Recommended Plant List for Bioretention Facilities Fairfax County, Virginia



The following list of plants for bioretention facilities was developed by staff from the Department of Public Works and Environmental Services (Urban Forest Management Division and Storm Water Planning Division) in cooperation with staff from the Northern Virginia Soil and Water Conservation District and the Fairfax County Park Authority. It is a "recommended" list of plants for use in bioretention facilities. The list is not exhaustive and is intended to give the designer a palette of plant materials to choose from. Other species may be used, and the acceptability of proposed plant materials is subject to review and approval by the Director. This plant list may be updated periodically to reflect other species that have been shown to perform well in bioretention facilities. Design guidelines for bioretention facilities can be found in the Public Facilities Manual § 6-1307.

KEY:

- Light: The amount of sunlight a plant requires is defined as:
 - \circ Full sun \mathfrak{Q} , the site is in direct sunlight for at least six hours daily during the growing season.
 - Partial shade (), the site receives approximately three to six hours of direct sunlight or lightly filtered light throughout the day.
 - Shade ₩, the site receives less than three hours of direct sunlight or heavily dappled light throughout the day.
- Moisture: The amount of soil moisture a plant requires is defined as:
 - Dry (D), areas where water does not remain after a rain; supplemental watering will not be needed, except under the most extreme drought conditions. Plants with the Dry designation can be considered drought tolerant.
 - Moist (M), areas where the soil is damp, and may be occasionally saturated.
 - Wet (W), areas where the soil is saturated for much of the growing season, except in droughts. Many of the plants designated for wet areas tolerate specific ranges of water depths.
- Salinity: A plant's tolerance to salinity is defined as:
 - None (N)
 - o Low (L)
 - o Medium (M)
 - o High (H)
- Browse: A plant's palatability to animal browsing (in particular deer browsing) is defined as:
 - o Low (L)
 - o Medium (M)
 - o High (H)

SOURCES:

For a list of sources see the notes at the end of this document.

If you have any questions about this list or suggestions for changes, please contact the Urban Forest Management Division at 703-324-1770.

Botanical Name Common Name (* = native to Virginia)	Time of Bloom and other Characteristics	Conditions	Mature Size Height Spread
Grasses/Sedges/Rushes			
Andropogon gerardii Big bluestem *	August – September. A warm season bunchgrass with yellow flowers; blue green blades turn tawny in fall. Often stays erect until spring.	Light: 🌣 🕩 Moisture: D M W Salinity: M Browse: H	H 36" – 72" S 24" – 30"
Andropogon virginicus Broomsedge bluestem *	August – November. A warm season bunchgrass with reddish brown flowers; turns straw colored in fall. Often stays erect until spring. Suited to infertile soil and drought tolerant.	Light: Moisture: D M W Salinity: L Browse: L	H 36" – 72" S 24" – 30"
Carex crinita Fringed sedge *	June – August. Inconspicuous flowers on long, drooping "fringed" female inflorescences; attracts songbirds and waterfowl.	Light: 🌣 🌢 Moisture: M W Salinity: N Browse:	H 24" – 48" S 18" – 36"
Carex lurida Shallow sedge *	June – October. Inconspicuous flowers; upright, cylindrical female inflorescences typically 2-4 per plant; attracts songbirds and waterfowl.	Light: 🌣 🏠 Moisture: M W Salinity: N Browse:	H 24" – 48" S 18" – 36"
<i>Carex stricta</i> Tussock sedge *	May – August. Inconspicuous flowers: upright, narrow female inflorescences; attracts songbirds; tolerates periodic drought and flooding; grows in clumps or tussocks.	Light: 🌣 🛈 Moisture: M W Salinity: N Browse:	H 24" – 48" S 24" – 48"
Chasmanthium latifolium River oats *	July – September. Attractive flat, drooping seed heads change from green in summer to bronze in fall and persist through winter; attracts songbirds; will naturalize and can be aggressive; can be used as a groundcover.	Light: 🇘 🛈 Moisture: D M Salinity: N Browse: H	H 24" – 48" S 24" – 36"
<i>Dichanthelium clandestinum</i> Deer-tongue *	May – October. Perennial warm-season bunchgrass with green flowers; drought tolerant; used to re- vegetate disturbed areas with infertile soils.	Light: 🇘 🌢 Moisture: D M W Salinity: L Browse: H	H 18" – 24" S 12" – 24"

Botanical Name Common Name (* = native to Virginia)	Time of Bloom and other Characteristics	Conditions	Mature Size Height Spread
<i>Elymus hystrix</i> Bottlebrush grass *	June– August. Perennial grass with few, wide flat leaves and loosely flowered spikes; prefers part shade and rich woods.	Light: 🌣 🛈 🗰 Moisture: M Salinity: Browse:	H 12" – 24" S 10" – 12"
<i>Elymus riparius</i> Riverbank wild rye *	July– September. Perennial grass with arching wheat/rye like spikes of yellow flowers; good for stream bank conditions; tolerates wide range of conditions.	Light: 🗘 🛈 🗰 Moisture: D M W Salinity: L Browse:	H 12" – 36" S 12" – 24"
<i>Elymus virginicus</i> Virginia wild rye *	June – October. Perennial cool-season bunchgrass with arching wheat/rye like spikes of yellow flowers; tolerates a wide range of soil conditions.	Light: ① ◆ Moisture: D M Salinity: N Browse: M	H 18" – 36" S 12" – 24"
<i>Eragrostis spectabilis</i> Purple lovegrass *	July – October. Perennial warm-season bunchgrass with delicate bronze-red inflorescences; green foliage turns bronze-red in fall; very drought tolerant, will not do well in frequently saturated soils.	Light: Moisture: D M Salinity: N Browse: M	H 10" – 12"" S 12" – 18"
<i>Festuca rubra</i> Red fescue *	May – July. Perennial bunchgrass; can be used as a cool-season turf grass, prefers part shade.	Light: 🌣 🛈 Moisture: D M W Salinity: M Browse: M	H 12" – 18" S 10" – 12"
<i>Juncus tenuis</i> Slender rush *	May – September. Inconspicuous green flowers; slender wiry stems; can be used as a groundcover or for erosion control; tolerates inundation.	Light: 🌣 🛈 Moisture: M W Salinity: L Browse: L	H 6" – 24" S 6" – 12"
<i>Juncus effusus</i> Soft rush *	June – September. Greenish brown flowers; slender stems; can be used as a groundcover or for erosion control; grows in clumps; tolerates inundation.	Light: 🌣 🛈 Moisture: M W Salinity: L Browse: L	H 12" – 48" S 12" – 24"
Leersia oryzoides Rice cutgrass*	June – October. Perennial grass with rough edged blades; forms dense stands; good for stabilization and erosion control; drought and inundation tolerance; high wildlife value.	Light: 🗘 🛈 Moisture: M W Salinity: N Browse: H	H 24" – 60" S 24" – 36"

