Designing Your Conservation Landscape

Presentation by Rebecca Wolf & Nguyen Le, Interstate Commission on the Potomac River Basin

With Inputs from Kari Rowe, ESOL Teacher, Northwestern High School, Adelphi, Maryland, and Hester Burch, Master Naturalist, St. Mary's County, Maryland

Part 1: Getting Design Ideas for Your Conservation Landscape

- Garden design starts with your imagination and by observing landscapes, gardens, and plants you like. Get ideas by looking around parks, your neighborhood, or at pictures.
- If you see something you like, think about what aspects you like:
  - The shape?
  - The colors?
  - The natural look?
  - The formal look?
  - What combination and placement of plants appeals to you?

What is a Design?

- A design shows the shape of your conservation landscape and the placement of plants, trees, and shrubs.

- Designs are done on grid paper in *plan* view (as seen from above).

- This enables you to
  - plan the garden dimensions
  - pick the right number of plants
  - space the plants correctly.
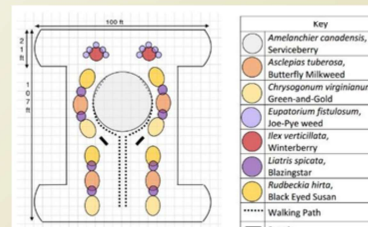
Student Design, Academy of Health Sciences

Basic Design Concepts

- Use **a mix of short, medium, and tall plants** -- short ones in the front, tall ones in back.
- Select plants that **bloom or produce berries during different months** and while students are in school.
- **Large groups** of flowers are more dramatic than many small groups.
- **Odd numbers** are artistically appealing. Consider placing 3, 5, or 7 plants together.
- Trees or shrubs can be **focal points or backdrops**, depending upon the site.

- **Clearly defined borders** of a garden can tie an informal garden together.
- **Curved borders** feel more natural to the viewer.
- **Repetition of flowers or colors** keeps the eye moving and keeps the garden from being too busy.
- **Points of focus,** such as special trees, bird baths, or benches, make a garden inviting.

See if you can spot some of these design concepts in the following landscapes.

Defining the edges:
tying different plants together.

What other design concepts are evident in this newly planted landscape?

Photo from Montgomery County Department of Environmental Protection's Rainscape site, Conservation Landscaping presentation.
Similar plants are grouped together. Most are in odd-numbered groupings – 7, 3.
The taller bushes are placed in the back.

A Shady Lawn Before and After

- What design guidelines are at play in the new conservation landscape on the right?
- How does it reduce water pollution?

Photos from Montgomery County Department of Environmental Protection's Rainscape site, Conservation Landscaping presentation.
Plants are in mass groups. Plants that are in the foreground are repeated in the background, bringing unity to the landscape. Several plants bloom at different times of the year.

