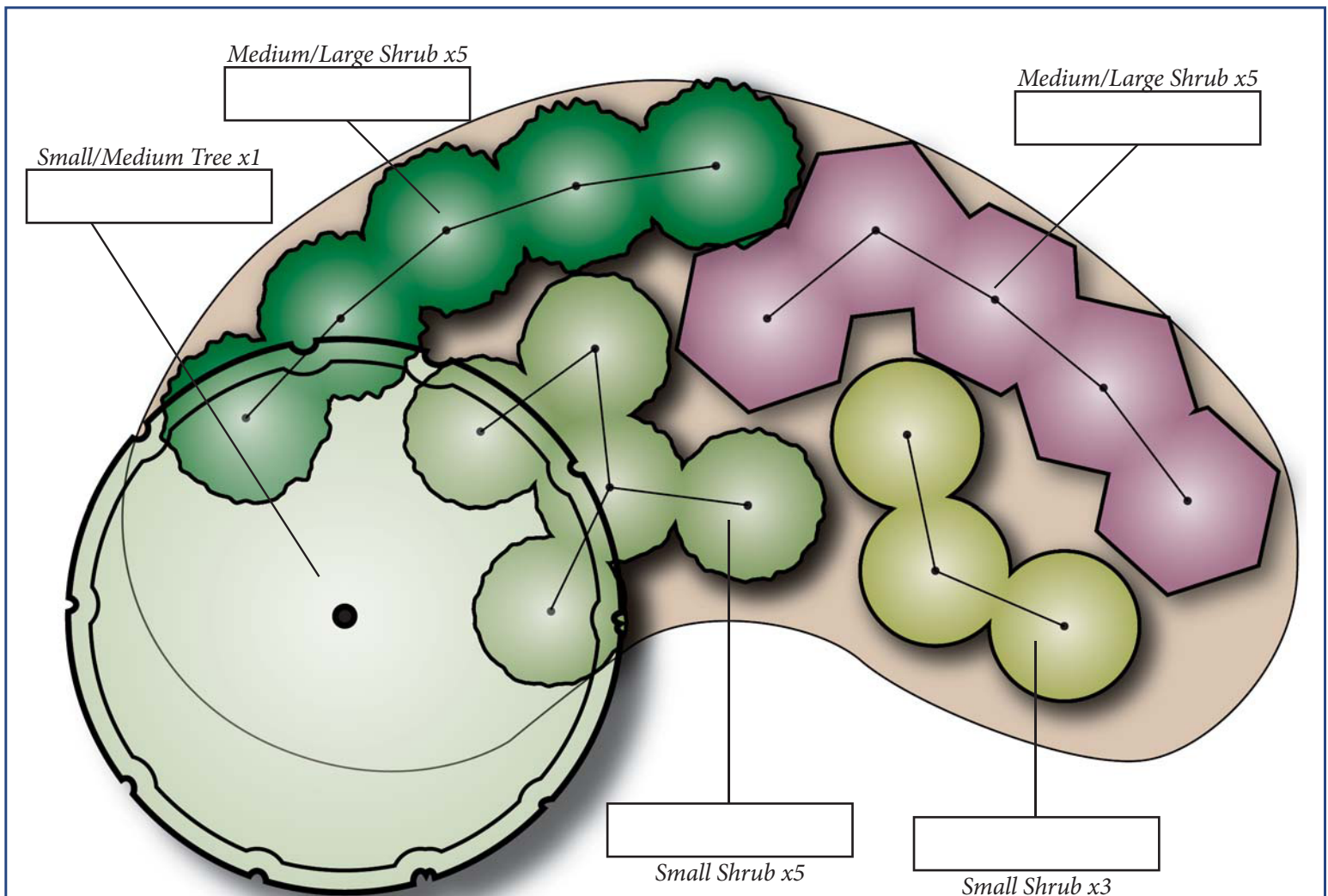


## Woody – 180 square feet

Part sun, wet soils

(contained in 21 x 12.5 foot area)



