

APPENDIX C: RIPARIAN BUFFER SEED MIX

The use of a diverse seed mix that incorporates annual species as well as grasses, forbes, shrubs, and trees are very beneficial to the success of restoration work done in riparian corridors. Certain annual species are excellent for erosion control and provide nurse crop benefits. A diverse seed mix of grasses, forbes, shrubs, and trees have been found, through empirical experience, to minimize erosion rill development, minimize invasive species control problems, and provide diverse vegetation and habitat values in variable rainfall, soil moisture, and topographic conditions. Contained in this appendix is one recommended seed mix for full sun conditions in a piedmont riparian buffer.

RIPARIAN BUFFER SEED MIX					
SCIENTIFIC NAME	COMMON NAME	INDICATOR STATUS	SEED RATE (POUNDS PER ACRE)	WILDLIFE VALUE	
				PRIMARY SPECIES	FUNCTION
GRASSES					
<i>Andropogon gerardii</i>	Big Bluestem	FAC	3	Finches, junco, sparrows, deer, bobwhite, small mammals.	FD
<i>Andropogon scoparius</i>	Little Bluestem	FACU-	1	Finches, junco, sparrows, deer, bobwhite.	FD
<i>Dichanthelium clandestinum</i>	Deertongue	FAC+	1	Sparrows, blackbirds.	FD
<i>Elymus riparius</i>	Riverbank Wild Rye	FACW	10	Sparrows, finches, small mammals.	FD
<i>Elymus virginicus</i>	Virginia Wild Rye	FACW-	10	Sparrows, finches, small mammals.	FD
<i>Lolium multiflorum</i>	Annual Ryegrass	NI	40	Sparrows, finches, small mammals.	EC, FD
<i>Panicum virgatum</i>	Switchgrass	FAC	15	Dove, bobwhite, wild turkey, mice, blackbirds, sparrows, deer, rabbit.	FD
<i>Setaria italica</i>	Foxtail Millet	UPL	40	Sparrows, finches, small mammals.	FD
<i>Sorghastrum nutans</i>	Indian Grass	FACU	3	Sparrows, finches, small mammals.	FD
FORBS					
<i>Anemone virginiana</i>	Thimbleweed	NI	0.2	Pollinators, butterflies, other insects.	FD
<i>Asclepias incarnata</i>	Swamp Milkweed	OBL	0.5	Pollinators, butterflies, other insects.	FD
<i>Asclepias syriaca</i>	Common Milkweed	NI	0.5	Pollinators, butterflies, other insects.	FD
<i>Aster laevis</i>	Smooth Aster	NI	0.2	Pollinators, butterflies, other insects.	FD
<i>Aster prenanthoides</i>	Zig-Zag Aster	FAC	0.1	Pollinators, butterflies, other insects.	
<i>Conoclinium coelestinum</i>	Mist Flower	FAC	0.1	Butterflies, pollinators, finches, sparrows.	FD
<i>Chamaecrista fasciculata</i>	Partridge Pea	NI	0.5	Pollinators, butterflies, other insects.	FD
<i>Chelone glabra</i>	White Turtlehead	OBL	0.1	Pollinators, butterflies, other insects.	FD
<i>Cimicifuga racemosa</i>	Black Cohosh	NI	0.1	Pollinators, butterflies, other insects.	FD
<i>Coreopsis tripteris</i>	Tall Tickseed	FAC	0.2	Pollinators, butterflies, other insects, songbirds.	FD
<i>Eupatoriadelphus fistulosus</i>	Joe Pye Weed	FACW	0.1	Pollinators, butterflies, other insects.	FD
<i>Eupatorium perfoliatum</i>	Boneset	FACW+	0.1	Pollinators, butterflies, other insects.	FD

