

CHOWAN COUNTY/TOWN OF EDENTON NORTH CAROLINA

CORE LAND USE PLAN

**Adopted by the Chowan County Board of
Commissioners: June 23, 2008**

Adopted by the Edenton Town Council: June 23, 2008

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Prepared by:



THE WOOTEN COMPANY

ENGINEERING | PLANNING | ARCHITECTURE

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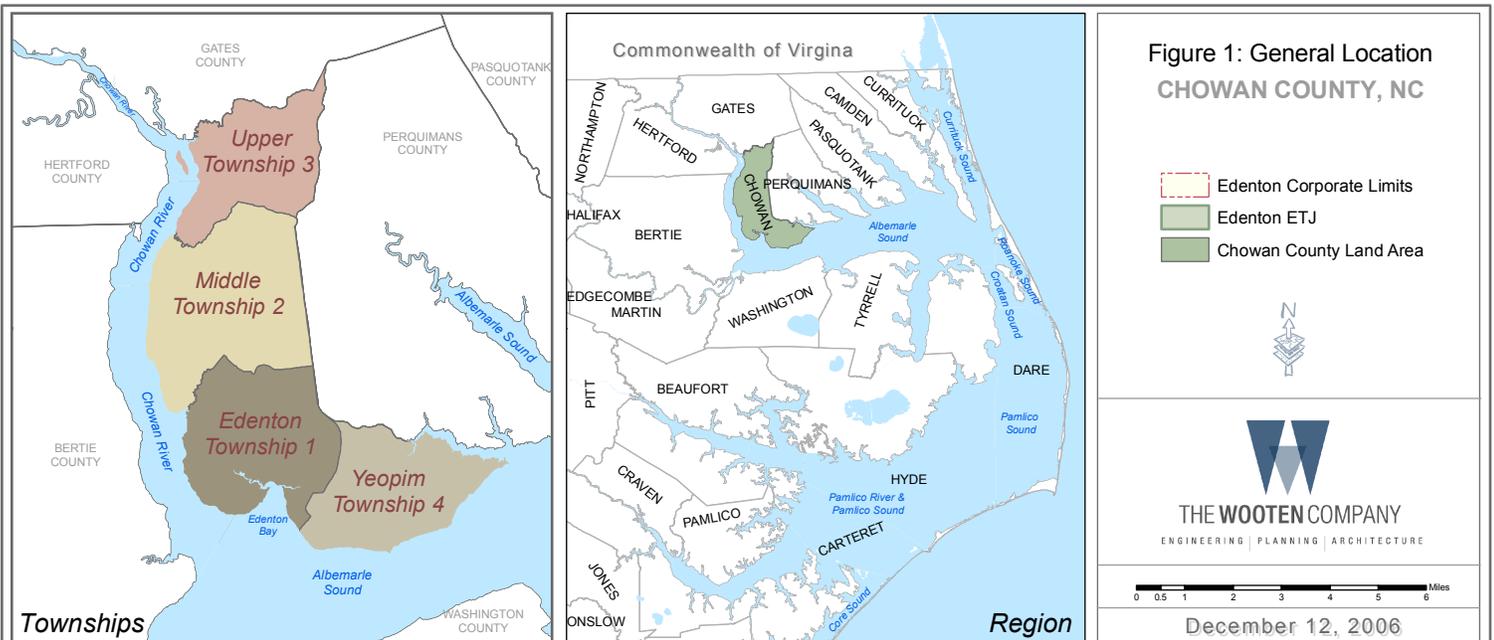
SECTION I: INTRODUCTION AND EXECUTIVE SUMMARY

1.1 Purpose

Land development generally involves a series of decisions by both private individuals and the public sector. In order to promote the public interest in the land development process, the North Carolina Coastal Area Management Act (CAMA) requires that local governments prepare, adopt, and keep current a land use plan. The land use plan is intended to provide a framework that will guide local governmental officials as they make day-to-day and long-range decisions that affect land development. The land use plan will also be used by state and federal agencies in making project consistency, project funding, and CAMA permit decisions.

CAMA regulations require that an update be made of land use plans every five years. The update is designed to ensure that all current land development issues are reviewed and reflected in the land use plan. Also, the Coastal Resources Commission (CRC) recently adopted revised planning guidelines which include requirements not addressed in previous land use plans. The land use plan update also provides an opportunity to evaluate the local government's policy statements and to determine their effectiveness in implementing the land development objectives of the community.

The study area for this joint land use plan is all of Chowan County, including the corporate area of the Town of Edenton and its extraterritorial planning and zoning jurisdiction (see Figure 1, General Location Map). When this Plan references the term 'Planning Jurisdiction' it is referring to the area within which each unit of government has authority to administer and enforce zoning, subdivision regulations, and other land development regulations. The Town of Edenton Jurisdiction includes the corporate limits of the Town of Edenton as well as the city's extraterritorial area. The Chowan County Planning Jurisdiction includes the remainder of Chowan County not included in the Edenton Planning Jurisdiction. Chowan County and the Town of Edenton previously prepared a joint land use plan which was completed in 1998 and certified in March of 1999. The current updated joint land use plan includes both a short term (5-10 year) and long term (20-year) evaluation of land use and land development. Implementation activities are based upon a five-year action plan.



The preparation of this map was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the Coastal Zone Management Act of 1972, as amended, which is administered by the Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration.

The goals and objectives of the joint land use plan are to:

- Identify and analyze new and emerging land use issues and concerns.
- Reexamine existing land use policies to determine their effectiveness.
- Revise existing land use policies and develop new policies that address current land use and land development issues and concerns.
- Reexamine the existing land use maps to determine what revisions are necessary to address new land use issues and concerns as well as revised and newly developed policy statements.
- Further develop implementation strategies and an implementation schedule. Promote a better understanding of the land use planning process.
- Promote citizen involvement in the process of preparing the joint plan.

1.2 Overview of the Plan

The Joint Chowan County/Edenton Land Use Plan follows the methodology mandated by the Division of Coastal Management in its Land Use Planning Guidelines (Subchapter 7B of the North Carolina Administrative Code). This Plan is organized to adhere to the format outlined in Subchapter 7B. In addition to requirements for land use plan format and content, the guidelines also require that the land use plan update process include a variety of educational efforts and participatory techniques to assure that all segments of the community have a full and adequate opportunity to participate in all stages of the preparation of the land use plan. A formal Citizen Participation Plan, [Appendix D](#), was developed to involve, inform and educate a broad cross-section of the community's populace. Chowan County and the Town of Edenton implemented a continuous citizen participation and education process that achieved these purposes.

A Planning Committee representing a cross-section of the community was appointed to serve as the body responsible for guiding the Joint Land Use Plan formulation effort. The Planning Committee served in a review and advisory capacity to the elected officials of Chowan County and Edenton and to the project planning consultant, The Wooten Company. The Planning Committee met on a periodic basis with the planning consultant and local planning department staffs to assist the planning consultant in defining land use and development issues and concerns, reviewing draft land use plan components prepared by the planning consultant, providing recommendations regarding land use plan content, and providing general input. The Planning Committee members kept their respective elected governing/appointed board apprised of their activities and progress through regular oral and/or written reports.

Section I of the plan includes introductory material and an executive summary of the plan document. It is possible that this section of the plan can be reformatted into a simplified brochure that could be utilized for general public informational purposes.

Section II of the land use plan involves an evaluation of growth-related conditions that impact land use in the Chowan County area, a description of key land use and development issues facing the community, and a statement of the general vision for the future appearance and form of the community.

Section III entails an analysis of existing and emerging conditions in the Chowan County area including population, economic, natural systems, major community facilities, and land use as well as an analysis of current plans and regulations that affect land use. Demographic, economic, and land use trends are identified and their implications for the future use of land are analyzed. Section III also provides an assessment of environmental conditions and trends as well as a land suitability analysis. The analysis of land suitability is particularly useful in preparing the future land use map and land development policies. Data utilized in the preparation of the land use plan include local, state, and federal sources. Section III also contains an evaluation of the consistency of existing land use regulations and ordinances with the current land use policies, the communities' efforts to implement their past land use plans, and the overall effectiveness of the current land use policies.

Section IV outlines the basic plan for the future. Land use goals and objectives, updated land use policies, and a future land use map are provided in this section of the plan. The land use policies are intended to establish guidelines to be utilized by Chowan County and Edenton in making day-to-day local planning decisions and by state and federal agencies in project consistency, project funding, and permit decisions. The policy statements have been developed based upon the previously described analysis of existing conditions, land use trends, community infrastructure, and land suitability as well as citizen input obtained through an extensive public participation process.

Tools for managing land development are outlined in **Section V** of the plan. A description of the specific management tools that the communities will utilize to implement the plan are provided in Section V as is a five-year implementation plan and schedule. This section of the plan also includes a description of the public participation activities that will be used to monitor implementation of the joint land use plan.

Copies of the Chowan County/Town of Edenton Core Land Use Plan document as well as all document maps and various reference maps are available for public inspection and review at the Edenton-Chowan Planning and Inspections Department, 108 East King Street, Edenton, 8 am to 5 pm, Monday-Friday. Specifically, the following maps are available for inspection:

- Natural Features Maps, Chowan County and Edenton
- Environmental Conditions Composite Maps, Chowan County and Edenton
- Existing Land Use Maps, Chowan County and Edenton
- Water Systems Map, Chowan County
- Water and Wastewater Systems Map, Edenton
- Transportations Systems Map
- Land Suitability Maps, Chowan County and Edenton
- Future Land Use Maps, Chowan County and Edenton
- Areas of Environmental Concern
- Prime Farmland

1.3 Executive Summary

1.3.1 Summary of Land Use Issues

The major land use and development issues identified during the preparation of this land use plan update that will affect Edenton and Chowan County during the next ten year period include the following:

Public Access

- Providing for public water access to all segments of the community, including persons with disabilities.
- Development of comprehensive policies that provide access opportunities for the public along the shoreline within the planning jurisdiction.

Land Use Compatibility

- Establishment of local development policies that balance protection of natural resources and fragile areas with economic development.
- Development of policies that provide clear direction to assist local decision making and consistency findings for zoning, divisions of land, and public and private projects.
- Compatibility of County land use regulations in future municipal utility service areas.

Infrastructure Carrying Capacity

- Establishment of service area boundaries for existing and future infrastructure.
- Development of infrastructure service policies and criteria consistent with future land needs projections.
- Correlating future land use map categories with existing and planned infrastructure such as water, sewer, and transportation facilities.
- Ensuring that public infrastructure systems are appropriately sized, located, and managed so that the quality and productivity of AECs and other fragile areas are protected or restored.

Natural Hazard Areas

- Development of policies that minimize threats to life, property, and natural resources resulting from land development located in or adjacent to hazard areas such as those subject to erosion, high winds, storm surge, flooding, or sea level rise.
- Development of location, density, and intensity criteria for new, existing development, and redevelopment (including public facilities and infrastructure) to avoid or better withstand natural hazards.

- Ensuring that existing and planned development is coordinated with existing and planned evacuation infrastructure.

Water Quality

- Development of policies to prevent or control nonpoint source discharges (sewage and storm water) such as impervious surface limits, vegetated riparian buffers, wetlands protection, etc.
- Establishment of policies and land use categories for protecting open shellfishing waters and restoring closed shellfishing waters.
- Adoption of policies for coastal waters within the planning jurisdiction to help ensure that water quality is maintained if not impaired and improved if impaired.

Areas of Local Concern

- Establishment of land use and development policies that minimize adverse impacts on Areas of Environmental Concern (AECs) and which support overall CAMA goals.
- Identify and address local concerns and issues, such as cultural and historic areas, scenic areas, economic development, or general health and human service needs

1.3.2 Summary of Data Collection and Analysis

The data analyzed in Section III were collected from a wide variety of sources including published documents, governmental and private organizations, and individuals. Printed and digital map data were utilized in the preparation of this section of the plan. The major conclusions resulting from the data collection and analysis include:

Population

- The total Chowan County population in 2000 was 14,150; Edenton's population was 5,058. The 2004 State certified population estimate for the County is 14,471 and 5,059 for the Town of Edenton.
- The total 2000 Edenton population represents more than one-third of the total Chowan County population.
- Edenton's total population decreased 3.99% from 1990-2000. The County's population growth rate during the same time period was 4.77%. The statewide average was 21.4%. The Town's and County's growth rates since 1990 are about average compared to other coastal North Carolina communities.
- The Edenton Township represents the largest percentage of 2000 population of the four townships in the County--- Edenton (53.6%), Middle (23.4%), Upper (9.1%), and Yeopim (13.8%) Townships.
- Between 1990 and 2000, the Chowan County townships that had the highest growth rates were the Yeopim (17.6%), Middle (12.8%) Townships. The lowest growth rates were in the Upper (-0.9%) and Edenton (4.63 %) Townships.

- Between 1990 and 2000, Chowan County's total population increased more by migration than by natural increase. The County's migration rate of 3.6% was lower than the statewide rate of 15.1%.
- The majority of Edenton's growth since 1990 has resulted from in-migration; only a slight increase of population has been a result of annexations.
- Chowan County's population density of 82 persons per square mile in 2000 was considerably higher than surrounding counties but considerably lower than the statewide average of 165 persons per square mile.
- Edenton's 2000 population density of 1,009 persons per square mile was slightly lower than most major coastal communities.
- Projections indicate an increase in the total County population to 15,675 in 2010 and 18,275 in 2025. Edenton's population is projected to increase to 6,505 in 2010 and 7,584 in 2025. Complete population projections are provided in Section 3.1.4.
- Projections indicate that the population growth rate of Chowan County and the entire state will slow over the next 25 years.
- Anticipated population growth will result in increased demand for additional goods, services, and housing as well as public services—utilities, roads, schools, police and fire protection, recreational facilities, etc.

Housing

- The number of housing units in Chowan County increased over 9 percent between 1990 and 2000 from 5,910 units to 6,443 units. In 2000, approximately 34 percent of all the housing units were located within the Town of Edenton corporate limits.
- The predominant housing type is the single-family detached dwelling---69% of all housing units in Chowan County and 67%, in Edenton. As expected in an urban area, Edenton has a higher percentage of multifamily housing units (25.6%) and a lower percentage of manufactured housing (6.8%) than does Chowan County (9.6% and 20.9%, respectively).
- Building permit data since 2002 indicate that Chowan County has averaged about 159 new residential dwellings per year—approximately 45% of those were manufactured homes.
- The majority 68.5% of seasonal housing units in Chowan County is composed of individual dwellings units, 30.3% are hotels, motels and bed and breakfasts. Approximately 62 percent of all seasonal housing units are located within the unincorporated area of Chowan County.

Economy

- Edenton is the only incorporated municipality in the County, thus the center for housing, retail and employment. The economy of

the area provides a diverse range of employment opportunities, including retail, services, governmental, education, manufacturing, healthcare, construction and management. The County's major employment sectors are manufacturing and education. Retail and healthcare sectors a make up a large number of employment opportunities as well.

- The unemployment rate for Chowan County in April 2006 was 4.0% compared to the statewide rate of 4.1%. The number of new jobs announced in 2004 totaled 7 and the total amount of investment announced was \$14,472,000.
- Employment data contained in the 2000 U.S. Census indicate that 22.65 percent of the total County workforce was employed outside of Chowan County. For the Town of Edenton, the percentage of workers employed outside of Chowan County was slightly higher—24.9 percent.
- Tourism is increasingly becoming an important part of the local economy. According to data from the NC Department of Commerce, domestic tourism in Chowan County generated an economic impact of \$15.36 million in 2004. In 2004, Chowan ranked 84th in travel impact among the State's 100 counties.
- Data from the US Census indicate that the net number of workers commuting to Chowan County has increased each year since 1970. However, there have been a greater number of workers outcommuting into adjoining counties. The largest numerical increase in workers outcommuting from Chowan County occurred between 1990 and 2000, while in 1970 and 1980 there were more workers commuting into Chowan County than outcommuting.
- The top five destinations for workers commuting outside of Chowan County and the percentage of all workers leaving Pasquotank County, 16.4%, Bertie County, 12.0%, Perquimans County, 35.4%, Gates, 11.5% County and Washington County, 12.4%. Out of state commuters in 2000 comprised approximately 1.3 percent of the total number of commuters into Chowan County.
- The percentage of workers that commute outside of Chowan County is 22.7 percent. The percentage of outcommuters traveling to the Virginia Tidewater area decreased since 1970.
- The major destinations for workers that commute from Chowan County to jobs outside of the County have recently shifted from the Norfolk-Portsmouth-Chesapeake area to the North Carolina counties surrounding Chowan County.

Natural Constraints for Development

- Identified environmentally fragile areas include AECs, flood hazard areas, storm surge areas, non-coastal wetlands, and public water supply watersheds. Natural resource areas include prime farmland areas and Significant Natural Heritage Areas.

- Generally, most of the soils in Chowan County have limitations for many urban uses due to wetness, low strength, and restricted permeability. Overall, for septic tank and light industrial uses, the soil types in most of the County have substantial limitations. Over 91 percent of all soils in Chowan County are rated as having slight limitations for septic tank absorption.
- Chowan County consists of two River Basins (Chowan and Pasquotank Basins). The waters in the Chowan River Basin include a wide range of primary and secondary water quality classifications, including C, B, and NSW. The waters in the Pasquotank River Basin include a wide range of primary and secondary water quality classifications, including C, SC, SB, and Sw. [Table 25](#) defines the water quality classifications for the various water bodies in Chowan County and North Carolina.
- In subbasin 03-01-03 and 03-01-04 of the Chowan River basin, all monitored waters are Supporting for aquatic life and primary recreation. Subbasin 03-01-52 is in the Pasquotank River basin and monitored waters are Supporting in the aquatic life category. However, waters are Impaired in the fish consumption category in subbasins 03-01-04 and 03-01-52 due to the Department of Health and Human Services Fish Consumption Dioxin Advisory for the Albemarle Sound and the mouth of the Chowan River.
- Approximately 14 percent of the County's land area is within a 100-year floodplain. The most significant floodplains are located along the creeks and tributaries that feed into the Cowan River, particularly along the Pembroke and Queen Anne Creeks. The 100-year floodplain is delineated on the [Natural Features Map, Figure 2](#). Other major floodplains areas include the Bear Swamp.
- The areas subject to storm surge inundation resulting from the most intense storm intensity and storm speed would encompass approximately 14 percent of the County's land.
- Major non-coastal wetlands areas are located in the northwestern, western, and south-central portions of Chowan County. Non-coastal wetlands account for approximately 28.2 percent of the total Chowan County land area.
- Identified Natural Heritage Areas are located throughout Chowan County. The most significant is the Chowan River Aquatic Habitat. The general locations of each Natural Heritage Areas are depicted on the [Natural Features Map, Figure 2](#).
- Based upon the environmental conditions assigned to each land class as delineated on the Environmental Conditions Composite Map ([Figure 3](#)), the majority (64 percent) of the total land area in Chowan County falls into Class II, which is land with moderate environmental conditions. Class I lands account for approximately 8 percent of the County's land area and are considered to be minimally limited. Class III lands, severe limitations, represent 28 percent of the county. The high percentage of area classified as least suitable for development is primarily a result of poor soils suitability for septic system utilization.

- Water quality is generally good within the Pasquotank River Basin and Chowan River Basin. The main water quality issue within the Pasquotank and Chowan River Basin is habitat degradation, including loss of riparian vegetation, channelization, and erosion.
- The majority of the waters in and around Chowan County are closed to shellfishing. The Chowan River is closed to shellfishing, as well as all waters west of Bluff Point in the Albemarle Sound. Those waters east of Bluff Point are open to shellfishing, with the exception of the Yeopim River.

Existing Land Use

- The major amount of developed land in Chowan County outside of the Town of Edenton planning and zoning jurisdiction is located immediately to the southeast of Edenton near the Airport. In the northwestern portion of the County there is a large waterfront community along the shoreline of the Chowan River called Arrowhead Beach.
- Single-family detached residences and manufactured homes on individual lots are the most predominant types of developed land uses in the Chowan County planning jurisdiction. Farmland is scattered throughout the County and developed land uses are oftentimes randomly interspersed with agriculturally-used tracts. Existing low density residential development ranges from 1 dwelling unit per five acres to 1 dwelling unit per acre. Existing medium density residential uses range from approximately 3-7 units per acre; high density uses range from approximately 8-10 units per acre.
- The overwhelming majority of commercially-used land in the county jurisdiction is located along the US 17 and NC 32 corridors heading out of Edenton. These commercial corridor areas contain retail, personal and business services, and office uses. A very small amount of commercial uses are located at various crossroad communities. Commercial lots typically average about 2 acres in size.
- There are very few institutional uses in the Chowan County planning jurisdiction, consisting mostly of churches, cemeteries, private recreational facilities, governmental buildings and facilities, and public schools. The Town of Edenton wastewater treatment plant site on Macedonia Road and the Chowan Golf and Country Club are the largest single institutional/public uses within the county's planning jurisdiction. Institutional and public lot sizes range from one acre to several acres, depending upon the intensity of the specific use.
- The majority of industrial land located outside of Edenton is near the airport, and south of Chowan Beach near the Chowan River. A few small industrial operations are scattered throughout rural Chowan County. Industrial lot sizes typically average approximately about 20 acres in size.

- Farmland is scattered throughout much of Chowan County. Several large-scale confined animal feeding operations are located in the County. Agriculturally-used land comprises almost 60 percent of the entire county planning jurisdictional area.
- The majority of land that is used for forestry purposes is located in the east central portion of the county and in the southeastern section of the county adjacent to Indian Trail Road.
- Undeveloped and underdeveloped properties are widely scattered throughout much of the county. Much of the undeveloped land is within floodplains and wetlands and is ideally suited for future use as conservation areas. Many of the vacant, developable tracts have potential for agricultural use and/or low density residential development.
- Edenton, being a commercial, governmental, and housing center for the region, contains a wide variety of developed land uses. Residential uses are more varied and include a wider range of density types. The Town also contains a higher intensity of nonresidential land use.
- The Town jurisdiction contains a variety of residentially-used properties. Most of the medium and high density residential development surrounds the downtown area and is generally bounded by US 17 on the north and the Albemarle Sound and Edenton Bay on the south.
- The town's ETJ consists of low density residential properties immediately outside the town limits. The only pockets of medium density residential development outside the town limits are along Mexico Road and US 17 Business. Existing low density residential development typically averages about two dwelling units per acre. Medium density residential development ranges between 3-7 dwelling units per acre; high density ranges from approximately 7-10 units per acre.
- Retail, personal services, and business services are concentrated in the downtown area. Downtown Edenton is very active with commercial retail uses and professional offices. The area near the intersection of US 17 and NC 32 West is the only major concentration of retail shopping facilities outside of the downtown. Several scattered commercial uses are also located adjacent to North Broad Street. Commercial lot sizes in the downtown area average about 0.25 acres in size. Lot sizes outside of the downtown area typically range between 1-2 acres in size.
- Institutional uses include public facilities such as town and county governmental offices and facilities, the hospital, public parks, and public schools. Private institutional uses include private recreational facilities, nursing homes, civic and fraternal organizations, places of worship and cemeteries. The largest institutional/public uses within the Edenton jurisdiction include the airport, fish hatchery, public cemetery, and hospital properties. Institutional and public lot sizes range from one acre to several acres, depending upon the intensity of the specific use.

- The majority of the industrially-used land is located near the airport. There are some scattered industrial uses within the Town limits in the northwest area of Town. Industrial lot sizes typically average approximately three acres in size.
- There are very few tracts of undeveloped and/or underdeveloped land within the town limits. Those tracts or parcels of land which are undeveloped present a likely opportunity for infill development. Much of the undeveloped land within the southern portion of the town's planning jurisdiction is located within the floodplain of Pembroke and Queen Anne Creeks or within wetlands areas and, therefore, presents constraints for future development. Such land is ideally suited for future conservation areas. Scattered large undeveloped tracts in the northern and northeastern portions of the ETJ area. The majority of vacant property outside of the corporate limits but inside the ETJ is zoned RA, Residential Agricultural and R-20, Low Density Residential. Most of the vacant, developable tracts have potential for low density residential use.
- There are several individual sites in Edenton and in Chowan County that are listed on the National Register of Historic Places. Nationally registered Historic Districts in Chowan County include the Cotton Mill District and the Edenton District, which was expanded in 2001 (Figure 8a).
- Based upon information in the 2002 Census of Agriculture, the total number of farms in Chowan County has decreased by 1.1% since 1997 but the number of acres devoted to farming and the average farm size has increased. Approximately 77 percent of the farm land in Chowan County is devoted to crop production compared to 60 percent statewide. Major crops produced in the County include peanuts, soybeans, corn, wheat, and tobacco.

Community Facilities

- Two separate water supply systems operate within Chowan County. These systems include the Town of Edenton municipal water system and the Chowan County water system.
- The Town of Edenton maintains two water treatment plants, four well sites, two elevated water storage tanks, and approximately 69 miles of distribution system lines. The Freemason plant has a permitted capacity of 1.35 MGD and the Beaver Hill plant, 0.725 MGD. The town draws its water for treatment from four deep wells, all drawing from the Castle Hayne aquifer. In 2002, the town water system served 2,017 metered customers; the population within the water system service area was 5,394.
- The Chowan County water system maintains seven active well sites and approximately 450 miles of distribution system lines. The wells are capable of supplying 2.196 MGD. The County water system has a storage capacity of 1.75 MG. The Valhalla water treatment plant has a permitted capacity of 2.31 MGD. The county's water storage tanks have a combined storage capacity of 1.75 million gallons. In 2002, the county water system served

approximately 4,136 customers; the population within the water system service area was 8,600.

- The Town's existing wastewater treatment plant design capacity will meet current and future demands. Planned sewer system capital improvements, including neighborhood rehabilitation projects and other system upgrades, total approximately \$4.8 million.
- There are several major transportation improvements scheduled for Chowan County and the Town of Edenton.
 1. Eastern Connector. A 2-lane facility connecting NC 32 at NC 94 (Soundside Road) with the US 17 Bypass at the North Broad Street Interchange.
 2. Western Connector. A 2-lane facility connecting West Queen Street (US 17 Business) and West Albemarle Road and ultimately, in combination with the Luke Street Extension, Virginia Road just south of the US 17 Bypass.
 3. Luke Street Extension. A 2-lane facility extending the existing Luke Street from Virginia Road to West Albemarle Road
 4. Peanut Drive Access. This proposed facility would connect Paradise Road and SR 1325 to allow truck traffic to access the existing industrial area and the US 17 Bypass without entering the downtown area.
 5. Soundside Road. This minor thoroughfare (NC 94) provides access to the southeastern portion of Chowan County including the airport industrial area. Shoulder widening to 24 feet is recommended to provide a safer road and to accommodate truck traffic.
- The existing stormwater drainage facilities consist of a system of piping, catch basins, and drainage ditches and swales. The Town is currently evaluating options for improving stormwater management. The Town's Unified Development Ordinance was amended in 2005 to require storm drainage plans for all new developments. The Town of Edenton is not subject to the EPA's Stormwater Phase II rules.
- The existing stormwater drainage facilities consist primarily of a system of drainage ditches and swales. The County is currently evaluating options for improving stormwater management. The County's subdivision ordinance was amended in 2005 to require storm drainage plans for all new developments. More specific stormwater management requirements have been proposed in the draft revisions to the Chowan County Subdivision Regulations.

Land Suitability

- A land suitability analysis was prepared to determine the supply of land suited for development based upon the following considerations: natural system constraints; compatibility with existing land uses and development patterns; existing land use

and development criteria of local, state, and federal agencies; and availability and capacity of water, sewer, stormwater management facilities, and transportation systems.

- The primary purpose of the land suitability analysis is to provide local governments with information regarding the best areas for development in order to guide the formulation of policies and the preparation of the future land use map.
- The Land Suitability Map (see Figure 7) classifies land as High Suitability, Medium Suitability, Low Suitability, and Least Suitable. In general, approximately 57 percent of the total Chowan County land area is within the higher suitability ratings (High and Medium Suitability).
- In general, the areas with the higher suitability ratings are located within the corporate limits of Edenton; along the US Highway 17 and NC Highway 32 and 37 corridors; and in areas where public water and/or sewer services are available. Lower suitability ratings are found in areas subject to flooding, wetlands areas, and areas without public utilities.
- A considerable number of vacant/under-utilized tracts are located within the areas with the higher suitability ratings. Large amounts of acreage currently used for agricultural and/or forestry purposes are also located within the high and medium suitability-classified areas.
- Based upon a comparison of future land allocation with projected needs, sufficient developable acreage exists within the Chowan County and Edenton planning jurisdictions to accommodate projected residential and nonresidential land needs.

1.3.3 Summary of Policy Statements

The formulation of land use and development policies is based upon a review and analysis of policy statements contained in the 1998 Edenton/Chowan County Joint CAMA Land Use Plan; an evaluation of identified concerns and aspirations (Section II) and the needs and opportunities identified in the analysis of existing and emerging conditions (Section III); input from the Joint Land Use Plan Committee, local planning boards, and elected officials; and input obtained through citizen participation efforts including public informational meetings, public forums, and Joint Land Use Plan Committee meetings.

Updated policy statements, which are outlined in [Section 4.2](#), have been formulated which address the following topics:

- Public access to public trust waters
- Land use compatibility
- Infrastructure carrying capacity
- Natural hazard areas
- Water quality
- Areas of environmental concern
- Areas of local concern

The following is a generalized summary of land use and land development policies:

A. Public Access to Public Trust Waters Policies

1. Enhance opportunities for public access
2. Support state shoreline access policies and objectives
3. Promote eco-tourism in waterfront areas
4. Support development of permanent moorings

B. Land Use Compatibility Policies

1. Support farmland and rural open space preservation
2. Oppose development of sound and estuarine islands
3. Allow water-dependent uses in conservation-classified areas
4. Prohibit floating homes and long-term occupancy of watercraft
5. Encourage preservation of historic resources
6. Manage and direct growth and development in balance with available infrastructure
7. Support industrial development at the Air Transpark
8. Support residential uses in downtown Edenton
9. Support cluster subdivision design

C. Infrastructure Carrying Capacity Policies

1. Require new development to have adequate support infrastructure
2. Encourage coordinated utility service area boundaries
3. Allow package wastewater treatment plants outside utility service areas
4. Support implementation of thoroughfare plan recommendations
5. Support wastewater treatment improvements in the Country Club Subdivision

D. Natural Hazard Area Policies

1. Require flood damage prevention measures
2. Support the recommendations of the *2005 Hazard Mitigation Plan*
3. Discourage high density/intensity development in hazardous areas

E. Water Quality Policies

1. Support use of BMPs for agricultural, forestry, and land development activities
2. Promote land use that maximizes the protection of adjoining shellfishing waters
3. Promote land use that maximizes the protection of ground water supplies
4. Support the development of a joint stormwater management plan and ordinances

F. Areas of Environmental Concern Policies

1. Support CAMA use standards for development within AECs
2. Permit only water dependent uses in coastal wetlands, estuarine waters, and public trust areas
3. Allow dry stack storage facilities

G. Areas of Local Concern Policies

1. Support the provision of affordable housing
2. Support tourism
3. Support greenway and bike paths as recommended by the *2003 Greenway Plan*
4. Encourage a variety of housing choices

Chowan County and the Town of Edenton support state and federal law regarding land use and development in Areas of Environmental Concern (AECs). Specific policy statements have been developed that support the general use standards of the North Carolina Administrative Code (15 NCAC 7H) for development within the estuarine system. No policy statements have been developed which exceed the requirements of state and federal regarding land use and development within AECs.

1.3.4 Summary of Future Land Use Maps

The major elements of the Chowan County and Edenton future land use maps include the following:

- Guides the most intensive development to areas with supporting infrastructure.
- Anticipates growth on the fringe of Edenton and along waterfronts.
- Accommodates a variety of residential densities.
- Promotes the majority of commercial development in Edenton.
- Encourages downtown mixed use development.
- Promotes industrial growth in the airport area.
- Discourages growth in areas with natural constraints and low suitability ratings.
- Conserves fragile environments.

The land use patterns depicted on the Future Land Use Maps are consistent with the analysis of natural systems and the analysis of land suitability. The Future Land Use Maps depict very generalized patterns of projected land use. The intent of the maps is to illustrate a typical pattern of use for a general area and not the specific use of an individual parcel. The Future Land Use Maps are not intended for site-specific land planning or for regulatory purposes.

Chowan County. The Future Land Use Map for the County's planning jurisdiction encompasses all of Chowan County outside of the Town of Edenton corporate limits and extraterritorial planning jurisdiction. The Chowan County Future Land Use Map (see [Figure 8](#)) classifications include the following categories and subcategories:

- Residential Agricultural
- Conservation/Open Space
- Low Density Residential
- Medium/High Density Residential
- Commercial
- Industrial

Generally, growth and development is expected to occur in the areas classified as Medium/High Density Residential, Commercial, and Industrial. Areas classified as Residential Agriculture and Conservation/Open Space are not

projected to accommodate significant growth and development. The type and intensity of projected development varies within each future land use map classification. The Future Land Use Map classifications are considered part of the Land Use Plan's policy.

Residential Agricultural Classification. Areas classified as Residential Agricultural are primarily located north and east of the Town of Edenton. Residential Agricultural-classified land is estimated to encompass approximately 142 square miles (91,344 acres) or about 91.6 percent of the total County land area.

The Residential Agricultural classification is intended to delineate lands where the predominant land use is scattered, low density (less than one dwelling unit per acre) residences dispersed among farm land and open spaces. Support public and institutional land uses are also located within this land use classification. The overall residential density within this classification is generally less than 1 dwelling unit per acre. Long-term, those portions of the Residential Agricultural-classified areas that are primarily residential in nature are projected to have average densities of approximately 1 dwelling unit per 5 acres. Such areas include lands immediately adjacent to major road corridors and properties located at crossroad communities. The predominantly agricultural areas, i.e., those lands not immediately adjacent to major road corridors and at crossroad communities, within this classification are projected to have residential densities that average approximately 1 dwelling unit per 20 acres.

The Residential Agricultural Classification is compatible with the A-1 (Agriculture) District of the Chowan Zoning Ordinance. Scattered single-family detached residences and manufactured homes on individual lots are the predominant types of dwellings within these areas. Some small, existing residential subdivisions and mobile home parks may also be located within the areas classified as Residential Agricultural. Cluster development is encouraged in the Residential Agricultural Classification. Public water service is available in the majority of the Residential Agricultural classified areas and is needed to support new residential subdivisions. Public sewer or an approved private wastewater treatment system will generally be required to support the higher end (2 or more dwelling units per acre) of residential densities allowed within this classification. Minimum lot sizes for land uses utilizing individual subsurface septic systems and/or individual water systems are determined by the local health department based upon soil types present at the site and generally range from 20,000 square feet to 30,000 square feet.

The Residential Agricultural classification, consistent with the underlying A-1 (Agricultural) zoning district, allows low intensity commercial uses typically associated with rural areas. Some of the projected needs for commercial uses in Chowan County will be accommodated in the Residential Agricultural classification. Public and Institutional uses such as churches, county parks, schools, golf courses and utilities are also appropriate for the Residential Agricultural Classification. Demand for such uses would be accommodated in this classification.

Conservation/Open Space Classification. The largest areas classified as Conservation/Open Space are located in the most northwestern section of Chowan County along the Chowan River, known as Chowan Swamp. There is

also a large conservation area located along the Chowan River in southwest corner of the County known as the Reedy Point Swamp. Other Conservation/Open Space areas are scattered throughout the County jurisdiction and include coastal wetlands, estuarine waters, estuarine shoreline, public trust areas, and 'Section 404' wetlands. Included as a conservation designation are the future greenways corridors that are located throughout the county along creeks and rivers, as depicted in the *2003 Edenton/Chowan Greenway and Open Space Plan*. Due to the small size of some areas, they are not individually identified on the Future Land Use Map. Generally, the precise location of such areas must be determined by field investigation. Conservation/Open Space-classified land is estimated to encompass approximately 3.8 square miles (2,456 acres) or about 2.3 percent of the total County land area.

The Conservation/Open Space classification is intended to delineate areas where traditional land uses are not desirable or expected to develop. Land development may however, include public building and facilities necessary to support existing land uses within the areas classified as Conservation/Open Space. Commercial and industrial uses that are water dependent and which cannot function elsewhere or are supportive of commercial fishing are permissible uses in Conservation/Open Space-designated areas. Public water or sewer utilities are not needed to support the types and intensities of land uses in these areas. Extensions of water and sewer utilities into these areas are not encouraged for the purpose of development. Water and sewer lines may be appropriate in conservation areas for supportive uses in conservation areas such as bathrooms or easements to serve another area. Public and Institutional uses such as golf courses and passive recreation would be appropriate in this classification as long as environmentally sensitive areas are not negatively impacted.

Low Density Residential Classification. The Low Density Residential classification encompasses approximately 3.6 square miles (2,356 acres) or about 2.4 percent of the total County land area. The lands classified as Low Density Residential are scattered throughout the Chowan County jurisdiction. There are large Low Density areas in the eastern most section of the County and a large area near Welch Ridge.

The Low Density Residential classification is intended to delineate lands where the predominant land use is low density residences, particularly properties with waterfront access and areas where public water service is readily available. The overall residential density within this classification is generally 1 to 2 dwelling units per acre. Single-family detached residences and manufactured homes on individual lots are the predominant types of dwellings within these areas. Support public and institutional land uses are also located within this land use classification

Public water service is widely available throughout the Low Density Residential-classified areas and is required to support the higher end of the range of residential densities in this classification. Public sewer or an approved private wastewater treatment system will generally be required to support the higher end (2 or more dwelling units per acre) of residential densities allowed within this classification. Minimum lot sizes for land uses utilizing individual subsurface septic systems and/or individual water systems are determined by the local

health department based upon soil types present at the site and generally range from 20,000 square feet to 30,000 square feet.

Medium/High Density Residential Classification. The Medium/High Density Residential classification encompasses approximately 4.4 square miles (2,867 acres) or about 2.9 percent of the total County land area. The majority of the properties classified as Medium/High Density Residential are located on the periphery of the Edenton urban area. Other areas identified as Medium/High Densities are the subdivisions located east of Town near the airport, Cape Colony and Country Club. The Arrowhead Beach area located along the Chowan River in the northwest portion of the county is also designated at Medium/High Density. The Medium/High Density Residential Classification also includes, as a subcategory, the approximate 465-acre area delineated in the amended *1999 Joint Land Use Plan* (amendment dated August 9, 2004) as 'New Urban Waterfront Area' and as authorized by Senate Bill 732 "Pilot New Urban Waterfront Area", effective July 17, 2004. Such designation is intended to accommodate future development of lands adjacent to the shorelines of public trust waters that provide a mixture of residential, commercial, and recreational uses in a publicly accessible, pedestrian-friendly traditional neighborhood community. The major characteristics of development in New Urban Waterfront Areas included the preservation of natural shorelines and other critical areas; public access to shorelines and public trust waters; interconnected streets; civic spaces, squares, and recreational space, and centrally operated water, sewer, and stormwater management systems. The Medium/High Density Residential Classification promotes development with these same characteristics. The area comprising the New Urban Waterfront Area is delineated on Figure 8.

The Medium/High Density Residential classification is intended to delineate lands where the predominant land use is higher density single-family residential developments and/or multifamily developments. Support public and institutional land uses are also located within this land use classification

The single family detached residential density within this classification is generally greater than 2 dwelling units per acre. Medium density generally ranges from approximately 3 to 7 dwelling units per acre; high density generally ranges from approximately 8 to 15 dwelling units per acre. The Medium/High Classification is compatible with two Chowan County residential zoning districts, the R-15 Residential District and R-5 Residential District and all commercial zoning districts. Planned Unit Developments, which allow for a mixture of residential and nonresidential land uses, promote a variety of residential building types, and require greater amounts of recreational and open space, would be compatible with the R-5 zoning district. Traditional Neighborhood Developments (TNDs) are compatible with both the R-5 and R-15 zoning districts. Higher residential densities may be permitted on a case-by-case basis in TNDs—up to 15 dwelling units per acre in R-5 and nonresidential zoning districts; up to 6 units per acre in R-15 districts; and up to 4 units per acre in all other districts. Public water and sewer service or an approved private wastewater treated system is required to support the densities in this classification. Roads with the capacity to accommodate higher traffic volumes are also necessary to support Medium/High Density Residential development.

Commercial Classification. The Commercial classification is intended to delineate lands that can accommodate a wide range of retail, wholesale, office,

business services, and personal services. Areas classified as Commercial may also include some heavy commercial uses, light manufacturing and warehousing uses as well as intensive public and institutional land uses. The Commercial classification encompasses approximately 0.1 square miles (55.6 acres) or about 0.1 percent of the total County land area. There are very few commercial classified areas outside the Town of Edenton's planning jurisdiction. There is a small commercial area located southeast of the airport. Public water service is needed to support the land uses characteristic of this classification. Public sewer service or an approved private wastewater treatment system is needed to support the most intensive commercial uses. Roads with the capacity to accommodate higher traffic volumes are necessary to support commercial development.

Public and Institutional uses such as town and county offices, schools and cemeteries are appropriate in the Commercial Classification as allowed in the underlying Business zoning districts. Demand for such uses would be accommodated in this classification.

Commercial-classified areas are anticipated to accommodate some of the most intensive land uses found in the county's planning jurisdiction. The county's goals and policies support the use of land in Commercial-classified areas for a wide variety of retail and commercial services uses where adequate public utilities and roads are available or can be upgraded to support the intensity of development encouraged in this classification. Since there is no sewer service within Chowan County's planning jurisdiction there will be limited opportunities for high density commercial uses. The county zoning districts that are compatible with the commercial classification include the B-1, General Business; B-2, Highway Commercial; and B-3, Neighborhood Commercial Zoning Districts. The density of commercial development within these districts will be based upon the on-site septic availability. Lot coverage is generally not restricted except that shopping centers and superstores (gross floor areas of greater than 25,000 square feet) can not exceed a maximum floor area ratio of 0.30. Lot coverage is, however, limited to 50 percent in areas located within a Highway Corridor Overlay district. Building heights are not restricted except for areas located within a Highway Corridor Overlay district where building heights are limited to 50 feet. Generally, the intensity of commercial development is expected to average one commercial establishment per acre. Public and institutional land uses that support and that are compatible with this type of commercial development are also encouraged.

Industrial Classification. The Industrial Classification encompasses approximately 1 square miles (661 acres) or about 0.7 percent of the total County land area. The properties classified as Industrial are concentrated along the east of the Town of Edenton near the airport.

The Industrial classification is intended to delineate lands that can accommodate industrial and manufacturing establishments. Some heavy commercial uses as well as services and businesses which support industrial land uses are also appropriate land uses within the Industrial classification. Public water and sewer service is needed to support the land uses characteristic of this classification. Without the availability of sewer in Chowan County there will be little industrial development. On-site package treatment systems will be the most likely option to offset this need. Roads with the capacity to accommodate higher traffic

volumes are necessary to support the intensity of development expected within the Industrial Classification.

Land uses with the Industrial Classification are generally compatible with the I-1, Light Industrial and I-2, Heavy Industrial classification. Generally, the intensity of industrial development is expected to average one industrial establishment per twenty acres. Lot coverage is not restricted and building heights are not limited.

The Industrial areas are expected to accommodate the majority of the future industrial growth projected for the planning period. Due to the large amount of acreage within the Industrial areas, these areas are also anticipated to meet longer-term industrial growth needs as well. Critical factors that will determine the development potential of these Industrial areas include market demand and the provision of the necessary support infrastructure (particularly public water and sewer utilities). Consequently, the development potential of the majority of the lands within the Industrial areas may be more long-term than short-term.

Town of Edenton. The Future Land Use Map for the Town of Edenton planning jurisdiction encompasses the Edenton corporate limits and the Town's extraterritorial planning and zoning jurisdiction. The Town's Future Land Use Map classifications (see Figure 8a) include the following categories and subcategories:

- Residential
 - Low Density Residential
 - Medium/High Density Residential
- Commercial
 - General Commercial
 - Downtown Mixed Use
- Public and Institutional
- Industrial
- Conservation/Open Space

Generally, growth and land development is anticipated to occur in all future land use categories except for the Conservation/Open Space classification. The type and intensity of projected development varies within each future land use map classification. The Future Land Use Map classifications are considered part of the Land Use Plan's policy.

Low Density Residential Classification. The Low Density Residential classification encompasses approximately 8 square miles (5,159 acres) or about 51.0 percent of the total Town planning jurisdiction. The majority of the lands classified as Low Density Residential are located on the fringe of the core Edenton area, particularly northeast, northwest and southwest of the Town's center.

The Low Density Residential classification is intended to delineate lands where the predominant land use is low density detached residences. The residential density within this classification ranges from 1 dwelling unit for 5 acres to 3 dwelling units per acre. The Town of Edenton zoning districts that are compatible with the Low Density classification are the RA, R-40 and R-20 districts. The RA district has a minimum lot size of 5 acres, the R-40 a minimum of 40,000 square feet, the R-20 a 20,000 square foot minimum. Lot coverage is

restricted to 60 percent and building heights are limited to 35 feet. The higher end of the density range of this classification (i.e., 1-3 dwellings per acre) is anticipated primarily on the south side of the West Queen Street corridor, the area north and west of Mexico Road, the area west of US 17 and north of Virginia Road, the area south of the North Broad Street/US 17 intersection, and the area south of the North Broad Street/Old Hertford Road intersection. The lower end of the density range of this classification (i.e., 1 dwelling per 5 acres to 1 dwelling per acre) is anticipated primarily on the outer fringe of the town's ETJ including the north side of the West Queen Street corridor, the east and west sides of the Paradise Road corridor, and the northeastern and eastern portions of the ETJ area located east of Queen Anne Creek.

The Town's goals and policies support the continued use of land in Low Density-classified areas for low density dwellings and for public and institutional land uses that support and that are compatible with this type of residential development. Future development is projected to be no more than 3 dwelling units per acre. Some Low Density Residential areas that are located on the immediate fringe of the intensively-developed town core may evolve into medium density (3 to 7 dwellings per acre) or high density (8 to 12 dwellings per acre) areas over time, particularly where public utilities and other infrastructure will be available to support increases in residential density.

Medium/High Density Residential Classification. The Medium/High Density Residential classification encompasses approximately 3.1 square miles (2,012 acres) or about 19.9 percent of the total Town planning jurisdiction. The majority of the properties classified as Medium/High Density Residential are located immediately surrounding the Edenton downtown area. Additional Medium/High Density Residential areas are along the US Business 17 and NC 32 corridors as they pass through the Town.

The Medium/High Density Residential classification is intended to delineate lands where the predominant land use is higher density single-family residential developments and/or multifamily developments as well as support public and institutional land uses. Some manufactured home parks are also located with this classification. Medium density generally ranges from approximately 3 to 7 dwelling units per acre; high density generally ranges from approximately 8 to 12 dwelling units per acre. The Town zoning districts that are compatible with the Medium/High Density classification are the R-14 (14,000 square foot minimum lot size), R-10 (10,000 square foot minimum lot size), and the R-5 (5,000 square foot minimum lot size). These districts allow a density of approximately 3-8 units per acre for single-family dwellings and 9-12 units per acre for multi-family dwellings. Lot coverage is restricted to 60 percent and building heights are limited to 35 feet. Cluster development is encouraged in areas within the Medium/High Density Residential Classification that are zoned R-14, R-10, and R-5. Public water and sewer service or an approved private wastewater treatment system is required to support the residential densities in this classification. Streets with the capacity to accommodate higher traffic volumes are also necessary to support Medium/High Density Residential development.

The higher density residential developments anticipated to occur during the planning period are encouraged within the Medium/High Density-classified areas.

General Commercial Classification. The General Commercial classification encompasses approximately 0.53 square miles (340 acres) or about 3.4 percent of the total Town planning jurisdiction. The properties classified as General Commercial are located primarily at the intersection of US Highway 17 and NC 32 West. General commercial uses are also located at the northern intersection of Broad Street and NC 32.

General Commercial-classified areas are anticipated to accommodate some of the most intensive land uses found in the town's planning jurisdiction. The Town's goals and policies support the use of land in General Commercial-classified areas for a wide variety of retail and commercial services uses where adequate public utilities and streets are available or can be upgraded to support the intensity of development encouraged in this classification. Public and institutional land uses that support and that are compatible with this type of commercial development are also encouraged. Densities of Commercial uses in this classification will vary depending on the underlying zoning district. General Commercial designated areas are compatible with the SC (Shopping Center), CH (Highway Commercial) and CN (Neighborhood Commercial) zoning districts. Zoning district CH (Highway Commercial) requires a minimum lot size of 30,000 square feet, SC (Shopping Center) district requires a 5 acre minimum lot size, and the CN (Neighborhood Commercial) district does require a minimum lot size. Lot coverage is restricted to 60 percent and building heights are limited to 50 feet. Shopping centers and superstores can not exceed a floor area ratio of 0.30.

General Commercial-classified areas are anticipated to accommodate some of the most intensive land uses found in the town's planning jurisdiction. The Town's goals and policies support the use of land in General Commercial-classified areas for a wide variety of retail and commercial services uses where adequate public utilities and streets are available or can be upgraded to support the intensity of development encouraged in this classification. Public and institutional land uses that support and that are compatible with this type of commercial development are also encouraged. Densities of Commercial uses in this classification will vary depending on the underlying zoning district. General Commercial designated areas are compatible with the SC (Shopping Center), CH (Highway Commercial) and CN (Neighborhood Commercial) zoning districts. Zoning district CH (Highway Commercial) requires a minimum lot size of 30,000 square feet, SC (Shopping Center) district requires a 5 acre minimum lot size, and the CN (Neighborhood Commercial) district does require a minimum lot size. Lot coverage is restricted to 60 percent and building heights are limited to 50 feet. Shopping centers and superstores can not exceed a floor area ratio of 0.30.

Downtown Mixed Use Classification. The Downtown Mixed Use classification encompasses approximately 0.04 square miles (27.0 acres) or about 0.3 percent of the total town planning jurisdiction. The properties classified as Downtown Mixed Use are located in and immediately surrounding the Edenton Central Business District and the downtown waterfront area.

