

**Appendix A  
Charlotte-Mecklenburg BMP Plant List**

Form	Scientific Name	Common Name	Planting Zone <sup>1,9</sup>	Wetland Indicator Status <sup>1</sup>	Water Tolerance <sup>3,4,8,9</sup>	Mature Height/ Diameter <sup>1</sup>	Bloom Time in NC Piedmont <sup>2,3</sup>	Showy Flower (F), Fall Foliage (L), or Fruit Color (R) <sup>2,4</sup>	Salinity Tolerance (in PPT) <sup>3,5,8</sup>	Shade Tolerance <sup>7</sup>	Spacing (All BMPs except Bioretention) <sup>6,8,9</sup>	Typical OC Spacing for Bioretention Areas	Minimum Size for Plants (All BMPs except Bioretention)	Minimum Size for Plants in Bioretention Areas
<b>Large Maturing Deciduous Trees</b>	<i>Acer rubrum</i>	Red Maple, Swamp Maple	4, 5, 6	FAC	Irregular to seasonal inundation	60'-90'	Fall Color	Red -L	<0.5	⊕	6'-6" OC	4'-8" OC	5 Ft. Ht. CG	2 In. Cal. B&B
	<i>Acer saccharinum</i>	Silver Maple	3, 4, 5	FACW	Irregular to seasonal inundation	60'-80'	March-May	None	Resistant	⊕	6'-6" OC	4'-8" OC	5 Ft. Ht. CG	2 In. Cal. B&B
	<i>Betula nigra</i>	River Birch	3, 4, 5	FACW	Irregular to seasonal inundation	50'-70'	April-May	Yellow -L	<0.5	⊕	6'-6" OC	4'-8" OC	5 Ft. Ht. CG	2 In. Cal. B&B
	<i>Celtis laevigata</i>	Sugarberry	3, 4, 5	FACW	Seasonal inundation	40'-55'	April-May	None	Low	⊕	6'-6" OC	4'-8" OC	5 Ft. Ht. CG	2 In. Cal. B&B
	<i>Diospyros virginiana</i>	Persimmon	4, 5, 6	FAC	Seasonal inundation	40'-50'	May-June	Red - L	Resistant	⊕	6'-6" OC	4'-8" OC	5 Ft. Ht. CG	2 In. Cal. B&B
	<i>Fraxinus americana</i>	White Ash	4, 5, 6	FACU	Seasonal inundation	60'-80'	April-May	Purple - L	<0.5	⊕	6'-6" OC	4'-8" OC	5 Ft. Ht. CG	2 In. Cal. B&B
	<i>Fraxinus pennsylvanica</i>	Green Ash	3, 4, 5	FACW	Irregular, seasonal, or regular inundation	50'-70'	April-May	None	Resistant	⊕	6'-6" OC	4'-8" OC	5 Ft. Ht. CG	2 In. Cal. B&B
	<i>Gleditsia triacanthos</i>	Honeylocust	4, 5	FAC	Seasonal inundation	50'-75'	Fall Color	None	Low	⊕	6'-6" OC	4'-8" OC	5 Ft. Ht. CG	2 In. Cal. B&B
	<i>Liriodendron tulipifera</i>	Tulip Poplar	4, 5, 6	FAC	None	60'-150'	Fall Color	Yellow - L	<0.5	⊕	6'-6" OC	4'-8" OC	5 Ft. Ht. CG	2 In. Cal. B&B
	<i>Liquidambar styraciflua</i>	Sweet Gum	4, 5, 6	FAC	Irregular, seasonal, or regular inundation	75'-100'	April-May	Purple - L	Resistant	⊕	6'-6" OC	4'-8" OC	5 Ft. Ht. CG	2 In. Cal. B&B
	<i>Nyssa sylvatica</i>	Black Gum	4, 5, 6	FAC	Irregular or seasonal inundation	50'-100'	Fall Color	Red -L	Resistant	⊕	6'-6" OC	4'-8" OC	5 Ft. Ht. CG	2 In. Cal. B&B
	<i>Platanus occidentalis</i>	Sycamore	4, 5	FACW-	Irregular to seasonal inundation	75'-100'	April	None	<0.5	⊕	6'-6" OC	4'-8" OC	5 Ft. Ht. CG	2 In. Cal. B&B
	<i>Quercus michauxii</i>	Swamp White Oak	4, 5, 6	FACW-	Seasonal inundation	50' - 60'	April	Yellow - L	Resistant	⊕	6'-6" OC	4'-8" OC	5 Ft. Ht. CG	2 In. Cal. B&B
	<i>Quercus nigra</i>	Water Oak	5, 6	FAC	Seasonal inundation	50'-75'	Fall Color	None	<0.5	⊕	6'-6" OC	4'-8" OC	5 Ft. Ht. CG	2 In. Cal. B&B