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Botanical Name Common Name (* = native to Virginia)	Time of Bloom and other Characteristics	Conditions	Mature Size Height Spread
Panicum virgatum Switch grass *	July – February. Pink-tinged panicles are attractive and persist into winter; clumping warm-season grass; important winter food and cover source for birds and mammals; good for erosion control. Should mainly be used within the coastal plain, east of I-395.	Light: 🌣 🛈 Moisture: D M W Salinity: M Browse: M	H 36" – 60" S 24" – 36"
Schizachyrium scoparium Little bluestem *	August – October. Purplish-bronze inflorescences; blue-green foliage turns bronze-orange in fall; useful for erosion control; highly drought tolerant; also tolerates flooding; will tolerate some shade.	Light: Moisture: D Salinity: N Browse: M	H 24" – 48" S 12" – 24"
Sorghastrum nutans Indian grass *	August – September. Tall clump grass with golden brown plume like flowers; adapted to dry or wet sites; nutritious seed heads for wildlife; grows rapidly.	Light: 🌣 🛈 Moisture: D M Salinity: M Browse: M	H 30" – 72" S 12" – 24"
<i>Tridens flavus</i> Purpletop tridens *	August – November. Perennial, yellow-green native grass with a reddish-purple inflorescence; highly drought tolerant; host plant for the Crossline Skipper butterfly.	Light: Moisture: D M Salinity: N Browse: H	H 24" – 60" S 18" – 30"
Perennials/Ground Covers			
<i>Aquilegia canadensis</i> Red columbine *	April – May. Drooping, bell-like red and yellow flowers attract hummingbirds and butterflies; blue- green foliage; tolerates moist or dry sites; will naturalize; prefers shade.	Light: 🌣 🛈 🗰 Moisture: D M Salinity: Browse: L	H 24" – 36" S 12" – 18"
<i>Aruncus dioicus (sylvester)</i> Goatsbeard *	May – July. Many small creamy white to yellow flowers, prefers moist well drained loamy soil.	Light: 🌣 🛈 Moisture: M Salinity: Browse:	H 36" – 72" S 24" – 48"
Asarum canadense Canadian wild ginger *	April – May. Semi-evergreen spreads rapidly; can be used as a ground cover; small purple/brown flowers hide under leaves; prefers shade.	Light: ① * Moisture: M Salinity: Browse:	H 4" – 6" S 6" – 24"+

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Botanical Name	Time of Bloom and other Characteristics	Conditions	Mature Size
Common Name			Height
(* = native to Virginia)			Spread
Asclepias incarnata Swamp milkweed *	May – June. Showy reddish-pink blooms in midsummer; butterfly nectar plant; monarch butterfly host plant; can tolerate drought.	Light: 🌣 🛈 Moisture: M W Salinity: N Browse:	H 24" – 48" S 18" – 24"
Asclepias tuberosa Butterflyweed *	May – July. Showy orange blooms, butterfly nectar plant; monarch butterfly host plant; does well in poor, dry soils; will naturalize.	Light: 🌣 🛈 Moisture: D M Salinity: N Browse:	H 12" – 36" S 18" – 24"
<i>Aster (Eurybia) divaricatus</i> White wood aster *	July – October. Good for dry shade or moist woods; white flowers attract butterflies; attractive massed at woodland edge; delicate sprawling form; can be used as a groundcover.	Light: ① 兼 Moisture: D M Salinity: Browse: L	H 12" – 36" S 18" – 24"
<i>Aster</i> (Symphyotrichum) laevis Smooth or blue bird aster *	August – October. Showy pale lavender-blue flowers with yellow centers in loose clusters; attracts butterflies.	Light: 🌣 🛈 Moisture: D M Salinity: Browse: L	H 24" – 42" S 18" – 24"
<i>Aster</i> (S <i>ymphyotrichum) lateriflorus</i> Calico aster *	September – October. White or pale purple flowers in small heads; loose branching habit.	Light: 🌣 🛈 Moisture: M Salinity: Browse: L	H 12" – 48" S 12" – 18"
Aster (Symphyotrichum) novae-angliae New England Aster *	August – October. Showy bright violet ray flowers surround yellow centers; pubescent leaves and stems; attracts butterflies; will tolerate drought and periodic flooding.	Light: 🌣 🛈 Moisture: M W Salinity: Browse: L	H 12" – 60" S 24" – 30"
<i>Aster</i> (S <i>ymphyotrichum) novi-belgii</i> New York aster *	July – October. Showy blue-violet flowers with yellow centers attract butterflies; smooth leaves and stems.	Light: 🌣 🛈 Moisture: M W Salinity: Browse: L	H 36" – 48" S 24" – 36"

