



## Native Plants for Your Riparian Landscape

Studies have consistently shown that naturally vegetated buffers must be at least 100 feet wide to achieve substantial reductions in most constituents of polluted runoff. When planning your buffer, it is best to work with someone who is familiar with riparian restoration, such as a landscape architect, wetlands ecologist, or restoration specialist. This person can help you consider all that is necessary to make the best decisions given your land, time, and other constraints. Here is a condensed overview of riparian buffer design suggestions.

Zone	Goal/ Purpose	What to Plant
Streamside (Zone 1)	To provide bank stabilization as well as shade and organic inputs for the stream system.	Larger trees and shrubs typically are planted in this zone to increase stability; they should be species that tolerate wet conditions.
Middle (Zone 2)	To plant vegetation that helps to absorb excess nutrients such as nitrogen and phosphorus, preventing them from entering the water. This zone also helps slow runoff, which allows it to recharge the groundwater supply.	A diverse array of native trees and shrubs. Can also be used for economic benefit (limited timber harvest, nuts, mushrooms, etc.).
Outer (Zone 3)	To help slow runoff and trap sediment. Planted as grassland or a mix of grasses and wildflowers. In residential areas, gardens or compost piles can be established here.	Native grasses, wildflowers, or perennial gardens. Can also plant shrubs or trees where there is not high sediment runoff.

The following list provides suggestions for native plants you can use to landscape a riparian buffer. It is adapted from Russ Cohen's *Native Riparian Species* (Mass. Riverways) and New England Wildflower Society's *Catalog of Plants*. These species are suitable for planting in most riparian areas in Massachusetts. All the plants on this list have value as food for wildlife or humans.

## Grasses, Rushes & Sedges

Common name	Scientific name	Flooding tolerance	Large woody debris	Shade value	Wildlife merit	Sun	Bloom Time	Growth Height	Growth Width
Calamus or Sweet Flag	<i>Acorus calamus</i>	M-H	L	L	M	Full Sun-Part Shade	Non-Flowering	2-3'	1-2'
Common Bulrush	<i>Scirpus validus and acutus</i>	H	L	L	M	Full Sun-Part Sun	Spring-Fall	6-8'	4-5'
River Bulrush	<i>Scirpus fluviatilis</i>	H	L	L	M	Full Sun-Part Sun	Spring-Fall	3-5'	3-5'
Appalachian Sedge	<i>Carex appalachica</i>	L-M	L	L	M	Part Sun-Part Shade	Spring-Fall	1'	1'
Pennsylvania Sedge	<i>Carex pennsylvanica</i>	L-M	L	L	M	Part Sun-Part Shade	Spring-Fall	6-12"	6-12"
Plantain-Leaved Sedge	<i>Carex plantaginea</i>	L-M	L	L	M	Part Sun-Part Shade	Spring-Fall	1-2'	1'
Silver Sedge or Blue Satin Sedge	<i>Carex platyphylla</i>	L-M	L	L	M	Part Sun-Part Shade	Spring-Fall	8-12"	12-18"
Northern Sea Oats Grass	<i>Chasmanthium latifolium</i>	M-H	L	L	M	Full Sun-Part Shade	Summer	2-5'	1-3'
Purple Lovegrass	<i>Eragrostis spectabilis</i>	L	L	L	M	Full Sun	Fall	18-24"	2-3'
Tawny Cottongrass	<i>Eriophorum virginicum</i>	M-H	L	L	M	Full Sun-Part Shade	Spring-Fall	1-3'	1-3'
Switch Grass	<i>Panicum virgatum</i>	M-H	L	L	H	Full Sun-Part Shade	Summer-Fall	3-6'	2-3'
Little Blue Stem Grass	<i>Schizachyrium scoparium</i>	L-M	L	L	M	Full Sun	Summer-Fall	2-4'	1-2'
Prairie Dropseed Grass	<i>Sporobolus heterolepis</i>	L-M	L	L	M	Full Sun	Summer-Fall	2-3'	2-3'
Eastern Gamagrass	<i>Tripsacum dactyloides</i>	M	L	L	M	Full Sun-Part Shade	Spring-Fall	4-8'	4-6'

