04/05/06

Upland and wetland plants that may be suitable for use in LID. Plant selection should be based on the volume and frequency of water expected to be present. Using the area's natural wetlands as a reference, species should be selected based on their tolerance of the site's microclimate and habitat. Garden design should include tree, shrub, and herbaceous species as FAC or wetter in the US Fish and Wildlife Service 1988 National List of Wetland Plants, excluding FAC- species and invasive species (including but not limited to *Phragmites australis*, *Lythrum salicaria*, *Typha spp.*, and *Phalaris arundinacea*). Please refer to the Invasive Plant Atlas of New England (IPANE), http://nbii-nin.ciesin.columbia.edu/ipane/ for a current listing of invasive species.

Plant Type	Referenc e	Plant	Common Name	Description	Zone	Matur e	Wetland Indicator	Shade Toleranc	Salt Toleranc	Brief Flood
herbaceous	http://www.r ook.org/earl/ bwca/nature/ aquatics/aco rus.html		Sweetflag	A hardy perennial swamp or bog plant with sweet, spicy-scented leaves. Edges of ponds and moist soils, marshes, shallow waters. Native to North America. Drought tolerant, not a rapid colonizer, tolerant of acidic conditions. The Integrated Taxonomic Information System (ITIS) lists the accepted name of North American Sweet Flag as Acorus americanus (TSN182561). Because all Sweet Flag in North American has long been lumped together as Acorus calamus, especially in the popular, non-professional realm, expect the confusion to continue. Acorus calamus, a non-native, is considered to	3 to 10	2-4'	OBL	intolerant		X
herbaceous	http://www.f loridata.com/ ref/A/andr_g er.cfm ASH		Big Bluestem	Big bluestem is a perennial bunch grass that forms large clumps which expand slowly on short, scaly rhizomes. It is tolerant of various moisture conditions, although it prefers dry sunny sites. Once established, it is very drought-tolerant. However, best growth occurs with regular watering. Big bluestem can withstand short periods of waterlogged soils in summer, but not in winter. Foliage starts blue-green and turns coppery in the fall. The stems and leaves are bluegreen in early summer, developing reddish tinges as they mature. The plants turn a rich copper or orangebrown in autumn and develop an overall reddish or burgundy cast after	3 to 9	to 6'	FACW+	intolerant		x

Plant Type	Referenc e	Plant	Common Name	Description	Zone	Matur e	Wetland Indicator	Shade Toleranc	Salt Toleranc	Brief Flood
herbaceous	http://www. mobot.org/G ARDENINGH ELP/PLANTFI NDER/Plant. asp?code=B4 00#Ibl_cultu re ASH	canadensis	Wild Columbine	Delicate woodland or shade perennial with lobed leaves and nodding red flowers in spring. Attracts hummingbirds. Easily grown in average, medium wet, well-drained soil in full sun to part shade. Wide range of soil tolerance as long as drainage is good. Prefers rich, moist soils in light to moderate shade. Freely self-seeds and will naturalize to form large colonies in optimum growing conditions.	3 to 8	18"	FAC	full to part shade		x
herbaceous	http://www. mobot.org/g ardeninghelp /plantfinder/ Plant.asp?co de=H170 ASH	Aster divaricatus	White Wood Aster	Perennial ground-covering aster blooming white in late August and September. Attracts butterflies. Easily grown in average, medium wet, well- drained soil in part shade to full shade. Thrives in shade and tolerates dry conditions. No serious insect or disease problems	3 to 8	2'		full sun to part shade		x
herbaceous	NEWP ASH	Aster noviae angliae	New England Aster			2-6'	FACW-	intolerant		х

