

## Maintenance

- ◆ Water - twice a week until established, if no rainfall. Once established, water only during hot, dry spells.
- ◆ Mulch - for water retention and weed suppression.
- ◆ Weed - occasionally in the beginning until plants fill in.
- ◆ Prune - as needed for any dead or diseased plants.
- ◆ Deadhead - Do not deadhead - perennials may enhance the beauty of garden in the winter and provide shelter for wildlife. Cut back in spring.
- ◆ Sediment—check yearly for accumulation and remove if necessary.
- ◆ Fertilize - native plants in the garden will sustain themselves. Non-native ornamentals may require more nutrients.
- ◆ Revegetate - as necessary for thinning or replacing plants.
- ◆ Soil Test - before starting and every 3 to 5 years to ensure good growth.



Have fun, share your plants by dividing and spread the word about rain gardens.

## Conclusion

Clean water for consumption and recreation is vital to our everyday lives.

Rain Gardens can beautify our municipalities, schools and homes while helping to conserve water. Building 40 residential gardens will treat and recharge 1,000,000 gallons of water per year!



The garden after a 2 inch rainfall and before planting. Stormwater percolated into the ground within a few hours, leaving behind sediment & pollutants.

*Thanks to*



**RUTGERS  
MASTER GARDENERS  
MONMOUTH COUNTY**

COASTAL NURSERY  
FREEHOLD SOIL CONSERVATION DISTRICT  
GUARDIAN TREE & TURF, INC.  
PINELANDS NURSERY  
MANASQUAN RIVER WATERSHED ASSOCIATION  
MONMOUTH COUNTY HIGHWAY DEPARTMENT  
MONMOUTH COUNTY SHADE TREE COMMISSION  
OCEAN TOWNSHIP MUNICIPAL RECYCLING DEPARTMENT  
RUTGERS DEPARTMENT OF ENVIRONMENTAL SCIENCES

For more information about Rain Gardens, go to  
[www.njaes.rutgers.edu/pubs](http://www.njaes.rutgers.edu/pubs)  
and get FS513 Rain Gardens

If your organization or club would like to schedule a presentation on rain gardens, contact the Rutgers Master Gardeners—Anita Meeks 732-775-1186

# RUTGERS

New Jersey Agricultural  
Experiment Station

## Rain Garden Demonstration Site Ag Building Freehold, New Jersey



**COOPERATIVE  
EXTENSION OF  
MONMOUTH COUNTY**

4000 Kozloski Road, PO Box 5033  
Freehold, New Jersey 07712  
732-431-7260

## What is a Rain Garden

A rain garden is a landscaped, shallow depression that allows rainwater and snowmelt to be collected and seep naturally into the ground.

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

This stormwater also carries non-point source pollutants such as:

- ◆ Bacteria-pet waste
- ◆ Litter
- ◆ Eroded soil
- ◆ Pesticides
- ◆ Road salt
- ◆ Fertilizers
- ◆ Petrochemicals

These non-point source pollutants wash into streams, lakes and rivers, via the stormdrains. Our parking lot has approximately 150 cars visiting each day. After a rainstorm, petrochemicals on the pavement along with other pollutants ultimately wash down the stormdrain. Our solution was to divert the stormwater by making a cut in the curb. The rocks slow the water velocity, plants filter pollutants and the water percolates into the ground.



The curb was cut so water could flow into the garden instead of the stormdrain.

## Benefits of a Rain Garden

- ◆ Reduces nonpoint source pollution
- ◆ Decreases sediment, flooding & shoreline damage
- ◆ Recharges groundwater
- ◆ Allows 30% more water to soak into the ground
- ◆ Creates habitat for birds, butterflies & beneficials

## Construction of our Garden

1. Calculate the volume of runoff to be treated and recharged into the soil.
2. Garden is sized 50 ft. x 25 ft. x 9 in. deep based on volume and the average NJ rain storm which is 1.25 inches in 2 hours.
3. Next a peanut shape was outlined in desired spot. Plant selection was made and a sketch was drawn.
4. Heavy equipment excavated to a depth of 24 inches. A ditch witch then cut three trenches to ensure good drainage through silty soil.
5. Soil amendments were added in layers—50% sand, 30% compost and 20% native soil.
6. Rip rap boulders were placed on the slope from the curb to the garden to slow the flow of water and to help collect sediment.
7. The base was carefully leveled.
8. A berm was formed to contain stormwater. An erosion mat was put in place for soil stabilization.
9. The plants were arranged, planted, watered and mulched.



Ditch Witch putting in trenches

## Plant Selection

- ◆ Selected wet and dry tolerant plants suitable for the site
- ◆ Incorporated evergreens, deciduous trees or shrubs, and perennials
- ◆ Our garden consists of all native species which:
  - Do not require fertilization
  - Absorb water more efficiently than lawns
  - Easier to maintain
- ◆ Used plants of different heights, shapes & textures
- ◆ Varied the blooming times for seasonal interest



Rutgers Master Gardeners planned, designed, planted and will maintain the garden.