Re-Naturalizing Areas

Columbine, cinnamon stick fern. On the right, these ferns cover a steep hill, protecting it from erosion. Such a mass planting is easy to maintain, as long as the site conditions are correct for the plant's needs.
Photo: Rebecca Wolf
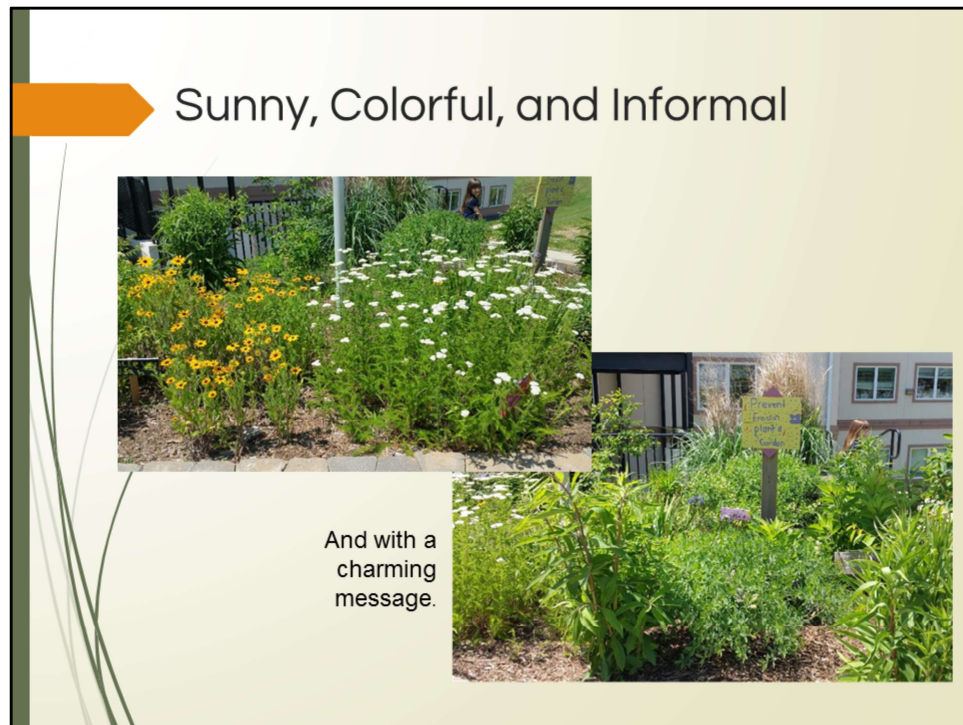
Black-eyed Susans and Wild Carrot. Chesapeake Charter School. These plants were spaced far enough apart for children to go into the garden and play or take care of the garden.
Photos: Rebecca Wolf

Shady Gardens that Imitate Woodlands
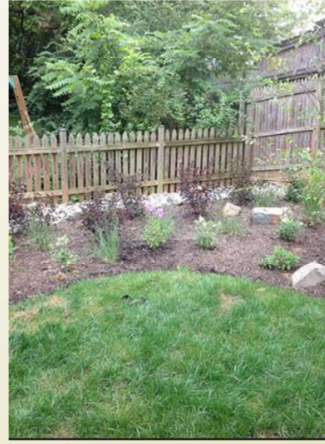
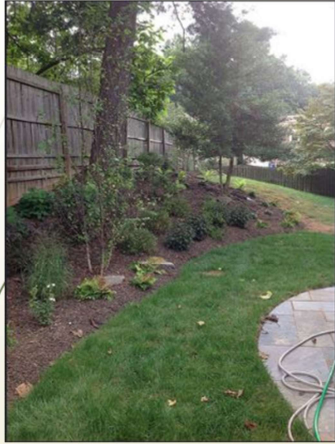How do the shrubs help define this garden?

Left: Michigan rest area created by master gardeners, using woodland plants. Right: Hellebore, a late winter plant, also known as Lenton Rose.
Photos: Rebecca Wolf

Informal, slightly curved outline is conducive to the natural setting. Shorter plantings have trees and shrubs as a backdrop.

Border Gardens With Purposes

Why might these homeowners have put these gardens in these areas?
How would straight and angular borders change the feel of the gardens?

Photos from Montgomery County Department of Environmental Protection's Rainscape site, Conservation Landscaping presentation.
The gardens soften the edges, creating a natural border. The gardens are placed on slope to reduce runoff. They also reduce moving and trimming along the fence edge.

