

Planting and Maintaining Your Rain Garden

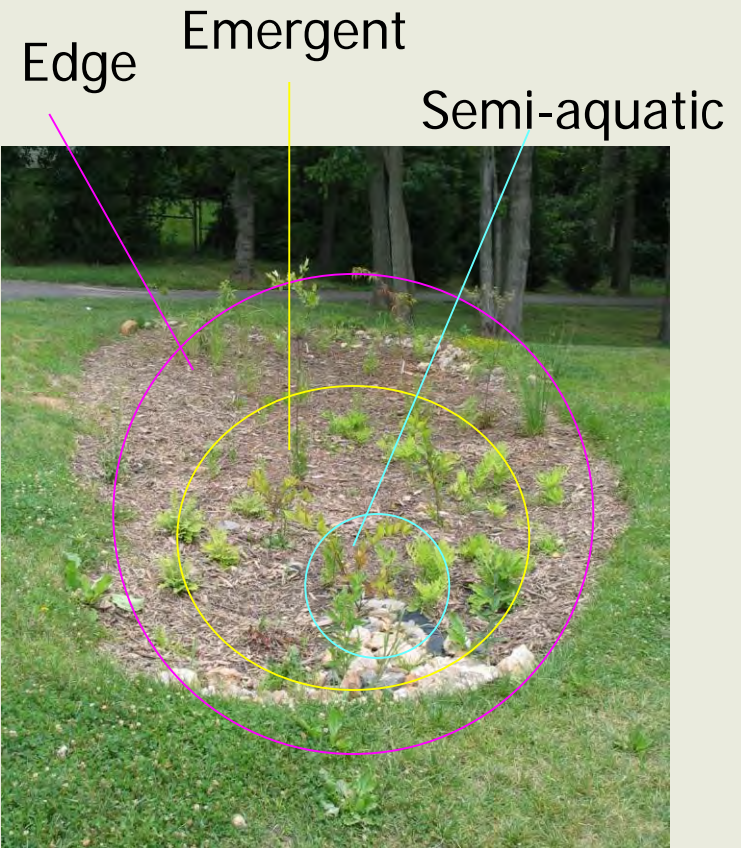


The Rain Garden Environment

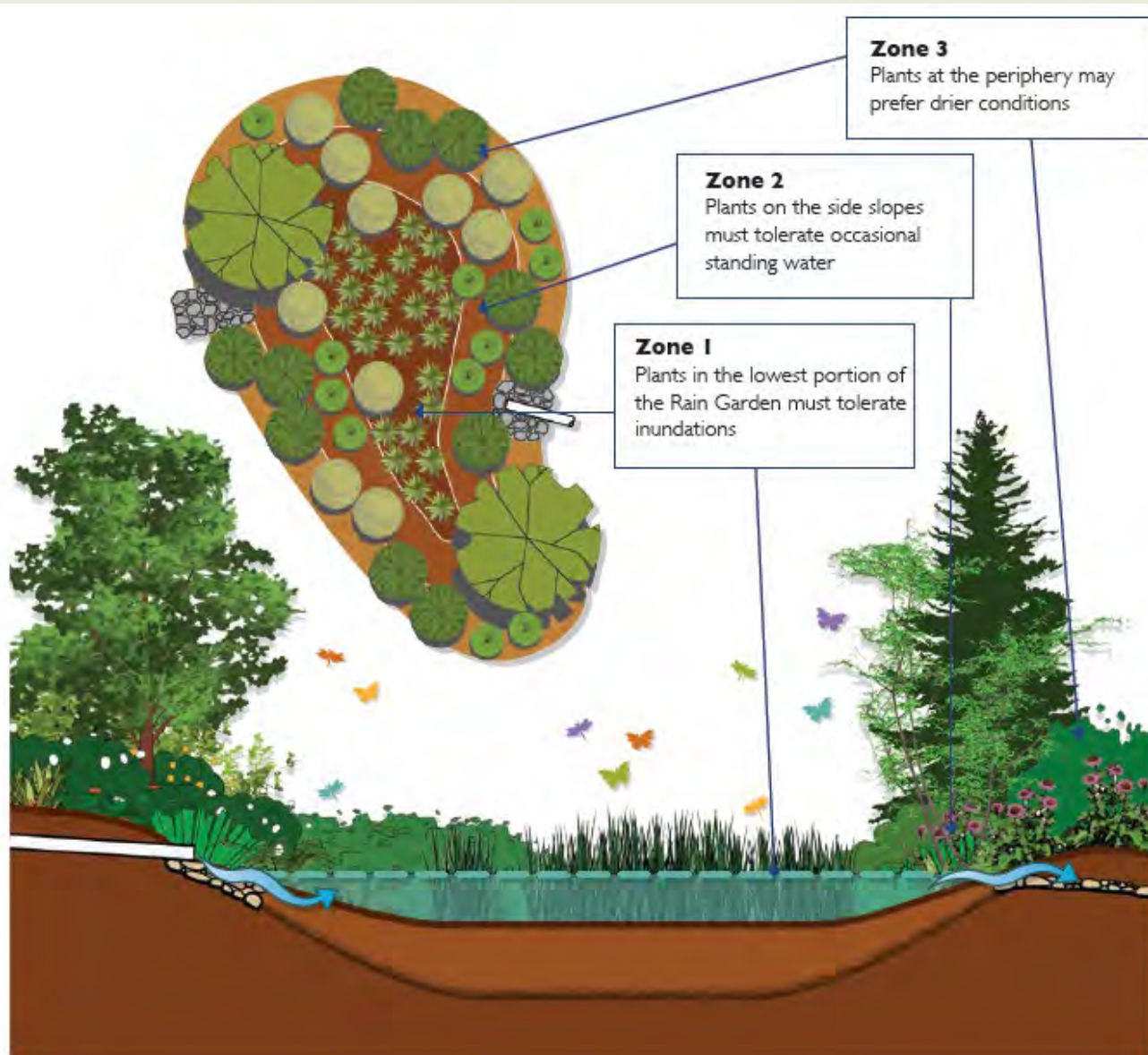
Are rain gardens wet?



