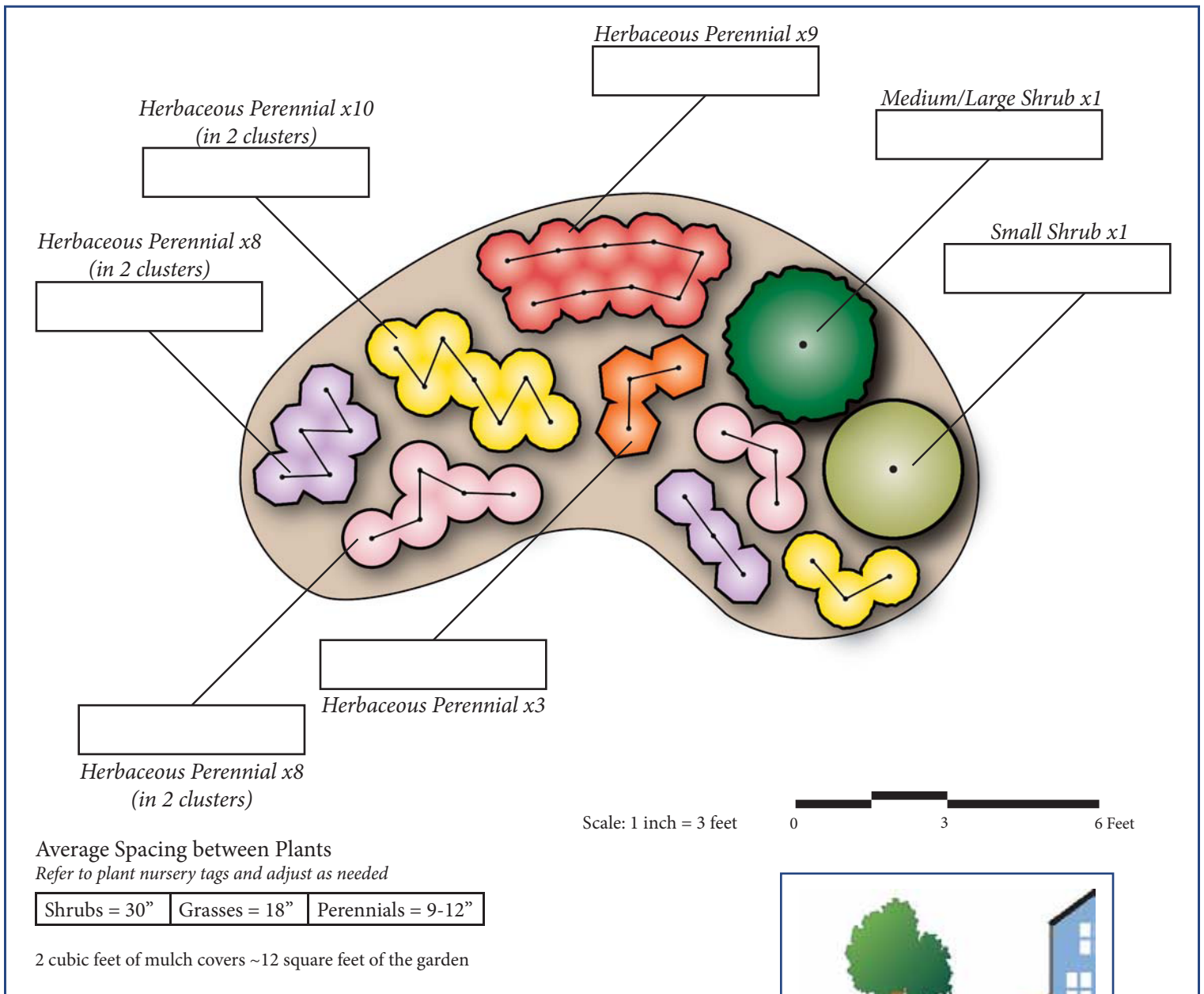


## Butterfly Garden – 90 square feet

*Shady, moderately drained soils*

(contained in 14.5 x 9 foot area)



## Number of plants

Herbaceous perennial type 1: 10 plants

Herbaceous perennial type 2: 9 plants

Herbaceous perennial type 3: 8 plants

Herbaceous perennial type 4: 8 plants

Herbaceous perennial type 5: 3 plants

Medium/Large Shrub: 1 plant

Small Shrub: 1 plant

## Recommended plant options for Anne Arundel County, MD and surrounding areas

These plants are native, and typically successful in the climate zone for Anne Arundel County. For more information about these plants, and for additional plant options, the [Ladybird Johnson native plant database](#) is recommended.

