

LANDSCAPE RESTORATION PLANT LISTS

The following plant lists have been developed for the Department of Conservation and Recreation (DCR) Charles River Basin Riverbank Vegetation Management Plan. Deviations from this plant and seed list should be approved by DCR's Landscape Architects and/or Ecologist. Any additions or modifications shall be presented to the Conservation Commission for review and authorization prior to implementation.

As defined by BioMap 2 and 'The Vascular Plants of Massachusetts' handbook, plants native to the Boston Basin shall be given priority selection. Plants native to Southern New England Coastal Plains and Hills may follow as secondary preference.¹

Lawn—

Low-Mow Grass Seed Mixes

The following low-mow grass seed mixes (or equal substitutions) are recommended to be utilized for overseeding passive recreation areas that need to stay at a low height. Mix shall be selected from those included below by required site conditions

- Natural Perfection Mix, by Lavoie Horticulture- A low-mow mix that includes native fescues intended to be mowed 1x per year after seed establishment, with no requirement for fertilizer or water after establishment.
- Fleur De Lawn (PT 755)- Developed by Oregon State University, a mix of low-growing flowers, clovers and grasses. The clovers naturally self-feed the lawn with nitrogen and the low growing flowers provide pollinator habitat. Maintain as high as 5" for a mini-meadow look, or 3" for a more manicured lawn.
- ["Dog Park Eco-Lawn Mix"](#) - Tall fescue provides high salt tolerance and rhizomatous 'self-repairing' growth patterns to counter effects of pet urine. Naturally nitrogen-fixing clover and a bit of vigorous perennial ryegrass round out the mix. Wear and drought-tolerant. Dappled shade to full sun. A great choice for any high traffic area where drought tolerance and Rhizomatous Tall Fescue attributes are desired. Mow about once a month to maintain between 3 and 5 inches.
- [Eco-Turf Mix](#): Tolerant grasses and Microclover® holds up well to wear—for high traffic areas. Low maintenance and low input, more shade tolerant than many other lawn alternatives. Once established this mix requires little supplemental irrigation or fertilizer and tolerates acidic and shady sites. Microclover feeds the companion grasses with nitrogen. The extremely drought-tolerant Microclover maintains a nice dark green color once established and should not require irrigation in most climates. Its inclusion with the grasses allows the soil to retain more moisture in dry periods which sustains an overall green appearance of grass through the summer. Mow about once a month to maintain this lawn at a height between 2 and 5 inches.
- [Verdant Lawn](#): Richly vegetative, this lawn is multi-textured with Microclover and white yarrow to enhance wear tolerance and provide year-round green cover. Performs well in both sun and shade. Diversity without flowers.
- [VT Wildflower Farm – No Mow Mix](#) Blend of low-mow grasses, Festuca rubra (Creeping Red Fescue), Festuca brevipila 'Charlot' (Hard Fescue 'Charlot'), Festuca ovina var. duriuscula 'Heron (Hard Fescue 'Heron').

¹Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife. (2011). *BioMap2 Technical Report - Building a Better BioMap*. Boston: Massachusetts Department of Fish & Game.

- [VT Wildflower Farm- Eco Lawn](#) Salt tolerant blend of fine fescue grasses that create a somewhat clumping appearance: Shoreline Creeping Red Fescue, Class One Creeping Red Fescue, SR3150 Hard Fescue, Quatro Sheep Fescue, Carson Chewings Fescue
- [American Meadows – Low Mow](#) - This cool season grass mix contains 6 different fescues - Jamestown Chewing, Quatro Sheep, Sea Link Slender, Sword, Aurora and Kent Creeping. Mixture of low-growing, fine-textured turf grasses, mixture only requires mowing every four to six weeks. All six grass varieties are also drought-resistant and withstand most growing conditions.
- [American Meadows – Creeping Red Fescue](#) or [Ernst Seeds – Festuca rubra ‘Pennlawn’](#) - low-maintenance grass ground cover. It is beneficial for erosion control and will attract wildlife. Single variety, less resilient if seed doesn't take.

Middlesex County Native Restoration Seed and Planting Lists

Where Heights up to 36" can be tolerated in passive recreation areas, it is suggested that passive turf areas be eliminated and seeded with the following mixes, selected per site conditions:

Low Growing Upland Mix

This seed mix is a lower growing, primarily native mix for general use (including roadsides and edges of paths) where little bluestem is desired or where conditions are unknown. It is tolerant of partial shade. Appropriate locations are where no mowing or infrequent mowing will occur: woodland edges, clearings, and locations where habitat and long-term soil stabilization are desired.