Rain Garden Zones



Rain Garden Zones



Where are your wet spots?



Courtesy Wetland Studies and Solutions, Inc.

Plants for Inlets & Flow Paths



Plants for Inlets & Flow Paths



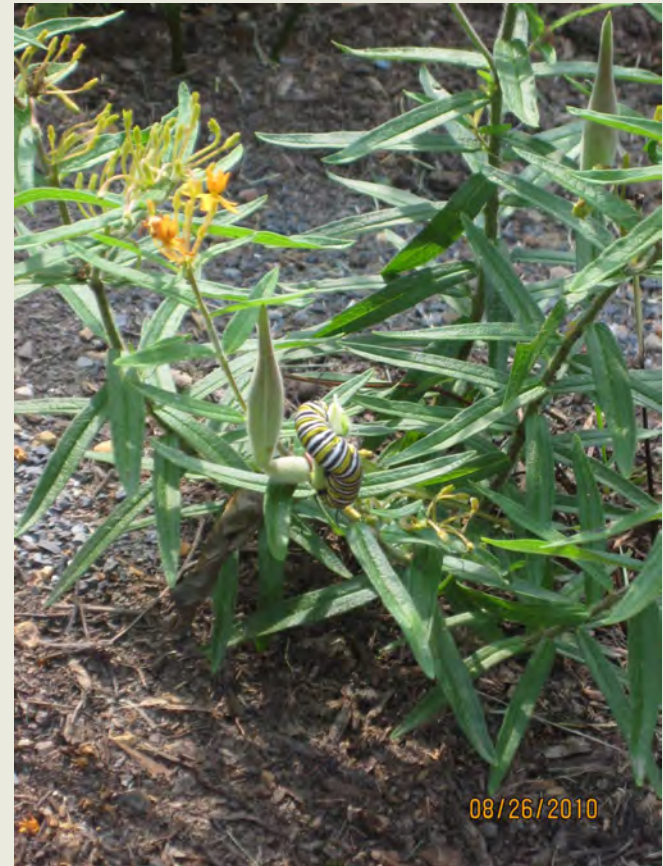
Pollutants in the Rain Garden



- Nutrients (Nitrogen and Phosphorus)
- Heavy Metals (Copper)
- **Salt**, Deicers, Sand
- Car fluids (Gasoline, Antifreeze, Oil, etc.)
- Pesticides & Herbicides

Use Native Plants

- Adapted to local conditions, including soils & precipitation
- Don't require inputs of chemical fertilizers & pesticides
- Save time and money
- Provide the habitat wildlife, including pollinators, need
- Beautiful!



<http://www.nps.gov/plants/pubs/chesapeake/toc.htm>
<http://www.plantnovanatives.org/>

Avoid Invasive Plants

An **invasive non-native plant** is “a species introduced by human activity... which aggressively competes with, and displaces, locally adapted native plant communities.

