

Recommendations for Chatham County Tree Protections for the Unified Development Ordinance

**Chatham County
Tree Protection Working
Group**

December 5, 2022



Introduction

The Tree Protection Working Group was approved by the Chatham County Board of Commissioners in May, 2022.

Its mission is to create recommendations to the BOC for new regulations to protect trees and forest cover in Chatham County that can be incorporated into the Unified Development Ordinance.

The Working Group is composed of 8 members from 4 advisory boards.

- Environmental Review Advisory Committee:**

Elaine Chiosso (Chair), Jeannie Ambrose, Heather Holley

- Planning Board:**

George Lucier, Caroline Siverson

- Climate Change Advisory Committee:**

John Graybeal, Alicia Koblansky

- Grand Trees of Chatham**

Sharon Garbutt

Need for Tree Protection

- **From 2001 to 2021, Chatham County grew 66% - from 51,482 people to 77,889.**
- **In that same period of time we lost 87,722 acres of forest land, equivalent to a 27% decrease in tree cover since 2000, and 14.9 metric tons of CO₂ emissions.** This is higher than the 24% average loss during that time period in North Carolina as a whole.
- Chatham County is predicted to continue this rapid growth, and will lose more tree coverage unless protections are put in place.



Purposes for Tree Protection Rules

- **Protecting air quality** by absorbing pollutants
- **Protecting water quality** in our counties rivers, streams and lakes by reducing stormwater pollution and soil erosion
- **Decreasing flooding** by slowing stormwater runoff and recharging groundwater
- **Protecting biodiversity and wildlife habitat** and minimizing forest fragmentation
- **Moderating temperature** by providing shade and increasing energy conservation
- **Sequestering carbon dioxide** to reduce and mitigate climate change



Recommendation #1

Chatham County Tree Arborist

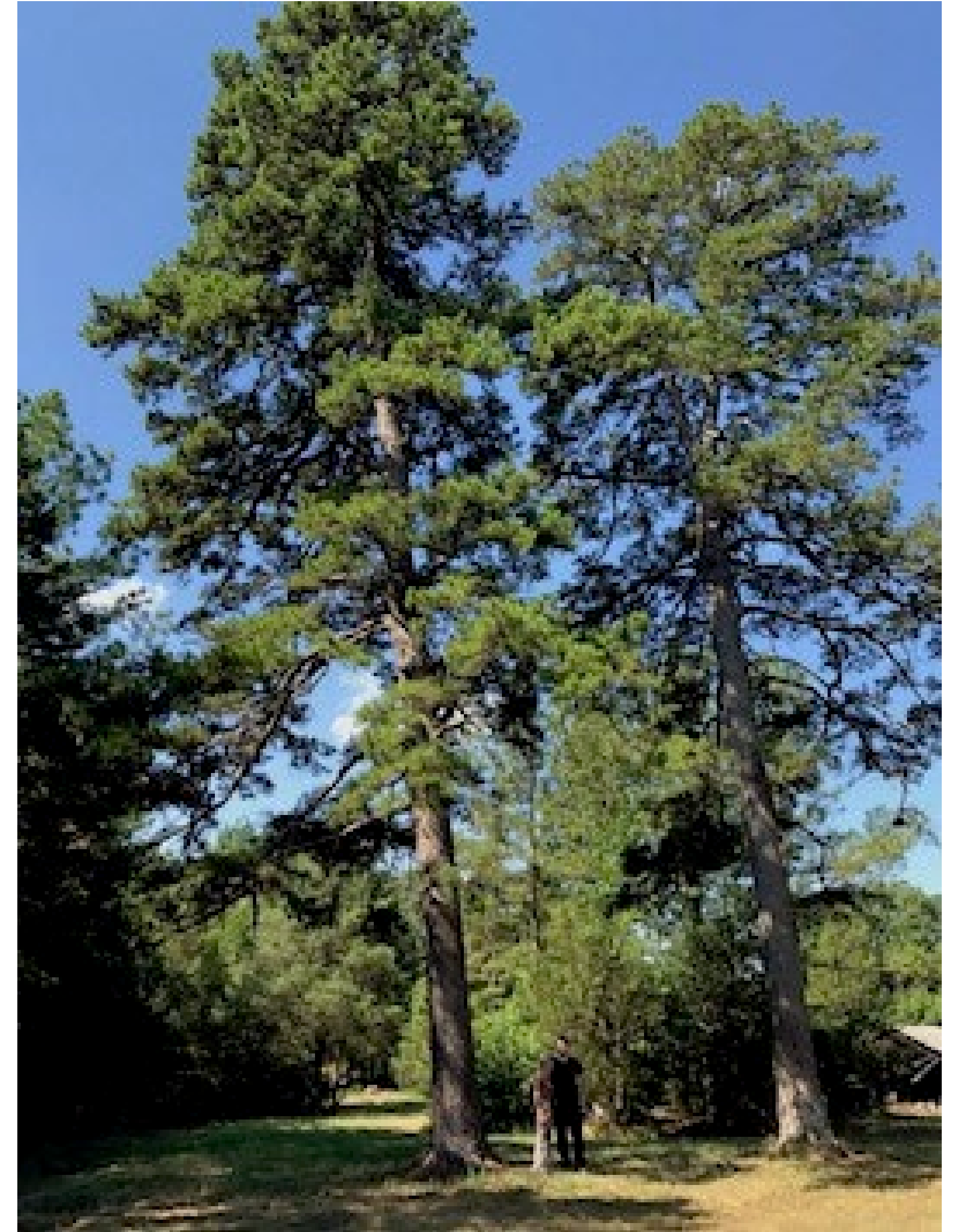
- We recommend that Chatham County hire a tree arborist certified by the International Society of Arboriculture to oversee tree protection elements in the UDO and to work with developers to meet regulations on tree protection.
- The arborist should be a full-time position within the Planning Department.