Plant	Referenc	Plant	Common	Description	Zone	Matur	Wetland	Shade	Salt	Brief
Туре	е		Name			е	Indicator	Toleranc	Toleranc	Flood
herbaceous	http://www. mobot.org/g ardeninghelp /plantfinder/ Plant.asp?co de=B730 ASH	Boltonia asteroides	False Aster	Easily grown in average, medium wet, well-drained soils in full sun. Tolerates a wide range of soils including moderately dry ones. Plants grown in part shade or in rich, moist soils tend to flop and need support. Plants grown in drier soils will grow shorter, but often less vigorously with inferior flowering. Species plants are somewhat weedy and several varieties and cultivars might be better selections see e.g., B. a. var. latisquama 'Snowbank' (H440). Showy white/pink aster-like flowers in August/September. Attracts butterflies. No serious insect or disease problems.	3 t 10	to 5'	FACW	intolerant		X
herbaceous	NEWP MDEP	Calamagrostis canadensis	Blue Joint Grass, Reed Grass	A typical upright attractive grass. Spreads slowly to form clumps. Does well in wet soils, bogs and swamps, and is a good soil stabilizer.	3	2-4'	FCW+	intolerant		х
herbaceous	NEWP	Carex sp.	individual species and	Wetland plant that may be suitable for use in LID. Plant selection should be based on the volume and frequency of water expected to be present. Species should be chosen after survey of natural local reference wetlands in the area to ensure that selected plants are tolerant of the site's microclimate and		2-4'	OBL/FACW+ / FACW	sun to light shade		x
herbaceous	http://www. mobot.org/G ARDENINGH ELP/PLANTFI NDER/Plant. asp?code=H 750 ASH	5 .	Autumn Fern, Japanese Shield Fern	Japanese shield fern is a deciduous, clump-forming, slowly spreading (rhizomatous) fern that typically grows 1.5-2.5' (infrequently to 3') tall and features glossy, deeply cut fronds (20-30" long). Easily grown in average, medium wet, well-drained soil in part shade to full shade. Prefers moist, humusy, acidic soils with protection from wind. Very intolerant of drought.	5 to 8	to 2'		required		x

Plant	Referenc	Plant	Common	Description	Zone	Matur	Wetland	Shade	Salt	Brief
Туре	е		Name			е	Indicator	Toleranc	Toleranc	Flood
herbaceous	http://www. mobot.org/g ardeninghelp /plantfinder/ Plant.asp?co de=C580 ASH	Echinacea purpurea	Purple Coneflower	Purple, pink or white long-lasting blooms on tall stems from June through August. Loved by birds and butterflies, especially Monarchs. Easily grown in average, medium wet, well-drained soil in full sun to part shade. Best in full sun. An adaptable plant that is tolerant of drought, heat, humidity and poor soil. Divide clumps when they become overcrowded (about every 4 years). Plants usually rebloom without deadheading, however prompt removal of spent flowers improves general appearance. Freely self-seeds if at least some of the seed heads are	3 to 8	to 4'		sun to part shade		x
herbaceous	http://www. mobot.org/g ardeninghelp /plantfinder/ Plant.asp?co de=C700 NEWP ASH	purpureum subsp.	Joe-Pye Weed	Tall perennial of moist places that blooms from July to September with small purplish-pink flowers clustered together at the top of the stem. Easily grown in average, medium wet to wet soils in full sun. Prefers moist, fertile, humusy soils which do not dry out.	4 to 8	4-5'	FACW/FAC	intolerant		х
herbaceous	http://www. mobot.org/G ARDENINGH ELP/PLANTFI NDER/Plant. asp?code=C 850 ASH		Wild Geranium	This is a clump-forming, woodland perennial that typically occurs in woods, thickets and shaded roadside areas. Spreading, bushy perennial with lobed leaves. Blooms April and May with pale pink, deep pink or lilac flowers. Easily grown in average, medium wet, well-drained soil in full sun to part shade. Prefers moist, humusy soils, but tolerates poor soils. Will naturalize in optimum growing conditions. Foliage may yellow in hot summers if soil is allowed to dry out. No serious insect or disease problems. Attracts butterflies.	3 t 8	to 2'	FACU	Full sun to part shade		X