The Downtown Mixed Use classification is intended to delineate properties that can accommodate a variety of retail, office, business services, and personal services. Areas classified as Downtown Mixed Use may also include medium density (3 to 7 dwellings per acre or high density (8 to 12 dwellings per acre) residences and public and institutional land uses, particularly governmental buildings and facilities. The Downtown Mixed Use classification also specifically

includes waterfront tourist-oriented land uses. This classification is compatible with the CD, Downtown Commercial zoning district. No minimum lot size is required in the CD district, except for permissible residential uses. For permissible nonresidential uses, lot coverage is restricted to 60 percent and building heights are limited to 50 feet.

Public water and sewer service is needed to support the land uses characteristic of this classification. Streets with the capacity to accommodate higher traffic volumes are also necessary to support the intensive land uses within this classification. Generally, the intensity of development is expected to average four commercial establishments per acre.

The town's goals and policies support the use of land in Downtown Mixed Use-classified areas for a wide variety of retail and commercial services uses where adequate public utilities and streets are available or can be upgraded to support the intensity of development encouraged in this classification. Redevelopment of the downtown waterfront area for tourist-oriented mixed uses consisting of retail shops, places of entertainment, restaurants, boating services, and overnight lodging is promoted by the town's goals and policies. The majority of the area classified as Downtown Mixed Use is already developed. Any new development or infill will be at high densities.

Public and Office/Institutional Classification. The Public and Office/Institutional classification encompasses approximately 0.15 square miles (101.5 acres) or about 1 percent of the total Town planning jurisdictional area. The properties classified as Public and Institutional are scattered throughout the Town's planning jurisdiction. The largest individual properties within the Public and Institutional classification are located near the hospital.

The Public and Office/Institutional classification is intended to delineate large land areas that are used for intensive public and educational purposes as well as medical related offices that support the hospital. Land uses within this classification include primarily government buildings and service facilities, public recreational facilities, public and private educational facilities, large medical facilities and offices, and large private institutional uses. Generally, public water service is needed to support the land uses characteristic of this classification. Public sewer or an approved private wastewater treatment system is needed to support the most intensive public and institutional uses. Streets with the capacity to accommodate higher traffic volumes are necessary to support the intensity of development expected within the Public and Office/Institutional Classification. The Public and Office /Institutional district is compatible with the MA (Medical Arts) and OS (Office & Services) zoning districts. The OS and MA zoning district does not require a minimum lot size except for residential uses. Generally, the intensity of development is expected to average one public, office, or institutional use per five acres. Lot coverage is restricted to 60 percent and building heights are limited to 50 feet.

Industrial Classification. The Industrial classification encompasses approximately 1.66 square miles (1,066 acres) or about 10.5 percent of the total Town planning jurisdiction. The properties classified as Industrial are primarily concentrated north of Town between Broad Street and US 17 and in the airport area on Soundside Road.

The Industrial classification is intended to delineate lands that can accommodate industrial and manufacturing establishments. Some heavy commercial uses as well as services and businesses which support industrial land uses are also appropriate land uses within the Industrial classification. Public water and sewer service is needed to support the land uses characteristic of this classification. Streets with the capacity to accommodate higher traffic volumes are necessary to support the intensity of development expected within the Industrial Classification. The Industrial Classification is compatible with the IW (Industrial Warehouse) zoning district. The IW (Industrial Warehouse) zoning district does not have a minimum lot size standard, therefore density will vary. Generally, the intensity of industrial development is expected to average one industrial use per three acres. Lot coverage is restricted to 60 percent and building heights are limited to 50 feet.

Conservation/Open Space Classification. The Conservation/Open Space classification encompasses approximately 2.2 square miles (1,411 acres) or about 13.9 percent of the total Town planning jurisdiction. Conservation/Open Space areas are scattered throughout the Edenton planning jurisdiction and include non-coastal wetlands, estuarine waters, estuarine shoreline, public trust areas, and 'Section 404' wetlands. Included as a conservation designation are the future greenways corridors that are located throughout the county along creeks and rivers, as depicted in the 2003 Edenton/Chowan Greenway and Open Space Plan. Large portions of Conservation/Open Space designated areas are identified on the Future Land Use Map. Generally, the locations of these large areas are mostly in non-coastal wetlands. The largest areas are at the southwestern portion of the Edenton jurisdiction and along both the Pembroke and Queen Anne Creeks.

The Conservation/Open Space classification is intended to delineate areas where traditional land uses are not desirable or expected to develop. Land development may, however, include public building and facilities necessary to support existing land uses within the areas classified as Conservation/Open Space. Commercial and industrial uses that are water dependent and which cannot function elsewhere or are supportive of commercial fishing are permissible uses in Conservation/Open Space-designated areas. Public water or sewer utilities are not needed to support the types and intensities of land uses in these areas. Extensions of water and sewer utilities into these areas are not expected or encouraged.

The following tables summarize the major features of the classifications as depicted on the Chowan County and Edenton Future Land Use Maps:

Chowan County Planning Jurisdiction				
Future LU Map Classification	% of Land Area	Compatible Zoning	Average Density/ Intensity	Typical Land Uses
Residential Agricultural	91.6%	A-1	<1 du/ac*	Farms, detached single-family residences, mobile homes on individual lots, rural businesses, agri-industries, support public and institutional uses
Low Density Residential	2.4%	R-40, R-25, RMH-25	1-2 du/ac*	Detached single-family residences, mobile homes on

				individual lots, support public and institutional uses
Medium/High Density Residential	2.9%	R-15, R-5	3-7 du/ac* medium density; 8-15 du/ac high density	Detached residences, multi-family developments, support public and institutional uses
Commercial	0.1%	B-1, B-2, B-3	1 per ac	Retail, wholesale, offices, business and personal services, warehousing, support public and institutional uses
Industrial	0.7%	I-1, I-2	1 per 20 ac	Manufacturing, assembly, heavy commercial, support businesses and services
Conservation/Open Space	2.3%	na	na	Natural and fragile resources, water-dependent uses, support public buildings and facilities

* Higher residential densities are permissible within planned unit developments and traditional neighborhood developments

The amount of land area allocated to the various general land uses does not exceed projected needs. Sufficient developable acreage exists within the Chowan County and Edenton jurisdictions to accommodate projected residential and nonresidential land needs. However, to efficiently accommodate projected growth, it will be imperative that the Town and County closely coordinate infrastructure development and land use regulations as much of the anticipated growth is expected to locate on the periphery of the Edenton urban area.

Edenton Planning Jurisdiction				
Future LU Map Classification	% of Land Area	Compatible Zoning	Average Density/ Intensity	Typical Land Uses
Low Density Residential	51.0%	RA, R-40, R-20	1 du per 5 ac 1-2.1 du/ac	Detached single-family residences, mobile homes on individual lots, support public and institutional uses
Medium/High Density Residential	19.9%	R-14, R-10, R-5	3-7 du/ac medium density; 8-12 du/ac high density	Detached residences, multi-family developments, support public and institutional uses
General Commercial	3.4%	SC, CH, CN	1 per 5 ac 1 per ac	Retail, wholesale, offices, business and personal services, shopping centers, warehousing, support public and institutional uses
Downtown Mixed Use	0.3%	CD	4 per ac	Retail, offices, business and personal services, multifamily development, governmental buildings, support public and institutional uses
Public and Office/Institutional	1.0%	MA, OS	1 per 5 ac	Public, educational, medical buildings and facilities
Industrial	10.5%	IW	1 per 3 ac	Manufacturing, assembly, heavy commercial, support businesses and services

Conservation/Open Space	13.9%	na	na	Natural and fragile resources, water dependent uses, support public buildings and facilities
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1.3.5 Use of the Land Use Plan

The Joint Land Use Plan, as adopted by the elected officials of Edenton and Chowan County and as may be amended from time to time, will serve as the primary guide upon which to make land use policy decisions. Every land use policy decision, such as a rezoning request or approval of a conditional or special use permit, will be measured for consistency with the goals, policies, and recommendations of the Plan. The elected officials, Planning Boards, Boards of Zoning Adjustment, and local government staffs should utilize the Land Use Plan as the basic policy guide in the administration of the zoning ordinance, subdivision regulations, and other land development regulatory tools. Persons involved in the land development business as well as the general public can also utilize the Land Use Plan to guide private decisions regarding land use and land development.

The policy statements and recommendations of the Land Use Plan can also be of assistance to the elected officials in making long-range decisions regarding such matters as the provision of water and sewer services, thoroughfare planning, stormwater planning and management, implementation of economic development strategies, recreational facility planning, preparation of capital and operating budgets, and implementation of housing and community development programs.

Edenton and Chowan County will continue to administer and enforce their land use regulatory tools. Each jurisdiction will review the current regulatory tools to eliminate inconsistencies which may exist between the tools and the policies outlined in this plan. In order to assist with the implementation of the updated Land Use Plan, anticipated amendments to land development ordinances include the following:

- Amendments to the Town and County zoning maps shall be made to establish consistency with the Future Land Use Map and the Zoning Map.
- Amendments to the Town's Unified Development Ordinance should be made to enforce the policies outlined in [Section 4.2](#).

1.3.6 Summary of Implementation Strategies

Major capital improvements that will assist with Plan implementation include the following:

Water Treatment Systems

Town of Edenton water system capital improvements include the following:

- Expansion of the water treatment facilities by 2010 is projected; estimated cost is \$1,140,000.00.
- Chlorination process to be completed by 2009: estimated cost is \$150,000.00

- 20-year maintenance improvements: estimated cost is \$960,000.00

In the event that the Chowan County Board of Commissioners would consider making the decision to fund certain utility infrastructure improvements to support any planned development in the future, the following costs are estimated using 2008 cost information:

- \$3 million +/-: Backwash water improvements at the Vahalla WTP.
- \$1 million +/-: One new well at the Valhalla WTP.
- \$2,000/day +/-: Purchase 300,000 gallons per day water supply from Gates County.
- \$1 million +/-: Construction of a new elevated storage tank in the southern part of the county.
- \$5 million +/-: Large diameter water main along NC 32 in northern system.
- \$2 million +/-: Construction of 1 million gallon storage tank at Paradise Road booster site.

These water system improvements have been identified by the Chowan County Water Department as desirable but have not, to date, been included in the county's formal capital improvements programming and budgeting process.

Wastewater Treatment Systems

Planned sewer system improvements for the Town of Edenton include:

- Sewer line rehabilitation: \$1,148,000.00; completion during 2008-2018
- Sewer system upgrades: \$550,000.00; completion during 2008-2009
- Pump stations: \$1,550,000.00; completion during 2012-2014
- Cape Colony pretreatment: \$20,000.00; completion in 2008
- BMI extension: \$600,000.00; completed
- Lift station upgrade: \$800,000.00; completion in 2011
- Additional spray field land: \$200,000.00; completion in 2010

Chowan County wastewater improvements:

The county has prepared a feasibility study for providing sewer collection services to a portion of southeastern Chowan County. The preliminary recommendation of that study is to install a low-pressure or vacuum sewer system to serve the Cape Colony, County Club Road and surrounding areas, and the Chowan County Golf and Country Club.

Chowan County Implementation Activities and Schedule

Chowan County has developed the following major implementation activities:

- FY07:** Joint task force to establish utility service area boundaries and to develop coordinated land use and development regulations.

FY07: Stormwater management plan.

FY07: State roadways vehicular access regulations.

FY07-08: Revisions to flood damage prevention provisions.

FY08: Waterfront access plan.

FY08: Joint task force to develop coordinated land use and development regulations for areas of common interest such as extraterritorial planning area, municipal utility service areas, airport zoning area, etc.

FY08: Capital Improvement Plan for future infrastructure improvement such as water and sewer.

FY09: Updated Thoroughfare Plan.

FY09: Wellhead protection program and ordinance

Edenton Implementation Activities and Schedule

The Town of Edenton has developed the following major implementation activities:

FY07: Completion of a planned water and sewer system improvements.

FY07: Stormwater management plan.

FY07: Wellhead protection program and ordinance.

FY08: Waterfront access plan.

FY08-09: Updated Unified Development Ordinance.

FY08: Comprehensive community services/facilities plan.

FY09: Urban Design Manual.

FY09: Updated Thoroughfare Plan.

FY09: Completion of sewer system improvements.

FY10: Completion of water system improvements.

Chowan County and Edenton will ensure a continuous planning process by conducting periodic reviews of the Land Use Plan's policies and implementation strategies. This review will be the responsibility of their respective Planning Departments and Planning Boards who will coordinate such reviews with the applicable elected officials.

SECTION II: COMMUNITY CONCERNS AND ASPIRATIONS

This section of the Plan is organized in accordance with the requirements of Subchapter 7B .0702(b). Section II includes a description of the dominant growth-related conditions that influence land use, development, water quality, and other environmental concerns within Chowan County and Edenton. Descriptions of the land use and development topics most important to the future of the County and Town as well as a community vision statement are also provided in Section II.

2.1 Significant Existing and Emerging Conditions

2.1.1 Land Use

A. General County Growth Trends

Development within Chowan County is mainly within the Town of Edenton and along the major road corridors on the outskirts of town. Specifically, the Town of Edenton is experiencing pressure for development along the US 17 and NC 32 corridors. Many of the existing commercial areas in the Town will experience redevelopment and infill. Commercial development is scattered throughout the county at crossroad communities. Small commercial uses and service oriented businesses will continue to serve rural residential areas. Future residential growth will be scattered throughout the county in small subdivisions and along waterfront properties. Much of the county's future residential growth is expected to be directly related to retirement-aged developments, particularly in waterfront areas. To facilitate orderly and compatible growth and development the County is pursuing the expansion of its zoning powers throughout the County.

B. General Municipal Growth Trends

The Town of Edenton serves as the commercial, governmental and housing center for the County. There are a variety of uses within the Town, at higher intensities than the rest of the County. Most of the Edenton's population growth since 1990 has been a result of in-migration. Edenton is unlike most coastal municipalities where annexation is the common method of population growth. The Town of Edenton will continue to evaluate the feasibility of annexation of urban developed land on the unincorporated periphery of the Town of Edenton. The Town currently has a sizeable retirement-aged population and future residential development is anticipated to reflect the growth in that sector of the population. The Town also has a desire to ensure that land development patterns occurring on the fringe of Edenton are consistent with its land use, zoning, street planning, and utility service goals and objectives.

C. Urban Development Impacts

Unplanned and indiscriminate development can threaten the basic fabric of a community. This type of development undermines the ability of the natural environment to support man's activities. Urban sprawl indiscriminately consumes productive farm land and open space and results in a burden on public services and facilities. Chowan County and the Town of Edenton must cooperate and coordinate their efforts to guide land development to the most appropriate locations, provide efficient public services, avoid duplication of

services, and promote desirable land development that is in harmony with the character of the community.

D. Land Suitability and Natural Constraints on Development

Most property in Chowan County (91%) has severe soil limitations for septic tank drainfields due to the high clay content of the soil and the high water table. Approximately 14 percent of the County's land area is within a 100-year floodplain. (*NEW LIDAR COUNTY-WIDE LIDAR DATA FOR FLOOD HAZARDS WILL BE AVAILABLE 2009*)

E. Waterfront and Estuarine Access

Waterfront properties along the Chowan River and Albemarle Sound will continue to experience residential development. Properties with water access and water views are a limited resource and the availability of these properties will diminish over time. It is of imperative that the County and the Town must plan for future public and private access to public waters. The development of a county-wide public water access plan can assist in the evaluation of access needs and opportunities for water access locations as well as develop implementation strategies.

F. Redevelopment

Many residents of Chowan County and the Town of Edenton live in areas which have substandard housing and community services. The Town and County will have to make efforts to rehabilitate deteriorated housing and improve public services in some low-income areas. The Town of Edenton shall plan for redevelopment of urban properties that are experiencing signs of blight and abandonment. Some redevelopment activities in residential areas, while rehabilitating the existing housing stock and generally improving the quality of housing, has also resulted in increased housing prices. Consequently, there is a need to ensure an adequate supply of affordable housing at the same time that new development and redevelopment activities are adding to and improving the overall housing stock.

2.1.2 Economic Conditions

A. General Economic Conditions

The economy of the area provides a diverse range of employment opportunities, including retail, services, governmental, construction and management. The county's major employment sectors are manufacturing, education, retail and healthcare. The local economy is driven by agricultural, retail trade, services, manufacturing, and government jobs. Agriculture and agribusiness is an important sector of the local economy. Tourism is an increasingly important component of the local economy. The Edenton-Chowan Chamber of Commerce has just begun working on an economic development plan for Chowan County.

B. Population Growth

Edenton's total population decreased 3.99% from 1990-2000 and is one of few coastal communities where population decreased. The county's population growth rate during the same time period increased 4.77%, and is comparable to other coastal counties. The statewide average was 21.4%. Between 1990 and 2000, the Chowan County townships that had the highest growth rates were the Yeopim (17.6%) and Middle (12.8%) Townships. The lowest growth rates were in the Upper (-0.9%) and Edenton (4.63 %)

Townships. Township boundaries are delineated in [Figure 1, General Location Map](#). The population growth in Chowan County and the Town of Edenton is a result of in-migration rather than natural growth rates.

Projections indicate an increase in the total County population to 15,675 in 2010 and 17,634 in 2020. Edenton's population is projected to increase to 6,505 in 2010 and 7,206 in 2020. Projections indicate that the population growth rate of Chowan County and the entire state will slow over the next 25 years.

Population growth will result in increased demand for additional goods, services, and housing as well as public services—utilities, roads, schools, police and fire protection, parks, etc. The Town and County anticipate an increase of retirement aged residents to the area. This will increase the demand for health care services.

C. Industrial and Economic Development

The majority of industrial uses are located in the vicinity of the airport in an area that is within both the Town's and County's planning jurisdictions. Further industrial growth is anticipated in this area. Protection of such industrial areas from encroachment by competing land uses will be necessary. There are existing residential neighborhoods, within Chowan County's jurisdiction, in the vicinity of the airport and its surrounding industrial uses. Careful coordination between the town and county is necessary in order to prevent incompatible uses. Several scattered industries are also located in the northwestern portion of Edenton adjacent to the west side of North Broad Street and throughout rural Chowan County.

The local economy is driven by the manufacturing, governmental, retail, and agricultural sectors. Tourism is increasingly becoming an important part of the local economy. As the Chowan area becomes more of a retirement destination, positive impacts on the construction, services, and retail sectors of the local economy are anticipated. The Edenton-Chowan Chamber of Commerce has just begun working on an economic development plan for Chowan County.

D. Historic Preservation, Downtown Revitalization and Waterfront Development

The Edenton is known throughout the region and an older historic town. There are several individual sites in Edenton and Chowan County that are listed on the National Register of Historic Places. The town and county should continue to capitalize on their history as an economic resource. The town should continue with efforts for the revitalization of historic structure and redevelop areas that are blighted. Edenton Downtown rejuvenation and waterfront development can be important economic asset to the community.

2.1.3 Transportation

The following are improvements identified in the NCDOT Transportation Improvements Plan (TIP) and are depicted on [Figure 6, Transportation System Map](#):

A. Eastern Connector

A 2-lane facility connecting NC 32 at NC 94 (Soundside Road) with the US 17 Bypass at the North Broad Street Interchange. This improvement is designated as project U-3419 in the current TIP. Planning and design is currently underway. Construction is projected to begin in FFY 11. This route is projected to alleviate downtown congestion and traffic by providing an alternate route for through traffic.

B. Western Connector

A 2-lane facility connecting West Queen Street (US 17 Business) and West Albemarle Road and ultimately, in combination with the Luke Street Extension, Virginia Road just south of the US 17 Bypass. A feasibility study is currently and is designated in the current TIP as FS-0201D. This proposed facility would also help to alleviate congestion in the downtown area.

C. Luke Street Extension

A 2-lane facility extending the existing Luke Street from Virginia Road to West Albemarle Road. The primary purpose of this facility is to improve emergency vehicle access from the hospital on Virginia Road to the western portions of Edenton.

D. Peanut Drive Access

This proposed facility would connect Paradise Road and SR 1325 to allow truck traffic to access the existing industrial area and the US 17 Bypass without entering the downtown area.

E. Soundside Road

This minor thoroughfare (NC 94) provides access to the southeastern portion of Chowan County including the airport industrial area. Shoulder widening to 24 feet is recommended to provide a safer road and to accommodate truck traffic.

2.1.4 Infrastructure

A. Adequate Levels of Service

The City and County provide public services and facilities that service existing and new development. The community is blessed with a quality of life that includes a number of outdoor recreational opportunities. These same opportunities attract tourist and weekend visitors from other parts of North Carolina and Virginia. Growth demands can overtax the local governments' ability to provide services if allowed to occur without consideration for the cost-effectiveness of providing services.

B. Water and Sewer Utilities

Two separate water supply systems operate within Chowan County. These systems include the Town of Edenton municipal water system and the Chowan County water system. The Town has two water treatment plants which for four deep wells which draw water from the Castle Hayne Aquifer. The Town water system can accommodate up to 1.3 MGD.

The County water system maintains nine wells and approximately 450 miles of water distribution lines. The Vahalla water treatment plant has a capacity of 2.196 MGD.

Wastewater treatment systems within Chowan County include the Town of Edenton municipal wastewater system. Chowan County currently does not operate a wastewater system. However, Chowan County is preparing a feasibility study for providing sewer service to the southeastern portion of the county, particularly the Cape Colony and Country Club areas. Due to Chowan County's lack of a county-wide wastewater system, growth will be confined to areas within and around the Town of Edenton where sewer is available. In the meantime, Chowan County will have to rely on private waste-water systems and septic tanks.

2.1.5 Water Quality

A. Potable Water Supply

Potable water supplies need to be conserved in order to assure the availability for future populations. At present, potable water is obtained from the Castle Hayne groundwater aquifer. Projected demands for the Town of Edenton are not expected to exceed 80% of the available supply before 2030. Much of the Edenton water supply infrastructure is old with valves not operating properly. Failures in the aging water supply system may limit development in the future. Additionally, there are limitations to the water quality due to high sodium content. Potable water supply currently is not a significant issue affecting land use and development. Water system improvements are being made or planned to meet the 2030 water service area population projections (see Section 3.4.1). The Town Council has set a maximum population growth goal of 7,500 to ensure that infrastructure can adequately support the anticipated service area growth.

B. Stormwater Runoff

The existing stormwater drainage facilities consist of a system of piping, catch basins, and drainage ditches and swales. Both the Town and County are currently evaluating options for improving stormwater management. Land development regulations for both communities were amended in 2005 to require storm drainage plans for all new developments. More specific stormwater management requirements have recently been added to the Chowan County Subdivision Ordinance.

2.1.6 Other Environmental Concerns

A. Cultural and Historical Resource Protection

The scope and importance of the colonial period in Chowan County is significant. The North Carolina Division of Archives and History inventoried sites and structures statewide. They have identified 125 historically significant sites which are located throughout Chowan County and in the Town of Edenton. These treasures need safeguarding from being destroyed by ill-planned development. Knowledge concerning the importance of these features or structures will help mitigate such future destruction if this knowledge is readily available. The Town of Edenton contains two nationally registered historic districts and continues its commitment to the preservation of its many historic and cultural resources. [Figure 4a](#) delineates the boundary of the Edenton Historic District and [Figure 4b](#) shows the locations of sites listed on the National Register of Historic Places.

B. Fragile Lands and Localized Resource Protection

Chowan County contains several areas that are designated by the NC Natural Heritage Program as “Significant Natural Heritage Areas” (SNHA). Unfortunately many of these areas are privately owned and are not protected. Chowan County has approximately 1,021 acres of beneficial Non-Coastal Wetlands. The NC Division of Marine Fisheries has not designated any waters in Chowan County as Primary Nursery Areas. However, the Division of Marine Fisheries has identified and documented Anadromous Fish Spawning Areas (AFSA) in Chowan County and has recommended that the NC Wildlife Resources Commission pursue designation of the documented AFSA under its jurisdiction. Development in and around these fragile areas will be limited due to its environmental sensitivity. Anticipated development, especially residential waterfront development, in and around fragile lands will need to be carefully sited to avoid or mitigate impacts.

C. Accessibility while Protecting Public Trust Waters

Increased demand for private boat piers and storage as well as commercial marinas is anticipated. The majority of commercial marina development will be in the Town of Edenton and adjacent areas. Marinas for residential developments may be scattered around Chowan County where water depth is accommodating. As prime waterfront property continues to be developed, opportunities for public water access points will become limited. As large waterfront developments are proposed, the issue of the provision of public water access as well as access for the sole use by residents of the developments must be reviewed. Maintaining the water quality, scenic vistas and compatibility with the existing waterfront uses is of the utmost importance.

D. Storm Hazard Mitigation and Evacuation

Chowan County is a low-lying area with the potential for significant storm damage. Hazard mitigation involves actions which would reduce the impact of any disaster including evacuation and cleanup. Chowan County and the Town of Edenton recently adopted a Hazard Mitigation Plan in February 2005. It is anticipated that property along the waterfront will make up the majority of growth in the town and county. Increased development within flood-prone areas will inevitably put more residents in danger during storm events. It will also make efforts to evacuate such areas more difficult.

2.2 Key Planning Issues

The major planning issues identified during the preparation of this land use plan include:

1. Spillover growth from metropolitan Tidewater Virginia given recent highway improvements that shorten the commuting time from that area.
2. High number of out-commuters for employment in the State of Virginia
3. Impact of growth on services and infrastructure
4. County-wide zoning
5. Coordination of regulations between the town and county
6. Retention of rural, low density character
7. Impact of large-scale residential developments

8. Urban design guidelines
9. Maintaining a healthy downtown
10. Appearance of major road corridors
11. Maintaining water quality
12. Open space conservation

Other issues include:

2.2.1 Public Access

- Providing for public water access to all segments of the community, including persons with disabilities.
- Development of comprehensive policies that provide access opportunities for the public along the shoreline within the planning jurisdiction.

2.2.2 Land Use Compatibility

Establishment of local development policies that balance protection of natural resources and fragile areas with economic development.

Development of policies that provide clear direction to assist local decision making and consistency findings for zoning, divisions of land, and public and private projects.

2.2.3 Infrastructure Carrying Capacity

- Establishment of service area boundaries for existing and future infrastructure
- Development of infrastructure service policies and criteria consistent with future land needs projections
- Correlating future land use map categories with existing and planned infrastructure such as water, sewer, and transportation facilities
- Ensuring that public infrastructure systems are appropriately sized, located, and managed so that the quality and productivity of AECs and other fragile areas are protected or restored

2.2.4 Natural Hazard Areas

Development of policies that minimize threats to life, property, and natural resources resulting from land development located in or adjacent to hazard areas such as those subject to erosion, high winds, storm surge, flooding, or sea level rise.

Development of location, density, and intensity criteria for new, existing development, and redevelopment (including public facilities and infrastructure) to avoid or better withstand natural hazards.

Ensuring that existing and planned development is coordinated with existing and planned evacuation infrastructure.

2.2.5 Water Quality

Development of policies to prevent or control nonpoint source discharges (sewage and storm water) such as impervious surface limits, vegetated riparian buffers, wetlands protection, etc.

Establishment of policies and land use categories for protecting open shellfishing waters and restoring closed shellfishing waters.

Adoption of policies for coastal waters within the planning jurisdiction to help ensure that water quality is maintained if not impaired and improved if impaired.

2.2.6 Areas of Local Concern

Establishment of land use and development policies that minimize adverse impacts on Areas of Environmental Concern (AECs) and which support overall CAMA goals.

Identify and address local concerns and issues, such as cultural and historic areas, scenic areas, economic development, or general health and human service needs

Many of the important land use and land development issues delineated in this updated Land Use Plan have also been identified in previous land use plans. A summary of the land use and development issues contained in the previous (1998) joint Chowan County/Edenton Land Use Plan is provided in [Appendix A](#).

2.3 Community Vision Statement

Chowan County Vision Statement:

Chowan County, its citizens, property owners, and business owners will continue to strive to preserve the rural character, natural beauty and scenic qualities of this remarkable place by guiding growth and development so that our natural and historic resources are protected for future generations. The rural landscape of the county will be preserved by requiring open space and clustered residential development while allowing for low intensity businesses and services at community crossroads. Farming and forestry will remain an important segment of our economy while a growing ecotourism industry provides economic sustainability in the region. Growth and change will be accommodated while maintaining the quality of the Chowan County waters which made our region an attractive settlement hundreds of years ago. The policies established in this Land Use Plan will be used as a guide for decision-making for all development in Chowan County.

The vision for the Town of Edenton is:

To develop a viable downtown business district supplemented by quality shopping centers and a diverse industrial mix in outlying areas that will translate into job opportunities and expanded tax base.

To develop and enhance water access and outdoor activities supplemented by a variety of recreational and cultural activities throughout the community for residents and tourists.

- To have a sound, stable infrastructure that meets the needs of citizens, business and industry including streets, water, sewer, electricity, transportation, facilities, etc.
- To be a municipal government that works collaboratively with citizens and other governments to plan for and respond to citizen needs and provide timely, efficient, effective, and customer friendly services.
- To grow to a population of 7,000 in ten years providing a home for young families and retirees while maintaining a strong sense of small town values and citizens involvement. The town will preserve and promote its historic resources and unique downtown and focus on community attractiveness.
- To be known as a desirable tourist destination offering a wide variety of historic exhibits, water activities, cultural offerings, lodging, dining, shopping, and other attractions.
- To have a sound, stable fiscal reserve to meet unanticipated needs and emergencies.

SECTION III: ANALYSIS OF EXISTING AND EMERGING CONDITIONS

This section of the Plan is organized in accordance with the requirements of Subchapter 7B .0702(c). The purpose of this section is to provide a sound factual and analytical base to support the land use and development policies formulated in this Plan. Specific elements of Section III include:

- Population, housing, and economic analysis
- Natural systems analysis
- Environmental conditions analysis
- Land use and development analysis
- Community facilities analysis
- Land suitability analysis
- Review of the current CAMA Land Use Plans

3.1 Population, Housing, and Economy

3.1.1 Population Analysis

- The total Chowan County population in 2000 was 14,150; Edenton's population was 5,058. The 2004 State certified population estimate for the County is 14,471 and 5,059 for the Town of Edenton.
- The total 2000 Edenton population represents more than one-third of the total Chowan County population.
- Edenton's total population decreased 3.99% from 1990-2000. The County's population growth rate during the same time period was 4.77%. The statewide average was 21.4%. The Town's and County's growth rates since 1990 are about average compared to other coastal North Carolina communities.
- The Edenton Township represents the largest percentage of 2000 population of the four townships in the County--- Edenton (53.6%), Middle (23.4%), Upper (9.1%), and Yeopim (13.8%) Townships.
- Between 1990 and 2000, the Chowan County townships that had the highest growth rates were the Yeopim (17.6%), Middle (12.8%) Townships. The lowest growth rates were in the Upper (-0.9%) and Edenton (4.63 %) Townships.
- Between 1990 and 2000, Chowan County's total population increased more by migration than by natural increase. The County's migration rate of 3.6% was lower than the statewide rate of 15.1%.
- The majority of Edenton's growth since 1990 has resulted from in-migration; only a slight increase of population has been a result of annexations.
- Chowan County's population density of 82 persons per square mile in 2000 was considerably higher than surrounding counties

but considerably lower than the statewide average of 165 persons per square mile.

- Edenton's 2000 population density of 1,009 persons per square mile was slightly lower than most major coastal communities.
- Projections indicate an increase in the total County population to 15,675 in 2010 and 18,275 in 2025. Edenton's population is projected to increase to 6,505 in 2010 and 7,584 in 2025. Complete population projections are provided in [Section 3.1.4](#).
- Projections indicate that the population growth rate of Chowan County and the entire state will slow over the next 25 years.
- Anticipated population growth will result in increased demand for additional goods, services, and housing as well as public services—utilities, roads, schools, police and fire protection, recreational facilities, etc.

A. Population Growth Trends

While the populations of Chowan County has consistently increased since 1980, the town's rate of growth has been consistently decreasing since 1980. Edenton's decrease in population is a result of the negative natural growth rate (births vs. deaths) exceeding any in-migration to the town. The town also has not annexed much property over the past few decades, which could possibly increase the population. The town and the county have experienced growth rates that are well below the statewide average. In 2004, the municipal population of Edenton, the only incorporated municipality within Chowan County, comprised approximately 35 percent of the total county population.

<i>Table 1: Population Size and Growth Rates Edenton, Chowan County, and the State 1980-2004</i>				
Population Size				
	1980 Census	1990 Census	2000 Census*	2004 (cert.)
Edenton	5,357	5,268	5,058	5,059
Chowan County	12,558	13,506	14,150	14,471
North Carolina	5,881,766	6,628,637	8,046,313	8,541,263
<i>Source: LINC - http://linc.state.nc.us/ *2000 Census (corrected numbers)</i>				
Population Growth Rates				
	1980-1990	1990-2000	2000-2004	
Town of Edenton	-1.66%	-3.99%	0.02%	
Chowan County	7.55%	4.77%	2.27%	
North Carolina	12.70%	21.39%	6.15%	
<i>Source: LINC - http://linc.state.nc.us/</i>				

The County's total population increased only 4.77 percent from 1990 to 2000. Chowan County's growth rate during this period was greater than the neighboring counties of Bertie, Washington and Hertford but lower than that of Gates and Perquimans Counties. During the same time period, Edenton rate of growth decreased 3.99 percent—a growth rate that was substantially lower than the statewide average of 21.4 percent. The following table provides a comparison of the recent growth rates of Chowan County and Edenton with selected coastal counties and municipalities.

*Table 2:
Comparison of Population Growth Rates
Selected Coastal Communities
1990 and 2000*

Jurisdiction	1990	2000*	Change	% Change
County				
Bertie County	20,388	19,779	-609	-2.99%
Chowan County	13,506	14,150	644	4.77%
Gates County	9,305	10,516	1,211	13.01%
Hertford County	22,523	22,601	78	0.35%
Perquimans County	10,447	11,368	921	8.82%
Washington County	13,997	13,723	-274	-1.96%
Municipality				
Elizabeth City	14,279	17,188	2,909	20.37%
Edenton	5,268	5,058	-210	-3.99%
Jacksonville	30,013	66,715	36,702	122.29%
Morehead City	6,046	7,691	1,645	27.21%
New Bern	17,363	23,128	5,765	33.20%
Washington	9,075	9,583	508	5.60%
Wilmington	55,530	75,838	20,308	36.57%
North Carolina	6,628,637	8,049,313	1,420,676	21.43%

*Source: LINC - <http://linc.state.nc.us/>
* 2000 census (corrected numbers)*

Within Chowan County, the Edenton Township contains the largest proportion of the total County population (township boundaries are delineated in [Figure 1, General Location Map](#)). Between 1990 and 2000, the fastest growing townships were the Yeopim (17.58 percent increase) and Middle (12.83 percent increase) Townships. The townships with the lowest growth rates from 1990 to 2000 were Edenton (4.63 percent) and Upper (-0.90 percent) Township, which actually lost population during this time period.

*Table 3:
Population Size and Growth Rates*

Chowan County Townships 1990 and 2000						
Township	1990	Percent of Total	2000	Percent of Total	Change 1990- 2000	% Change
Edenton	7,447	55.14%	7,792	53.64%	345	4.63%
Middle	3,017	22.34%	3,404	23.43%	387	12.83%
Upper	1,336	9.89%	1,324	9.11%	-12	-0.90%
Yeopim	1,706	12.63%	2,006	13.81%	300	17.58%
Totals	13,506	100.00%	14,526	100.00%	1,020	7.55%

Source: US Census - 1990, 2000

B. Population Characteristics

1. Age Characteristics

Age characteristics for the population within Edenton and Chowan County are generally similar to those for the state as a whole. The largest general age category in both the town and county is the working age group (25-64 years of age) although this category is lower than that statewide. Edenton and Chowan County have a higher percentage of retirement age persons (65 years or greater) than does North Carolina. The percentage of retirement age persons in Chowan County should remain consistent or increase due to expected development of retirement communities to accommodate retiring baby boomers.

*Table 4:
Age Characteristics
2000*

Age Group	Town of Edenton		Chowan County		North Carolina	
	Total	Percent	Total	Percent	Total	Percent
Under 18 years, School Age	1,278	23.69%	3,476	23.93%	1,964,047	24.40%
18-24 years, College Age	772	14.31%	1,395	9.60%	806,821	10.02%
25-64 Years, Working Age	2,240	41.53%	7,049	48.53%	4,309,397	53.54%
65 years+, Retirement Age	1,104	20.47%	2,606	17.94%	969,048	12.04%
Totals	5,394	100.00%	14,526	100.00%	8,049,313	100.00%

Source: US Census 2000 - SF1 Table P12

In 2000, the median age of the population in Chowan County (39.8 years) and in Edenton (37.0) was slightly higher than the statewide average (35.3 years).

2. Distribution of Males and Females

The State of North Carolina has a higher percentage of women than men. Both Chowan County and Edenton also have a greater percentage of women than men than the statewide percentage.

Table 5: Distribution of Males and Females in the Total Population 2000					
2000					
	Male	Percent	Female	Percent	Total
Edenton	2,367	43.88%	3,027	56.12%	5,394
Chowan County	6,805	46.85%	7,721	53.15%	14,526
North Carolina	3,942,695	48.99%	4,105,618	51.01%	8,048,313

Source: US Census 2000 - SF1 Table P12

3. Racial Characteristics

Racial characteristics of the populations of both Edenton and Chowan County indicate a higher level of racial diversity. The Town of Edenton contains greater proportions of Black/African American populations and lower proportions of White and Hispanic/Latino populations than Chowan County and the State.

Table 6: Race and Hispanic or Latino Origin 2000						
Race Category	Edenton		Chowan County		North Carolina	
	Number	Percent	Number	Percent	Number	Percent
White	2,283	42.95%	8,703	60.83%	5,647,155	73.62%
Black/African American	2,956	55.61%	5,415	37.85%	1,723,301	22.47%
American Indian/Alaska Native	11	0.21%	42	0.29%	95,333	1.24%
Asian	34	0.64%	50	0.35%	112,416	1.47%
Hawaiian/Pacific Islander	0	0.00%	0	0.00%	3,165	0.04%
Other Race	4	0.08%	6	0.04%	9,015	0.12%
Two or More Races	28	0.53%	91	0.64%	79,965	1.04%
Total	5,316	100.00%	14,307	100.00%	7,670,350	100.00%
Hispanic or Latino Origin	78	1.47%	219	1.53%	378,963	4.94%

Source: US Census, 2000 - SF1 Table P4

4. Components of Population Change

In migration of population accounted for the majority of Chowan County's growth between 1990 and 2000 comprising three quarters of the total increase in population. While the County's 1990 to 2000 migration rate was similar to other counties in the region, it was substantially below the statewide average of 15.0 percent.

<i>Table 7: Components of Population Change 1990 to 2000</i>		
	Chowan County	North Carolina
Population Change	644	1,414,365
Births	1,894	1,055,655
Deaths	1,734	638,777
Natural Increase*	160	416,878
Net Migration*	484	997,487
Migration Rate*	3.60%	15.0%

Source: NC State Data Center

*Natural increase is the difference between total births and total deaths. Net migration is the difference between total population change and natural increase. Migration rate is the difference between in-migration and out-migration expressed as a percentage of the base year total population. It is calculated by dividing net migration by the base year total population.

Recent data from the NC State Data Center indicate that in-migration has continued to exceed natural increase in the population of Chowan County as well as in neighboring counties.

<i>Table 8: Components of Population Change 2000 to 2004</i>						
Selected Counties and North Carolina						
	Population Change April 2000* to July 2004	Births	Deaths	Natural Increase	Net Migration	Migration Rate
Bertie	-40	1,076	1,100	-24	-16	0.10%
<i>Chowan</i>	<i>321</i>	<i>765</i>	<i>778</i>	<i>-13</i>	<i>334</i>	<i>2.40%</i>
Gates	470	470	526	-56	526	5.00%
Hertford	753	1,214	1,274	-60	813	3.50%
Perquimans	472	512	636	-124	596	5.20%
Washington	-243	730	700	30	-273	-2.00%
North Carolina	494,450	503,781	305,639	198,142	296,308	3.70%

*Source: NC State Data Center
2000 Census (corrected numbers)*

Projections by the NC State Data Center indicate that migration into Chowan County will continue to play a more important role in population growth than will natural increase. However, as shown in the table below, the County's total population growth rate, reflective of statewide trends, is projected to decrease each decade through 2030. While in-migration is a major component of Chowan County's population growth, it is an even greater factor in the growth of most neighboring counties.

**Table 9:
Projected Components of Population Growth
2000-2030**

Selected Counties in the Region

	2000-2010			2010-2020			2020-2030		
	Pop Growth %	Natural Increase %	Net Migration %	Pop Growth %	Natural Increase %	Net Migration %	Pop Growth %	Natural Increase %	Net Migration %
Bertie County	-2.50%	-4.50%	-1.90%	-3.40%	-24.10%	-0.80%	-4.80%	-48.80%	0.00%
Chowan County	4.50%	5.30%	3.80%	3.00%	-9.40%	4.10%	1.20%	-23.60%	3.70%
Gates County	9.80%	-5.50%	10.40%	9.10%	-6.40%	9.80%	7.40%	-12.50%	8.70%
Hertford County	4.60%	0.50%	4.60%	2.50%	-11.10%	3.80%	0.80%	-31.60%	4.00%
Perquimans County	8.00%	-22.10%	10.40%	6.90%	-28.40%	9.80%	5.10%	-38.80%	8.80%
Washington County	-4.40%	0.20%	-4.40%	-4.90%	-15.60%	-3.20%	-6.00%	-36.10%	-2.30%
North Carolina	17.30%	39.10%	11.40%	14.70%	38.40%	9.10%	13.00%	36.60%	7.80%

Source: NC State Data Center

Most of the Edenton's population growth since 1990 has been a result of in-migration. As illustrated in the following table, Edenton is unlike most coastal municipalities where annexation is the common method of population growth.

**Table 10:
Municipal Growth
1990-2002**

Selected Coastal Municipalities

Municipality	Total Population Growth	Population Annexed	Urban Growth	% Population Growth Annexed
Elizabeth City	3,143	3,126	17	99.50%
Edenton	116	10	106	8.60%
Jacksonville	37,958	36,535	1,534	6.50%
Morehead City	1,680	1,591	89	94.70%
New Bern	6,052	4,469	1,583	73.80%
Washington	570	991	-421	173.90%
Wilmington	35,928	25,855	10,073	72.00%

Sources: Municipal Growth, April 1990 to April 2000, NC Data Center, September 2002. Municipal Growth, April 2000 to July 2002, NC Data Center, October 2003.

Note: Urban growth is the difference between total population growth and population annexed.

5. Income Characteristics

Chowan County's 2000 per capita income of \$15,027 was 74 percent of the statewide per capital income of \$20,307. The 2000 per capita income level in Edenton of \$13,264 was 65.7 percent of the North Carolina average. The County's 2000 median household income of \$30,928 ranked it as 74th statewide. Edenton's median household income of \$25,241 was considerably below the North Carolina average of \$39,184.

According to data from the 2000 U.S. Census, the percentage of families below the poverty level in Chowan County was 13.7% compared to the statewide rate of 12.3% and Edenton's rate of 20.2%.

6. Population Density

Chowan County's population density of 82 persons per square mile in 2000 was higher than surrounding counties but considerably lower than the statewide average of 165 persons per square mile. Edenton's 2000 population density of 1,009 persons per square mile was lower than most major coastal communities. The following table provides population density data for selected coastal communities:

<i>Table 11: Population Density* 1960-2000</i>					
Selected Coastal Communities					
	1960	1970	1980	1990	2000
County					
Bertie County		29.41	29.99	29.16	28.26
<i>Chowan County</i>		<i>62.22</i>	<i>69.17</i>	<i>78.23</i>	<i>81.96</i>
Gates County		25.29	26.24	27.32	30.87
Hertford County		69.23	65.62	63.68	65.04
Perquimans County		33.95	38.50	42.26	45.99
Washington County		40.93	44.63	40.24	39.38
Municipality					
Elizabeth City			2999.36	3154.97	1929.39
<i>Edenton</i>			<i>1492.20</i>	<i>1066.40</i>	<i>1009.26</i>
Jacksonville			2309.34	2340.11	1500.00
Morehead City			2126.34	2298.86	1507.61
New Bern			2514.16	1698.92	894.83
Washington			1895.95	1607.02	1480.77
Wilmington		2188.10	2046.51	1870.33	1849.83
North Carolina		104.19	120.39	136.14	165.20
<i>Source: NC State Data Center * Persons per square mile</i>					

Based upon projections by the NC State Data Center, Chowan County's population density will increase through 2030 but at a much lower rate than the statewide average. The following table provides projected population density data for the County and North Carolina.

Table 12: Projected Population Density* 2005-2030						
	July 2005	2010	2015	2020	2025	2030
Chowan County	84.08	85.69	86.96	88.26	88.79	89.33
North Carolina	177.86	191.23	205.15	219.3	233.48	247.73
<i>Source: NC State Data Center</i>						
<i>* Persons per square mile</i>						

3.1.2 Housing Stock

The number of housing units in Chowan County increased 9 percent between 1990 and 2000 from 5,910 units to 6,443 units. In 2000, 2,204 or approximately 34 percent of all the housing units were located within the Edenton corporate limits. Since the 2000 census, approximately 723 building permits were issued county-wide for new housing increasing the estimated number of housing units in 2005 to 7,166 units countywide and approximately 2,450 units within the Edenton corporate limits.

The predominant housing type is the single-family detached dwelling---68% of all housing units in Chowan County and 64%, in Edenton. As expected in an urban area, Edenton has a higher percentage of multifamily housing units (25.6%) and a lower percentage of manufactured housing (6.8%) than does Chowan County (9.6% and 20.9%, respectively). The following table provides a comparison of housing by structural type for Edenton, Chowan County, and the State of North Carolina.

Table 13: Comparison of Housing by Structural Type 2000			
Structural Type	Town of Edenton	Chowan County	North Carolina
Single-Family	67.58%	69.38%	67.37%
Multi-Family	25.60%	9.67%	16.08%
Manufactured Home	6.82%	20.95%	16.38%
Other	0.00%	0.00%	0.17%
Totals	100.00%	100.00%	100.00%
<i>Source: US Census 2000 - SF3 Table H30</i>			

The median year built for all housing in Chowan County is 1974 and 1965 for the Town of Edenton. The statewide average median year built is 1978. Chowan County's and Edenton's 2000 median value of owner-occupied housing (\$76,100 and \$81,100, respectively) are below the statewide median value of \$95,800. Median rents in Chowan County (\$301) and Edenton (\$279) are also below the North Carolina average of \$431.

A. Residential Building Permits Issued

Building permit data since 1998 indicate that Chowan County and Edenton have averaged about 55 new single family dwellings residential dwellings per year. Chowan County and Town of Edenton began tracking manufactured

home permits in 2002. Since then, they have averaged 41 manufactured homes a year. Manufactured housing has accounted for over 45% of all new housing units built county-wide since 2002.

The following table provides residential building data for Chowan County and the Town of Edenton. In 2000, the County and the Town became a joint building permit program.

	1998	1999	2000	2001	2002	2003	2004	2005	Total	Average
Single-Family	31	50	42	43	58	39	65	114	442	55.3
2-Family	0	0	0	0	0	0	0	0	0	0.0
3+ Family	0	0	0	0	0	0	12	62	74	10.6
Manufactured Homes	n/a	n/a	n/a	n/a	69	107	56	56	288	41.1
County and Town	31	50	42	43	127	146	133	232	804	107.0

Source: Chowan/Edenton Planning and Inspections Department

Subdivision lot approvals in Edenton and Chowan County between 1999 and 2005 have resulted in the creation of an average of 115 new residential building lots per year. In 2000, the County and Town building inspections programs consolidated into a joint building permit program.

[Section 3.3.4](#) provides addition data concerning recent building trends since 1998.

B. Seasonal Housing

The majority (68.5 percent) of seasonal housing units in Chowan County are seasonal dwellings units. Hotel, motels and bed & breakfast units comprise only 30.3 percent of the County’s total seasonal housing. The majority (62%) of all seasonal housing units lie outside Edenton’s corporate limits.

	Total Seasonal Housing Units	% of Seasonal Housing w/i Jurisdiction	% of All Seasonal Housing
Seasonal Dwellings	47	17.1%	6.5%
Hotel, Motel, B&B	219	79.6%	30.3%
Campsites	0	0.0%	0.0%
Transient Marina Slips	9	3.3%	1.2%
Totals	275	100%	38%

<i>Seasonal Housing 2000</i>			
Unincorporated Chowan County	Total Seasonal Housing Units	% of Seasonal Housing w/i Jurisdiction	% of All Seasonal Housing
Seasonal Dwellings	448	100.00%	62.0%
Hotel, Motel, B&B	0		
Campsites	0		
Transient Marina Slips	0		
Totals	448	100%	62%

<i>Seasonal Housing 2000</i>		
Total Chowan County	Total Seasonal Housing Units	% of All Seasonal Housing
Seasonal Dwellings	495	68.5%
Hotel, Motel, B&B	219	30.3%
Campsites	0	0.000%
Transient Marina Slips	9	1.2%
Totals	723	100%
<i>Sources: US Census Summary File 3, Table H1, Housing Summary and Table H33, Population by Units in Structure by Tenure. Estimates by The Wooten Company. The number of 'Hotel, Motel, B&B and transient marina slips' provided by the Edenton Area Chamber of Commerce.</i>		

As new waterfront development and tourism increases, a higher proportion of seasonal housing units is expected in future years.

3.1.3 Local Economy

A. Economic Trends

Edenton is the employment center for Chowan County. The economy of the area provides a diverse range of employment opportunities, including retail trade, services, governmental, education, manufacturing, healthcare, construction and management. The county's major employment sectors are healthcare and social assistance and manufacturing. Retail trade and education sectors make up a large number of employment opportunities as well. Fourth quarter 2005 employment data from the NC Department of Commerce for Chowan County indicate that private industry employment accounts for over 84 percent of all workers.

According to the NC Department of Commerce, the total population of the Chowan County workforce in 2005 was 6,955. According to the NC Employment Security Commission the total unemployed in April 2006 was 282 (4.0%), compared to the statewide rate of 4.1%. The number of new jobs announced in 2004 totaled 7 and the total amount of investment

announced was \$14,472,000. The number of new jobs announced for the first six months of 2005 totaled 42 and the total amount of investment announced was \$2,300,000. There were no announced closings and/or layoffs in 2004 and for the first six months of 2005.

