An Introduction to Rain Gardens

AFTER: A beautiful rain garden captures rain water from the roof, allowing it to soak into the ground. This rain garden is located at the Zen Center of Syracuse and helps to prevent stormwater from entering Onondaga Creek.

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

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

Rain gardens capture and filter stormwater

Stormwater Management in Your Backyard

The Stormwater Management in Your Backyard program was developed by the Rutgers Cooperative Extension Water Resources Program in collaboration with the USDA Regional Water Program and New Jersey Sea Grant. The program provides educational lectures, hands-on training, and community-level outreach for homeowners and other groups on the topics of water quality issues and management practices such as rain gardens and rain barrels. County Master Gardener and Environmental Steward volunteers play an important role in many aspects of the program.

For more information and technical assistance, contact:

Christopher C. Obropta, Ph.D., P.E.
Extension Specialist, Cooperative Extension
Water Resources Program
obropta@envsci.rutgers.edu
http://www.water.rutgers.edu

-or-

Your Cooperative Extension County Office by visiting/calling:
http://njaes.rutgers.edu/county/default.asp

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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 patios. 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 allows 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 outlet that will transport excess rainfall to a proper location (not your neighbors lawn!).

Prepare

How Big?

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

1. The size of the drainage area.
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. Call Rutgers Cooperative Extension for assistance in calculating the dimensions of your garden.

Plant

Ready to Dig?

- Use string 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!

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.

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 the sun/shade exposure of your garden.

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