

CLEAN WATER CAMPAIGN CELEBRATES ARBOR DAY

"Planting Trees to Protect Streams"

Georgia Arbor Day: Third Friday in February
State Tree: Live Oak

BASIC INFORMATION

- Buffer vegetation (including trees, shrubs and grasses) captures sediments and pesticides in runoff as well as large amounts of nitrogen and phosphorus, which are primary pollutants to waterways.
- Trees and other vegetation help stormwater runoff to travel slowly and store water in soils. Riparian buffers also reduce flood damage by keeping development back from the immediate banks of waterways.
- Trees are an important part of the water cycle. As water falls to earth in various forms of precipitation, plants intercept or catch some of the water before it falls to the ground. This is called interception. Plants also put water back into the air through a process we call transpiration. When the sun shines on plants, tiny drops of water are released into the air. Transpiration is how plants lose water out of their leaves.
- The deep root systems of trees and shrubs absorb stormwater and stabilize shoreline soil to reduce erosion along the banks of waterways.

ECONOMICS

- Trees contribute to increased property values. Also, electricity costs are typically lower when shade is provided by a natural tree canopy.

ADDITIONAL INFORMATION

- Stormwater runoff heated by sunlight can raise the temperature of receive waters (the waterways that stormwater flows into), which can impair the aquatic environment. Planting a tree can shade the ground and prevent the heating of water (which is known as thermal pollution).
- By creating shade, trees moderate temperatures both globally and in the micro-climates of cities and counties.
- Planting trees help to preserve habitat. Many wildlife species either live in riparian areas or use them as travel corridors. Wider buffers support more species and continuous buffers are very effective in protecting amphibians and water birds.
- Vegetated buffers cost less to maintain than turf. Native vegetation also requires less water and limits the need for fertilizers and pesticides.
- The leafy canopy of the trees provides shade that helps to control water temperature. Maximum summer temperatures in a deforested stream may be 10-20 degrees warmer than in a forested stream.
- Shade lowers the water temperature, which improves the conditions for fish.
- The removal of trees and other streamside vegetation can cause detrimental effects to fish and aquatic life. During hot summer months, a stream that is not shaded will not be able to hold as much oxygen.

Go on the web to www.cleanwatercampaign.com for more information on water pollution.