Employment data contained in the 2000 U.S. Census indicate that 22.65 percent of the total County workforce was employed outside of Chowan County. For Edenton, the percentage of workers employed outside of Chowan County was slightly higher 24.9 percent.

B. Employment by Major Sectors

The following table provides a comparison of recent employment and wages data for Chowan County and the State of North Carolina.

<i>Table 16: Employment and Wages by Sector</i>						
Chowan County and the State Second Quarter 2005						
	Chowan County			North Carolina		
	Avg Emp	% Total	Avg Wkly Wage	Avg Emp	% Total	Avg Wkly Wage
Total All Industries	5,861	100.0	\$502	3,791,435	100.0	\$685
Total Government	917	15.6	\$726	654,514	17.3	\$765
Total Private Industry	4,944	84.4	\$483	3,136,921	82.7	\$688
Agriculture Forestry Fishing & Hunting	221	3.8	\$434	25,707	0.7	\$472
Mining	--	--	--	3,464	0.1	\$1,078
Utilities	--	--	--	14,381	0.4	\$1,369
Construction	264	4.5	\$480	222,493	5.9	\$616
Manufacturing	1,135	19.4	\$608	570,924	15.1	\$818
Wholesale Trade	235	4.0	\$491	168,623	4.4	\$972
Retail Trade	593	10.1	\$321	440,057	11.6	\$424
Transportation and Warehousing	146	2.5	\$737	135,026	3.6	\$685
Information	126	2.1	\$346	77,026	2.0	\$1,151
Finance and Insurance	135	2.3	\$530	140,481	3.7	\$1,519
Real Estate and Rental and Leasing	40	0.7	\$277	47,719	1.3	\$605
Professional and Technical Services	99	1.7	\$850	161,530	4.3	\$951
Management of Companies and Enterprises	--	--	--	63,507	1.7	\$1,888
Administrative and Waste Services	71	1.2	\$639	214,084	5.6	\$451
Educational Services	549	9.4	\$581	354,225	9.3	\$624
Health Care and Social Assistance	1,169	19.9	\$518	479,688	12.7	\$755
Arts, Entertainment and Recreation	33	0.6	\$259	43,977	1.2	\$434
Accommodation and Food Services	489	8.3	\$170	299,968	7.9	\$232
Other Services except Public Admin.	138	2.4	\$402	97,178	2.6	\$429
Public Administration	377	6.4	\$597	217,810	5.7	\$685
Unclassified	20	0.3	\$307	14,436	0.4	\$500

Source: NC Department of Commerce, County Economic Profile

C. Community Economic Activity

Major industry sector employers include education and health services, public administration, manufacturing, trade, transportation, and utilities. The table below delineates the major private sector employers in Chowan County in 2005:

<i>Table 17: Chowan County's Largest Private Sector Employers Ranked in Order According to Employment Size Fourth Quarter 2005</i>		
Name	Industry Description	Employment Range
East Carolina Health Inc.	Education & Health Services	250-499
The Moore Company (A CORP) Life Inc	Manufacturing Education & Health Services	100-249
Regulator Marine Inc	Manufacturing	100-249
Albemarle Boats Inc	Manufacturing	100-249
Economic Improvement Council Inc	Other Services	100-249
Britthaven of Edenton	Education & Health Services	100-249
Edenton Dyeing & Finishing LLC	Manufacturing	100-249
Mitek Industries	Manufacturing	100-249
J&J Peanut Company	Trade, Transportation, and Utilities	100-249
Colony Tire Corporation	Trade, Transportation, and Utilities	50-99
Seabrook Ingredients	Manufacturing	50-99
Carolina Classic Boats Inc	Manufacturing	50-99
United Parcel Services Inc	Trade, Transportation, and Utilities	50-99
Food Lion LLC	Trade, Transportation, and Utilities	50-99
Home Life Care Inc	Education & Health Services	50-99
Nixon Family Restaurant	Leisure and Hospitality	50-99
Albemarle Cotton Growers Cooperative	Other Services	50-99
Rose Stores Inc	Trade, Transportation, and Utilities	50-99
CA Perry & Son Inc	Trade, Transportation, and Utilities	50-99
Leary Plant Farm Inc	Natural Resources and Mining	50-99

Sources: NC Department of Commerce and Chowan County

Tourism is increasingly becoming an important part of the local economy. According to data from the NC Department of Commerce, domestic tourism in Chowan County generated an economic impact of \$15.36 million in 2004. This was a 9.4 percent increase over 2003. More than 160 jobs in Chowan County were directly attributable to travel and tourism. The travel industry generated a \$2.71 million payroll in 2004. State and local tax revenues from

travel amounted to \$1.82 million. In 2004, Chowan County ranked 84th in travel impact among the States 100 counties.

The total valuation of real, personal, and public service company property in Chowan County totaled \$807,993,226.00 for fiscal year 2004-2005. Real property constitutes approximately 77 percent of the total county-wide valuation. The Town of Edenton total valuation for 2004-2005 was \$262,275,528.00. Edenton comprised approximately 32 percent of the total Chowan County valuation.

*Table 18:
Real Property Valuations and Tax Rates*

	2004-2005 Taxable Real Property Valuation	2005-2006 Tax Rate (per \$100)	Equalized Tax Rate* (per \$100)
County			
Bertie County	\$693,969,783	\$0.78	\$0.7387
<i>Chowan County</i>	<i>\$621,325,155</i>	<i>\$0.78</i>	<i>\$0.5677</i>
Gates County	\$368,759,008	\$0.87	\$0.6200
Hertford County	\$814,659,961	\$0.91	\$0.8756
Perquimans County	\$665,334,602	\$0.67	\$0.5820
Washington County	\$395,230,603	\$0.79	\$0.7900
Municipality			
Elizabeth City	\$529,300,053	\$0.67	\$0.4352
<i>Edenton</i>	<i>\$199,126,375</i>	<i>\$0.43</i>	<i>\$0.3130</i>
Hertford	\$62,513,200	\$0.49	\$0.4256
Morehead City	\$823,908,327	\$0.38	\$0.2956
Plymouth	\$88,051,720	\$0.55	\$0.5500
Washington	\$423,248,929	\$0.55	\$0.4929
Windsor	\$88,134,043	\$0.15	\$0.1421

Source: NC Department of Revenue, Tax Research Division

* Equalized rates are adjusted county and municipal rates which aid in comparison of jurisdictions. As counties are on various revaluation cycles, the ratio of assessed value to the actual value differ. These differences are adjusted by applying the sales assessment ratio (the ratio of selling price of property to the assessed value of property) to the tax rate to obtain an equalized rate. No special district tax rates are included in the adjustment.

Building permit data indicate that a total of 243 nonresidential building permits were issued between 1999 and 2005, an average of approximately 35 permits per year. In 2000, the County and Town building inspection programs were consolidated into a joint program. Available nonresidential building permit data is very generalized and is not maintained on a separate jurisdictional basis.

D. Commuting Patterns

Data from the US Census indicate that in 1970 and 1980 there were more workers coming into Chowan County for jobs than were leaving the county for work. However, in 1990 and 2000 the number of workers commuting to jobs outside of Chowan County exceeded the number commuting into the county. As shown in the following table, the largest numerical increase in workers commuting into Chowan County occurred between 1990 and 2000, while the largest percentage of increase occurred between 1970 and 1980.

<i>Table 19: Commuting Patterns 1970-2000</i>				
	1970	1980	1990	2000
Incommuters	782	980	1,256	1,405
Outcommuters	617	797	1,308	1,695
Net Number Commuting Into Chowan County	165	183	-52	-290

Sources: US Census Bureau and the US Bureau of Economic Analysis

As shown in the following table, the overall percentage of all Chowan County workers employed within their county of residence in 2000 is slightly higher than the statewide average 77.3% compared to 75.1%. While the percentage of all Chowan County workers employed outside their county of residence is lower than the statewide average, the percentage of workers employed outside their state of residence is much higher than the statewide average. This is mostly attributable to the close proximity of the State of Virginia and the Tidewater employment market. Of the 442 Chowan County workers employed outside of North Carolina in 2000, 385 or approximately 87 percent worked in Virginia.

<i>Table 20: Place of Work--Workers 16 years of age or older 2000</i>						
	Chowan County		Edenton		North Carolina	
	Number	Percent	Number	Percent	Number	Percent
Worked in State of Residence	5,532	92.6%	2,098	98.4%	3,762,169	98.0%
Worked in County of Residence	4,279	77.3%	1,574	75.0%	2,826,122	75.1%
Worked outside County of Residence	1,253	22.7%	524	25.0%	936,047	24.9%
Worked outside State of Residence	442	7.4%	34	1.6%	75,604	2.0%
Total Workers	5,974	100.00%	2,132	100.00%	3,837,773	100.0%

Source: US Census 2000

The top five destinations for workers commuting outside of Chowan County in 2000 are Pasquotank County, Bertie County, Perquimans County, Gates County, and Washington County. As shown in the following table, the major destinations for workers that commute from Chowan County to jobs outside of the County have traditionally been the North Carolina counties immediately surrounding Chowan County. Since 1970, the Tidewater Virginia area has become less of a major destination for out commuters.

Table 21:
*Top 5 Destinations of Workers Commuting
Out of Chowan County*

1970	1980	1990	2000
Pasquotank Co.	Perquimans Co.	Pasquotank Co.	Pasquotank Co.
Perquimans Co.	Pasquotank Co.	Perquimans Co.	Bertie Co.
Norfolk	Washington Co.	Bertie Co.	Perquimans Co.
Gates Co.	Norfolk	Washington Co.	Gates Co.
Hertford Co.	Bertie Co.	Portsmouth	Washington Co.

Sources: US Census and US Bureau of Economic Analysis

In 2000, the overwhelming majority of North Carolina workers commuting into Chowan County came from five surrounding counties: Perquimans County (35.4%), Pasquotank County (16.4%), Washington County (12.4%), Bertie County (12.0%), and Gates County (11.5%). Out of state commuters in 2000 comprised approximately 1.3 percent of the total number of commuters into Chowan County.

3.1.4 Population Projections

A. Permanent Population Projections

Projections provided by the NC State Data Center indicate that the Chowan County population will continue to increase through the next several decades but at a slower rate. This projected trend of decreased growth rates also holds true for the neighboring counties as well as the entire state. The following table provides projected population figures for the County, Edenton, and each entity's planning jurisdiction.

Table 22:
Permanent Population Projections

	US Census	Certified Estimate July	Projections					
	2000*	2004	2005	2010	2015	2020	2025	2030
Chowan County	14,150	14,471	14,893	15,675	16,498	17,364	18,275	19,235
Town of Edenton Corporate Area	5,058	5,059	6,181	6,505	6,847	7,206	7,584	7,982
Town of Edenton Planning Jurisdiction	6,208*	n/a	7,114	7,487	7,880	8,294	8,730	9,188
Chowan County Planning Jurisdiction	7,942	n/a	7,779	8,187	8,617	9,070	9,546	10,047

Sources: US Census, 2000. 2002 Certified population estimates, NC State Data Center, October 2003. County Population Growth 2000-2030, NC State Data Center, July 2004. Chowan County and Edenton projections by the Wooten Company based upon each community's average growth rate between 1970-2000.
*2000 Census (corrected numbers)

B. Seasonal and Peak Population

The impact of seasonal population is felt fairly evenly throughout the County. As shown in the following table, it is estimated that the seasonal population in Edenton in 2005 totaled 652 persons and resulted in a peak population of 5,711. The seasonal population for the unincorporated portion of Chowan County in 2005 is estimated to total 1,111 persons. For the County as a

whole, the 2005 seasonal population is estimated to total 1,793 persons thereby resulting in a peak population of 16,264. Countywide, peak population is estimated at approximately 112 percent of the permanent population.

*Table 23:
Seasonal and Peak Population Estimates
2005*

Edenton Corporate	Total	Persons per household	Population
Seasonal DU	47	2.37	111
Hotel, Motel, B&B	219	2.37	519
Campsites			
Transient Marina Slips	9	2.37	21
Totals			652
Seasonal Population 2005			652
Permanent Population 2005			5,059
Peak Population 2005			5,711
Peak to Permanent Ratio			112.88%
Unincorporated Chowan County	Total	Persons per household	Population
Seasonal DU	448	2.48	1111
Hotel, Motel, B&B			
Campsites			
Transient Marina Slips			
Totals			1,111
Seasonal Population 2005			1,111
Permanent Population 2005			9,412
Peak Population 2005			10,523
Peak to Permanent Ratio			111.80%
Total Chowan County	Total	Persons per household	Population
Seasonal DU	495	2.48	1228
Hotel, Motel, B&B	219	2.48	543
Campsites			
Transient Marina Slips	9	2.48	22
Totals			1793
Seasonal Population 2005			1,793
Permanent Population 2005			14,471
Peak Population 2005			16,264
Peak to Permanent Ratio			112.39%

Sources: US Census Summary File 3, Table H1, Housing Summary and Table H33, Population by Units in Structure by Tenure. Estimates by The Wooten Company. The number of 'Hotel, Motel, and B&B' units and transient marina slips provided by the Edenton-Chowan County Chamber of Commerce.

Based upon the estimated 2005 seasonal and peak population as delineated above and the assumption that the ratio of 12% seasonal population to permanent population will remain constant, the following projections have been prepared for the Chowan County and the Town of Edenton planning jurisdictions.

<i>Table 24:</i>						
<i>Seasonal and Peak Population Projections</i>						
Chowan County Planning Jurisdiction						
	2005	2010	2015	2020	2025	2030
Permanent Population	7,779	8,187	8,617	9,070	9,546	10,047
Seasonal Population (111.80%)	918	966	1,017	1,070	1,126	1,186
Peak Population	8,697	9,154	9,634	10,140	10,672	11,233
Town of Edenton Planning Jurisdiction						
	2005	2010	2015	2020	2025	2030
Permanent Population	7,114	7,487	7,880	8,294	8,730	9,188
Seasonal Population (112.88%)	916	964	1,015	1,068	1,124	1,183
Peak Population	8,030	8,452	8,895	9,362	9,854	10,371

Source: The Wooten Company, May 2006

3.1.5 Summary of Implications for Land Use and Development

Population, housing, and economic conditions and trends suggest that:

- While population projections indicate continued growth, long-term forecasts by the NC State Data Center project overall growth in the Chowan area as well as across the state will occur at a slower rate than in previous years.
- Anticipated population growth will result in increased demand for additional goods, services, and housing as well as public services—utilities, roads, schools, police and fire protection, recreational facilities, etc.
- Recent commuting data indicate that the majority of workers commuting into Chowan County for jobs are coming from surrounding counties rather than the Tidewater Virginia area. However, as highway improvements continue to provide for shortened commute times to the Tidewater area, more spillover growth from that area is expected.
- Much of the county's future residential growth is expected to be directly related to retirement-aged developments, particularly in waterfront areas. The Town of Edenton currently has a sizeable retirement-aged population and future residential development is anticipated to reflect the growth in that sector of the population.
- As the Chowan area becomes more of a retirement destination, positive impacts on the construction, services, and retail sectors of the local economy are anticipated.
- Tourism is anticipated to become an increasingly important part of the local economy. The demand for retail and commercial services as well as seasonal housing will increase. Increased opportunities for eco-tourism and commercial waterfront development are expected.

- As new waterfront residential development and tourism increases, a higher proportion of seasonal housing units is expected in future years. The conflict of public water access versus restricted private access will intensify as more and more of the area's waterfront is developed.
- Population growth and the demand for housing are expected to increasingly result in the conversion of farm land to residential land uses. The loss of agricultural land and the preservation of open space must be balanced with the provision of adequate land for dwellings.

3.2 Natural Systems Analysis

Subchapter 7B .0702(c)(2) requires that the land use plan describe and analyze the natural features and environmental conditions within Chowan County and Edenton to assess their capabilities and limitations for development. Section 3.2 provides an inventory of natural features; a description of a composite map of environmental conditions that shows the extent and overlap of natural features; and an assessment water quality, natural hazard, and natural resource conditions and features and their limitation or opportunity for land development. The 14-digit hydrological units delineated by the Natural Resources Conservation Service (see Figure 2) are used as the basic unit of analysis for natural systems.

3.2.1 Inventory of Natural Features

The inventory of natural features includes a description of Areas of Environmental Concern (AECs), soil characteristics, water quality classifications and use support designations, flood hazard areas, storm surge areas, non-coastal wetlands, water supply watersheds, and other environmentally fragile areas.

A. Areas of Environmental Concern

Areas of Environmental Concern within the Chowan County area include the following:

Public Trust Waters

All waters of the Atlantic Ocean and submerged lands where the public has rights of use and/or ownership. Public trust waters overlap with estuarine waters AEC but include inland fishing waters that are not within the estuarine waters AEC. Public trust waters in Chowan County include the Chowan River, Edenton Bay, Albemarle Sound, and all creeks.

Estuarine Waters

All waters of the Atlantic Ocean and all the water of bays, sounds, rivers, and tributaries thereto seaward of the dividing line between coastal fishing waters and inland fishing waters. Estuarine waters in Chowan County include the Albemarle Sound and all man-made tributaries, the Yeopim River (below Norcum Point), the Chowan River and Edenton Bay.

Estuarine Shoreline

The estuarine shoreline includes dry land up to 75 feet landward of abutting estuarine waters.

Coastal Wetlands

Any salt marsh or other marsh subject to regular or occasional flooding by tides, including lunar and wind tides, but not including hurricane nor tropical storm tides. The general location of coastal wetlands are depicted in Figures 2 and 2a. Coastal wetlands comprise approximately 47 acres of the Chowan County planning jurisdiction and less than 1 acre of the Edenton planning jurisdiction. The precise location of coastal wetlands must be determined by field investigation by the Division of Coastal Management.

Development within the designated Areas of Environmental Concern is limited by CAMA regulations and development guidelines. A map delineating AECs in Edenton and Chowan County is available for public review and inspection at the Edenton-Chowan Planning and Inspections Department.

B. Soil Characteristics

Generally, most of the soils in Chowan County have limitations for many urban uses due to wetness, low strength, and restricted permeability. Overall, for septic tank and light industrial uses, the soil types in most of the County have substantial limitations. Over 91 percent of all the soils in Chowan County are rated as having slight limitations for septic tank absorption fields. Site-specific soil analyses are required by the Albemarle Regional Health Services to evaluate the suitability of a particular parcel for a septic system. Centralized sewer facilities are needed to support intensive urban development.

Specific soil limitations data for sewage disposal, dwellings, and small commercial buildings are provided in [Appendix C](#). Soils that are classified as prime farmland and hydric are also delineated in [Appendix C](#).

Prime farmland soils are soils that are defined by the US Department of Agriculture as soils that have the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. Such soils have properties that favor the economic production of sustained high yields of crops. However, soils that are well suited to crops are also well suited to urban uses. The loss of prime farmland to other land uses puts pressure on marginal lands which are generally less productive and not as easily cultivated. It is estimated that approximately 50 percent of the total Chowan County land area contains soils that are identified as prime farmland, farmland of statewide importance, and farmland of unique importance. The largest concentrations of such classified soils are located in the northern, southeastern, and central portions of the Chowan County. An additional 28 percent of the County land area is classified as having prime farmland soils if those soils are drained.

Prime farmland, as defined by the US Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. Farmland of statewide importance includes land that does not meet all of the characteristics of prime farmland soils but are lands that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some may produce as high a

yield as prime farmlands if conditions are favorable. Farmland of unique importance includes land other than prime farmland that is used for the production of specific high-value food and fiber crops. It has the special combination of soil quality, growing season, moisture supply, temperature, humidity, air drainage, elevation, and aspect needed for the soil to economically produce sustainable high yields of specific high-value food and fiber crops. In North Carolina, soils on which blueberries are produced meet these requirements. Drained phases of the Leon, Lynn, and Murville series are examples of soils in this category. A map delineating prime farmland in Edenton and Chowan County is available for public review and inspection at the Edenton-Chowan Planning and Inspections Department.

A variety of mechanisms are currently available in North Carolina to assist with farmland preservation including:

- Voluntary agricultural district program
- Use value taxation
- Conservation easements
- Transfer of development rights
- Right to farm laws
- Large lot zoning

Hydric soils are soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to support the growth and reproduction of hydrophytic vegetation. Hydrophytic vegetation along with hydric soils and wetland hydrology are considered the three essential characteristics of wetlands. Consequently, the presence of hydric soils is one indicator of probable wetlands locations. The precise location of wetlands must, however, be determined through field investigation.

Soils data is important information for site planning purposes as well as for the formulation of public policies and regulatory mechanisms regarding infrastructure development and land use planning. More detailed data regarding the criteria for defining prime farmland and hydric soils as well as information regarding measures for mitigating particular soils limitations can be obtained at the local office of the Natural Resources Conservation Service.

Soils maps and data are available for public review and inspection at the Chowan Soil and Water Conservation District Office located in the Chowan Agriculture Building at 730 North Granville Street, Suite B, Edenton, NC.

C. Water Quality Classifications and Use Support Designations

Water Quality Classifications. All surface waters in North Carolina are assigned a primary water quality classification by the North Carolina Division of Water Quality under the authority of the Environmental Management Commission. Classifications are designations applied to surface water bodies that define the best uses to be protected within these waters, as required by the Clean Water Act. The most common primary classification within North Carolina is Class C, which protects waters for the propagation of aquatic life and for secondary recreation. Other primary freshwater classifications provide for additional levels of protection for uses consisting of

water supplies (Class WS-I through Class WS-V) and for primary recreation (Class B). Saltwater primary classifications are denoted as SC, SB, and SA.

In addition to the primary classification, one or more supplemental classifications may be assigned to specific surface waters to provide additional protection to waters with special uses or values. North Carolina's supplemental classifications include NSW (nutrient sensitive waters), Tr (trout waters), HQW (high quality waters), ORW (outstanding resource waters), and Sw (swamp waters).

All primary and secondary water quality classifications are described in the following table:

<i>Table 25: North Carolina Water Quality Classifications</i>	
Freshwater Primary Classifications	
Classification	Best Usage of Waters
C	Aquatic life propagation and maintenance of biological integrity (including fishing, and fish), wildlife, secondary recreation, agriculture and any other usage except for primary recreation or as a source of water supply for drinking, culinary, or food processing purposes. All freshwaters shall be classified to protect these uses at a minimum.
B	Primary recreation (which includes swimming on a frequent or organized basis) and any other best usage specified for Class C waters.
WS I - WS V	Source of water supply for drinking, culinary, or food-processing purposes for those users desiring maximum protection of their water supplies and any best usage specified for Class C waters.
Saltwater Primary Classifications	
Classification	Best Usage of Waters
SC	Aquatic life propagation and maintenance of biological integrity (including fishing, fish and functioning primary nursery areas (PNAs)), wildlife, secondary recreation, and any other usage except primary recreation or shellfishing for market purposes.
SB	Primary recreation (which includes swimming on a frequent or organized basis) and any other usage specified for Class SC waters.
SA	Shellfishing for market purposes and any other usage specified for Class SB or SC waters.
Supplemental Classifications	
Classification	Best Usage of Waters
HQW	High Quality Waters. Waters which are rated as excellent based on biological and physical/chemical characteristics through Division monitoring or special studies, native and special native trout waters (and their tributaries) designated by the Wildlife Resources Commission, primary nursery areas (PNAs) designated by the Marine Fisheries Commission and other functional nursery areas designed by the Marine Fisheries Commission.
NSW	Nutrient Sensitive Waters. Waters that experience or are subject to excessive growths of microscopic or macroscopic vegetation. Excessive growths are growths which the Commission determines impair the use of the water for its best usage as determined by the classification applied to such waters.
ORW	Outstanding Resource Waters. Unique and special surface waters of the state that are of exceptional state or national recreational or ecological significance that require special protection to maintain existing uses.
Sw	Swamp Waters. Waters which are topographically located so as to generally have very low velocities and other characteristics which are different from adjacent streams draining steeper topography.
Tr	Trout Waters. Waters which have conditions that shall sustain and allow for trout propagation and survival of stocked trout on a year-round basis.
<i>Source: NC Division of Water Quality</i>	

Chowan County is divided by two separate river basins, the Chowan River basin and the Pasquotank River Basin. The Chowan County waters within the Chowan River Basin include a variety of primary and secondary water quality classifications, including C, B, and NSW. All waters with the Chowan

River basin have a supplemental classification of NSW. The Chowan County waters within the Pasquotank River Basin include C, SC, SB, and Sw. [Table 25](#) includes a listing of the water quality classifications for the various water bodies in Chowan County.

Use Support Designations. Surface waters are classified according to their best intended uses. Determining how well a waterbody supports its uses (use support status) is an important method of interpreting water quality data and assessing water quality. Surface waters are currently rated supporting and impaired. These ratings refer to whether the classified uses of the water (such as water supply, aquatic life protection and recreation) are being met. For example, waters classified for fish consumption, aquatic life protection and secondary recreation (Class C for freshwater or SC for saltwater) are rated Supporting if data used to determine use support meet certain criteria. However, if these criteria were not met, then the waters would be rated as Impaired. Waters with inconclusive data are listed as Not Rated. Waters lacking data are listed as No Data.

In previous use support assessments, surface waters were rated fully supporting (FS), partially supporting (PS), not supporting (NS) and not rated (NR). FS was used to identify waters that were meeting their designated uses. Impaired waters were rated PS and NS, depending on their degree of degradation. NR was used to identify waters lacking data or having inconclusive data. The 2002 Integrated Water Quality Monitoring and Assessment Report Guidance issued by the EPA requested that states no longer subdivide the impaired category. In agreement with this guidance, North Carolina no longer subdivides the impaired category and rates waters as Supporting, Impaired, Not Rated or No Data.

In subbasin 03-01-03 and 03-01-04 of the Chowan River basin, all monitored waters are Supporting for aquatic life and primary recreation. Subbasin 03-01-52 is in the Pasquotank River basin and monitored waters are Supporting in the aquatic life category. However, waters are Impaired in the fish consumption category in subbasins 03-01-04 and 03-01-52 due to the Department of Health and Human Services Fish Consumption Dioxin Advisory for the Albemarle Sound and the mouth of the Chowan River.

The tables below provide more detailed information regarding use support ratings for each subbasin:

Table 26:
*Use Support Ratings for Monitored and Evaluated Freshwater Streams
Chowan River Basin*

Subbasin 03-01-03 Use Support Ratings	Aquatic Life		Recreation	
	Freshwater	Saltwater	Freshwater	Saltwater
Monitored Waters				
Supporting	14.1 miles		14.1 miles	
Total Monitored	14.1 miles		14.1 miles	
Unmonitored Waters				
No Data	17.1 miles		17.1 miles	
Total Unmonitored	17.1 miles		17.1 miles	
Total All Waters*	31.2 miles		31.2 miles	
Subbasin 03-01-04 Use Support Ratings				
Monitored Waters				
Supporting	9.1 miles 15,600.4 ac		7.8 miles 15,600.4 ac	
Not Rated	7.8 miles		0	
Total Monitored	16.9 miles 15,600.4 ac		7.8 miles 15,600.4 ac	
Unmonitored Waters				
No Data	58.9 miles 1,370.3 ac		68.1 miles 1,370.3 ac	
Total Unmonitored	58.9 miles 1,370.3 ac		68.1 miles 1,370.3 ac	
Total All Waters*	75.8 miles 16,970.7 ac		75.9 miles 16,970.7 ac	
*Total Monitored + Total Unmonitored = Total All Waters				
Source: Chowan River Basinwide Water Quality Plan, Draft 2007				

Table 27:
*Use Support Ratings for Monitored and Evaluated Freshwater Streams
Pasquotank River Basin*

Subbasin 03-01-52 Use Support Ratings	Aquatic Life		Recreation	
	Freshwater	Saltwater	Freshwater	Saltwater
Monitored Waters				
Supporting	25.0 miles	73,736.7 ac	7.9 miles	74,429.3 ac
Impaired **	7.9 miles (19.8%)	692.6 ac (0.9%)	0	0
Not Rated	7.1 miles	0	0	0
Total Monitored	40.0 miles	74,429.3 ac	7.9 miles	74,429.3 ac
Unmonitored Waters				
Not Rated	8.0 miles	14.7 ac	0	0
No Data	40.9 miles	18,220.6 ac	80.9 miles	18,235.3 ac
Total Unmonitored	48.9 miles	18,235.3 ac	80.9 miles	18,235.3 ac
Total All Waters*	88.9 miles	92,664.6 ac	88.8 miles	92,664.6 ac
*Total Monitored + Total Unmonitored = Total All Waters				
** The noted percent Impaired is the percent of monitored miles/acres only				
Source: Pasquotank River Basinwide Water Quality Plan, Draft 2007				

D. Flood Hazard Areas

The 100-year floodplain is land within a floodplain subject to a one percent or greater chance of flooding in any given year. Approximately 14% percent of the county's land area is within a 100-year floodplain. The most significant floodplains are located along the creeks and tributaries that feed into the Chowan River. The 100-year floodplain is delineated in [Figure 2](#).

The NC Floodplain Mapping Program has released official digital data only for the portion of Chowan County within the Pasquotank River Basin. Data for the portion of the county within the Chowan River Basin is due for release in 2009. As no digital floodplain data exists for the Chowan County River Basin, The Wooten Company created a dataset for the purposes of CAMA Modeling and for use in the Natural Features Map.

E. Storm Surge Areas

Maps delineating hurricane surge inundation areas have been provided to Chowan County and Edenton by the Division of Coastal Management. Storm surge is the rise in sea level caused by water being pushed towards land by hurricane winds. The storm surge inundation areas are based upon National Hurricane Center model maps and have been recompiled by the North Carolina Center for Geographic Information and Analysis. Surge inundation areas have been mapped to illustrate the extent of hurricane-induced flooding based upon slow moving (forward velocity less than 15 mph) and fast moving (forward velocity greater than 15 mph) category 1 and 2, category 3, and category 4 and 5 hurricanes.

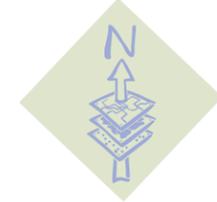
Storm surge areas for fast moving hurricanes are shown in the [Figure 2](#). The areas subject to storm surge inundation delineated on this map are based upon the most intense storm intensity and storm speed. Under this worst-case scenario, a fast-moving category 4 or 5 hurricane, approximately 14 percent of the County's land area is subject to flooding from a storm surge. More detailed storm hurricane surge maps are available for review in the offices of the Town of Edenton and Chowan County Planning Departments.

Flooding as well as high winds would impact the Chowan County area during a major coastal storm. The table below describes the impact of the various categories of hurricanes:

Category	Winds	Storm Surge	Damage Expected
Category 1	74-95 MPH	4-5 Feet	Minimal Damage
Category 2	96-110 MPH	6-8 Feet	Moderate Damage
Category 3	111-130 MPH	9-12 Feet	Extensive Damage
Category 4	131-155 MPH	13-18 Feet	Extreme Damage
Category 5	155+ MPH	18+ Feet	Catastrophic Damage

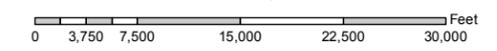
Chowan County, NC

Figure 2:
Natural Features Maps, including Storm
Surge, Floodplains and Sub-watersheds
Figure 3:
Environmental Conditions Composite Map



THE WOOTEN COMPANY
ENGINEERING | PLANNING | ARCHITECTURE

October 17, 2007



The preparation of this map was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the Coastal Zone Management Act of 1972, as amended, which is administered by the Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration.

Figure 2

Natural Features Map

- Sub-River Basins
- Edenton Corporate Limits
- Edenton Extraterritorial Jurisdiction
- ▲ NPDES
- Edenton National Fish Hatchery
- Beneficial Non-Coastal Wetlands
- Significant Natural Heritage Areas
- Coastal Wetlands
- Estuarine Waters
- Closed Shellfish Harvesting Area
- Lands Managed for Conservation & Open Space
- Exceptional & Substantial Non-Coastal Wetlands

This map is a guide that illustrates the general location of wetlands. The specific location of wetlands must be determined by field investigation.

Functionally, all waters of the Chowan River (proper) Edenton Bay and Albemarle Sound that border Chowan County are considered estuarine waters. The Natural Features Map uses the more narrowly construed definition provided by the Division of Coastal Management for modeling purposes. These have been defined as all salt waters classified as "SA", "SB", or "SC" by the Division of Water Quality."

Floodplain Map

- Sub-River Basins
- Edenton Corporate Limits
- Edenton ETJ
- 100 Year Floodplain*
- Estimated 100 Year Floodplain**

*100 year floodplain data was provided by the NC Floodplain Mapping Program for the portion of the county within the Pasquotank River Basin. The Final Basin Plan for the Pasquotank River was completed June 12, 2002.
**No official digital flood data exists for the Chowan River Basin. This necessitated the creation of an estimated 100 year floodplain dataset for CAMA modeling. The Wooten Company derived this dataset from LIDAR elevation data; detailed methodology is provided in the document text and in the dataset's metadata.

Storm Surge Map

- Edenton Corporate Limits
- Sub-River Basins
- Edenton ETJ
- Storm Surge (fast)**
- Categories 1 & 2
- Category 3
- Categories 4 & 5

Sub-River Basins Map

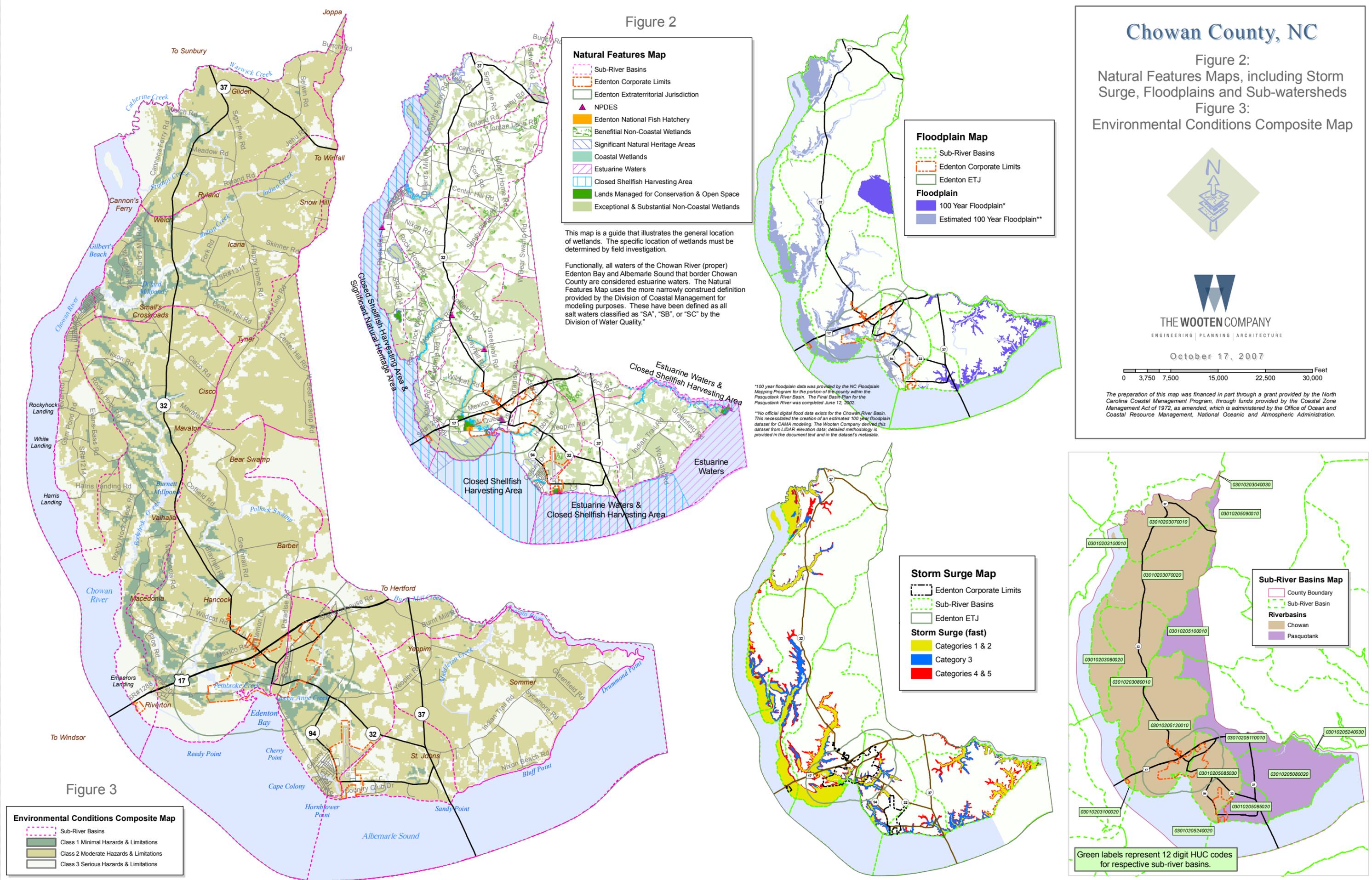
- County Boundary
- Sub-River Basin
- Riverbasins**
- Chowan
- Pasquotank

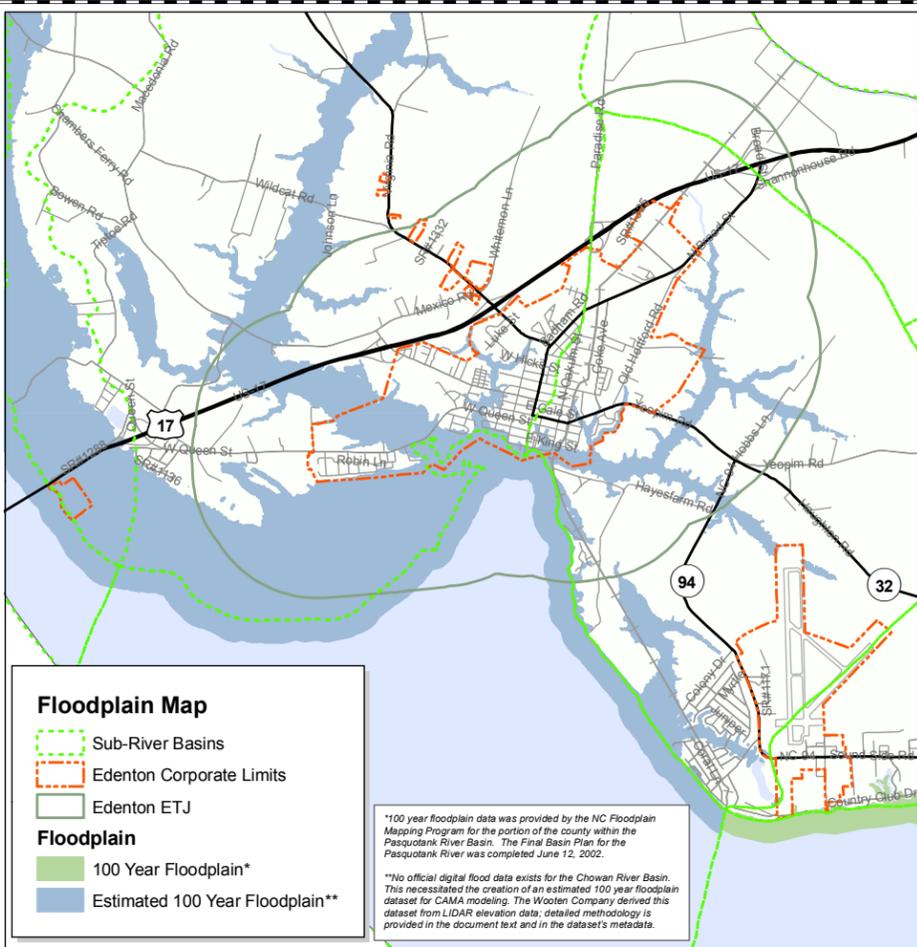
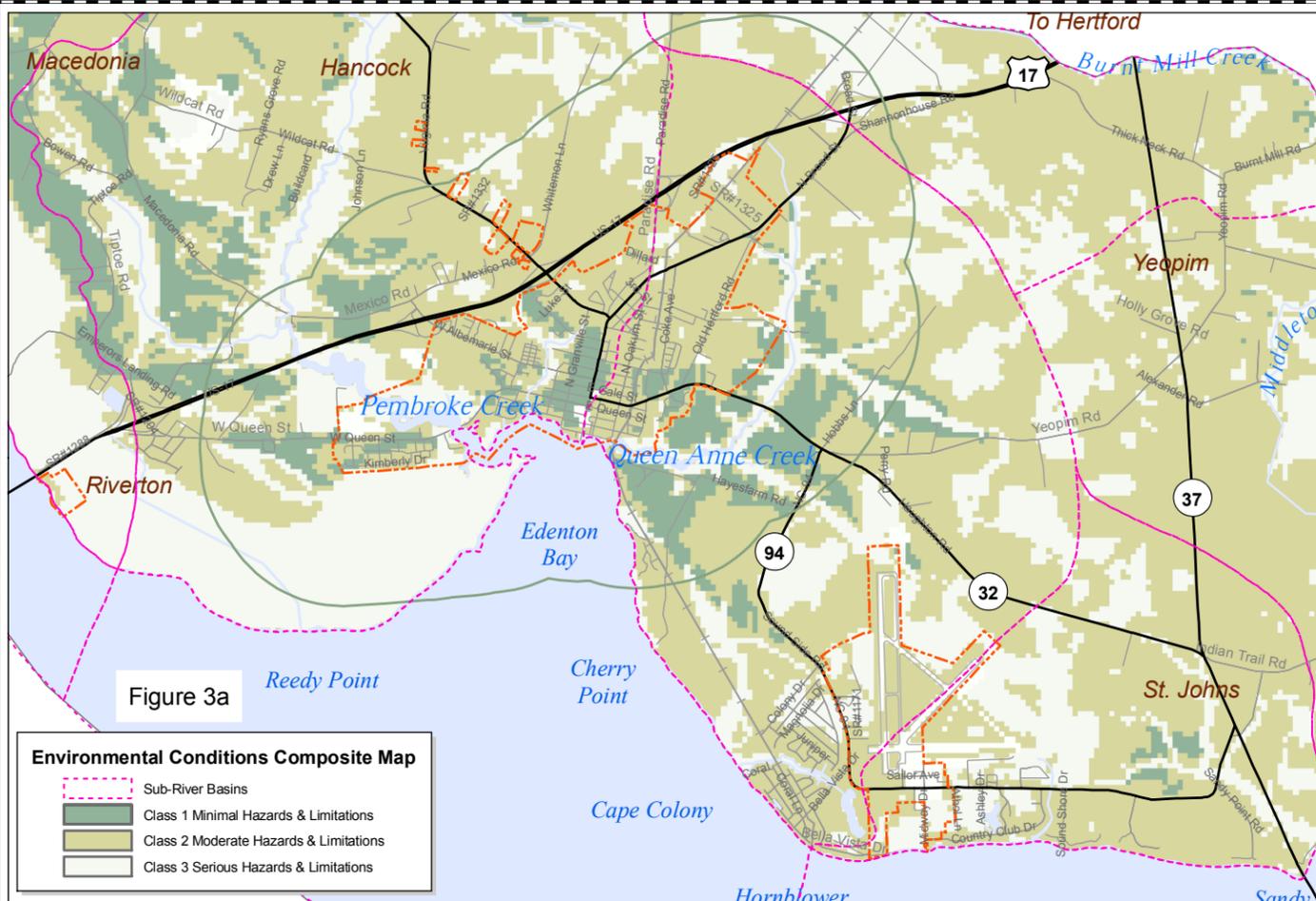
Green labels represent 12 digit HUC codes for respective sub-river basins.

Figure 3

Environmental Conditions Composite Map

- Sub-River Basins
- Class 1 Minimal Hazards & Limitations
- Class 2 Moderate Hazards & Limitations
- Class 3 Serious Hazards & Limitations



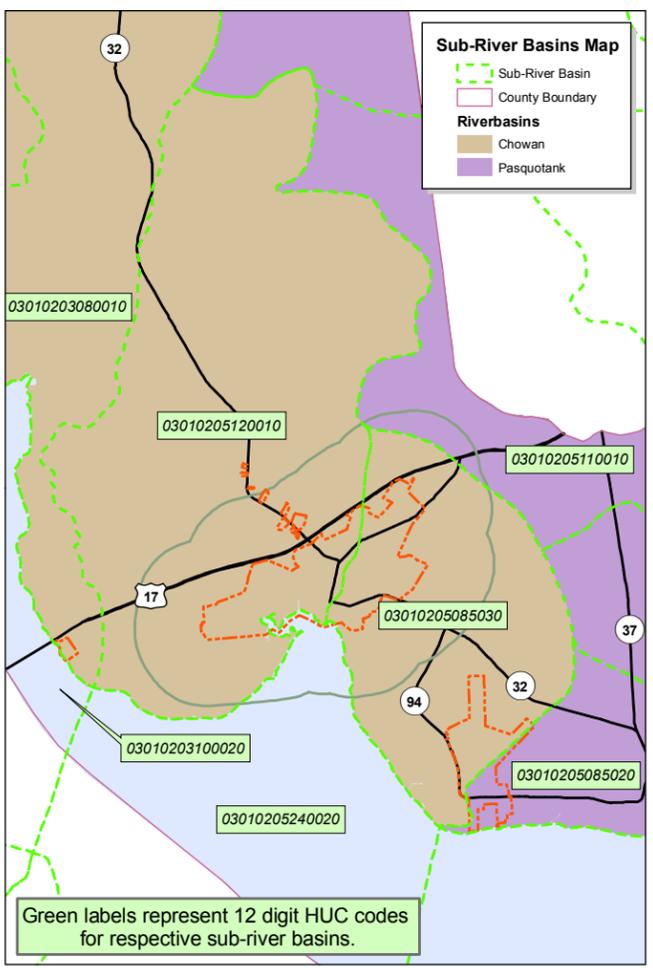
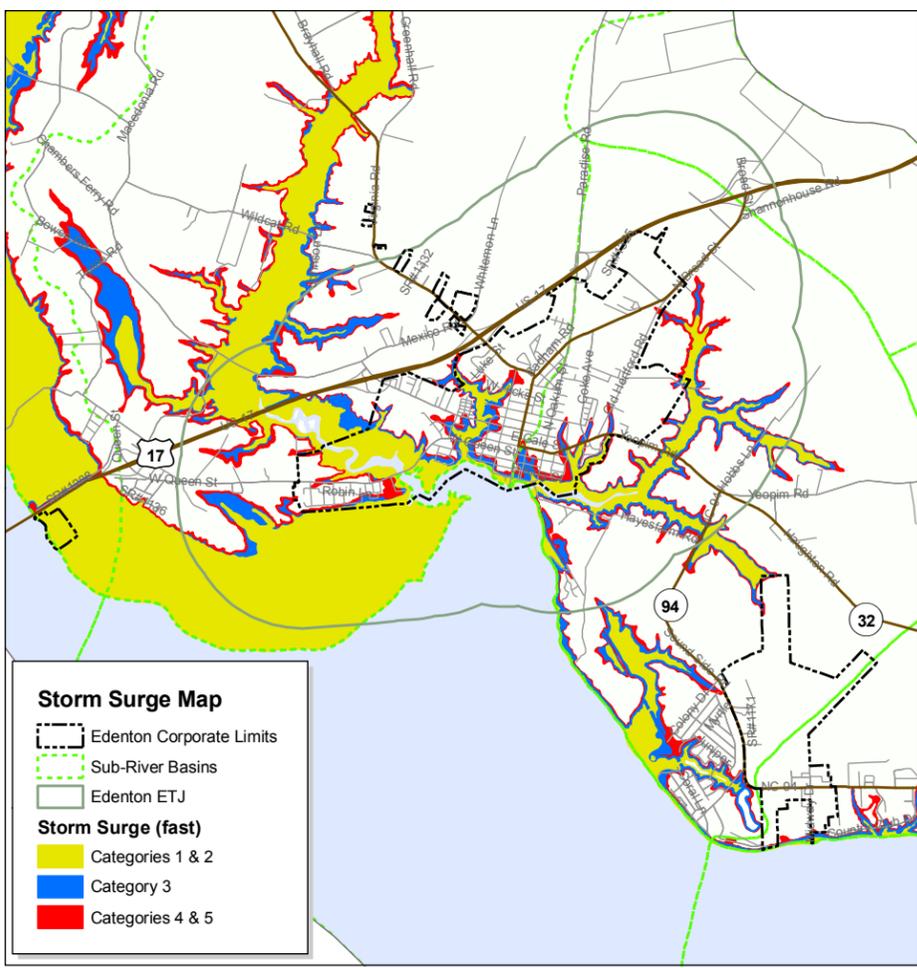
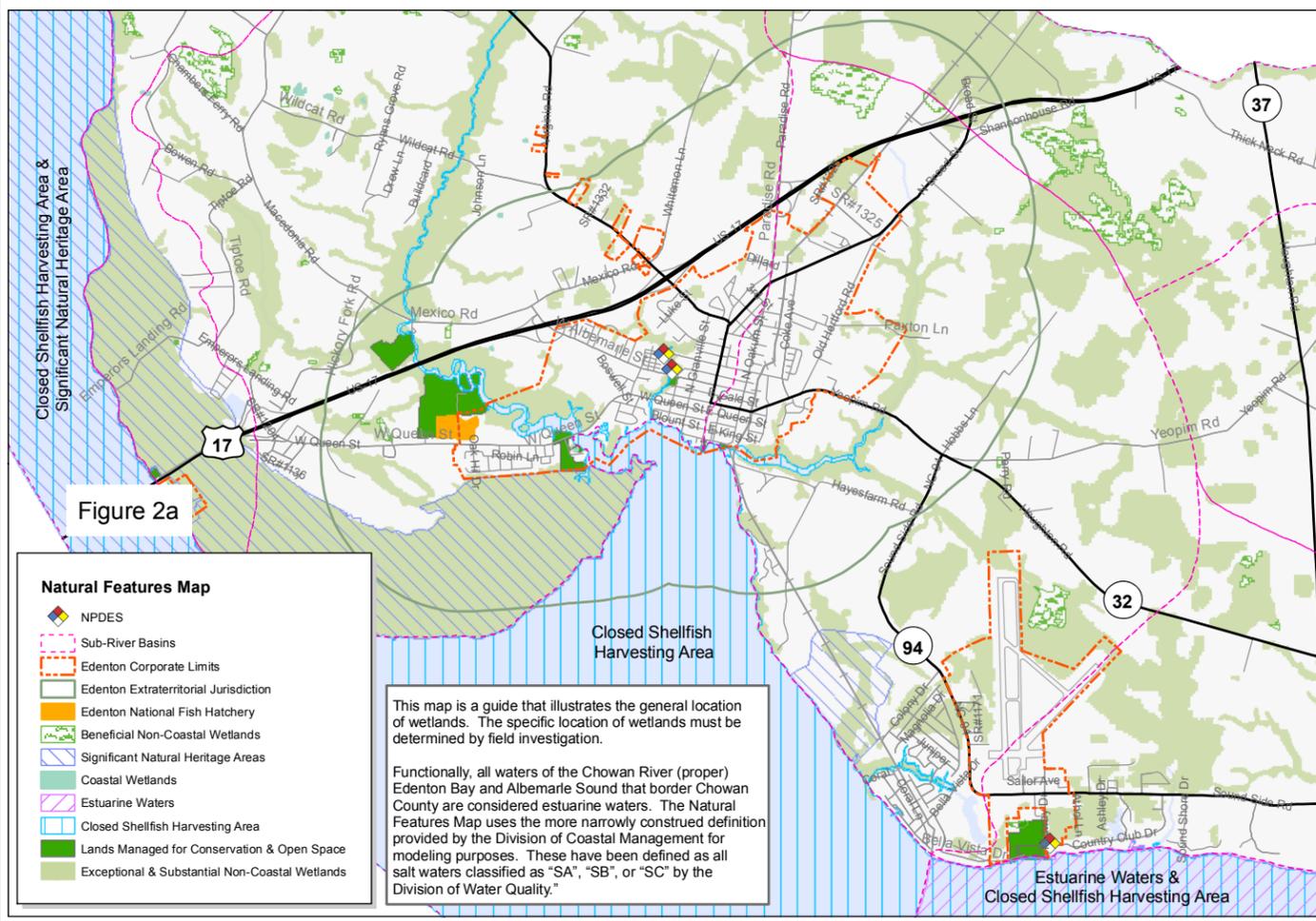


Edenton, NC

Figure 2a:
Natural Features Maps, including Storm Surge, Floodplains, and Sub-watersheds
Figure 3a:
Environmental Conditions Composite Map

October 17, 2007

The preparation of this map was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the Coastal Zone Management Act of 1972, as amended, which is administered by the Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration.