Little Bluestem and Virginia Wild Rye, growing to 1.5-2 feet, are intended to be the long-term dominant species, depending on sun/shade. Herbaceous species may grow 2-4 feet in height.

Herbaceous Species may be substituted with similar species under 2' HT native to Massachusetts 'Bio Basin' or 'Southern New England Coastal Plains and Hills' if those specified are not available.

	<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS By Weight</u>
Grasses	<i>Schizachyrium scoparium</i>	Little Bluestem	67.0%
	<i>Elymus Virginicus</i>	Virginia Wild Rye	25.0%
	<i>Panicum clandestinum 'Tioga'</i>	Deer Tongue	5.00%
	<i>Agrostis perennans</i>	Upland Bentgrass	4.00%
	<i>Juncus tenuis</i>	Path Rush	1.00%
			<hr/> 92.00%
Herb/Forb	<i>Chamaecrista fasciculata</i>	Partridge Pea	4.30%
	<i>Penstemon digitalis</i>	Beard-tongue	2.00%
	<i>Solidago nemoralis</i>	Grey Goldenrod	0.50%
	<i>Solidago caesia</i>	Woodland Goldenrod	0.50%
	<i>Aster cordifolius</i>	Blue Wood Aster	0.30%
	<i>Aster laevis</i>	Smooth Aster	0.20%
	<i>Pycnanthemum tenuifolium</i>	Slender Mountain Mint	0.20%
			<hr/> 8.00%
			100.00%

Seeding Rate

Apply this mix at 20 lbs. PLS/acre on areas of less than 3:1 slope and 60 lbs. PLS on areas of greater than 3:1 slope.

Add 30 lbs./acre of a cover crop. For a cover crop use either grain oats (1 Jan to 31 July) or grain rye (1 Aug to 31 Dec). Cover crop shall be incidental to seeding item. Cover crops must be properly cut and managed after plant establishment to prevent them from reseeding.

Low Growing Upland Mix- Full Sun

This seed mix is intended for full sun and drier soils and locations. It would be appropriate for limited mow (once year or less) medians, traffic islands, and other roadside locations where low naturalized grasses are desired.

Little Bluestem and Sheep Fescue, growing 1.5-2 feet, are intended to be the long-term dominant grass. Sheep Fescue is a low growing (12 inches) non-native, drought tolerant, cool season bunch grass. Herbaceous species may grow 2-3 feet in height.

Herbaceous Species may be substituted with similar species under 2' HT native to Massachusetts 'Bio Basin' or 'Southern New England Coastal Plains and Hills' if those specified are not available.

	<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS By Weight</u>
Grass			
	Festuca ovina	Sheep Fescue	80.00%
	Schizachyrium scoparium	Little Bluestem	10.70%
	Elymus virginicus	Virginia Wild Rye	5.30%
	Agrostis perennans	Upland Bentgrass	0.30%
	Juncus tenuis	Path Rush	0.70%
			<hr/> 97.0%
Herb/Forb			
	Chamaecrista fasciculata	Partridge Pea	1.80%
	Asclepias tuberosa	Butterfly Milkweed	0.50%
	Lespedeza capitata	Round Headed Bush Clover	0.30%
	Aster laevis	Smooth Aster	0.10%
	Euthamia caroliniana	Slender Goldentop	0.20%
	Pycnanthemum tenuifolium	Slender Mountain Mint	0.10%
			<hr/> 3.00%
			100.00%

Seeding Rate:

Apply this mix at 75 lbs. PLS/acre on areas of less than 3:1 slope and 175 lbs. PLS on areas of greater than 3:1 slope.

Add 30 lbs./acre of a cover crop. For a cover crop use either grain oats (1 Jan to 31 July) or grain rye (1 Aug to 31 Dec). Cover crop shall be incidental to seeding item. Cover crops must be properly cut and managed after plant establishment to prevent them from reseeding.

Seeding –Low Upland Native Mix – Full Sun

This seed mix is intended for areas where a lower grass is desired. Mix is intended for areas that will not be mowed or will be mowed once a year or less. Little Bluestem, which grows 1.5-3 feet in height, is intended to be the long-term dominant grass. Herbaceous species may grow 2-4 feet in height.