Botanical Name Common Name (* = native to Virginia)	Time of Bloom and other Characteristics	Conditions	Mature Size Height Spread
Aster (Doellingeria) umbellatus Parasol whitetop	July – October. White or violet tinged daisy-like flowers grow in flat-topped clusters.	Light: ① * Moisture: M W Salinity: Browse: L	H 12" – 36" S 18" – 24"
<i>Bidens cernua</i> Nodding beggarticks *	August – October. Yellow flowers; annual; tolerates wide range of soil types; seeds feed songbirds and waterfowl.	Light: 🗘 🛈 Moisture: W Salinity: N Browse: L	H 24" – 42" S 24" – 48"+
<i>Chelone glabra</i> White turtlehead *	July – October. White, snapdragon-like flowers attract hummingbirds and butterflies; host plant for Baltimore checkerspot butterfly.	Light: 🗘 🛈 Moisture: M W Salinity: Browse:	H 24" – 36" S 12" – 18"
Chrysogonum virginianum Green and gold *	March – June. Showy, bright yellow, star-shaped flowers; attractive, versatile groundcover; will naturalize; prefers shade.	Light: 🌣 🛈 🗰 Moisture: D M Salinity: Browse:	H 4" – 8"" S 12" – 18"
<i>Cimicifuga racemosa</i> Black snakeroot *	June – September. Flowers are white upright spikelets; appropriate for naturalized areas; attracts butterflies.	Light: ① ◆ Moisture: M Salinity: Browse:	H 36" – 72" S 24" – 30"
<i>Coreopsis verticillata</i> Threadleaf coreopsis *	June – October. Yellow daisy-like flowers attract butterflies; can be used as a groundcover.	Light: 🌣 🛈 Moisture: D M Salinity: Browse:	H 12" – 36" S 18" – 24"
<i>Eupatorium coelestinum</i> Blue mist flower *	July – October. Blue-violet, tuft-like flower clusters attract butterflies; will naturalize.	Light: 🌣 🕩 🏶 Moisture: D M W Salinity: N Browse:	H 24" – 36" S 24" – 36"
<i>Eupatorium fistulosum</i> Joe pye weed *	July – October. Large terminal panicles of dusky pink-purple flowers attract butterflies and songbirds; seed heads persist into winter; will naturalize.	Light: 🌣 🛈 Moisture: D M W Salinity: Browse:	H 18" – 60" S 24" – 48"

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Botanical Name Common Name (* = native to Virginia)	Time of Bloom and other Characteristics	Conditions	Mature Size Height Spread
Eupatorium perfoliatum Common boneset *	July – October. Flat-topped clusters of tiny, white, tuft-like flowers attract butterflies; all parts of this plant are toxic.	Light: 🇘 🛈 Moisture: M W Salinity: Browse:	H 36" – 48" S 24" – 36"
<i>Eupatorium (Ageratina) rugosum</i> White snakeroot *	July – October. Bright, white flowers are tiny and tuft-like; attracts butterflies; will naturalize.	Light: 🌣 🛈 🗰 Moisture: D M Salinity: Browse:	H 48" – 60" S 24" – 30"
Geranium maculatum Spotted geranium *	April – July. Delicate lavender or pink blooms attract butterflies and beneficial insects; long-bloom period; will naturalize; very adaptable; can be used as a ground cover.	Light: 🗘 🛈 Moisture: D M Salinity: Browse:	H 18" – 24" S 12" – 18"+
Helenium autumnale Common sneezeweed *	July – November. Bright yellow, daisy-like flowers with a yellow-green domed central disk; attracts butterflies; intolerant of dry soils.	Light: 🌣 🛈 Moisture: M W Salinity: N Browse: L	H 36" – 60" S 36" – 48"
Helianthus decapetalus Ten-petaled or thin-leaved sunflower *	July – October. Daisy-like flowers are yellow with a brown central disk; attracts butterflies and songbirds; moderate drought tolerance.	Light: 🌣 🛈 Moisture: M Salinity: Browse:	H 36" – 60" S 36" – 48"
<i>Heuchera americana</i> American alumroot *	April – June. Tiny greenish-white to pale lavender bell-like flowers borne on stalks above heart-shaped foliage; long bloom time; semi evergreen; can be used as a groundcover; prefers shade and rich woods.	Light: 🗘 🌢 🗰 Moisture: D M Salinity: Browse:	H 12" – 18" S 10" – 14"
<i>Hibiscus laevis (militaris)</i> Halberd-leaf rose mallow *	August – September. Large white to purple flowers with maroon centers; multi-stemmed; not drought tolerant; attracts butterflies.	Light: 🌣 🛈 Moisture: M W Salinity: N Browse: L	H 48" – 72" S 36" – 48"

Botanical Name Common Name (* = native to Virginia)	Time of Bloom and other Characteristics	Conditions	Mature Size Height Spread
Hibiscus moscheutos Crimson-eyed rose mallow *	July – September. Large white, pink or rose blooms with crimson centers; multi-stemmed; grey-green foliage; not drought tolerant; attracts butterflies.	Light : 🌣 Moisture: M W Salinity: L Browse: L	H 36" – 84" S 36" – 48"
<i>Iris versicolor</i> Harlequin blue flag *	May – July. Showy blue to violet-blue flowers on straight stems; tolerates inundation to 6 inches.	Light: 🌣 🋈 Moisture: W Salinity: M Browse:	H 24" – 36" S 36" – 60"+
<i>Liatris pilosa</i> Grass-leaf blazingstar *	August – October. Striking spikes of red-purple flowers and delicate green foliage; attracts butterflies and songbirds; moderate drought tolerance.	Light: 🌣 🛈 Moisture: D M Salinity: L Browse:	H 12" – 54" S 12" – 24"
<i>Liatris squarrosa</i> Plains blazingstar *	July – September. Small multiple spikes of rose flowers and delicate green foliage; attracts butterflies and songbirds.	Light: 🌣 🛈 Moisture: M Salinity: Browse:	H 6" – 30" S 6" – 24"
Lobelia cardinalis Cardinal flower *	July – October. Brilliant scarlet red flowers arranged along tall stems attract hummingbirds and butterflies; biennial; will naturalize; long bloom period.	Light: 🌣 🛈 Moisture: M W Salinity: N Browse: M	H 24" – 48" S 12" – 24"
Lobelia siphilitica Great blue lobelia *	August – October. Blue-violet flowers clustered on tall stems attract hummingbirds and butterflies; long bloom time; will naturalize.	Light: 🌣 🛈 🗰 Moisture: M W Salinity: Browse:	H 12" – 48" S 12" – 18"
<i>Mentha arvensis</i> Wild mint *	July – September. Lavender to white flowers cluster at the stem; edible herb; low drought tolerance.	Light: 🌣 🇿 Moisture: M W Salinity: N Browse: L	H 18" – 30" S 24" – 36"
<i>Mertensia virginica</i> Virginia bluebells *	March – June. Bell-shaped pink to blue flowers; color depends on soil acidity; dormant in summer.	Light: ① * Moisture: M W Salinity: N Browse: M	H 12" – 24" S 10" – 12"