(Note: for shady conditions, ferns can function in place of a grass/sedge/rush or an herbaceous perennial.)

Plant Type	Plant Latin Name	Plant Common Name	Planting Condition	Maintenance Type	Spacing
Fern	<i>Dryopteris intermedia</i>	Evergreen Wooded Fern	Shady/Medium	Low	18" apart
Fern	<i>Osmunda regalis</i>	Royal Fern	Shady/Medium	Low	18" apart
Fern	<i>Polystichum aristichoides</i>	Christmas Fern	Shady/Medium	Low	18" apart
Grass/Sedge/Rush	<i>Acorus calamus</i>	Sweet Flag	Shady/Medium	Minimal	18" apart
Grass/Sedge/Rush	<i>Acorus gramineus</i> 'Minimus Aureus'	Dwarf Golden Variegated Sweet Flag	Shady/Medium	Minimal	18" apart
Grass/Sedge/Rush	<i>Carex glauca</i> 'Blue Zinger'	Blue Zinger Sedge	Shady/Medium	Minimal	18" apart
Grass/Sedge/Rush	<i>Carex pensylvanica</i>	Pennsylvania Sedge	Shady/Medium	Minimal	12" apart
Grass/Sedge/Rush	<i>Chasmanthium latifolium</i>	Northern Sea Oats	Shady/Medium	Minimal	30" apart
Herbaceous Perennial	<i>Chelone glabra</i>	Turtlehead	Shady/Medium	Minimal	18" apart
Herbaceous Perennial	<i>Chrysogonum virginianum</i>	Green and Gold	Shady/Medium	Minimal	18" apart
Herbaceous Perennial	<i>Iris cristata</i>	Dwarf Crested Iris	Shady/Medium	Minimal	18" apart
Herbaceous Perennial	<i>Lobelia cardinalis</i>	Cardinal Flower	Shady/Medium	Minimal	18" apart
Herbaceous Perennial	<i>Lobelia siphilitica</i>	Great Blue Lobelia	Shady/Medium	Minimal	18" apart
Herbaceous Perennial	<i>Sedum ternatum</i>	Woodland Stonecrop	Shady/Medium	Low	18" apart
Herbaceous Perennial	<i>Senecio aureus</i>	Golden Ragwort	Shady/Medium	Minimal	18" apart
Herbaceous Perennial	<i>Tiarella</i> 'Octoraro'	Octoraro Foam Flower	Shady/Medium	Low	18" apart
Herbaceous Perennial	<i>Viola pedata</i>	Birdsfoot Violet	Shady/Medium	Minimal	18" apart
Shrub	<i>Calycanthus florida</i>	Sweetshrub	Shady/Medium	Minimal	48" apart
Shrub	<i>Clethra alnifolia</i>	Sweet Pepper Bush	Shady/Medium	Minimal	48" apart
Shrub	<i>Cornus sericea</i>	Red Twig Dogwood	Shady/Medium	Minimal	48" apart



Plant Type	Plant Latin Name	Plant Common Name	Planting Condition	Maintenance Type	Spacing
Shrub	Gaylussacia baccata	Black Huckleberry	Shady/Medium	Minimal	36" apart
Shrub	Ilex glabra	Inkberry	Shady/Medium	Minimal	36" apart
Shrub	Lindera benzoin	Spicebush	Shady/Medium	Minimal	48" apart
Shrub	Myrica pensylvanica	Northern Bayberry	Shady/Medium	Minimal	48" apart
Tree	Acer rubrum	Red Maple	Shady/Medium	Minimal	60" + apart
Tree	Asimina triloba	Paw Paw	Shady/Medium	Minimal	60" + apart
Tree	Chionanthus virginicus	Fringe Tree	Shady/Medium	Minimal	60" + apart
Tree	Ilex opaca	American Holly	Shady/Medium	Minimal	60" + apart
Tree	Magnolia virginiana	Sweet Bay Magnolia	Shady/Medium	Minimal	60" + apart
Tree	Quercus pinus	Rock Oak	Shady/Medium	Minimal	60" + apart

