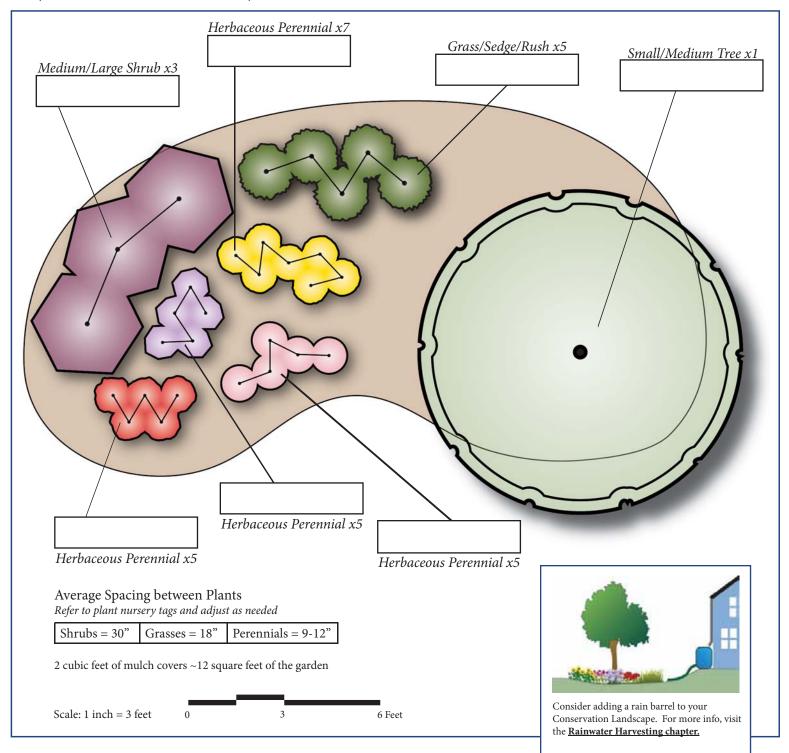
WSA Conservation Landscape Design Tool

Tree – 180 square feet

Part sun, dry soils

(contained in 21 x 12.5 foot area)



Number of plants

Grass/sedge/rush: 5 plants Herbaceous perennial type 1: 7 plants Herbaceous perennial type 2: 5 plants Herbaceous perennial type 3: 5 plants Herbaceous perennial type 4: 5 plants Medium/Large Shrub: 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 <u>Ladybird Johnson native plant database</u> 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	Carex glauca 'Blue Zinger'	Blue Zinger Sedge	Part Sun/Dry	Minimal	18'' apart
Grass/Sedge/Rush	Chasmanthium latifolium	Northern Sea Oats	Part Sun/Dry	Minimal	30'' apart
Grass/Sedge/Rush	Elymus arenarius 'Blue Dune'	Blue Lyme Grass	Part Sun/Dry	Low	18'' apart
Grass/Sedge/Rush	Helichtotrichon sempervirens	Blue Oat Grass	Part Sun/Dry	Minimal	18'' apart
Herbaceous Perennial	Aquilegia canadensis	Columbine	Part Sun/Dry	Minimal	18'' apart
Herbaceous Perennial	Boltonia asteroides	False Aster	Part Sun/Dry	Minimal	18'' apart
Herbaceous Perennial	Geranium sanguineaum 'Rozanne'	Rozanne Cranesbill	Part Sun/Dry	Minimal	18'' apart
Herbaceous Perennial	Physostegia virginiana	Obedient Plant	Part Sun/Dry	Minimal	18'' apart
Herbaceous Perennial	Physostegia virginiana 'Vivid'	Vivid Obedient Plant	Part Sun/Dry	Minimal	18'' apart
Herbaceous Perennial	Rudbeckia fulgida var. fulgida	Black Eyed Susan	Part Sun/Dry	Minimal	18'' apart
Shrub	Ceonothus americanus	New Jersey Tea	Part Sun/Dry	Minimal	48'' apart
Shrub	Comptonia peregrina	Sweetfern	Part Sun/Dry	Minimal	48'' apart
Shrub	llex glabra	Inkberry	Part Sun/Dry	Minimal	48'' apart
Shrub	Rhus aromatica 'Gro Lo'	Gro Lo Fragrant Sumac	Part Sun/Dry	Minimal	48'' apart
Shrub	Vaccinium angustifolium	Low Bush Blueberry	Part Sun/Dry	Medium	48'' apart
Shrub	Viburnum acerifolium	MapleleafViburnum	Part Sun/Dry	Minimal	48'' apart
Tree	Acer saccharum 'Monumental'	Monumental Fastigiate Maple	Part Sun/Dry	Minimal	60'' + apart
Tree	Betula nigra 'Dura Heat'	Dura Heat River Birch	Part Sun/Dry	Minimal	60'' + apart
Tree	Cercis canadensis	Redbud	Part Sun/Dry	Minimal	60'' + apart
Tree	llex opaca	American Holly	Part Sun/Dry	Minimal	60'' + apart
Tree	Quercus pinus	Rock Oak	Part Sun/Dry	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 <u>Maryland</u>. <u>Stormwater Design Manual</u>, <u>Appendix A</u>, the <u>Ladybird Johnson native plant database</u>, and the <u>Piedmont Natives plant</u>. <u>database</u>.

There are alternative layouts possible with the same general character and plant makeup. <u>Click here for alternative layouts</u>.

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.)

- I. 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	
 Water once every three days for the first month and then weekly during the first growing season (April-October), depending on rainfall. Expect up to 10% of the plant stock to NOT do well in the first year, and plan accordingly for replacement plants. 	Upon establishment	
 Check inlets and overflow areas for debris or leaves that are blocking flow. Check and repair erosion areas. 	After heavy rains in 1 st month; periodically in subsequent years	
• Remove weeds by hand.	Monthly for first growing season; every 3 months in subsequent years	
 For "meadow" type Conservation Landscapes consisting of grasses, mow in early spring. For other types of landscapes, check for winter damage and add mulch to bare spots as desired (2–3 inches) Cut back perennials and remove dead growth 	March or April	
 Add reinforcement planting to maintain the desired vegetation density. Prune trees and shrubs; thin herbaceous plants as desired. 	Fall	
 Remove invasive and non-native plants using recommended control methods. Remove any dead or diseased plants. Stabilize any eroded or bare areas Remove trash 	As needed	

Additional References

<u>WSA Rainscaping Manual</u> <u>RainScapes Program (Montgomery County, MD)</u> <u>U.S. Fish & Wildlife Service - BayScapes</u>







