

Plant NNK Natives
Go Native—Grow Native

Native Plants for Northern Neck Bay-Friendly Properties

Northern Neck Chapter of the
Virginia Native Plant Society



Virginia Native Plant Society
NORTHERN NECK CHAPTER

Plant
NNK Natives
Go Native – Grow Native

In the Chesapeake Bay watershed, one of the greatest threats to its health comes from development of the land. Transformation of the natural landscape to buildings, rooftops, streets and lawns leads to less rainwater soaking into the ground where it is naturally filtered before supplementing the aquifer or returning to our streams and rivers. Instead, more water “runs off” our properties and travels along our impervious corridors of lawn, driveways and streets carrying pollutants including fertilizers and pesticides along the way and delivering them to our streams and ultimately the Chesapeake Bay.

Rainwater running through a downspout and pipe erodes the lawn and washes onto the sidewalk. Though this does not look dramatic, the cumulative impacts from many sites like this can be great. Nutrients (such as phosphorus and nitrogen) dissolved in the runoff make their way to our creeks and estuaries. The excess nutrients can lead to harmful algal blooms, which eventually decrease the amount of dissolved oxygen in the water for fish, crabs and oysters.



In some areas, runoff is so great that gullies form and stream banks and shorelines are eroded. Here, mud carried from an eroded bank in Lancaster County washes out a small tributary to the Chesapeake Bay. The sediment from eroded stream banks covers oyster beds, smothering and suffocating the oysters.

Imagine this!
Runoff from a typical 1" rainfall on a 1600 square foot roof would fill more than twenty 50-gallon bathtubs or rain barrels.

So what can YOU do?

Every parcel of land in the Northern Neck affects the quality of the Bay. So, all of us need to be concerned about runoff. There are many ways to retrofit your existing landscape to be more Bay-friendly; several are outlined in this brochure. In fact, though all of us should take action, those who are undertaking new construction that disturbs 2,500 sq ft or more are required to control runoff from their property under new Chesapeake Bay and Virginia Stormwater regulations.

How do Native plants fit in?

Northern Neck native flowers, grasses, shrubs and trees are beautiful and add value to your landscape by providing diverse colors and textures year round. Once established, they need little maintenance. They nurture birds, butterflies and other wildlife by providing food and shelter. Most importantly for management of runoff, they help to slow down runoff and filter out pollutants as the water is slowly absorbed into the ground. The Plant Northern Neck Natives: Go-Native—Grow Native campaign prepared this brochure to help you choose ways to use native plants to protect water quality by reducing runoff from your property.

Practices for a Bay-Friendly Northern Neck Property

The goal is to reduce the volume of water that runs off your property and remove pollutants, such as nitrogen, phosphorus, sediment and oil based chemicals from cars before they are delivered to local streams and eventually reach the Chesapeake Bay. There are many ways that a homeowner can accomplish this. The following practices use native plants to reduce runoff and absorb pollutants.

Rain gardens accept runoff from a roof, driveway, or parking lot that would otherwise go to the street, storm drain, ditch, nearby stream or other waterway, including wetlands. The garden has a shallow depression that collects runoff. Natural soils may need to be replaced with sandier ones to allow the water to soak into the ground. The garden is planted with a mix of native plants that filter out pollutants, take up some of the water and slow down the flow.

Rain gardens are not suitable for areas where the water table is very close to the surface. In these areas it is better to manage the runoff without replacing natural soil with sand, for example by creating swales or shoreline buffers planted with native perennials, grasses, shrubs and /or small trees to retain and absorb runoff.

Lawns often make up a significant portion of individual properties and have been shown to produce more runoff (as much as 4 to 5 times) than their forested counterparts. So, reducing lawn areas and replacing them with mulched beds filled with native flowers, shrubs and trees is an effective way to reduce runoff. Trees create a leafy canopy that intercepts rainfall and reduces runoff and they produce shade to cool your home, too. On the remaining lawn areas, be sure to use bay-friendly lawn care such as reducing or eliminating fertilizers and other chemicals, keeping mulched clippings on the grass and increasing the porosity of your lawn so that water will filter through it to the soil below.

The Times They Are A-Changin’
In the past, downspouts were designed to drain onto a paved area and conduct water away from the building site as quickly as possible. This meant that polluted runoff was rapidly conveyed to nearby streams and eventually the Bay. Today, the goal is to keep runoff on the property so that it is filtered as it seeps into the ground slowly and recharges groundwater.