	<i>Quercus phellos</i>	Willow Oak	3, 4, 5	FACW-	Irregular to seasonal inundation	60'-80'	April	Red - L	<0.5	⊕	6'-6" OC	4'-8" OC	5 Ft. Ht. CG	2 In. Cal. B&B
<i>Ulmus americana</i>	American Elm, White Elm	4, 5, 6	FACW	Irregular to seasonal inundation	75'-125'	Fall Color	None	<0.5	⊕	6'-6" OC	4'-8" OC	5 Ft. Ht. CG	2 In. Cal. B&B	
<b>Small Maturing Deciduous Trees</b>	<i>Acer negundo</i>	Box Elder	4, 5, 6	FACW	Irregular, seasonal, or regular inundation	30' - 40'	Early Spring	None	Resistant	⊕	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	2 In. Cal. B&B
	<i>Asimina triloba</i>	Paw paw	4, 5, 6	FAC	Irregular to seasonal inundation	15' - 20'	April-May	Yellow - L	<0.5	⊕	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	2 In. Cal. B&B
	<i>Carpinus caroliniana</i>	American Hornbeam	4, 5, 6	FAC	Seasonal inundation	25'	April-May	Yellow - L	<0.5	●	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	2 In. Cal. B&B
	<i>Ostrya virginiana</i>	Hop Hornbeam	4, 5, 6	FACU-	None	25'	Fall Color	None	<0.5	●	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	2 In. Cal. B&B
	<i>Oxydendrum arboreum</i>	Sourwood	4, 5, 6	FACU	Irregular inundation	20'-30'	June-July Color	White - F, Red - L	<0.5	●	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	2 In. Cal. B&B
	<i>Salix nigra</i>	Black Willow	3, 4, 5, 6	OBL	Irregular, seasonal, or regular inundation	35'	Early Spring	None	<0.5	⊕	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	2 In. Cal. B&B
<b>Evergreen Trees</b>	<i>Juniperus virginiana</i>	Eastern Red Cedar	4, 5, 6	FACU	irregular inundation	40'-60'	Spring	Inconspicuous	Resistant	⊕	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	5 Ft. Ht. CG
	<i>Pinus taeda</i>	Loblolly Pine	4, 5, 6	FAC	Irregular, seasonal, or regular inundation	90' - 100'	Spring	Inconspicuous	Resistant	⊕	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	5 Ft. Ht. CG
	<i>Tsuga canadensis</i>	Canadian Hemlock	5, 6	FACU	None	30'-80'	Spring	Inconspicuous	<0.5	●	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	5 Ft. Ht. CG
<b>Deciduous Shrubs</b>	<i>Aesculus pavia</i>	Red Buckeye	4,5,6	FAC	Irregular inundation	9'	April - May	Red - F	<0.5	⊕	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	3 Ft. Ht. CG
	<i>Aesculus sylvatica</i>	Buckeye, Painted Buckeye	4, 5, 6	FAC	Irregular inundation	9'	April-May	Yellow - F	<0.5	⊕	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	3 Ft. Ht. CG
	<i>Alnus serrulata</i>	Tag Alder	2, 3, 4	FACW+	Seasonal to regular inundation 0 - 3 in.	15'	February	None	<0.5	⊕	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	3 Ft. Ht. CG
	<i>Aronia arbutifolia</i>	Red chokeberry	4, 5, 6	FACW	Irregular to seasonal inundation	6'-9'	April	Red - R & L	Resistant	⊕	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	3 Ft. Ht. CG