Plant Type	Referenc e	Plant	Common Name	Description	Zone	Matur e	Wetland Indicator	Shade Toleranc	Salt Toleranc	Brief Flood
herbaceous	ASH	Hemerocallis sp.	Daylily	Tolerant of many landscape conditions, early summer blooms found in many colors and styles. Needs 6 or more hours of full sun per day. Protection from mid and late afternoon sunwill help flower color to remain more consistent. Plant in well-drained soil with organic matter. Drought tolerant. Tolerant of short-term flooding.	4 to 9	to 3'		full sun to light shade		х
herbaceous	ASH	Hosta sp.	Hosta	Clumping, leafy lush-foliaged plants in many colors, heights and textures ranging from single solid colors of green, blue and gold, to variegations of these colors and also white. Leaf size can range from thumbnail to as large as a serving platter. Individual plants come in an array of sizes: from fist-size to mounds three feet tall and five feet across. Hosta flowers are borne on scapes, bloom between June and October and last for several weeks. Some are fragrant. Soil requirements range from sand to clay loam, but is best supplemented with organic material. While hostas are regarded as shade plants, they appreciate early morning/late afternoon sun.	4 to 9	to 3'		required, some sun tolerated		x

Plant	Referenc	Plant	Common	Description	Zone	Matur	Wetland	Shade	Salt	Brief
Туре	е		Name			е	Indicator	Toleranc	Toleranc	Flood
herbaceous	http://www. mobot.org/g ardeninghelp /plantfinder/ Plant.asp?Co de=C629 NEWP	Iris versicolor	Blue flag iris	A clump-forming iris that is native to marshes, swamps, wet meadows, ditches and shorelines. Grow in full sun to part shade in medium to wet soils; can take periods of dryness. This iris may be grown in up to 2-4" of shallow standing water, or in moist shoreline soils or in constantly moist humusy soils of a border. Clumps spread slowly and naturalize by tough, creeping rhizomes. Violet blue flowers in late spring. No serious insect or disease problems.	3 to 9	2-2.5'	OBL	full sun to part shade		х
herbaceous	http://www. bbg.org/gar2 /topics/plant s/2002su_lia tris.html ASH	Liatris sp.	Blazing Star		5 to 9	to 5'	FAC+	intolerant		х
herbaceous	http://www. mobot.org/g ardeninghelp /plantfinder/ Plant.asp?co de=D940 NEWP	Lobelia cardinalis	Cardinal flower	Cardinal flower is a native perennial which typically grows in moist locations along streams, sloughs, springs, swamps and in low wooded areas. Easily grown in rich, humusy, medium wet to wet soils in full sun to part shade. Needs constant moisture. Will tolerate full sun in cool, northern climates, but otherwise appreciates part shade. Short-lived, requires regular replanting. Late summer bloom period. Flowers are very attractive to butterflies and hummingbirds, but not cardinals. No serious disease or insect		2-4'	OBL	tolerant		х

Plant	Referenc	Plant	Common	Description	Zone	Matur	Wetland	Shade	Salt	Brief
Type	е		Name			е	Indicator	Toleranc	Toleranc	Flood
herbaceous	http://www. mobot.org/g ardeninghelp /plantfinder/ Plant.asp?co de=1460 NEWP ASH	Lobelia siphilitica	Great Blue Lobelia	A native that typically grows in moist to wet locations along streams, sloughs, springs, swamps, meadows and in low wooded areas. A clumpforming perennial that features light to dark blue, flowers in late summer to early fall. Easily grown in rich, humusy, medium wet to wet soils in full sun to light shade. Needs constant moisture. Will tolerate full sun in cool, northern climates, but otherwise appreciates part shade. No serious disease or pest	4 to 9	2-3'	FACW+	intolerant		X
herbaceous	http://www. mobot.org/G ARDENINGH ELP/PLANTFI NDER/Plant. asp?code=L3 00 NEWP	Onoclea sensibilis	Sensitive fern	A large, somewhat coarse, native, deciduous fern that occurs in wet woods and thickets and in moist soils along streams and springs. Sensitive to drought. Best grown in organically rich, wet to almost wet, well-drained soil in part shade to full shade. Needs consistent moisture. Although native to swampy and marshy areas, it grows quite well in average garden soil as long as soil is not allowed to dry out.		3-4'	FACW	required		x
herbaceous	NEWP MDEP	Osmunda regalis	Royal Fern	Vigorous, spreading to form large, vase shaped clumps. Very hardy. Moist, acid, highly organic soil best. Wet soils but not submerged; tolerant of drying for short periods. Only tolerates full sun if plenty of moisture.		3'	OBL	tolerant		х
herbaceous	NEWP MDEP	Panicum virgatum	Switchgrass	Several species. Forms thick spreading clumps. A tall grass often found in drier sandy soils and along the upland edge of salt marshes. Holds shape throughout winter. Needs 1 or 2 years to become established. Tolerates poor, acid, sandy, dry soil. Drought and heat tolerant.		4-7'	FAC	intolerant		х

