

Bioretention and Organic Filters

Latin Name Grasses/Sedges	Common Name	Submerged & Emergent (water depth ii)										Seasonal Interest - Color and Months										Soil Conditions										Site Requirements									
		Pond	Edge	Over sand	Permanent Water	Lower slopes & bioretention base	Upper slopes	Height (feet)	Spacing (feet)	J	F	M	A	M	J	J	A	S	O	N	D	Sun	Pt Sun	Pt Shade	Shade	Dry	Medium	Wet	Birds	Butterflies	Fall Color	Winter interest	Flood frequency	Flood height tolerance	Flood duration tolerance (days)	Salt tolerance	Aggressiveness	Silt tolerance			
<i>Andropogon gerardii</i>	Big bluestem	x	x	x	4-6	2	plum	x x														x	x		x	x	x	x	x	M	12	2	M								
<i>Bouteloua curtipendula</i>	Sideoats grama	x		x	1-2	1	tan															x x		x x		x			x	L		L									
<i>Carex praegracilis*</i>	Tollway sedge	x	x	x	1-2	1.5	tan															x x		x x	x x	x x	x x			H	12	2	H	H							
<i>Carex grayii</i>	Bur sedge	x	x		1-2	1.5	tan															x x	x x	x x	x x	x x	x x			H	24	3	L								
<i>Carex shortiana</i>	Short's sedge	x	x	x	2	1.5	bluish															x x	x x	x x	x x	x x	x x			x M	24	3	L								
<i>Carex vulpinoides</i>	Fox sedge	x	x		2-3	1.5	tan															x x	x x	x x	x x	x x	x x			x H	24	3	L	L							
<i>Chasmanthium latifolium</i>	River oats	x	x	x	2-4	1.5	green															x x	x x	x x	x x	x x	x x			x x	M	12	1	H							
<i>Schizachyrium scoparium</i>	Little bluestem	x	x		2-3	1.5	bronze	x x													x x	x x	x x	x x	x x	x x					M	L	L								
<i>Sporobolus heterolepis</i>	Prairie dropseed		x	x	2-3	1.5	tan														x x	x x	x x	x x	x x	x x			x L			L									
Forbs																																									
<i>Amsonia illustris</i>	Shining bluestar	x	x	x	2-3	3	lt. blue		x x												x x	x x	x x	x x	x x	x x			H	36	5	L	H								
<i>Aster novae-angliae</i>	New England aster	x	x		3-4	2	violet			x x											x x	x x	x x	x x	x x	x x			M	24	3	L	H								
<i>Chelone obliqua</i>	Rose turtlehead	x	x		3-4	2	se/purple			x x x											x x	x x	x x	x x	x x	x x			M	12	1	M									
<i>Coreopsis lanceolata</i>	Lanceleaf coreopsis	x	x	x	1-2	1.5	yellow		x x												x x	x x	x x	x x	x x	x x			x	L		M									
<i>Echinacea pallida</i>	Pale purple coneflower		x		2-3	1.5	violet		x x												x x	x x	x x	x x	x x	x x			L			L									
<i>Echinacea purpurea</i>	Purple coneflower		x		2-3	1.5	violet		x x												x x	x x	x x	x x	x x	x x			x L			L									
<i>Eryngium yuccifolium</i>	Rattlesnake master				2-3	1.5	green			x x x x											x x	x x	x x	x x	x x	x x			M	12	2	M	L								
<i>Eupatorium coelestinum</i>	Mist flower; wild ageratum	x	x	x	1-2	1.5	avender		x x x x											x x	x x	x x	x x	x x	x x			H	12	3	M	H									
<i>Hibiscus lasiocarpos</i>	Rose mallow	x	x		3-5	2.5	white/pink			x x x x x										x x	x x	x x	x x	x x	x x			x x	H	36	5	M	H								
<i>Iris virginica</i>	Southern blueflag iris	x	x		2-3	2	blue			x x											x x	x x	x x	x x	x x	x x			x H	36	4	M	M								
<i>Pycnanthemum tenuifolium</i>	Slender Mountain Mint	x			2-3	1.5	white		x x x											x x	x x	x x	x x	x x	x x			x	L		H										
<i>Ratibida pinnata</i>	Yellow/Grey coneflower		x		3-5	1.5	yellow		x x x											x x	x x	x x	x x	x x	x x			x M	12	1	M	H	L								
<i>Rudbeckia fulgida</i>	Orange coneflower		x		2	2	yellow		x x x x											x x	x x	x x	x x	x x	x x			x L			M										
<i>Rudbeckia hirta</i>	Black-eyed Susan				2-3	1.5	yellow			x x x x										x	x	x	x	x	x			x	L		M										
<i>Solidago rugosa</i>	Rough-leaved goldenrod	x	x		2-3	1.5	yellow		x x											x x	x x	x x	x x	x x	x x			x L			M	H	L								
<i>Solidago speciosa</i>	Showy goldenrod	x	x		2-3	1.5	yellow			x x										x x	x x	x x	x x	x x	x x			x L			M	H	L								
<i>Verbesina helianthoides</i>	Yellow wingstem				2-3	1.5	yellow		x											x x	x x	x x	x x	x x	x x			L			M										
<i>Zizia aurea</i>	Golden alexander		x		1-3	1.5	yellow		x x											x x	x x	x x	x x	x x	x x			x L			M	H									
Trees/Shrubs																																									
<i>Carpinus caroliniana</i>	Musclewood			x	x	15-20	20	yellow	x x x											x x x	x x x	x x x	x x x	x x x	x x x			x x M	6	1	L										
<i>Cercis canadensis</i>	Redbud		x	x	x	10-20	15	pink	x x											x x x	x x x	x x x	x x x	x x x	x x x			L			L	M	L								
<i>Hamamelis virginiana</i>	Eastern witchazel	x	x	x	10-15	15	yellow			x x x										x x x	x x x	x x x	x x x	x x x	x x x			x x L			L	L									
<i>Quercus alba</i>	White oak		x	x	40-60	30	green		x x											x x x	x x x	x x x	x x x	x x x	x x x			x x x L			H	L									

Requirements

Local Ecotype Rule: Plants of Missouri or Southern Illinois ecotype are required.

Must use a minimum of 5 grass/sedge species and 8 forb species for each BMP.

Each species must consist of between 5% - 15% of the total plant count for each BMP.

Refer to Planting, Water, and Mulch Requirements for Stormwater BMP's for plant sizes and irrigation requirements

Biodegradable erosion blanket must be used on slopes greater than 10%.

Erosion blankets must be coarse to allow varying leaf sizes (examples include Geotextile, Curlex #1 and NorthAmerican Green S75 single net straw blanket, or equivalent)

*Experimental for practice and/or limited availability in commercial trade