This mix is all native species, tolerant of dry to mesic condition and is intended for full sun locations. Appropriate for meadows, roadside slopes and shoulders, and locations where habitat and long-term soil stabilization are desired. This mix does not include fescues and should only be used where slow rate of establishment, other than nurse crops, is acceptable.

Herbaceous Species may be substituted with similar species under 36" HT native to Massachusetts 'Bio Basin' or 'Southern New England Coastal Plains and Hills' if those specified are not available

	<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS By Weight</u>
Grasses			
	<i>Schizachyrium scoparium</i>	Little Bluestem	63.30%
	<i>Elymus virginicus</i>	Virginia Wild Rye	20.00%
	<i>Panicum clandestinum 'Tioga'</i>	Deer Tongue	5.00%
	<i>Agrostis perennans</i>	Upland Bentgrass	3.00%
	<i>Juncus tenuis</i>	Path Rush	<u>1.00%</u>
			92.30%
Herb/Forb			
	<i>Chamaecrista fasciculata</i>	Partridge Pea	4.50%
	<i>Asclepias tuberosa</i>	Butterfly Milkweed	1.50%
	<i>Lespedeza capitata</i>	Roundhead Bush Clover	1.00%
	<i>Pycnanthemum tenuifolium</i>	Slender Mountain Mint	0.30%
	<i>Euthamia caroliniana</i>	Slender Goldentop	0.30%
	<i>Aster laevis</i>	Smooth Aster	<u>0.10%</u>
			<u>7.70%</u>
			100.00%

Seeding Rate:

Apply this mix at 10 lbs. PLS/acre on areas of less than 3:1 slope and 25 lbs. PLS on areas of greater than 3:1 slope.

Add 30 lbs./acre of a cover crop. For a cover crop use either grain oats (1 Jan to 31 July) or grain rye (1 Aug to 31 Dec). Cover crops must be properly cut and managed after plant establishment to prevent them from reseeding.

Northeast Showy Mix- Full Sun

This seed mix is intended for full sun where pollinator habitat is desirable. It would be appropriate for limited mow (once year or less) locations.

Herbaceous Species may be substituted with similar species under 36" HT native to Massachusetts 'Bio Basin' or 'Southern New England Coastal Plains and Hills' if those specified are not available.

	<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS By Weight</u>
Grass			
	<i>Schizachyrium scoparium</i>	Little Blue Stem	39.50%
	<i>Bouteloua curtipendula 'Butte'</i>	Sideoats Grama 'Butte'	23.10%
	<i>Elymus virginicus</i>	Virginia Wild Rye	14.00%

		76.60%
Herb/Forb		
<i>Echinacea purpurea</i>	Purple Coneflower	7.00%
<i>Chamaecrista fasciculata</i>	Partridge Pea	5.00%
<i>Penstemon digitalis</i>	Beard-tongue	3.50%
<i>Asclepias tuberosa</i>	Butterfly Milkweed	2.50%
<i>Rudbeckia triloba</i>	Brown Eyed Susan	1.00%
<i>Aster laevis</i>	Smooth Aster	1.00%
<i>Zizia aurea</i>	Golden Alexanders	0.50%
<i>Senna hebecarpa</i>	Wild Senna	0.50%
<i>Tradescantia ohiensis</i>	Ohio Spiderwort	0.50%
<i>Aster novae-angliae</i>	New England Aster	0.40%
<i>Aster pilosus</i>	Heath Aster	0.40%
<i>Pycnanthemum tenuifolium</i>	Slender Mountain Mint	0.30%
<i>Solidago nemoralis</i>	Grey Goldenrod	0.30%
<i>Aster prenanthoides</i>	Zig Zag Aster	0.20%
<i>Solidago juncea</i>	Early Goldenrod	0.20%
<i>Baptisia tinctoria</i>	Wild Indigo	0.10%
		<u>23.40%</u>
		100.00%

Seeding Rate:

Apply this mix at 20 lbs PLS/acre on areas of less than 3:1 slope and 25 lbs PLS on areas of greater than 3:1 slope.

Add 30 lbs/acre of a cover crop. For a cover crop use either grain oats (1 Jan to 31 July) or grain rye (1 Aug to 31 Dec). Cover crops must be properly cut and managed after plant establishment to prevent them from reseeding.

Upland Shade Mix

Mix of native species and annual rye for more densely shaded areas of roadside or bike paths. Intended for no mow or minimal mow conditions. Height of grasses and forbs ranges from 1-3 feet.