Recommendation #2

Minimum Tree Canopy Coverage Area Rules

- All new development must conserve the required percentages of tree canopy depending on zoning classifications.
- Stream buffers required by the Chatham County Watershed Protection Ordinance shall not be counted as part of the tree canopy area minimum requirements.
- Replacement plantings for minimum tree canopy coverage area are required for developments built on former pasture, crop or other cleared land.



Minimum Tree Canopy Percentages in UDO Zoning Classifications

(Based on current probable zoning classifications under review)

Residential Zones	Percentage Canopy
Parks	50
Protected Lands	70
Agricultural subdivision	20
Conservation Residential	60
Rural Residential	35
Suburban Residential	25
Compact Residential	20
 Non-Residential Zones	 Percentage Canopy
Rural Village	30
Office/Institutional	30
Neighborhood Business	20
Compact Mixed Use	20
Community Business	20
Compact Non-Residential	20
Regional Business	20
Rural Highway Commercial	30
Light Industry	20
Heavy Industry	20

Recommendation #3

Replacement Trees to Meet Minimum Tree Canopy Percentages

- Standards for replacement trees, including density, caliper size and height shall be determined by the type and size of tree at maturity.
- Native trees and shrubs shall be selected from the list provided by the county arborist, unless approved by the county arborist.
- Invasive non-native species shall not be used as replacement plantings.

