CREATE A RAIN GARDEN

What is a Rain Garden?

A designed, shallow depression area planted with attractive perennial native plants that captures runoff from household surfaces such as roofs, driveways, and lawns, and allows it to seep slowly into the ground instead of running off into the storm drain all at once. Rain gardens are planted with native plants that are adapted to wet conditions and don't mind getting their feet wet!

Why Install a Rain Garden?

- A rain garden allows **30% more water** to infiltrate the ground than a conventional lawn, and help replenish the groundwater supply.
- During a rain storm, rain gardens temporarily hold water before it is released or absorbed into the soil, and help **filter out many common pollutants** like sediment, oil, grease, and nutrients.
- Rain gardens **provide habitat** for birds and butterflies.
- Rain gardens are **easy** to design, install, and maintain!
- Rain gardens are an **attractive** addition to your home's landscaping!

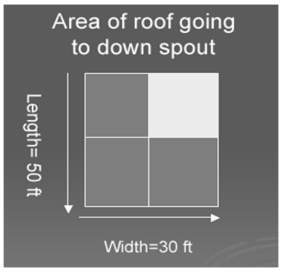
Planning Your Rain Garden

1. Find a Location

- Place the garden at least 10 feet away from your home to prevent flooding in your house.
- Select a location with minimal slope (<5% slope).
- Do not locate the garden over a septic field.
- You should try to choose a naturally occurring low spot in your yard or position the garden where your downspouts or sump pump outlet can be used to direct rainwater into your garden.
- Try to choose a location in either full or partial sun.
- Select a site that will not interfere with the root systems of existing trees and large vegetation.

2. Measure Drainage Area & Analyze Soil

- Calculate the area draining to your rain garden:
  Area of rooftop= Length x Width
  Example: Area= 50 ft x 30 ft = 1500 sq ft
  25% of rooftop drains to downspout
  1500 sq ft x 25% = **375 sq ft**



Type of Soil	3 to 5 Inches Deep	6 to 7 Inches Deep	8 Inches Deep
Sandy	0.19	0.15	0.08
Silty	0.34	0.25	0.16
Clayey	0.43	0.32	0.20

- To determine the appropriate size of your rain garden, you must find out the **type of soil** in your yard. Then refer to the chart above to find the multiplier to apply to the drainage area you calculated. For example, a rain garden placed in silty soil, and dug to a depth of 6 to 7 inches will use the 0.25 multiplier. So the rain garden size would be:

  375 sq ft x 0.25 = 93.75, or approximately **100 sq ft**

- Slopes and soil types will impact the size and shape of your rain garden. Refer to information at www.raingardens.org or in the **Rain Garden Manual for Homeowners**, available from numerous online sources.

3. Create a Design

Whether your garden is large or small the same basic principles apply. By planning your garden on paper first, you will be able to create the best appearance possible for your rain garden. If you need ideas, many design templates are available at www.raingardens.org.

4. Choose Your Plants

- **Native plant species** are suggested for rain garden installations because they are best adapted for our climate.
- Avoid use of non-native or invasive plant species.
- You will want to choose plants that will grow well in both wet and dry areas because the rain garden will temporarily fill with rainwater from time to time.
- Choose a few species of plants and group them together for maximum effect.
- As a general rule, you'll need one plant every two feet.
- Incorporate mix of sedges, rushes, grasses and ferns with your flowering species (differing root depths and levels of infiltration).

5. Lay Out the Garden

- Lay out the shape and boundary of the garden with string based on your design.
- Before you start digging contact your local organization (O.U.P.S.) that locates underground utilities.

6. Dig Out Your Garden

- Remove the turf grass and dig your garden to appropriate depth according to your calculations.
- Use the soil to build a berm around the lower (downslope) edges if necessary due to the slope of the ground.
- Amend the soil with 2"-3" of compost if necessary. Mix in well.

7. Install the Native Plants You Selected

- Follow the design you created and place your plants in the approximate locations. Step back and look at the garden and the design. Once you are satisfied you can start planting the flowers and grasses using a hand trowel.
- Use a weed barrier if desired.

8. Add Mulch

- Use coarse, fibrous, shredded woodchips that won't float or blow away.
- Apply the mulch about 2-3 inches deep. This will help to keep the moisture in and the weeds out.

9. Water and Arrange Downspouts

- After you've planted the garden, water every other day for 2 weeks if it doesn't rain or until the garden looks to be growing on its own.
- Make sure water exiting from downspouts can make it to the rain garden (use spreaders, pipes, or dig a shallow swale if needed).
- A good water supply and proper maintenance are the keys to a successful rain garden!

Handout Provided By:

AWARE
Alliance for Watershed Action and Resource Education

For More Information Contact:
Mill Creek MetroParks (330) 702-3000
Mahoning Soil & Water Conservation District
(330) 740-7995

For More detailed information about Rain Gardens, including design templates and suggested native plant lists, you can visit

www.raingardens.org

OR download the

RAIN GARDEN MANUAL FOR HOMEOWNERS

from various online sources, including:

http://www.starkswcd.org/articles/NEOHIO_RAINGARDEN_MANUAL.pdf