Herbaceous Species may be substituted with similar species under 30" HT native to Massachusetts 'Bio Basin' or 'Southern New England Coastal Plains and Hills' if those specified are not available

<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS By Weight</u>
Grass		
<i>Elymus virginicus</i>	Virginia Wild Rye	32.00%
<i>Panicum clandestinum</i>	Deer Tongue	30.00%
<i>Agrostis perennans</i>	Upland Bentgrass	20.00%
<i>Juncus tenuis</i>	Path Rush	5.00%
<i>Carex vulpinoidea</i>	Fox Sedge	<u>3.00%</u>
		90.0%
Herb/Forb		

<i>Chamaecrista fasciculata</i>	Partridge Pea	5.00%
<i>Aster divaricatus</i>	White Wood Aster	3.00%
<i>Solidago caesia</i>	Woodland Goldenrod	<u>2.00%</u>
		<u>10.00%</u>
		100.00%

Seeding Rate:

Apply this mix at 30 lbs. PLS/acre on areas of less than 3:1 slope and 25 lbs. PLS on areas of greater than 3:1

slope. No cover crop is recommended.

Roadside Riverbank - Part Shade Mix

This mix contains species tolerant of sun – part shade conditions and very dry to moist soils. Grasses are relatively low-growing. Good for roadside edge or banks that may be periodically mowed.

Herbaceous Species may be substituted with similar species under 30" HT native to Massachusetts 'Bio Basin' or 'Southern New England Coastal Plains and Hills' if those specified are not available.

<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS By Weight</u>
Grass		
<i>Elymus virginicus</i>	Virginia Wild Rye	30.00%
<i>Elymus canadensis</i>	Canada Wild Rye	25.00%
<i>Schizachyrium scoparium</i>	Little Bluestem	22.00%
<i>Dichanthelium clandestinum</i>	Deertongue grass	8.00%
<i>Agrostis perennans</i>	Upland Bentgrass	6.00%
<i>Carex vulpinoidea</i>	Fox Sedge	2.00%
<i>Juncus tenuis</i>	Path Rush	2.00%
<i>Juncus effusus</i>	Soft Rush	<u>0.10%</u>
		<u>95.10%</u>
Herb/Forb		
<i>Penstemon digitalis</i>	Beard-tongue	2.00%
<i>Aster novae-angliae</i>	New England Aster	1.00%
<i>Solidago caesia</i>	Woodland Goldenrod	0.50%
<i>Aster cordifolius</i>	Blue Wood Aster	0.50%
<i>Eupatorium maculatum</i>	Joe-pye Weed	0.30%
<i>Geum canadense</i>	White Avens	0.30%
<i>Solidago rigida</i>	Rigid Goldenrod	0.30%
		<u>4.90%</u>
		100.00%

Seeding Rate:

Apply this mix at 20 lbs PLS/acre on areas of less than 3:1 slope and 25 lbs PLS on areas of greater than 3:1 slope.

Add 30 lbs/acre of a cover crop. For a cover crop use either grain oats (1 Jan to 31 July) or grain rye (1 Aug to 31 Dec). Cover crops must be properly cut and managed after plant establishment to prevent them from reseeding.

Roadside Riverbank – Full sun

This mix contains native species tolerant of dry to mesic conditions. Good for slopes or riverbanks where soils range from dry to moist, that will not be mowed and where a tall, dense grass stand is desired.

Herbaceous Species may be substituted with similar species under 30" HT native to Massachusetts 'Bio Basin' or 'Southern New England Coastal Plains and Hills' if those specified are not available.

<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS By Weight</u>
Grass		
Andropogon gerardii 'Niagara	Big Bluestem 'Niagara	24.00%
Sorghastrum nutans	Indiangrass	22.00%
Elymus virginicus	Virginia Wild Rye	20.00%
Panicum virgatum	Switchgrass	8.00%
Dichanthelium clandestinum 'Tioga'	Deertongue grass 'Tioga'	10.00%
Agrostis perennans	Upland Bentgrass	4.00%
Carex vulpinoidea	Fox Sedge	2.00%
Juncus tenuis	Path Rush	1.00%
Juncus effuses	Soft Rush	<u>1.00%</u>
		92.00%
Herb/Forb		
Verbena hastata	Blue Vervain	6.0%
Desmodium canadense	Showy Tick Trefoil	1.40%
Aster novae-angliae	New England Aster	0.50%
Asclepias incarnata	Swamp Milkweed	0.50%
Eupatorium maculatum	Joe-pye Weed	0.30%
Solidago juncea	Early Goldenrod	0.20%
Solidago rigida	Rigid Goldenrod	0.20%
Rudbeckia hirta	Black-eyed Susan	<u>0.10%</u>
		<u>8.0%</u>
		100.00%

Seeding Rate:

Apply this mix at 20 lbs PLS/acre on areas of less than 3:1 slope and 25 lbs PLS on areas of greater than 3:1 slope.