While the identified hurricane storm surge inundation areas often parallel the [100-year flood hazard area shown in Figure 2](#), there are some additional portions of Chowan County and Edenton that are particularly subject to Category 4 and 5 hurricane-induced flooding. These areas are generally located in along the Chowan River front and all rivers and tributaries that feed into the Chowan River.

F. Non-coastal Wetlands

Non-coastal wetlands include all other wetlands not classified as coastal wetlands. These non-coastal wetlands are not covered by CAMA regulations (unless the Coastal Resource Commission designates them as a natural resource AEC) but are protected by the Clean Water Act. Consequently, the US Army Corps of Engineers is responsible for regulating these 'Section 404' or freshwater wetlands. Authorization must be obtained from the Corps prior to disturbing such wetlands. As with coastal wetlands, the precise location of non-coastal wetlands can only be determined through a field investigation and analysis. The general location of coastal and non-coastal wetlands is shown on the [Natural Features Map, Figure 2](#). Major non-coastal wetlands areas are located in the northwestern, western, and south central portions of Chowan County. Non-coastal wetlands account for approximately 28.2 percent of the total Chowan County land area.

G. Public Water Supply Watershed

There are no public water supply watersheds within Chowan County.

H. Primary Nursery Areas

Primary Nursery Areas are designated in rule by the Marine Fisheries Commission. The North Carolina Division of Marine Fisheries is responsible for preserving, protecting, and developing Primary Nursery Areas for commercially and recreationally important finfish, invertebrates, and shellfish.

No Primary Nursery Areas have been identified within the waters of Chowan County. However, the Division of Marine Fisheries has identified and documented Anadromous Fish Spawning Areas (AFSA) in Chowan County. The NC Marine Fisheries Commission is currently in the rule making process of designating these areas in the rule. Many of the AFSA in the waters of Chowan County are in Inland Waters, under the jurisdiction of the NC Wildlife Resources Commission (NCWRC). The Division is recommending that the NCWRC pursue designation of the documented AFSA under its jurisdiction. The waters of the Chowan River and its tributaries, as well as the near shore waters of the Albemarle Sound, serve as nursery area for anadromous species (striped bass, blueback herring, alewife, American shad and hickory shad), resident species (white perch, yellow perch, catfishes, etc.) and estuarine dependent species (spot, croaker, striped mullet, southern flounder, blue crabs, etc.).

Submerged Aquatic Vegetation is also found in the waters around Chowan County. This type of habitat is not only important to the species listed above but also to forage species. The [NC Coastal Habitat Protection Plan \(2005\)](#) identified Submerged Aquatic Vegetation as one of critical habitat types in North Carolina.

I. Other Environmentally Fragile Areas

Significant Natural Heritage Areas

One of the key functions of the North Carolina Natural Heritage Program is identification of the most important areas for the natural diversity of our State. These 'Significant Natural Heritage Areas' (SNHA) may derive their significance from the presence of rare species, rare or high quality natural communities, or other important ecological features. The SNHAs are summarized below, with the names in italics. The designation of a Significant Natural Heritage Area conveys no protection status. Many of these significant natural heritage areas are privately owned, and not protected.

Cherry Point Woods is considered of regional significance for a high quality example of the Mesic Mixed Hardwood Forest natural community -- one of the best in the region.

Chowan River Aquatic Habitat is state significant, and contains habitat for an assemblage of rare mollusks, including Tidewater mucket (*Leptodea ochracea*), Triangle floater (*Alasmidonta undulata*), alewife floater (*Anodonta implicata*), Eastern lampmussel (*Lampsilis radiata*), and Eastern pondmussel (*Ligumia nasuta*).

Chowan Swamp is considered of state significant for one of the most extensive mature Tidal/Nonriverine Swamp Forest complexes in the state. The site contains one of the few known examples in the state for the Freshwater Variant of the Tidal Freshwater Marsh natural community.

Drummond Point Woods is state significant for Cluster of natural tidal and upland natural communities, with bald eagle (*Haliaeetus leucocephalus*) nesting site. Natural communities include Tidal Cypress-Gum Swamp, Coastal Plain Semipermanent Impoundment, and Mesic Mixed Hardwood Forest.

Gallberry Swamp is regionally significant for a fair quality example of the globally rare Nonriverine Swamp Forest natural community.

Lower Indian Creek Swamp and Ravine is considered of regional significance for its combination of good quality natural communities, including Tidal Freshwater Marsh, Tidal Cypress--Gum Swamp, and Dry-Mesic Oak--Hickory Forest.

Reedy Point Swamp is regionally significant and contains a good example of Pond Pine Woodland natural community. This example is among the best in the region north of Albemarle Sound.

Rocky Hock Swamp Forest is state significant, and contains the only known population of whiskfern (*Psilotum nudum*) population in North Carolina; this represents a significant range extension for the species. This site contains a not-well-developed example of the rare Nonriverine Swamp Forest natural community, and could be the only protected forest community on mineral soils in Chowan County.

Snow Hill Bay is regionally significant for an unusual example of Nonriverine Swamp Forest natural community.

Warwick Creek Oak Flats and Slopes is county significant for fairly good quality examples of Mesic Mixed Hardwood Forest and Cypress--Gum Swamp natural communities. The site significance has been reduced since the 1990 report by recent clearcutting and field clearing.

These areas serve as important natural vegetated buffers and provided wildlife habitat. The general locations of Natural Heritage Areas are shown on the [Natural Features Map, Figures 2 and 2a](#). A larger map delineating the general location of SNHAs in Edenton and Chowan County is available for public review and inspection at the Edenton-Chowan Planning and Inspections Department. [Appendix F](#) contains an inventory of natural areas and rare species found in Chowan County.

Many of the creek/swamps that are listed are also areas documented as Anadromous Fish Spawning Areas (AFSA). As indicated in Section H above, the waters of the Chowan area are important as spawning areas and areas of this type are also important to water quality.

3.2.2 Composite Environmental Conditions Map

Subchapter 7B .0702(c)(2)(B) requires that the land use plan include an environmental conditions composite map that shows the extent and overlap of natural features such as AECs, soil characteristics, water quality classifications, flood hazard areas, storm surge areas, non-coastal wetlands, primary nursery areas, and other environmentally fragile areas. The composite map must show, based on the local government's determination of the capabilities and limitations of these natural features and the conditions for development, three categories of land which include the following:

- **Class I** is land that contains only minimal hazards and limitations for development which can be addressed by commonly accepted land planning and development practices. Class I land will generally support the more intensive types of land uses and development.
- **Class II** is land that has hazards and limitations for development that can be addressed by restrictions on land uses, special site planning, or the provision of public services, such as water and sewer. Land in this class will generally support only the less intensive uses, such as low density residential, without significant investment in public services.
- **Class III** is land that has serious hazards and limitations for development or lands where the impact of development may cause serious damage. Land in this class will generally support very low intensity uses, such as conservation and open space.

The table below delineates the environmental features which are included in each land class for the Chowan County Environmental Conditions Composite Map:

**Table 29:
Environmental Features within Land Classes**

Feature	Class I	Class II	Class III
Coastal Wetlands			☐
Exceptional or Substantial Non-Coastal Wetlands			☐
Beneficial Non-Coastal Wetlands	☐		
Estuarine Waters			☐
Soils with Slight or Moderate Septic Limitations	☐		
Soils with Severe Septic Limitations		☐	
100-Year Flood Hazard Areas		☐	
Storm Surge Areas		☐	
Public Water Supply Watersheds		☐	
Significant Natural Heritage Areas		☐	
Protected Lands			☐
HQW/ORW Watersheds	Data not available		
<i>* The default weight measures provided by DCM were used in this model</i>			

Based upon the environmental conditions assigned to each land class as delineated in the above table, the majority (64 percent) of the total land area in Chowan County falls into Class II, which is land with moderate environmental conditions. Class I lands account for approximately 8 percent of the County's land area and are considered to be minimally limited. Class III lands, severe limitations, represent 28 percent of the county. The high percentage of area classified as least suitable for development is primarily a result of poor soils suitability for septic system utilization. The distribution of environmental conditions within the Chowan County Planning Jurisdictional area approximately mirrors that for the total county land area. However, the Edenton Planning Jurisdictional area contains a higher percentage of Class I lands (15 percent) and a lower percentage of Class II lands (58 percent). Both jurisdictional areas contain the same percentage (28%) of Class III lands.

The [Environmental Conditions Composite Map, Figure 3](#) is a very general depiction of the three land classes as defined above. The model utilized to produce this map uses one acre of land area to delineate a pixel or cell on the map. Consequently, the information provided by this map is intended to show generalized patterns and is not intended for permitting or regulatory purposes.

3.2.3 Assessment of Environmental Conditions

A. Water Quality Assessment

Chowan County is divided by two River basins, the Pasquotank River Basin and the Chowan River Basin. These basins lie within the Coastal Plain Physiographic Region. The geology of this area consists of alternating layers of sand, silt, clay, and limestone. The land is relatively flat sloping downward at a rate of only a few feet per mile. The average drainage area per stream

mile in the Chowan Basin is 1.75 square miles, the Pasquotank Basin is 0.13 square mile, the lowest drainage density per stream mile in the state. Areas with low drainage density are characterized with low flood peaks, low sediment production, and relatively high suitability for traditional agriculture.

Chowan County is within subbasins 03-01-03, 03-01-04 and 03-01-52. The northern portions of Chowan County are within subbasin 03-01-03. The County comprises approximately 9% of this subbasin. The central portion of Chowan County, including the Town of Edenton, are also with subbasin 03-01-04. The County comprises approximately 12.9% of this subbasin. The eastern portions of Chowan County are within subbasin 03-01-52. The County comprises approximately 14.9% of this subbasin. The majority of subbasin 03-01-52 is within Perquimans County.

*Table 30:
General Characteristics of Subbasins*

Area and Population	Chowan Basin	Subbasin	Subbasin	Pasquotank	Subbasin
		03-01-03	03-01-04	Basin	03-01-52
Area (Sq. Miles)					
Total Area	1,373	123	177	3635	541
% Total Area	100%	9.0%	12.9%	100.0%	14.9%
Total Land Area	1,312	100	122	2130	399
% Total Land Area	100%	7.6%	9.3%	100	18.73%
Total Water Area	81	23	45	1504	142
% Total Water Area	100%	28.4%	55.6%	100.0%	9.4%
Population					
1990 Population	62,474	4,731	10,146	97,215	18,399
% 1990 Population	100%	7.6%	16.2%	100.0%	18.9%
Population Density (persons per sq. mile)	48	47	67	46	46

Source: These figures are from the Pasquotank River Basin Water Quality Plan, July 2002 & Chowan River Basin Water Quality Plan, July 2002

*Table 31:
Land Cover of Subbasins*

Type of Land Cover	Pasquotank Basinwide	Subbasin 03-01-52	Chowan Basinwide	Subbasin 03-01-03	Subbasin 03-01-04
Forest/Wetland	38.0%	32.0%	56.7%	40.0%	41%
Surface Water	41.0%	28.0%	9.7%	19.0%	25%
Urban	1.0%	<1%	2.4%	<1%	<1%
Cultivated Crop	19.0%	39.0%	30.3%	40.0%	31%
Pasture/Managed Herbaceous	1.0%	1.0%	0.7%	<1%	2%

Source: These figures are from the Pasquotank River Basin Water Quality Plan, July 2002 & Chowan River Basin Water Quality Plan, July 2002

Water quality is generally good within the Pasquotank and Chowan River Basins. The main water quality issue within the Pasquotank River Basin is habitat degradation, including loss of riparian vegetation, channelization, and erosion. Nonpoint source surface runoff is a threat to water quality for both the Chowan and Pasquotank River basins.

Subbasin 03-01-03. *The July 2002 Basinwide Assessment Report for the Chowan-Pasquotank River Basin* noted that phytoplankton blooms were a frequent problem in this portion of the Chowan River, especially from 1970-1978. Reduction in nutrient inputs has led to a steady decline in both the frequency and intensity of algal blooms.

The 1997 Chowan River Basin Plan considered this section of the Chowan river was considered to be impaired as a result of the excessive algae blooms. The 2002 basin plan noted that this subbasin is currently fully supporting. DWQ recommends the continued issuance of permits for point sources using the Nutrient Sensitive Waters (NSW) management strategy that involves nitrogen and phosphorus limits and land application requirements.

Subbasin 03-01-04. *The July 2002 Basinwide Assessment Report for the Chowan-Pasquotank River Basin* noted that this portion of the Chowan River is influenced by the intrusion of brackish water during low-flow periods. Phytoplankton blooms were a frequent problem in this portion of the Chowan River, reductions in nutrient inputs has led to a steady decline in both the frequency and intensity of algal blooms.

The 1997 Chowan basin plan identified the mainstream of the Chowan River as impaired due to the nutrient concerns. Today this segment of the Chowan River is fully supporting.

Subbasin 03-01-52. *The July 2002 Basinwide Assessment Report for the Chowan-Pasquotank River Basin* noted that nonpoint source runoff seems to be the greatest problem in this subbasin. The nonpoint source pollution potential from cropland was determined to be moderate to high.

Burnt Mill Creek is currently not rated and is no longer considered impaired. DWQ will continue to develop biocriteria to better assess use supports in waters and swamp characteristics. However, monitoring data revealed some impacts to water quality. While the *2002 Basinwide Water Quality Plan* recommended no required action, voluntary implementation of Best Management Practices is encouraged and continued monitoring is recommended. Growth management techniques for mitigating the negative impacts of land development on water quality include limiting the amount of impervious cover and retaining and restoring vegetated riparian buffers and wetlands.

The following is updated water quality assessment data from the Draft 2007 Chowan River Basinwide Plan (May 2007) provided by the NC Division of Water Quality

Chowan River

Current Status

The Chowan River, from the subbasin 03-01-01 and 03-01-03 boundary to the subbasin 03-01-03 and 03-01-04 boundary (14.1 miles), is Supporting in the aquatic life category due to ambient water quality data collected at sites DA9 and DA10. No water quality standards were exceeded at either of the two ambient monitoring stations.

2007 Recommendations

DWQ will recommend removal of this segment of the Chowan River from the 303(d) list of impaired waters based on current noted water quality improvements. However, Edenton Dyeing and Finishing has a history of effluent limit violations; yet, even with recent monitoring and aquatic toxicity violations, the facility is not considered to be causing substantial harm to water quality. The DWQ regional office reports a new manager now operates the facility and compliance is attainable with improved facility management.

Albemarle Sound

The Albemarle Sound is Supporting in both the aquatic life and recreation categories. However, the waters are Impaired for fish consumption based on the dioxin advisory issued by the Department of Health and Human Services in 2001. Dioxins are the byproducts of industrial processes and are formed during the chlorine bleaching process at pulp and paper mills. The advisory is for the consumption of catfish and carp in the Albemarle Sound from Bull Bay to Harvey Point; West to the mouth of the Roanoke River and to the mouth of the Chowan River to the U.S. Highway 17 Bridge (Perquimans, Chowan, Bertie, Washington, and Tyrrell Counties). Women of childbearing age and children should not eat any catfish or carp from this area until further notice. All other persons should eat no more than one meal per month of catfish and carp from this area. For more information on this advisory please visit the DHHS website <http://www.epi.state.nc.us/epi/fish/>.

Chowan River [AU# 25c]

Current Status

The lower Chowan River, from the subbasin boundary to the Albemarle Sound (7.8 miles), is Not Rated+ in the aquatic life category. A Good benthic bioclassification at site DB14 was given based on draft Coastal B criteria. Coastal B rivers are defined as waters in the coastal plain that are deep (nonwadeable), freshwater systems with little or no visible current under normal or low flow conditions. Other characteristics may include an open canopy, low pH and low DO. Boat sampling is required for these waters. Any bioclassifications derived from sampling data should be considered draft and not used for use support decisions; therefore the lower Chowan River is Not Rated (BAU, July 2006).

Since 1983, the lower Chowan River has been sampled nine times. Bioclassifications have ranged from Fair to Good. Since 1995, the river has been rated using draft criteria for Coastal B rivers. The 2005 Good bioclassification is an improvement from the Good-Fair it received during 2000. The improvement was noted in the number of species collected in 2005 compared to 2000.

No water quality standards were exceeded at the ambient monitoring station (DA11); however, salinity values over 3.0 parts per trillion (ppt) have been recorded 10 percent of the time. Because salinity can be above 3.0 ppt, the lower Chowan River has historically been classified as both freshwater and oligohaline. Oligohaline is an estuarine classification for waters with salinity between 0.5 and 5.0 ppt. Due to the low salinity during this assessment period, however, the bioclassification at site DB14 was based on draft criteria for Coastal B rivers. The lower Chowan River will continue to be sampled as a freshwater site with saltwater intrusions from 0.5 to 5.0 ppt (oligohaline).

This segment of the Chowan River (7.8 mi.) is Impaired in the fish consumption category because of a dioxin advisory issued by the Department of Health and Human Services in 2001.

2007 Recommendations

Water quality conditions appear to be improving in the Chowan River, but AU # 25c will remain on the 303(d) list of impaired waters because of the dioxin advisory and until Coastal B rating criteria have been finalized and approved.

Pollock Swamp and Rockyhock Creek

Pollock Swamp drains to Edenton Bay and Rockyhock Creek is a tributary to the Chowan River, these waters were not monitored and are therefore not given a use support ratings. Water quality conditions are of concern here because Valhalla WTP (NC0032719) is discharging to an unnamed tributary to the Pollock Swamp when they are permitted to discharge to Rockyhock Creek. The facility is currently out of compliance with toxicity issues; the lagoon is leaking to old borrow pits on the south side and may be contaminating surface waters. The plant holds a temporary permit for the new discharge site, while the renewal permit is being processed for discharge into the unnamed tributary of Pollock swamp. The new permit will require toxicity monitoring. DWQ recommends the lagoon be repaired and excess solids be cleaned out.

Pollock Swamp drains into Pembroke Creek along the western edge of Edenton and Queen Ann's Creek flows along the eastern side of Edenton. Resource agencies have identified these creeks as priority in need of riparian buffers, stormwater wetlands and critical area plantings to improve water quality.

Division of Water Quality Conclusion Regarding Stormwater Rules and Water Quality

The Division of Water Quality has concluded that its current coastal stormwater rules have not adequately addressed water quality impacts to Public Trust Waters. Additionally, DWQ's review of scientific studies has resulted in a determination that local governments who simply defer to state and federal rules to address water quality issues results in impaired water quality based on the following conclusions:

- 10% impervious or greater areas can be linked to local stream degradation.

- Biological diversity has been shown to drop when areas of impervious surface increases beyond 10% - 15%.
- Stream stability is affected when impervious surface approaches 10% in an area.
- Estuaries generally degrade after 10% impervious surface area occurs.
- Sensitive fish species loss increases after about 12%.

Chronic Wastewater Treatment System Malfunctions

There are no reports of areas experiencing chronic wastewater treatment system malfunctions.

B. Impaired Waters

Section 303(d) of the Clean Water Act requires states to develop a list of waters not meeting water quality standards or which have impaired uses. Listed waters must be prioritized and a management strategy or total maximum daily load must subsequently be developed for all listed waters.

As noted in Table 27, the draft 2007 Pasquotank River Basinwide Plan identified impaired waters within a portion of subbasin 03-01-52 located outside of Chowan County in Perquimans and Pasquotank Counties. The identified impaired waters include a 7.9-mile section of Little River from SR 1225 to Halls Creek.

C. Closed Shellfishing Areas

The North Carolina Shellfish Sanitation and Recreational Water Quality Section of the Department of Environment and Natural Resources is responsible for protecting the consuming public from shellfish and crustacea which could cause illness. Rules and regulations following national guidelines have been implemented to ensure the safety of harvesting waters and the proper sanitation of establishments which process shellfish and crustacea for sale to the general public. Waters are sampled regularly and closed if levels of fecal coliform indicate that harvesting shellfish from those waters could cause a public health risk.

The majority of the waters in and around Chowan County are closed to shellfishing. The Chowan River is closed to shellfishing, as well as all waters west of Bluff Point in the Albemarle Sound. Those waters east of Bluff Point are open to shellfishing, with the exception of the Yeopim River. Closed shellfishing areas are delineated in [Figure 2, Natural Features Map](#). These waters have been closed to shellfishing for many years. There are no major productive shellfishing areas in Chowan County.

Land uses that potentially adversely impact shellfishing waters include the conversion of undeveloped and underdeveloped land to more intensive land uses, wastewater treatment plants, industrial uses, and the intensive urban development in and near the downtown waterfront. Increased stormwater runoff from developed uses also can adversely impact shellfishing waters.

D. Natural Hazards

The table below provides information concerning the major hurricane and tropical storms that have impacted the Chowan County area since 1950:

*Table 32:
Hurricanes and Tropical Storm Events 1950 - 2005*

Chowan County							
Location or County	Date	Time	Type	Deaths	Injury	Property Damage	Crop Damage
<u>Bertha</u>	7/12/1996	5:00 PM	Hurricane	0	0	200K	30K
<u>Fran</u>	9/5/1996	6:00 PM	Hurricane	0	0	1.0M	0
<u>Josephine</u>	10/7/1996	6:00 PM	Tropical Storm	0	0	100K	0
<u>Bonnie</u>	8/26/1998	8:00 PM	Hurricane	1	0	13.4M	0
<u>Dennis</u>	9/1/1999	12:00 AM	Hurricane	0	0	35K	0
<u>Floyd</u>	9/15/1999	12:00 PM	Hurricane	0	0	12.0M	63.4M
<u>Irene</u>	10/17/1999	4:00 PM	Hurricane	0	0	31K	0
<u>Isabel</u>	9/18/2003	3:00 AM	Hurricane	1	0	16.9M	0
<u>Charley</u>	8/14/2004	3:00 PM	Tropical Storm	0	0	0	0
TOTALS:				2	0	43.666M	63.430M

National Climactic Data Center, 2005

In addition to the hurricane and tropical storms that have impacted the Chowan County area since 1950, other major weather-related events include thunderstorm wind and high winds (310), hail (17), tornadoes (9), winter storms (17), and floods (2).

Both Chowan County and Edenton participate in the National Flood Insurance Program by adopting and enforcing floodplain management ordinances to help reduce future flood damage. In exchange, the National Flood Insurance Program makes Federally-backed flood insurance available to homeowners, renters, and business owners. As of February 2006, there were 197 National Flood Insurance Program policies in force within the Edenton jurisdiction and 207 within the County's jurisdiction. The amount of the policies totaled \$43.8 million in Edenton and over \$40.6 million within the County. According to loss statistics data from the Federal Emergency Management Agency (FEMA) for the period January 1978 to February 2006, 109 claims were filed in Edenton and the amount of payments made totaled approximately \$3.6 million. During the same time period, 72 claims were filed in Chowan County and over \$1.1 million in payments were made.

Areas of repetitive flooding that have been identified by the Emergency Management Coordinator include the following:

Within the Town of Edenton Planning Jurisdiction:
Pembroke Circle (storm surge)

Water Street (storm surge)
Queen Street & Broad Street intersection (heavy rain)
Court Street & E. Eden Street intersection (heavy rain)

Within the Chowan County Planning Jurisdiction:

Cape Colony Neighborhood; Blackbeard Road (storm surge)
Old Ferry Road; Chowan River (storm surge)
Cannon's Ferry Road; Chowan River (storm surge)

The *Chowan County/Edenton Hazard Mitigation Plan*, February 2005, also identifies general coastal flooding as a hazard that often results from a strong southwest wind that raises water levels and, in turn, floods parts of waterfront neighborhoods. The *Hazard Mitigation Plan* identifies the following areas as being susceptible to flooding:

- Morris Circle and Stratford Drive
- South side of Albemarle Court adjacent to Fisher Field
- Stratford Road and Second Street
- Badham Road and the businesses in the Fisher Field area
- East Water Street
- East King Street

Flooding problems resulting from excessive rainfall have been identified in the *Inflow and Infiltration Study*, 2001 and the *Albemarle Court/Morris Circle Drainage Evaluation*, 2002 prepared by Hobbs Upchurch and Associates.

The *Hazard Mitigation Plan* identifies and analyzes natural hazards, evaluates vulnerability to natural hazards, assesses the county and town's capability to mitigate the effects of natural hazards, and outlines mitigation strategies and recommended actions. A summary of the recommended hazard mitigation measures is provided in Appendix I.

The Chowan County and Town of Edenton hazard mitigation goals, as outlined in the *Hazard Mitigation Plan*, are to:

- Protect and enhance the natural and built environment of the community.
- Revise existing County and Town policies that will serve to reduce the extensive damage that hazards can leave behind.
- Better recognition and documentation of areas of concern due to flooding, hurricanes, etc., throughout the County and Town.
- Make public awareness key to disaster prevention.

The following table summarizes the hazards identified and assessed in the Hazard Mitigation Plan:

Type of Hazard	Likelihood of Occurrence*	Possible Affected Area**	Impact***	Rank^
<u>Hurricane</u>	<u>Likely</u>	<u>Large</u>	<u>Critical</u>	<u>1</u>
<u>Flooding</u>	<u>Likely</u>	<u>Large</u>	<u>Limited</u>	<u>3</u>
<u>Erosion</u>	<u>Possible</u>	<u>Small</u>	<u>Limited</u>	<u>5</u>
<u>Tornado</u>	<u>Likely</u>	<u>Small</u>	<u>Catastrophic</u>	<u>2</u>
<u>Nor'easter</u>	<u>Likely</u>	<u>Large</u>	<u>Limited</u>	<u>2</u>
<u>Wildfire</u>	<u>Likely</u>	<u>Medium</u>	<u>Limited</u>	<u>3</u>
<u>Drought</u>	<u>Possible</u>	<u>Medium</u>	<u>Limited</u>	<u>3</u>
<u>Severe Winter Storm</u>	<u>Likely</u>	<u>Large</u>	<u>Negligible</u>	<u>3</u>
* Highly Likely, Likely, Possible, or Unlikely				
** Small, Medium, Large, or Extensive				
*** Catastrophic, Critical, Limited, or Negligible				
^ The ranking is based on a scale of 1 to 5 with 1 being the highest rank of concern				

As part of the hazard mitigation planning process, the types of Critical Facilities were identified within Chowan County and the Town of Edenton. These facilities are necessary to maintain the health, safety and viability of the community during hazardous events.

Highly Critical Facilities identified in the Hazard Mitigation Plan include:

- Schools
- Town, County, State & Federal Office
- Hospitals
- EMS/police/fire stations
- Sewage Treatment Plant and pump stations
- Water Treatment Facility
- Historical Structures
- Churches

The *Hazard Mitigation Plan* does not specifically list the highly critical structures. A map delineating the general location of the Critical Facilities is provided in the *Hazard Mitigation Plan*. Structures identified in the *Hazard Mitigation Plan* as being vulnerable to natural hazards include the following:

Chowan County

- Schools: some are located in wooded areas; all are prone to hurricanes, wildfires, drought, Nor'easters, winter storms, and tornadoes.
- Commercial Airport: located in a wooded area; prone to hurricanes, wildfires, drought, Nor'easters, winter storms, and tornadoes.
- Historic Structures: some are located in the 100-year flood zone and wooded areas; all are prone to flooding, hurricane damage, wildfires, drought, Nor'easters, winter storms, and tornadoes.
- Churches: some are located in the 100-year flood zone; all are prone to hurricanes, wildfires, drought, Nor'easters, winter storms, and tornadoes.
- The total value of highly critical facilities is \$4,491,160

Town of Edenton

- Town, county, state and federal offices: some are located within the 100-year flood zone; all are prone to hurricanes, wildfires, drought, Nor'easters, winter storms, and tornadoes.
- Schools: some are located in highly populated areas; all are prone to hurricanes, wildfires, drought, Nor'easters, winter storms, and tornadoes.
- Hospital: prone to hurricanes, wildfires, drought, Nor'easters, winter storms, and tornadoes.
- EMS/police/fire: some are located in the 100-year flood zone; all are prone to flooding, hurricane damage, wildfires, drought, Nor'easters, winter storms, and tornadoes.
- Sewer Treatment Plant and Pump Stations: located in a wooded area with pump station located throughout the town all near or within the 100-year flood zone. Prone to hurricanes, flooding and wildfires.
- Water Treatment Facility: facilities are located near the 100-year flood zone; prone to hurricane damage, drought, Nor'easters, winter storms, and tornadoes.
- Historical structures: some are located in the 100-year flood zone and wooded areas; all are prone to flooding, hurricane damage, wildfires, drought, Nor'easters, winter storms, and tornadoes.
- Churches: some are located in the 100-year flood zone; all are prone to hurricanes, wildfires, drought, Nor'easters, winter storms, and tornadoes.
- The total value of highly critical facilities is \$24,000,000.

The *Hazard Mitigation Plan* states that erosion has not been a significant issue for Chowan County or the Town of Edenton. However, continued hurricanes and other storms which cause high storm surges could eventually cause erosion problems. Currently, there are no areas experiencing significant shoreline erosion as evidenced by the presence of threatened structures or public facilities.

E. Natural Resources

Environmentally fragile areas and natural resource areas that may be impacted as a result of incompatible development are delineated in [Section 3.2.1](#). Identified environmentally fragile areas include AECs, flood hazard areas, storm surge areas, non-coastal wetlands, and public water supply watersheds. Natural resource areas include prime farmland areas and Significant Natural Heritage Areas.

The potential for sand, rock, and gravel deposits suitable for extraction is limited within Chowan County. According to ratings made by the Natural Resources Conservation Service of soils as a source of sand and gravel, all of the soils in Chowan County are rated as 'fair' or 'poor' as a sand source and all of the soil classifications are rated as 'poor' as a gravel source. Currently, there are nine active mining permits for sand and gravel operations within the county. These mining operations include a total of 146 permitted acres.

According to *Forest Statistics for North Carolina, 2002*, 44,600 acres (or approximately 40%) of Chowan County's total land area is forest land. Of

that total amount of timberland, 6,700 acres (15%) is owned by the forest industry and 37,900 acres (85%) is in nonindustrial, private ownership. Commercial forest lands are largely concentrated in the southeastern section of the county south of the Yeopim River and east of NC Highway 37.

F. Summary of Limitations on and Opportunities for Development

Land development activity within most environmentally fragile areas is subject to local, state, and/or federal restrictions. Local land use regulations such as zoning ordinances, subdivision ordinances, public water supply watershed ordinances, stormwater management ordinances, and flood damage prevention ordinance include specific standards for land development activities. Site-specific soil analyses are required by the Albemarle Regional Health Services to evaluate the suitability of a particular parcel for a septic system. Encouraging good site planning principles and best management practices can assist with mitigating the impacts of land development on environmentally fragile areas.

Development within the designated Areas of Environmental Concern is limited by CAMA regulations and development guidelines. Generally, the development standards for coastal wetlands, estuarine waters, and public trust areas permit only water-dependent uses such as navigation channels, dredging projects, docks, piers, bulkheads, boat ramps, groins, and bridges. Priority is, however, given to the conservation of these AECs. CAMA standards for estuarine shoreline development generally require that (i) the development not cause significant damage to estuarine resources; (ii) the development not interfere with public rights of access to or use of navigable waters or public resources; (iii) the development preserve and not weaken natural barriers to erosion; (iv) impervious surfaces not exceed 30 percent of the lot area located within the AEC boundary; (v) the development comply with state soil erosion, sedimentation, and stormwater management regulations; and (vi) the development comply with the CAMA Land Use Plans. Specific CAMA development standards for AECs can be found in 15 NCAC 7H.

The Town of Edenton historic waterfront presents a tremendous opportunity for development and economic activity. However, any development or activity along the waterfront must be cognizant of the environmental constraints that waterfront property presents.

The US Army Corps of Engineers is responsible for regulating non-coastal or 'Section 404' wetlands. Authorization must be obtained from the Corps prior to disturbing such wetlands.

Areas with prime farmland soils are also well suited to urban uses. The loss of prime farmland to other land uses is anticipated to continue particularly on the immediate periphery of the Edenton urban area where more intensive growth is also well suited due to the existing infrastructure in the area. County policies and land use regulations can assist with guiding incompatible land development away from existing agricultural areas. Mechanisms such as the establishment of voluntary agricultural districts can also assist in protecting farms from non-farm development.

Opportunities exist for the conservation of fragile areas and natural resource areas through both private and public means. Private land trusts and conservancies are tax-exempt organizations that acquire and preserve natural areas, open spaces, and historical properties. Such organizations offer mechanisms such as conservation easements to protect natural resources (natural habitats, places of scenic beauty, farms, forestlands, floodplains, watersheds, etc.) while also providing compensation and possible tax incentives to private property owners. Tax incentive programs, such as the North Carolina Conservation Tax Credit Program, provide opportunities for property owners donating land for conservation purposes to receive tax credits. State and local governments may also accept land donations for conservation purposes.

Public land use regulations, such as conservation design subdivision requirements, can be developed to assist with the conservation of environmentally sensitive areas and open space as land is being subdivided into building parcels.

3.3 Analysis of Land Use and Land Development

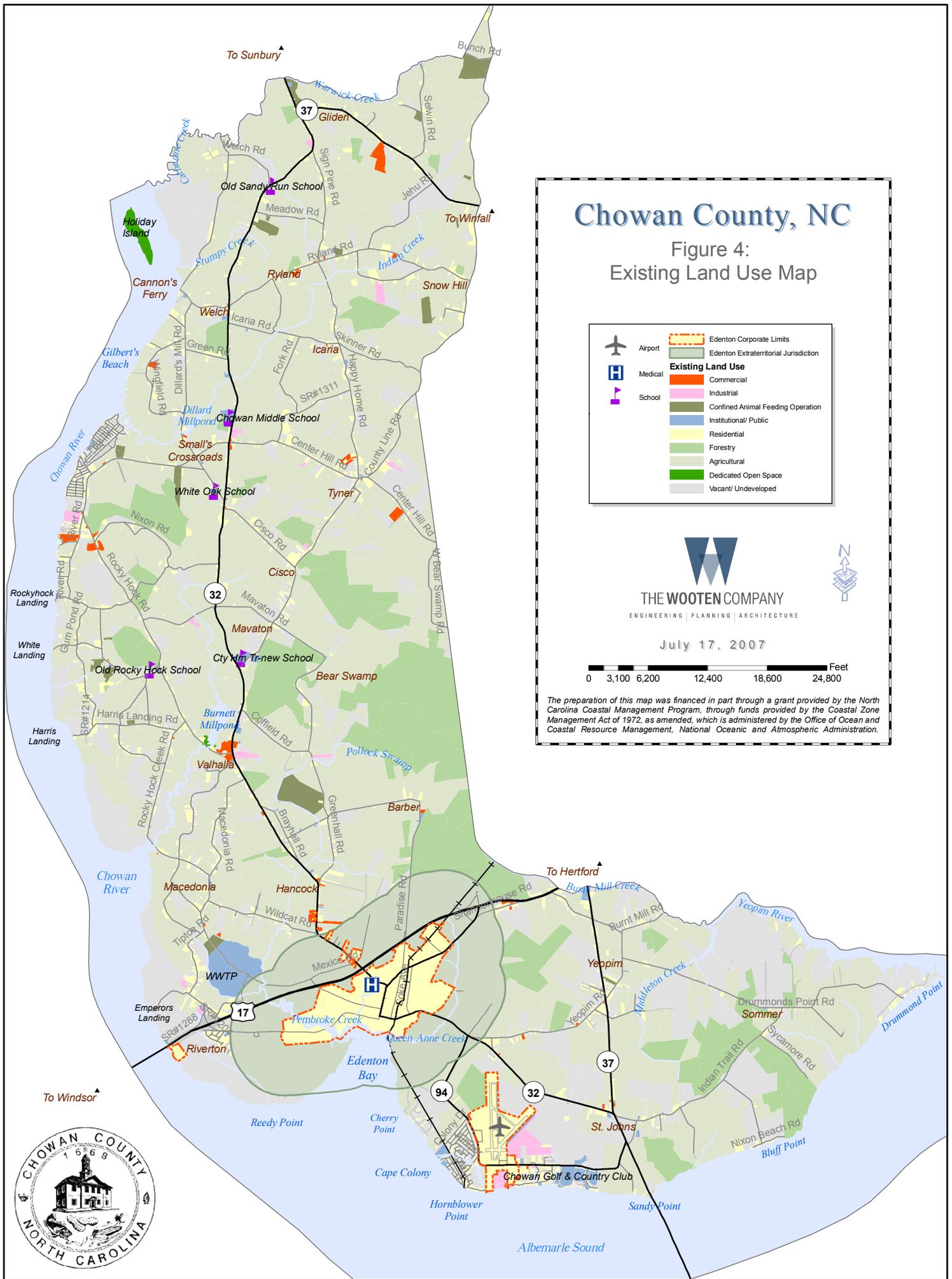
Subchapter 7B .0702(c)(3) requires that the land use plan describe and quantify existing land use patterns, identify potential land use and land use/water conflicts, determine future development trends, and project future land needs.

3.3.1 Existing Land Use Analysis

Section 3.3.1 provides a description and analysis of existing land uses in Chowan County and the Town of Edenton as well as maps of existing land use patterns.

A. Chowan County Jurisdiction

The major amount of developed land in Chowan County outside of the Town of Edenton planning and zoning jurisdiction is located immediately to the southeast of Edenton near the airport. In the northwestern portion of the County there is a large waterfront community along the shoreline of the Chowan River called Arrowhead Beach. Building heights in residential areas are limited to 35 feet; building heights in nonresidential development are generally not restricted. There is no maximum lot coverage requirement for most types of development within the county's planning jurisdiction. Existing land uses with the Chowan County planning jurisdiction are depicted in [Figure 4](#).



Chowan County, NC

Figure 4:
Existing Land Use Map

	Airport		Edenton Corporate Limits
	Medical		Edenton Extraterritorial Jurisdiction
	School		Commercial
			Industrial
			Confined Animal Feeding Operation
			Institutional/Public
			Residential
			Forestry
			Agricultural
			Dedicated Open Space
			Vacant/Undeveloped



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0 3,100 6,200 12,400 18,600 24,800 Feet

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Residential. The areas south and southwest of the airport present the highest densities of residential development such as the Cape Colony and Country Club developments. There is also a large residential neighborhood, Arrowhead Beach, in the northwestern portion of the county along the Chowan River. Elsewhere, developed lands are comprised primarily of widely scattered residential subdivisions and clusters of low density residential development at crossroad communities like Yeopim, Vahalla, Cisco, St. Johns and along the Chowan River and Albemarle Sound waterfronts. Low density residences are also scattered along the major corridors that transverse the county. Multiple acre tracts containing a single dwelling unit are often classified as 'residential' thereby distorting somewhat the residential patterns illustrated in [Figure 4](#). Existing low density residential development ranges from 1 dwelling unit per five acres to 1 dwelling unit per acre. Existing medium to high density residential development consists primarily of detached single-family residences in the Cape Colony and Arrowhead Beach developments. These developments generally average approximately 8 to 10 units per acre. There are no large concentrations of multifamily residences within the county's planning jurisdiction. A few small, scattered multifamily developments with densities approaching 6-8 units per acre are located along the Highway 32 north corridor. Building heights in most residential developments are restricted to 35 feet.

Commercial. The overwhelming majority of commercially-used land is located along the US 17 and NC 32 corridors heading out of Edenton. These commercial corridor areas contain retail, personal and business services, and office uses. A very small amount of commercial uses are located at various crossroad communities. Commercial lots typically average about 2 acres in size. Building heights in commercial areas are generally not restricted but most commercial development does not exceed 35 feet in height.

Institutional/Public. There are very few institutional uses in the Chowan County planning jurisdiction, consisting mostly of churches, cemeteries, private recreational facilities, governmental buildings and facilities, and public schools. The Town of Edenton wastewater treatment plant site on Macedonia Road and the Chowan Golf and Country Club are the largest single institutional/public uses within the county's planning jurisdiction. Institutional and public lot sizes range from one acre to several acres, depending upon the intensity of the specific use. Most public and institutional uses do not exceed 35 feet in height.

Industrial. The majority of industrial land located outside of Edenton is in the vicinity of the airport and south of Chowan Beach near the Chowan River. A few small industrial operations are scattered throughout rural Chowan County. Industrial lot sizes typically average approximately about 20 acres in size. Building heights in industrial areas are generally not restricted but most industrial development does not exceed 50 feet in height. There are no water-dependent industrial land uses within the county's planning jurisdiction.

Agricultural. Chowan County consists of several thousand of acres of land being for agriculture activities. Agriculturally-used land comprises almost 60 percent of the entire county planning jurisdictional area. Low density residential uses are also permitted in areas classified as agricultural.

Vacant/Undeveloped. Undeveloped and underdeveloped properties are widely scattered throughout much of the county. Much of the undeveloped land is within floodplains and wetlands and is ideally suited for future use as conservation areas. The majority of the undeveloped tracts are currently zoned as A-1, Agricultural. Many of the vacant, developable tracts have potential for agricultural use and/or low density residential development.

Dedicated Open Space. Existing land uses that are classified as dedicated open space include conservation areas and environmentally sensitive land that will not be intensively developed such as Holiday Island. Lands that are specifically designated as reserved open space areas are included in this category but, due to the scale of the existing land use map, are not delineated in [Figure 4](#).

Forestry. The majority of land that is used for forestry purposes is located in the east central portion of the county and in the southeastern section of the county adjacent to Indian Trail Road.

Confined Animal Feeding Operation. Confined feeding operations are scattered throughout the county. The largest tract of land is located just east of NC 32 north. There are 16 hog farms, 25 poultry farms and 39 cattle farms in Chowan County according to the *2002 Census of Agriculture*.

B. Town of Edenton Jurisdiction

Edenton, being a commercial, governmental, and housing center for the region, contains a wide variety of developed land uses. Residential uses are more varied and include a wider range of density types. The town also contains a higher intensity of nonresidential land use. The maximum lot coverage within the majority of the Edenton planning jurisdiction is restricted to sixty percent. Existing land uses within the Edenton planning jurisdiction are depicted in [Figure 4a](#).

Residential. The town contains a variety of residentially-used properties. Most of the medium and high density residential development surrounds the downtown area and is generally bounded by US 17 on the north and the Albemarle Sound and Edenton Bay on the south. Residential densities in this area generally range from 3 to 7 dwelling units per acre. The town's ETJ consists of low density residential properties immediately outside the town limits. Existing low density residential development typically averages about two dwelling units per acre. Higher density residential development ranges between 7-10 dwelling units per acre. Pockets of higher density multifamily residential development are located along Martin Luther King Boulevard and Old Hertford Road. The only condominium developments are located at Pembroke Creek, the Cotton Mill, and Wharf's Landing. Building heights in most residential developments are restricted to 35 feet.

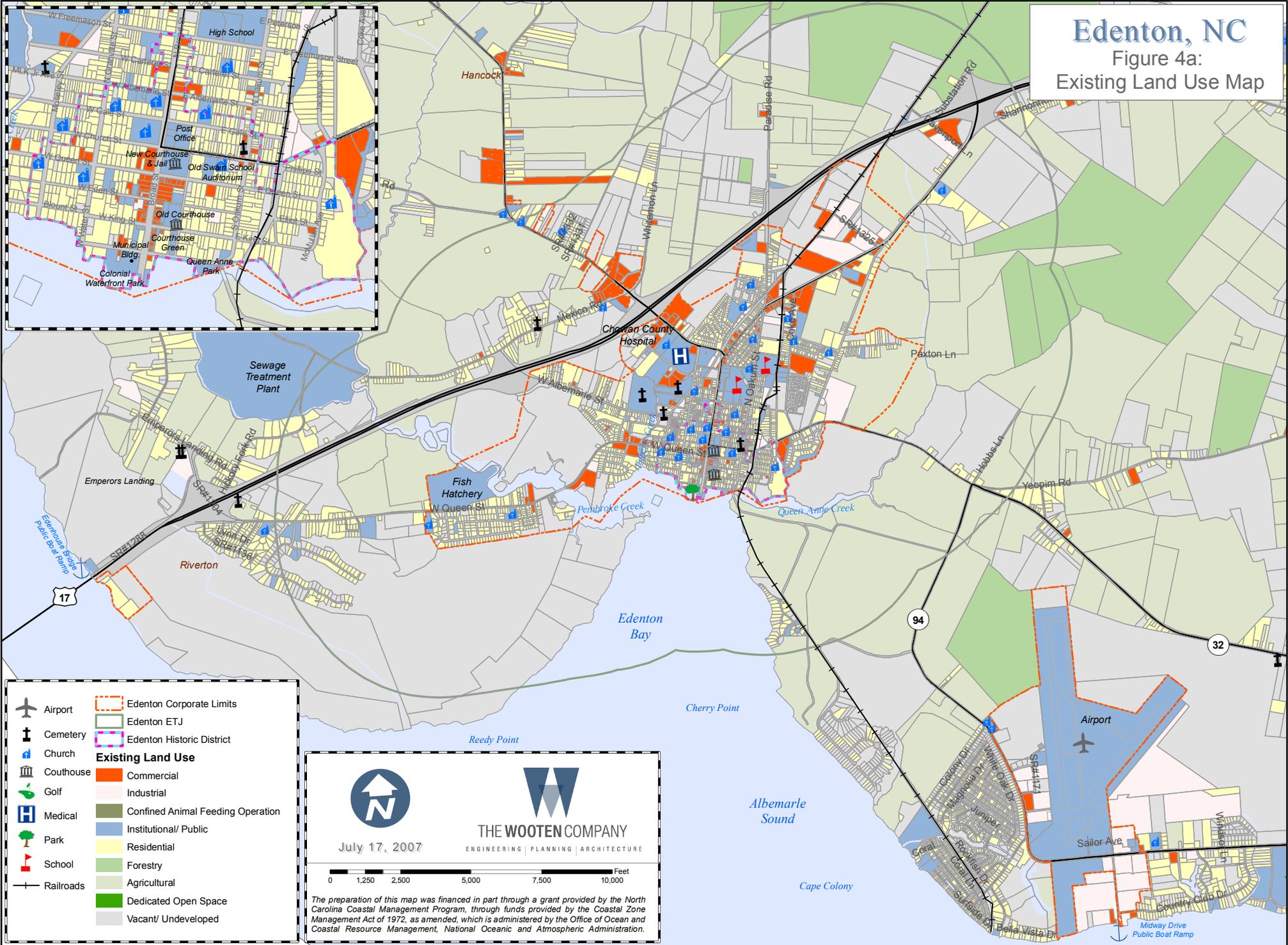
Commercial. Retail, personal services, and business services are concentrated in the downtown area. Downtown Edenton is very active with commercial retail uses and professional offices. The area near the intersection of US 17 and NC 32 West is the only major concentration of retail shopping facilities outside of the downtown. Several scattered commercial uses are also located adjacent to North Broad Street. Commercial lot sizes in

the downtown area average about 0.25 acres in size. Lot sizes outside of the downtown area typically range between 1-2 acres in size. Building heights in commercial areas are restricted to a maximum of 50 feet but the majority of commercial development located outside of the downtown area does not exceed 35 feet in height.

Institutional/Public. Institutional uses include public facilities such as town and county governmental offices and facilities, the hospital, public parks, and public schools. Private institutional uses include private recreational facilities, nursing homes, civic and fraternal organizations, places of worship and cemeteries. The largest institutional/public uses within the Edenton jurisdiction include the airport, fish hatchery, public cemetery, and hospital properties. Institutional and public lot sizes range from one acre to several acres, depending upon the intensity of the specific use. The average lot size is approximately five acres. Most public and institutional land uses do not exceed 35 feet in height.

Edenton, NC

Figure 4a:
Existing Land Use Map



- | | |
|-----------|-----------------------------------|
| Airport | Edenton Corporate Limits |
| Cemetery | Edenton ETJ |
| Church | Edenton Historic District |
| Couthouse | Existing Land Use |
| Golf | Commercial |
| Medical | Industrial |
| Park | Confined Animal Feeding Operation |
| School | Institutional/ Public |
| Railroads | Residential |
| | Forestry |
| | Agricultural |
| | Dedicated Open Space |
| | Vacant/ Undeveloped |

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0 1,250 2,500 5,000 7,500 10,000 Feet

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Industrial. The majority of the industrially-used land is located near the airport. There are some scattered industrial uses within the town limits in the northwest area of town adjacent to the west side of North Broad Street. Industrial lot sizes typically average approximately three acres in size. Building heights in industrial areas are restricted to a maximum of 50 feet but the majority of industrial development does not exceed 35 feet in height. There are no water-dependent industrial land uses within the town's planning jurisdiction.