**Appendix A  
Charlotte-Mecklenburg BMP Plant List**

Form	Scientific Name	Common Name	Planting Zone <sup>1,9</sup>	Wetland Indicator Status <sup>1</sup>	Water Tolerance <sup>3,4,8,9</sup>	Mature Height/ Diameter <sup>1</sup>	Bloom Time in NC Piedmont <sup>2,3</sup>	Showy Flower (F), Fall Foliage (L), or Fruit Color (R) <sup>2,4</sup>	Salinity Tolerance (in PPT) <sup>3,5,8</sup>	Shade Tolerance <sup>7</sup>	Spacing (All BMPs except Bioretention) <sup>6,8,9</sup>	Typical OC Spacing for Bioretention Areas	Minimum Size for Plants (All BMPs except Bioretention)	Minimum Size for Plants in Bioretention Areas
	<i>Callicarpa americana</i>	American Beautyberry	4, 5, 6	FACU-	Irregular inundation	5' - 10'	June-August	Pink - R		☉	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	3 Ft. Ht. CG
	<i>Cephalanthus occidentalis</i>	Buttonbush	2, 3	OBL	Irregular to permanent inundation 0 - 36 in.	3'-6'	June	White - F L Yellow -	Resistant	●	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	3 Ft. Ht. CG
	<i>Cornus amomum</i>	Silky Dogwood	3, 4	FACW+	Irregular to seasonal inundation	10'-12'	May-July	Red - R L Yellow -	<0.5	☉	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	3 Ft. Ht. CG
	<i>Euonymus americana</i>	Hearts-a-bustin', Strawberry bush	4, 5, 6	FAC-	Irregular inundation	3' - 5'	September-October	Red - R	<0.5	●	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	3 Ft. Ht. CG
	<i>Hamamelis virginiana</i>	Witch Hazel	4, 5	FAC	Irregular inundation	5'-6'	October-December	Yellow - L,F	<0.5	☉	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	3 Ft. Ht. CG
	<i>Ilex decidua</i>	Deciduous holly, Possum haw	3, 4, 5	FACW-	Irregular to seasonal inundation	20'	April-May	Yellow - L Red - R	Resistant	☉	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	3 Ft. Ht. CG
	<i>Ilex verticillata</i>	Common Winterberry	4, 5, 6	FACW	irregular to seasonal inundation	6'-12'	April-May	Red - R	<0.5	●	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	3 Ft. Ht. CG
	<i>Itea virginica</i>	Virginia-willow	4, 5, 6	FACW+	Seasonal, regular, or permanent inundation 0 - 6 in.	6'	May-June	White - F, Purple - L	Resistant	●	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	3 Ft. Ht. CG
	<i>Lindera benzoin</i>	Spicebush	3, 4, 5	FACW	Seasonal inundation	6'-12'	March	Yellow	Resistant	●	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	3 Ft. Ht. CG
	<i>Rhododendron perichlymenoides (Rhododendron nudiflorum)</i>	Pinxter Azalea	4, 5	FAC	Irregular to seasonal inundation	3' - 6'	April	Pink F, Red - L	<0.5	☉	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	3 Ft. Ht. CG
	<i>Vaccinium arboreum</i>	Sparkleberry	4, 5, 6	FACU	Irregular inundation	6'-10'	June	White	<0.5	●	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	3 Ft. Ht. CG
<b>Evergreen Shrubs</b>														
	<i>Hypericum hypericoides</i>	St. John's Wort	5, 6	FAC	Seasonal to irregular inundation	1'-3'	July-August	Yellow		☉	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	3 Ft. Ht. CG
	<i>Rhododendron maximum</i>	Rhododendron, Rosebay, Great Laurel	6	FAC-	Regular inundation	4'-6'	June-July	White	<0.5	●	6'-6" OC	4'-8" OC	3 Ft. Ht. CG	3 Ft. Ht. CG
<b>Herbs and Flowers</b>														
	<i>Acorus calamus</i>	Sweetflag	2, 3	OBL	Regular to permanent inundation 0 - 6 in.	2'-3'	Spring	Inconspicuous	0 - 10	☉	1 ft	1 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Alisma subcordatum</i>	Water Plantain	3, 4		Regular to permanent inundation 0 - 12 in.		Summer	White	< 0.5	☉	Clusters at irregular intervals in an area planted with full cover species.	Clusters at irregular intervals in an area planted with full cover species.	2" dia x 5" Plug	2" dia x 5" Plug
				OBL		2'-3'								
	<i>Athyrium asplenoides</i>	Southern Lady Fern	4, 5	--	Irregular inundation	1'-3'	Spring	Inconspicuous	< 0.5	☉	1 ft	1 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Bidens aristosa</i>	Tickseed Sunflower	3, 4	FACW	Regular inundation	1'-3'	July-August	Yellow	<0.5	☉	2 ft	2 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Eupatoriadelphus dubius</i>	Joe Pye Weed	4, 5, 6	FACW	Seasonal inundation and upland	6'	Fall	Purple	<0.5	☉	2 ft	2 ft	#SP4 CG	#SP4 CG
	<i>Eupatorium perfoliatum</i>	Boneset	3, 4, 5, 6	FACW+	Irregular inundation and upland	4' - 5'	Fall	White	<0.5	☉	2 ft	2 ft	#SP4 CG	#SP4 CG
	<i>Hibiscus moscheutos</i>	Marsh mallow	2, 3	OBL	Irregular to regular inundation 0 - 3 in.	2' - 4'	July-September	White	0-15	☉	Irregular intervals in an area planted with full cover species.	Irregular intervals in an area planted with full cover species.	#SP4 CG	#SP4 CG
	<i>N. coccineus</i>	Red Mallow	2,3	FACW	Irregular to regular inundation 0 - 15 in.	2' - 6'	July-September	Red	0-15	☉				
	<i>Impatiens capensis</i>	Jewelweed, Touch-me not	3, 4	FACW	Regular inundation	2'-4'	June-September	Orange	<0.5	●	2 ft	2 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Iris cristata</i>	Dwarf Iris	4, 5, 6	--	Irregular inundation	<1'	Late Spring	Lavender	< 0.5	☉	1 ft	1 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Iris virginica</i>	Southern Blue Flag	2, 3	OBL	Regular inundation	1' - 3'	May-June	Blue	<0.5	☉	1 ft	1 ft	2" dia x 5" Plug	2" dia x 5" Plug