Add 30 lbs/acre of a cover crop. For a cover crop use either grain oats (1 Jan to 31 July) or grain rye (1 Aug to 31 Dec). Cover crops must be properly cut and managed after plant establishment to prevent them from reseeding.

Conversion to Meadows of primarily forbs:

See Type C Lists

Trees for use in Turf Areas

Acer rubrum – Red Maple

Amelanchier canadensis - Serviceberry

Celtis occidentalis – Hackberry

Fagus grandifolia – American Beech

Nyssa sylvatica- Black Tupelo

Platanus occidentalis - Sycamore

Quercus alba – White Oak

Quercus coccinea – Scarlet Oak

Quercus velutina – Black Oak

Quercus bicolor – Swamp White Oak

Swida florida – Flowering Dogwood

Tilia americana – Basswood

Ulmus americana ‘Homestead’ – Homestead Elm

Ulmus americana ‘Valley Forge’ – American Elm

Meadows and River's Edge

Upland meadow appropriate species can be chosen by utilizing the following indicator categories:

OBL – Obligate Wetland; commonly found in wetlands-near the water

FACW – Facultative Wetland; commonly found in wetlands; but may occur in areas other than wetlands

FAC – Facultative; found in wetlands and non-wetlands

FACU – Facultative Upland; commonly found in non-wetlands but may occur in wetlands