Plant	Referenc	Plant	Common	Description	Zone	Matur	Wetland	Shade	Salt	Brief
Туре	е		Name			е	Indicator	Toleranc	Toleranc	Flood
herbaceous	http://www. mobot.org/g ardeninghelp /plantfinder/ Plant.asp?co de=F990 ASH	Tiarella cordifolia		A clump-forming perennial which spreads rapidly by stolons to form dense, 1-2' wide clumps of foliage. Small white flowers blooming on the ends of spikes. Easily grown in average, medium wet, well-drained soil in part shade to full shade. Prefers organically rich, moisture-retentive soils. Wet soils, particularly in winter, can be fatal, however. Soil should not be allowed to dry out. No serious insect or disease problems		to 12"	FAC-	required		х
shrub	NTSV	Aesculus pavia	Red Buckeye	No serious disease/insect pests. Intermediate drought/heat resistance. Deep descending roots; difficult to transplant, use container or B&B from nursery.	6	12-20'	FAC	tolerant	X	intermediate
shrub	NEWP COOP	Amelanchier canadensis, Amelanchier arborea	Shadblow/ Serviceberry	Upright, tall shrub. Moist, acid soils, good for wet or naturalized areas. Newer cultivars are reported to be less subject to pest and disease pressure.	4 to 9	18'+	FAC, FAC-	sun/shade		х
shrub	NEWP COOP NTSV ASH	Aronia arbutifolia	Red Chokeberry	Adaptable to various soils, tolerates both wet and dry soils. No serious insect/disease problems; good for massing or naturalizing. Intermediate drought/heat tolerance. Transplants well. Profuse suckering.	4 to 9	6-10'	FACW	intolerant	х	х
shrub	NEWP CE NTSV ASH	Aronia melanocarpa	Black Chokeberry	Adaptable to various soils, tolerates both wet and dry soils. No serious insect/disease problems; good for massing or naturalizing. Resistent to heat and drought. Transplants easily. Suckers profusely.	4 to 9	3-6'	FAC	sun/light shade	х	х
shrub	NTSV	•	Purplefruit Chokeberry	Adaptable to various soils, tolerates both wet and dry soils. No serious insect/disease problems; good for massing or naturalizing. Intermediate drought/heat tolerance. Transplants well.	4 to 9	6-10'		sun/light shade	х	x

