



UNIVERSITY OF
MARYLAND



COLLEGE OF
AGRICULTURE &
NATURAL RESOURCES



UNIVERSITY OF
MARYLAND
EXTENSION



UNIVERSITY OF
MARYLAND
EXTENSION

MASTER
GARDENER 



RAIN GARDENS:
PART 1: INTRODUCTION

Do I Want a Rain Garden?



A RAIN GARDEN

- Is a landscaped depression
- Stores rain water for a brief period of time
- Uses native plants to aid in absorption


Rain garden with perennials only





Why do I want a rain garden?

- To help keep storm water on my property.
- To reduce flooding and drainage problems such as erosion.
- To protect streams from pollutants carried by storm water.



Other reasons to have a rain garden

- To increase the amount of water that filters into the ground.
- To enhance your yard's beauty.
- To provide habitat for birds, butterflies and beneficial insects.
- To receive a reduction in my storm water assessment.



How does a rain garden work?

- Rain gardens collect runoff from impervious surfaces.
- The soil and plants filter the runoff.
- Native plants and microorganisms in the soil remove the pollutants.



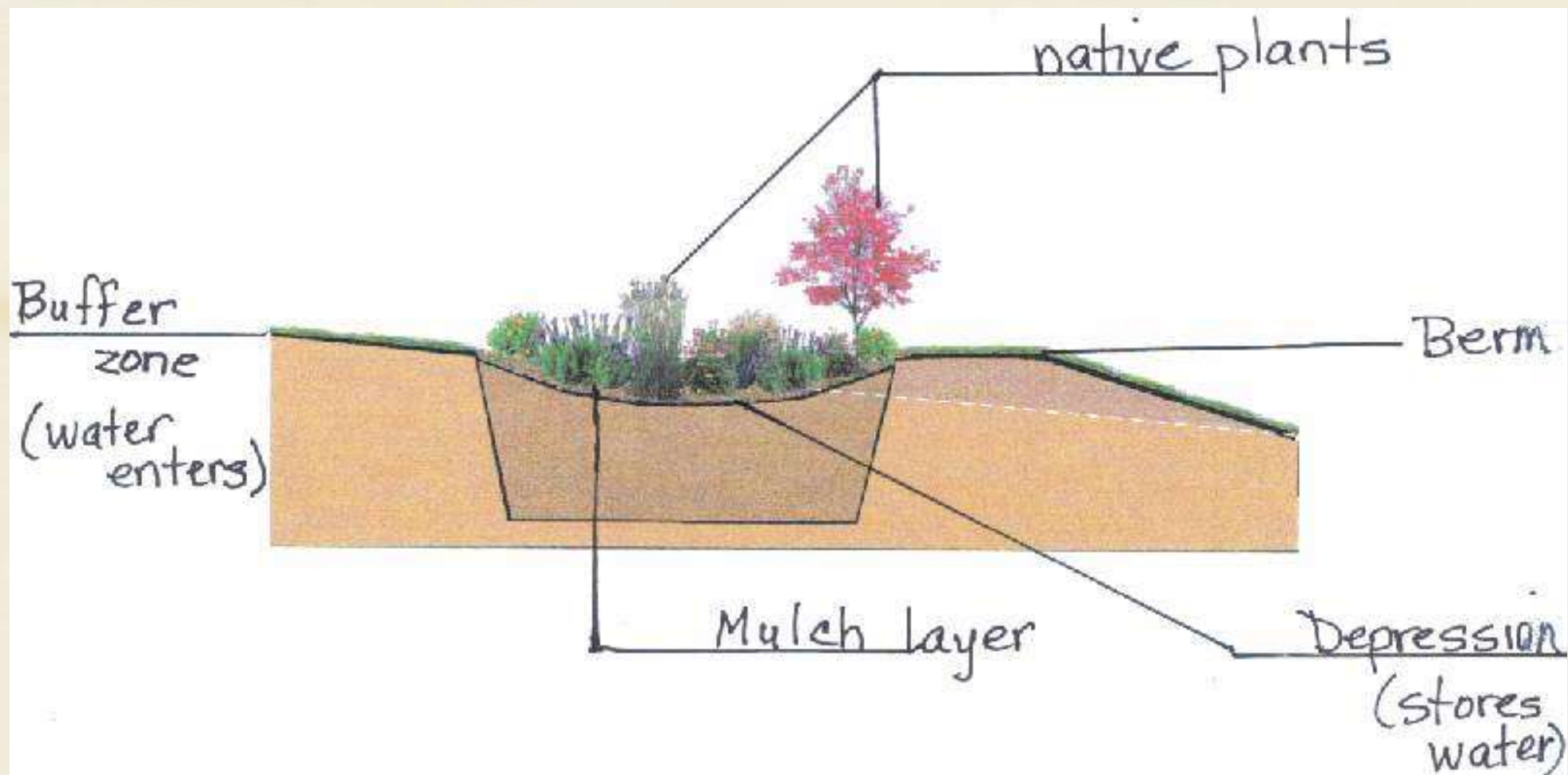
Rain garden with mature trees and bushes