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Botanical Name Common Name (* = native to Virginia)	Time of Bloom and other Characteristics	Conditions	Mature Size Height Spread
<i>Monarda didyma</i> Scarlet beebalm *	July – September. Vibrant red flowers attract bees, butterflies and hummingbirds; will naturalize; leaves are fragrant.	Light: 🗘 🛈 Moisture: M W Salinity: Browse:	H 24" – 54" S 18" – 36"
<i>Myosotis laxa</i> Smaller forget-me-not *	May – July. Tiny light blue flowers with yellow centers. Will die back in dry summers and come back in the winter.	Light: Moisture: W Salinity: Browse:	H 3" – 6" S 6" – 8"
<i>Oenothera fruticosa</i> Narrow-leaved sundrops *	May – September. Yellow flowers; attracts hummingbirds and songbirds; long bloom period.	Light: 🌣 🋈 Moisture: D M Salinity: H Browse:	H 12" – 36" S 12" – 24"
<i>Onoclea sensibilis</i> Sensitive fern *	Dark brown fertile fronds; will naturalize in wet areas; can be used as a ground cover; needs consistent moisture.	Light: 🇘 🋈 🏶 Moisture: M W Salinity: Browse:	H 12" – 36" S 24" – 48"
<i>Penstemon digitalis</i> Talus slope penstemon *	June – August. White flowers attract hummingbirds and butterflies; clump-forming; will naturalize; drought tolerant.	Light : 🌣 🛈 Moisture: D M Salinity: M Browse: M	H 24" – 48" S 12" – 36"
<i>Phlox divaricata</i> Woodland phlox*	April – June. Blue, lavender and white aromatic showy flowers; dormant in summer; attracts butterflies; evergreen; frequently cultivated.	Light : ① ◆ Moisture: M Salinity: Browse:	H 12" – 18" S 12" – 18"
<i>Phlox stolonifera</i> Creeping phlox*	April – June. Rose, violet or blue flowers; attracts butterflies; evergreen; can be used as a groundcover; will naturalize.	Light : 🌣 🏚 🏶 Moisture: D M Salinity: Browse:	H 6" – 12" S 12" – 18"
<i>Physostegia virginiana</i> Obedient plant *	June – September. Showy spires of pink or white flowers; attracts butterflies; will naturalize rapidly and can escape cultivation.	Light: 🌣 🛈 Moisture: D M Salinity: Browse:	H 24" – 48" S 18" – 36"

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Botanical Name Common Name (* = native to Virginia)	Time of Bloom and other Characteristics	Conditions	Mature Size Height Spread
Rudbeckia fulgida Early coneflower *	July – October. Yellow-orange flowers with black centers attract butterflies; provides food and cover for songbirds; will naturalize.	Light: 🌣 🛈 Moisture: D M Salinity: Browse:	H 18" – 36" S 18" – 24"
<i>Rudbeckia hirta</i> Black-eyed susan *	June – October. Yellow flowers with black centers attract butterflies; provides food and cover for songbirds; will naturalize and can be invasive.	Light: 🌣 🋈 Moisture: D M Salinity: N Browse: L	H 12" – 36" S 12" – 24"
<i>Rudbeckia laciniata</i> Cutleaf coneflower *	June – October. Yellow flowers with green centers attract butterflies; provides food and cover for songbirds; will naturalize.	Light: 🌣 🛈 🗰 Moisture: M W Salinity: N Browse: H	H 48" – 96" S 24" – 48"
Sedum ternatum Woodland stonecrop *	April – June. Greenish-white, star-shaped flowers; evergreen; can be used as a groundcover.	Light: Moisture: M Salinity: Browse:	H 3" – 6" S 6" – 12"
Senecio (Packera) aureus Golden ragwort *	April – August. Yellow, daisy-like flowers attract butterflies; will naturalize and can spread aggressively.	Light: ☆	H 12 – 36" S 12" – 24"
<i>Solidago rugosa</i> Wrinkleleaf goldenrod *	August – November. Tough plant that colonizes easily; yellow flowers; medium drought tolerance.	Light: 🌣 🇿 Moisture: D M W Salinity: N Browse: L	H 12" – 24" S 12" – 36"+
<i>Tiarella cordifolia</i> Heartleaf foamflower *	April – July. Attractive, white spike flowers; long blooming, spreads rapidly.	Light: 🌣 🛈 🗰 Moisture: M Salinity: Browse:	H 6" – 12" S 6" – 12"
<i>Tradescantia virginiana</i> Common Virginia spiderwort *	April – July. Grass-like foliage and deep blue-purple showy flowers; medium drought tolerance.	Light: 🌣 🋈 Moisture: M Salinity: N Browse: L	H 12" – 24" S 18" – 24"+