Please contact SVT's Land Protection staff with questions: 978-443-5588

**L=Low • M=MEDIUM • H=HIGH**

## Wildflowers & Groundcover

Common name	Scientific name	Flooding tolerance	Large woody debris	Shade value	Wildlife merit	Sun	Bloom Time	Growth Height	Growth Width
Angelica	<i>Angelica atropurpurea</i>	M-H	L	L	M	Full Sun-Part Sun	Summer	2-8'	2-6'
Arrowhead	<i>Sagittaria latifolia</i>	H	L	L	H	Full Sun	Summer-Fall	1-4'	1-3'
Bee Balm	<i>Monarda didyma</i>	M-H	L	L	H	Full Sun-Part Sun	Summer	2-4'	2-4'
Bugleweed	<i>Lycopus uniflorus</i>	M-H	L	L	M	Full Sun-Part Sun	Summer-Fall	1-2'	1-2'
Bunchberry	<i>Cornus canadensis</i>	M	L	L	H	Full Sun-Part Shade	Spring	6-12"	widely spreading
Canada Mayflower	<i>Maianthemum canadense</i>	M	L	L	M	Part Shade- Shade	Spring	3-6"	3-6"
Carrion Flower	<i>Smilax herbecea</i>	L-M	L	L	M	Part Shade	Spring-Summer	8'	3-5'
Cat Brier	<i>Smilax rotundifolia</i>	M	L	L	H	Full Sun-Part Shade	Summer	20'	vine
Cattail	<i>Typha latifolia and angustifolia</i>	H	L	L	M	Full Sun-Part Shade	Spring-Fall	4-8'	4-8'
Cow Parsnip	<i>Heracleum maximum</i>	M	L	L	H	Full Sun-Part Shade	Summer	4-8"	1-2'
Cranberry	<i>Vaccinium macrocarpon</i>	M	L	L	M	Full Sun-Part Sun	Summer	4-8"	1-2'
Evening Primrose	<i>Oenothera biennis</i>	L-M	L	L	H	Full Sun-Part Sun	Summer-Fall	7'	8-12"
False Solomons' Seal	<i>Smilacina racemosa</i>	L-H	L	L	M	Full Sun-Part Shade	Spring-Summer	12-24"	18-24"
Flowering Raspberry	<i>Rubus odoratus</i>	M-H	M	L	H	Full Sun-Part Shade	Summer	3-6'	6-12'

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Fox Grape	<i>Vitis labrusca</i>	L-M	L	L	M	Full Sun	Summer	15-20'	15-20'
Wild Groundnut	<i>Apios americana</i>	M-H	L	L	H	Full Sun	Spring-Summer	4-8'	1'
Hog Peanut	<i>Amphicarpa bracteata</i>	M-H	L	L	H	Full Sun-Part Shade	Summer	3-5'	1-2'
Jerusalem Artichoke	<i>Helianthus tuberosus</i>	M	L	L	M	Full Sun-Part Shade	Fall	5-7'	1-2'
Jewelweed	<i>Impatiens biflora or pallida</i>	M-H	L	L	H	Full Sun-Part Shade	Summer-Fall	3-5'	3-5'
Marsh Marigold	<i>Caltha palustris</i>	M-H	L	L	L	Full Sun-Part Shade	Spring/Summer	12-18"	12-18"
Meadow Beauty	<i>Rhexia virginica</i>	M	L	L	M	Full Sun-Part Shade	Summer	1-2'	1-2'
Partridgeberry	<i>Mitchella repens</i>	L-M	L	L	M	Part Shade-Shade	Spring	3"	3-6"
Pickernelweed	<i>Pontederia cordata</i>	H	L	L	M	Full Sun	Summer	2-4'	2'
Riverside or Wild Grape	<i>Vitis riparia</i>	L-M	L	L	H	Full Sun-Part Shade	Summer-Fall	50'	vine
Sweet Cicely	<i>Osmorhiza claytonii</i>	M	L	L	M	Part Shade-Shade	Spring-Summer	1-3'	1-3'
Trout Lily or Yellow Addler's Tongue	<i>Erythronium americanum</i>	L	L	L	L	Part Shade-Shade	Spring	3-6"	3-6"
Wintergreen	<i>Gaultheria procumbens</i>	L	L	L	L	Part Shade-Shade	Summer	6"	6-12"