Vacant and Undeveloped. There are very few tracts of undeveloped and/or underdeveloped land within the town limits. Those tracts or parcels of land which are undeveloped present a likely opportunity for infill development. Much of the undeveloped land within the southern portion of the town's planning jurisdiction is located within the floodplain of Pembroke and Queen Anne Creeks or within wetlands areas and, therefore, presents constraints for future development. Such land is ideally suited for future conservation areas. Scattered large undeveloped tracts are present in the northern and northeastern portions of the ETJ area. The majority of vacant property outside of the corporate limits but inside the ETJ is zoned RA, Residential Agricultural and R-20, Low Density Residential. Most of the vacant, developable tracts have potential for low density residential use.

Dedicated Open Space. Existing land uses that are classified as dedicated open space include conservation areas and environmentally sensitive land that will not be intensively developed. The courthouse green located south of the restored 1767 courthouse is included in this category. Lands that are specifically designated as reserved open space areas (such as within private land developments) are included in this category but, due to the scale of the existing land use map, are not delineated in [Figure 4a](#).

Forestry. A small amount of land within the town's ETJ.

Agricultural. Agriculturally-used acreage within the town's planning jurisdiction accounts for approximately 30 percent of the total land area and is located primarily in the northwestern, northern, northeastern portions of the Edenton ETJ. The largest agricultural tracts are located north of Yeopim Road and north of Mexico Road. Low density residential uses are also permitted in areas classified as agricultural.

Confined Animal Feeding Operations. There are no confined animal feeding operations with the town's planning jurisdiction.

C. Historic, Cultural, and Scenic Areas

There are several individual sites in Edenton and in Chowan County that are listed on the National Register of Historic Places. Nationally registered Historic Districts in Chowan County include the Cotton Mill District and the Edenton District, which was expanded in 2001 ([see Figure 8a](#)). Chowan County listings in the National Register include the following list of properties and districts (the date provided is the date listed in the National registry):

Albania (Edenton), 5/13/1976
Athol (Edenton vicinity), 5/22/1980

Barker House (Edenton), 3/24/1972
 Chowan County Courthouse (Edenton), 4/15/1970
 Cullen Jones House (Rockyhock vicinity) 5/3/2006
 Cullins-Baker House (Tyner vicinity), 4/29/1982
 Cupola House (Edenton), 4/15/1970
 Edenton Historic District (Edenton), 7/16/1973
 Edenton Historic District Boundary Expansion (Edenton), 10/5/2001
 Edenton Cotton Mill Village Historic District (Edenton), 2/5/1999
 Edenton Station (Fish Hatchery), U.S. Govt. Fish & Fisheries Commission
 (Edenton), 9/14/2002
 Greenfield Plantation (Somer vicinity), 5/11/1976
 Hayes Plantation (Edenton), 3/3/1974
 Hicks Field (Edenton), 9/13/1995
 James Iredell House (Edenton), 2/26/1970
 Susan J. Armistead Moore House (NC 32 at jct), 5/18/2005
 Mulberry Hill (Edenton vicinity), 5/13/1976
 Peanut Factory (Edenton Peanut Mill (Edenton), 9/20/1979
 Pembroke Hall (Edenton), 11/7/1976
 Saint Paul's Episcopal Church and Churchyard (Edenton), 5/29/1975
 Sandy Point (Edenton vicinity), 4/25/1985
 Shelton Plantation House (Clement Hall) (Edenton vicinity), 10/29/1974
 Speight House and Cotton Gin (Edenton), 9/22/1980
 Strawberry Hill (Edenton), 5/22/1980
 Wessington House (Edenton), 3/20/1973

Figure 4b shows the locations of all historic sites listed on the National Register of Historic Places.

Surveys of Arrowhead Beach--possible site of the sixteenth century Chowanoke Indian village--and an underwater survey of Edenton Harbor in 1980 are major archaeological projects in the county. Over 125 sites known throughout the county are recorded in the North Carolina State Historic Preservation Office's statewide inventory for Chowan County. Most archeological sites that are identified by the NC Historic Preservation Office are not publicly disclosed for fear of damage or tampering.

There are no designated scenic views or areas in Chowan County or the Town of Edenton.

D. Agricultural Land Use

Based upon information in the 2002 Census of Agriculture, the total number of farms in Chowan County has decreased by 1.1% since 1997 but the number of acres devoted to farming and the average farm size has increased. Approximately 77 percent of the farmland in Chowan County is devoted to crop production compared to 60 percent statewide. Major crops produced in Chowan County include peanuts, sorghum for grain, soybeans, corn, wheat, and tobacco. The remainder of the Chowan County farmland is devoted to woodland and other uses. Some farmland is used for livestock and poultry production, nonfarm purposes, or is idle.

Agriculture is an important sector of the local economy. According to the 2002 Census of Agriculture, the market value of agricultural products sold in

Town of Edenton & Chowan County, NC

Figure 4b
Historic Sites Map

Historic Sites

Edenton Historic District

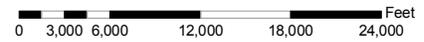
Edenton Corporate Limits

Edenton Extraterritorial Jurisdiction



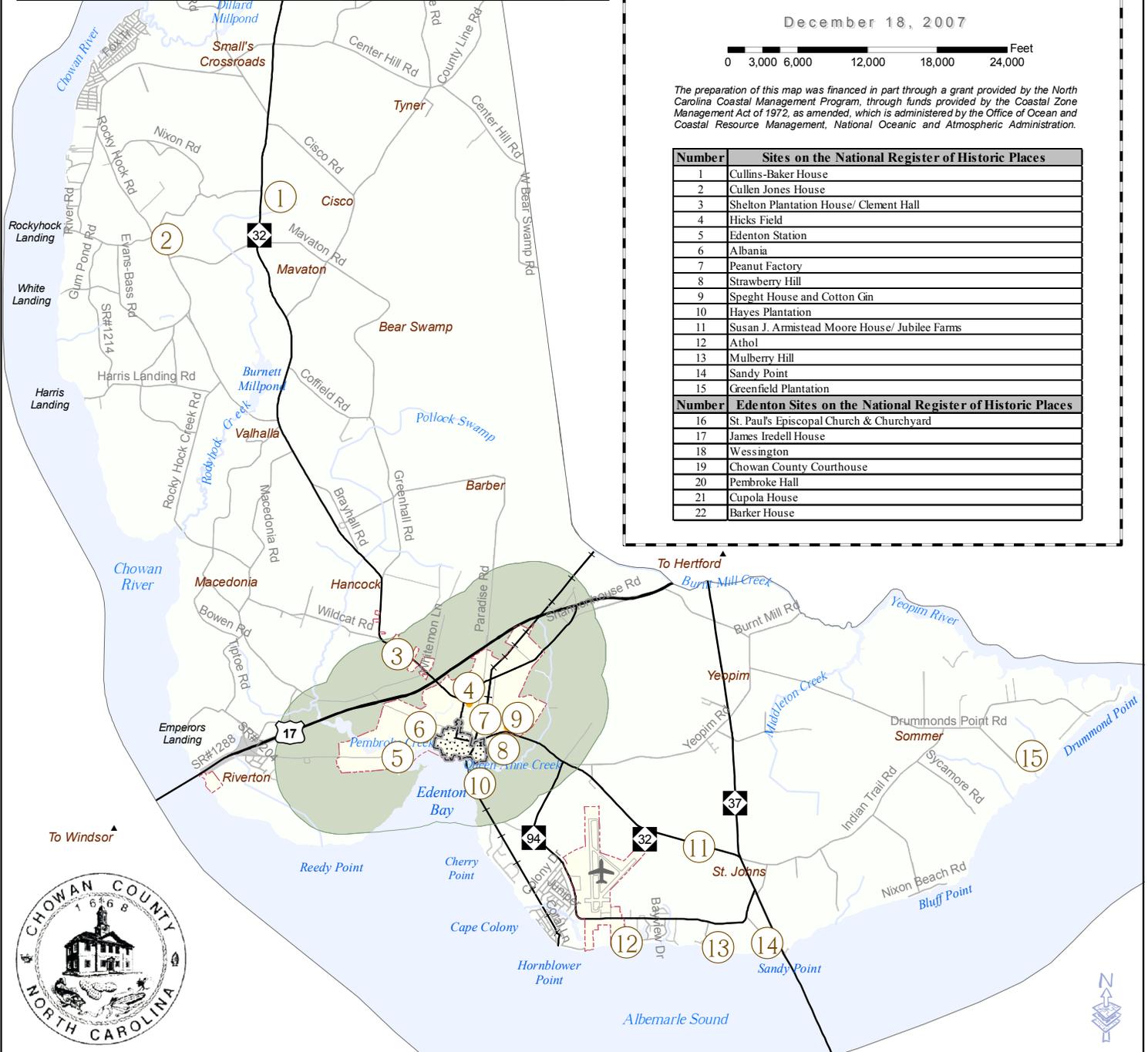
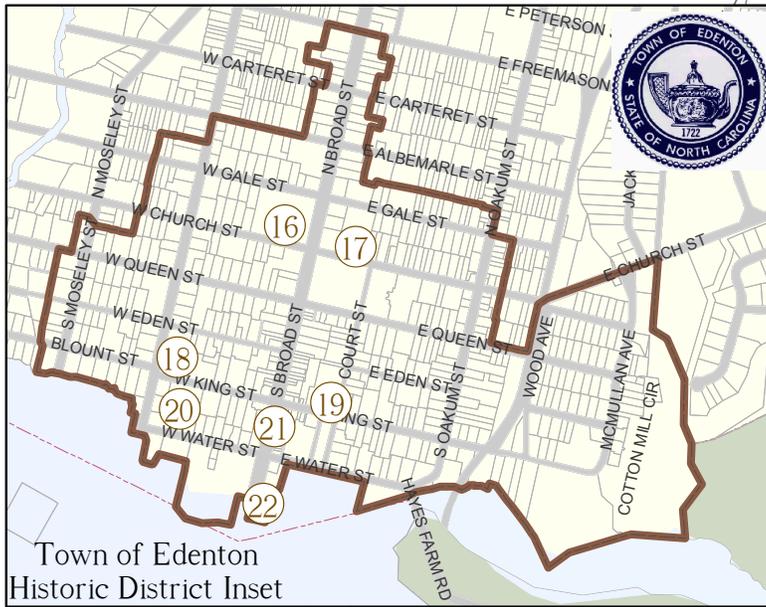
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Number	Sites on the National Register of Historic Places
1	Cullins-Baker House
2	Cullen Jones House
3	Shelton Plantation House/ Clement Hall
4	Hicks Field
5	Edenton Station
6	Albania
7	Peanut Factory
8	Strawberry Hill
9	Speght House and Cotton Gin
10	Hayes Plantation
11	Susan J. Armistead Moore House/ Jubilee Farms
12	Athol
13	Mulberry Hill
14	Sandy Point
15	Greenfield Plantation
Number	Edenton Sites on the National Register of Historic Places
16	St. Paul's Episcopal Church & Churchyard
17	James Iredell House
18	Wessington
19	Chowan County Courthouse
20	Pembroke Hall
21	Cupola House
22	Barker House



Chowan County was approximately \$38.1 million. Many local agribusinesses rely on locally grown agricultural products. The following table provides a comparison of agricultural statistics for Chowan County and the State of North Carolina.

*Table 33:
Agricultural Profile*

	Chowan County			North Carolina		
	2002	1997	% Change	2002	1997	% Change
No. Farms	173	175	-1.1%	53,930	59,120	-9%
Ac. In Farms	59,890	52,736	+13.5 %	9,079,001	9,444,867	-4%
Av. Farm Size	346 ac.	301 ac.	+14.9%	168 ac.	160 ac.	+5%
Market Value of Production	\$38.1m	\$35.0m	+8.8%	\$6,961.6m	\$7,832.4m	-11%
Government Payments	\$1.6m	\$0.76m	+110%	\$97.7m	\$52.5m	+86%

Source: Census of Agriculture, 2002

3.3.2 Estimates of Land Area by Land Use Category

The table below illustrates the estimated land area within the Chowan County and Town of Edenton planning jurisdictions.

*Table 34:
Land Area by Jurisdiction*

Jurisdiction	Sq. Miles	Acres	% Acres
Edenton Planning Jurisdiction	17	10,901	9.9%
Chowan County Planning Jurisdiction	156	99,744	90.1%
Total Chowan County	173	110,645	100.0%
Edenton Corporate Limits	5	3,230	2.9%
Edenton ETJ Area	12	7,671	6.9%
Unincorporated Chowan County	168	107,415	97.1%

Source:; The Wooten Company, May 2006

Existing land uses within each planning jurisdiction are summarized by major land use category in the following table.

<i>Table 35: Existing Land Use Summary</i>						
Land Use Category	Countywide		Town of Edenton Jurisdiction		Chowan County Jurisdiction	
	Acres	Percent Acres	Acres	Percent Acres	Acres	Percent Acres
Agricultural	63,454	57.35%	3,206	29.42%	60,248	60.40%
Water	206	0.19%	114	1.05%	92	0.09%
Residential	4,808	4.35%	947	8.69%	3,861	3.87%
Vacant/Undeveloped	22,014	19.90%	3,841	35.25%	18,173	18.22%
Forestry	12,927	11.68%	563	5.17%	12,364	12.39%
Roads	2,811	2.54%	804	7.38%	2,007	2.01%
Institutional/Public	1,850	1.67%	932	8.55%	918	0.92%
Confined Feeding Operations	845	0.76%	0	0.00%	845	0.85%
Industrial	761	0.69%	246	2.26%	515	0.52%
Commercial	605	0.55%	225	2.06%	380	0.38%
Dedicated Open Space	367	0.33%	19	0.17%	348	0.35%
Totals	110,648	100%	10,897	100%	99,751	100%

Source: The Wooten Company, December 2006

3.3.3 Description of Land Use and Land Use/Water Quality Conflicts

The following have been identified as existing conflicts that exist in some sections of Chowan County and the Town of Edenton.

- Conversion of agricultural and forested land into residential and other more intensive land uses.
- Residential land use in the vicinity of the airport and its industrial uses surrounding it.
- Loss of natural, open space and rural low density character
- Impact of large scale residential developments
- Appearance of development along major road corridors and the impact of development on the functional capacity of the roads
- Small lot development in areas with soils that have major limitations for subsurface septic systems.
- Loss of natural buffers adjacent to streams and water bodies as land is developed into more intensive land uses.
- Intensive land development within 100-year floodplains.
- Loss of potential public water access as land development occurs.
- Blighting influence of dilapidated structures on surrounding land uses.

3.3.4 Description of Development Trends

Between 1999 and 2005, Chowan County including Edenton averaged over 64 stick-built residential building permits per year. Manufactured homes accounted for approximately 41 percent of all new residential permits issued since 2002.

Subdivision lot approval records from the Edenton-Chowan Planning and Inspections Department indicate that the County and Town averaged approximately 115 new residential building lots a year from 1999-2005.

The following table provides data concerning the new subdivision lots created countywide during the period 1999 to 2005.

<i>Table 36: New Subdivision Lots 1999 to 2005</i>									
Total	1999	2000	2001	2002	2003	2004	2005	Total	Average
New Lots Created	243	41	60	32	202	132	97	807	115.3
<i>Source: Edenton/Chowan Planning and Inspections Department</i>									

Within Chowan County, the townships immediately on the fringe of the Town of Edenton have experienced the most recent growth and development. Between 1990 and 2000, the fastest growing townships were the Yeopim (17.8 percent increase) and Middle (12.8 percent increase) Townships. The townships with the lowest growth rates from 1990 to 2000 were the Upper Township (-0.8 percent) which actually lost population, and Edenton (4.6 percent) Township. The Middle and Edenton townships encompass over three-fourths of the total 2000 County population. Township boundaries are shown in [Figure 1, General Location Map](#).

Chowan County and the Town of Edenton are expected to experience moderate growth over the next twenty years. Most short-term growth (particularly within the five years following certification of this land use plan) will be associated with homes in waterfront communities in the Middle and Yeopim Townships and development oriented towards retirement-aged populations. An example of the anticipated type of waterfront development is the proposed Sandy Point development located on the Albemarle Sound west of NC Highway 32 adjacent to Soundside Road. Infill manufactured housing will continue to account for approximately 50% of the residential housing units.

Commercial development within the Town of Edenton is anticipated along current major road corridors such as NC 32 and US 17. Little commercial development is expected in the rural areas of Chowan County.

Industrial development is anticipated to continue near the airport and just north of town east of US 17 and west of Broad Street. The only industrial development anticipated in the county's jurisdiction is north and east of the airport.

3.3.5 Description of Land Use Patterns Within Watersheds

Because land development activities, particularly urban-intensity development, can have an adverse impact on water quality, it is important to assess the intensity of land use patterns within individual watersheds. The Chowan County land area is within sixteen 14-digit watersheds as delineated by the Natural

Resources Conservation Service of the US Department of Agriculture. A general description of these five watersheds is provided in the table that follows. The general boundaries of these watersheds are depicted on [Figure 2, Natural Features Map](#).

*Table 37:
General Characteristics of 14-digit Watersheds*

Watershed	Jurisdiction	Subbasin	Total Acres	Percent of Total Acreage	Estimated % of Developed Land within Watershed
03010205090010	County	PASQUOTANK	750.8	0.68%	5%
03010203040030	County	CHOWAN	52.5	0.05%	50%
03010203070010	County	CHOWAN	11,656.6	10.54%	20%
03010203100010	County	CHOWAN	166.3	0.15%	0%
03010203070020	County	CHOWAN	15,066.4	13.62%	20%
03010205100010	County	PASQUOTANK	5,931.4	5.36%	20%
03010203080020	County	CHOWAN	5,003.7	4.52%	40%
03010203080010	County	CHOWAN	16,614.1	15.02%	20%
03010205240030	County	PASQUOTANK	20.1	0.02%	0%
03010205120010	County	CHOWAN	16,148.9	14.60%	20%
03010205110010	County	PASQUOTANK	6,288.8	5.68%	20%
03010203100020	County	CHOWAN	17.8	0.02%	40%
03010205085030	County	CHOWAN	4,163.2	3.76%	30%
03010205080020	County	PASQUOTANK	14,057.9	12.71%	30%
03010205240020	County	CHOWAN	8.7	0.01%	5%
03010205085020	County	PASQUOTANK	3,796.9	3.43%	80%
03010203080010	Edenton	CHOWAN	40.0	0.04%	90%
03010205120010	Edenton	CHOWAN	5,327.4	4.81%	60%
03010205110010	Edenton	PASQUOTANK	434.0	0.39%	90%
03010203100020	Edenton	CHOWAN	2.3	0.00%	90%
03010205085030	Edenton	CHOWAN	4,814.0	4.35%	70%
03010205240020	Edenton	CHOWAN	10.8	0.01%	90%
03010205085020	Edenton	PASQUOTANK	272.6	0.25%	90%
TOTALS			110,645		

Source: The Wooten Company, December 2006

The watersheds with the most intensive land development are those which include the Town of Edenton, southeastern Chowan County and the Arrowhead Beach area. The Town of Edenton’s planning jurisdiction impacts 7 watersheds (03010203080010, 03010203080010, 03010205110010, 03010203100020, 03010205085030, 03010205240020, and 03010205085020). The largest watershed in the county (03010203080010) includes the central and western portion of Chowan County and totals 16,614 acres.

3.3.6 Projections of Land Needs

The following table provides short and long-term projections of residential land area needed to accommodate the projected future population projections. These land needs projections are based, in part, upon permanent population projections for Chowan County prepared by the NC State Data Center ([Section 3.1.4](#)). The 7B CAMA Guidelines allow the projections of land needs to be increased by up to 50 percent to account for unanticipated growth and to provide market flexibility.

Based upon the most recent short-term population growth and building permit trends, there is concern that the long-term population projections prepared by the NC State Data Center do not accurately reflect future growth and development trends in Chowan County and the Town of Edenton. It is anticipated that Chowan County and the Town of Edenton may experience an increase in growth for retirement age communities. The general availability of developable land are reasons often cited that the Chowan County area will experience higher increases in future population growth than as predicted by the Data Center's long term projections. Consequently, it is felt that the residential land needs projected here may be too conservative.

*Table 38:
Residential Land Needs Projections*

	2000	2005	2010	2015	2020	2025	2030	Total 2000- 2030
Town of Edenton Planning Jurisdiction								
Projected Permanent Population	6,208	7,114	7,487	7,880	8,294	8,730	9,188	
Permanent Population Increase		906	373	393	414	435	458	2,980
Seasonal Dwelling Unit Population Increase		117	48	51	53	56	59	384
Total Permanent and Seasonal Population Increase		1,022	422	444	467	492	517	3,364
Permanent DU Increase		324	133	140	148	156	164	1,064
Seasonal Dwelling Unit Increase		42	17	18	19	20	21	137
Total Dwelling Unit Increase*		365	151	158	167	176	185	1201
Gross Residential Acres Per Person		0.5	0.5	0.5	0.5	0.5	0.5	
Additional Residential Acres Needed		511	211	222	234	246	259	1682
Total Residential acreage with 50% adjustment		767	316	333	350	369	388	2523
								Total 2000- 2030
Chowan County Planning Jurisdiction								
Projected Permanent Population	7942	7,779	8,187	8,617	9,070	9,546	10,047	
Permanent Population Increase		-163	408	430	452	476	501	2,105
Seasonal Dwelling Unit Population Increase		-19	48	51	53	56	59	248
Total Permanent and Seasonal Population Increase		-182	457	481	506	532	560	2,353
Permanent DU Increase		-72	182	191	201	212	223	936
Seasonal Dwelling Unit Increase		-9	21	23	24	25	26	110
Total Dwelling Unit Increase*		-81	203	214	225	237	249	1,046
Gross Residential Acres Per Person		1.0	1.0	1.0	1.0	1.0	1.0	1
Additional Residential Acres Needed		-182	457	481	506	532	560	2353
<i>Source: The Wooten Company, December 2006</i>								
* 2.80 persons per household for Edenton; 2.25 persons per household for County								

**Table 39:
Nonresidential Needs Projections**

	2005	2010	2015	2020	2025	2030	Additional acreage needed between 2005 and 2030
Town of Edenton Jurisdiction							
Population projections	7144	7487	7880	8284	8730	9188	
Commercial acres per person	0.0580	0.0580	0.0580	0.0580	0.0580	0.0580	
Commercial acres needed	414.4	434.2	457.0	480.5	506.3	532.9	118.6
Industrial acres per person	0.0345	0.0345	0.0345	0.0345	0.0345	0.0345	
Industrial acres needed	246.5	258.3	271.9	285.8	301.2	317.0	70.5
Public and Institutional acres per person	0.0191	0.0191	0.0191	0.0191	0.0191	0.0191	
P & I acres needed *	136.5	143.0	150.5	158.2	166.7	175.5	39.0
Chowan County Jurisdiction							
							Additional acreage needed between 2005 and 2030
Population Projections	7779	8087	8617	9070	9546	10047	
Commercial acres per person	0.0489	0.0489	0.0489	0.0489	0.0489	0.0489	
Commercial acres needed	380.4	395.5	421.4	443.5	466.8	491.3	110.9
Industrial acres per person	0.0662	0.0662	0.0662	0.0662	0.0662	0.0662	
Industrial acres needed	515.6	535.4	570.4	600.4	631.9	665.1	149.5
Public and Institutional acres per person	0.04	0.04	0.04	0.04	0.04	0.04	
P & I acres needed **	319.0	331.6	353.3	371.9	391.4	411.9	92.9
<p align="center"><i>Source: The Wooten Company, December 2006. Projections of future nonresidential land use needs are based upon the proportional relationship of current land use acreage per capita population.</i></p>							
<p>*Note: The airport, 795 acres, has been removed from the town's industrial acreage totals in order to prevent skewing of projected land needs of this particular land use category.</p>							

3.3.7 Description of Conflicts with Class II and Class III Lands

The projected growth areas are primarily within Class I lands as defined in Section 3.2.2 and as shown on the Environmental Conditions Composite Map, Figure 3. Many of the potential conflicts with Class II lands can be mitigated through the provision of public water and sewer services and careful site planning. The Class III lands within or in close proximity to the projected growth areas include wetlands and/or flood hazard areas parallel to the Chowan River, scattered areas in the western parts of the County. Such areas can be conserved as part of any development proposals through such techniques as conservation subdivision design, buffering and open space requirements, etc. The demand for waterfront development is expected to remain high for the immediate future. Such development can have potential conflicts with flood hazard and storm surge areas. Effective site planning techniques, buffering, and conservation of natural vegetation can possibly ensure compatibility of such development.

3.4 Analysis of Community Facilities

Subchapter 7B .0702(c)(4) requires that the land use plan include a community facilities analysis that evaluates the existing and planned capacity, location, and adequacy of key facilities and services that serve the community's population and economic base; that

protect important environmental factors such as water quality; and that guide land development. Section 3.4 provides an analysis of public and private water and wastewater systems, transportation systems, and stormwater systems.

3.4.1 Water Supply Systems

Two separate water supply systems operate within Chowan County. These systems include the Town of Edenton municipal water system and the Chowan County water system. The existing service areas of each jurisdiction are delineated in Figures 5 and 5a. The maps are for illustrative purposes only and are intended to delineate the general water system facilities. For more precise information, detailed maps available at the offices of the respective water system provider should be consulted.

A. Edenton Municipal Water System

Overview

The Town of Edenton maintains two water treatment plants, four well sites, two elevated water storage tanks, and approximately 69 miles of distribution system lines. The oldest water treatment plant, Freemason Street, was constructed in 1936 and is located in downtown Edenton. The Beaver Hill plant, located off of Dr. Martin Luther King Avenue, was constructed in 1973. Both facilities utilize ion exchange to soften the water. The Freemason plant has a permitted capacity of 1.35 MGD and the Beaver Hill plant, 0.725 MGD. The town draws its water for treatment from four deep wells, all drawing from the Castle Hayne aquifer. The well sites are identified as Freemason Street, Beaver Hill, Virginia Road, and Boswell Street. The total available water supply of all wells for regular use is 1.310 MGD. The four wells and two water treatment facilities can reliably provide a maximum day capacity of 1.1 MGD. The town's water storage tanks have a total storage capacity of 850,000 gallons. Currently, the peak demand is 700,000 GPD.

In 2002, the town water system served 2,017 metered customers; the population within the water system service area was 5,394. The average annual daily water use in 2002 was 0.686 MGD. The maximum day use, 1.561 MGD, occurred in September 2002. The 2002 average daily water use by type of customer is provided in the following table:

Use Type	Number	Average Daily Water Use (MGD)
Residential	1,688	0.292
Commercial	214	0.095
Industrial	12	0.019
Institutional	103	0.065

Current Conditions

- Currently the maximum day demand is 1.4 MGD.
- An increase in water production will be necessary in the very near future to provide appropriate water supply.
- The town system has an interconnection with the Chowan County water system that is capable of providing water in an emergency.
- The town has a contract with the Chowan County water system to purchase 0.072 MGD.

Projected Demand

The 2002 Local Water Supply Plan for Edenton indicates the following water demand projections:

<i>Table 40: Future Water Supply Needs</i>				
Town of Edenton	2002	2010	2020	2030
LUP Planning Jurisdiction Peak Population Projections	n/a	8,452	9,362	10,371
Year-Round Service Area Population	5,394	5,519	5,679	5,843
Total Service Area Demand, MGD	0.686	0.701	0.721	0.745
Total Available Water Supply, MGD	1.310	1.310	1.310	1.310
Total Average Daily Demand, MGD	0.686	0.701	0.745	0.764
Demand as Percent of Supply	52%	54%	57%	58%
Additional Supply Needed to Maintain 80%	0.00	0.00	0.00	0.00
Chowan County	2002	2010	2020	2030
LUP Planning Jurisdiction Peak Population Projections	n/a	9,154	10,140	11,233
Year-Round Service Area Population	8,600	9,114	9,657	10,057
Total Service Area Demand, MGD	0.973	1.087	1.146	1.189
Total Available Water Supply, MGD	2.196	2.196	2.196	2.196
Total Average Daily Demand, MGD	0.973	1.087	1.146	1.189
Demand as Percent of Supply	44%	49%	52%	54%
Additional Supply Needed to Maintain 80%	0.000	0.000	0.000	0.000
Total All Water Service Providers	2002	2010	2020	2030
LUP Planning Jurisdiction Peak Population Projections	n/a	17,606	19,502	21,604
Year-Round Service Area Population	13,994	14,633	15,336	15,900
Total Service Area Demand, MGD	1.659	1.788	1.867	1.934
Total Available Water Supply, MGD	3.506	3.506	3.506	3.506
Total Average Daily Demand, MGD	1.659	1.788	1.891	1.953
Demand as Percent of Supply	47%	51%	54%	56%
Additional Supply Needed to Maintain 80%	0.000	0.000	0.000	0.000

Sources: 2002 Water Supply Plans

Projected water demands are not expected to exceed 80% of the available water supply before 2030.

Limitations

The town currently maintains four deep wells. Two wells are in undesirable commercial or industrial locations, one is out of service, and one is located near a cemetery. Much of the infrastructure is old and there are problems with valves not operating correctly or breaking when adjusted. Base upon past studies, a chlorination process needs to be instituted at the water treatment facilities. Additionally, there are limitations to the water quality due to high sodium content. The Town has completed a groundwater study to determine where the best quality of water is available for expansions of the well fields. The Town Council has set a maximum population growth goal of 7,500 to ensure that infrastructure can adequately support the anticipated service area growth. The town is vigorously working on the reduction of TTHM levels.

Planned Water System Improvements

- Expansion of the water treatment facilities by 2010 is projected; estimated cost is \$1,140,000.00.
- Chlorination process to be completed by 2009: estimated cost is \$150,000.00
- 20-year maintenance improvements: estimated cost is \$960,000.00

B. Chowan County Water System

Overview

The Chowan County water system maintains seven active well sites, and approximately 450 miles of distribution system lines. The wells are capable of supplying 2.196 MGD. The County water system has a storage capacity of 1.75 MG. The Valhalla water treatment plant has a permitted capacity of 2.31 MGD. The county's water storage tanks have a combined storage capacity of 1.75 million gallons.

In 2002, the county water system served approximately 4,136 customers; the population within the water system service area was 8,600. The average annual daily water use in 2002 was 0.973 MGD. The maximum day use, 1.476 MGD, occurred in June 2002. The 2002 average daily water use by type of customer is provided in the following table:

Use Type	Number	Average Daily Water Use (MGD)
Residential	4,040	0.659
Commercial	92	0.123
Industrial	1	0.046
Institutional	3	0.014

Current Conditions

- Currently the maximum day demand is 1.5 MGD.
- The county system has an interconnection with the Edenton municipal water system that is capable of providing water in an emergency.

Projected Demand

The draft 2002 Local Water Supply Plan for Chowan County indicates the following water demand projections:

	2010	2020	2030
Service Population	9,114	9,657	10,057
Average Daily Service Demand (MGD)	1.087	1.146	1.189
Total Available Water Supply (MGD)	2.196	2.196	2.196
Demand as a Percent of Supply	49%	52%	54%

Projected water demands are not expected to exceed 80% of the available water supply before 2030.

Limitations

The water system in Chowan County consists of nine well sites. The treatment plant and wells have ample capacity to serve future needs. The water storage capacity of 1.75 MG is less than the wells supply capability, 2.196 MGD and the treatment plants capacity of 2.31MG. New storage tanks are proposed in the southern part of the County to accommodate potential growth in that area.

Planned Water System Improvements

The following water system improvements have been identified by the Chowan County Water Department as desirable but have not, to date, been included in the county's formal capital improvements programming and budgeting process. In the event that the Chowan County Board of Commissioners would consider making the decision to fund certain utility infrastructure improvements to support any planned development in the future, the following costs are estimated using 2008 cost information:

- \$3 million +/-: Backwash water improvements at the Vahalla WTP.
- \$1 million +/-: One new well at the Valhalla WTP.
- \$2,000/day +/-: Purchase 300,000 gallons per day water supply from Gates County.
- \$1 million +/-: Construction of a new elevated storage tank in the southern part of the county.
- \$5 million +/-: Large diameter water main along NC 32 in northern system.
- \$2 million +/-: Construction of 1 million gallon storage tank at Paradise Road booster site.

If Chowan County decides to undertake the above water system improvements, the probable completion dates would be between 2015 and 2025.

3.4.2 Wastewater Treatment Systems

Wastewater treatment systems within Chowan County include the Town of Edenton municipal wastewater system. Chowan County currently does not operate a wastewater system. However, Chowan County is preparing a feasibility study for providing sewer service to the southeastern portion of the county, particularly the Cape Colony and Country Club areas. The existing Town of Edenton sewer service area is delineated in Figures 5a. Figure 5a is for illustrative purposes only and is intended to delineate the general wastewater system facilities. For more precise information, detailed maps available at the Town of Edenton Public Works Department offices should be consulted.

One private wastewater treatment plant is owned by Edenton Dyeing and Finishing which is an industrial establishment located in the west central portion of Chowan County just south of the Arrowhead Beach development. Information concerning this privately-owned system is not available.

A. Edenton Municipal Wastewater Treatment System

Sewer System Description

The town's wastewater treatment facility, built in 1988, is located off of Mexico Road. It consists of a 24-acre lagoon, three 7.5 HP floating aerators, and two 4026GPM spray irrigation pumps for 300 acres of trees. The collection system consists of 118,931 feet of gravity sewer, 461 manholes, and 16 sewer pump stations, which pump to the main pump station located on West Water Street. This pump station pumps sewage to the wastewater treatment facility through 21,205 feet of 18-inch force main. The majority of the gravity sewer collection system was constructed before 1929 through the late 1970's. Pipes are predominantly vitrified clay ranging in size from 6-inch to 24-inch. The permitted capacity of the wastewater treatment facility is 1.076 million GPD. The town has approximately 1,928 sewer customers.

Current Conditions

- The town has experience problems with inflow/infiltration in the sewer system, especially in the Broad Street business district and the surrounding residential area. Inflow and Infiltration is a situation where groundwater and stormwater enter the sanitary sewer system.
- The average annual daily discharge in 2002 was approximately 0.020 MGD.

Sewer System Needs

- The rehabilitation of sewer lines has been identified as the most important need
- Construction of an additional treatment facility
- Feasibility of forming an Edenton-Chowan County sewer authority

Proposed Sewer System Improvements

Planned sewer system improvements for the Town of Edenton include:

- Sewer line rehabilitation: \$1,148,000.00; completion during 2008-2018
- Sewer system upgrades: \$550,000.00; completion during 2008-2009
- Pump stations: \$1,550,000.00; completion during 2012-2014
- Cape Colony pretreatment: \$20,000.00; completion in 2008
- BMI extension: \$600,000.00; completed
- Lift station upgrade: \$800,000.00; completion in 2011
- Additional spray field land: \$200,000.00; completion in 2010

B. Proposed Chowan County Wastewater Treatment System

The county has prepared a feasibility study for providing sewer collection services to a portion of southeastern Chowan County. The preliminary recommendation of that study is to install a low-pressure or vacuum sewer system to serve the Cape Colony, County Club Road and surrounding areas,

Chowan County, NC

Figure 5: Water & Sewer Systems Map

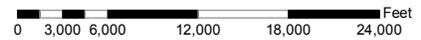
Water & Sewer Infrastructure

- Private WWTP (Package Plant)
- Town of Edenton WWTP
- Water Wells
- Water Treatment Plant
- Water Tanks
- Hazardous Substance Disposal Site
- Pump Stations
- Sludge Application Site
- Edenton Sewer Pipes
- Chowan County Water Pipes
- Edenton Water Pipes
- Edenton Sewer System Service Area
- Chowan County Water System Service Area
- Town of Edenton Water System Service Area
- Edenton Corporate Limits
- Edenton Extraterritorial Jurisdiction

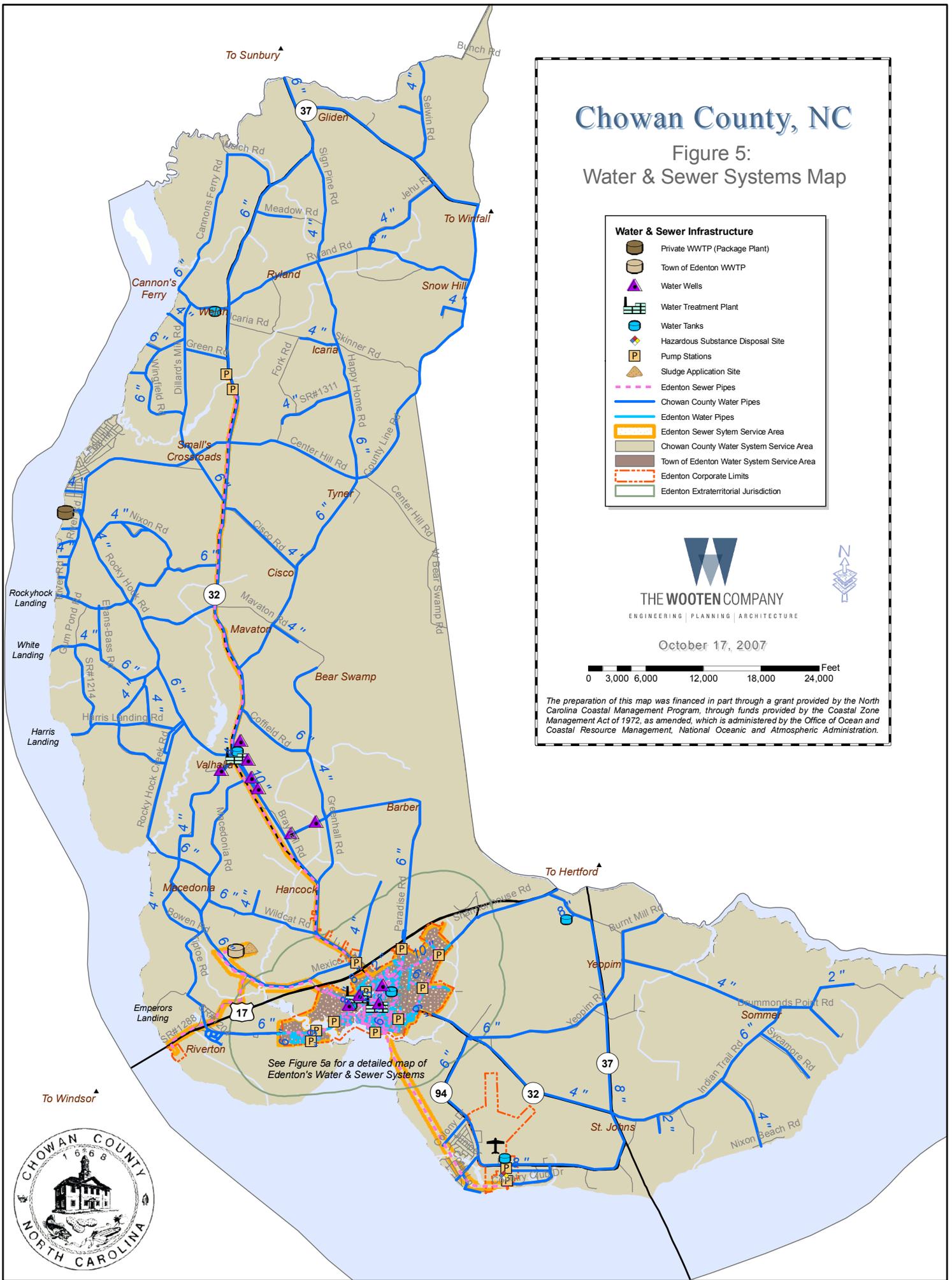


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October 17, 2007



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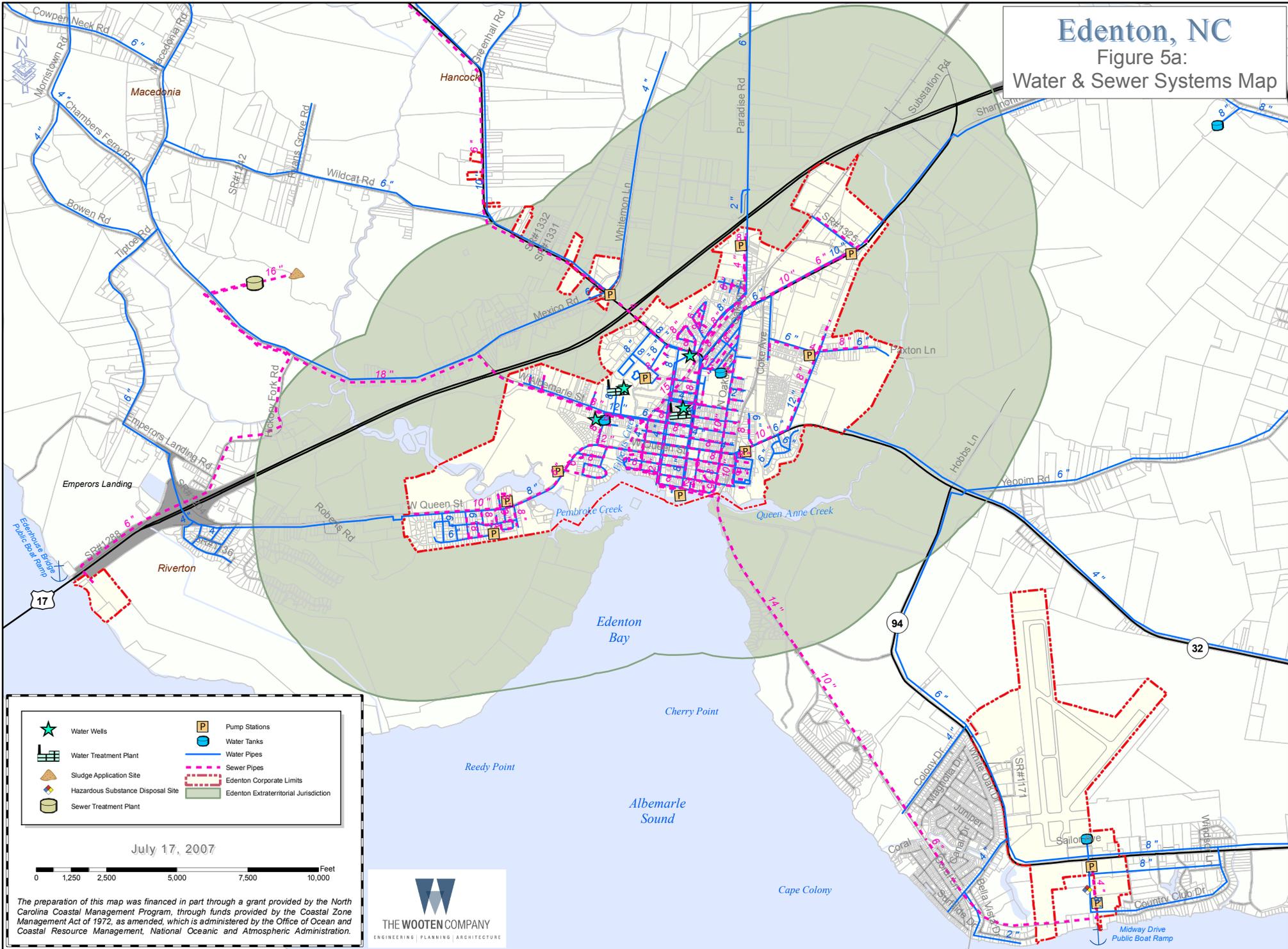


See Figure 5a for a detailed map of Edenton's Water & Sewer Systems



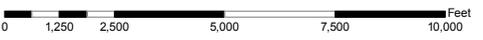
Edenton, NC

Figure 5a: Water & Sewer Systems Map



	Water Wells		Pump Stations
	Water Treatment Plant		Water Tanks
	Sludge Application Site		Water Pipes
	Hazardous Substance Disposal Site		Sewer Pipes
	Sewer Treatment Plant		Edenton Corporate Limits
			Edenton Extraterritorial Jurisdiction

July 17, 2007



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and the Chowan County Golf and Country Club. Soils in the study area all have a septic tank absorption rating of 'severe' due either to wetness or flooding. These soils ratings indicate a high probability of surfacing effluent and groundwater contamination.

3.4.3 Transportation Systems

A thoroughfare plan was adopted by the Town of Edenton in 1993. A thoroughfare plan for the Chowan County planning jurisdiction has not been prepared.

A. Proposed Major Highway Improvements

Improvements in the current NCDOT Transportation Improvements Plan (TIP), as delineated on [Figure 6](#), include the following:

Eastern Connector

A 2-lane facility connecting NC 32 at NC 94 (Soundside Road) with the US 17 Bypass at the North Broad Street Interchange. This improvement is designated as project U-3419 in the current TIP. Planning and design is currently underway. Construction is projected to begin in FFY 11. This route is projected to alleviate downtown congestion and traffic by providing an alternate route for through traffic.

Western Connector

A 2-lane facility connecting West Queen Street (US 17 Business) and West Albemarle Road and ultimately, in combination with the Luke Street Extension, Virginia Road just south of the US 17 Bypass. A feasibility study is currently underway and is designated in the current TIP as FS-0201D. This proposed facility would also help to alleviate congestion in the downtown area.

Luke Street Extension

A 2-lane facility extending the existing Luke Street from Virginia Road to West Albemarle Road. The primary purpose of this facility is to improve emergency vehicle access from the hospital on Virginia Road to the western portions of Edenton.

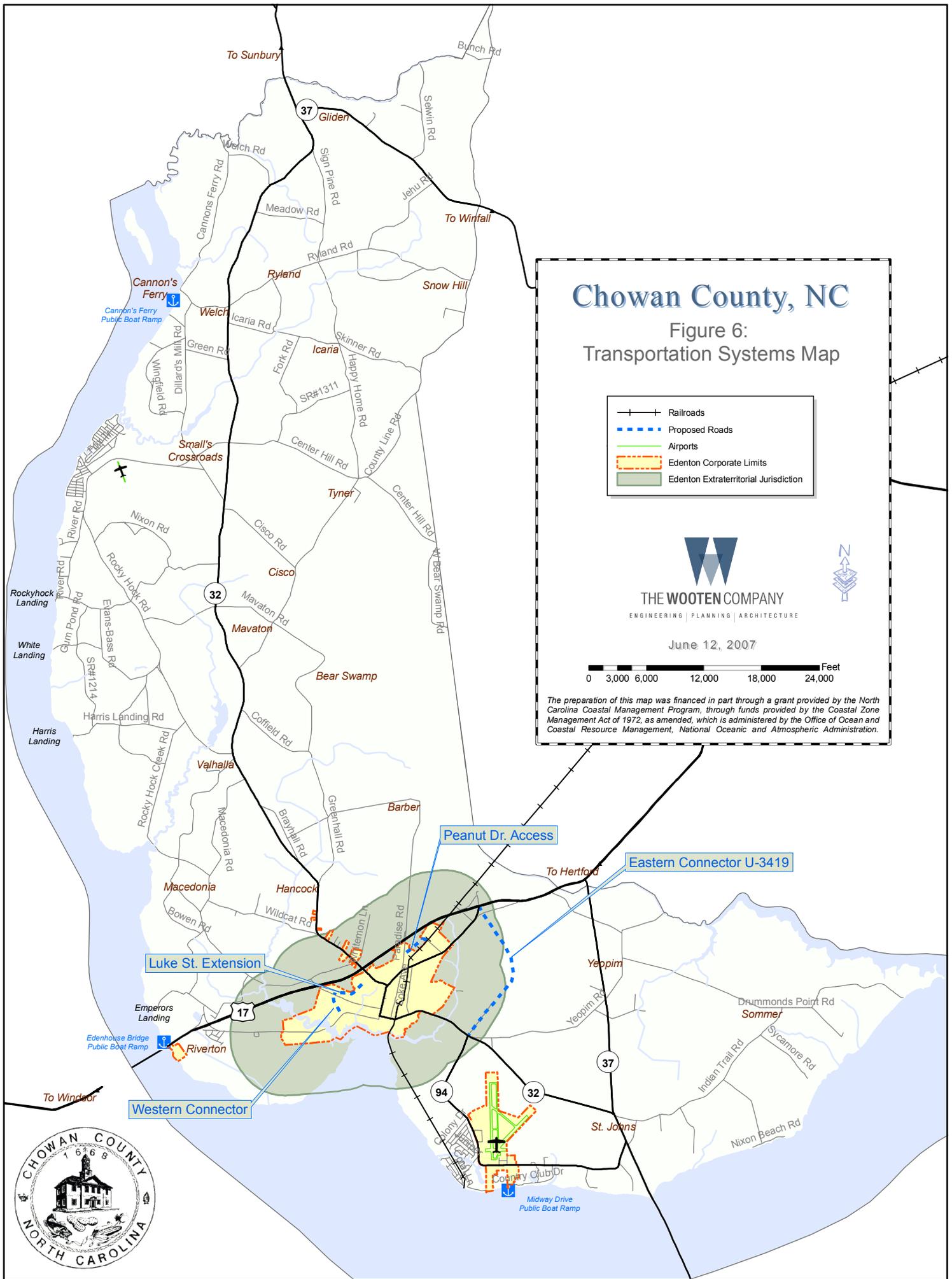
Peanut Drive Access

This proposed facility would connect Paradise Road and SR 1325 to allow truck traffic to access the existing industrial area and the US 17 Bypass without entering the downtown area.

Soundside Road

This minor thoroughfare (NC 94) provides access to the southeastern portion of Chowan County including the airport industrial area. Shoulder widening to 24 feet is recommended to provide a safer road and to accommodate truck traffic.

The Eastern Connector will allow for easier traffic flow from the southeastern portion of the county to the north. The combination of the Western Connector, Luke Street extension, and Peanut Drive will eventually allow for better traffic circulation around the circumference of Town. As a result of the proposed transportation improvements, an increase in residential density and



Chowan County, NC

Figure 6:
Transportation Systems Map

- Railroads
- Proposed Roads
- Airports
- Edenton Corporate Limits
- Edenton Extraterritorial Jurisdiction



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future commercial development will be anticipated outside of the downtown area. The improvements will also alleviate some of the traffic congestion downtown.