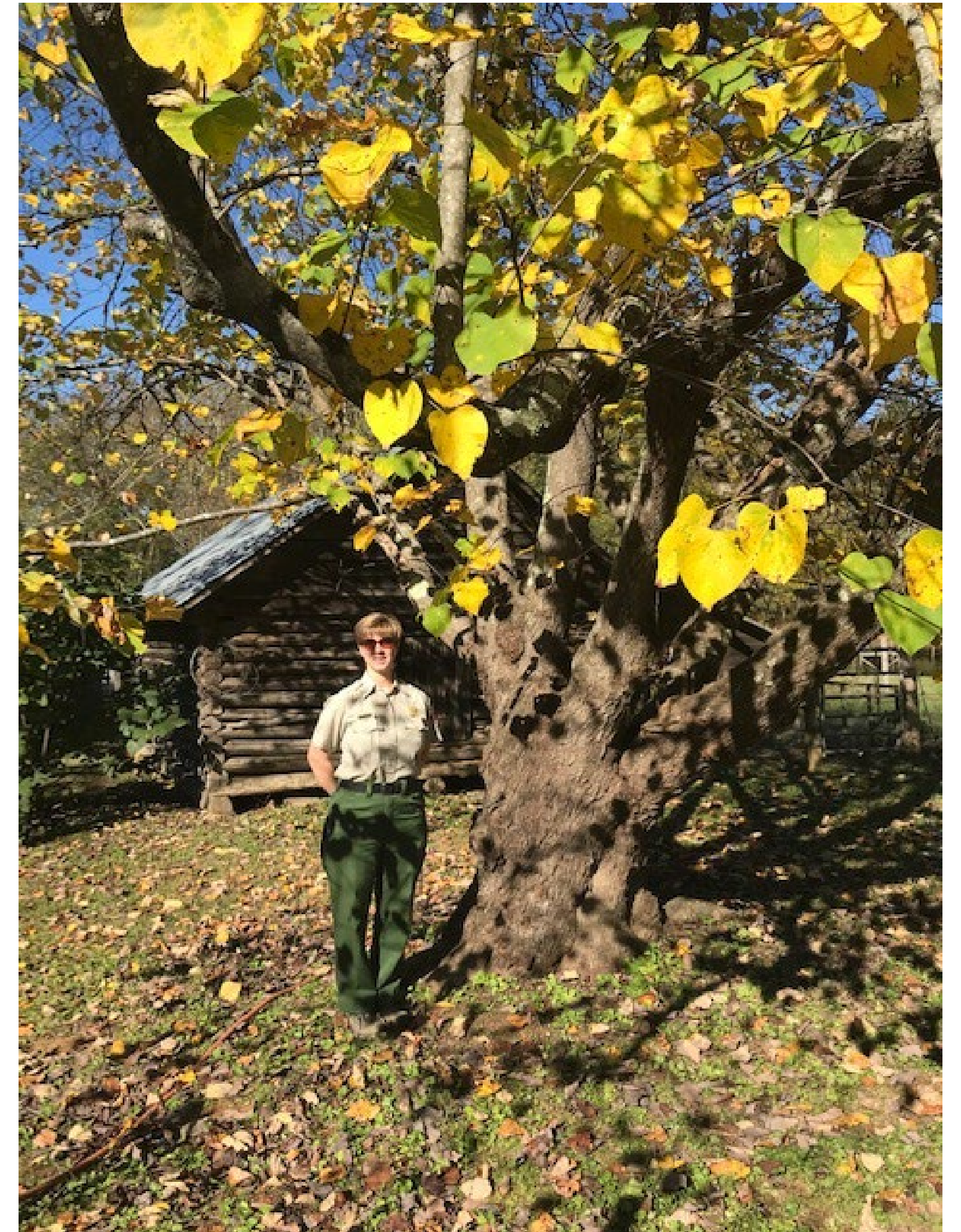


Recommendation #4

Protection and Classification of “Grand Trees”

We recommend that the four categories of trees used by Grand Trees of Chatham be protected and preserved during development.

- **Champion Trees:** Selected based on their large size for that particular species.
- **Historic Trees:** At least 50 years old and associated with a significant historical event or location.
- **Landmark Trees:** Remarkable natural groupings or communities of trees
- **Meritorious Trees:** Special trees in a variety of situations.



Some Grand Trees of Chatham County



Chatham County Champion Willow Oak



National Champion Blackjack Oak



Landmark Chestnut Oak Group



Meritorious American Holly at Ebenezer Church

Recommendation #5

Incentives for Tree Protection During Logging Operations

- We recommend that Chatham County investigate incentives to protect trees within the riparian buffers, as logging operations (silviculture) are currently exempt from county riparian buffer rules under state law.
- We also recommend incentives for silviculture that would encourage protection of a percentage of the tree canopy during logging operations.



Questions?