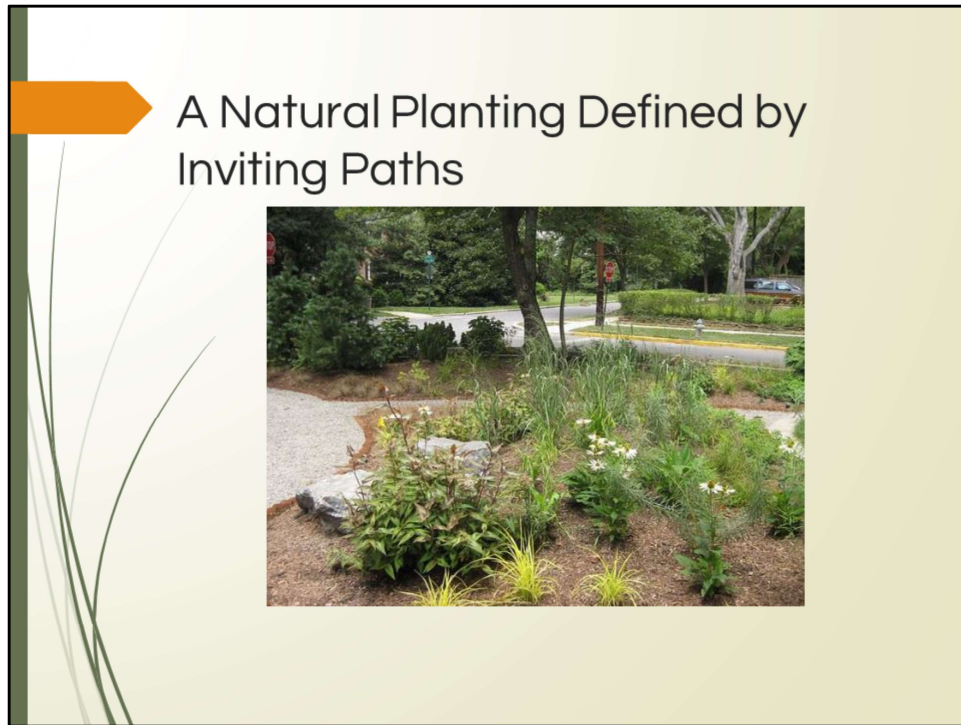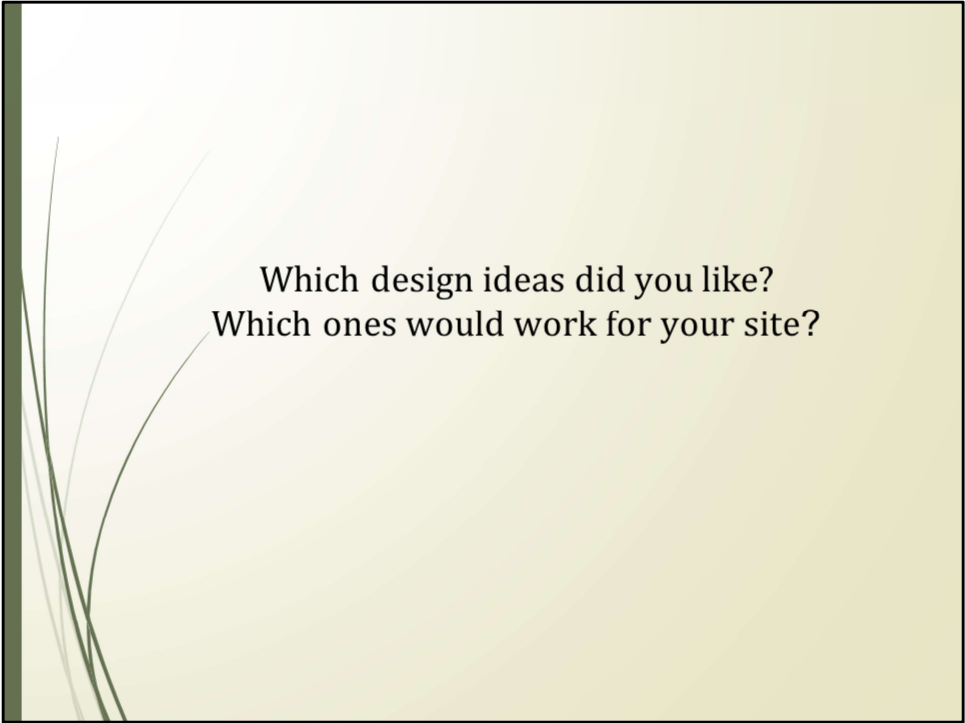A Natural Planting Defined by Inviting Paths

Photo from Montgomery County Department of Environmental Protection's Rainscape site, Conservation Landscaping presentation.

Which design ideas did you like?
Which ones would work for your site?

Start shaping your ideas with the garden shape.

Go to your site with a hose or rope and experiment with simple shapes, such as a circle, an oval, a bean shape, or a curved border.

- Which shape best fits your area?
- Which one unites different parts of the landscape (like the two trees in the pictures)?