RIPARIAN BUFFER SEED MIX (cont.)					
SCIENTIFIC NAME	COMMON NAME	INDICATOR STATUS	SEED RATE (POUNDS PER ACRE)	WILDLIFE VALUE	
				PRIMARY SPECIES	FUNCTION
FORBS					
<i>Heliopsis helianthoides</i>	Oxeye Sunflower	NI	0.5	Pollinators, butterflies, other insects.	FD
<i>Penstemon digitalis</i>	Penstemon	FAC	0.1	Pollinators, butterflies, other insects.	FD
<i>Rubus allegheniensis</i>	Common Blackberry	FACU-	0.1	Pollinators, butterflies, other insects.	FD
<i>Rudbeckia hirta</i>	Black-eyed Susan	FACU-	0.1	Butterflies and other pollinators	FD
<i>Solidago juncea</i>	EARLY GOLD-ENROD	NI	0.1	Pollinators, butterflies, other insects.	FD
<i>Solidago nemoralis</i>	Grey Goldenrod	NI	0.1	Pollinators, butterflies, other insects.	FD
<i>Thalictrum pubescens</i>	Tall Meadow Rue	FACW+	0.1	Pollinators, butterflies, other insects.	FD
<i>Verbena hastata</i>	Blue Vervain	FACW+	0.1	Pollinators, butterflies, other insects.	FD
<i>Verbesina alternifolia</i>	Wingstem	FAC	0.5	Butterflies and other pollinators	FD
<i>Veronia noveboracensis</i>	NY Ironweed	FACW+	0.1	Pollinators, butterflies, other insects.	FD
SHRUBS					
<i>Cornus alternifolia</i>	Alternate-Leaf Dogwood	NI	0.2	Grouse, turkey, rabbit, brown thrasher, wood thrush, cedar waxwing, squirrel.	FD
<i>Hamamelis virginiana</i>	Witch Hazel	FAC-	0.2	Grouse, turkey, rabbit, beaver, squirrel, deer.	FD
<i>Ilex verticillata</i>	Winterberry	FACW+	0.5	Bluebird, catbird, brown thrasher, robin, yellow bellied sapsucker, mockingbird.	FD, PC, RA
<i>Lindera benzoin</i>	Spicebush	FACW-	0.2	catbird, robin, sparrows, turkey.	FD
<i>Rhus glabra</i>	Smooth Sumac	NI	0.2	Robin, catbird, cardinal, turkey, rabbit, chipmunk, deer, mockingbird, phoebe.	FD, PC
<i>Sambucus canadensis</i>	Common Elderberry	FACW-	0.1	Brown thrasher, catbird, woodpeckers, mockingbird, veery, hermit thrush.	FD, PC
<i>Vaccinium corymbosum</i>	High-Bush Blueberry	FACW-	0.1	Scarlet tanager, bluebird, catbird, chat, thrasher, towhee, mice, deer.	FD
<i>Viburnum dentatum</i>	Southern Arrowwood	FAC	0.2	Purple finch, goldfinch, robin, junco, bluebird, hermit thrush.	FD, PC, RA

RIPARIAN BUFFER SEED MIX (cont.)					
SCIENTIFIC NAME	COMMON NAME	INDICATOR STATUS	SEED RATE (POUNDS PER ACRE)	WILDLIFE VALUE	
				PRIMARY SPECIES	FUNCTION
TREES					
<i>Acer negundo</i>	Boxelder	FAC+	0.2	Finches, songbirds, squirrels, mice, warblers, deer and other browsers.	FD, PC, RA
<i>Acer rubrum</i>	Red Maple	FAC	0.2	Sapsucker, grosbeaks, squirrels, robins, goldfinch, warblers.	FD, PC, RA
<i>Amelanchier arborea</i>	Downy Serviceberry	FAC-	0.2	Catbird, Hermit thrush, scarlet tanager, crow, chipmunk, red squirrel.	FD
<i>Carpinus caroliniana</i>	Musclewood	FAC	0.1	Wood duck, grouse, quail, warblers, fox, rabbit, beaver, deer, pollinators.	FD, PC, RA
<i>Liriodendron tulipifera</i>	Yellow Poplar	FACU	0.2	Purple finch, cardinal, hummingbird, squirrel, white footed mice, deer.	FD, RA
<i>Nyssa sylvatica</i>	Black Gum	FAC	0.2	Wood duck, wild turkey, mockingbird, robin, woodpeckers, fox, deer.	FD, PC, RA
<i>Platanus occidentalis</i>	Sycamore	FACW+	0.1	Woodpeckers, wood ducks, racoon, opossum.	FD
<i>Prunus serotina</i>	Black Cherry	FACU	0.2	Robin, cedar waxwing, ruffed grouse, mammals, woodpeckers, deer.	FD, PC, RA
<i>Sassafras albidum</i>	Sassafras	FACU-	0.2	Catbird, flycatcher, kingbird, mockingbird, phoebe, brown thrasher, thrushes.	FD, PC, RA
Total Pounds of Seed Per Acre:			130.8		

Abbreviations

FD = Food
 RA = Reproductive Areas
 PC = Protective Cover
 EC = Erosion Control

Notes:

1. Annual rye and foxtail millet are annual species that provide erosion control and nurse crop benefits. Both species rarely persist more than two growing seasons.
2. Species substitutions are often required due to availability issues for the native species listed in the above table. We recommend replacement with a species that provides similar form and wildlife value.

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