Grasses, Sedges & Rushes

Agrostis perennans – Autumn Bentgrass – FACU – shade tolerant

Andropogon gerardii– Big Bluestem - FACU

Andropogon virginicus – Broom Sedge - FACU

Calamagrostis canadensis – Canada Bluejoint Grass – OBL

Carex amphibola - Creek sedge- FAC– shade tolerant

Carex lurida – Lurid Sedge - OBL

Carex utriculata – Common Beaked Sedge - OBL

Danthonia spicata – Poverty Grass

Deschampsia flexuosa - Wavy Hairgrass – FACU - Shade Tolerant

Elymus hystrix – Bottlebrush – FACU - Shade Tolerant

Elmus virginicus – Virginia Wildrye - FACW

Elymus riparius – Riverbank Wildrye

Festuca subverticillata - Nodding fescue- FACU– shade tolerant

Glyceria striata – Fowl Mannagrass - OBL

Juncus canadensis – Canada Rush - OBL

Juncus effusus – Soft Rush - OBL

Juncus effuses var. solutus – Lamp Rush

Juncus tenuis – Path Rush - FAC

Leersia oryzoides – Rice Cutgrass - OBL

Panicum virgatum– Switchgrass - FAC

Schizachyrium scoparium – Little Bluestem

Scirpus cyperinus – Woolgrass - OBL

Sorghastrum nutans – Indiangrass - FACU

Perennials & Ferns

Actaea pachypoda - White Baneberry- UPL – shade tolerant

Actaea rubra- Red Baneberry- FACU– shade tolerant

Ageratina altissima) - White Snakeroot- UPL– shade tolerant

Anaphalis margaritace - Pearly Everlasting- FACU

Anemone virginiana - Thimbleberry- FACU– shade tolerant

Apocynum androsaemifolium - Spreading Dogbane- UPL

Apocynum cannabinum – Dogbane - FAC

Aquilegia canadensis – Red Columbine – FACU - Shade Tolerant

Asclepias incarnata – Swamp Milkweed – OBL

Asclepias purpurescens - Purple Milkweed- FACU

Asclepias tuberosa – Butterfly Weed

Asclepias verticillate - Whorled Milkweed- UPL

Aster novae-angliae – New England

Aster Baptisia tinctorial - Yellow Wild Indigo- UPL

Bidens frondosa – Devil's Pitchfork - FACW

Chamaecrista fasciculata - Partridge Pea – FACU

Chelone glabra - White turtlehead – OBL– shade tolerant
Coreopsis rosea – Rose Coreopsis - FACW
Coreopsis tinctorial – Plains Coreopsis
Desmodium canadense – Showy Ticktrefoil – FAC
Eragrostis spectabilis – Purple Lovegrass – UPL
Eupatorium dubium ‘Little Joe’ – Little Joe Pyeweed
Eschscholzia californica - California poppy (Annual, for pollinators)
Eupatorium maculatum - Spotted Joe Pye Weed – FACW
Eupatorium perfoliatum – Common Boneset – FACW
Eurybia divaricata - White Wood Aster – Shade Tolerant
Eurybia macrophylla - Bigleaf aster- UPL– shade tolerant
Euthamia graminifolia- Flat topped Goldenrod- FAC
Geranium maculatum - Wild Geranium – FACU
Geranium x. magnificum – Purple Cranesbill
Gratiola aurea – Golden Pert - OBL
Helianthus decapetalus - Thinleaf Sunflower- FACU
Hieracium spp. – Hawkweed
Hierochloa odorata - Sweetgrass-UPL
Hypericum mutilum – Dwarf St. John’s Wort - FACW
Iris versicolor – Blue Flag Iris - OBL
Lechea intermedia var. intermedia – Largepod Pinweed
Lechea maritima – Beach Pinweed
Lechea mucronata – Hairy Pinweed
Lechea spp. – Pinweed
Lechea tenuifolia - Slender Pinweed
Lupinus perennis – Wild Blue Lupine
Oenothera biennis - Evening Primrose- FACU
Onoclea sensibilis - Sensitive fern - FACW– shade tolerant
Penstemon digitalis – Beard Tongue - FAC
Pycnanthemum muticum – Short-toothed Mountain Mint – FAC
Pycnanthemum flexuosum – Appalachian Mountain Mint - FACW
Pycnanthemum tenuifolium – Narrow-leafed Mountain Mint
Pycnanthemum virginiana – Virginia Mountain Mint
Solidago bicolor – Silverrod – Shade Tolerant
Solidago caesia – Bluestem Goldenrod – FACU - Shade Tolerant
Solidago nemoralis – Grey Goldenrod – Shade Tolerant
Solidago sempervirens - Seaside goldenrod- FACW
Solidago speciose - Showy Goldenrod- UPL
Symphyotrichum leave -Smooth Blue Aster- FACU
Symphyotrichum cordifolium – Blue Wood Aster – Shade Tolerant
Thalictrum dioicum - Early Meadow Rue- FACU– shade tolerant
Verbena hastata – Blue Vervain - FACW
Zizia aurea – Golden Alexander – Shade Tolerant – FAC

Circulation

* Salt and pollution tolerant trees and shrubs

Street Trees

Celtis occidentalis – Hackberry

Liquidambar styraciflua - Sweetgum

Ulmus americana ‘Homestead’ – Homestead Elm

Ulmus americana ‘Valley Forge’ – American Elm

Shoreline Trees

Acer negundo – Box Elder

Acer saccharinum – Silver Maple

Betula papyrifera – Paper Birch

Betula populifolia – Grey Birch

Carpinus caroliniana – American Hornbeam

Juniperus virginiana – Eastern Red Cedar

Prunus serotina – Black Cherry

Quercus bicolor – Swamp White Oak

Quercus rubra – Red Oak

Salix caroliniana – Coastal Plain Willow

Salix interior - Sandbar Willow

Salix nigra – Black Willow

Shrubs

Ilex glabra - Inkberry

Morella pennsylvanica – Bayberry

Prunus maritima – Beach Plum

Rubus flagellaris – Northern Dewberry

Salix discolor – Pussy Willow

Spiraea alba – Meadowsweet

Spiraea tomentosa – Steeplebush

Vines

Parthenocissus quinquefolia – Virginia Creeper

*existing woodlands only – will overtop new plantings

*See Type A Seed lists for seed mixes appropriate to roadsides

River's Edge

Shrubs

Arctostaphylos uva-ursi – Bearberry
Ceanothus americanus- New Jersey Tea
Comptonia peregrina – Sweet Fern
Dasiphora fruticosa – Shrubby Cinquefoil
Fragaria virginiana - Wild Strawberry
Gaylussacia baccata – Black Huckleberry
Kalmia angustifolia – Sheep-Laurel
Rosa virginiana – Virginia Rose
Rubus flagellaris – Northern Dewberry
Spiraea alba – Meadowsweet
Spiraea tomentosa – Steeplebush
Vaccinium angustifolium - Lowbush blueberry