**Appendix A  
Charlotte-Mecklenburg BMP Plant List**

Form	Scientific Name	Common Name	Planting Zone <sup>1,9</sup>	Wetland Indicator Status <sup>1</sup>	Water Tolerance <sup>3,4,8,9</sup>	Mature Height/ Diameter <sup>1</sup>	Bloom Time in NC Piedmont <sup>2,3</sup>	Showy Flower (F), Fall Foliage (L), or Fruit Color (R) <sup>2,4</sup>	Salinity Tolerance (in PPT) <sup>3,5,8</sup>	Shade Tolerance <sup>7</sup>	Spacing (All BMPs except Bioretention) <sup>6,8,9</sup>	Typical OC Spacing for Bioretention Areas	Minimum Size for Plants (All BMPs except Bioretention)	Minimum Size for Plants in Bioretention Areas
	<i>Lobelia cardinalis</i>	Cardinal flower	3, 4	FACW+	Regular to permanent inundation	1'-5'	July-September	Scarlet	<0.5	☉	Clusters at irregular intervals in an area planted with full cover species.	Clusters at irregular intervals in an area planted with full cover species.	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Nuphar luteum</i>	Yellow Cowlily or Spatterdock	1, 2	OBL	Regular to permanent inundation 12 - 36 in.	1' - 4'	May-October	Yellow	Resistant	☉	0.5 ft	NA	#SP4 CG	#SP4 CG
	<i>Nymphaea odorata</i>	White (Native) Water Lily	1, 2	OBL	Permanent inundation 0-3 feet	2'	Summer	White	< 0.5	☉	3 ft	NA	#SP4 CG	#SP4 CG
	<i>Osmunda cinnamomea</i>	Cinnamon fern	3, 4	FACW+	Irregular, seasonal, or regular inundation	2' - 4'	March-November	Green	<0.5	●	0.5 ft	0.5 ft	#SP4 CG	#SP4 CG
	<i>Peltandra virginica</i>	Arrow arum	2, 3	OBL	Regular to permanent inundation 0 - 12 in	1'-2'	March-September	Green	0-2	☉	0.5 ft	0.5 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Pilea pumila</i>	Clearweed	4	FACW	Regular inundation	1.5'	July-October	White	< 0.5	☉	1 ft	1 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Polystichum acrostichoides</i>	Christmas fern	5, 6	FAC	Irregular inundation	2'	Evergreen	Green	<0.5	●	1.5 ft	1.5 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Pontederia cordata</i>	Pickereelweed	2, 3	OBL	Regular to permanent inundation 0 - 12 in.	1' - 3'	May - October	Blue/Lavender	0-3	☉	1 ft	1 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Sagittaria latifolia</i>	Duck Potato	1, 2	OBL	Regular to permanent inundation 0 - 24 in.	3' - 4'	Summer	White	<0.5	☉	2 ft	NA	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Saururus cernuus</i>	Lizard's Tail	2, 3	OBL	Regular to permanent inundation 0 - 12 in.	1'-3'	June-September	White	<0.5	☉	2 ft	2 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Vernonia noveboracensis</i>	New York Ironweed	4, 5	FAC+	Seasonal inundation	3' - 7'	Fall	Purple	<0.5	☉	2 ft	2 ft	2" dia x 5" Plug	2" dia x 5" Plug