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Botanical Name Common Name (* = native to Virginia)	Time of Bloom and other Characteristics	Conditions	Mature Size Height Spread
Verbena hastata var. hastata Swamp verbena*	June – October. Pencil-like spikes of small blue or purple flowers that bloom a few at a time; swamps, meadows and roadside ditches.	Light: 🌣 🛈 Moisture: M W Salinity: Browse:	H 24" – 60" S 18" – 30"
<i>Vernonia noveboracensis</i> New York ironweed *	August – Oct. Spreading, tall upright wildflower with a brilliant purple flower; grows in wet meadows.	Light: 🗘 Moisture: M W Salinity: N Browse: M	H 48" – 72" S 24" – 36"
Shrubs/Small trees			
Alnus serrulata Smooth alder *	March – April. Purple/brown, catkins and small cones; yellow and red foliage in the fall; forms thickets along watercourses and tolerates flooding; fixes nitrogen; high wildlife value.	Light: 🗘 🛈 🗰 Moisture: M W Salinity: N Browse: M	H 6' – 25' S 10' – 15'
<i>Aronia (Photinia) arbutifolia</i> Red chokeberry *	April – June. Deciduous shrub with white flowers, developing red berries; has medium tolerance for flooding; can be pruned as a hedge; red fall foliage.	Light: 🌣 🛈 Moisture: D M W Salinity: L Browse: L	H 6' – 10' S 3' – 5'(10')
<i>Aronia (Photinia) melanocarpa</i> Black chokeberry *	April – May. White flowers that develop into black berries in September/November; can be pruned as a hedge; more drought tolerant then red chokeberry.	Light: 🌣 🛈 Moisture: D M W Salinity: N Browse: L	H 5' – 8' S 5' – 10'
<i>Aronia prunifolia (Photinia floribunda)</i> Purple chokeberry *	July – August. White flowers and purple/black berries that ripen in October/December; prefers wetter sites.	Light: 🌣 🌢 Moisture: M W Salinity: Browse:	H 5' – 12' S 6' – 8'
<i>Callicarpa americana</i> American beautyberry *	June – August. Lavender pink flowers on new wood; tolerates heavy pruning; lavender berries are persistent during winter and food source for birds; high wildlife value; high drought tolerance.	Light: 🌣 🛈 Moisture: D M W Salinity: N Browse: H	H 4' – 8' S 4' – 8'

Botanical Name Common Name (* = native to Virginia)	Time of Bloom and other Characteristics	Conditions	Mature Size Height Spread
Ceanothus americanus New Jersey tea *	May – September. White flowers and brown seeds; tolerates moisture for short periods; fixes nitrogen; drought tolerant; attracts butterflies.	Light: 🌣 🛈 Moisture: D Salinity: M Browse: M	H up to 3' S up to 3'
<i>Cephalanthus occidentalis</i> Common buttonbush *	July – August. Creamy white fragrant ball-shaped flowers; brown ball-like fruits in September through January; drought tolerant, but also tolerates flooding to 36".	Light: 🌣 🛈 Moisture: M W Salinity: L Browse:	H 3' – 10'(20') S 3' – 10'
Clethra alnifolia Coastal sweet pepperbush *	July – August. Very fragrant white or pink flowers; butterfly nectar plant; brown capsules; tolerates some flooding by slightly saline water. Occurrence in Fairfax mostly confined to coastal plain east of I- 395.	Light: 🌣 🛈 Moisture: M W Salinity: L Browse: M	H 4' – 10' S 4' – 8'
Cornus amomum Silky dogwood*	May – June. White flowers with blue berries ripening in August; high wildlife value.	Light: 🌣 🛈 Moisture: M W Salinity: N Browse: L	H 6' – 10' S 6' – 10'
<i>Cornus sericea (stolonifera)</i> Redosier dogwood (NE native)	May – July. White flowers, white berries; red twigs (with white pith) and red/maroon fall color; excellent bank stabilizing shrub, sprouts easily from twigs; high wildlife value.	Light: 🌣 🛈 Moisture: M Salinity: L Browse: H	H 7' – 9' S 8' – 10'
<i>Gaylussacia baccata</i> Black huckleberry *	May – June. Reddish white flowers; black, bluish seedy berries in the fall; fruit edible; high wildlife value.	Light: 🏠 🏶 Moisture: D M Salinity: N Browse: M	H 1' – 3' S 2' – 4'
<i>Hydrangea arborescens</i> Wild hydrangea *	June – August. White flowers on new wood; flowers dry to a tan color and persist; leaves poisonous to humans.	Light: () * Moisture: M W Salinity: Browse:	H 3' – 6' S 4' – 8'

Botanical Name Common Name (* = native to Virginia)	Time of Bloom and other Characteristics	Conditions	Mature Size Height Spread
Hypericum densiflorum Bushy St. John's wort *	July – September. Yellow, flat topped clusters of flowers; tolerates a variety of moisture conditions.	Light: 🌣 🛈 Moisture: D M W Salinity: N Browse:	H 4' – 6' S 3' – 4'
<i>llex glabra</i> Inkberry holly *	May – June. Greenish white flowers and black berries in the fall that persist through the winter; male and female flowers on separate plants; high wildlife value; tolerates some flooding.	Light: 🌣 🌢 Moisture: M Salinity: M Browse: L	H 6' – 8' S 8' – 10'
<i>llex verticillata</i> Winterberry holly *	June – July. Greenish white flowers; red berries in the fall, persistent though the winter; food source for birds; high wildlife value; need male plant to pollinate female in order to bear berries.	Light: 🌣 🛈 Moisture: M W Salinity: N Browse: L	H 6' – 10' S 6' – 8'
<i>Itea virginica</i> Virginia sweetspire *	June – July. White flowers with fruit capsules on stalks; plant will sucker and form thickets; tolerates flooding to 6 inches;	Light: 🌣 🛈 🗰 Moisture: M W Salinity: N Browse: H	H 3' – 8' S 5' – 10+
<i>Iva frutescens</i> High-tide bush (Jesuit's bark) *	August – October. Greenish white flowers; similar to <i>Baccharis halimifolia</i> , but with opposite leaves; tolerates high salinity; grows in brackish and salt marshes. Use in coastal plain east of I-395 only.	Light: 🗘 Moisture: M W Salinity: H Browse: L	H 4' – 10' S 6' – 12'
<i>Kalmia latifolia</i> Mountain laurel *	May – July. Showy white to pink purple flowers; shrub of woods, fields, ridge tops, slopes and swamps; performs best in cool locations; evergreen foliage.	Light: ♥ ● ♥ Moisture: D M W Salinity: N Browse: L	H 5' – 12' S 5' – 12'
<i>Leucothoe racemosa</i> Fetterbush, swamp sweetbells, gray swamp doghobble *	May – June. White to pinkish bell-shaped flowers borne in dense one-sided clusters; suckering plant that forms thickets; mostly present in coastal plain east of I-395.	Light: ① 兼 Moisture: M W Salinity: Browse:	H 4' – 6' S 4' – 6'+