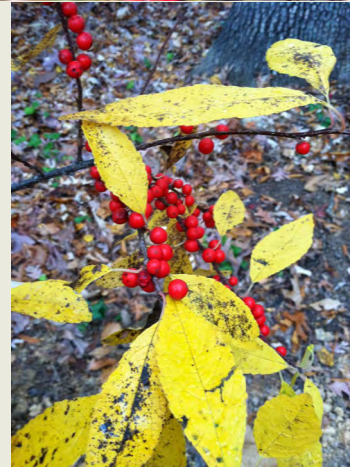
- Displace native species
- Reduce wildlife habitat
- Alter ecosystem processes
- Maintenance nightmare!



<https://www.invasive.org/alien/pubs/midatlantic/midatlantic.pdf>
http://www.dcr.virginia.gov/natural_heritage/invspinfo.shtml

Rain Garden Plants

Winterberry holly
(*Ilex verticillata*)





Virginia sweetspire
(*Itea virginica*)



Rain Garden Plants

Black Chokeberry (*Aronia melanocarpa*)

Red Chokeberry (*Aronia arbutifolia*)



Rain Garden Plants

Arrowwood viburnum (*Viburnum dentatum*)

Poosumhaw viburnum (*Viburnum nudum*)



Rain Garden Plants



Black-eyed susan (*Rudbeckia fulgida* var. *fulgida*)

Rain Garden Plants



Joe Pye weeds
(*Eutrochium* spp.)
Formerly *Eupatorium* spp.



Rain Garden Plants



Narrow-leaved mountain mint
(*Pycnanthemum tenuifolium*)



Short-toothed mountain mint
(*Pycnanthemum muticum*)

Rain Garden Plants

Switchgrass (*Panicum virgatum*)



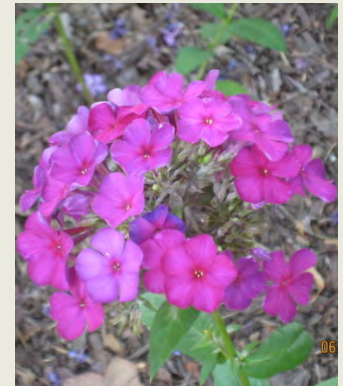
More Winning Plants - Shade

- Smooth hydrangea (*Hydrangea arborescens*)
- Elderberry (*Sambucus canadensis*)
- Foamflower (*Tiarella cordifolia*)
- Turtlehead
- Ferns – Cinnamon fern (*Osmunda cinnamomea*), Wood ferns (*Dryopteris spp*), Sensitive fern (*Onoclea sensibilis*)



More Winning Plants - Sun

- Cardinal flower (*Lobelia cardinalis*)
- New York ironweed (*Vernonia noveboracensis*)
- Milkweeds – *Asclepias incarnata* (swamp) and *Asclepias tuberosa* (butterfly weed)
- Beebalm (*Monarda fistulosa* and *Monarda didyma*)
- New England aster (*Symphotrichum novae-angliae*)
- Summer phlox (*Phlox paniculata*) and creeping phlox (*Phlox stolonifera*)



More Winning Plants – Inlets

- Upland sea oats (*Chasmanthium latifolium*)
- Switch grass (*Panicum virgatum*)
- Little bluestem (*Schizachyrium scoparium*)
- Soft rush (*Juncus effusus*)
- Pennsylvania sedge (*Carex pensylvanica*), Tussock sedge (*Carex stricta*) and other sedges (*Carex* spp.)
- Blue flag (*Iris versicolor*)



Pots, Plugs or Seeds?



Plugs are best for...

- Gardeners who don't mind a wait
- Sharing with a group or large gardens
- Typically planted 12" on center