<b>Grasses and Sedges</b>	<i>Andropogon glomeratus</i> <sup>10</sup>	Bushy Beardgrass	3, 4	FACW+	Irregular to seasonal inundation	1' - 2'	Fall	Golden	<0.5	☉	0.5 ft	0.5 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Carex stricta</i> <sup>10</sup>	Tussock Sedge	2, 3	OBL	Seasonal, regular, or permanent inundation 0 - 6 in.	1'-1.5'	May-September	Green	<0.5	☉	1ft	1ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Chasmanthium latifolium</i> <sup>10</sup>	River oats, Spikegrass	4, 5, 6	FAC-	Seasonal to regular inundation	1'-3'	Aug.-September	Green	<0.5	●	1.5 ft	1.5 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Dulichium arundinaceum</i>	Three-Way Sedge	2, 3	OBL	Regular to permanent inundation 0 - 12 in.	1' - 3'	Summer	Inconspicuous	<0.5	☉	1 ft	1 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Eleocharis quadrangulat</i>	Perennial Eleocharis	2, 3	OBL	Regular to seasonal inundation 0 - 12 in.	0.5'	Summer	Green	<0.5	☉	0.5 ft	0.5 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Juncus effusus</i> <sup>10</sup>	Soft Rush	2, 3, 4	FACW+	Regular to permanent inundation 0 - 12 in.	1'-1.5'	May-October	Green	<0.5	☉	0.5 ft	0.5 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Leersia oryzoides</i>	Rice cutgrass	2, 3	OBL	Irregular, seasonal, regular, or permanent inundation 0 - 6 in.	3'-5'	June-October	Greenish	<0.5	●	1 ft	1 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Panicum virgatum</i> <sup>10</sup>	Switchgrass	3, 4, 5	FAC+	irregular to seasonal inundation	4' - 5'	June-October	Burgundy	0-10	☉	0.5 ft	0.5 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Schizachyrium scoparium</i>	Little Bluestem	4, 5, 6	FACU	Irregular inundation	2' - 3'	Summer	Golden/White	<0.5	☉	1.5 ft	1.5 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Scirpus atrovirens</i> <sup>10</sup>	Green Bulrush	2, 3	OBL	Regular inundation	1'	June-August	Green	<0.5	☉	1.5 ft	1.5 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Scirpus cyperinus</i>	Woolgrass	3, 4	OBL	Irregular to seasonal inundation	4' - 5'	Summer	Green	<0.5	☉	1 ft	1 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Scirpus pungens</i>	Common Threesquare	2, 3	OBL	Seasonal, regular, or permanent inundation 0 - 6 in.	2' - 4'	Summer	Inconspicuous	0-15	☉	2 ft	2 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Scirpus validus</i>	Sofistem Bulrush	2, 3	OBL	Permanent to regular inundation 0-12 in.	6' - 10'	Summer	Inconspicuous	<0.5	☉	2 ft	2 ft	2" dia x 5" Plug	2" dia x 5" Plug
	<i>Sparganium americanum</i>	Eastern Bur-Reed	2, 3	OBL	Permanent to regular inundation 0 - 6 in.	4' - 5'	Summer	Green	<0.5	☉	2 ft	2 ft	#SP4 CG	#SP4 CG
<b>Ground Covers</b>	<i>Phlox nivalis</i>	Phlox	5, 6	--	Irregular inundation	0.5'	Spring	White	<0.5	☉	1.5 ft	1.5 ft	#SP4 CG	#SP4 CG

