

# RESOURCE GUIDE

# TREE PRESERVATION AND REPLACEMENT

(DRAFT)

December 29, 2022

---

## Table of Contents

<b>Overview .....</b>	<b>2</b>
<b>Residential Vacant Lots .....</b>	<b>2</b>
<b>Special Zoning Districts .....</b>	<b>2</b>
<b>Special Planned District 20 .....</b>	<b>2-3</b>
<b>Special Environmental District 80 .....</b>	<b>3-4</b>
<b>Official Town Tree .....</b>	<b>4-5</b>
<b>Table A Tree Replacement Guide.....</b>	<b>5</b>
<b>Key Definitions .....</b>	<b>5-6</b>
<b>Resources.....</b>	<b>7</b>
<b>Current Town Zoning Map .....</b>	<b>8</b>

## Overview

---

Trees are an important natural resource that provide numerous environmental, health, and community benefits to the Town of Nags Head. Individual trees and forest cover provide food and habitat for wildlife, filter groundwater, stabilize soils, and reduce surface runoff and erosion that is harmful to waterways. They sequester carbon and reduce energy consumption with the shade they provide to buildings and outdoor spaces. They also provide quality settings for outdoor gatherings and recreation, reduce pollutants, and improve air quality. Overall, the benefits of trees highlight the need to protect and restore tree canopy affected by development.

The town of Nags Head's code of ordinances and unified development ordinance determine tree preservation regulations. The town code prioritizes the preservation of the unique maritime forest ecosystem, as well as the official town tree, the Live oak (*Quercus virginianus*).

This guide is intended to summarize the tree preservation and replacement policies in the Town's code for residential and commercial development project applicants and also serve as a reference for homeowners, developers and town staff involved in review of development plans that will affect existing tree canopy. This is a simplified consolidated document; see the official town code for all development related regulations.

## RESIDENTIAL VACANT LOTS

---

### Development Permitting Requirements

The Following is prohibited without an approved land disturbance or building permit:

- Removal of trees greater than (6) inches diameter measured at breast height (DBH).
- Land-disturbing activity including, but not limited to, clearing, grading of on-site material, grubbing of tree/shrub roots, and/or storing and grading imported fill material.

## SPECIAL PLANNED DISTRICT (SPD) - 20

---

Removal of trees greater than four (4) inches in diameter at breast height (DBH) are allowed in the following areas:

- Within the proposed building footprint, including decks and a twenty foot perimeter around the principal building and its accessory buildings;
- Within a 5 foot perimeter around vehicular accessways;
- Within the septic tank drainfield and an area around such field as determined by Dare County Health Department as to ensure proper functioning of the septic system; and
- Within areas where land disturbing activities have created slopes in excess of three to one, the finished topography shall be aligned with and graded to existing neighboring dunes in such a manner as to minimize erosion.

The planning and development department may approve the removal of any tree which:

- Is likely to fall and injure persons or private property as evidenced by cracking, splitting, leaning or physical damage.
- a threat to public facilities or services as evidenced by cracking, splitting, leaning or physical damage.
- Is in progressive and irreversible decline due to the presence of disease or is considered to be no longer living. The Town may require the applicant to submit a report from a certified arborist substantiating that the tree is dead or diseased to the point it is in progressive and irreversible decline.
- Tree topping shall be considered tree removal.

## SPECIAL ENVIRONMENTAL DISTRICT (SED)- 80

---

Removal of trees greater than four (4) inches in diameter at breast height (DBH) are allowed in the following areas:

- Within the proposed building footprint, exclusive of decks, and within a twenty foot perimeter around the principal building
- Within a required accessway, parking lot, driveway, utility installation sites, cemeteries, hiking trails and

accessory buildings and a five-foot perimeter around these areas.

- Within the septic tank drainfield and an area around such field as determined by the Dare County Health Department.