B. System Deficiencies and Capacity Analysis

The 1993 Thoroughfare Plan noted that the most evident deficiency in the Edenton road network is the lack of a circumferential route that would allow traffic to access the US 17 bypass without passing through the center of town. Improvements to existing streets in the downtown area is limited by the abundance of historic properties and the large trees that line the pavement edge.

An analysis of the roads was made to determine if the 2020 design year traffic would exceed the practical capacity of the system. No roads are expected to exceed practical capacity. According to current projections, only downtown sections of US 17 Business and NC 32 will approach capacity.

C. Traffic Volumes

As would be expected, the heaviest traffic volumes are on the major US and NC numbered thoroughfares (US 17 and NC 32) and on major collector streets (North Broad Street and West Queen Street). The heaviest traffic volumes occur in the Town of Edenton on Virginia Road (NC 32/US 17 Business) and North Broad Street. The following table summarizes the 2004 traffic volumes on the major streets.

*Table 41:
2004 Average Daily Traffic
Major Thoroughfares
Edenton-Chowan County*

Highway	ADT	Location
US 17	8600	N. of Chowan River
	7900	N. of West Queen Street
	7500	N. of West Albemarle Street
	8500	N. of NC 32
	7900	N. of Paradise Road
	9900	S. of Perquimans County line
NC 32	3800	at Sandy Point
	3900	S. of Indian Trail Road
	2200	W. of NC 37
	6300	W. of NC 94 intersection
	5300	E. of N. Oakum Street
	5100	W. of N. Oakum Street
	9900	N. of Albemarle Street
	13000	W. of railroad intersection
	14000	E. of US 17 intersection
	9800	W. of US 17 intersection
	7900	N. of Wildcat Rd. intersection
	6700	N. of Pollock Swamp bridge
	2800	S. of Mavaton Rd. intersection
2600	S. of Indian Creek bridge	
2600	S. of Gates County line	
NC 37	2500	S. of Perquimans County line
NC 94	2300	at Edenton Municipal Airport
	3800	S. of Hobbs Ln. intersection
West Queen Street	2500	E. of US 17 bypass
	4300	E. of N. Broad Street
North Broad Street	9900	N. of Albemarle Street
	9500	W. of Coke Avenue
	2800	N. of Peanut Drive

Source: 2004 Annual Average Daily Traffic, Chowan County, NCDOT

3.4.4 Stormwater Systems

A. Edenton

The existing stormwater drainage facilities consist of a system of piping, catch basins, and drainage ditches and swales. The Town is currently evaluating options for improving stormwater management. The Town's Unified Development Ordinance was amended in 2005 to require storm drainage plans for all new developments. The Town of Edenton is not subject to the EPA's Stormwater Phase II rules.

B. Chowan County

The existing stormwater drainage facilities consist primarily of a system of drainage ditches and swales. The County is currently evaluating options for improving stormwater management. The County's subdivision ordinance was amended in 2005 to require storm drainage plans for all new developments. More specific stormwater management requirements have been proposed in the draft revisions to the Chowan County

Subdivision Regulations. Chowan County is not subject to the EPA's Stormwater Phase II rules.

C. Existing Drainage Problems

Areas of repetitive flooding, including flooding from stormwater runoff, are also identified in Section 3.2.3, D.

D. Water Quality Problems Related to Point Sources

No specific problem areas were identified.

3.4.5 Solid Waste and Recycling

Solid waste in Edenton and Chowan County is collected and transported to the privately run East Carolina Regional Landfill located in Aulander in Bertie County. Most of the waste generated in the county is sent through the Transfer Station located at the PCG Solid Waste Management Facility in Belvidere. The four convenience centers located in Chowan County are managed by Perquimans-Chowan-Gates Solid Waste Commission, which is a department of Albemarle Regional Health Services. The Town of Edenton operates a transfer station located at Hicks Street. County residents may dispose of solid wastes and recyclables at convenience centers. Curbside recycling is available in the Town of Edenton. The estimated remaining capacity of the East Carolina Environmental Regional Landfill in Bertie County is approximately 20 years.

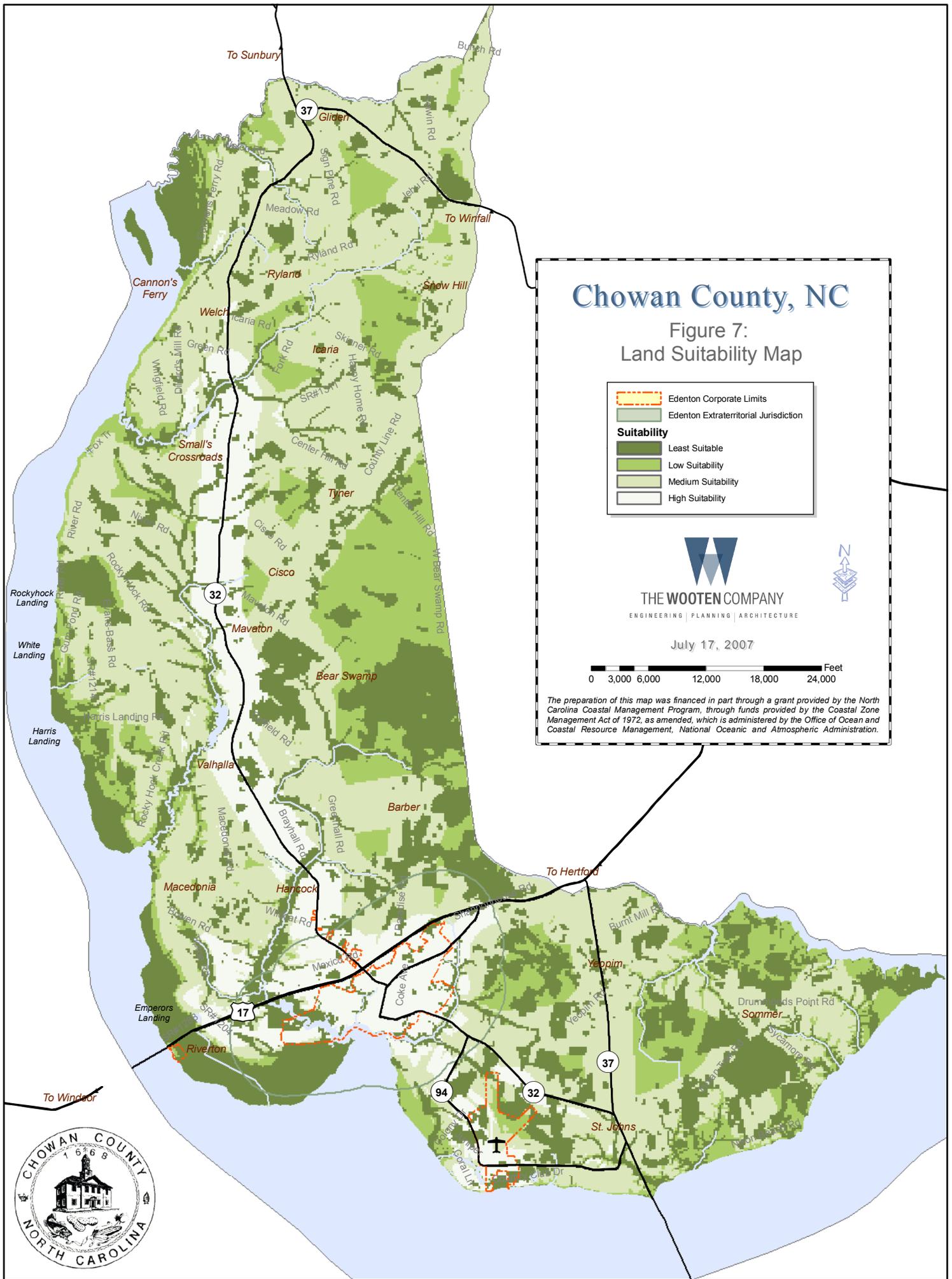
3.4.6 Natural Gas

Natural gas is provided to the Town of Edenton and portions of Chowan County by Piedmont Natural Gas Company. Natural gas service for residential and nonresidential users is available in scattered areas within the Edenton corporate limits. A high pressure, nonresidential gas line runs from Edenton northward along NC 32 to Gates County. A residential line splits off of this nonresidential line and loops back to NC 32 on Rocky Hock Road. A nonresidential line also extends east of Edenton along NC 32 and Soundside Road (NC 94) to Midway Drive located south of the Edenton Municipal Airport. Splits of this line provide residential service to some streets in the Cape Colony Subdivision as well as in the Country Club Subdivision along Country Club Drive.

3.5 Land Suitability Analysis

Subchapter 7B .0702(c)(5) requires that the land use plan include a land suitability analysis to determine the community's supply of land suited for development based upon the following considerations:

- Natural system constraints
- Compatibility with existing land uses and development patterns
- Existing land use and development criteria of local, state, and federal agencies
- Availability and capacity of water, sewer, stormwater management facilities, and transportation systems



Chowan County, NC

Figure 7:
Land Suitability Map

	Edenton Corporate Limits
	Edenton Extraterritorial Jurisdiction
Suitability	
	Least Suitable
	Low Suitability
	Medium Suitability
	High Suitability



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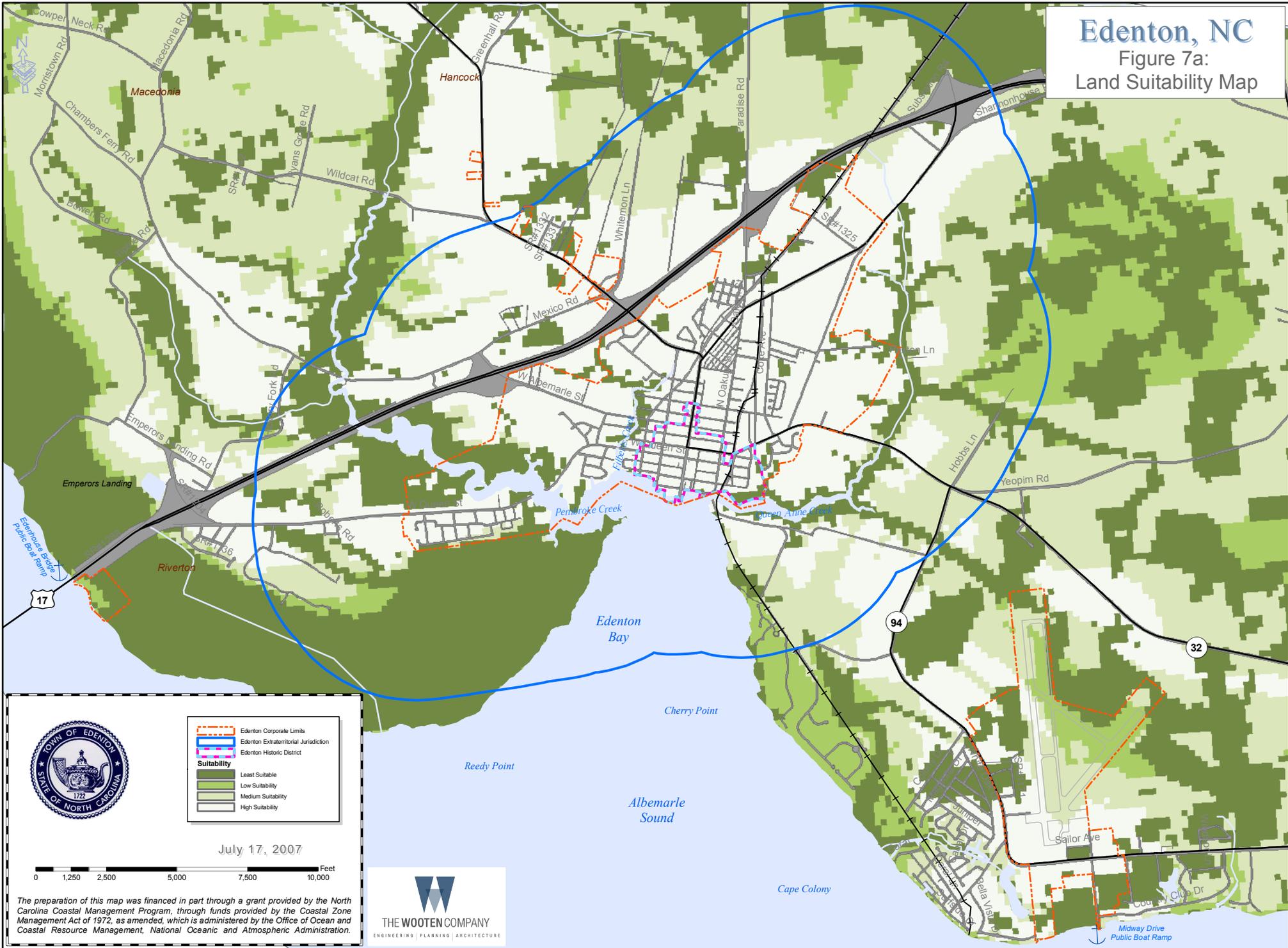
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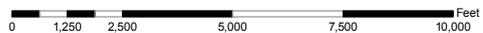
Edenton, NC

Figure 7a:
Land Suitability Map



	Edenton Corporate Limits
	Edenton Extraterritorial Jurisdiction
	Edenton Historic District
Suitability	
	Least Suitable
	Low Suitability
	Medium Suitability
	High Suitability

July 17, 2007



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The primary purpose of the land suitability analysis is to provide the local government with information regarding the best areas for development in order to guide the formulation of policies and the preparation of the future land use map.

The following factors must be considered to assess land suitability:

- Water quality
- Land Classes I, II, and III
- Proximity to existing developed areas and compatibility with existing land uses
- Potential impact of development on areas and sites designated by local historic commissions or the NC Department of Cultural Resources as historic, culturally significant, or scenic
- Land use and development requirements of local development regulations, CAMA Use Standards and other applicable state regulations, and applicable federal regulations
- Availability of community facilities, including water, sewer, stormwater and transportation

The development of a Land Suitability Map is required as part of the suitability analysis. The Land Suitability Map is intended to illustrate the degree to which land within the planning area is suitable for development. The Division of Coastal Management and the NC Center for Geographic Information and Analysis have jointly developed a GIS-based land suitability analysis model for analyzing and mapping land suitability. The suitability criteria, ratings, and weight factors used in this model to prepare the Land Suitability Map are delineated in the following table. The default weighting factors provided by DCM were used in the preparation of this Land Suitability Analysis.

**Table 42:
Land Suitability Model**

Layer Name		-----Criteria and Rating-----				Assigned Weight	Percent Weight
		Least Suitable 0	Low Suitability -2	Medium Suitability 1	High Suitability 2		
Coastal Wetlands	Exclusion	Inside	Outside				
Exceptional and Substantial Noncoastal Wetlands	Exclusion	Inside	Outside				
Estuarine Waters	Exclusion	Inside	Outside				
Protected Lands	Exclusion	Inside	Outside				
Beneficial Noncoastal Wetlands	Weighted		Inside		Outside	1	4.348
Storm Surge Areas	Weighted		Inside		Outside	2	8.696
Soils with septic limitations	Weighted		Severe	Moderate	Slight	2	8.696
Flood Zones*	Weighted		Inside		Outside	2	8.696
Water Supply Watersheds	Weighted		Inside		Outside	1	4.348
Significant Natural Heritage Areas	Weighted		< 500'		> 500'	1	4.348
Hazardous Substance Disposal Sites	Weighted		< 500'		> 500'	1	4.348
NPDES Sites	Weighted		< 500'		> 500'	1	4.348
Wastewater Treatment Plants and Land Application Site	Weighted		< 500'		> 500'	1	4.348
Municipal Sewer Discharge Points	Weighted		< 500'		> 500'	1	4.348
Airports	Weighted		< 500'		> 500'	1	4.348
Developed Land	Weighted		> 1 mi	.5 - 1 mi	< .5 mi	1	4.348
Primary Roads	Weighted		> 1 mi	.5 - 1 mi	< .5 mi	2	8.696
Water Pipes	Weighted		> .5 mi	.25 - .5 mi	< .25 mi	3	13.043
Sewer Pipes	Weighted		> .5 mi	.25 - .5 mi	< .25 mi	3	13.043
Total Percent							100.000
Mean Percent							6.667
Mean Weight						1.533	

Assigned weight: 1 = Important 2 = Very important 3 = Most important for development

Sources: William B. Farris; Frederick Steiner, *The Living Landscape*; Carteret County Land Suitability Analysis; Kaiser et al, *Urban Land Use Planning*; The Wooten Company, 2006

*As no digital floodplain data exists for the Chowan County River Basin, The Wooten Company created a dataset for the purposes of CAMA Modeling. Using LIDAR elevation data distributed from NCDOT, raster cells were selected with a pixel value under 5 (this translates to a stretched value of approximately 59 feet above sea level). A 3 x 3 kernel low pass filter was applied to smooth out the data by dropping out lines of only a few pixels in width. This process was applied to the entire county and the official Pasquotank River Basin flood data (June 2002) was used as a control. The output matched quite favorably with the control, so the raster data was converted to vector, clipped to the Chowan Watershed Boundary and clipped again to a 1,000-foot buffer of the county shoreline (again using the official LIDAR data as a model).

The Land Suitability Map produced through this modeling process classifies land as High Suitability, Medium Suitability, Low Suitability, and Least Suitable. In general, the areas with the highest suitability for development are within the Town of Edenton urban area and in areas where public water and/or sewer services are available. Lower suitability ratings are found in areas subject to flooding, wetlands areas, and areas without public utilities. [Figure 7, Land Suitability Map](#) graphically illustrates the suitability ratings.

Table 43: Land Area within Land Suitability Classifications				
Suitability Rating	Town of Edenton Jurisdiction		Chowan County Jurisdiction	
	Acres	Percent	Acres	Percent
High Suitability	5,086	47%	8,179	8%
Medium Suitability	2,302	21%	47,142	47%
Low Suitability	443	4%	16,516	17%
Least Suitable	3,071	28%	27,767	28%
Totals	10,901	100%	99,604	100%
<i>Source: The Wooten Company, 2007</i> Note: Acreage excludes water features				

A comparison of [Figure 4, Existing Land Use Map](#) with the Land Suitability Map reveals that a considerable number of vacant/under-utilized tracts are located within the areas with the higher suitability ratings. Large amounts of acreage currently used for agricultural and/or forestry purposes are also located within the high and medium suitability-classified areas.

3.6 Review of Current Land Use Plan

Subchapter 7B .0702(c)(6) requires that the preparation of the land use plan update include an evaluation of the community’s success in implementing the policies and programs adopted in the current land use plan as well as the effectiveness of those policies in achieving the goals of the plan. The current Chowan County/Town of Edenton CAMA Land Use Plan was certified in March 1999. A summary of ordinance consistency, implementation actions taken, and overall effectiveness of current land use plan policies follows.

A. Consistency of Existing Ordinances with the Current Land Use Plan Policies

Chowan County land development ordinances include a zoning ordinance, subdivision ordinance, flood damage prevention ordinance, unsafe building ordinance, and a mobile home park ordinance. Ordinance revisions/adoption that have been made to ensure consistency with the 1998 Plan policies include:

- Mobile home age restriction ordinance
- County-wide zoning
- Requirement for a drainage plan for major developments

The Town of Edenton has a unified development ordinance (UDO), which includes zoning, subdivision, flood damage prevention, and sign regulations. The Town considers their existing ordinances to generally be consistent with the 1998 Land Use Plan Policies. Ordinance revisions/adoption and other

actions that have been taken to ensure consistency with the 1998 Plan policies include:

- Mobile home age restriction ordinance
- Requirement for a drainage plan for major developments
- Design standards for commercial districts outside of downtown

B. Adoption of the Current Implementation Measures

Major implementation activities recommended in the 1998 Land Use Plan and implementation activities (in italics) undertaken by Edenton and Chowan County include:

1. Develop an Urban Design Manual for the Town of Edenton. *Adopted 2005, Architectural Standards for new Commercial & Medical Arts Construction.*
2. Place areas designated by the Land Use Classification Map for Conservation in the Resource Zone. *Encourage private property owners to dedicate conservation easements.*
3. Enforce more stringent design and drainage requirements for development proposals. *Amended town and county ordinances in 2005 to require a drainage plan review by Soil & Water Conservation staff and Town/County engineer.*
4. Publicize and enforce marina and dock requirements. *On-going activity.*
5. Assist channel maintenance by providing dredge spoil disposal sites, applying for necessary permits, and pursuing financial assistance. *On-going activity.*
6. Require Federal 404 wetlands permits before issuing Town building permits. *On-going activity; standard operating procedure.*
7. With CAMA's help, set up citizen work shops designed to interact with residents to:
 - open lines of communication
 - establish dialogue concerning history and past experiences
 - share research about both the local area and research in other areas

No action to date.
8. Create a comprehensive strategy for raising the funds necessary to implement dredging, channel maintenance, etc. *No action to date.*
9. Develop a detailed plan for procuring CAMA and other State funding, as well as Federal grants. *On-going activity.*
10. Adopt an annexation ordinance which spells out strategies for voluntary and involuntary annexation. *No action to date.*

11. Identify the historic district in the Downtown area and adopt an historic district ordinance to regulate development, redevelopment and demolition in the area. *Updated historic district design guidelines currently being prepared.*
12. Adopt a formal street improvement plan which includes a survey of problem areas, a rank future projects based on need, and which identifies available funds. *No action to date.*
13. Support public education workshop on motorist safety, neighborhood safety. *No action to date.*
14. Identify landmarks with plaques or other markers. *On-going activity.*
15. Update the Town's 100-year flood plain map. *Pasquotank River basin maps recently completed. Chowan River basin revised maps to be completed in 2007.*
16. Educate the community on the value and significance of natural resources. *On-going activity.*

Specific implementation recommendations regarding the Town of Edenton Unified Development Ordinance and the actions taken to date include:

1. Require all development proposals to include a map and design for drainage. *UDO amended in 2005 to require drainage plan review by Soil & Water Conservation staff and the Town engineer.*
2. When a rezoning occurs, the newly adopted zoning classification should be appropriate and consistent with the Land Use Plan regarding the allowable uses and development standards for the area in question. *All staff reports to the Planning Board and Town Council include a statement of consistency with the land use plan.*
3. Adopt two new zoning districts to govern the development of shopping centers and "strip" commercial development. *An amendment regarding the shopping center zoning district was adopted in 1999.*
4. Adopt upgraded application requirements and design review guidelines for Conditional Use District rezonings applications. *An amendment regarding conditional use district rezonings was adopted in 1999.*
5. Adopt updated landscape and screening standards for commercial development. *Amendments regarding landscaping and screening requirements for nonresidential developments were adopted in 1999 and 2005.*
6. Adopt requirements and guidelines for traffic impact assessments, fiscal impact assessments and environmental performance standards for large scale or "big box" commercial development proposals. *An amendment requiring such additional evaluations for major site plans was adopted in 2002.*

Specific implementation recommendations regarding the Town of Edenton and Chowan County subdivision regulations and the actions taken to date include:

1. Incorporate greater detail on design standards for both public and private streets as well as conditions relating to when other public improvements (such as sidewalks and curb and gutter) would be required. *New street design standards were adopted by the Town in 1999 and by the County in 2002.*
2. Incorporate language to protect environmentally sensitive areas identified in the Plan (those being susceptible to flooding and other hazards and fires, areas of special biological and resource significance, areas of special cultural significance and the like). *The Chowan County subdivision regulations are currently being revised and will include more specific language regarding land suitability and protection of fragile environments.*

Other implementation activities completed since the 1998 Plan include:

- Preservation of the remaining Bandon Plantation buildings
- County feasibility study for southeastern Chowan County
- Acquisition of Holliday Island for passive open space and recreation use
- Redevelopment of Edenton Cotton Mill & Mill Village
- Farmers market in downtown Edenton
- Formed Edenton-Chowan Affordable Housing Commission
- CDBG Scattered site rehabilitation grants 2001 & 2004
- Expanded ecotourism with water based recreation sites at Holladay Island, Cannon's Ferry, Pembroke Creek, and Wildlife boat ramps
- 2003 Edenton-Chowan Greenways and Open Space Plan
- Chowan County, Town of Edenton Hazard Mitigation Plan 2005

C. Effectiveness of the Current Policies

Both Chowan County and the Town of Edenton consider that their current Land Use Plan policies are generally achieving the desired land use patterns and protecting natural systems. However, the 1998 Land Use Plan policy statements, while good goals for environmental protection, emergency management, and public recreation access, did not provide a specific set of guidelines for use by the Edenton Town Council and Chowan County Board of Commissioner when making land development decisions. The policies, while addressing growth management and land use in a general sense, did not give the Planning Boards or elected bodies explicit tenets by which they could guide growth and development in the Town and County. Rather than being a 'toolbox' for the Boards, Council, and Board of Commissioners to use and rely on, the 1998 Land Use Plan became more of an encyclopedia of existing land use patterns and categories, with idealized statements about future land use and environmental concerns.

SECTION IV: PLAN FOR THE FUTURE

This section of the Plan is organized in accordance with the requirements of Subchapter 7B .0702(d). Section IV includes goals, land use and development policies, and a future land use map. This portion of the Plan is intended to guide the development and use of land within the planning jurisdictions of Chowan County and the Town of Edenton manner that achieves each community's goals and the goals of the Coastal Area Management Act program.

Within this section specific definition of terms used in the goals and policies are as follows:

Cluster development. The grouping of buildings in order to conserve land resources and provide for innovation in the design of the project including minimizing stormwater runoff impacts. Generally, the objective of clustering is to allow variations in building setbacks and lot sizes while maintaining the overall density permitted under base zoning standards for traditional lot development. Clustering is a land subdivision option available in single-family residential zoning districts in Edenton and in the county, in any zoning district that allows single-family residences. In Edenton and Chowan County, clustering does not result in increased density.

Continue: Follow past and present procedures to maintain desired goal, usually with staff involved at all levels from planning to implementation.

Encourage: To stimulate or foster a particular condition through direct or indirect action or through regulation, staff recommendation and decisions.

Enhance: Improve existing conditions by increasing the quantity or quality of desired features or current regulations and decisions towards a desired state through the use of policies and staff involved at all levels of planning. This could include financial support.

Implement: Actions to guide the accomplishment of the Plan recommendations.

Promote: Advance the desired state through the use of policies and codes and planning board and staff activity at all levels of planning. This may include financial support.

Protect: Guard against a deterioration of the desired state through the use of policies and regulations, staff, and, if needed, financial assistance.

Provide: Take the lead role in supplying the needed financial and staff support to achieve the desired goal. The unit of government is typically involved in all aspects from planning to implementation to maintenance.

Support: Supply the needed staff support, policies, and financial assistance at all levels to achieve the desired goal.

Work: Cooperate and act in a manner through the use of staff, actions, and policies to create the desired goal.

During the course of the preparation of the land use plan update, specific issues have been identified that the county and town goals and policies strive to address. The following table summarizes, by CRC land use plan management topic, those issues.

<i>Table 44: Land Use Issues and Management Topics</i>	
Management Topic Category	Locally Identified Issue
Public Water Access	Providing for public water access to all segments of the community, including persons with disabilities.
	Development of comprehensive policies that provide access opportunities for the public along the shoreline within the planning jurisdiction.
Land Use Compatibility	Development of local development policies that balance protection of natural resources and fragile areas with economic development.
	Development of policies that provide clear direction to assist local decision making and consistency findings for zoning, divisions of land, and public and private projects.
	Compatibility of County land use regulations in future municipal utility service areas.
	Development of land use and development policies that minimize adverse impacts on Areas of Environmental Concern (AECs) and which support overall CAMA goals.
Infrastructure Carrying Capacity	Establishment of service area boundaries for existing and future infrastructure
	Development of infrastructure service policies and criteria consistent with future land needs projections
	Correlating future land use map categories with existing and planned infrastructure such as water, sewer, and transportation facilities
	Ensuring that public infrastructure systems are appropriately sized, located, and managed so that the quality and productivity of AECs and other fragile areas are protected or restored
Natural Hazard Areas	Development of policies that minimize threats to life, property, and natural resources resulting from land development located in or adjacent to hazard areas such as those subject to erosion, high winds, storm surge, flooding, or sea level rise.
	Development of location, density, and intensity criteria for new, existing development, and redevelopment (including public facilities and infrastructure) so as to avoid or better withstand natural hazards.
	Ensuring that existing and planned development is coordinated with existing and planned evacuation infrastructure.
Water Quality	Development of policies to prevent or control nonpoint source discharges (sewage and storm water) such as impervious surface limits, vegetated riparian buffers, wetlands protection, etc.
	Establishment of policies and land use categories for protecting open shellfishing waters and restoring closed shellfishing waters.
	Adoption of policies for coastal waters within the planning jurisdiction to help ensure that water quality is maintained if not impaired and improved if impaired.
Areas of Local Concern	Identify and address local concerns and issues, such as cultural and historic areas, scenic areas, economic development, or general health and human service needs

4.1 Land Use and Development Goals

The formulation of land use and development goals is based upon each community's evaluation of its identified concerns and aspirations (Section II) and the needs and opportunities identified in the analysis of existing and emerging conditions (Section III). These land use plan goals were formulated after a review and analysis of the goals and objectives contained in the 1998 Edenton/Chowan CAMA Land Use Plans (see [Appendix B](#)), and the Coastal Resource Commission (CRC) management goals, planning objectives, and land use plan requirements (see [Appendix H](#) for a summary). Delineation of goals is a foundation upon which policy statements can be built.

4.1.1 Chowan County and the Town of Edenton Goals

The following table summarizes the land use and development goals, organized by CRC land use plan management topic, that have been formulated by Chowan County and the Town of Edenton.

<i>Table 45: Land Use and Development Goals</i>	
Management Topic	Chowan County and Edenton Land Use and Development Goals
Public Water Access	Provide adequate opportunities for public access to coastal waters
Land Use Compatibility	Balance growth and development and conservation/preservation of natural resources
	Promote land use and public infrastructure development that is compatible with land suitability as well as capabilities to provide requisite public services
	Promote land use and land development compatible with the functional purposes of Areas of Environmental Concern
Infrastructure Carrying Capacity	Promote land use and public infrastructure development that is compatible with land suitability as well as capabilities to provide requisite public services
Natural Hazard Areas	Conserve and maintain natural hazard areas
Water Quality	Maintain and enhance the water quality of coastal waters
Areas of Local Concern	Preserve historic and cultural resources
	Provide a variety of housing opportunities
	Promote diversified economic development
	Preserve the waterfront vistas

4.2 Land Use and Development Policies

The formulation of land use and development policies is based upon a review and analysis of policy statements contained in the 1998 Chowan/Edenton CAMA Land Use Plan (see [Appendix A](#) for a summary of policies from that plan); an evaluation of identified concerns and aspirations (Section II) and the needs and opportunities identified in the analysis of existing and emerging conditions (Section III); input from the Joint Land Use Plan Committee, local planning boards, and elected officials; and input obtained through citizen participation efforts including public informational meetings, public forums, and Joint Land Use Plan Committee meetings.

4.2.1 Town of Edenton/Chowan County Policy Statements

The following table summarizes the land use and development policies that have been formulated by the Town of Edenton and Chowan County. Where a particular policy statement is applicable to only one jurisdiction, it is so stated. If

no specific reference is made to the Town or the County in a policy statement, the stated policy is applicable to both jurisdictions.

*Table 46:
Land Use and Development Policies*

A. Public Access to Public Trust Waters Policies

Policy A1: Edenton and Chowan County will ensure a variety of opportunities for access to public trust waters to all segments of the community, including persons with disabilities.

Policy A2: The Town of Edenton and Chowan County support the state's shoreline access policies set forth in NCAC Chapter 15A, subchapter 7M.

Policy A3: It is the policy of Town of Edenton and Chowan County governments to acquire, in accordance with an adopted access plan and funding availability, rights-of-way, fee simple title and/or easements to allow public access along the navigable waterways.

Policy A4: Chowan County shall require water access for owners of interior lots or as public access sites in major residential subdivisions located in close proximity to the water's edge. Edenton shall require residential waterfront subdivisions containing interior lots to reserve water access for owners of interior lots. Edenton shall also require that some major residential waterfront developments include in the proposed development a plan for public water access.

Policy A5: The County should investigate the viability of eco-tourism development along its waterfront areas. Eco-tourism is a thriving "clean" industry that takes advantage of existing environmental characteristics such as creeks, lakes and rivers to promote recreational activities and attract visitors. Such an industry would be ideal for the County given its existing environmental resources. The County could explore the development of several creek trails, for example, that could be used for recreational purposes.

Policy A6: The community shall continue to provide for the diverse recreational needs of the permanent and seasonal populations by supporting the design and construction of the extensive waterfront area in a manner that balances water access needs with the protection of fragile natural resources.

Policy A7: The County and the Town both support the idea of providing a permanent mooring in the area to provide safe and efficient docking and boat storage opportunities to local residents.

Policy A8: The development of marinas, preferably upland marinas, is supported to enhance access to public trust waters.

B. Land Use Compatibility Policies

Policy B1: The County supports the establishment of a voluntary agricultural district program for the purpose of the preservation of prime farmlands.

Policy B2: Chowan County, as part of a subdivision request, shall review the Land Use Plan's Land Suitability Analysis Map as a source of information for determining the general suitability of land for the proposed development. Because the Land Suitability Map is a static illustration of suitability based upon numerous factors including proximity to developed land and the presence of infrastructure, consideration will be given to conditions which have changed since the time of map preparation that may alter the suitability rating delineated on the map. Land which the County has determined, either through its own investigations or the investigations of other public agencies, to be unsuitable for development because of flooding, poor drainage, steep slopes, poor soil conditions and other such physical features which may endanger health, life, or property or necessitate the excessive expenditure of public funds for the provision and/or maintenance of public services shall not be approved for subdivision unless methods are formulated by the developer for mitigating the problems created by the subdivision of

*Table 46:
Land Use and Development Policies*

such land.

Policy B3: In order to preserve farmland and rural open space, the Town and County encourage cluster residential subdivision developments throughout their jurisdictions.

Policy B4: Ensure that land use and development activities provide a balance between economic development needs and protection of natural resources and fragile environments.

Policy B5: The Town and County support growth and development at the densities and intensities specified in the Future Land Use Map land classifications as delineated in Section 4.3 of this plan.

Policy B6: Oppose any development on sound and estuarine islands located within the Edenton and Chowan County planning jurisdictions.

Policy B7: The Town and County support CAMA Use Standards for coastal wetlands.

Policy B8: Only commercial and industrial uses that are water dependent and which cannot function elsewhere or are supportive of commercial fishing will be allowed in conservation-classified areas. Examples of such uses would include but not necessarily be limited to commercial fishing and fish processing, marinas consistent with the policies of this plan, boat repair and construction facilities, any business dependent upon natural salt water as a resource, and restaurants that do not extend into or over estuarine waters and/or public trust waters. All uses must be consistent with established zoning.

Policy B9: Industrial development within the Town of Edenton's jurisdiction must use municipal utilities if available. Utility systems for industrial development proposed outside of the municipal service area will be reviewed and approved on a case by case basis. Industrial development in the Chowan County jurisdiction shall use public water or sewer if available, or acceptable package treatment systems.

Policy B10: Industries which are noxious by reason of the emission of smoke, odor, dust, glare, noise, and vibrations, and those which deal primarily in hazardous products such as explosives, will not be permitted.

Policy B11: Industrial development and/or industrial zoning will not infringe on established residential development. When reviewing proposals for new industrial development or industrial zoning, the Town and County will ensure that the proposals are compatible with surrounding land uses and that identified adverse impacts are mitigated.

Policy B12: To help ensure that cluster developments and planned unit developments are in harmony with adjoining land uses, Chowan County will require such developments to provide buffering between dissimilar uses and will require building setbacks that are comparable to those of the use located on the adjacent properties.

Policy B13: Coordinate all development activity with appropriate Regional Health Department and state regulatory personnel.

Policy B14: Cooperate with the U.S. Army Corps of Engineers in the regulation/enforcement of the 404 wetlands permit process.

Policy B15: Encourage land use proposals which will have no negative impact on historic, cultural and/or archaeological resources in the Town and County. These proposals shall be reviewed through the Section 106 review process as well as through the Historic Preservation Commission and the State Historic Preservation Office.

Policy B16: Edenton and Chowan County support citizens' awareness programs and public educational opportunities for community historic and natural resources, including the conservation, preservation and maintenance thereof.

Policy B17: To help ensure that planned residential developments (PRDs) are in harmony with adjoining single-family land uses, Edenton will require that the two-family and multi-family components of such developments be located more to the interior of

*Table 46:
Land Use and Development Policies*

the PRD rather than on the periphery.

Policy B18: The Town and County prohibit floating homes or watercraft with any long-term occupancy.

Policy B19: Chowan County shall require that the developer or subdivider of major subdivisions located adjacent to US and primary or secondary NC Highways, railroads, industrial or commercial developments, or watercourses establish and maintain a continuous and uninterrupted buffer strip in addition to the normal lot depth required.

Policy B20: Future public improvements should be planned and financed using fiscal mechanisms which avoid adverse tax impacts on the owners of prime forestry lands where such lands will not directly benefit from the planned public improvements.

Policy B21: Chowan County shall continue to promote use-value assessment as a means of preserving the forestry resource base and encourage owners of parcels of 10 acres or more to apply for use-value assessment.

Policy B22: Encourage replanting of areas within the County cleared for timber.

Policy B23: Manage and direct growth and development in balance with available support services.

Policy B24: The Town and County shall continue to work cooperatively in identifying suitable sites for economic development and marketing them to expanding firms that would generate new job opportunities for local residents.

Policy B25: The Town and County support the development of the Air Transpark outside of Edenton. This industrial park site offers the area a unique opportunity for attracting new industry and future economic development. Great potential exists to link the airport with other transportation alternatives (water, new and existing roads, etc.) in order to develop a true commercial transportation center.

Policy B26: Encourage growth to occur and expand in geographical areas in and around the Town as portrayed in the respective Future Land Use Maps.

Policy B27: The Town supports the conversion of businesses to residences in appropriate areas of Downtown Edenton.

Policy B28: Chowan County supports the use of cluster subdivision design for new residential development to ensure that the capacity and character of the County's public road frontages are maintained.

Policy B29: Edenton shall maintain minimum landscaping and screening requirements that provide a visual buffer between parking and loading areas and public streets; a visual buffer between parking and loading areas and adjoining residential land uses; screening of solid waste collection dumpsters; and screening between certain incompatible uses.

Policy B30: The Town and County shall maintain appearance and operational standards for nonresidential developments located within designated highway corridors to ensure no undue interference with through vehicular traffic in gaining access to proposed developments to the highway, to require architectural design compatibility within the proposed developments, and to provide landscaping and screening to buffer adjoining residentially used or zoned properties.

Policy B31: The Town and County shall maintain development standards (such as limitations on the hours of operation, distance/separation requirements, buffering/screening requirements, etc.) for special and/or conditional uses in order to assist with mitigating potential negative impacts.

Policy B32: The Town shall require shopping center developments to comply with access, screening/buffering, landscaping, setback, building scale, architectural design, outdoor lighting, outdoor storage/activity, and signage requirements to help minimize impacts to public street and views, adjacent properties, and adjacent residentially zoned

Table 46:
Land Use and Development Policies

areas.

Policy B33: Chowan County will allow the development of Traditional Neighborhood Developments (TNDs) as a means of encouraging mixed-use, pedestrian-oriented communities and promoting the diversification and integration of land uses. A TND is a human scale, walkable community composed of a variety of housing types and densities and a mixed use core of shopping, offices, public, and civic uses. Generally, TNDs shall adhere to the following general principles and design standards:

1. Neighborhoods have clearly delineated centers and edges and are limited in size to promote pedestrian activity.
2. The distance from the center to the edge of a neighborhood is generally no greater than $\frac{1}{4}$ to $\frac{1}{2}$ mile.
3. TNDs provide a balanced mix of residential, retail, professional and personal service, office, civic, public, and recreational uses.
4. Residential uses include a diversity of housing types.
5. Street patterns are interconnected and blocks are short.
6. TNDs are organized around an activity center consisting of shopping, offices, public, and civic uses.
7. Public and civic uses, such a schools, libraries, government offices, parks and recreational facilities, plazas, and village greens are prominent features and focal points.
8. Formal and informal open space is located throughout a TND

To promote flexibility and creativity, dimensional standards shall be established in accordance with the TND purpose and design principles. The determination of appropriate building setbacks, lot coverage, building heights for proposed uses will be made during the special use permit review process. The permitted density of the residential component of a TND shall be determined during the special use permit review process but in no case shall exceed the maximum density levels delineated in the zoning ordinance. Factors taken into consideration in determining the permissible density of a specific TND shall include the anticipated vehicular traffic, infrastructure, and environmental impacts of the proposed TND.

C. Infrastructure Carrying Capacity Policies

Policy C1: Development within the Town and County shall only be approved where adequate public or approved private facilities and service are available, including water, sewage disposal, roads, etc.

Policy C2: Coordinate the establishment of service area boundaries for existing and future water and sewer infrastructure within Chowan County.

Policy C3: It is the policy of Chowan County and Edenton to ensure that infrastructure systems are correlated with population projections, future land needs, and the future land use classifications as delineated in Section 4.3.

Policy C4. In areas located outside of the Town of Edenton utility service area, the Town and County will support the construction of package treatment plants which are approved and permitted by the State Division of Environmental Management. If any package plants are approved, a specific contingency plan specifying how ongoing private operation and maintenance of the plant will be provided, and detailing provisions for assumption of the plant into a public system should the private operation fail or management of the system not meet the conditions of the state permit must be submitted and approved. The Town and County, however, oppose the installation of package treatment plants and septic tanks or discharge of waste in any areas classified as coastal wetlands, freshwater wetlands (404), or natural heritage areas.

*Table 46:
Land Use and Development Policies*

Policy C5: The Town of Edenton and Chowan County support the implementation of the following transportation improvements:

- Eastern Connector
- Western Connector
- Luke Street Extension
- Peanut Drive Access
- Soundside Road

Policy C6: Any application for a wastewater disposal system which is to be located in the planning jurisdiction shall be coordinated with existing facilities. The Town and County should work together to assure that a waste water permit is not issued without a corresponding zoning permit.

Policy C7: The Town and County will continue to work together to provide services where needed, and as feasible, for new development.

Policy C8: The County will explore the various options for improving the sewage treatment problems that exist in many of the septic systems in the Country Club subdivision.

Policy C9: The Town and County support the extension of infrastructure into desired growth areas as necessary and financially feasible.

Policy C10: Depending upon water availability and septic capability, subdivisions may develop outside of the currently developed areas served by public utilities. The location and intensity of commercial uses should be guided by the availability of public services, accessibility and be in compliance with development standards.

D. Natural Hazard Area Policies

Policy D1. Conserve the natural resources and fragile environments that provide protection from such natural hazards as floods and storm surges.

Policy D2. Minimize the threat to life, property, and natural resources that may result from land use and development within or adjacent to identified natural hazard areas.

Policy D3: The Town and County will continue to coordinate all development within the special flood hazard area with the Planning and Inspections Department, NC Division of Coastal Management, FEMA, and the US Corps of Engineers.

Policy D4: It is the policy of Chowan County and Edenton to ensure that evacuation plans and needs are addressed as new development proposals are reviewed for approval.

Policy D5: It is the policy of Town of Edenton and Chowan County government to ensure that new development is protected from flood hazard through the administration of the flood damage prevention ordinances and continued participation in the National Flood Insurance Program.

Policy D6: The Town of Edenton and Chowan County shall implement the goals and recommended mitigation measures of the 2005 Chowan County and the Town of Edenton Multi-jurisdictional Hazard Mitigation Plan as delineated in Section 3.2.3, D and Appendix I.

Policy D7: Chowan County will continue to support and enforce the N.C. State Building Code, particularly requirements of construction standards to meet wind-resistive factors such as design wind velocity. The County also supports provisions in the state Building Code requiring tie-downs for mobile homes, which help resist wind damage.

Table 46:
Land Use and Development Policies

Policy D8: Edenton and Chowan County shall maintain flood damage prevention requirements that (1) Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities, (2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; (3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; (4) Control filling, grading, dredging and other development which may increase erosion or flood damage; and (5) Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

Policy D9: Chowan County supports the CAMA development permit process for estuarine shoreline areas and the requisite development standards which encourage both shoreline stabilization and facilitation of proper drainage.

Policy D10: Edenton and Chowan County shall discourage development, especially higher density (greater than six dwelling units per acre) residential development, in its most hazardous areas (storm surge areas, areas prone to repetitive flooding, etc.) so as to decrease the number of people living in areas that may need evacuating.

Policy D11: Based upon the availability of federal and state grant funds, land acquisition programs will be utilized in the most hazardous areas to minimize future damage and loss of life.

E. Water Quality Policies

Policy E1: The Town of Edenton and Chowan County will continue to support the use of Best Management Practices (BMP) on agricultural properties and urban developments in order to reduce sedimentation and pollution run-off into Nutrient Sensitive Waters.

Policy E2. Chowan County shall require that all subdivision developments disturbing 5,000 square feet of more control and treat the stormwater runoff generated by a 1.5-inch rain event and that all buildings or related structures within waterfront subdivisions be set back 50 feet from the shoreline.

Policy E3: It is the policy of Chowan County and Edenton to coordinate the approval of local land development projects with applicable state agencies to ensure compliance with regulations to prevent or control nonpoint source discharges.

Policy E4: It is the policy of Chowan County and Edenton to establish land use categories that maximize the protection of open shellfishing waters and that assist with the restoration of any closed shellfishing waters.

Policy E5: Edenton and Chowan County shall maintain requirements that, to the extent practicable, all development shall conform to the natural contours of the land and natural and pre-existing man-made drainage ways shall remain undisturbed. All developments shall be provided with a drainage system that is adequate to prevent the undue retention of surface water on the development site. No surface water may be channeled or directed into a sanitary sewer. Whenever practicable, the drainage system of a development shall coordinate with and connect to the drainage systems or drainage ways on surrounding properties or roads. All developments shall be constructed and maintained so that adjacent properties are not unreasonably burdened with surface waters as a result of such developments.

Policy E6: The density and intensity of land development adjacent to ground water supplies shall be in accordance with the density and intensity characteristics of the future land use designations.

Policy E7: Chowan County shall require that all impervious surfaces in new

*Table 46:
Land Use and Development Policies*

developments, except for roads, paths, and water-dependent structures, be located landward of all perennial and intermittent surface waters in accordance with locally adopted best management practices. Notwithstanding this Water Quality Policy # E7, the locations of impervious surfaces in new developments shall be subject to the more or less stringent provisions of any applicable State law.

Policy E8: The Town of Edenton and Chowan County support state efforts to reduce nutrient loading in the surrounding surface waters, which include consideration of more stringent restrictions on nitrogen discharges and enhanced regulations controlling the disposal of animal wastes.

Policy E9: Because of special water quality concerns in Chowan County, only limited construction will be allowed within a landward buffer (provided in accordance with locally adopted best management practices) of the mean high water mark on subdivisions lots which adjoin the Chowan River, the Albemarle Sound, or their impounded waters and tributaries. The landward buffer shall not contain any buildings or related structures, such as decks, paved patios, or utility sheds. The primary use of the area is the growth of natural vegetation such as a grassed lawn. The only structure permissible within the waterfront set-back area is an elevated pier of wood construction constructed to provide access to the water. On-site septic systems and nitrification lines are also prohibited from the required setback area. Notwithstanding this Water Quality Policy # E9, the locations of buildings or related structures, such as decks, paved patios, or utility sheds in new developments shall be subject to the more or less stringent provisions of any applicable State law.

Policy E10: In order to minimize sedimentation and erosion, Edenton shall require that all developments maintain a vegetated buffer along each side of a stream or natural drainageway. The vegetated buffer shall remain undisturbed except as may be necessary to accommodate roads, utilities and their easements, pedestrian paths and their easements and approved water-dependent uses such as marinas, docks, piers, boat ramps and bridges. In cases in which the buffer may not be practical or desirable, the Board of Adjustment may consider a special exception if it finds that an acceptable alternative means of handling stormwater can be achieved without maintaining a vegetated buffer

F. Areas of Environmental Concern Policies

Policy F1: Chowan County and Edenton support state and federal law regarding land use and development in AECs.

Policy F2: Within AECs, the County will permit those land uses which conform to the general use standards of the North Carolina Administrative Code (15 NCAC 7H) for development within the estuarine system. Generally, only those uses which are water-dependent will be permitted in coastal wetlands, estuarine waters, and public trust areas. Examples of permitted water-dependent uses include utility easements, docks, boat ramps, bulkheads, dredging, bridges and bridge approaches, revetments, culverts, groins, navigational aids, mooring pilings, navigational channels, simple access channels, and drainage ditches.

Policy F3: The County and Town policy is to restrict development in estuarine waters and public trust waters to those uses which will not cause significant degradation of the natural function nor condition of the estuarine waters and public trust areas.

Policy F4: It is the policy of Chowan County and the Town of Edenton to comment concerning the overall interests of residents on CAMA dredge and fill permits for projects which would be detrimental to rivers and wetlands.

Policy F5: Allow the construction of dry stack storage facilities for boats associated with or independent of marinas.

*Table 46:
Land Use and Development Policies*

Policy F6: It is the policy of Chowan County and the Town of Edenton to ensure water dependent development activities such as marinas including upland marinas occur in compliance with local, state and federal regulations and to discourage non-water dependent uses especially floating home developments in public trust waters.

Policy F7: The County and Town will restrict, through its zoning ordinance and subdivision regulations, land uses in coastal wetlands to those that support wetlands conservation and which do not adversely affect their delicate balance.

Policy F8: When necessary, bulkhead installation should be conducted employing appropriate construction and resource protection techniques. Where installation is required, development plans should consider every feasible alternative to minimize the damage to existing marshes.

Policy F9: The Town and County shall require industries to use the best available technology to avoid pollution of air or water during both construction and operation of new industrial facilities.

G. Areas of Local Concern Policies

Policy G1: The Town of Edenton and Chowan County will continue to support and pursue opportunities to provide affordable housing, housing rehabilitation and community revitalization through the Community Development Block Grant, HOME, and NC Housing Finance Agency for housing rehabilitation and community revitalization.