**Appendix A  
Charlotte-Mecklenburg BMP Plant List**

Form	Scientific Name	Common Name	Planting Zone <sup>1,9</sup>	Wetland Indicator Status <sup>1</sup>	Water Tolerance <sup>3,4,8,9</sup>	Mature Height/ Diameter <sup>1</sup>	Bloom Time in NC Piedmont <sup>2,3</sup>	Showy Flower (F), Fall Foliage (L), or Fruit Color (R) <sup>2,4</sup>	Salinity Tolerance (in PPT) <sup>3,5,8</sup>	Shade Tolerance <sup>7</sup>	Spacing (All BMPs except Bioretention) <sup>6,8,9</sup>	Typical OC Spacing for Bioretention Areas	Minimum Size for Plants (All BMPs except Bioretention)	Minimum Size for Plants in Bioretention Areas
------	-----------------	-------------	------------------------------	---------------------------------------	------------------------------------	---	---	---	---	------------------------------	---	--	---	--

<sup>1</sup> **Zone 1:** Deep Water Pool; **Zone 2:** Shallow Water Bench (low marsh); **Zone 3:** Shoreline Fringe (high marsh); **Zone 4:** Riparian Fringe; **Zone 5:** Floodplain Terrace; **Zone 6:** Upland Slopes. (Source: NCDENR.

<sup>2</sup> Source: Mecklenburg County Water Quality Program.2006.Town of Huntersville Water Quality Ordinance Design Manual. Accessed on October 19, 2006 via




<sup>3</sup> **Permanent:** Tolerates inundation or saturation from 76 - 100 percent of the growing season; **Regular:** Tolerates inundation or saturation from 26-75% of the growing season; **Seasonal:** Tolerates inundation or saturation

<sup>4</sup> Source: Hightshoe, G.L. 1988. Native Trees, Shrubs, and Vines for Urban and Rural America: A Planting Design Manual for Environmental Designers. New York, NY: Van Nostrand Reinhold Company, Inc.

<sup>5</sup> Source: USDA. 2006. Plants Database. Accessed on October 19, 2006 via <http://plants.usda.gov/index.html>.

<sup>6</sup> Source: Mellichamp, T.L., et al. 1996. Selection and Planting Guide for Aquatic and Wetland Plants in the Piedmont Region of North Carolina. Produced for Mecklenburg County Engineering and Building Standards

<sup>7</sup> Shade Tolerance:

- Requires Full sun 
- Tolerates Partial Shade 
- Tolerates Full shade 

<sup>9</sup> Professional Judgment

<sup>10</sup> Grasses that can be substituted for 25% of the Shrub requirement (90%) for bioretention areas if planted in 5- to 7-gallon pots