## Materials Needed

**Mulch:** 23 cubic feet (0.8 cubic yards) – this assumes 3" of mulch cover

**Compost:** 15 cubic feet (0.6 cubic yards) – this assumes the top 6" of soil is being amended with compost

**Soil media:** 90 cubic feet (3.3 cubic yards) – this is only required if replacing soil

**Soil removal:** 38 cubic feet (1.4 cubic yards) if amending soil, 113 cubic feet (4.2 cubic yards) if replacing soil

The plants recommended above are reliable, hardy, area-appropriate plants for central and eastern Maryland and the surrounding areas. However, many other options are available. Other references for appropriate plants include the [Maryland Stormwater Design Manual, Appendix A](#), the [Ladybird Johnson native plant database](#), and the [Piedmont Natives plant database](#).

There are alternative layouts possible with the same general character and plant makeup. [Click here for alternative layouts](#).

Also, if you use a custom size practice, by area or depth, the material quantities change. Use the following calculator to give you a more accurate set of material quantities. It will also calculate the amount of pollutant removal, which may be of interest. Note: this pollutant removal is not yet approved by the Chesapeake Bay Program, but is based on other Bay Program protocols for runoff reduction.

[Conservation Landscape calculator](#)

## Installation Steps

(For more detail on these steps, please see the Conservation Landscape chapter of the WSA Manual.)

1. Call Miss Utility to mark any existing utilities
  - a. (800) 257-7777 or 811 for most of Maryland, and Washington, DC
  - b. (800) 441-8355 for Eastern Shore Maryland
  - c. (800) 282-8555 for Delaware
2. Outline the area for the conservation landscape
3. Remove the turf grass
4. If amending existing soil:
  - a. Remove excess soil
  - b. Add compost
  - c. Till soil to work compost in
5. If replacing soil:
  - a. Remove existing soil
  - b. Replace with new soil mixture
6. Install stone inlet channel (if receiving water from uphill)
7. Install plants and mulch
8. Water!

## Maintenance Plan

### Recommended Maintenance Tasks for Conservation Landscapes

Maintenance Tasks	Frequency
<ul style="list-style-type: none"> <li>Water once every three days for the first month and then weekly during the first growing season (April-October), depending on rainfall.</li> <li>Expect up to 10% of the plant stock to NOT do well in the first year, and plan accordingly for replacement plants.</li> </ul>	Upon establishment
<ul style="list-style-type: none"> <li>Check inlets and overflow areas for debris or leaves that are blocking flow.</li> <li>Check and repair erosion areas.</li> </ul>	After heavy rains in 1 <sup>st</sup> month; periodically in subsequent years
<ul style="list-style-type: none"> <li>Remove weeds by hand.</li> </ul>	Monthly for first growing season; every 3 months in subsequent years
<ul style="list-style-type: none"> <li>For “meadow” type Conservation Landscapes consisting of grasses, mow in early spring.</li> <li>For other types of landscapes, check for winter damage and add mulch to bare spots as desired (2–3 inches)</li> <li>Cut back perennials and remove dead growth</li> </ul>	March or April
<ul style="list-style-type: none"> <li>Add reinforcement planting to maintain the desired vegetation density.</li> <li>Prune trees and shrubs; thin herbaceous plants as desired.</li> </ul>	Fall
<ul style="list-style-type: none"> <li>Remove invasive and non-native plants using recommended control methods.</li> <li>Remove any dead or diseased plants.</li> <li>Stabilize any eroded or bare areas</li> <li>Remove trash</li> </ul>	As needed

## Additional References

[WSA Rainscaping Manual](#)

[RainScapes Program \(Montgomery County, MD\)](#)

[U.S. Fish & Wildlife Service - BayScapes](#)