Policy G2: Support and pursue funding opportunities of tourism events and activities such as festivals, markets and recreational activities. The Town and County should take advantage of the historical resources of the area to promote tourism year round. The Town and County will also support local and regional interest groups in the promotion of tourism.

Policy G3: The Town and County support the development of a greenway and bike path network around the area as outlined in the 2003 Chowan/Edenton Greenways and Open Space Plan.

Policy G4: It is the policy of the Town of Edenton and Chowan County to encourage, where practicable and funding is available, the preservation of historically significant structures and sites.

Policy G5: It is the policy of Chowan County and Edenton government to conserve the natural and cultural resources for recreational enjoyment.

Policy G6: It is the policy of Chowan County and Edenton to support state and federal programs which lead to improvements of the quality of life of County residents and lessen the burdens of local government such as: highway construction and maintenance, channel maintenance, aviation enhancement, environmental protection, education, health and human services.

Policy G7: Continue to work toward a diversified economy including industry, tourism and improved technical educational opportunities.

Policy G8: Edenton and Chowan County shall maintain airport height overlay requirements that prevent that creation of conditions hazardous to aircraft operation, that prevent conflict with land development which may result in loss of life and property, and that encourage development which is compatible with airport use characteristics.

Policy G9: Locate new facilities on land having stable, well-drained soils adequately protected from flooding and easily accessible to public utilities and transportation routes.

Policy G10: Continue to encourage a variety of choice in existing neighborhoods through a balance of preservation, rehabilitation and new development.

Policy G11: Continue to use a low interest loan pool to encourage downtown business owners to rehabilitate their establishments.

Policy G12: Continue to support market-driven trends in redevelopment and reuse,

*Table 46:
Land Use and Development Policies*

particularly in the retirement/assisted living care facility segment of the housing market.

Policy G13: The Town and County remain committed to State and Federal programs in planning areas related to community and economic development, including erosion control, public access, and highway improvements.

Policy G14: Edenton and Chowan County shall maintain requirements that residential developments reserve land area for usable open and recreational space.

4.2.2 Analysis of the Impact of Policies on Management Topics

Each individual policy statement delineated in Section 4.2.1 was evaluated and compared to the CRC Land Use Plan Management Topic goals, objectives, and land use plan requirements (see Appendix H) to determine if the policy statement had a positive, negative, or neutral impact on the management topics. Each policy statement was evaluated as to whether or not it was consistent with the stated management topic goals and objectives. Each policy statement was also evaluated as to its contribution to accomplishing the land use plan requirements of the various management topics. Based upon this analysis, a conclusion as to positive, negative, or neutral impact was derived. The following table and narrative summarizes the general impact of the Chowan County and Edenton land use and development policies on the CRC land use plan management topics.

*Table 47:
Impact of Local Policies on CRC Land Use Plan Management Topics*

CRC Land Use Plan Management Topics						
Policies	Public Water Access	Land Use Compatibility	Infrastructure Carrying Capacity	Natural Hazard Areas	Water Quality	Local Areas of Concern
Public Water Access	Positive					Positive
Land Use Compatibility		Positive	Positive	Positive	Positive	Positive
Infrastructure Carrying Capacity		Positive	Positive	Positive	Positive	Positive
Natural Hazard Areas		Positive	Positive	Positive	Positive	Positive
Water Quality		Positive		Positive	Positive	
Areas of Environmental Concern	Positive	Positive	Positive	Positive	Positive	
Areas of Local Concern		Positive		Positive		Positive

Note: Blank spaces in table indicate neutral impact. All local policies have been determined to have either a positive or neutral impact on CRC management topics. No specific actions or programs are required to mitigate negative impacts.

A. Public Water Access Policies

Edenton and Chowan County support the provision of access to public trust waters to all segments of the community. There are few public water access points currently existing within both the Edenton and Chowan County planning jurisdictions.

Town and county policies support coordinating public water access within waterfront developments as they are reviewed for approval. Policies encourage the development of a comprehensive waterfront access plan to evaluate needs, opportunities, and implementation strategies in both jurisdictions.

The local policies encourage the provision of public water access and the continued assessment of its water access needs and opportunities for improving public water access. The local policies have a positive impact on the CRC public water access goals and objectives.

B. Land Use Compatibility Policies

Overall, the Town and County existing building intensities and densities are consistent with infrastructure availability and land suitability. Generally, the most intense development is located in areas with adequate water and sewer facilities and other support infrastructure and outside of sensitive natural environments.

The local policies provide for a balance of growth and the preservation of fragile environments. Development with acceptable impacts on natural resources and which is in harmony with the existing character of the area being developed is encouraged. Local policies concerning Areas of Environmental Concern support state and federal law regarding development within AECs. Development is encouraged in those portions of the planning jurisdictions that possess the support infrastructure necessary to sustain that growth. County policies discourage the conversion of active, productive farm and forest land to urban uses. Local policies support the implementation of water and wastewater systems improvements.

The local policies have a positive impact on the CRC land use compatibility goals and objectives.

C. Infrastructure Carrying Capacity Policies

Edenton and Chowan County support managing and directing development in balance with the availability of municipal services. The most intensive land uses and highest residential densities are guided to those portions of the planning jurisdictions that possess the support infrastructure necessary to sustain that level of development.

Local policies support the implementation of water and wastewater systems improvements which will vastly improve each jurisdiction's ability to provide effective and reliable water and wastewater systems. The local policies ensure that public infrastructure is located and managed in harmony with fragile environments and natural resource areas.

The town and county policies have a positive impact on the CRC infrastructure carrying capacity goals and objectives.

D. Natural Hazard Areas Policies

Local policies encourage the conservation of natural resources and fragile environments that provide protection from natural hazards. Local policies encourage the development of compatible location, density, and intensity criteria for new development, existing development, and redevelopment within flood hazard and storm surge areas. Flood damage prevention policies encourage compatible development and redevelopment within flood hazard areas. Town

and county policies ensure that evacuation plans and needs are addressed as new land development proposals are reviewed for approval.

The local policies have a positive impact on the CRC natural hazard areas goals and objectives.

E. Water Quality Policies

The local policies support the maintenance, protection, and enhancement of water quality. The town and county policies support land development that has minimal adverse impacts on water quality. Best management practices are encouraged to minimize stormwater impacts. Preservation of remaining portions of the Bear Swamp is encouraged by county policies to protect aquifer recharge and wildlife habitat.

Local policies support the implementation of water and wastewater systems improvements which will vastly improve each jurisdiction's ability to provide effective and reliable water and wastewater systems. The county supports the long term efforts for providing future countywide sewer service.

The Town and County policies have a positive impact on the CRC water quality goals and objectives.

F. Local Areas of Concern Policies

Edenton and Chowan County policies regarding local areas of concern support and have a positive impact on the CRC public water access, land use compatibility, infrastructure carrying capacity, and natural hazard areas goals and objectives. The local policies encourage increased recreational opportunities, development compatible with natural resources, and preservation of historic structures and sites. Local policies also promote tourism-related economic development.

Appendix G provides a further evaluation of each individual town policy's impact on the CRC land use plan management topics.

4.2.3 Statement of Local Support Regarding Areas of Environmental Concern

Chowan County and the Town of Edenton support state and federal law regarding land use and development in Areas of Environmental Concern (AECs). Specific policy statements have been developed that support the general use standards of the North Carolina Administrative Code (15 NCAC 7H) for development within the estuarine system. No policy statements have been developed which exceed the requirements of state and federal regarding land use and development within AECs.

4.3 Future Land Use Map

The purpose of the Future Land Use Map is to graphically depict the County's and Town's policies for growth and land development and the projected patterns of future land use. The Future Land Use Map has been prepared with consideration given to land development objectives and policies, natural constraints and limitations, overall land suitability, and the ability to provide the infrastructure to support growth and development.

The major elements of the Chowan County-Edenton future land use maps include the following:

- Guides the most intensive development to areas with supporting infrastructure.
- Anticipates growth on the fringe of Edenton and along waterfronts.
- Accommodates a variety of residential densities.
- Promotes the majority of commercial development in Edenton.
- Encourages downtown mixed use development.
- Promotes industrial growth in the airport area.
- Discourages growth in areas with natural constraints and low suitability ratings.
- Conserves fragile environments.

Appendix J summarizes the general relationship between proposed Future Land Use Map classifications and existing zoning and unified development ordinance requirements.

The following tables illustrate the distribution of existing land uses acreages by Future Land Use Map classifications:

*Table 48:
Distribution of Acreage for Existing and Future Land Use Map Classifications
Chowan County Planning Jurisdiction*

Existing Land Use Classifications and Acreage*												
	Agricultural 60,248	Water 92	Residential 3,861	Vacant 18,173	Forestry 12,364	Roads 2,007	Institutional Public 918	Confined Feeding Operations 845	Industrial 515	Commercial 380	Dedicated Open Space 348	Total Acreage 99,751
Future Land Use Classifications & Acreage												
Residential Agricultural 91,344	58,824	0	3,264	13,519	11,736	0	715	843	197	373	42	89,513
Low Density Residential 2,357	294	0	54	1,598	390	0	1	0	0	0	0	2,337
Medium/High Density Residential 2,867	1,041	0	516	805	0	0	173	2	3	4	0	2,544
Commercial 56	12	0	19	16	0	0	4	0	0	1	0	52
Industrial 661	14	0	7	57	238	0	22	0	315	2	0	655
Conservation & Open Space 2,456	62	0	1	2,179	0	0	3	0	0	0	306	2,551
Road 2,007	0	0	0	0	0	2,007	0	0	0	0	0	2,007
Water 92	0	92	0	0	0	0	0	0	0	0	0	92
Totals 101,840	60,247	92	3,861	18,174	12,364	2,007	918	845	515	380	348	99,751

* Rounding may result in totaling errors

Table 49:
Distribution of Acreage for Existing and Future Land Use Map Classifications
Town of Edenton Planning Jurisdiction

	Existing Land Use Classifications and Acreage*												
	Agricultural	Water	Residential	Vacant	Forestry	Roads	Institutional Public	Confined Feeding Operations	Industrial	Commercial	Dedicated Open Space	Total Acreage	
	3,206	114	947	3,841	563	804	932	0	246	225	19	10,897	
Future Land Use Classifications & Acreage													
Low Density Residential	5,159	2,344	0	359	1,757	563	0	71	0	14	25	0	5,133
Medium/High Density Residential	2,012	718	0	543	547	0	0	171	0	2	11	11	2,003
Commercial	341	80	0	26	78	0	0	20	0	17	117	5	343
Downtown Mixed Use	27	0	0	5	1	0	0	13	0	0	9	0	28
Public & Institutional	102	0	0	9	25	0	0	50	0	1	13	0	98
Industrial	1,066	0	0	4	254	0	0	547	0	212	49	2	1,068
Conservation & Open Space	1,411	63	0	2	1,179	0	0	59	0	0	0	1	1,304
Roads	804	0	0	0	0	0	804	0	0	0	0	0	804
Water	114	0	114	0	0	0	0	0	0	0	0	0	114
Totals	11,036	3,205	114	948	3,841	563	804	931	0	246	224	19	10,895

* Rounding may result in totaling errors

4.3.1 Chowan County Future Land Use Map

The Future Land Use Map for the County's planning jurisdiction encompasses all of Chowan County outside of the Town of Edenton corporate limits and extraterritorial planning jurisdiction. The Chowan County Future Land Use Map (see Figure 8) classifications include the following categories and subcategories:

- Residential Agricultural
- Conservation/Open Space
- Low Density Residential
- Medium/High Density Residential
- Commercial
- Industrial

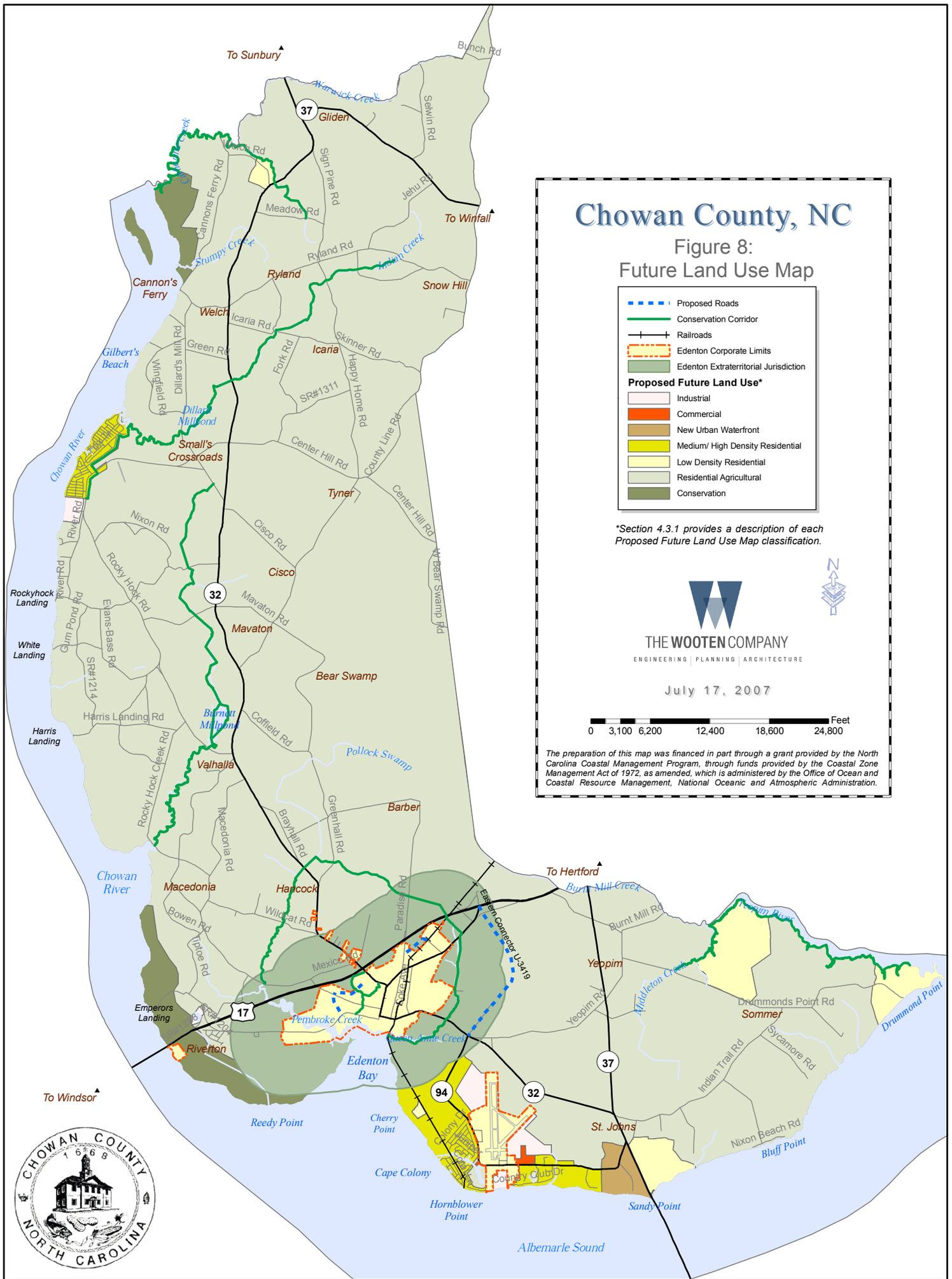
Generally, growth and development is expected to occur in the areas classified as Medium/High Density Residential, Commercial, and Industrial. Areas classified as Residential Agriculture and Conservation/Open Space are not projected to accommodate significant growth and development. The type and intensity of projected development varies within each future land use map classification. The Future Land Use Map classifications are considered part of the Land Use Plan's policy.

A. Residential Agricultural Classification

Areas classified as Residential Agricultural are primarily located north and east of the Town of Edenton. Residential Agricultural-classified land is estimated to encompass approximately 142 square miles (91,344 acres) or about 91.6 percent of the total County land area.

The Residential Agricultural classification is intended to delineate lands where the predominant land use is scattered, low density (less than one dwelling unit per acre) residences dispersed among farm land and open spaces. Support public and institutional land uses are also located within this land use classification. The overall residential density within this classification is generally less than 1 dwelling unit per acre. Long-term, those portions of the Residential Agricultural-classified areas that are primarily residential in nature are projected to have average densities of approximately 1 dwelling unit per 5 acres. Such areas include lands immediately adjacent to major road corridors and properties located at crossroad communities. The predominantly agricultural areas, i.e., those lands not immediately adjacent to major road corridors and at crossroad communities, within this classification are projected to have residential densities that average approximately 1 dwelling unit per 20 acres.

The Residential Agricultural Classification is compatible with the A-1 (Agriculture) District of the Chowan Zoning Ordinance. The minimum lot size for most land uses in the A-1 District is 40,000 square feet. Higher residential densities may be permitted on a case-by-case basis in Traditional Neighborhood Developments—up to 4 dwelling units per acre in A-1 zoning districts. Such TNDs are expected to locate primarily on the periphery of the Town of Edenton planning jurisdiction and in waterfront areas. Lot coverage is not restricted and building heights are limited to 35 feet. Scattered single-



Chowan County, NC

Figure 8:
Future Land Use Map

	Proposed Roads
	Conservation Corridor
	Railroads
	Edenton Corporate Limits
	Edenton Extraterritorial Jurisdiction
Proposed Future Land Use*	
	Industrial
	Commercial
	New Urban Waterfront
	Medium/ High Density Residential
	Low Density Residential
	Residential Agricultural
	Conservation

*Section 4.3.1 provides a description of each Proposed Future Land Use Map classification.



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family detached residences and manufactured homes on individual lots are the predominant types of dwellings within these areas. Some small, existing residential subdivisions and mobile home parks may also be located within the areas classified as Residential Agricultural. Cluster development is encouraged in the Residential Agricultural Classification. Public water service is available in the majority of the Residential Agricultural classified areas and is needed to support new residential subdivisions. Public sewer or an approved private wastewater treatment system will generally be required to support the higher end (2 or more dwelling units per acre) of residential densities allowed within this classification. Minimum lot sizes for land uses utilizing individual subsurface septic systems and/or individual water systems are determined by the local health department based upon soil types present at the site and generally range from 20,000 square feet to 30,000 square feet.

The Residential Agricultural classification along with the underlying A-1 (Agricultural) zoning district allows commercial uses typically associated with rural areas. Some of the projected needs for commercial uses in Chowan County will be accommodated in the Residential Agricultural classification. Public and Institutional uses such as churches, county parks, schools, golf courses and utilities are also appropriate for the Residential Agricultural Classification. Demand for such uses would be accommodated in this classification. Lot coverage is not restricted and building heights are limited to 35 feet.

It is estimated that approximately 50 percent of the entire Chowan County land area contains soils that are identified as prime farmland, farmland of statewide importance, and farmland of unique importance. The largest concentrations of such classified soils are located in the northern, southeastern, and central portions of the Chowan County. An additional 28 percent of the County land area is classified as having prime farmland soils if those soils are drained. The soil characteristics that are favorable for agricultural use are also conducive for other types of land use, including urban development.

This Residential Agricultural classification, as previously stated, is intended to delineate lands where the predominant land use is scattered, low density residences dispersed among farm land and open spaces. This classification is compatible with the county's current lowest density residential zoning district, the A-1, Agricultural District. This zoning district is primarily intended to accommodate low density residential uses as well as associated public and institutional uses, low intensity commercial uses, and agricultural-related industrial uses which are interspersed throughout areas that are principally characterized as rural in nature. This district reflects the diverse nature of land uses within predominantly rural areas and, therefore, permits a wide array of land uses. However, those intensive land uses, which could have an adverse impact on the rural nature, are not permitted or are allowed only on a special use permit basis following a formal review and approval process. The district is specifically established for the following purposes:

1. To encourage the continued use of land for agricultural, forestry, and open space purposes;

2. To encourage small-scale commercial uses that primarily provide goods and services to residents of the surrounding rural areas;
3. To encourage only those industries which are agricultural-related; and
4. To discourage any use which, because of its character, would create premature or extraordinary public infrastructure and service demands.

The county's goals and policies support the continued use of land in Residential Agricultural classified areas for scattered, very low density residential development and agricultural and forestry purposes. Policies state that the County will promote the preservation of farmland and rural open space by encouraging cluster development. In the long-term, as the County's population increases and the demand for housing rises, it is anticipated that the character of some Residential Agricultural-classified areas may evolve into low density residential areas. In the short-term, waterfront properties where public water service is available are considered prime areas for low density residential development.

B. Conservation/Open Space Classification

The largest areas classified as Conservation/Open Space are located in the most northwestern section of Chowan County along the Chowan River, known as Chowan Swamp. There is also a large conservation area located along the Chowan River in southwest corner of the County known as the Reedy Point Swamp. Other Conservation/Open Space areas are scattered throughout the County jurisdiction and include coastal wetlands, estuarine waters, estuarine shoreline, public trust areas, and 'Section 404' wetlands. Included as a conservation designation are the future greenways corridors that are located throughout the county along creeks and rivers, as depicted in the 2003 *Edenton/Chowan Greenway and Open Space Plan*. Due to the small size of some areas, they are not individually identified on the Future Land Use Map. Generally, the precise location of such areas must be determined by field investigation. Conservation/Open Space-classified land is estimated to encompass approximately 3.8 square miles (2,456 acres) or about 2.3 percent of the total County land area.

The Conservation/Open Space classification is intended to delineate areas where traditional land uses are not desirable or expected to develop. Land development may however, include public building and facilities necessary to support existing land uses within the areas classified as Conservation/Open Space. Commercial and industrial uses that are water dependent and which cannot function elsewhere or are supportive of commercial fishing are permissible uses in Conservation/Open Space-designated areas. The intensity of development for such uses would be in accordance with the zoning requirements of the zoning district in which located. Public water or sewer utilities are not needed to support the types and intensities of land uses in these areas. Extensions of water and sewer utilities into these areas are not encouraged for the purpose of development. Water and sewer lines may be appropriate in conservation areas for supportive uses in conservation areas such as bathrooms or easements to serve another area. Public and Institutional uses such as golf courses and passive recreation would be appropriate in this classification as long as environmentally sensitive areas are not negatively impacted.

The County's goals and policies support the continued use of land in Conservation/Open Space-classified areas for appropriate uses that are compatible with the fragile nature of the Conservation/Open Space areas. Traditional urban growth and development in such areas is discouraged. Conservation/Open Space areas are expected to retain their existing character over time.

C. Residential Classifications

The residential classification is subdivided into two subcategories: Low Density Residential and Medium/High Density Residential.

Low Density Residential Classification. The Low Density Residential classification encompasses approximately 3.6 square miles (2,356 acres) or about 2.4 percent of the total County land area. The lands classified as Low Density Residential are scattered throughout the Chowan County jurisdiction. There are large Low Density areas in the eastern most section of the County and a large area near Welch Ridge.

The Low Density Residential classification is intended to delineate lands where the predominant land use is low density residences, particularly properties with waterfront access and areas where public water service is readily available. The overall residential density within this classification is generally 1 to 2 dwelling units per acre. Single-family detached residences and manufactured homes on individual lots are the predominant types of dwellings within these areas.

Support public and institutional land uses are also located within this land use classification. Minimum lot sizes for such uses range from 25,000 to 40,000 square feet. Building heights are restricted to 35 feet. There is no maximum lot coverage requirement for such uses.

The Low-Density Residential Classification is compatible with the R-40, R-25 and RMH-25 Residential Districts of the Chowan Zoning Ordinance. The minimum lot size in the R-40 District is 40,000 square feet. The R-25 and RMH-25 districts have a minimum lot size of 25,000 square feet. Lot coverage is not restricted and building heights are limited to 35 feet. Higher residential densities may be permitted on a case-by-case basis in Traditional Neighborhood Developments—up to 4 dwelling units per acre in R-25, RMH-25, and R-40 zoning districts. Cluster development is encouraged in the Low Density Residential Classification. Public water service is widely available throughout the Low Density Residential-classified areas and is required to support the higher end of the range of residential densities in this classification. Public sewer or an approved private wastewater treatment system will generally be required to support the higher end (2 or more dwelling units per acre) of residential densities allowed within this classification. Minimum lot sizes for land uses utilizing individual subsurface septic systems and/or individual water systems are determined by the local health department based upon soil types present at the site and generally range from 20,000 square feet to 30,000 square feet.

The county's goals and policies support the continued use of land in Low Density-classified areas for low density dwellings and for public and

institutional land uses that support and that are compatible with this type of residential development. Future development is projected to be no more than one dwelling unit per acre. Low Density Residential areas are anticipated to retain their low density character over time and not evolve into higher density areas.

Medium/High Density Residential Classification. The Medium/High Density Residential classification encompasses approximately 4.4 square miles (2,867 acres) or about 2.9 percent of the total County land area. The majority of the properties classified as Medium/High Density Residential are located on the periphery of the Edenton urban area. Other areas identified as Medium/High Densities are the subdivisions located east of Town near the airport, Cape Colony and Country Club. The Arrowhead Beach area located along the Chowan River in the northwest portion of the county is also designated at Medium/High Density. The Medium/High Density Residential Classification also includes, as a subcategory, the approximate 465-acre area delineated in the amended *1999 Joint Land Use Plan* (amendment dated August 9, 2004) as 'New Urban Waterfront Area' and as authorized by Senate Bill 732 "Pilot New Urban Waterfront Area", effective July 17, 2004. Such designation is intended to accommodate future development of lands adjacent to the shorelines of public trust waters that provide a mixture of residential, commercial, and recreational uses in a publicly accessible, pedestrian-friendly traditional neighborhood community. The major characteristics of development in New Urban Waterfront Areas included the preservation of natural shorelines and other critical areas; public access to shorelines and public trust waters; interconnected streets; civic spaces, squares, and recreational space, and centrally operated water, sewer, and stormwater management systems. The Medium/High Density Residential Classification promotes development with these same characteristics. The area comprising the New Urban Waterfront Area is delineated on Figure 8.

The Medium/High Density Residential classification is intended to delineate lands where the predominant land use is higher density single-family residential developments and/or multifamily developments.

Support public and institutional land uses are also located within this land use classification. Minimum lot sizes for such uses range from 25,000 to 40,000 square feet. Building heights are restricted to 35 feet. There is no maximum lot coverage requirement for such uses.

The single family detached residential density within this classification is generally greater than 2 dwelling units per acre. Medium density generally ranges from approximately 3 to 7 dwelling units per acre; high density generally ranges from approximately 8 to 15 dwelling units per acre. The Medium/High Classification is compatible with two Chowan County residential zoning districts, the R-15 Residential District and R-5 Residential District and all commercial zoning districts. The R-15 district requires a minimum lot size of 15,000 square feet and only allows detached single family homes. The R-5 district requires minimum lot sizes of 5,000 square feet and allows both single family and multifamily residences. Cluster development is encouraged in the Medium/High Density Residential Classification. Lot coverage is not restricted and building heights are limited to 35 feet. Planned Unit Developments, which allow for a mixture of residential and nonresidential

land uses, promote a variety of residential building types, and require greater amounts of recreational and open space, would be compatible with the R-5 zoning district. Traditional Neighborhood Developments (TNDs) are compatible with both the R-5 and R-15 zoning districts. Higher residential densities may be permitted on a case-by-case basis in TNDs—up to 15 dwelling units per acre in R-5 and nonresidential zoning districts; up to 6 units per acre in R-15 districts; and up to 4 units per acre in all other districts. Public water and sewer service or an approved private wastewater treated system is required to support the densities in this classification. Roads with the capacity to accommodate higher traffic volumes are also necessary to support Medium/High Density Residential development. The intensity of permissible nonresidential development in the Medium/High Density Residential classification would be in accordance with the zoning requirements of the zoning district in which located.

The County's goals and policies support the use of land in Medium/High Density-classified areas for single-family and multifamily dwellings where adequate public utilities and roads are available or can be upgraded to support the higher residential densities encouraged in this classification. The higher residential densities are encouraged within the Medium/High Density-classified areas.

D. Commercial Classification

The Commercial classification encompasses approximately 0.1 square miles (55.6 acres) or about 0.1 percent of the total County land area. There are very few commercial classified areas outside the Town of Edenton's planning jurisdiction. There is a small commercial area located southeast of the airport.

The Commercial classification is intended to delineate lands that can accommodate a wide range of retail, wholesale, office, business services, and personal services. Areas classified as Commercial may also include some heavy commercial uses, light manufacturing and warehousing uses as well as intensive public and institutional land uses. Public water service is needed to support the land uses characteristic of this classification. Public sewer service or an approved private wastewater treatment system is needed to support the most intensive commercial uses. Roads with the capacity to accommodate higher traffic volumes are necessary to support commercial development.

Public and Institutional uses such as town and county offices, schools and cemeteries are appropriate in the Commercial Classification as allowed in the underlying Business zoning districts. Demand for such uses would be accommodated in this classification.

Commercial-classified areas are anticipated to accommodate some of the most intensive land uses found in the county's planning jurisdiction. The county's goals and policies support the use of land in Commercial-classified areas for a wide variety of retail and commercial services uses where adequate public utilities and roads are available or can be upgraded to support the intensity of development encouraged in this classification. Since there is no sewer service within Chowan County's planning jurisdiction there will be limited opportunities for high density commercial uses. The county

zoning districts that are compatible with the commercial classification include the B-1, General Business; B-2, Highway Commercial; and B-3, Neighborhood Commercial Zoning Districts. The density of commercial development within these districts will be based upon the on-site septic availability. Lot coverage is generally not restricted except that shopping centers and superstores (gross floor areas of greater than 25,000 square feet) can not exceed a maximum floor area ratio of 0.30. Lot coverage is, however, limited to 50 percent in areas located within a Highway Corridor Overlay district. Building heights are not restricted except for areas located within a Highway Corridor Overlay district where building heights are limited to 50 feet. Generally, the intensity of commercial development is expected to average one commercial establishment per acre. Public and institutional land uses that support and that are compatible with this type of commercial development are also encouraged.

E. Industrial Classification

The Industrial Classification encompasses approximately 1 square miles (661 acres) or about 0.7 percent of the total County land area. The properties classified as Industrial are concentrated along the east of the Town of Edenton near the airport.

The Industrial classification is intended to delineate lands that can accommodate industrial and manufacturing establishments. Some heavy commercial uses as well as services and businesses which support industrial land uses are also appropriate land uses within the Industrial classification. Public water and sewer service is needed to support the land uses characteristic of this classification. Without the availability of sewer in Chowan County there will be little industrial development. On-site package treatment systems will be the most likely option to offset this need. Roads with the capacity to accommodate higher traffic volumes are necessary to support the intensity of development expected within the Industrial Classification. Land uses with the Industrial Classification are generally compatible with the I-1, Light Industrial and I-2, Heavy Industrial classification. Generally, the intensity of industrial development is expected to average one industrial establishment per twenty acres. Lot coverage is not restricted and building heights are not limited.

The Industrial areas are expected to accommodate the majority of the future industrial growth projected for the planning period. Due to the large amount of acreage within the Industrial areas, these areas are also anticipated to meet longer-term industrial growth needs as well. Critical factors that will determine the development potential of these Industrial areas include market demand and the provision of the necessary support infrastructure (particularly public water and sewer utilities). Consequently, the development potential of the majority of the lands within the Industrial areas may be more long-term than short-term.

The County's goals and policies support the use of land in Industrial-classified areas for a wide variety of manufacturing and heavy commercial services uses where adequate public utilities and roads are available or can be upgraded to support the intensity of development encouraged in this classification. Public and institutional land uses as well as commercial uses that support and that are compatible with this type of industrial development

are also encouraged. Industrial-classified areas may include certain land uses which, due to their nature and characteristics, have potential adverse impacts on surrounding land use types. Consequently, the County's policy is to ensure the compatible location of industrial land uses and to require the necessary measures to mitigate any adverse impacts.

*Table 50:
Future Land Use Map Calculations
Chowan County Planning Jurisdiction*

Chowan County Classifications	Total Acres	% of Total Acres
Residential Agricultural	91,344	91.6%
Low Density Residential	2,357	2.4%
Medium/High Density Residential	2,867	2.9%
Commercial	56	0.1%
Industrial	661	0.7%
Conservation and Open Space	2,456	2.3%
Totals	99,741	100%

Source: The Wooten Company

4.3.2 Town of Edenton Future Land Use Map

The Future Land Use Map for the Town of Edenton planning jurisdiction encompasses the Edenton corporate limits and the Town's extraterritorial planning and zoning jurisdiction. The Town's Future Land Use Map classifications (see Figure 8a) include the following categories and subcategories:

- Residential
 - Low Density Residential
 - Medium/High Density Residential
- Commercial
 - General Commercial
 - Downtown Mixed Use
- Public and Institutional
- Industrial
- Conservation/Open Space

Generally, growth and land development is anticipated to occur in all future land use categories except for the Conservation/Open Space classification. The type and intensity of projected development varies within each future land use map classification. The Future Land Use Map classifications are considered part of the Land Use Plan's policy.

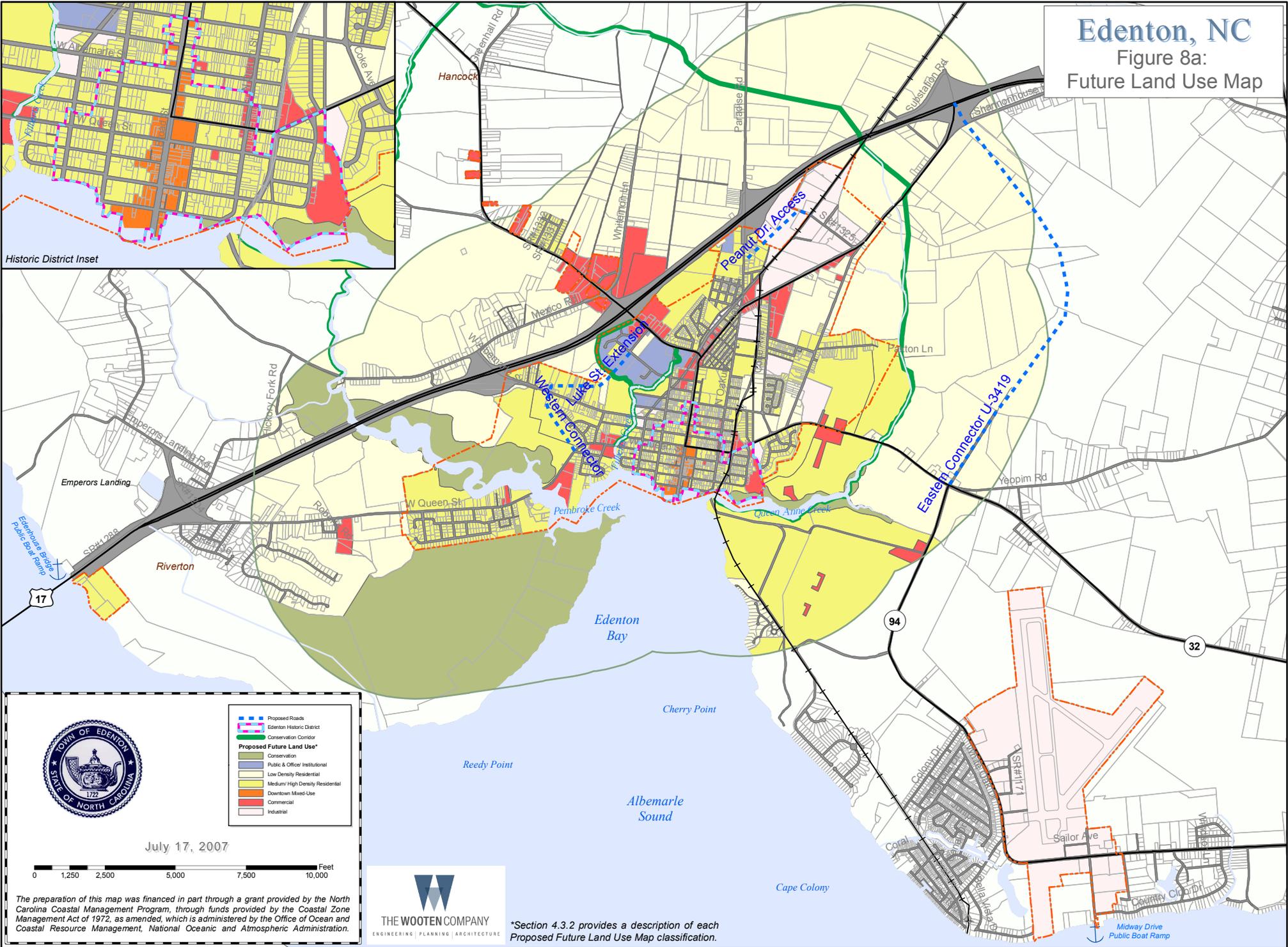
A. Residential Classification

The Residential classification is subdivided into two subcategories: Low Density and Medium/High Density.

Low Density Residential Classification. The Low Density Residential classification encompasses approximately 8 square miles (5,159 acres) or

Edenton, NC

Figure 8a:
Future Land Use Map



Historic District Inset



--- Proposed Roads
 Edenton Historic District
 Conservation Corridor

Proposed Future Land Use*

- Conservation
- Public & Office/Institutional
- Low Density Residential
- Medium/High Density Residential
- Downtown Mixed-Use
- Commercial
- Industrial

July 17, 2007

0 1,250 2,500 5,000 7,500 10,000 Feet

The preparation of this map was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the Coastal Zone Management Act of 1972, as amended, which is administered by the Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration.



*Section 4.3.2 provides a description of each Proposed Future Land Use Map classification.

about 51.0 percent of the total Town planning jurisdiction. The majority of the lands classified as Low Density Residential are located on the fringe of the core Edenton area, particularly northeast, northwest and southwest of the Town's center.

The Low Density Residential classification is intended to delineate lands where the predominant land use is low density detached residences. The residential density within this classification ranges from 1 dwelling unit for 5 acres to 3 dwelling units per acre. The Town of Edenton zoning districts that are compatible with the Low Density classification are the RA, R-40 and R-20 districts. The RA district has a minimum lot size of 5 acres, the R-40 a minimum of 40,000 square feet, the R-20 a 20,000 square foot minimum. Lot coverage is restricted to 60 percent and building heights are limited to 35 feet. The higher end of the density range of this classification (i.e., 1-3 dwellings per acre) is anticipated primarily on the south side of the West Queen Street corridor, the area north and west of Mexico Road, the area west of US 17 and north of Virginia Road, the area south of the North Broad Street/US 17 intersection, and the area south of the North Broad Street/Old Hertford Road intersection. The lower end of the density range of this classification (i.e., 1 dwelling per 5 acres to 1 dwelling per acre) is anticipated primarily on the outer fringe of the town's ETJ including the north side of the West Queen Street corridor, the east and west sides of the Paradise Road corridor, and the northeastern and eastern portions of the ETJ area located east of Queen Anne Creek.

Single-family detached residences and manufactured homes on individual lots are the predominant types of dwellings within these areas. Support public and institutional land uses are also located within this land use classification. Cluster development is encouraged in areas within the Low Density Residential Classification that are zoned R-20. Residences interspersed among agricultural uses are also anticipated land uses in the outer fringe of the town's ETJ. Public water service is widely available throughout the Low Density Residential-classified areas. Public sewer service or an approved private wastewater treatment system is required to support the higher end of the range of residential densities in this classification.

The Town's goals and policies support the continued use of land in Low Density-classified areas for low density dwellings and for public and institutional land uses that support and that are compatible with this type of residential development. Future development is projected to be no more than 3 dwelling units per acre. Some Low Density Residential areas that are located on the immediate fringe of the intensively-developed town core may evolve into medium density (3 to 7 dwellings per acre) or high density (8 to 12 dwellings per acre) areas over time, particularly where public utilities and other infrastructure will be available to support increases in residential density.

Medium/High Density Residential Classification. The Medium/High Density Residential classification encompasses approximately 3.1 square miles (2,012 acres) or about 19.9 percent of the total Town planning jurisdiction. The majority of the properties classified as Medium/High Density Residential are located immediately surrounding the Edenton downtown area.

Additional Medium/High Density Residential areas are along the US Business 17 and NC 32 corridors as they pass through the Town.

The Medium/High Density Residential classification is intended to delineate lands where the predominant land use is higher density single-family residential developments and/or multifamily developments as well as support public and institutional land uses. Some manufactured home parks are also located with this classification. Medium density generally ranges from approximately 3 to 7 dwelling units per acre; high density generally ranges from approximately 8 to 12 dwelling units per acre. The Town zoning districts that are compatible with the Medium/High Density classification are the R-14 (14,000 square foot minimum lot size), R-10 (10,000 square foot minimum lot size), and the R-5 (5,000 square foot minimum lot size). These districts allow a density of approximately 3-8 units per acre for single-family dwellings and 9-12 units per acre for multi-family dwellings. Lot coverage is restricted to 60 percent and building heights are limited to 35 feet. Cluster development is encouraged in areas within the Medium/High Density Residential Classification that are zoned R-14, R-10, and R-5. Public water and sewer service or an approved private wastewater treatment system is required to support the residential densities in this classification. Streets with the capacity to accommodate higher traffic volumes are also necessary to support Medium/High Density Residential development.

The Town's goals and policies support the use of land in Medium/High Density-classified areas for single-family and multifamily dwellings where adequate public utilities and streets are available or can be upgraded to support the higher residential densities encouraged in this classification. The higher density residential developments anticipated to occur during the planning period are encouraged within the Medium/High Density-classified areas.

B. Commercial Classification

The Commercial classification is subdivided into two subcategories: General Commercial and Downtown Mixed Use.

General Commercial Classification. The General Commercial classification encompasses approximately 0.53 square miles (340 acres) or about 3.4 percent of the total Town planning jurisdiction. The properties classified as General Commercial are located primarily at the intersection of US Highway 17 and NC 32 West. General commercial uses are also located at the northern intersection of Broad Street and NC 32.

The General Commercial classification is intended to delineate lands that can accommodate a wide range of retail, wholesale, office, business services, and personal services. Areas classified as General Commercial may also include some heavy commercial uses, light manufacturing and warehousing uses as well as intensive public and institutional land uses. Public water service is needed to support the land uses characteristic of this classification. Public sewer service or an approved private wastewater treatment system is needed to support the most intensive commercial uses. Streets with the capacity to accommodate higher traffic volumes are necessary to support commercial development.

General Commercial-classified areas are anticipated to accommodate some of the most intensive land uses found in the town's planning jurisdiction. The Town's goals and policies support the use of land in General Commercial-classified areas for a wide variety of retail and commercial services uses where adequate public utilities and streets are available or can be upgraded to support the intensity of development encouraged in this classification. Public and institutional land uses that support and that are compatible with this type of commercial development are also encouraged. Densities of Commercial uses in this classification will vary depending on the underlying zoning district. General Commercial designated areas are compatible with the SC (Shopping Center), CH (Highway Commercial) and CN (Neighborhood Commercial) zoning districts. Zoning district CH (Highway Commercial) requires a minimum lot size of 30,000 square feet, SC (Shopping Center) district requires a 5 acre minimum lot size, and the CN (Neighborhood Commercial) district does not require a minimum lot size. Lot coverage is restricted to 60 percent and building heights are limited to 50 feet. Shopping centers and superstores can not exceed a floor area ratio of 0.30.

Downtown Mixed Use Classification. The Downtown Mixed Use classification encompasses approximately 0.04 square miles (27.4 acres) or about 0.3 percent of the total town planning jurisdiction. The properties classified as Downtown Mixed Use are located in and immediately surrounding the Edenton Central Business District and the downtown waterfront area.

The Downtown Mixed Use classification is intended to delineate properties that can accommodate a variety of retail, office, business services, and personal services. Areas classified as Downtown Mixed Use may also include medium density (3 to 7 dwellings per acre or high density (8 to 12 dwellings per acre) residences and public and institutional land uses, particularly governmental buildings and facilities. The Downtown Mixed Use classification also specifically includes waterfront tourist-oriented land uses. This classification is compatible with the CD, Downtown Commercial zoning district. No minimum lot size is required in the CD district, except for permissible residential uses. For permissible nonresidential uses, lot coverage is restricted to 60 percent and building heights are limited to 50 feet.

Public water and sewer service is needed to support the land uses characteristic of this classification. Streets with the capacity to accommodate higher traffic volumes are also necessary to support the intensive land uses within this classification. Generally, the intensity of development is expected to average four commercial establishments per acre.

The town's goals and policies support the use of land in Downtown Mixed Use-classified areas for a wide variety of retail and commercial services uses where adequate public utilities and streets are available or can be upgraded to support the intensity of development encouraged in this classification. Redevelopment of the downtown waterfront area for tourist-oriented mixed uses consisting of retail shops, places of entertainment, restaurants, boating services, and overnight lodging is promoted by the town's goals and policies.

The majority of the area classified as Downtown Mixed Use is already developed. Any new development or infill will be at high densities.

C. Public and Office/Institutional Classification

The Public and Office/Institutional classification encompasses approximately 0.15 square miles (101.5 acres) or about 1.0 percent of the total Town planning jurisdictional area. The properties classified as Public and Institutional are scattered throughout the Town's planning jurisdiction. The largest individual properties within the Public and Institutional classification are located near the hospital.

The Public and Office/Institutional classification is intended to delineate large land areas that are used for intensive public and educational purposes as well as medical related offices that support the hospital. Land uses within this classification include primarily government buildings and service facilities, public recreational facilities, public and private educational facilities, large medical facilities and offices, and large private institutional uses. Generally, public water service is needed to support the land uses characteristic of this classification. Public sewer or an approved private wastewater treatment system is needed to support the most intensive public and institutional uses. Streets with the capacity to accommodate higher traffic volumes are necessary to support the intensity of development expected within the Public and Office/Institutional Classification. The Public and Office/Institutional district is compatible with the MA (Medical Arts) and OS (Office & Services) zoning districts. The OS and MA zoning district does not require a minimum lot size except for residential uses. Generally, the intensity of development is expected to average one public, office, or institutional use per five acres. Lot coverage is restricted to 60 percent and building heights are limited to 50 feet.

D. Industrial Classification

The Industrial classification encompasses approximately 1.66 square miles (1,066 acres) or about 10.5 percent of the total Town planning jurisdiction. The properties classified as Industrial are primarily concentrated north of Town between Broad Street and US 17 and in the airport area on Soundside Road.

The Industrial classification is intended to delineate lands that can accommodate industrial and manufacturing establishments. Some heavy commercial uses as well as services and businesses which support industrial land uses are also appropriate land uses within the Industrial classification. Public water and sewer service or an approved private wastewater treatment system is needed to support the land uses characteristic of this classification. Streets with the capacity to accommodate higher traffic volumes are necessary to support the intensity of development expected within the Industrial Classification. The Industrial Classification is compatible with the IW (Industrial Warehouse) zoning district. The IW (Industrial Warehouse) zoning district does not have a minimum lot size standard, therefore density will vary. Generally, the intensity of industrial development is expected to average one industrial use per three acres. Lot coverage is restricted to 60 percent and building heights are limited to 50 feet.

The Industrial areas are expected to accommodate the majority of the future industrial growth projected for the planning period. Critical factors that will determine the development potential of these Industrial-classified areas include market demand and the provision of the necessary support infrastructure (particularly public water and sewer utilities). Consequently, the development potential of the majority of the lands within the Industrial areas may be more long-term than short-term.

The Town's goals and policies support the use of land in Industrial-classified areas for a wide variety of manufacturing and heavy commercial services uses where adequate public utilities and streets are available or can be upgraded to support the intensity of development encouraged in this classification. Public and institutional land uses as well as commercial services that support and that are compatible with this type of industrial development are also encouraged. Industrial-classified areas may include certain land uses which, due to their nature and characteristics, have potential adverse impacts on surrounding land use types. Consequently, the Town's policy is to ensure the compatible location of industrial land uses and to require the necessary measures to mitigate any adverse impacts.

E. Conservation/Open Space Classification

The Conservation/Open Space classification encompasses approximately 2.2 square miles (1,411 acres) or about 13.9 percent of the total Town planning jurisdiction. Conservation/Open Space areas are scattered throughout the Edenton planning jurisdiction and include non-coastal wetlands, estuarine waters, estuarine shoreline, public trust areas, and 'Section 404' wetlands. Included as a conservation designation are the future greenways corridors that are located throughout the county along creeks and rivers, as depicted in the 2003 Edenton/Chowan Greenway and Open Space Plan. Large portions of Conservation/Open Space designated areas are identified on the Future Land Use Map. Generally, the locations of these large areas are mostly in non-coastal wetlands. The largest areas are at the southwestern portion of the Edenton jurisdiction and along both the Pembroke and Queen Anne Creeks.

The Conservation/Open Space classification is intended to delineate areas where traditional land uses are not desirable or expected to develop. Land development may, however, include public building and facilities necessary to support existing land uses within the areas classified as Conservation/Open Space. Commercial and industrial uses that are water dependent and which cannot function elsewhere or are supportive of commercial fishing are permissible uses in Conservation/Open Space-designated areas. Public water or sewer utilities are not needed to support the types and intensities of land uses in these areas. Extensions of water and sewer utilities into these areas are not expected or encouraged.

The town's goals and policies support the continued use of land in Conservation/Open Space-classified areas for appropriate uses that are compatible with the fragile nature of the Conservation/Open Space areas. Traditional urban growth and development in such areas is discouraged. Conservation/Open Space areas are expected to retain their existing character over time.

<i>Table 51: Future Land Use Map Calculations Town of Edenton Planning Jurisdiction</i>		
Edenton Classifications	Total Acres	% of Total Acres
Low Density Residential	5,159.0	51.0%
Medium/High Density Residential	2,012.0	19.9%
Commercial	340.7	3.4%
Downtown Mixed Use	27.0	0.3%
Public and Institutional	101.5	1.0%
Industrial	1,066.4	10.5%
Conservation and Open Space	1,411.0	13.9%
Totals	10,117.6	100.0%

Source: The Wooten Company

4.3.3 Cost Estimates for Planned Community Facility Improvements

A. Water Systems

In the event that the Chowan County Board of Commissioners would consider making the decision to fund certain utility infrastructure improvements to support any planned development in the future, the following costs are estimated using 2008 cost information:

- \$3 million +/-: Backwash water improvements at the Vahalla WTP.
- \$1 million +/-: One new well at the Valhalla WTP.
- \$2,000/day +/-: Purchase 300,000 gallons per day water supply from Gates County.
- \$1 million +/-: Construction of a new elevated storage tank in the southern part of the county.
- \$5 million +/-: Large diameter water main along NC 32 in northern system.
- \$2 million +/-: Construction of 1 million gallon storage tank at Paradise Road booster site.