Part 2: Putting the Design on Paper

Sketch ideas for your garden. Then convert these ideas to the PLAN view (as seen from above). Here is one method.

- Draw the shape of your garden on graph paper. It needs to represent the size of your garden.
  - You will be drawing "to scale." More on this later.
- Make paper symbols to represent the selected plants. The symbols will represent the plant size at full growth.
  - The paper symbols can be arranged and rearranged until you like what you see.
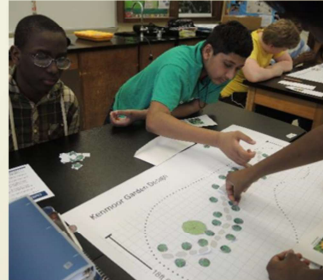
The paper shapes should represent the size of the plant at full grown
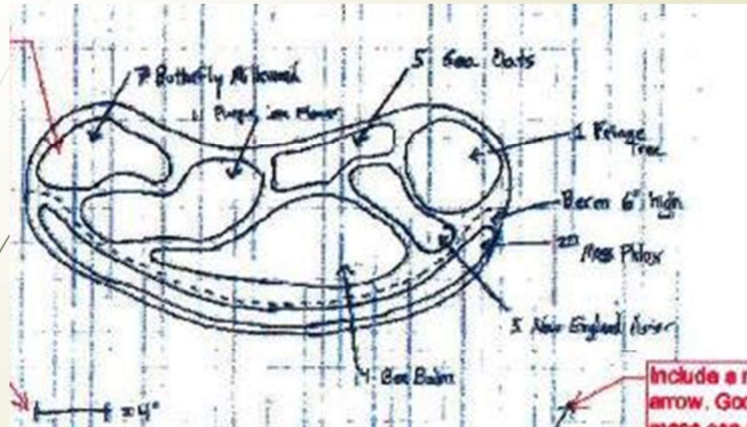
Or Use the Bubble Method

- The "bubbles" represent plants, as seen in *plan view.*
- The size of the bubble represents the plant's width at maturity. A plant that is 4 feet wide at maturity, will be placed at the center of a bubble that represents four feet.
- The dot in the center is where the plant is placed.
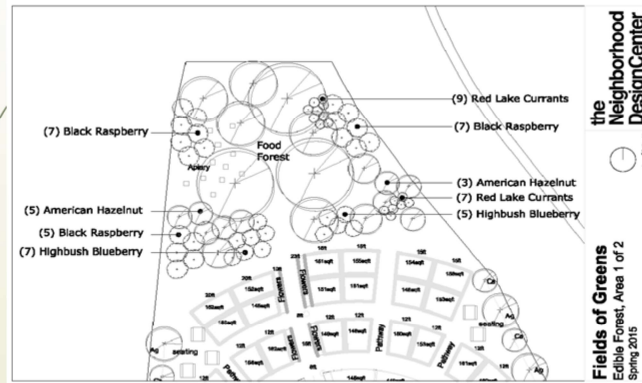
Some circles may overlap if a plant is under a tree or a shrub.

Drawing taken from Rainscape class materials, Montgomery County Department of the Environment.

Drawing taken from Rainscape class materials, Montgomery County Department of the Environment.

How To Size the Plants on the Designs

Draw trees and shrubs at their mature size.

- Trees often grow as wide as they grow tall. One that will be 30 feet tall will also be 30 feet wide.
  - If drawing a "bubble," the circle will represent 30 feet.
  - The tree will be planted in the center of the circle, 30 feet away from the center of the next tree.

Rule of thumb for smaller plants:

- Plants that are shorter than 2.5 feet tall at full growth should be planted 1 foot apart (from center to center).
- Taller flowers should be given 18 inches of room.

Planting plans show plant width as O.C., meaning on center. Thus, trees with a width of 30 O.C. are planted 30 feet apart center to center.