In addition, there are several ways to reduce runoff that do not use native plants. For example, homeowners can redirect the flow of water from downspouts to vegetated areas such as rain gardens, swales and garden beds. They can also use rain barrels to capture runoff from the roof and reuse it for watering. Or they may want to install permeable pavers on driveways and sidewalks to allow rainfall to pass through the pavers and soak into the ground.

Tips On Rain Barrels
In a typical rainfall, one rain barrel can only accept a small portion of the runoff from your roof. So, be sure to use the water in the barrel for irrigation between storms. Also, be sure the overflow from the barrel is directed away from your foundation and into a rain garden or other permeable area.

For more details on any of these techniques visit the websites in the list of Technical Resources in this brochure.

Technical Resources

Is the sample rain garden plan on the back of this brochure right for you? If not, you can find many more plans and lots more information on how to make your property *Bay-Friendly* on the websites listed below.

- Homeowner Guide For a More Bay-Friendly Property (Chesapeake Stormwater Network) www.chesapeakestormwater.net/be-bay-friendly. This guide presents a step-by-step approach for analyzing your property to find out whether it makes sense to install a rain garden or other *Bay-Friendly* practices. It also provides information on the design and installation of many runoff control practices, such as rain barrels and permeable pavers.
- Rain Garden Design Templates (Low Impact Development Center) www.lowimpactdevelopment.org/raingarden_design/templates.htm
- Rainscaping.org www.rainscaping.org, click on Rainscaping
- BayScapes program (Alliance for the Chesapeake Bay) www.allianceforthebay.org/our-work/healing-the-land/bayscapes
- *Eight Essential Elements of Conservation Landscaping* (Chesapeake Conservation Landscaping Council) www.chesapeakelandscaping.org/eight-essential-elements
- *Gardener for the Bay* program (Chesapeake Bay Foundation) www.cbf.org/join-us/more-things-you-can-do/gardeners-for-the-bay

- *Habitat At Home* Guide (Virginia Department of Game and Inland Fisheries) www.dgif.virginia.gov/habitat/habitat-at-home/
- *Landscapes for Life* (American Society of Landscape Architects) www.landscapeforlife.org
- Virginia Stormwater BMP Clearinghouse www.vwrrc.vt.edu/swc/

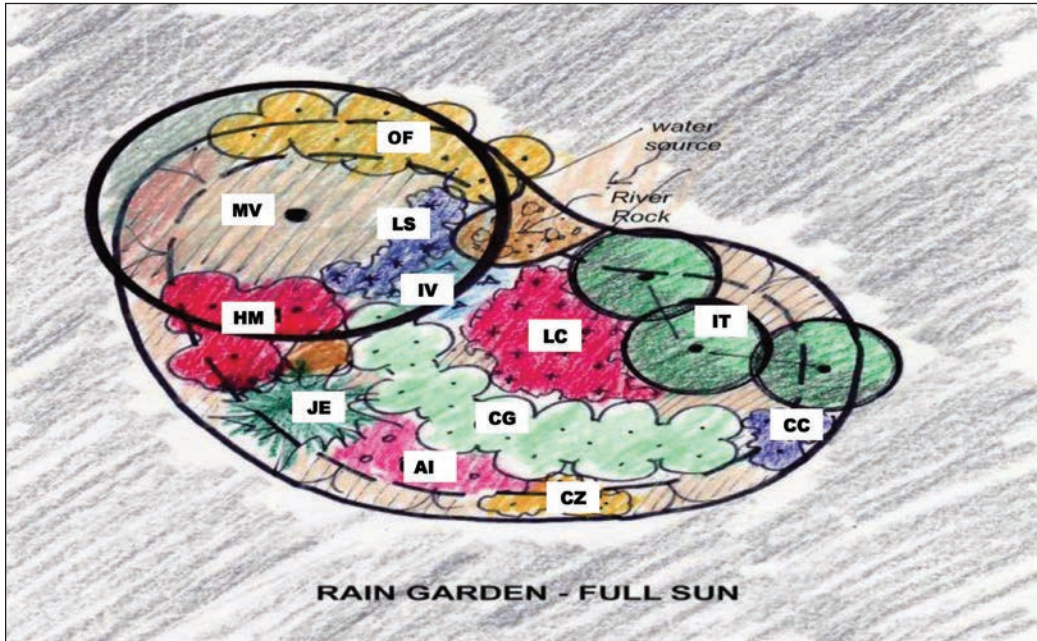
Information on Native Plants and Vendors (Wholesale and Retail)