### Average Spacing between Plants

Refer to plant nursery tags and adjust as needed

Shrubs = 30"	Grasses = 18"	Perennials = 9-12"
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2 cubic feet of mulch covers ~12 square feet of the garden

Scale: 1 inch = 3 feet





## Number of plants

Medium/Large Shrub type 1: 5 plants

Medium/Large Shrub type 2: 5 plants

Small Shrub type 1: 5 plants

Small Shrub type 2: 3 plants

Small/Medium Tree: 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
Grass/Sedge/Rush	<i>Carex stricta</i>	Tussock Sedge	Part Sun/Wet	Minimal	18" apart
Grass/Sedge/Rush	<i>Chasmanthium latifolium</i>	Northern Sea Oats	Part Sun/Wet	Minimal	30" apart
Grass/Sedge/Rush	<i>Juncus effusus</i>	Common Rush	Part Sun/Wet	Minimal	18" apart
Grass/Sedge/Rush	<i>Juncus inflexus</i> 'Blue Arrows'	Blue Arrows Common Rush	Part Sun/Wet	Minimal	18" apart
Herbaceous Perennial	<i>Chelone glabra</i>	Turtlehead	Part Sun/Wet	Minimal	18" apart
Herbaceous Perennial	<i>Chelone lyonii</i> 'Hot Lips'	Pink Turtlehead	Part Sun/Wet	Minimal	18" apart
Herbaceous Perennial	<i>Iris versicolor</i>	Blue Flag Iris	Part Sun/Wet	Minimal	18" apart
Herbaceous Perennial	<i>Lobelia cardinalis</i>	Cardinal Flower	Part Sun/Wet	Minimal	18" apart
Herbaceous Perennial	<i>Mertensia virginica</i>	Virginia Bluebells	Part Sun/Wet	Minimal	18" apart
Shrub	<i>Aesculus parvifolia</i>	Bottlebrush Buckeye	Part Sun/Wet	Minimal	48" apart
Shrub	<i>Cephalanthus occidentalis</i>	Buttonbush	Part Sun/Wet	Minimal	48" apart
Shrub	<i>Hibiscus moscheutos</i>	Rose Mallow	Part Sun/Wet	Minimal	48" apart
Shrub	<i>Ilex verticillata</i> 'Southern Gentleman'	Pollinator for Sparkleberry Winterberry	Part Sun/Wet	Minimal	36" apart
Shrub	<i>Ilex verticillata</i> 'Sparkleberry'	Sparkleberry Winterberry	Part Sun/Wet	Minimal	60" apart
Shrub	<i>Lindera benzoin</i>	Spicebush	Part Sun/Wet	Minimal	48" apart
Shrub	<i>Sambucus canadensis</i>	Elderberry	Part Sun/Wet	Minimal	48" apart
Tree	<i>Alnus incana</i>	Gray Alder	Part Sun/Wet	Minimal	60" + apart
Tree	<i>Amelanchier laevis</i>	Allegheny Serviceberry	Part Sun/Wet	Minimal	60" + apart
Tree	<i>Asimina triloba</i>	Paw Paw	Part Sun/Wet	Minimal	60" + apart
Tree	<i>Betula nigra</i>	River Birch	Part Sun/Wet	Minimal	60" + apart
Tree	<i>Carpinus caroliniana</i>	Ironwood	Part Sun/Wet	Medium	60" + apart
Tree	<i>Nyssa sylvatica</i>	Black Tupelo	Part Sun/Wet	Minimal	60" + apart



## Materials Needed

**Mulch:** 45 cubic feet (1.7 cubic yards) – this assumes 3” of mulch cover

**Compost:** 30 cubic feet (1.1 cubic yards) – this assumes the top 6” of soil is being amended with compost

**Soil media:** 180 cubic feet (6.7 cubic yards) – this is only required if replacing soil

**Soil removal:** 75 cubic feet (2.8 cubic yards) if amending soil, 225 cubic feet (8.3 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](#)