

## What is a Rain Garden?

A rain garden is a shallow depression planted with deep rooted, native perennial plants. Rain gardens are located near sources of stormwater runoff such as roads, driveways, and gutter downspouts. The depression collects storm runoff and allows it to filter slowly into the ground via the deep roots of the native perennial plants. Plants chosen for rain gardens are adapted to both wet and dry conditions.

## Why Plant a Rain Garden?

### Rain Gardens Filter Water Pollution

Water that flows over roads, fields, and lawns during a rainstorm can pick up pollutants such as oil, road salt, pet waste, sediment, fertilizer, pesticides, and other chemicals. Rain gardens filter these pollutants out of the water and break them down. This prevents the pollutants from reaching lakes and streams.

### Rain Gardens Reduce Flood Intensity

Rain gardens capture stormwater and filter it slowly into the ground. Surfaces such as roofs and pavement are impermeable, which means that stormwater cannot pass through them and into the ground. Stormwater instead flows over the top of these surfaces and into ditches, pipes, or culverts, reaching streams and lakes much quicker than water that is allowed to filter into the ground. During a rain storm, a stream in a developed landscape will reach a higher flood level than a similar stream in a forested area.

## Additional Design Resources

Native Plant lists and sources, and additional technical design information for calculating drainage area and rain garden size are available on the Livingston County Planning Department website:

<http://livingstoncounty.us/conesus.htm>

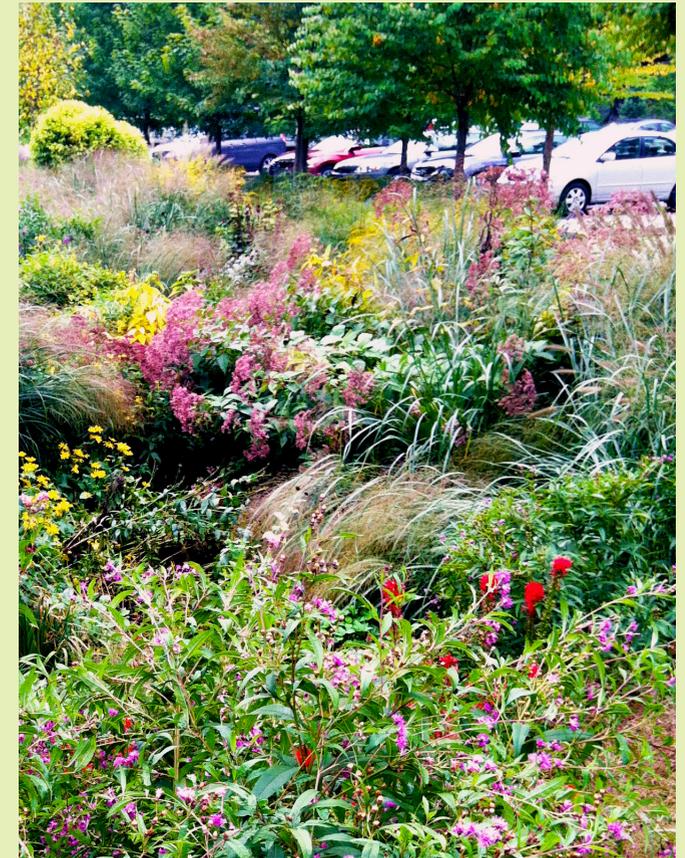
Questions about rain garden function and design may be directed to:

Conesus Lake Watershed Manager  
Livingston County Planning Department  
6 Court Street Room 305  
Geneseo, NY 14454  
(585) 243-7550



*Newly planted rain garden at Long Point Park, Town of Geneseo.*

# Help Protect Water Quality



## With A Rain Garden

- Filter out sediments and pollutants
- Reduce erosion
- Fix flooding and drainage problems
- Reduce the need for expensive stormwater upgrades
- Provide habitat for native birds and butterflies

## Selecting a Site

Rain gardens are positioned to catch water from roofs, driveways, patios, etc. Consider the following guidelines when selecting a site for your garden:

- Track where stormwater flows during a rainstorm. Plant your garden in the path of the stormwater.
- Choose a relatively flat area; a slight slope can also be accommodated.
- Position your garden at least 10 feet away from any building foundations.
- Select a well drained site for the rain garden. Poorly drained sites may store water longer than 48 hours, which can harbor mosquitoes.



*A potential rain garden site near Conesus Lake*

## Determining Garden Size

A typical rain garden will be about 100-300 square feet. Garden size depends on the size of the drainage area, the soil type, and the depth of the garden. A large drainage area will require a larger and/or deeper rain garden. Clay soils will also require more storage volume. Technical resources are available from the Livingston County Planning Department to calculate garden size.

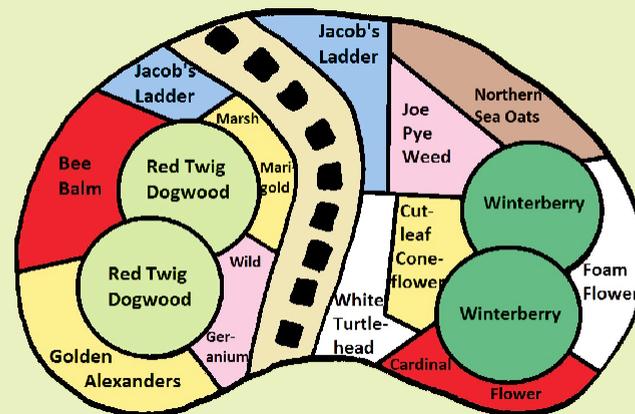
## Choosing Plants

Determine if your garden will be in full sun, partial sun, or partial shade, and choose plants accordingly. Select plants that are adapted to both wet and dry conditions. Between storms, a rain garden can be relatively dry.

Native plants work best for rain gardens due to their long roots and adaptations to local weather patterns, pests, diseases, and low maintenance after initial planting. Using native plants...

- Provides food and habitat for native birds, insects and other wildlife.
- Requires less fertilizers, pesticides, and maintenance than non-native species.
- Filters stormwater deep into the ground via long roots unlike the shorter roots of lawn species and nonnative ornamentals.
- Prevents the spread of invasive species. Invasives such as purple loosestrife, giant hogweed, and oriental bittersweet were originally introduced as non-native landscaping plants.

Lists and local sources of native rain garden plants are available from the Livingston County Planning Department.



*The design for the rain garden at Long Point Park, Town of Geneseo, features native plants selected for partial shade conditions.*

## Selected Rain Garden Plants Native to Livingston County

New England Aster



PA DCNR, bugwood.org

Winterberry



Rob Routledge, bugwood.org

Red Osier Dogwood



Rob Routledge, bugwood.org

Black-eyed Susan



Chris Evans, bugwood.org

Bee Balm



Jerry A. Payne, bugwood.org

Jacob's Ladder



Chris Evans, bugwood.org

Marsh Marigold



R. W. Smith, bugwood.org

Purple Coneflower



Karan A. Rawlins, bugwood.org