Features of the rain garden

- A **buffer zone** around the garden slows the flow of water.
- A **mulch layer** is home for microorganisms and keeps soil moist.
- **Native plants** are used to best absorb water and nutrients.
- A **depression** stores the runoff.
- A **berm** is the dam that helps pond the water.





How will the garden be created?

- A hole will be dug to the needed depth.
- Amended soil will be added.
- A berm will be formed on 3 sides of the garden.
It will be highest at the downhill side.
- The center will be a flat, level depression.
- The water will be directed into the garden.

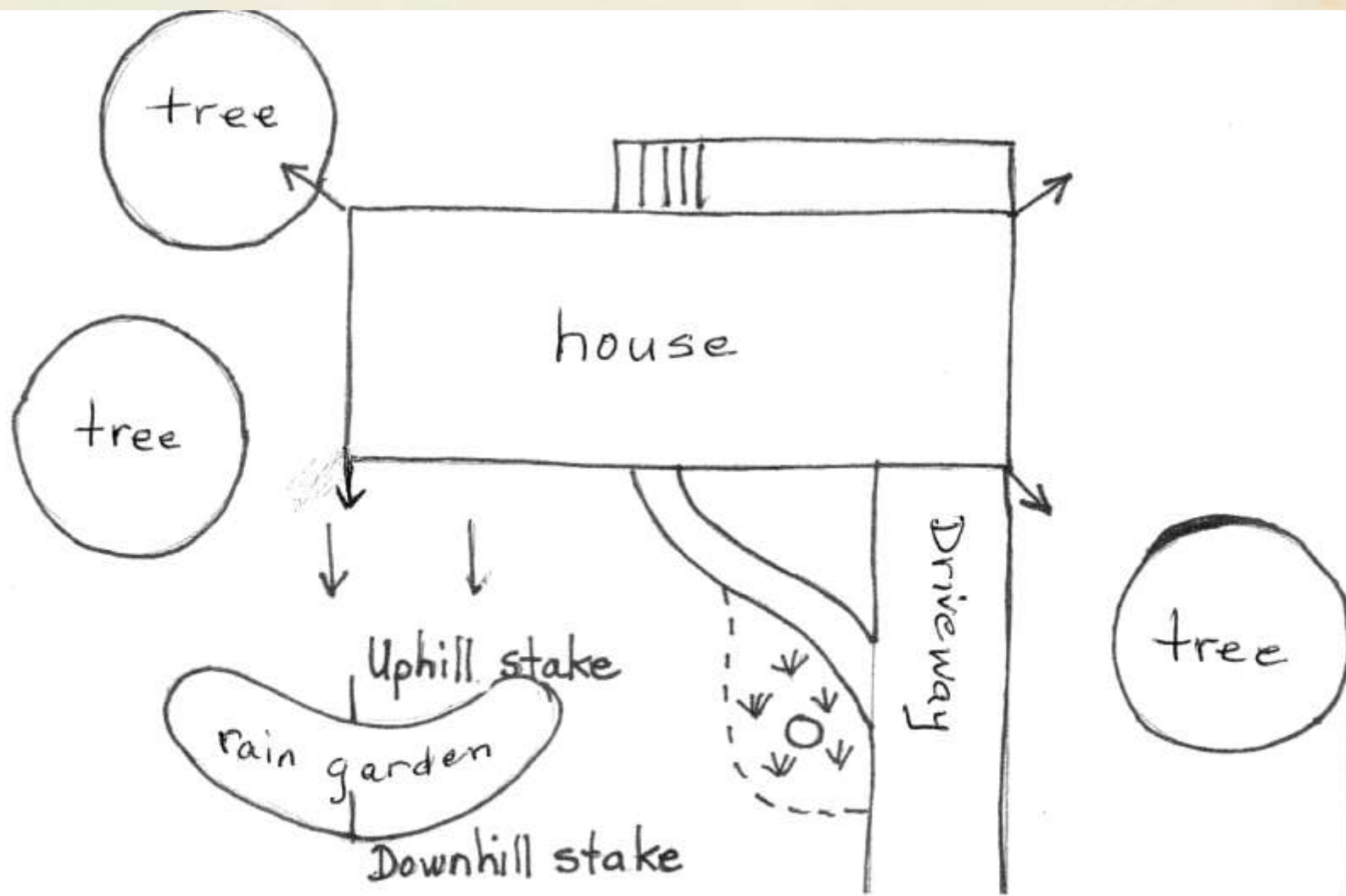
Note the downspout and the berm





Where should I put the garden?

- Make a drawing of your property.
- Note where the water flows on it during a rain storm.
- Indicate high and low elevations.
- Note all buildings and impervious areas.
- Integrate present landscapes.






Placement guidelines

- Put it outside the drip line of any tree.
- Place it at least 10 feet from the house.
- Place it upslope from an area where water ponds.
- Don't locate it over a septic system or well.
- Locate it on a fairly flat area (no more than 12% slope).
- Place it in full or partial sun.

Rain comes from lower left, moves through curb cut & slowed by rock.





What size will my garden be?

- The typical size is 100-300 sq. feet.
- Size depends on:
 - Depth (usually 18-36 inches deep)
 - Soil type
 - Area drained (roof and lawn)



What will the garden look like?

- It should be wide enough to spread water evenly over the area.
- It should have a wide variety of native plants.
- It should have an aesthetic appearance.