Plant		Plant	Common Name	Description	Zone	Matur	Wetland Indicator	Shade Toleranc	Salt Toleranc	Brief Flood
Type shrub	COOP NTSV	Calycanthus floridus	Carolina Allspice, Common Sweetshrub	Adaptable to many soil conditions, prefers wet to average soil moisture. Sensitive to drought/heat. Easily transplanted; prolific suckering habit forming thickets.	5 to 9	6-9'	FACU+	tolerant	Totel and	X
shrub	NEWP COOP NTSV ASH	Clethra alnifolia	Sweet Pepperbush	Dry to moist acidic soil supplemented with organic matter. Found in coastal and inland wetlands. Tolerates drier sites. Generally pest free; mites may be a problem in hot, dry locations.	3 to 9	3-8'	FAC+	full sun to light shade	х	х
shrub		Cornus racemosa	Gray Dogwood			6-10'		shade tolerance		
shrub		Cornus sericea	Red Osier Dogwood			20'		drought intolerant		
shrub	NEWP NTSV MADEP ASH	Cornus amomum	Silky Dogwood	A fast growing, clump forming, medium shrub found along lakes and streams and in moist thickets. Some diseases, few insect pests. Tolerates poorly-drained soil. Intermediate drought/heat tolerance. Transplants easily.	4	5-8'	FACW	intolerant		х
shrub	ASH COOP NTSV	Fothergilla gardeni	Witch Alder	Prefers a moist, acid soil supplemented with organic matter. Useful for naturalizing, for the border or as a specimen. Small, dense, upright shrub with crooked branch appearance. Intermediate drought/heat tolerance. Tremendously pest/disease free.	5	3'	FACW	tolerant		intolerant
shrub	ASH NTSV	Gaultheria procumbens	Wintergreen	Prostrate herb-like small shrub spreading by stolons. Intermediate drought/heat tolerance. Tremendously pest/disease free. Difficult to transplant, start from potted plants.	3	2-6"	FACU	demands shade		х

Plant Type	Referenc e	Plant	Common Name	Description	Zone	Matur e	Wetland Indicator	Shade Toleranc	Salt Toleranc	Brief Flood
shrub	NEWP COOP ASH	Hamamelis virginiana	Witch Hazel	Generally prefers moist, acid soils high in organic matter. Grows in moist woods. No serious insect/disease problems.	6 to 8	15-20'	FAC-	full sun to light shade		х
shrub	NTSV	Hypericum densiflorum	Dense Hypericum, Dense St. John's Wort	Found in boggy places, seepage slopes, borders of ponds and lakes, wet meadows, stream banks, roadside ditches and moist pinelands. Intermediate drought/heat tolerance. Infrequent disease and insect pests. Shallow root system that transplants well.	6	4'	FAC+	intolerant	х	X
shrub	NEWP COOP NTSV ASH	Ilex glabra	Inkberry	Moist to wet soils, grows in moist sandy coastal Southern New England woodlands. Drought/heat sensitive. Transplants well.	5 to 9	6-8'	FACW-	tolerant	х	х
shrub	NEWP COOP NTSV MDEP ASH	Ilex verticillata	Winterberry Holly	Tolerates a variety of soil types. Found in damp clearings, swamps and moist thickets. Moist, acidic soils supplemented with organic matter, does well under wet conditions, also in lighter soils, but is considered drought intolerant. No serious insect/disease problems. Transplants well.	3 to 9	6-10'	FACW+	sun/light shade		x
shrub	NTSV	Itea virginica	Virginia Sweetspire	Wet to moist soil conditions. Drought/heat resistant; can tolerate some drying but does not grow as well. No serious disease/insect pests. Transplants easily, best moved B&B.	5	6-12'	OBL	tolerant	х	х
shrub	ASH NTSV	Kalmia latifolia	Mountain Laurel	Spreading evergreen shrub. Intermediate drought/heat tolerance. Occasional disease/insect pests. Transplants well, but site carefully to avoid full hot sun. Requires acid, moist soil supplemented with organic matter, good drainage.	5	7-15'	FACU	tolerant	intermediate	x