Botanical Name Common Name (* = native to Virginia)	Time of Bloom and other Characteristics	Conditions	Mature Size Height Spread
<i>Lindera benzoin</i> Northern spicebush *	March – May. Early, small yellow flowers; bright red berries are favored by many birds; stem and leaves very fragrant when crushed; yellow fall color; high wildlife value; butterfly host plant.	Light: 🌣 🛈 🗰 Moisture: D M W Salinity: N Browse: M	H 6' – 12' S 6' – 12'
<i>Lyonia ligustrina</i> Maleberry *	May – July. White, globe-shaped clusters of flowers; berry-like capsules persist through winter; evergreen leaves turn orange and red in fall.	Light: ① 举 Moisture: M Salinity: N Browse: L	H 6' - 12' S 10' – 20'
<i>Myrica (Morella) cerifera</i> Small wax myrtle *	March – June. Yellowish-green flowers, bluish-white berries; very fragrant spicy scent, used for candles; waxy evergreen leaves. Use in coastal plain east of I-395 only.	Light: 🌣 🛈 Moisture: D M W Salinity: M Browse: L	H 8' – 12' S 8' – 12'
<i>Physocarpus opulifolius</i> Common eastern ninebark *	May – July. White to pink flowers; orange to red capsule; yellow to purple fall color; exfoliating bark adds winter interest; drought tolerant and adaptable.	Light: 🌣 🛈 Moisture: M W Salinity: Browse:	H 6' – 10' S 6' – 10'
<i>Rhododendron periclymenoides</i> Pinxterbloom azalea *	April – May. Pink, purple or white flowers. Tolerates thin soils; susceptible to disease and insects.	Light: 🌣 🛈 🗰 Moisture: D M Salinity: N Browse: L	H 3' – 10' S 6' – 12'
<i>Rhododendron viscosum</i> Swamp azalea *	May – August. White or pink flowers and brown capsules; fall color yellow, orange to purple; needs acid soil; drought tolerant.	Light: 🌣 🛈 Moisture: M W Salinity: N Browse: L	H 3' – 8' S 3' – 8'
<i>Rhus aromatica</i> Fragrant sumac *	March – May. Greenish yellow flowers, dark wine red berry; red fall color; fuzzy edible berry clusters and aromatic leaves; male and female separate plants; high wildlife value.	Light: 🌣 🛈 Moisture: D Salinity: Browse:	H 5' – 6' S 6' – 10'
<i>Rhus copallina</i> Shining or winged sumac *	July – September. Greenish yellow flowers, red berry; red fall color; forms large colonies; winter food for wildlife.	Light: 🌣 🛈 Moisture: D Salinity: N Browse: L	H 20' – 35' S 10 – 15'

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Botanical Name	Time of Bloom and other Characteristics	Conditions	Mature Size
Common Name			Height
(* = native to Virginia)			Spread
<i>Rhus glabra</i> Smooth sumac *	June – July. Greenish flowers, red fuzzy berry clusters; very drought resistant; male and female may be on separate plants; high wildlife value.	Light: 🌣 Moisture: D M Salinity: N Browse: L	H 10' – 15' S 10' – 15'
<i>Rosa carolina</i> Pasture rose *	May – June. White to pale pink flowers, red berry- like hips August – March; hips are edible; has thorns.	Light: 🌣 🛈 Moisture: D M Salinity: M Browse: M	H 3' – 5' S 6' – 10'
Rosa palustris Swamp rose *	June – August. Pink flowers, red berry-like hips in July-March; hips are edible; has thorns; tolerates flooding; spreads.	Light: 🌣 🛈 🗰 Moisture: M W Salinity: N Browse: L	H 6' – 8' S 3' – 4'
Salix sericea Silky willow*	April – May. Small greenish yellow flowers, will tolerate flooding; high wildlife value.	Light: 🌣 🛈 Moisture: M W Salinity: N Browse: M	H 10' – 12' S 8' – 12'
Sambucus canadensis Common elderberry *	June – July. Showy white, fragrant flower clusters; blue-black berries August – September; berries are edible; high wildlife value.	Light: 🌣 🛈 Moisture: M W Salinity: N Browse: M	H 6' – 12' S 6' – 12'
Spirea alba Narrow-leaved meadowsweet*	June – September. White cone-shaped flower clusters attract butterflies; needs moist soil.	Light: 🌣 Moisture: M Salinity: N Browse: L	H 3' – 4' S 3' – 4'
Spirea latifolia Broad-leaved meadowsweet*	June – September. White or pinkish cone-shaped flower clusters attract butterflies; twigs more purplish red then previous species.	Light: 🌣 Moisture: M Salinity: N Browse: L	H 3' – 4' S 3' – 4'
Vaccinium angustifolium Lowbush blueberry *	May – June. Tiny white-pink flowers; edible blue- black berries in July-August; red fall color; can be used as a ground cover; good wildlife plant.	Light: 🌣 🛈 Moisture: D M Salinity: N Browse: H	H 1' – 2' S 2' – 3'

