The NJ One Call Hotline
(1-800-272-1000)
to locate underground
utility lines!

Plant



Plant Selection

Choose plants that have a variety of heights, textures, and bloom times. It is important to select plants that can tolerate both wet and dry conditions, and that are suited to your garden's sun/shade exposure.

Tip: dig each hole 2x the width of the plant plug. The hole should be deep enough so that the crown of the plug is level with the ground.