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## Ferns

Common name	Scientific name	Flooding tolerance	Large woody debris	Shade value	Wildlife merit	Sun	Bloom Time	Growth Height	Growth Width
Ostrich Fern	<i>Mattuccia pensylvanica</i>	M-H	L	L	M	Part Sun-Part Shade	Spring-Fall	2-4'	2-4'
Lady in Red Fern	<i>Athyrium filix-femina</i>	M	L	L	M	Part Shade-Part Shade	Spring-Fall	18-30"	18-24"
Cinnamon Fern	<i>Osmunda cinnamomea</i>	M-H	L	L	M	Part Shade-Part Shade	Spring-Fall	2-3'	2-3'
Christmas Fern	<i>Polystichum acrostichoides</i>	L-M	L	L	M	Part Shade-Part Shade	Spring-Winter	1-2'	1-2'
Virginia Chain Fern	<i>Woodwardia virginica</i>	L-M	L	L	M	Part Shade-Part Shade	Spring-Fall	2-4'	2-4'

## Trees

Common name	Scientific name	Flooding tolerance	Large woody debris	Shade value	Wildlife merit	Sun	Bloom Time	Growth Height	Growth Width
Basswood or American Linden	<i>Tilia americana</i>	L-M	H	H	L	Full Sun-Part Shade	Summer	50-80'	30-50'
Black Birch	<i>Betula lenta</i>	M-H	H	H	M	Full Sun-Part Shade	Spring	40-70'	40-60'
Butternut Walnut	<i>Juglans cinerea</i>	M	H	H	M	Full Sun	Summer	40-60'	40-60'
Hackberry	<i>Celtis occidentalis</i>	L-H	M	H	H	Full Sun-Part Shade	Spring	40-60'	40-60'
Juneberry	<i>Amelanchier canadensis</i>	M	M	M	H	Full Sun-Part Shade	Spring	25-30'	15-20'
Mountain Ash	<i>Sorbus americana</i>	H	H	H	H	Full Sun	Spring	15-30'	15-25'
Red Maple	<i>Acer rubrum</i>	H	H	H	M-H	Full Sun-Part Shade	Spring	40-70'	30-50'
White Pine	<i>Pinus strobus</i>	M	H	H	H	Full Sun-Part Shade	—	40-80'	20-40'

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## Shrubs

Common name	Scientific name	Flooding tolerance	Large woody debris	Shade value	Wildlife merit	Sun	Bloom Time	Growth Height	Growth Width
Highbush Blueberry	<i>Vaccinium corymbosum</i>	M-H	M	M	H	Full Sun-Part Shade	Spring-Summer	6-12'	6-12'
Black Elderberry	<i>Sambucus canadensis</i>	M-H	M	M	H	Full Sun-Part Shade	Summer	5-12'	5-12'
Highbush Cranberry	<i>Viburnum trilobum</i>	M-H	M	M	H	Full Sun-Part Shade	Spring	8-12'	8-12'
Nannyberry	<i>Viburnum lentago</i>	L-H	M	H	H	Full Sun-Part Shade	Spring	14-16'	6-12'
Spicebush	<i>Lindera benzoin</i>	L-H	M	M	H	Full Sun-Part Shade	Spring	6-12'	6-12'
Sweet Fern	<i>Comptonia peregrina</i>	L-M	L	L	M	Full Sun-Part Shade	Spring	2-5'	4-8'
Wild Raisin	<i>Viburnum cassinoides and prunifolium</i>	L-M	L	M	H	Full Sun-Part Shade	Spring/Summer	5-12'	5-12'
Winterberry	<i>Ilex verticillata</i>	M-H	L	L	H	Full Sun-Part Shade			
Buttonbush	<i>Cephalanthus Occidentalis</i>	M-H	L	L	M	Full Sun-Part Shade	Summer	5-12'	4-8'
Sweet pepperbush	<i>Clethra alnifolia</i>	M-H	M	L	M	Full Sun-Part Shade	Summer	3-8'	4-6'

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Local Garden Centers and Nurseries with Native Plant Selections  
 New England Wildflower Society  
 180 Hemenway Road Framingham, MA 01701  
[www.newfs.org](http://www.newfs.org)

Russell's Garden Center  
 379 Boston Post Rd. Wayland, MA 01778  
[www.russellsgardencenter.com](http://www.russellsgardencenter.com)

Mahoney's Garden Center  
 165 Princeton St. North Chelmsford, MA 01863  
[mahoneysgarden.com](http://mahoneysgarden.com)

Weston Nurseries  
 93 East Main St. Hopkinton, MA 01748  
[www.westonnurseries.com](http://www.westonnurseries.com)