Plant	Referenc	Plant	Common	Description	Zone	Matur	Wetland	Shade	Salt	Brief
Туре	е		Name			е	Indicator	Toleranc	Toleranc	Flood
shrub/small tree		Lindera benzoin	Spicebush			12'				
shrub	NTSV COOP	Magnolia virginiana	Sweetbay Magnolia	Does well in wet soils. Drought/heat intolerant. No serious insect/disease problems. Difficult to transplant, slow to re-establish.	5 to 9	10-20'	FACW+	tolerant	x	×
shrub		Myrica gale	Sweet Gale	to re-establish.		6'				
shrub	NEWP COOP NTSV	Myrica pensylvanica	Northern Bayberry	Does extremely well in poor sandy soils, adaptable to heavy soils. Drought resistant. Rarely susceptible to insects and disease. Transplants well.		5-12'	FAC	intolerant	x	x
shrub		Nemopanthus mucronata	Mountain Holly			9'				
shrub	СООР	Prunus maritima	Beach Plum	Adaptable to most soil conditions except wet. Drought tolerant once established. Relativey pest free but susceptible to some insect pests and diseases.	6-Mar	1-8'		sun to part shade	х	х
shrub	NTSV ASH	Rhododendron maximum	Rosebay Rhododendron	Moist to average soil conditions. Drought/heat sensitive. Frrequent disease/insect pests. Transplants readily B&B as a small plant in early spring. Can form thickets in moist, shady and protected places.	3	15'	FAC	tolerant	intolerant	х
shrub	NEWP ASH	Rosa palustris	Swamp Rose	A native rose with attactive pink flowers that prefers moist, acidic habitats such as bogs, wet conifer swamps, and the edges of ponds and	5 to 8	6-8'	OBL	tolerant		х

Plant	Referenc	Plant	Common	Description	Zone	Matur	Wetland	Shade	Salt	Brief
Туре	е		Name			е	Indicator	Toleranc	Toleranc	Flood
shrub	NEWP NTS ASH	Sambucus canadensis	Common Elderberry	Fast-growing, stoloniferous. Found growing in wet meadows and marshes. Tolerates various soil conditions. Transplants well, culture easy. Suckers freely, forming thickets. Drought/heat resistant.	3	6-8'	FACW-	tolerant	sensitive	х
shrub	ASH	Skimmia japonica	Japanese Skimmia	Small, mounding, densely branched evergreen shrub. Requires shade and a moist, well-drained, organic soil.	6 to 8	4'		required		x
shrub	http://www. hort.uconn.e du/Plants/s/s orsor/sorsor1 .html	Sorbaria sorbifolia	Ural Falsespirea	Multi-stemmed, deciduous shrub. Fast- growing, white flowers; prefers moist, well-drained soil, full sun to part shade.	2	5-10'		partial shade		
shrub	NEWP MDEP	Spiraea latifolia	Meadowsweet	Low shrub that grows in moist fields and uplands. Root suckers. Generally hardy and easy to care for. Native species can be found in open, wet meadows and along lakes and ditches.	2	2-4'	FAC+	intolerant		х
shrub	NEWP NTSV MDEP ASH	Spiraea tomentosa	Steeplebush	A small shrub common to wet fields and pastures. Drought resistent. Occasional disease/insect pests. Root suckers, transplants easily. Native species can be found in open, wet meadows and along lakes and ditches.	4	2-4'	FACW	intolerant		х
shrub	NTSV ASH	Vaccinium angustifolium	Lowbush Blueberry	Prefers moist to droughty soils. Drought/heat resistant. Transplants well, spreads by stolons. Occasional disease/insect pests.	2	2'	FACU-	tolerant	х	х
shrub	NEWP COOP NTSV ASH	Vaccinium corymbosum	Highbush Blueberry	Native to swamps but does well in dry, acid, poor and sandy soils in fullsun or partial shade. Intermediate drought tolerance. Occasional disease and insect pests. Transplants well, B&B or container grown.	3 to 8	6-12'	FACW-	tolerant	х	х
shrub	NEWP NTSV ASH	Viburnum cassinoides	Wild Raisin, Arrowwood		3	6-12'	FACW-	tolerant	х	х