Removal of trees less than four (4) inches in diameter at breast height (DBH), weeds, vines, bushes and similar ground vegetation may be removed provided **that no land disturbing** activity occurs and that the leaf litter, mulch, topsoil and similar materials are left undisturbed. However, no vegetation shall be removed from the western slope of the Roanoke Sound dunes ridge or the western slope of the estuarine dune ridge.

Site Plan Approval:

- **Single-Family Residences.** Site plans for single-family residences shall be reviewed by the planning and development department. The planning and development department may approve site plans when the dimensional requirements and standards of this UDO are met and when no trees sixteen (16) inches diameter at breast height or greater are requested to be removed.
- **Other Development.** The planning and development department shall review the proposed site plan and forward the site plan to the Planning Board and Board of Commissioners for review and approval.

The planning and development department may approve the removal of any tree which:

- Is likely to fall and injure persons or private property as evidenced by cracking, splitting, leaning or physical damage.
- Is a threat to public facilities or services as evidenced by cracking, splitting, leaning or physical damage.
- Is in progressive and irreversible decline due to the presence of disease or is considered to be no longer living. The Town may require the applicant to submit a report from a certified arborist substantiating that the tree is dead or diseased to the point it is in progressive and irreversible decline.
- Tree topping shall be considered tree removal.

[https://library.municode.com/nc/nags\\_head/codes/code\\_of\\_ordinances?nodeId=PTIUNDEOR\\_ART8DID\\_EST\\_S8.4DESTSPDI](https://library.municode.com/nc/nags_head/codes/code_of_ordinances?nodeId=PTIUNDEOR_ART8DID_EST_S8.4DESTSPDI) for code related to this section

## ALL ZONING DISTRICTS

---

### Official Town Tree (Live oak)

The removal or destruction of any Live oak with a diameter at breast height (DBH) of 2" or more within any district shall be prohibited unless it meets the criteria below:

- **Removal where permitted during active construction activities.** In any district, live oaks may be removed only within the footprint of the principal building, required accessways, parking areas, utility installation sites, active septic areas, and accessory buildings. If a zoning district contains more restrictive rules as pertaining to tree removal, then those rules take precedence.
- **Tree damage.** Any tree not authorized to be removed by this section which is damaged during construction, or damaged occurring as a result of such construction, shall be evaluated by planning department staff and/or be evaluated by a certified arborist whose services are to be procured by the applicant. If tree repair is possible as determined by planning staff and/or certified arborist, the applicant shall repair the tree as designated prior to the issuance of a certificate of occupancy.
- **Unauthorized tree removal.** Any Live oak tree which is protected by this section which is destroyed shall be replaced as designated in Table A prior to the issuance of a certificate of occupancy if associated with an active building or land disturbance permit. If tree removal is not associated with an active building or land disturbance permit, the applicant may satisfy the provisions of this article by (i) planting a replacement Live Oak tree or other approved native tree onsite that is at a size designated by Table A or (ii) paying to the Town, at the time of violation of this article, for the destruction of each protected tree, a sum equal to five hundred dollars (\$500.00) per protected tree destroyed or damaged on the subject property or site.
- **Removal due to Disease or Death.** The removal or destruction of any Live oak tree in any district, may be removed if designated diseased or dead by a certified arborist, or by reasonable judgement of planning staff. It is the responsibility of the applicant to demonstrate the condition of the tree, and provide the arborist report ,if required.
- **Removal due to Hazard.** A hazard tree is likely to fall and injure persons or property causing damage to existing public services or facilities, and such facilities or services cannot reasonably be relocated or repaired. The applicant must demonstrate that the condition or location of the tree presents a clear public safety hazard or a foreseeable danger of property damage to an existing structure or built element and such hazard or danger cannot reasonably be alleviated by treatment or pruning or moving the service or facility.
- Tree topping shall be considered unauthorized removal. Any pruning or trimming of protected trees shall follow the guidelines set forth in NC State Extension Pruning Trees & Shrubs General Pruning Techniques.