Perennials & Ferns

Asclepias tuberosa – Butterfly Weed
Campanula rotundifolia – Harebell
Capnoides sempervirens – Pink corydalis
Dennstaedtia punctilobula - Hay-scented Fern
Geranium maculatum - Wild Geranium
Gratiola aurea – Golden Pert
Iris versicolor – Blue Flag Iris
Lupinus perennis – Wild lupine
Lycopus americanus – American Water Horehound
Matteuccia struthiopteris – Ostrich Fern
Melampyrum lineare – Common Cow-Wheat
Nuttallanthus canadensis – Blue Toadflax
Onoclea sensibilis – Sensitive Fern
Osmundastrum cinnamomea – Cinnamon Fern
Osmunda claytonia – Interrupted Fern
Osmunda regalis – Royal Fern
Packera aurea - Golden Groundsel- FACW
Plantago rugelli – American Plantain
Pteridium aquilinum – Bracken Fern
Pycnanthemum muticum - Short-toothed Mountainmint
Rudbeckia laciniata – Tall Coneflower
Sabatia kennedyana – Plymouth Rose Gentian
Silene caroliniana - Wild Pinks/ Catchfly
Verbena hastata – Blue Vervain
Viola pedate - Bird's Foot Violet

Grasses, Rushes & Sedges

Carex amphibola – Creek Sedge
Deschampsia flexuosa - Common Hair Grass
Elymus hystrix – Bottlebrush Grass
Eragrostis spectabilis – Purple Love Grass
Juncus tenuis - Poverty Rush
Sisyrinchium angustifolium - Blue-Eyed Grass

Sporobolus vaginiflorus - Poverty Grass

Vines/ Groundcovers

Parthenocissus quinquefolia – Virginia Creeper

Type F: Medium to High Shrub with Overstory

Trees

Amelanchier arborea – Tall Shadbush

Benthamidia florida – Flowering Dogwood

Betula papyrifera – Paper Birch

Carya cordiformis – Bitternut Hickory

Carya ovata – Shagbark Hickory

Carya tomentosa – Mockernut Hickory

Juniperus virginiana – Eastern Red Cedar

Quercus ilicifolia – Bear Oak

Shrubs

Amelanchier spicata – Thicket Shadbush

Amelanchier stolonifera – Running Serviceberry

Aronia arbutifolia – Red Chokeberry

Aronia melanocarpa – Black Chokeberry

Cephalanthus occidentalis – Buttonbush

Clethra alnifolia – Summersweet Clethra

Cornus amomum - Silky Dogwood

Cornus racemose - Gray Dogwood

Corylus americana – American Hazelnut

Hamamelis virginiana - American Witchhazel

Ilex verticillate - Common Winterberry

Lindera benzoin – Spicebush

Prunus maritima – Beach Plum

Rubus allegheniensis - Common Blackberry

Rhus glabra - Smooth Sumac

Rhus typhina – Staghorn Sumac

Rubus odoratus - Purple-flowering Raspberry

Salix bebbiana - Bebb Willow

Salix discolor - Pussy Willow

Salix nigra - Black Willow

Sambucus canadensis – Elderberry

Spirea alba - Meadowsweet

Spirea tomentosa – Steeplebush

Swida alternifolia – Pagoda Dogwood

Swida amomum – Silky Dogwood

Swida racemosa – Gray Dogwood

Swida rugosa – Round-leaved Dogwood

Viburnum acerifolium – Mapleleaf Viburnum

Vaccinium angustifolium – Lowbush Blueberry

Vaccinium corymbosum – Highbush Blueberry

Viburnum dentatum – Arrowwood Viburnum

Viburnum lantanoides – Hobblebush

Viburnum lentago – Nannyberry

Viburnum nudum – Smooth Witherod
Viburnum trilobum - American Cranberrybush

Perennials

Asclepias tuberosa – Butterfly Weed
Eutorchium fistulosum – Joe Pye Weed
Senna hebecarpa - Wild Senna
Symphotrichum novae-angliae – New England Aster
Symphyotrichum novi-belgii - New York Aster
Teucrium canadense - American Germander
Verbena hastata - Swamp Verbena
Vernonia noveboracensis - New York Ironweed