Plant	Referenc	Plant	Common	Description	Zone	Matur	Wetland	Shade	Salt	Brief
Туре	е		Name			е	Indicator	Toleranc	Toleranc	Flood
shrub	COOP NTSV ASH	Viburnum dentatum	Arrowwood Viburnum	Wet to average soils. Drought/heat resistant. Infrequent disease/insect pests. Transplants well.	3	6-12'	FAC	tolerant	х	х
shrub	http://www. mobot.org/g ardeninghelp /plantfinder/ Plant.asp?co de=M750 ASH	Viburnum Ientago	Nannyberry	A large, upright, multi-stemmed, suckering, deciduous shrub which typically grows to 10-18' tall with a spread of 6-12', but may also be grown as a small, single trunk tree which may reach a height of 30'. Non-fragrant white flowers appear in spring. Easily grown in average, medium wet, well-drained soil. Remove root suckers to control spread unless naturalization is desired. Attracts birds and butterflies. No serious insect or disease problems.	2 t 8	14-16'	FAC	full sun to part shade		х
shrub	NEWP COOP NTSV	Viburnum trilobum	American Cranberrybush	Adaptable to soil conditions. An easy to grow native. Drought/heat resistant. Transplants easily.	3 to 8	8-12'	FACW	full sun to light shade		х
tree	NEWP COOP NTSV	Acer rubrum	Red Maple	Tolerates most soils but prefers moist, acid conditions, excellent for wet conditions. Fast growing, One of the best common trees in NE wetlands. Easily transplanted in early spring B&B or BR if small. Intermediate heat/drought tolerance.	3 to 9	60-75'	FAC	sun to shade		x
tree	NTSV	Aesculus glabra	Ohio Buckeye	Prefers wet soils, tolerates dry. Intermediate drought/heat tolerance. Infrequent insect problems, but frequent disease problems. Taproot, moderately difficult, transplant in early spring B&B.	4	35-50'	FACU+	intermediate		intermediate
tree	NEWP COOP NTSV	Betula nigra	River Birch	Fast growing, found on stream banks, prefers moist well drained soils but tolerates dry conditions once established. Rapid grower. Infrequent disease/pests. Heat/drought resistent. Transplants easily B&B in early spring or late autumn.	4 to 9	50-70'	FACW	intolerant		x

Plant Type	Referenc e	Plant	Common Name	Description	Zone	Matur e	Wetland Indicator	Shade Toleranc	Salt Toleranc	Brief Flood
tree	COOP NTSV	Carpinus caroliniana	American Hornbeam	Drought/heat sensitive. Demands moist to average soil moisture. Infrequent disease/insect pests. Difficult to transplant, move root pruned trees B&B in early spring. Useful as an understory tree.	3 to 9	20-30'	FAC	tolerant		х
tree	COOP NTSV	Chionanthus virginicus	White Fringetree	Very adaptable to soil types, prefers moist to average soil moisture. Sensitive to drought/heat. Infrequent disease/insect pests. Somewhat difficult to transplant, move as small tree B&B in early spring. Grows very wide so careful siting is important.	4 to 9	12-20'	FAC+	intolerant		intolerant
tree	COOP NTSV	Cladrastis lutea	American Yellowood	Prefers wet to average soil moisture. Sensitive to drought/heat. No serious disease/insect pests. Transplants well as small tree B&B in early spring.	4 to 8	30-50'		intolerant		intolerant
tree	ASH NTSV	Cornus alternifolia	Pagoda Dogwood	Small understory, white flowering, deciduous tree, often multistemmed. Shallow, fibrous roots, easily transplanted B&B in early spring. Drought/heat sensitive, but can tolerate periods of dryness once established. Few disease/insect pests.	3	20-35'		tolerant		intermediate
tree	NTSV	Fraxinus quadrangulata	Blue Ash	Drought/heat resistant. Wet to droughty soils. No serious diseases, but frequently susceptible to insect pests. Readily transplanted B&B or BR in spring or autumn with care.	5	50-75'		intermediate	intermediate	intolerant
tree	COOP NTSV	Ginkgo biloba	Ginkgo	High tolerance to difficult growing conditions. Good heat tolerance, no insect or disease problems. Must use male cultivars as decomosing fruit on female trees in fall are malodorous. Slow to establish.	4	50-80'		intolerant	х	х