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Botanical Name Common Name (* = native to Virginia)	Time of Bloom and other Characteristics	Conditions	Mature Size Height Spread
Vaccinium corymbosum Highbush blueberry *	April – June. Tiny white-pink urn-shaped flowers; edible blue-black berries in July-August; yellow to red fall color; commonly cultivated.	Light: ♥ ♥ ♥ Moisture: D M W Salinity: H Browse: M	H 6' – 12' S 6' – 12'
Vaccinium stamineum Deerberry *	April – June. Tiny white-purple flowers; blue-black berries in September – October; berries are edible but sour.	Light: 🌣 🛈 Moisture: D M Salinity: N Browse: M	H 3' – 16' S 6' – 12'
Viburnum acerifolium Mapleleaf viburnum *	June. Flat-topped flower clusters are cream to pink; blue-black berries in August – December; tolerates dryness and shade; suckers; orange-purple fall color.	Light: 🌣 🛈 🗰 Moisture: D M Salinity: N Browse: M	H 3'- 6' S 3'- 4'
Viburnum dentatum Southern arrowwood *	May – June. White flat-topped flower clusters; blue- black berries September – November; reddish- purple fall color; good winter structure; attracts butterflies and birds.	Light: 🌣 🛈 Moisture: D M W Salinity: Browse:	H 6' – 10' S 4' – 8'
Viburnum nudum Smooth witherod viburnum *	June – July. White or cream flowers in flat-toped clusters; berries in September – October appear red then change to blue and finally, black; red-purple fall color; good wildlife plant.	Light: 🌣 🛈 🗰 Moisture: D M W Salinity: N Browse: H	H 6' – 18' S 4' – 12'
<i>Viburnum prunifolium</i> Blackhaw viburnum *	April – May. White flowers in flat-topped clusters; July – November blue-black berries; red-purple fall color.	Light: 🌣 🛈 🗰 Moisture: D M W Salinity: N Browse: M	H 12' – 16' S 8' – 12'
Trees			
Acer rubrum Red maple *	March – April. Shallow root system; high wildlife value; attractive red flowers and fruit; tolerates moist or dry sites; red/yellow/orange fall color.	Light: 🌣 🕩 Moisture: D M W Salinity: L Browse: M	H 60' – 90' S 50' – 75'

Botanical Name Common Name (* = native to Virginia)	Time of Bloom and other Characteristics	Conditions	Mature Size Height Spread
Amelanchier arborea Downy serviceberry*	March – May. White flowers and red to dark purple fleshy fruit. Used by 58 wildlife species; 35 bird species; important early summer food; edible to people.	Light: ① ◆ Moisture: D M Salinity: N Browse: M	H 15' – 25' S 15' – 20'
Amelanchier canadensis Canadian serviceberrry *	April – May. Single or multi-stem; shallow roots, high wildlife value; 4 season interest: white flowers, edible fruit, orange to red fall color; smooth grey bark.	Light: ① 兼 Moisture: M W Salinity: N Browse: H	H 35' – 50' S 20' – 25'
Asimina triloba Paw paw *	April – June. Unusual maroon flower; very large leaves; edible yellow fruits relished by wildlife; yellow fall color; moist soil.	Light: 🌣 🋈 Moisture: M Salinity: N Browse: L	H 20' – 35' S 20' – 30'
<i>Betula nigra</i> River birch *	April – May. Tolerates wet feet, but is also drought tolerant; interesting catkins; beautiful peeling bark; yellow fall color; high wildlife value; good bank stabilizer; usually disease-free unless old or damaged.	Light: 🌣 🋈 Moisture: M W Salinity: N Browse: M	H 50' – 75' S 35' – 50'
<i>Carpinus caroliniana</i> American hornbeam *	April – May. Tolerates sun if soil is moist; tolerates irregular inundation; unique fluted silver-gray bark; yellow, red, or orange fall color; high wildlife value; small slow-growing short-lived understory tree.	Light: () * Moisture: M Salinity: N Browse: L	H 35' – 50' S 30' – 40'
<i>Carya cordiformis</i> Bitternut hickory *	April – May. Grows in dry, moist, or wet soil; yellow fall color; good food source for birds and mammals; strong wood; resistant to wind throw; dense root system with a pronounced taproot.	Light: Moisture: M W Salinity: N Browse: L	H 60' – 100' S 40' – 60'
<i>Celtis occidentalis</i> Common hackberry *	April – May. Tolerates dry sites and irregular flooding; good food source for birds and mammals; especially important for winter food; host for 7 butterfly species; only host for rare hackberry butterfly; tolerates road salt; yellow fall color; good for bank stabilization.	Light: 🌣 🌢 🗰 Moisture: D M W Salinity: N Browse: M	H 40' – 60' S 40' – 60'

Botanical Name Common Name (* = native to Virginia)	Time of Bloom and other Characteristics	Conditions	Mature Size Height Spread
<i>Cercis canadensis</i> Eastern redbud *	April – May. Tolerates sun if soil is moist; tolerates irregular inundation; flowers pink to lavender prior to emergence of leaves; new leaves reddish; yellow fall color; high wildlife value.	Light: 🌣 🛈 🏶 Moisture: D M Salinity: N Browse: L	H 20' – 30' S 20' – 30'
<i>Chamaecyparis thyoides</i> Atlantic white cedar*	March – April. Aromatic evergreen tree with small acute, scale like leaves; bluish cone like fruit; shallow root system makes trees susceptible to wind throw on permanently saturated sites.	Light: ① ◆ Moisture: M W Salinity: N Browse: L	H 40' – 50' S 10' – 20'
<i>Chionanthus virginicus</i> White fringetree *	May – June. Clumping or single-stemmed; white, pendulous, fragrant flowers; gold fall color; birds eat fruits; tolerates drought and irregular inundation.	Light: 🌣 🛈 🏶 Moisture: D M Salinity: N Browse: M	H 20' – 35' S 15' – 20'
Diospyros virginiana Common persimmon*	June. Greenish yellow to cream flowers with golden yellow to orange (when ripe) edible fruit in fall; fruit eaten by wide range of wildlife.	Light: 🌣 🛈 Moisture: D M Salinity: N Browse: L	H 35' – 50' S 25' – 35'
<i>Fraxinus pennsylvanica</i> Green ash *	April – May. Tolerates drought as well as infrequent flooding; loose purplish flower clusters; male and female flowers on separate plants; yellow to orange fall color; good bank stabilizer.	Light: 🌣 🛈 Moisture: D M W Salinity: N Browse: M	H 50' – 70' S 35' – 50'
<i>Hamamelis virginiana</i> American witchhazel *	September – December. Small tree or large shrub. Tolerates irregular flooding or dry sites; yellow fragrant strap-like flowers in fall and early winter; medicinal use.	Light: Moisture: D M Salinity: N Browse: L	H 15' – 25' S 15' – 20'
<i>llex opaca</i> American holly *	May – June. Evergreen; need both male and female to produce red berries (dioecious); moist to well- drained sandy soil; creamy white flowers; high wildlife value.	Light: 🌣 🛈 🏶 Moisture: M Salinity: L Browse: L	H 30' – 50' S 15' – 30'