- Northern Neck Native Plants—For a comprehensive list of native plants suitable for rain gardens, swales, and buffers on the Northern Neck see the Plant Northern Neck Natives, Go Native—Grow Native section at www.nnnps.org.
- For local retailers see Plant Northern Neck Natives: Go Native—Grow Native retail partners at www.nnnps.org.
- Northern Neck Chapter of the Virginia Native Plant Society Plant Sale, first Saturday after Labor Day in September, Wicomico Parish Church (Episcopal), Route 200, Wicomico Parish, VA.
- U.S. Fish and Wildlife, list of native plant suppliers in the Chesapeake Bay Region, www.fws.gov/chesapeakebay/bayscapes.htm. Look under *Finding Natives* for a list of Native Plant Nurseries in the Chesapeake Bay.
- Virginia Nursery and Landscape Association's Guide www.vnla.org/Grower-Guide

Technical and Financial Assistance to Homeowners

The following is a list of programs that may be able to provide technical (T), financial (F) or other (O) types of assistance to homeowners installing stewardship practices on their residential property in the Northern Neck.

Organization	Name of Program(s)	Website/Contact	Type of Assistance		
			F	T	O
Alliance for the Chesapeake Bay	Chesapeake RiverwiseCommunities	https://allianceforthebay.org/category/our-work/riverwise/	X	X	X
Friends of the Rappahannock	Rainscape Retrofits and Healthy Rivers Begin at Home	Richard Moncure, Tidal Rappahannock River Steward Phone: (804) 443-3448 Email: richard.moncure@riverfriends.org www.riverfriends.org		X	X
Northern Neck Master Gardeners	Shoreline Evaluation Program	http://www.nnmg.org/		X	X
Northern Neck Planning District Commission	Environmental Planning	Stuart McKenzie, Environmental Planner Phone: (804) 333-1900, ext 25 Email: smckenzie@nnpdc17.state.va.us http://www.nnpdc.org		X	
Northern Neck Soil & Water Conservation District	Stormwater Education and Assessment	Brandon Dillistin, District Technical Manager Phone: (804) 313-9102, ext 102 http://www.nnswcd.org/	X	X	X
Virginia Department of Environmental Quality	Virginia Stormwater Management Program	Xing Lin, Stormwater Compliance Specialist Cell: (804) 238-2977 Email: xing.lin@deq.virginia.gov		X	
Lancaster County	Environmental Codes Compliance	Brian Barnes, Environmental Codes Compliance Officer Phone: (804) 462-5220 Email: bbarnes@lancova.com		X	
Northumberland County	Zoning	Philip H. Marston, Zoning Administrator Phone: (804) 580-891 Email: pmarston@co.northumberland.va.us		X	
Richmond County	Code Compliance	T. Richard English, Code Compliance Officer Phone: (804) 333-3408 Email: renglish@co.richmond.va.us		X	
Westmoreland County	Planning & Community Development	Bob Fink, Director of Planning & Community Development Phone: (804) 493-0120 Email: bfink@westmoreland-county.org		X	



Source: Anne Guillette, Low Impact Design Studio

Plant List for a Sunny Rain Garden with Perennials, Shrubs and Trees							
LABEL	LATIN NAME	COMMON NAME	SIZE ¹	QTY	PLANTING ZONE		
					1	2	3
TREE and SHRUB							
MV	Magnolia virginiana	Sweetbay Magnolia	8-10'	1	x	x	x
IT	Itea virginica	Virginia Sweetspire	5 gal	3	x	x	x
PERENNIALS, SEDGES + GRASSES							
AI	Asclepias incarnata	Swamp Milkweed	QT	9	x	x	
CC	Conoclinium coelestinum	Mistflower	QT	3			x
CG	Chelone glabra	White Turtlehead	QT	18	x	x	
CZ	Chrysopsis mariana	Maryland Golden-aster	QT	3			x
HM	Hibiscus moscheutos	Swamp Rose-Mallow	#1	3	x	x	
IV	Iris versicolor	Blue Flag Iris	#1	5	x	x	
JE	Juncus effusus	Soft Rush	#1	1	x	x	
LC	Lobelia cardinalis	Cardinal Flower	QT	12	x	x	
LS	Lobelia siphilitica	Great Blue Lobelia	#1	6	x	x	
OF	Oenothera fruticosa	Narrow-leaf Sundrops	#1	9	x	x	x
¹ Refers to the size of the container: gallon (#1) or quart							

Credits

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