Plant	Referenc	Plant	Common Name	Description	Zone	Matur e	Wetland Indicator	Shade	Salt Toleranc	Brief Flood
Type tree	COOP NTSV	Gynmocladus dioicus	Kentucky Coffeetree	Adaptable to various soil conditions, but prefers wet to average soils. Tolerates drought/heat. No serious insect/disease problems. Somewhat difficult to transplant, B&B in early spring.	3 to 8	60-75'	mulcator	intolerant	x	intolerant
tree	NEWP NTSV	Larix laricina	Eastern Larch/Tamarac k	Deciduous conifer. Easily transplanted B&B when dormant. No serious disease problems, but susceptible to insects. Drought/heat sensitive. Readily transplants B&B when dormant.	2	40-80'	FACW	intolerant	х	х
tree	NEWP COOP NTSV ASH	Nyssa sylvatica	Black Gum/Tupelo	Tree of forested wetlands and moist woods. Moist, well drained soils, will also grow on upland areas. No serious insects/disease problems. Heat/drought resistent. Difficult to transplant, should be grown as a container plant, or move B&B in early spring.	3 to 9	30-50'	FAC	intolerant	x	х
tree	NEWP COOP NTSV	Quercus alba	White Oak	Wide moisture tolerance. Adaptable to soil types, prefers moist, acid conditions, full sun. White oaks are more likely to die from gypsy moth attack than other oak species. Intermediate drought/heat tolerance. Deep taproot, difficult to transplant, move as small tree B&B in early spring.	3 to 9	50-80'	FACU	intermediate		Х
tree	NEWP COOP NTSV	Quercus bicolor	Swamp White Oak	The preferred choice of the oaks. Moist, acid soils but very drought tolerant once established. Several pests and diseases attack this plant but cause no significant damage. Transplants readily B&B in early spring or late autumn.		60-80'	FACW+	intermediate	x	х
tree	NTSV	Quercus imbricaria	Shingle Oak		5	30-45'	FAC	intermediate	х	intermediate

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Plant Type	Referenc e	Plant	Common Name	Description	Zone	Matur e	Wetland Indicator	Shade Toleranc	Salt Toleranc	Brief Flood
tree	NTSV	Quercus macrocarpa	Bur Oak	Prefers wet to droughty soils. Drought/heat tolerant. Infrequent insect pests, but frequent disease problems. Taproot, difficult to transplant, move B&B in early spring.	2	79-100'	FAC-	intolerant	х	intolerant
tree	NEWP COOP NTSV ASH	Quercus palustris	Pin Oak	Moist, acid soils, intolerant of high pH, tolerates wet soils and urban conditions. Heat/drought resistant. Easily transplanted B&B in early spring or autumn.	4 to 8	50-60'	FACW	intolerant	х	х
tree	COOP	Quercus phellos	Willow Oak	Adaptable to soil conditions, fibrous root system allows ease of transplanting, no serious insect or disease problems. Tolerant of heat/drought. It is a good species to plant along margins of fluctuating-level reservoirs, but is not tolerant of permanent standing water.	5 to 9	40-60'	FAC+	intolerant		х
tree	NEWP COOP	Quercus rubra	Red Oak	Moist, acid soils, tolerates urban conditions. Easily transplanted.	4 to 8	60-70'	FACU-	intermediate		Х
tree		Salix discolor	Pussywillow			20-40'				

Referen

ASH Ashumet Nitrogen Plume Offset Program (http://geocities.com/ashumet2001/capecodplants.html)

NTSV Native Trees, Shrubs and Vines for Urban and Rural America by Gary L. Hightshoe, 1988.

NEWP New England Wetland Plants, Inc. (www.newp.com)

COOP Sustainable Trees and Shrubs for Southern New England, Umass and URI Cooperative Extension Systems

Internet websites as indicated.

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