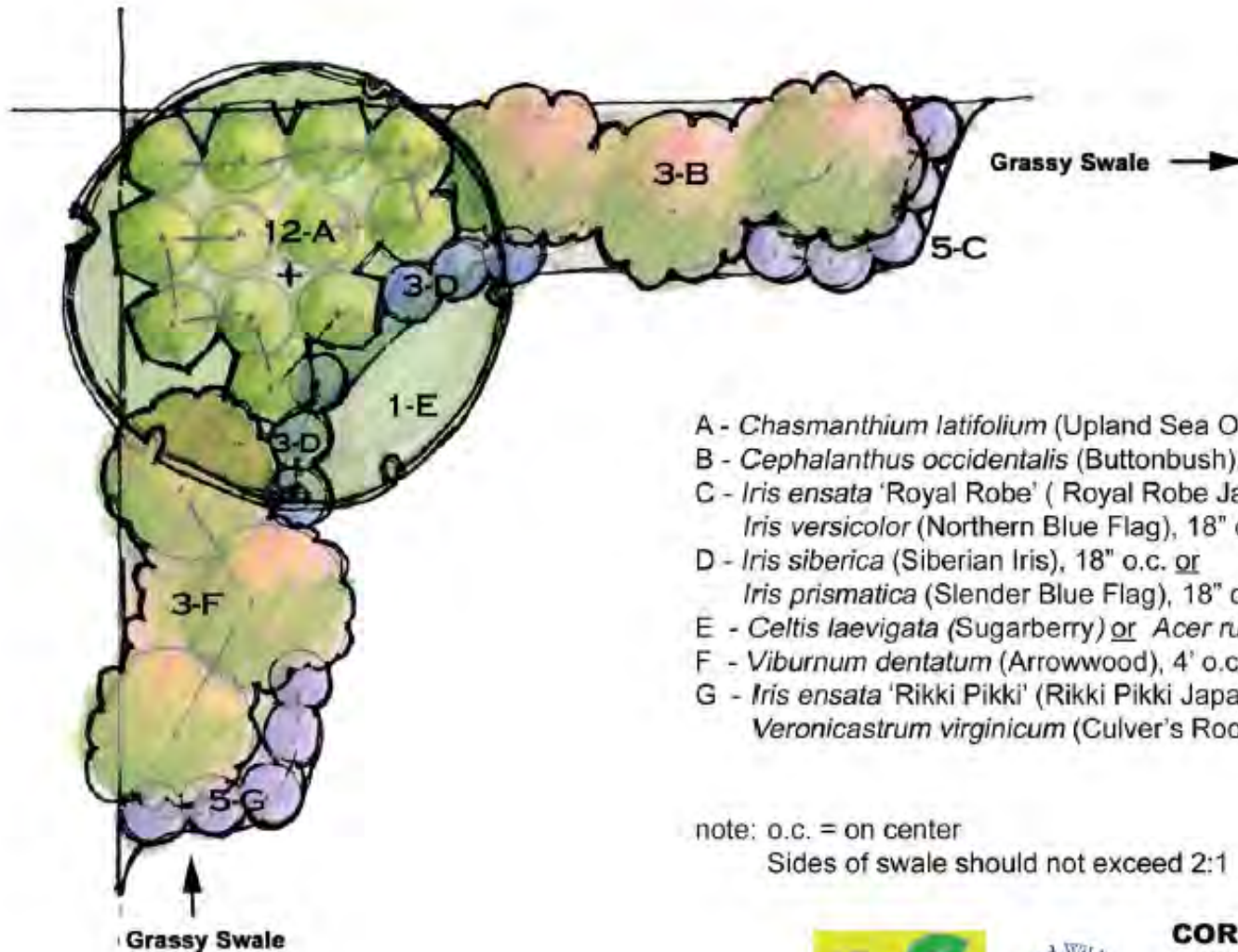
Containers are best for...

- Immediate gratification
- Spacing depends on mature size
- For herbaceous plants, 15-36" on center

A Few Design Tips

- “A well-designed rain garden doesn’t look like a rain garden.”
- Rule of 3 – each plant should have at least 3 features you enjoy
- Plant in clumps of 3 – 7 to create bold color, cohesion and pattern.
- Use your edges.
- Plant densely, but plan for mature size and form.
- Remember the 4 seasons.
- Variety & contrast create interest.

<http://lowimpactdevelopment.org/rain-garden-templates-for-maryland/>
<http://aawsa.org/conservation-design-tool>



- A - *Chasmanthium latifolium* (Upland Sea Oats), 2' o.c.
- B - *Cephalanthus occidentalis* (Buttonbush), 4' o.c.
- C - *Iris ensata* 'Royal Robe' (Royal Robe Japanese Iris), 18" o.c. or *Iris versicolor* (Northern Blue Flag), 18" o.c. (native)
- D - *Iris siberica* (Siberian Iris), 18" o.c. or *Iris prismatica* (Slender Blue Flag), 18" o.c. (native)
- E - *Celtis laevigata* (Sugarberry) or *Acer rubrum* (Red Maple)
- F - *Viburnum dentatum* (Arrowwood), 4' o.c.
- G - *Iris ensata* 'Rikki Pikki' (Rikki Pikki Japanese Iris), 18" o.c. or *Veronicastrum virginicum* (Culver's Root), 18" o.c.