(See Resources for publication)

**REPLANTING GUIDELINES**

**Table A**

Minimum Size of Existing Tree	Town Tree – Live oak Replacement Tree(s) *	Other Native Replacement Tree(s) *
2—18" DBH	1 Tree	2 Trees
19—36" DBH	2 Trees	2 Trees
Greater than 36" DBH	3 Trees	3 Trees

Factor	Options	Comments
Planting Date	During or after construction	Seasonal timing for best planting window with a time limit of 1 year for installation.
Selection	Contractor/Homeowner	The applicant shall purchase tree(s) that have been approved by the town.
Installation	Contractor/Homeowner	Planting by the applicant is monitored for performance to ensure quality. It is the responsibility of the applicant to arrange all installation and verify approval with the Town.

\*minimum 1.5" tree caliper for new trees

**KEY DEFINITIONS**

ANSI-A300: The American National Standards Institute; ANSI-300 standards are generally accepted industry standards for tree care practices.

ANSI-Z60.1: The *American Standard for Nursery Stock* as produced by American Horticulture Industry Association (formerly American Nursery & Landscape Association) accredited by the American National Standards Institute; ANSI-Z60.1 is a standardized system of sizing and describing plants to facilitate trade in nursery stock.

Arborist: A professional certified by the International Society of Arboriculture (ISA), or registered with the American Society for Consulting Arborists (ASCA).

Caliper: Refers to the tree trunk measurement (diameter) of nursery stock trees at 6 to 12 inches above the soil surface.

Diameter Breast Height: Refers to the diameter of a living tree trunk in a natural condition measured at 4.5 feet above the ground.

Forest: A biological community dominated by extensive tree cover and other woody plants, frequently consisting of stands of trees that are often characterized based on species, age, and size class.

Invasive Species: Alien or exotic plant species whose introduction does or is likely to cause economic or environmental harm, or harm to human health.

Native Species: A plant species that occurs in a particular place without human intervention.

Non-invasive Species: Naturally reproducing, non-native plants that do not invade areas dominated by native vegetation.

Tree Topping: indiscriminate cutting back of tree branches to stubs or lateral branches that are not large enough to assume the terminal role. (ISA – International Society of Arboriculture)

**APPLICANT RESOURCES**

**Town of Nags Head Code of Ordinances**

[https://library.municode.com/nc/nags\\_head/codes/code\\_of\\_ordinances](https://library.municode.com/nc/nags_head/codes/code_of_ordinances)

**NC State Pruning Trees & Shrubs General Pruning Techniques**

<https://content.ces.ncsu.edu/pdf/general-pruning-techniques/2014-09-29/general-pruning-techniques.pdf>

**American National Standards Institute A300**

[https://www.tcia.org/TCIA/Build\\_Your\\_Business/A300\\_Standards/A300\\_Standards.aspx](https://www.tcia.org/TCIA/Build_Your_Business/A300_Standards/A300_Standards.aspx)

**I Tree – Tree benefits estimation**

<https://www.itreetools.org/>

**American Horticulture Industry Association**

<https://www.americanhort.org/>

**North Carolina Nursery & Landscape Association**

<http://www.buyncplants.com/>

**North Carolina Forest Service Urban & Community Forestry**

[https://www.ncforestservice.gov/Urban/Urban\\_Forestry.htm](https://www.ncforestservice.gov/Urban/Urban_Forestry.htm)

**Tree Topping**

[https://www.treesaregood.org/Portals/0/TreesAreGood\\_Why%20Topping%20Hurts\\_0321.pdf](https://www.treesaregood.org/Portals/0/TreesAreGood_Why%20Topping%20Hurts_0321.pdf)

**International Society of Arboriculture (ISA)**

<https://www.isa-arbor.com/>

**United States Department of Agriculture PLANTS Database** <https://plants.sc.egov.usda.gov/java/>

**TOWN OF NAGS HEAD ZONING MAP**

---