Building the rain garden

- Call Miss Utility before you dig.
- 410-712-0056

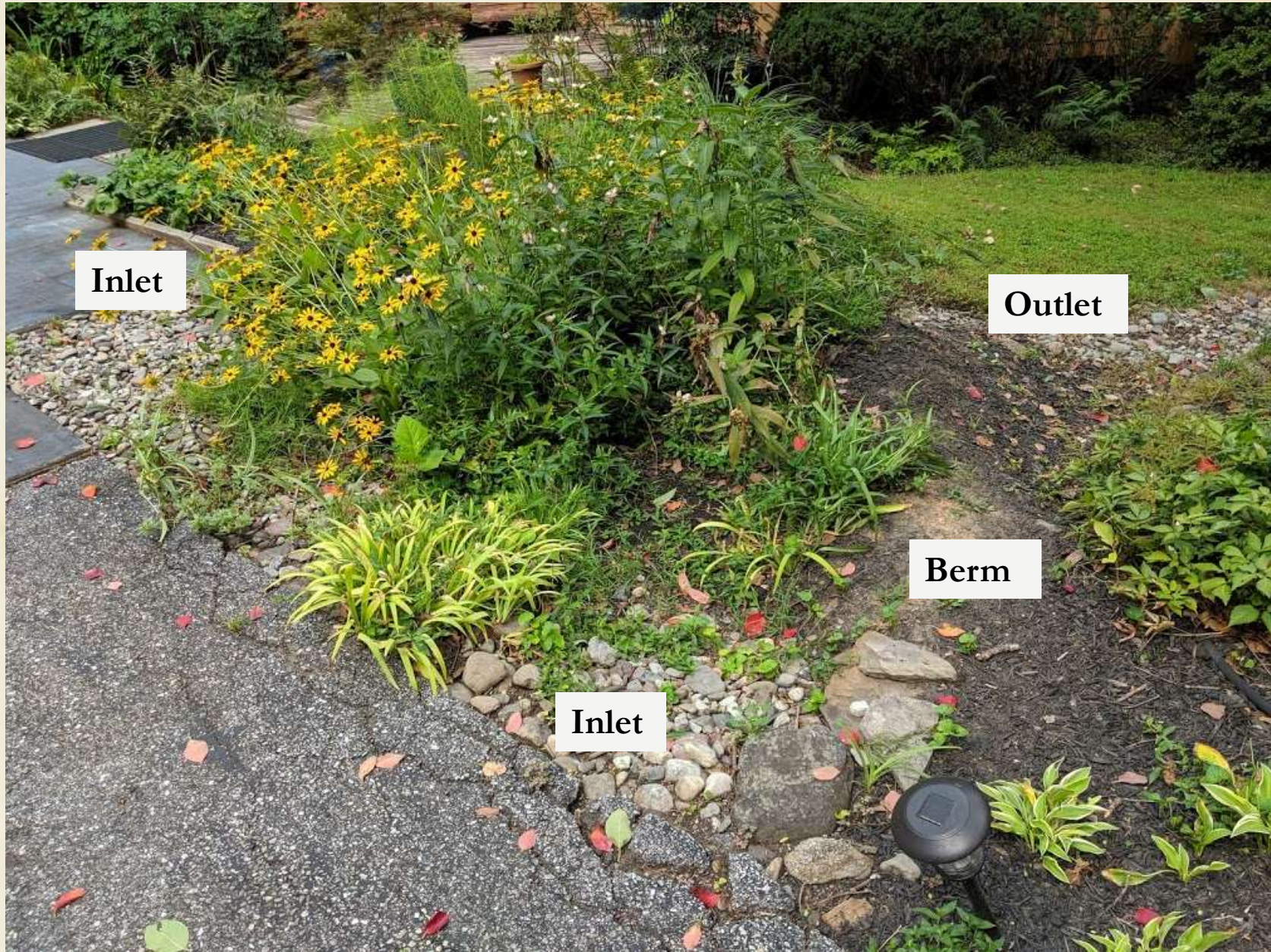




Plant location

The plants are placed in areas dependent on their moisture requirements.

- Central plants are wet-loving.
- Middle area plants require average moisture.
- Upper rim plants are dry-loving.





Selection of plants

- Working with Master Gardeners or Columbia Association personnel, you will choose a template of native plants for the design.
- Consider height, bloom time, color and texture.
- Incorporate sedges, rushes, and grasses with flowering species.



Why native plants

- They are best adapted to local climate.
- Many are deep rooted and drought resistant. They reduce erosion.
- They are attractive to a diverse group of pollinators.
- They provide habitat, food, protection, and a place to raise young for native wildlife.



You will need to do some maintenance.

- Water 1 inch per week when nature does not do it for you.
- Weed for the first two years or until plants are well established.
- After each growing season leave seedheads and stems to encourage wildlife.



Resources

Native Plants for Wildlife Habitat and Conservation Landscaping, U.S. Fish and Wildlife Service.

Native Plants of Maryland: What, when and where.
Maryland Cooperative Extension.

Rain Gardens Across Maryland; www.co.worcester.md.us

UNIVERSITY OF
MARYLAND
EXTENSION

MASTER
GARDENER 

This program was brought to you by
University of Maryland Extension
Master Gardener Program
Howard County

The University of Maryland Extension programs are open to any person and will not discriminate against anyone because of race, age, sex, color, sexual orientation, physical or mental disability, religion, ancestry, national origin, marital status, genetic information, political affiliation, and gender identity or expression.