Botanical Name	Time of Bloom and other Characteristics	Conditions	Mature Size
Common Name			Height
(* = native to Virginia)			Spread
<i>Juniperus virginiana</i> Eastern redcedar *	March – April. Evergreen; tolerates dry or moist sites and a broad range of habitats; red purple flowers; pale green to dark blue cone/like berries consumed by more then 50 varieties of birds.	Light: Moisture: D M Salinity: L Browse: L	H 35' – 50' S 20' – 35'
<i>Liquidambar styraciflua</i> Sweetgum *	April – May. Tolerates wet soils and a wide range of conditions. Star shaped leaves have spectacular yellow and red fall color; brown capsules contain seeds; eaten by birds and mammals.	Light: 🌣 🛈 Moisture: M W Salinity: N Browse: M	H 60' – 100' S 40' – 60'
<i>Liriodendron tulipifera</i> Tulip poplar *	June. Greenish-yellow tulip-like flowers, producing abundant nectar much used by bees; very fast growing tree; seeds eaten by squirrels and a few song birds.	Light: 🌣 🛈 Moisture: M Salinity: L Browse: L	H 70' – 100' S 35' – 50'
<i>Magnolia virginiana</i> Sweetbay magnolia *	May – June. Large white to yellow fragrant flowers; small multi-stem tree; red berries; semi-evergreen; wildlife value; will tolerate wet soils.	Light: 🌣 🛈 🗰 Moisture: M W Salinity: Browse:	H 15' – 40' S 15' – 25'
<i>Nyssa sylvatica</i> Black gum *	April – June. Greenish white small flowers; tolerates seasonal flooding or dry, rocky uplands; nectar source for honeybees; blue/black berries taken by birds; brilliant scarlet fall color.	Light: 🌣 🛈 Moisture: D M W Salinity: L Browse: M	H 30' – 75' S 20' – 50'
<i>Platanus occidentalis</i> American sycamore *	April – June. Tolerates intermittent inundation; white and brown peeling bark; leafs out in late spring; tan/brown balls for fruit; good bank stabilizer; finches eat seeds; nesting cavities.	Light: 🌣 🛈 Moisture: M W Salinity: N Browse: L	H 75' – 100' S 75' – 100'
<i>Populus deltoides</i> Eastern cottonwood *	March – April. Tolerates occasional inundation; fast growing; short-lived; golden yellow fall color; can become weedy or invasive; subject to wind and ice damage; shallow root system.	Light: Moisture: M W Salinity: L Browse: M	H 75' – 100' S 50' – 80'

Botanical Name Common Name (* = native to Virginia)	Time of Bloom and other Characteristics	Conditions	Mature Size Height Spread
Quercus bicolor Swamp white oak *	May – June. Tolerates seasonal flooding or upland site as well as soil compaction; acorns much prized by wildlife; yellow and sometimes red/purple fall color; shallow root system.	Light: 🌣 🛈 Moisture: M W Salinity: L Browse: M	H 60' – 100' S 50' – 75'
<i>Quercus michauxii</i> Swamp chestnut oak *	May. Larval plant for Juvenal's dusky wing butterfly; shallow root system; acorns have high wildlife value; allelopathic (exudes plant growth inhibitors) to understory plants.	Light: 🌣 Moisture: M W Salinity: N Browse: M	H 50' – 80' S 75' – 100'
<i>Quercus palustris</i> Northern pin oak *	April – May. Fast-growing large tree; high wildlife value; red fall color; leaves sometimes persist into winter; tolerates seasonal flooding but not consistently wet sites; needs acid soils.	Light: 🌣 Moisture: M W Salinity: N Browse: L	H 50' – 80' S 35' – 75'
<i>Quercus phellos</i> Willow oak *	February – May. Fast growing, long lived, large tree; willow like foliage; shallow root system; high wildlife value; red fall color; tolerates seasonal flooding and drought; prefers acidic soil; transplants easily.	Light: 🌣 🐠 Moisture: D M W Salinity: N Browse: H	H 80' – 100' S 40' – 75'
<i>Salix nigra</i> Black willow	March – April. Small yellow/green flowers borne in catkins; narrow lance shaped leaves; dense shallow root system excellent for stabilizing eroding land; prefers wet soil; roots sucker readily.	Light: 🌣 🛈 Moisture: M W Salinity: N Browse: L	H 35' – 50' S 20' – 35'
<i>Taxodium distichum</i> Bald cypress *	March – April. Deciduous, large, slow growing, long lived conifer; prefers wet sites, but once established also drought tolerant; ducks and marsh birds eat seeds and foliage; buttressed trunk; "knees" grow above water from roots.	Light: 🇘 🛈 Moisture: W Salinity: N Browse: L	H 75' – 100' S 25' – 35'
<i>Thuja occidentalis</i> Arborvitae *	May. Dense single stem tree; evergreen; shallow root system; white tailed deer will browse during severe winters; grows on wet and dry sites.	Light: Moisture: D M W Salinity: N Browse: M	H 50' – 75' S 35' – 50'

NOTES:

- 1. Adapted from Prince George's County, Maryland Bioretention Manual Bioretention Plant List, updated February 2001.
- 2. Information was supplemented by the online PLANTS National Database of the Natural Resources Conservation Service, United States Department of Agriculture.
- 3. Further information was obtained from the following sources:
 - Native Plants for Wildlife Habitat and Conservation Landscaping: Chesapeake Bay Watershed. Slattery, Britt E., Kathryn Reshetiloff, and Susan M. Zwicker, Annapolis, MD: U.S. Fish & Wildlife Service, Chesapeake Bay Field Office, 2003
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