What is

STORMWATER

Stormwater is the water from rain or melting snow that can become "runoff" flowing over the ground surface and returning to lakes and streams.

What's the problem?

As stormwater flows 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 and localized flooding.

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

These pollutants wash into ditches and storm drains, eventually ending up in local waterways.

For additional resources:

CHECK OUT

Rain Garden Manual of New Jersey
by visiting
https://issuu.com/rutgerswater

-or-

Rain Garden App

UCONN

by visiting
http://nemo.unconn.edu/tools

For more information and technical assistance, contact:

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obropta@envsci.rutgers.edu
http://www.water.rutgers.edu

-or-

Your Cooperative Extension County Office
by visiting/calling:
https://njaes.rutgers.edu/county/

RUTGERS
New Jersey Agricultural
Experiment Station

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Introduction to RAIN GARDENS

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What is a

RAIN GARDEN

A rain garden, or bioretention system, is a landscaped, shallow depression that captures, filters, and infiltrates stormwater runoff. The rain garden removes nonpoint source pollutants from stormwater runoff while recharging groundwater. A rain garden serves as a functional system to capture, filter, and infiltrate stormwater runoff at the source while being aesthetically pleasing. Rain gardens are an important tool for communities and neighborhoods to create diverse, attractive landscapes while protecting the health of the natural environment. Rain gardens can also be installed in areas that do not infiltrate by incorporating an underdrain system.

Rain gardens can be implemented throughout communities to begin the process of re-establishing the natural function of the land. Rain gardens offer one of the quickest and easiest methods to reduce runoff and help protect our water resources. Beyond the aesthetic and ecological benefits, rain gardens encourage environmental stewardship and community pride.

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:

- For buildings with a basement, a rain garden should be located a minimum of 10’ from the building; for buildings without a basement, a rain garden should be located at a minimum of 2’ from the building.
- Do not place a rain garden within 25’ of a septic system.
- Do not site a rain garden in soggy places where water already ponds.
- Avoid seasonally high water tables.
- Consider flat areas first for easier digging.
- Avoid placing a rain garden within the dripline of trees.

PREPARE

How big?

The size of your garden will depend upon three 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.

Ready to dig?

- Use rope or a garden hose 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 and level.
- Don’t forget to make an overflow for heavy rain events.

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 the sun/shade exposure of your garden.

Planting pointer!

Dig each hole twice the width of the plant plug. The hole should be deep enough so that the crown of the plant is level with the ground.