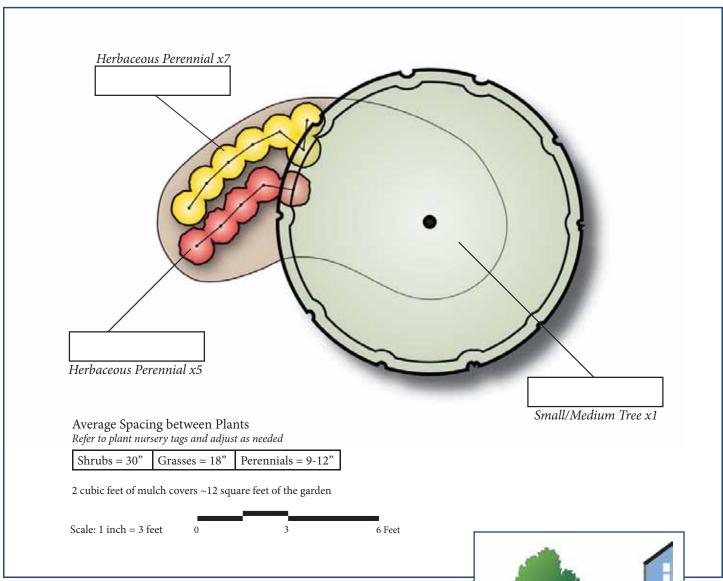
WSA Conservation Landscape Design Tool

Tree - 60 square feet

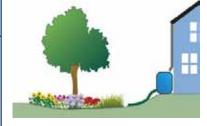
Part sun, moderately drained soils

(contained in 11.5 \times 6.5 foot area)



Number of plants

Herbaceous perennial type 1:7 plants Herbaceous perennial type 2:5 plants Small/Medium Tree: I plant



Consider adding a rain barrel to your Conservation Landscape. For more info, visit the <u>Rainwater Harvesting chapter</u>.

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/Medium | Minimal | 18'' apart |
| Grass/Sedge/Rush | Carex pensylvanica | Pennsylvania Sedge | Part Sun/Medium | Minimal | 12'' apart |
| Grass/Sedge/Rush | Chasmanthium latifolium | Northern Sea Oats | Part Sun/Medium | Minimal | 30'' apart |
| Grass/Sedge/Rush | Elymus arenarius 'Blue Dune' | Blue Lyme Grass | Part Sun/Medium | Low | 18'' apart |
| Herbaceous Perennial | Aquilegia canadensis | Columbine | Part Sun/Medium | Minimal | 18" apart |
| Herbaceous Perennial | Boltonia asteroides | False Aster | Part Sun/Medium | Minimal | 18" apart |
| Herbaceous Perennial | Chelone glabra | Turtlehead | Part Sun/Medium | Minimal | 18" apart |
| Herbaceous Perennial | Chelone İyonii 'Hot Lips' | Pink Turtlehead | Part Sun/Medium | Minimal | 18'' apart |
| Herbaceous Perennial | Geranium sanguineaum 'Rozanne' | Rozanne Cranesbill | Part Sun/Medium | Minimal | 18" apart |
| Herbaceous Perennial | Liatris microcephala | Smallhead Gayfeather | Part Sun/Medium | Minimal | 18'' apart |
| Herbaceous Perennial | Liatris spicata | Gayfeather | Part Sun/Medium | Minimal | 18'' apart |
| Herbaceous Perennial | Lobelia cardinalis | Cardinal Flower | Part Sun/Medium | Minimal | 18'' apart |
| Herbaceous Perennial | Senecio aureus | Golden Ragwort | Part Sun/Medium | Minimal | 18" apart |
| Shrub | Aronia arbutifolia | Chokeberry | Part Sun/Medium | Minimal | 48'' apart |
| Shrub | Aronia arbutifolia 'Brilliantissima' | Brilliantissima Chokeberry | Part Sun/Medium | Minimal | 48'' apart |
| Shrub | Comptonia peregrina | Sweetfern | Part Sun/Medium | Minimal | 48'' apart |
| Shrub | Hydrangea arborescens | Smooth Hydrangea | Part Sun/Medium | Low | 48'' apart |
| Shrub | Hydrangea arborescens 'Annabelle' | Annabelle Smooth Hydrangea | Part Sun/Medium | Low | 48'' apart |
| Shrub | Kalmia latifolia | Mountain Laurel | Part Sun/Medium | Medium | 48'' apart |
| Shrub | Lindera benzoin | Spicebush | Part Sun/Medium | Minimal | 48'' apart |
| Shrub | Rhus aromatica 'Gro Lo' | Gro Lo Fragrant Sumac | Part Sun/Medium | Minimal | 48'' apart |
| Shrub | Viburnum acerifolium | Mapleleaf Viburnum | Part Sun/Medium | Minimal | 48'' apart |
| Tree | Amelanchier laevis | Allegheny Serviceberry | Part Sun/Medium | Minimal | 60'' + apart |
| Tree | Asimina triloba | Paw Paw | Part Sun/Medium | Minimal | 60'' + apart |
| Tree | Betula nigra | River Birch | Part Sun/Medium | Minimal | 60'' + apart |
| Tree | Cercis canadensis | Redbud | Part Sun/Medium | Minimal | 60'' + apart |

| Plant Type | Plant Latin Name | Plant Common Name | Planting Condition | Maintenance Type | Spacing |
|------------|------------------------|----------------------|-----------------------|---------------------|--------------|
| Tree | Chionanthus virginicus | Fringe Tree | Part Sun/Medium | Minimal | 60'' + apart |
| Tree | Hamamelis virginiana | Witch Hazel | Part Sun/Medium | Minimal | 60'' + apart |
| Tree | Nyssa sylvatica | Black Tupelo | Part Sun/Medium | Minimal | 60'' + apart |

Materials Needed

Mulch: 15 cubic feet (0.6 cubic yards) - this assumes 3" of mulch cover

Compost: 10 cubic feet (0.4 cubic yards) – this assumes the top 6" of soil is being amended with compost

Soil media: 60 cubic feet (2.2 cubic yards) – this is only required if replacing soil

Soil removal: 25 cubic feet (0.9 cubic yards) if amending soil, 75 cubic feet (2.8 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