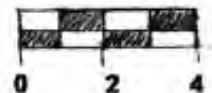
note: o.c. = on center
 Sides of swale should not exceed 2:1



CORNER RAINGARDEN

150 SF
 Full Sun
 All zones,
 Piedmont

Scale: 1/4"=1'





Courtesy Wetland Studies and Solutions, Inc.



Maintaining Your Rain Garden



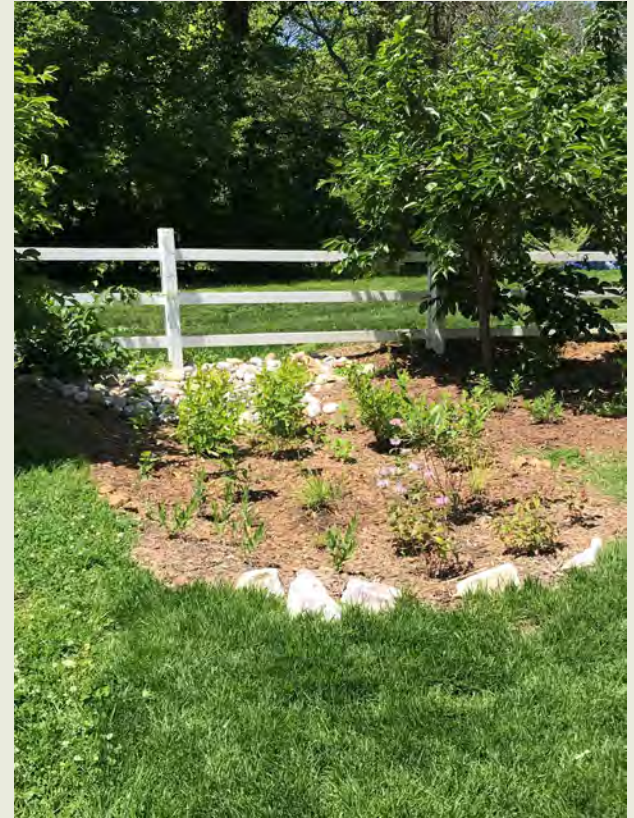
Maintaining Your Rain Garden

- Water the plants until established
- Observe during and after rain - check for standing water
- Monitor inflow/outflow/berm & repair as needed
- Weed the garden
- Monitor/replace plants
- Add mulch



Short Term Maintenance

- You DO need to water the plants if it doesn't rain, especially for the first year.
- Observe the garden during and after storms.
- Check to make sure the garden is draining within 48 hours.
- Look for signs of erosion at the inflow, outflow, or berm and correct as needed (add stone or re-grade).



Observe during and after storms





Observe during and after storms



Observe during and after storms

Check inflow area
for erosion



Longer Term Maintenance

- Mulching
- Berm
- Weeding
- Monitoring the plants

Refresh the wood mulch in the garden's top layer in the spring and fall, to enrich the soil and control weeds.



Maintaining the Berm









June 2012



Spring 2018

Monitoring the Plants

- Remove weeds. Planting in clumps makes it easier to identify the weeds.
- You may want to mark the locations of your plants in the fall, especially small ones, so you can easily identify them in the spring.
- Replace any plants that do not survive.
- Use sturdier plants near the inflow (higher energy).
- As plants get larger, divide them. You may find volunteers as well.







Tuckahoe Townhouses



Rain garden and conservation landscaping



After







03/7











Virginia Conservation Assistance Program (VCAP)

- Cost-share grants of up to \$3500 are available for landowners in Fairfax and Alexandria for rain gardens, subject to state fund availability.
- Proposals are reviewed by the state-wide VCAP committee for funding consideration.
- Application period for 2022 grants will open July 2021.
- Other conservation practices are funded under the VCAP as well.

For More Information on VCAP

- <https://www.fairfaxcounty.gov/soil-water-conservation/conservation-assistance-programs>
- Or email conservationdistrict@fairfaxcounty.gov



Virginia Conservation Assistance Program

Presented by **Virginia Association of Soil & Water Conservation Districts**

Other Learning Opportunities

Green Home and Garden Tour – 1st Sunday in June in Arlington and 2nd Sunday in Fairfax.

www.ecoactionarlington.org

Rain Barrel workshops-

<https://www.fairfaxcounty.gov/soil-water-conservation/rain-barrel>

Questions?

Aileen Winqvist

awinqvist@arlingtonva.us

703-228-3610