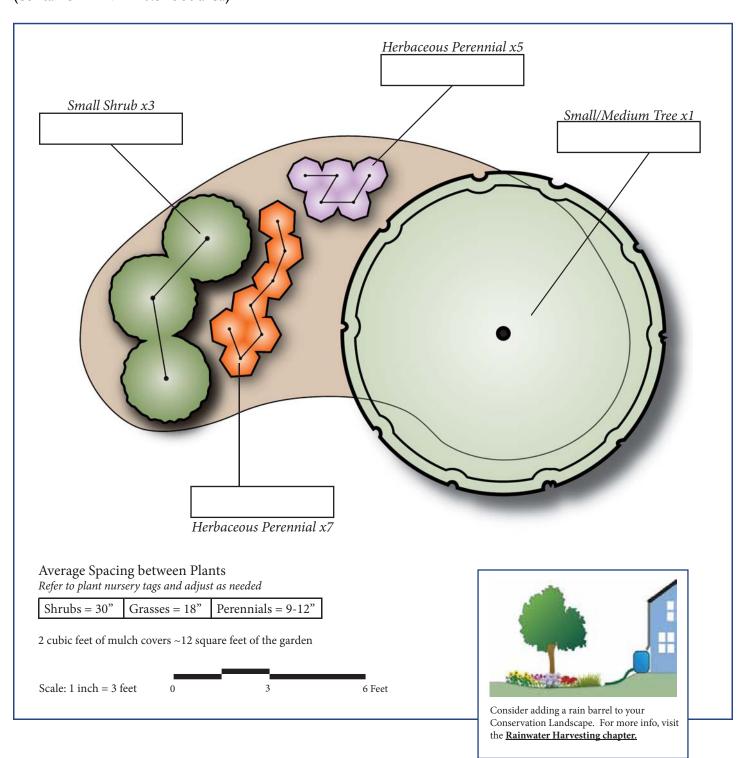
WSA Conservation Landscape Design Tool

Tree - 120 square feet

Sunny, wet soils

(contained in 17 x 10.5 foot area)



Number of plants

Herbaceous perennial type 1:7 plants Herbaceous perennial type 2:5 plants Small/Medium Shrub: 3 plants

Small/Medium Tree: I 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 stricta	Tussock Sedge	Sun/Wet	Minimal	18'' apart
Grass/Sedge/Rush	Elymus arenarius 'Blue Dune'	Blue Lyme Grass	Sun/Wet	Low	18'' apart
Grass/Sedge/Rush	Juncus effusus	Common Rush	Sun/Wet	Minimal	18'' apart
Grass/Sedge/Rush	Juncus inflexus 'Blue Arrows'	Blue-green Rush	Sun/Wet	Minimal	18'' apart
Herbaceous Perennial	Asclepias incarnata	Swamp Milkweed	Sun/Wet	Minimal	18'' apart
Herbaceous Perennial	Iris versicolor	Blue Flag Iris	Sun/Wet	Minimal	18'' apart
Herbaceous Perennial	Lobelia cardinalis	Cardinal Flower	Sun/Wet	Minimal	18'' apart
Herbaceous Perennial	Verbena hastata	Blue Vervain	Sun/Wet	Minimal	18'' apart
Herbaceous Perennial	Vernonia noveboracensis	New York Ironweed	Sun/Wet	Minimal	18" apart
Shrub	Cepholanthus occidentalis	Buttonbush	Sun/Wet	Minimal	48'' apart
Shrub	Cornus sericea	Red Twig Dogwood	Sun/Wet	Minimal	48'' apart
Shrub	Hibiscus moscheutos	Rose Mallow	Sun/Wet	Minimal	48'' apart
Shrub	llex verticillata 'Southern Gentleman'	Pollinator for Sparkleberry Winterberry	Sun/Wet	Minimal	36" apart
Shrub	llex verticillata 'Sparkleberry'	Sparkleberry Winterberry	Sun/Wet	Minimal	60'' apart
Shrub	Myrica cerifera	Southern Bayberry	Sun/Wet	Minimal	48'' apart
Shrub	Viburnum dentatum	Arrowwood Viburnum	Sun/Wet	Minimal	48'' apart
Tree	Betula nigra	River Birch	Sun/Wet	Minimal	60'' + apart
Tree	Magnolia virginiana	Sweet Bay Magnolia	Sun/Wet	Minimal	60'' + apart
Tree	Nyssa sylvatica	Black Tupelo	Sun/Wet	Minimal	60'' + apart
Tree	Taxodium distichum 'Peve Minaret'	Peve Minaret Bald Cypress	Sun/Wet	Minimal	60'' + apart

Materials Needed

Mulch: 30 cubic feet (1.1 cubic yards) - this assumes 3" of mulch cover

Compost: 20 cubic feet (0.7 cubic yards) – this assumes the top 6" of soil is being amended with compost

Soil media: 120 cubic feet (4.4 cubic yards) – this is only required if replacing soil

Soil removal: 50 cubic feet (1.9 cubic yards) if amending soil, 150 cubic feet (5.6 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 Stormwater Design Manual</u>, Appendix A, the <u>Ladybird Johnson native plant database</u>, and the <u>Piedmont Natives plant database</u>.

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	
 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 1st 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

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