Information to Include on Your Designs

- Title, Names
- Compass showing north
- Scale (for example, 1 square = 5 feet)
- Key giving names and numbers of plants
- A reference building
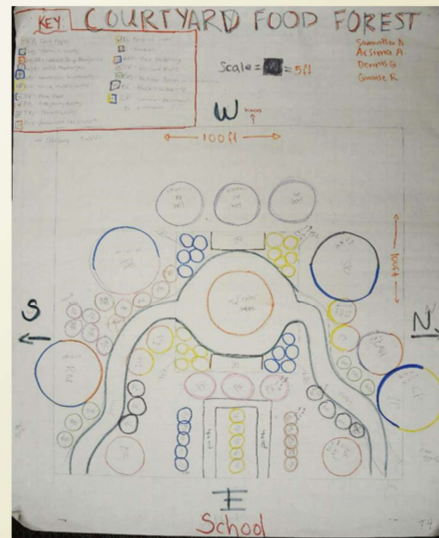
Drawing finished using Microsoft word.

Parkdale High School

Original Design by Samantha N., Arsima A., Dennis Q., Quaise R., Environmental Science Students, Edited by Rebecca Wolf and Nguyen Le ICPRB

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Scale: 1 Square = 5 feet   Planting Area: 235 ft. x 60 ft.

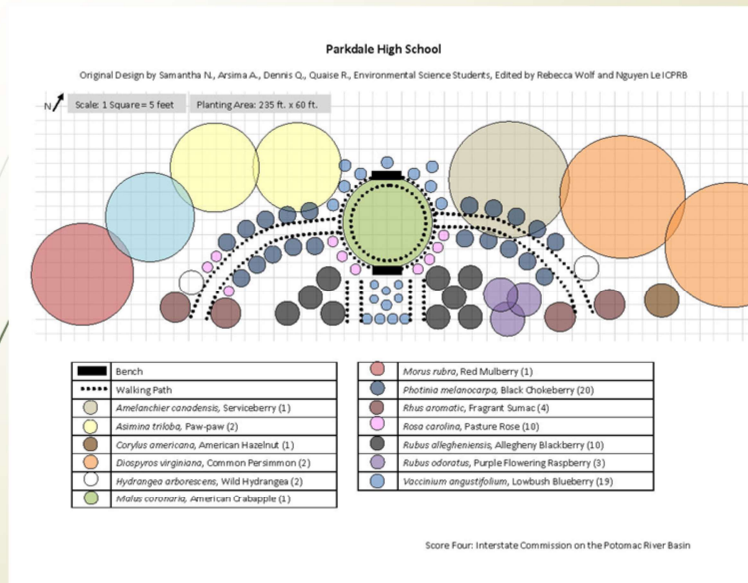|	
▬ Bench	
····· Walking Path	
Amelanchier canadensis, Serviceberry (1)	*Morus rubra,* Red Mulberry (1)
Asimina triloba, Paw-paw (2)	*Photinia melanocarpa,* Black Chokeberry (20)
Corylus americana, American Hazelnut (1)	*Rhus aromatic,* Fragrant Sumac (4)
Diospyros virginiana, Common Persimmon (2)	*Rosa carolina,* Pasture Rose (10)
Hydrangea arborescens, Wild Hydrangea (2)	*Rubus allegheniensis,* Allegheny Blackberry (10)
Malus coronaria, American Crabapple (1)	*Rubus odoratus,* Purple Flowering Raspberry (3)
	Vaccinium angustifolium, Lowbush Blueberry (19)

Score Four: Interstate Commission on the Potomac River Basin

Drawing done on graph paper.

MOST IMPORTANTLY: Have fun and trust your creative spirit.

A homeowners garden that is sure to invite butterflies and bees.
Photo: Rebecca Wolf

Resources and credits:

Montgomery County Rainscapes Program Conservation Landscaping
- project manual: https://www.montgomerycountymd.gov/DEP/Resources/Files/PostersPamphlets/Conservation-Landscaping-Techniques.pdf
  Helpful information on garden preparation and relationship to stormwater runoff.

Alliance for the Chesapeake Bay
BayScape Templates & Plant List (PDF)
http://www.stormwater.allianceforthebay.org/wp-content/uploads/2015/09/bayscape-templates-and-plant-lists.pdf
  EXCELLENT garden designs and plant info.

Chesapeake Conservation Landscaping Council
http://www.chesapeakelandscape.org/