Grasses

Eragrostis spectabilis – Purple Love Grass

Wooded

Trees

Acer pensylvanicum – Striped Maple
Acer rubrum – Red Maple
Acer saccharinum – Silver Maple
Amelanchier laevis – Allegheny Serviceberry
Amelanchier canadensis – Serviceberry
Betula alleghaniensis – Yellow Birch
Betula lenta- Black Birch
Betula papyrifera- Paper Birch
Betula populifolia- Grey Birch
Carpinus caroliniana— American Hornbeam
Carya ovata – Shagbark Hickory
Cornus alternifolia- Pagoda Dogwood
Nyssa sylvatica - Black Tupelo
Ostrya virginiana – American Hop Hornbeam
Platanus occidentalis – American
 Sycamore *Pinus strobus* – White Pine
Populus grandidentata – Big-toothed Aspen
Populus tremuloides – Quaking Aspen
Prunus serotina – Black Cherry
Quercus bicolor - Swamp White Oak
Quercus coccinea – Scarlet Oak
Quercus rubra – Red Oak
Quercus velutina – Black Oak
Sassafras albidum – Sassafras
Salix nigra – Black Willow
Tilia americana – American Basswood

Shrubs

Alnus incana – Speckled Alder
Alnus serrulata – Smooth Alder
Aronia arbutifolia– Red chokeberry
Aronia melanocarpa – Black Chokeberry

Clethra alnifolia – Summersweet
Corylus americana – American Hazelnut
Diasphora floribuda – Shrubby cinquefoil
Hamamelis virginiana – American Witchhazel
Hypericum canadense – Canadian St. John's Wort
Hypericum mutilum - Dwarf St. John's Wort
Hypericum punctatum – Spotted St. John's Wort
Ilex verticillata – Common Winterberry
Lindera benzoin – Spicebush
Prunus virginiana – Choke Cherry
Rubus allegheniensis - Common Blackberry
Rubus odoratus – Purple-flowering Raspberry
Viburnum lantanoides – Hobblebush
Viburnum lentago – Nannyberry
Viburnum nudum L. var. *cassinoides* – Witherod Viburnum
Viburnum trilobum – American Cranberrybush

Perennials & Ferns

Actaea pachypoda – White Baneberry
Actaea rubra – Red Baneberry
Adiantum pedatum – Maidenhair Fern
Ageratina altissima (*Eupatorium rugosum*) – White Snakeroot
Apocynum cannabinum – Dogbane
Aralia racemosa – Spikenard
Asplenium platyneuron – Ebony Spleenwort
Asplenium trichomanes ssp. *trichomanes* – Maidenhair Spleenwort
Athyrium filix-femina – Lady Fern
Carex amphibola – Creek sedge
Carex appalachica – Appalachian Sedge
Carex pennsylvanica – Pennsylvania sedge
Carex platyphylla – Silver Sedge
Dendrolycopodium dendroideum – Ground Pine
Dryopteris marginalis – Marginal Shield Fern
Dennstaedtia punctilobula – Hay-scented fern
Dryopteris marginalis – Wood Fern
Eurybia divaricata - Whitewood Aster
Eurybia macrophylla – Bigleaf aster
Fragaria virginian – Wild Strawberry
Gaultheria procumbens – Wintergreen
Gentiana andrewsii – Closed Gentian
Geranium maculatum – Wild Geranium
Ionactis linariifolia – Flaxleaf whitetop aster
Maianthemum canadense – Canada Mayflower
Maianthemum stellatum – Star-Flowered False Solomon Seal
Matteuccia struthiopteris – Ostrich fern
Mitchella repens – Partridge Berry
Onoclea sensibilis – Sensitive fern
Osmundastrum cinnamomeum – Cinnamon Fern
Osmunda claytoniana – Interrupted fern
Osmunda regalis – Royal fern
Packera aurea (*Senecio aureus*) – Golden Groundsel

Polystichum acrostichoides – Christmas fern
Pteridium aquilinum - Bracken fern
Sanguinaria canadensis – Bloodroot
Symphytichum cordifolium – Blue Heart-Leaf Aster
Thelypteris noveboracensis – New York Fern
Tiarella cordifolia – Foam Flower

Vines/ Groundcovers

Clematis virginiana – Wild Clematis
Parthenocissus quinquefolia – Virginia Creeper
Vitis riparia – Riverbank Grape