Wetlands serve several purposes in their design. They improve water quality and flood control, enhance the wildlife habitat, and provide as educational and recreational resources. The benefits of a wetland rely upon the vegetation which is planted there. It is important that the vegetation planted in a wetland is native to the area. Non native species can take over an area and eliminate the diversity the wetland offers. All wetland vegetation and plantings should conform to the American Standard Nursery Stock, published by the American Association of Nurserymen, and should be selected from certified nurseries. Certain plants should be avoided such as:

- Extremely aggressive species
- Cattails
- Common Reed
- Non-native species
- Chinese Privet
- Asiatic Dayflower

Deep Water Zone Vegetation Species

Deep Water Vegetation species are capable of surviving in depth of water ranging from a depth of 1- to 6- feet. This vegetation type is not typically planned or planted. In many locations, these plants will gradually begin to establish through natural colonization. The availability of plant materials that can withstand and grow in 1- to 6-feet water depth is limited.

Vegetation Common Name

American Water Lotus
Deepwater Duck Potato
Fragrant Water Lily
Redhead Grass
Spadderdock
Wild Celery
Yellow Water Lily

Tree Common Name
Bald Cypress

Shallow Water Zone Vegetation Species

Shallow Water Vegetation species are capable of surviving in depth of water ranging from 1-foot deep to the top of the permanent pool. These species are the primary emergent vegetation found in wet storm water detention ponds and constructed vegetated wetlands.

Vegetation Common Name

Alligator Flag Arrowhead Arrow Arum Cardinal Flower Caric Sedges Coastal Spikerush Duck Potato Flat Sedge Giant Bulrush Golden Canna Green Arum Jointed Spikerush Lance-leaf Arrowhead Lizard's Tail Louisiana Iris Pickerelweed **Pond Cyprus** Rice Cutgrass Soft Rush Softstem Bulrush Southern Blue-Flag Iris Smartweed Swamp Hibiscus Swamp Lily Swamp Rose Swamp Sunflower Sweetflag **Switchgrass** Tickseed Three-square Virginia Chain Fern

Wool Grass

Semi-Wet Zone A Vegetation Species

Semi-wet Zone A Vegetation species are capable of surviving along the edge of the permanent pool up to an elevation of 1-foot above the normal pool. These species are the most difficult to establish because the vegetation will be submerged during storm events and it must be able to survive during larger flooding periods. Many of the plants listed in the Shallow Water Vegetation classification are also capable of surviving in the Semi-Wet classification. In some situations vegetation in the classification may be required to provide shade to the water quality structure and shoreline. Several species of trees are suitable for this classification.

Vegetation Common Name

Bushy Broom Grass
Cardinal Flower
Cinnamon Fern
Dwarf Tickseed
False Nettle
Hawthorns
Rose Mallow
Royal Fern
Smartweed
Spiked Gayfeather
Touch-me-not
Upland Sea-Oats

Tree Common Name

American Sycamore
Black Willow
Boxelder
Green Ash
Pond Pine
Pumpkin Ash
Red Maple
River Birch
Sweetbay
Water Oak
Willow
Willow Oak

Semi-Wet Zone B Vegetation Species

Semi-wet Zone B Vegetation species are capable of surviving along the edge of the permanent pool from an elevation of 1- to 4-feet above the normal pool. Vegetation in this zone is subject to periodic flooding after larger storm events and may experience saturated or partially saturated soil conditions.

Vegetation Common Name

Black-eyed Susan
Broom Grass
Flatsedge
Forsythia
Hawthorn
Hollies
Ironweed
Joe Pye Weed
Lilies
Lovegrass
Yellow Indian Grass

Tree Common Name

Bald Cypress Silver Maple Sugar Maple

BIORETENTION AREA VEGETATION SPECIFICATIONS

All bioretention area vegetation and plantings should conform to the American Standard Nursery Stock, published by the American Association of Nurserymen, and should be selected from certified nurseries.

The typical types of vegetation found in Bioretention areas include trees, shrubs, and wildflowers and native grasses.

Trees

Bald Cypress Loblolly Pine Persimmon Red Maple River Birch Washington Hawthorn

Evergreen Shrubs

American Holly
Anise Shrub
Dwarf Yaupon
Inkberry
Little Gem Magnolia
Southern Wax Myrtle
Weeping Yaupon
Yaupon

Deciduous Shrubs

American Beautyberry
Blackhaw
Brilliant Chokeberry
Redosier Dogwood
Spice Bush
Sweet Pepperbush
Virginia Sweetspire
Winterberry

BIORETENTION AREA VEGETATION SPECIFICATIONS

Wildflowers and Native Grasses

Aster
Baptisia
Broom Sedge
Coreopsis
Deer Tongue
Goldenrod
Joe Pye Weed
Liriope
Little Bluestem
Prarie Dropseed
Rudbeckia
Virginia Wildrye
Yellow Iris

Turf Grasses

Centipede

lowest mowing lowest nitrogen

Bermuda

most drought resistant most mowing highest nitrogen requirement

Zosia

most aesthetic drought tolerant medium mowing medium nitrogen