

## APPENDIX L

**Forestry Guidance for Inland Bays Pollution Control Strategies**  
Delaware Department of Agriculture, Forest Service  
May 2008

**Forested Areas**

The purpose of this guidance document is to establish forestry standards to address Section 5.3.3.4 of the Regulations Governing the Pollution Control Strategy for the Indian River, Indian River Bay, Rehoboth Bay and Little Assawoman Bay Watersheds, which allows the preservation and protection of existing forest stands or the creation of new forest stands to achieve compliance with required sediment and stormwater controls. In order to meet these requirements, at least 30 percent of the project parcel must be established as forest in common open space. It is recognized that forests and trees are not only desirable, but are also essential to the health, safety, and welfare of the population in that they provide oxygen, reduce carbon dioxide, stabilize soil, cleanse the air by transpiring clean water into the atmosphere, cleanse water passing into the ground through the root system, provide protection for wildlife and their habitats, provide shade, reduce noise and glare, increase property values, and provide an important physical, aesthetic, and psychological balance to the built environment.

**FORESTED AREA** — An area of contiguous wooded vegetation of at least 10,000 square feet in area where trees exist at a density of at least one tree with a diameter at breast height of six inches or greater per 400 square feet of land and where the tree branches form a contiguous canopy. Active tree nurseries and orchards shall not be considered forested areas.

**Forested Area Preservation**

Efforts should be made to preserve forested areas during the development process within the Inland Bays Watershed. Forested areas to be preserved should have a tree protection area designated at the dripline of the canopy.

**TREE PROTECTION AREA** — Any portion of a site wherein are located existing trees which are proposed to be retained in order to comply with the requirements of this section. The tree protection area shall include no less than the total area beneath the drip line of the tree.

**TREE** — Any self-supporting woody perennial plant, usually having a main stem or trunk and many branches and at maturity normally attaining a trunk diameter greater than three inches at any point and a height of over 10 feet.

**DRIPLINE** — A line on the ground established by a vertical plane extending from a tree's outermost branch tips to the ground; i.e., the line enclosing the area directly beneath the tree's crown from which rainfall would drip.

### **Planting Trees in Non-Forested Areas**

A. For developments built in non-forested areas, existing trees may be preserved and new trees may be planted to achieve the minimum tree planting requirements as specified below. In order to expedite the impact of the tree plantings within non-forested areas, at least fifty (50) percent of the area shall be planted with balled and burlap stock. Bare-root seedlings may be used in the remaining area. The site shall be adequately prepared for planting (tilled to eliminate any soil compaction and competing vegetation) and measures taken to control competing vegetation for at least 3 years. All plantings shall contain a mixture of at least three deciduous tree species and one evergreen species. A ninety (90) percent survival rate three years after planting is required for all tree plantings.

B. For balled and burlap plantings, trees should be planted at a rate of 150 trees per acre (17' x 17') within the Inland Bays watershed. Balled and burlap stock hardwood (deciduous) species should be a minimum of 1 ¾" to 2" caliper stock while evergreen species should be at least 5' to 6' tall.

C. Bare-root seedlings should be planted at rate of 600 trees per acre (8' X 9' spacing) for all areas in the Inland Bays watershed.

### **Forested Buffers**

The Pollution Control Strategy for the Inland Bays encourages the planting of trees and other plants adjacent to all waters and wetlands. Forested buffers should consist of at least 350 trees per acre three years after planting. Forested buffer plantings shall follow all of the specifications listed for planting trees in non-forested areas.

## Appendix L

### Tree Species for Plantings

#### Deciduous Trees

<b>Common Name</b>	<b>Botanical Name</b>
American beech	<i>Fagus grandifolia</i>
American sycamore	<i>Platanus americana</i>
Baldcypress	<i>Taxodium distichum</i>
Blackgum (tupelo)	<i>Nyssa sylvatica</i>
Persimmon	<i>Diospyros virginiana</i>
Red maple	<i>Acer rubrum</i>
River birch	<i>Betula nigra</i>
Swamp chestnut oak	<i>Quercus michauxii</i>
Swamp white oak	<i>Quercus bicolor</i>
Sweetbay magnolia	<i>Magnolia virginiana</i>
White oak	<i>Quercus alba</i>
Willow oak	<i>Quercus phellos</i>
Yellow-poplar	<i>Liriodendron tulipifera</i>

#### Evergreen Trees

<b>Common Name</b>	<b>Botanical Name</b>
American holly	<i>Ilex opaca</i>
Atlantic white- cedar	<i>Chamaecyparis thyoides</i>
Eastern redcedar	<i>Juniperus virginiana</i>
Loblolly pine	<i>Pinus taeda</i>
White pine	<i>Pinus strobus</i>