Edenton planned water system improvements include the following:

- Expansion of the water treatment facilities by 2010 is projected; estimated cost is \$1,140,000.00.
- Chlorination process: estimated cost is \$150,000.00
- Miscellaneous improvements: estimated cost is \$960,000.00 over 7 years

B. Sanitary Sewer Systems

Currently Chowan County does not operate a sanitary sewer system. However, there are plans to provide sewer to the southeastern portion of the county including the Cape Colony and Country Club areas. The county is in the process of preparing a feasibility study for the project. In

the event that the Chowan County Board of Commissioners would consider making the decision to fund such sewer improvements, the cost, using 2008 cost information, is estimated to be \$15 million +/-.

Planned sewer system improvements for the Town of Edenton include:

- Sewer line rehabilitation: \$1,148,000.00
- Sewer system upgrades: \$550,000.00
- Pump stations: \$1,550,000.00
- Cape Colony pretreatment: \$20,000.00
- BMI extension: \$600,000.00
- Lift station upgrade: \$800,000.00
- Additional spray field land: \$200,000.00

4.3.4 Consistency with Natural Systems and Land Suitability Analyses

The land use patterns depicted on the Future Land Use Map are generally consistent with the analysis of natural systems and the analysis of land suitability. The Future Land Use Map depicts very generalized patterns of projected land use. The intent of the map is to illustrate a typical pattern of use for a general area and not the specific use of an individual parcel. Some of the generalized land use patterns depicted on the Future Land Use Map conflict with the Environmental Conditions Composite Map and the Land Suitability Map. The Future Land Use Map classifications reflect existing land development and zoning patterns which may conflict with the generalized maps depicting environmental conditions and land suitability. The Future Land Use Map is not intended for site-specific land planning or for regulatory purposes.

Property adjacent to the Pembroke and Queen Anne's Creeks as well as the southwestern portion of the town's jurisdiction contain some type of natural constraint, primarily floodplains, storm surge and wetlands. The majority of such areas are designated on the Future Land Use Map for conservation and low density residential use. Major areas with significant natural constraints and low suitability ratings within the Chowan County jurisdiction are designated as Conservation/Open Space on the Future Land Use Map. Examples of such areas include the Bear Swamp and coastal wetlands along the western edge of the county.

Other Conservation/Open Space areas are scattered throughout the town and county and include coastal wetlands, estuarine waters, estuarine shoreline, public trust areas, and 'Section 404' wetlands. Due to the small size of such areas, they are not specifically identified on the Future Land Use Map. Other areas with significant natural constraints and low suitability ratings are designated on the Future Land Use Map for low intensity land uses such as those anticipated to occur in the Agricultural, Rural Agricultural, and Low Density Residential classifications.

The table below illustrates the amount of land area within each planning jurisdiction by land suitability rating.

*Table 52:
Acreage by Land Suitability Rating*

Suitability	Town of Edenton Jurisdiction		Chowan County Jurisdiction	
	Total Acres	Percent	Total Acres	Percent
High	5,086	47%	8,179	8%
Medium	2,302	21%	47,142	47%
Low	443	4%	16,516	17%
Least	3,071	28%	27,767	28%
Totals	10,901	100%	99,604	100%

Source: The Wooten Company, 2007 *Note: Acreage excludes water features*

Some portions of the projected use classifications shown on the Future Land Use Map may include land which is designated as having moderate or serious natural limitations or land which is rated as having low suitability for development. Inclusion of such areas within a specific projected future use classification does not denote a recommendation for future development. Rather, it means that while such areas are located within a broader general use pattern, their ultimate future use may be different from other properties because of their natural constraints and regulatory limitations. Some of the designated fragile areas may always remain in their current natural state or, if permitted by regulatory authority, may be altered and any negative impacts overcome through approved mitigation measures. Some of the areas currently designated as having low suitability for development may lose that rating over time as, for example, public utilities are installed and roads are constructed. Consequently, the future use of such areas, if the low suitability conditions are eliminated, will be in accordance with the broader general use classification.

Land development activity within most environmentally fragile areas is subject to local, state, and/or federal restrictions. Local land use regulations such as zoning ordinances, subdivision ordinances, public water supply watershed ordinances, stormwater management ordinances, and flood damage prevention ordinance include specific standards for land development activities. Site-specific soil analyses are required by Albemarle Regional Health Services to evaluate the suitability of a particular parcel for septic system suitability. Encouraging good site planning principles and best management practices can assist with mitigating the impacts of land development on environmentally fragile areas.

Development within the designated Areas of Environmental Concern is limited by CAMA regulations and development guidelines. Generally, the development standards for coastal wetlands, estuarine waters, and public trust areas permit only water-dependent uses such as navigation channels, dredging projects, docks, piers, bulkheads, boat ramps, groins, and bridges. Priority is, however, given to the conservation of these AECs. CAMA standards for estuarine shoreline development generally require that (i) the development not cause significant damage to estuarine resources; (ii) the development not interfere with public rights of access to or use of navigable waters or public resources; (iii) the development preserve and not weaken natural barriers to erosion; (iv) impervious surfaces not exceed 30 percent of the lot area located within the AEC boundary; (v) the development comply with state soil erosion, sedimentation, and stormwater management regulations; and (vi) the development comply with the

CAMA Land Use Plans. Specific CAMA development standards for AECs can be found in 15 NCAC 7H.

The US Army Corps of Engineers is responsible for regulating non-coastal or 'Section 404' wetlands. Authorization must be obtained from the Corps prior to disturbing such wetlands.

Areas with prime farmland soils are also well suited to urban uses. The loss of prime farmland to other land uses is anticipated to continue particularly on the immediate periphery of the Edenton urban area where more intensive growth is also well suited due to the existing infrastructure in the area. County policies and land use regulations can assist with guiding incompatible land development away from existing agricultural areas that are located within the Chowan County jurisdiction. Mechanisms such as the establishment of voluntary agricultural districts can also assist in protecting farms from non-farm development.

Opportunities exist for the conservation of fragile areas and natural resource areas through both private and public means. Private land trusts and conservancies are tax-exempt organizations that acquire and preserve natural areas, open spaces, and historical properties. Such organizations offer mechanisms such as conservation easements to protect natural resources (natural habitats, places of scenic beauty, farms, forestlands, floodplains, watersheds, etc.) while also providing compensation and possible tax incentives to private property owners. Tax incentive programs, such as the North Carolina Conservation Tax Credit Program, provide opportunities for property owners donating land for conservation purposes to receive tax credits. State and local governments may also accept land donations for conservation purposes.

Public land use regulations, such as conservation design subdivision requirements, can be developed to assist with the conservation of environmentally sensitive areas and open space as land is being subdivided into building parcels.

The timing of the provision of infrastructure improvements, particularly water and sewer services and roads, will also have a tremendous impact on the rate and location of growth and development. Development will occur where infrastructure is available or can readily be made available to sustain that development. Consequently, achieving the Future Land Use Map land use projections will depend in large part upon if and when infrastructure is provided. The provision of public infrastructure generally depends upon capability to provide the service and demand for the service. Economic climate will be a major factor in the capability to make infrastructure available as well as the level of service demand.

4.3.5 Comparison of Future Land Use Allocations and Projected Land Needs

The following tables provide a comparison of the amount of land within each future land use map classification and projected land needs. These tables compare the gross, developed, and undeveloped acreage of land allocated to the various future land use map classifications. 'Total Acres' allocated to the various land use classifications is derived from Table 48, Future Land Use Map Classifications, Chowan County Planning Jurisdiction and Table 49, Future Land

Use Map Classifications, Edenton Planning Jurisdiction. 'Existing Developed Acreage' is derived from Table 35

'Undeveloped Acreage' results from subtracting 'Existing Developed Acreage' from 'Total Acres'.

'Total Additional Acres for Development Based on Projected Needs' is as calculated in Table 38, Residential Land Needs Projections and Table 39, Nonresidential Needs Projections and reflects the estimated gross acreage needed to meet forecasted residential, commercial, industrial, and public/institutional land needs.

The tables are intended to provide a comparison of the amount of land allocated to the various future land use map classifications and the amount of land needed to meet projected future needs based upon population growth through 2030. The tables illustrate a general comparison of land allocation without accounting for the mixture and variety of land uses within individual map classifications, the specific projected needs of integrated land uses within map classifications, or for the presence of natural and man-made constraints within each map classification which limit or prohibit development potential. Thus, the comparisons illustrated in the tables are of very limited utility and should only be used to provide a very broad, nonspecific prospective of future land allocation and projected land needs.

*Table 53:
Comparison of Land Allocated in the Future Land Use Map and Projected Needs
Chowan County Planning Jurisdiction 2030*

	A	B	C	D
Future Land Use Classification	Total Acres Allocated to Each Land Classification	Existing Developed Acreage within Each Classification*	Undeveloped Acreage within Each Classification (A-B)	Total Additional Acres for Development Based on Projected Land Need**
Residential Agricultural	91,344	5,392	85,952	950
Low Density Residential	2,357	55	2,302	841
Medium/High Density Residential	2,867	698	2,169	562
Commercial	56	24	32	111
Industrial	661	346	315	150
Conservation & Open Space	2,456	4	2,452	n/a
Totals	99,741	6,519	93,222	2,614

* Column B includes existing residential, institutional & public, confined feeding operations, industrial, and commercial acreage as delineated in Table 48, Distribution of Acreage for Existing and Future Land Use Map Classifications. Does not account for developed land uses/acreage within the Agricultural and Forestry existing land use categories (i.e., a dwelling located within the Agricultural category).

** Column D includes projected land needs from Tables 38 and 39. 93 acres of projected additional public & institutional acres assumed to be distributed among the six future land use classifications, primarily within the Residential Agricultural, Low Density Residential, and Medium/High Density Residential classifications.

<i>Table 54: Comparison of Land Allocated in the Future Land Use Map and Projected Needs Town of Edenton Planning Jurisdiction 2030</i>				
	A	B	C	D
Future Land Use Classification	Total Acres Allocated to Each Land Classification	Existing Developed Acreage within Each Classification*	Undeveloped Acreage within Each Classification (A-B)	Total Additional Acres for Development Based on Projected Land Need**
Low Density Residential	5,159	469	4,690	1,817
Medium/High Density Residential	2,012	727	1,285	706
Commercial	341	180	161	111
Downtown Mixed Use	27	27	0	8
Public & Institutional	102	73	29	39
Industrial	1,066 [^]	812	254	71
Conservation & Open Space	1,411	61	1,350	n/a
Totals	10,118	2,349	7,769	2,752

* Column B includes existing residential, institutional & public, confined feeding operations, industrial, and commercial acreage as delineated in Table 49, Distribution of Acreage for Existing and Future Land Use Map Classifications.

** Column D includes projected land needs from Tables 38 and 39.

[^] Acreage includes the airport property which was delineated on the Existing Land Use map as public and institutional

Chowan County and the Town of Edenton acknowledge that the Future Land Use Plan Map designations and policies accommodate residential density levels that exceed the projected need. However, the County and Town believe that promoting higher density levels in some portions of their jurisdictions is not inconsistent with the desired objective of accommodating diverse residential development types and avoiding a strict segregation of housing types and densities. Chowan County and Edenton also believe that allowing for higher residential density levels is not inconsistent with the purposes of the Future Land Use Map categories, particularly the County's Residential Agricultural classification and the Town's Low Density Residential classification, or with the existing and proposed infrastructure within these classifications.

The fact that the Plan may accommodate higher density levels does not equate with all or even most of the future land development actually occurring at the higher levels. The Plan sets the stage for the **possibility** of allowing higher

densities. The Plan is not carte blanc approval for all future high density development requests or proposals. Every land development proposal is reviewed and approved on a case-by-case basis with consideration given to site-specific conditions.

The County and Town believe that higher residential density levels can, with appropriate regulatory safeguards, be compatible with surrounding lower density land uses. Proposed higher density developments require extended and more detailed scrutiny in their review and approval processes. Decisions regarding the approval or disapproval of such developments are made on a case-by-case basis after extensive local government evaluation and review, including public review and comments, and only after a case-by-case independent determination of consistency or inconsistency with this plan is made pursuant to NCGS 153A-341. Because these types of development are permissible only as special or conditional uses, determinations can be made by the local governments to require specific mitigating actions to address identified potential negative impacts or the protection of natural resources. Regulatory authorization is currently in place to ensure that special or conditional uses (i) do not endanger the public health or safety, (ii) do not injure the value of adjoining or abutting properties, (iii) are compatible with the area in which it is proposed to be located, and (iv) will be in conformity with adopted local plans.

The County and Town do not believe that the residential densities accommodated in the Plan will automatically result in adverse impacts and environmental degradation and should, therefore, be excluded from their jurisdictions. Rather, the County and Town believe that they have the capabilities to review and assess land development proposals and to make appropriate decisions regarding their desirability and compatibility. The County and Town have statutory authorization to regulate land development activities and currently do so with their zoning/unified development ordinances and subdivision regulations. Chowan County and Edenton will, through these land development regulations, continue to ensure that any identified adverse impacts resulting from increased density levels will be avoided or mitigated prior to approval.

Based upon the projections and assumptions delineated in the above tables, sufficient developable acreage exists within the Chowan County and Edenton jurisdictions to accommodate projected residential and nonresidential land needs. However, to efficiently accommodate projected growth, it will be imperative that the Town and County closely coordinate infrastructure development and land use regulations as much of the anticipated growth is expected to locate on the periphery of the Edenton urban area.

4.3.6 Use of the Future Land Use Plan to Guide Development

In preparing the Future Land Use Map, consideration was given to land development objectives and policies, land suitability, and the ability to provide the infrastructure to support growth and development. The Future Land Use Map depicts the general location of projected patterns of future land uses. The Future Land Use Map is a plan or guideline for the future.

The ultimate use and development of a particular parcel of land will be determined by property owners' desires, overall market conditions, implementation tools employed by the Town and the County to regulate land use

and development (such as zoning ordinances, subdivision regulations, flood hazard regulations), the absence of specific natural constraints to development, and the availability of the necessary infrastructure (water, sewer, roads, etc.) to support development. Consequently, even though the Future Land Use Map may indicate a specific projected use in a particular location, many factors come into play to determine if the projected use is appropriate and the land can be developed as projected.

Achieving the projected patterns of land use indicated by the Future Land Use Map will be greatly impacted by timing. Much of the projected land use indicated on the Future Land Use Map will not come to fruition without market demand. Therefore, market and economic conditions must be conducive for growth and development. While the Land Use Plan attempts to provide a general expectation of growth based upon projected population change, it simply cannot predict the economic future. The demand for houses, businesses, industries, etc. will fluctuate widely with economic conditions.

The timing of the provision of infrastructure improvements, particularly water and sewer services and roads, will also have a tremendous impact on growth and development. Development will occur where infrastructure is available or can be made available to sustain that development. Consequently, achieving the Future Land Use Map land use projections will depend in large part upon if and when infrastructure is provided. The provision of public infrastructure depends upon capability to provide the service and demand for the service. Economic climate will be a major factor in both the capability to make infrastructure available and the level of service demand.

The following table summarizes a hypothetical maximum buildout scenario and utility demand by future land use map classifications using assumed density and intensity levels as identified in the table:

**Table 55:
Utility Demand at Buildout**

Chowan County Future Land Use Map Classification	Estimated Undeveloped Acreage[^]	Average DU/AC	Maximum Projected DU	Average Nonresidential Lot Size (acres)	Maximum Projected Nonresidential Users	Projected Water Demand MGD*	Projected Sewer Demand MGD**
Residential Agricultural (Residential Portion)	847						
<i>TNDs, PUDs</i>	170	2	340	na	na	0.0680	0.0680
<i>All Other Residential</i>	677	1 per 5	135	na	na	0.0271	0.0271
Residential Agricultural (Agricultural Portion)	83,815	1 per 20	4,191	na	na	0.8382	0.8382
Residential Agricultural (Commercial Portion)	430	na	na	2	215	0.1075	0.1075
Low Density Residential	2,269	1	2,269	na	na	0.4538	0.4538
Medium/High Density Residential	2,136						
<i>Medium Density</i>	1,708	2	3,416	na	na	0.6832	0.6832
<i>High Density</i>	428	6	2,568	na	na	0.5136	0.5136
Commercial	32	na	na	2	16	0.0080	0.0080
Public and Institutional	926	na	na	5	185	0.9260	0.9260
Industrial	315	na	na	20	16	0.0788	0.0788
Totals	90,770	na	12,919	na	432	3.7041	3.7041

[^] Gross undeveloped acres from Table 53

* Based upon an average consumption of 200 gpd for residential users, 500 gpd for commercial users, and 5,000 gpd for industrial users.

** Currently, the county does not have a wastewater system.

Town of Edenton Future Land Use Map Classification	Estimated Undeveloped Acreage[^]	Average DU/AC	Maximum Projected DU	Average Nonresidential Lot Size (acres)	Maximum Projected Nonresidential Users	Projected Water Demand MGD*	Projected Sewer Demand MGD*
Low Density Residential	4,690						
<i>Low Density</i>	2,580	2	5,160	na	na	1.0320	1.0320
<i>All Other Residential</i>	2,110	1 per 5	422	na	na	0.0844	0.0844
Medium High Density Residential	1,285						
<i>Medium Density</i>	964	4	3,856	na	na	0.7712	0.7712

Town of Edenton Future Land Use Map Classification	Estimated Undeveloped Acreage[^]	Average DU/AC	Maximum Projected DU	Average Nonresidential Lot Size (acres)	Maximum Projected Nonresidential Users	Projected Water Demand MGD*	Projected Sewer Demand MGD*
High Density	321	8	2,568	na	na	0.5136	0.5136
Commercial	161	na	na	2	81	0.0403	0.0403
Downtown Mixed Use (residential)	5	10	50	na	na	0.0100	0.0100
Downtown Mixed Use (commercial)	0	na	na	0.25	0	0.0000	0.0000
Public and Institutional	29	na	na	5	6	0.0290	0.0290
Industrial	254	na	na	3	85	0.4233	0.4233
Totals	6,424	na	12,056	na	171	2.9038	2.9038
[^] Gross undeveloped acres from Table 54							
* Based upon an average consumption of 200 gpd for residential users, 500 gpd for commercial users,, 5000 gpd for public and institutional uses, and 5,000 gpd for industrial users							
<i>Source: The Wooten Company, February 2008</i>							

Notes to Table 55:

1. Residential uses are permitted within the County's Residential Agricultural Classification. The Future Land Use Map acreage assumes approximately 847 acres (or just over 1%) of the gross undeveloped Residential Agricultural acreage will be used for residential purposes.
2. The County's Residential Agricultural Classification allows low intensity commercial uses; additional commercial land demand will be accommodated there. The future land use map assumes that approximately 430 acres or 0.5% of the gross undeveloped Residential Agricultural acreage will be used for commercial purposes.
3. The County's Residential Agricultural, Low Density Residential, and Medium Density Residential and Classifications allow for public and institutional uses, additional demand will be accommodated there. The future land use map assumes that 1.0% (860 acres) of the total Residential Agricultural acreage and 1.5% of the Low Density and Medium/High Density Residential Future Land Use Map acreage (33 acres each classification) will be used for public and institutional uses.
4. The Town of Edenton's Low Density Residential classified-area is transitioning from agricultural to residential use. Future land needs assume that only approximately 2,560 acres or about 55% of the gross Low Density Residential acreage will be used for residential purposes during the planning period.
5. Five acres of high density residential development/redevelopment is anticipated in Edenton's Downtown Mixed Use Classification during the planning period.

These hypothetical projections help to illustrate the areas of Chowan County and Edenton that have the greatest potential for intensive growth as well as the highest demand for water and sewer services. Cost estimates for planned/proposed water and sewer system improvements are provided in Section 4.3.3.

SECTION V: TOOLS FOR MANAGING DEVELOPMENT

This section of the Plan is organized in accordance with the requirements of Subchapter 7B .0702(e). Section V includes a description of the Town of Edenton and Chowan County land management tools and programs as well as the actions and strategies that each local government will use to implement the Joint Land Use Plan.

5.1 Guide for Land Use Decision-making

The Joint Land Use Plan, as adopted by the elected officials of Edenton and Chowan County and as may be amended from time to time, will serve as the primary guide upon which to make land use policy decisions. Every land use policy decision, such as a rezoning request or approval of a conditional or special use permit, will be measured for consistency with the goals, policies, and recommendations of the Plan. The elected officials, Planning Boards, Boards of Zoning Adjustment, and local government staffs should utilize the Land Use Plan as the basic policy guide in the administration of the zoning ordinance, subdivision regulations, and other land development regulatory tools. Persons involved in the land development business as well as the general public can also utilize the Land Use Plan to guide private decisions regarding land use and land development.

The policy statements and recommendations of the Land Use Plan can also be of assistance to the elected officials in making long-range decisions regarding such matters as the provision of water and sewer services, thoroughfare planning, stormwater planning and management, implementation of economic development strategies, recreational facility planning, preparation of capital and operating budgets, and implementation of housing and community development programs.

It should be noted, however, that the Land Use Plan is one of a variety of guides in making a public policy decision. The Plan should be viewed as a tool to aid in decision making and not as the final decision.

5.2 Existing Land Use and Development Management Programs

5.2.1 Chowan County

Chowan County's existing land development management program includes the following land regulatory ordinances and related plans:

- Joint Edenton/Chowan County CAMA Land Use Plan Update, Certified in March 1999
- Edenton/Chowan Greenway and Open Space Plan 2003
- Joint Edenton/Chowan Hazard Mitigation Plan 2005
- Edenton/Chowan Recreation and Parks Plan 2005
- Zoning Ordinance (including Subdivision and Flood Damage Prevention requirements)

The County's land development management program is administered primarily by the joint Edenton/Chowan Planning and Inspections Department which is responsible for administering land development regulations. The County's land development regulations are applicable to all land areas located outside of the planning and zoning jurisdiction of the Town of Edenton.

The Planning and Inspections Department serves as staff support for the Chowan County Planning Board and the Chowan County Board of Adjustment. The Planning Board serves primarily in an advisory capacity, making recommendations to the Board of Commissioners on zoning and subdivision matters. The Board of Adjustment is responsible for hearing requests for special use permits as well as requests for appeals and variances from the zoning ordinance. The Board of Commissioners responsibilities in the zoning process include adopting and amending the zoning ordinance text and map. The Board of Commissioners is also responsible for making approval decisions on all preliminary and final subdivisions.

Building inspections throughout the Chowan County jurisdiction are administered by the County Building Inspections Department.

5.2.2 Town of Edenton

Edenton's existing land development management program includes the following land regulatory ordinances and related plans:

- Joint Edenton/Chowan County CAMA Land Use Plan Update, Certified in March 1999
- Edenton/Chowan Greenway and Open Space Plan 2003
- Joint Edenton/Chowan Hazard Mitigation Plan 2005
- Edenton/Chowan Recreation and Parks Plan 2005
- Unified Development Ordinance, which includes zoning, subdivision regulations, flood prevention and sign regulations.
- Minimum Housing Code
- Edenton Capital Improvement Plan, May 2003
- Edenton Thoroughfare Plan 1993
- Edenton Major Corridor Overlay Plan, 2003

The Town of Edenton land development management program is administered primarily by the Joint Edenton/Chowan County Planning Department which is responsible for administering land development regulations. The Town's land development regulations are applicable to all land areas located inside the corporate limits of the Town of Edenton and the Town's extraterritorial planning and zoning jurisdiction.

The Planning Department serves as staff support for the Edenton Planning Board and the Edenton Board of Adjustment. The Planning Board serves primarily in an advisory capacity, making recommendations to the City Council on zoning matters and preliminary subdivision plat approvals. The Board of Adjustment hears all requests for appeals and variances from the unified development ordinance. The City Council is responsible for hearing requests for conditional use permits and makes all approval decisions on preliminary subdivision plats.

Building inspections throughout the Town's jurisdiction are administered by the joint Planning and Inspections Department. The Chowan/Edenton Planning and Inspections Department also administers the Town's Minimum Housing Code.

5.3 Additional Implementation Tools

5.3.1 Amendments or Adjustments to Existing Land Development Ordinances

Amendments to land development ordinances necessary to ensure consistency with the Land Use Plan include the following:

- Amend official zoning map where inconsistencies exist between the zoning map and Future Land Use Map

5.3.2 Capital Improvements

A. Water Treatment Systems

Town of Edenton water system capital improvements include the following:

- Expansion of the water treatment facilities by 2010 is projected; estimated cost is \$1,140,000.00.
- Chlorination process to be completed in 2009: estimated cost is \$150,000.00
- 20-year maintenance improvements: estimated cost is \$960,000.00

Identified Chowan County water system improvements needs include the following:

- Backwash water improvements at the Valhalla WTP
- One new well at the Valhalla WTP
- Purchase of 300,000 gpd water supply from Gates County
- Construction of new elevated storage tank in the southern portion of the county
- Large diameter water main along NC 32 in the northern system
- Construction of 1 mg ground storage tank at Paradise Road booster site

These water system improvements have been identified by the Chowan County Water Department as desirable but have not, to date, been included in the county's formal capital improvements programming and budgeting process. If Chowan County decides to undertake the above water system improvements, the probable completion dates would be between 2015 and 2025.

B. Wastewater Treatment Systems

Planned sewer system improvements for the Town of Edenton include:

- Sewer line rehabilitation: \$1,148,000.00; completion during 2008-2018

- Sewer system upgrades: \$550,000.00; completion during 2008-2009
- Pump stations: \$1,550,000.00; completion during 2012-2014
- Cape Colony pretreatment: \$20,000.00; completion in 2008
- BMI extension: \$600,000.00; completed
- Lift station upgrade: \$800,000.00; completion in 2011
- Additional spray field land: \$200,000.00; completion in 2010

Chowan County Wastewater improvements:

The county has prepared a feasibility study for providing sewer collection services to a portion of southeastern Chowan County. The preliminary recommendation of that study is to install a low-pressure or vacuum sewer system to serve the Cape Colony, Country Club Road and surrounding areas, and the Chowan County Golf and Country Club. If Chowan County decides to undertake the above sewer system improvements, the probable completion date would be between 2015 and 2025.

5.4 Implementation Plan and Schedule

5.4.1 Chowan County

Chowan County has developed the following action plan and schedule to implement the Land Use Plan:

A. Public Water Access Implementation Actions

FY07: Seek funding from DCM for a grant to prepare a waterfront access plan.

FY08: Finalize waterfront access plan.

Post FY08: Initiate implementation of the recommendations of the waterfront access plan; seeking funding approval for recommended acquisitions/improvements; develop specific criteria and standards for the provision of public waterfront access.

Ongoing: Review, through the subdivision plat and site plan review and approval process, proposed waterfront land development projects to ensure consistency with the County's public access goals and policies.

B. Land Use Compatibility Implementation Actions

1. **FY07:** Develop, in cooperation with the NCDOT, requirements for regulating vehicular access to state roadways; amend the County zoning ordinance and subdivision regulations accordingly.
2. **FY08:** Review all development regulations to ensure that residential densities and building intensities implement the Town's land use suitability goals and policies.
3. **FY08:** Establish a joint task force with the Town of Edenton to develop coordinated land use and development regulations for areas of common interest such as extraterritorial planning area, municipal utility service areas, airport zoning area, etc.

C. Infrastructure Carrying Capacity Implementation Actions

1. **FY07:** Establish a joint task force with the Town of Edenton and other utility providers within Chowan County to establish formal utility service area boundaries and agreements and to develop coordinated land use and development regulations within such areas.
2. **FY08:** Review the County's water system extension and service policies for consistency with the goals and objectives of the Land Use Plan.
3. **FY08:** Prepare a Capital Improvement Plan for future infrastructure improvement such as water and sewer.
4. **FY09:** Update the existing Edenton Thoroughfare Plan (1993) with a joint comprehensive transportation plan for Edenton and Chowan County.
5. **Ongoing:** Utilize the Land Use Plan, zoning ordinance, subdivision regulations, and water extension policies to guide public infrastructure and services to areas where growth and development are desired.
6. **Ongoing:** Pursue opportunities to provide sanitary sewer to southeastern Chowan County, specifically Cape Colony and Country Club Drive areas.

D. Natural Hazard Areas Implementation Actions

Ongoing: The County will review its zoning ordinance, subdivision regulations, and flood damage prevention provisions to determine if more specific locational and density regulations regarding development or redevelopment activities within identified flood hazard areas and storm surge areas are warranted. Issues to be addressed include restrictions on land uses that utilize or store hazardous materials on-site, establishment of riparian buffers, increasing the minimum freeboard height above base flood elevation, etc.

Ongoing: The County will avoid zoning areas susceptible to storm surge for high density residential or intensive nonresidential use.

Ongoing: Based upon the availability of federal and state grant funds, land acquisition programs will be utilized in the most hazardous areas to minimize future damage and loss of life.

Ongoing: If any portion of the County's public infrastructure is significantly damaged by a major storm, consideration will be given to the feasibility of relocating or modifying the affected facilities to prevent the reoccurrence of storm damage.

Ongoing: Coordinate the review and approval of development plans for major subdivisions, multifamily developments, and large public and institutional uses located within identified natural hazard areas with the County Emergency Management Agency. Continue the active enforcement of the State Building Code provisions regarding wind-resistance requirements and participation in the National Flood Insurance Program.

FY07-08: The County will review their Flood Damage prevention provisions when the new countywide floodplain data is completed in 2007. Modifications to reflect the new data may be necessary.

E. Water Quality Implementation Actions

FY07: The County will investigate the feasibility of developing and implementing a countywide stormwater management plan and coordinating such management plan with the Town of Edenton.

FY08: The County will review its zoning ordinance and subdivision regulations to determine if revisions are needed to include additional measures, such as riparian buffers and impervious surface limitations, to control stormwater discharges.

FY09: Consider the adoption of a wellhead protection ordinance to regulate land uses within areas that replenish groundwater supply.

Ongoing: The County will continue to require, through its subdivision regulations, adequate stormwater drainage systems for new developments. The County will continue to promote the use of best management practices to minimize the degradation of water quality resulting from stormwater runoff. The County will continue to coordinate the approval of land development projects with the applicable State agencies.

F. Areas of Environmental Concern Implementation Actions:

FY07: The County will review its zoning ordinance and subdivision regulations to determine if revisions are needed to include additional protective measures for AECs.

G. Areas of Local Concern Implementation Actions:

1. **FY07:** The County will review its zoning ordinance and subdivision regulations to determine if revisions are needed to eliminate requirements that are not conducive to encouraging a variety of affordable housing opportunities or to promoting diversified economic development.
2. **Ongoing:** Continue to pursue funding opportunities to rehabilitate substandard housing throughout the County.

5.4.2 Town of Edenton

Edenton has developed the following action plan and schedule to implement the Land Use Plan:

A. Public Water Access Implementation Actions

1. **FY07:** Seek funding from DCM for a grant to prepare a waterfront access plan.
2. **FY08:** Finalize waterfront access plan.
3. **Post FY08:** Initiate implementation of the recommendations of the waterfront access plan; seeking funding approval for recommended acquisitions/improvements; develop specific criteria and standards for the provision of public waterfront access.
4. **Ongoing:** Review, through the subdivision plat and site plan review and approval process, proposed waterfront land development projects to ensure implementation of the Town's public access goals and policies.

B. Land Use Compatibility Implementation Actions

1. **FY08-09:** Comprehensive update of the Unified Development Ordinance to include development principles and techniques that promote land use compatibility as open space subdivision design, clustering, innovative stormwater management design, etc.
2. **Ongoing:** Review the Unified Development Ordinance and other Town land use and development regulations to ensure that residential densities and building intensities implement the Town's land suitability goals and policies. Prepare revisions and updates as determined appropriate. Coordinate the review with the Chowan County Health Department.

C. Infrastructure Carrying Capacity Implementation Actions

1. **FY07:** Completion of a planned water and sewer system improvements.
2. **FY09:** Completion of sewer system improvements.
3. **FY10:** Completion of water system improvements.
4. **FY09:** Update the existing Edenton Thoroughfare Plan (1993) with a joint comprehensive transportation plan for Edenton and Chowan County.
5. **Ongoing:** Utilize the Land Use Plan, Unified Development Ordinance, and utilities extension policies to guide public infrastructure and services to areas where growth and development are desired.

D. Natural Hazard Areas Implementation Actions

Ongoing: The Town will review its zoning ordinance, subdivision ordinance, and flood damage prevention ordinance to determine if more specific locational and density regulations regarding development or redevelopment activities within identified flood hazard areas and storm surge areas are warranted. Issues to be addressed include restrictions on land uses that utilize or store hazardous materials on-site, establishment of riparian buffers, increasing the minimum freeboard height above base flood elevation, etc.

Ongoing: The Town will avoid zoning areas susceptible to storm surge for high density residential or intensive nonresidential use.

Ongoing: Based upon the availability of federal and state grant funds, land acquisition programs will be utilized in the most hazardous areas to minimize future damage and loss of life.

Ongoing: If any portion of the Town's public infrastructure is significantly damaged by a major storm, consideration will be given to the feasibility of relocating or modifying the affected facilities to prevent the reoccurrence of storm damage.

Ongoing: Coordinate the review and approval of development plans for major subdivisions, multifamily developments, and large public and institutional uses located within identified natural hazard areas with the County Emergency Management Agency. Continue the active enforcement of the State Building Code provisions regarding wind-resistance requirements and participation in the National Flood Insurance Program.

E. Water Quality Implementation Actions

FY07: The Town will investigate the feasibility of developing and implementing a stormwater management plan.

FY07: The Town will prepare and implement a wellhead protection program.

FY08: The Town will review its Unified Development Ordinance to determine if revisions are needed to include additional measures, such as riparian buffers and impervious surface limitations, to control stormwater discharges. A stormwater management ordinance will be developed.

Ongoing: The Town will continue to require, through its subdivision provisions in the Unified Development Ordinance, technical specifications manual, and adequate stormwater drainage systems for new developments. The Town will continue to promote the use of best management practices to minimize the degradation of water quality resulting from stormwater runoff. The Town will continue to coordinate

the approval of land development projects with the applicable State agencies.

F. Areas of Environmental Concern Implementation Actions:

FY07: The Town will review its zoning ordinance to determine if revisions are needed to include additional protective measures for AECs.

G. Areas of Local Concern Implementation Actions:

FY08: The Town will prepare a comprehensive community services/facilities plan. This plan will identify major municipal services and facilities needs and deficiencies, prioritize those needs, and prepare cost estimates and a budgeting plan for the recommended improvements.

FY09: Develop an Urban Design Manual for the Town of Edenton.

5.5 Description of Public Participation Activities to Assist in Monitoring Plan Implementation

Chowan County and the Town of Edenton have developed the following action plan to assist in monitoring implementation of the Land Use Plan.

Annual Performance Review

The county and the town, through the joint Department of Planning and Inspections and their respective Planning Boards, will undertake an annual review of the proposed implementation activities delineated in Section 5.4 to determine the following:

- The status of the implementation actions proposed during the previous fiscal year.
- If the implementation action has been completed, evaluate the general effectiveness of the implementation action taken and make recommendations on any follow-up action deemed necessary to assist in implementing the goals, objectives, and policies of the Land Use Plan.
- If the implementation action has not been undertaken, assess the reasons that the action has not been completed, evaluate the current need to undertake the action, and make recommendations regarding a revised schedule for carrying out the action.

In addition to reviewing specific implementation actions outlined in Section 5.4, the county and the town will also undertake an assessment of the general effectiveness of the policies outlined in Section 4.2 and make recommendations on any follow-up action deemed necessary to improve the effectiveness of the policies.

The joint Department of Planning and Inspections will forward its evaluation and recommendations to the respective elected officials. The County Board of Commissioners and the Town Council, following a review of the Planning Director's recommendations, will make a determination of what action, if any, should be taken to ensure implementation of the Land Use Plan. All Planning Board and elected officials meetings are open to the public and citizen comments are welcomed.

If a formal amendment to the Land Use Plan is deemed necessary, such amendment shall be processed in accordance with the requirements of NCAC 7B.0900. The Town of Edenton and Chowan County each have sole and independent authority to make amendments to the joint plan as it affects their jurisdiction. The governing body requesting a plan amendment shall notify the governing body of the other joint plan participant of the proposed amendment and shall request that comments and recommendations concerning the proposed amendment be provided in writing. Any such written comments and recommendations received shall be included in the formal amendment request submitted to the Coastal Resources Commission.

Appendix A:
Issue Identification and Summary Policy Statements
Edenton and Chowan County Land Use Plan Update, September 1998

All policies apply to both the Town of Edenton and Chowan County jurisdictions unless otherwise stated.

Issue: Resource Protection and Areas of Environmental Concern

The overriding vision guiding the policies related to resource protection is that all natural resources should be regarded as valuable assets which need to be sheltered from adverse impacts. While the Town and County both recognize that limited development is acceptable in some resource areas, guidelines and policies directing such development need to be developed and implemented to ensure such projects are sensitive to their environment.

1998 Resource Protection Policies:

Public Trust Waters

1. *Continue the conservation and management of public trust waters. Appropriate uses include those which do not cause detriment to the physical or biological functions of public trust areas. Navigational channels, drainage ditches, bulkheads designed to prevent erosion, marinas, piers and docks shall be permitted.*
2. *All commercial, industrial, institutional and residential development should be sensitive to the character of prevailing soil types, flood prone areas and physiographic conditions which impact septic tank use, private wells, and construction feasibility. Update existing land use and zoning regulations to complement the Land Classification Map.*
3. *Marinas developed in accordance with the Division of Coastal Management standards and guidelines and applicable zoning shall be permitted.*
4. *Continue policies to disallow floating homes or water craft with any long-term occupancy.*

Coastal Wetlands

Allow uses which promote "conservation" of the sensitive areas, with conservation meaning the lack of imposition of irreversible damage to the wetlands.

Uses which require water access and uses such as utility easements, fishing piers and docks will be allowed provided they adhere to use standards set forth in the Coastal Area Management Act.

Estuarine Waters and Estuarine Shoreline

1. *Permit only those uses that are compatible with the nature of the estuarine system. Residential, recreation and commercial uses are acceptable provided that there is no substantial chance of pollution, erosion is not accelerated, impervious surfaces are limited, public access to navigable waters is not hampered and North Carolina Sedimentation Pollution Control standards are met.*
2. *Protect identified significant natural areas from undue encroachment, damage or pollution. This may be accomplished with low density and lot coverage regulations in undeveloped areas adjacent to these natural areas.*
3. *Study the potential for the establishment of a land conservation fund or similar instruments which would protect areas of environmental, recreational and/or aesthetic importance by fee acquisition, dedication and/or permanent easement.*

Issue: Land Suitability and Natural Constraints on Development

The majority of the County's land area consists of soil types not conducive for urban development. A significant amount of soils are not suitable for dwelling foundations or septic tank placement. Also, it should be noted, many soil associations considered as "prime" or important farmlands occur within Chowan County. These soils make up 70% of all soils in the County.

The majority of new development planned within the County is anticipated to occur along the Route 32 corridor north of Edenton. The land surrounding this corridor is very sandy, and therefore, is particularly receptive to septic systems. Thus, this segment of future residential growth could potentially be supported without the extension of a sewage system along Route 32 northward from Edenton

1998 Land Suitability Policies:

Continue to support and amend existing land use ordinance regulations which appropriately regulate and control land development in areas with identified physical constraints.

As indicated in the Town's adopted land use ordinance, all commercial, industrial, institutional and residential subdivision development should be sensitive to the character of prevailing soil types, flood prone areas and physiographic conditions which impact septic tank use, private wells, and construction feasibility. Update existing land use and zoning regulations, when necessary, to complement the Land Classification Map. (Town policy only)

Protect identified significant natural areas from undue encroachment, damage or pollution. This may be accomplished with low density and lot coverage regulations in undeveloped areas adjacent to these natural areas.

Continue to support and update existing growth management tools and study new alternatives which would provide for the control of land use types and densities

and establish development criteria within areas having defined development constraints.

Encourage land use proposals which will have no negative impact on historic, cultural and/or archaeological resources in the Town and County. These proposals shall be reviewed through the Section 106 review process as well as through the Historic Preservation Commission and the State Historic Preservation Office.

In cooperation with the Edenton Historic Commission and State Preservation Office, review, revise and update the inventory of historic properties in the planning area as needed. (Town policy only)

Identify areas of historical significance and cultural importance in the County and ensure that significant resources are preserved or recovered through a resource management plan. (County policy only)

Study the potential for the establishment of a land conservation fund or similar instruments which would protect areas of environmental, recreational, and/or aesthetic importance by fee acquisition, dedication and/or permanent easement.

Promote citizens' awareness programs and public educational opportunities for community historic and natural resources, including the conservation, preservation and maintenance thereof.

Initiate the development of neighborhood plans working with neighborhood residents to identify resources and problems in the neighborhood and offering strategies to protect those resources and solve the problems within one (1) year of plan adoption. (Town policy only).

Encourage the redevelopment of the mill campus into a regional cultural center.

Issue: Protection of Water Supplies and Potable Water Resources

The Town and County both rely on ground water supplies as their major source of water. The protection of the quality and quantity of the potable water supply is critical to the health, safety and welfare of the citizens of Chowan and Edenton and provides a basis for future economic development.

1998 Water Supply Protection Policies:

The community should make every effort to ensure that the protection of existing and future potable water supplies and resources will be consistent with all State and Federal policies and guidelines.

Prepare and periodically update a Water and Sewer Plan which would direct future expansion and current maintenance of community water and sewer facilities.

Prepare water and sewer maps in conjunction with this Plan within two (2) years.
(Town policy only)

Ensure that the community's land development review and inspection process examines all land use proposals to determine their impact on the community's potable water supplies and resources.

Use the existing Zoning Ordinance to control densities adjacent to ground water supplies. **(Town policy only)**

Continue the extension and maintenance of public water supplies and distribution systems into selected areas of the community.

Develop citizens' awareness programs related to expanding water supplies and distribution systems, including information promoting access to these systems.

Issue: Package Wastewater Treatment Plants

The only centralized sewer service in Chowan County's planning jurisdiction comes from the Town of Edenton. It may become necessary to develop small package treatment systems in order to accommodate certain types of development in outlying areas of the County.

1998 Package Treatment Plant Policies:

1. *The community may permit the use of private package sewage treatment plants if the associate development meets the following criteria:*
 - *The said development is consistent with the community's existing policies and ordinances.*
 - *The system meets or exceeds the State and federal permitting requirements.*
 - *The project will have no adverse impacts beyond its boundaries.*
 - *The perpetual operation and maintenance of the system is guaranteed without obligation to the community in any way.*
 - *The permitted system is of the highest level of suitable technology.*
2. *Update the Water and Sewer Plan which would direct future expansion and current maintenance of community water and sewer facilities. Prepare and update water and sewer maps in conjunction with this Plan. (Town policy only)*
3. *Private developers considering the use of private sewage treatment facilities must provide adequate financial responsibility to insure orderly maintenance and operation of the facility for the life of the development for which it is intended to serve.*
4. *Upon application for a development permit, a private package treatment facility must be accompanied by environmental assessments and/or, documentation of*

assurances that all applicable State and local health requirements will be satisfied.

5. *Any application for a wastewater disposal system which is to be located in the planning jurisdiction shall be coordinated with existing facilities. The Town and County should work together to assure that a waste water permit is not issued without a corresponding zoning permit.*
6. *All development and subsequent construction of wastewater facilities shall be consistent with the regulations set forth by the respective Town and County land use ordinances.*

Issue: Stormwater Runoff

Significant portions of the major water courses in the planning area are “Nutrient Sensitive Waters”. Stormwater runoff from both urban development and agricultural activities could adversely affect the quality of these waters.

1998 Stormwater Policies:

1. *Continue involvement in the Agricultural Best Management Practices (BMP) Program aimed at reducing the amount of agricultural run-off into Nutrient Sensitive Waters. (County policy only)*
2. *Support strict enforcement of existing sedimentation and pollution control measures including the BMP program.*
3. *Apply to CAMA for a grant to develop a stormwater management plan for the Town in order to identify potential adverse impacts associated with uncontrolled stormwater runoff and devise changes to local ordinances aimed at controlling such runoff. (Town policy only)*

Issue: Marinas, Floating Home Development, and Dry Stack Facilities

Marinas and other water-dependent projects can provide public access to valuable water resources and have the potential to serve as valuable economic assets to the community if properly developed. The Town and County both would like to encourage boat owners to tie their boats on permanent moorings rather than build new piers. The County supports the placement of a permanent mooring facility in the County.

1998 Marina, Floating Home, and Dry Stack Policies:

1. *Marinas developed in accordance with the Division of Coastal Management standards and guidelines and consistent with zoning shall be permitted.*

2. *Review plans for water-dependent development on a case-by-case basis ensuring location and character are consistent with applicable zoning restrictions.*
3. *Continue policies to disallow floating homes or watercraft with any long-term occupancy.*
4. *Adopt a mooring ordinance to regulate boat mooring in Edenton Bay and insert it into the Town's Unified Development Ordinance. (Town policy only)*
5. *Apply to CAMA for permit to construct a permanent boat mooring facility on Pembroke Creek and/or on Holiday Island.*
6. *Developing marinas and boat basins in upland excavation areas is permissible provided such development meets all applicable ordinance requirements and other applicable local, State and federal regulations and all required permits are obtained.*

Issue: Development of Sound and Estuarine System Islands

Holiday Island is the only estuarine system island within the study area. This island can be characterized as a wooded swamp and is therefore, a natural fragile area.

1998 Sound and Estuarine System Islands Policies:

Protect Holiday Island from any environmentally adverse development by adhering to policies set forth in this land use plan regarding development in sensitive environmental areas and through strict enforcement of existing ordinances and regulations such as the building code. (County policy only)

Issue: Areas up to Five Feet Above Mean High Water

1. *Development in areas up to five feet above mean high water mark is not restricted provided such development meets all applicable zoning, CAMA, Building Code and Flood Zone requirements.*

Issue: Bulkhead Installation

1998 Bulkhead Policies:

Bulkhead construction adjacent to coastal wetlands requires a CAMA permit. Freshwater swamps and island wetlands are protected by the Clean Water Act and a Corps of Engineers permit is required for work in these areas.

Bulkhead installation along waterfront areas is permitted if all local, State and federal permits can be obtained following all applicable regulations.

When necessary, bulkhead installation should be conducted employing appropriate construction and resource protection techniques. Where installation is required, development plans should consider every feasible alternative to minimize the damage to existing marshes.

Issue: Resource Production and Management

The vision for the community is to protect natural resources and ensure continued vitality in agricultural and water-based industries. The overriding vision guiding the formulation of policies related to resource production and management is to support the continued vitality of those industries such as agriculture, fishing and forestry, which have been a mainstay of the local economy for decades. The ideal scenario is to balance resource production with environmental protection to ensure the high quality of Edenton and Chowan County's natural environment lasts for generations.

1998 Resource Production and Management Policies

Productive Agricultural Land

Encourage sensitive resource management policies and implementation techniques for productive agricultural lands in the planning area.

1998 Agricultural Land Policies:

- 1. Support State and Federal agricultural programs, where applicable, which assist farming and aid in preserving prime agricultural lands in and around Edenton and Chowan.*
- 2. Review development trends to ensure that growth does not occur in prime agricultural lands.*
- 3. Continue to support agricultural Best Management Practices in the County, encouraging farmers to implement such practices to the benefit of their natural resource production activities.*
- 4. Encourage participation in the Non-Point Pollution Agricultural Cost-Share Program designed to balance proper agricultural management with protection of nutrient-sensitive waters from agricultural run-off.*

Forestry

Encourage forestry as a valuable natural resource industry and preserve and protect the community's forest lands. Woodlands and forests cover most of Chowan County's landscape but do not represent a significant portion of the Town's land. Substantial amounts of income are generated annually in the County from forestry products. Commercial forest areas do not exist in Edenton, therefore, the following policies pertain only to areas outside Town boundaries.

1998 Forestry Policies:

- 1. Support State and Federal forestry programs which assist community commercial forests and the forestry industry. (County policy only)*

2. *Ensure land use controls on commercial forest lands that provide opportunities for community expansion and/or development. (County policy only)*
3. *Promote public awareness of forestry Best Management Practices in the area, while encouraging the private forestry industry to implement such practices to the benefit of their natural resource production activities. (County policy only)*
4. *Future public improvements should be planned and financed using fiscal mechanisms which avoid adverse tax impacts on the owners of prime forestry lands where such lands will not directly benefit from the planned public improvements.*
5. *Continue to promote use-value assessment as a means of preserving the forestry resource base and encourage owners of parcels of 10 acres or more to apply for use-value assessment. (County policy only)*
6. *Encourage replanting of areas within the County cleared for timber. (County policy only)*

Commercial and Recreational Fishing

Support, encourage and protect the community's commercial and recreational fishing and other water-based resources and production activities. Most of the estuarine waters in Edenton and Chowan County are important spawning and nursery areas. These waters are important for the propagation of fish and shellfish which contribute to both recreational and commercial fishing in the area. Fish and shellfish have been steadily declining in local waters in recent years. This may be attributable to declining water quality.

1998 Commercial and Recreational Fishing Policies:

1. *Commercial and recreational fishing resources and production activities, including nursery and habitat areas, and trawling activities in estuarine waters, should be recognized as important contributors to the local economy.*
2. *Actively support State efforts to reduce nutrient loading in the surrounding surface waters, which include consideration of more stringent restrictions on nitrogen discharges and enhanced regulations controlling the disposal of animal wastes.*
3. *Support the regulation of development in coastal wetlands and wetlands as administered by CAMA and the US Army Corps of Engineers, respectively.*
4. *Establish minimum protective buffers along waterways to help protect water quality and fisheries.*

Urban Development Impacts on Resource Production and Management

The area defined as the planning jurisdiction is still growing. It shall continue to be the policy of both the Town and the County to direct future growth by enforcing the regulations set forth the joint Land Use Plan, the Town's Unified Development Ordinance and the County's Subdivision Ordinance.

1998 Urban Development Impacts Policies:

1. *Require all new development and/or redevelopment to be consistent with policies on Resource Protection, Resource Production and Management and Economic and Community Development.*
2. *Allow development to take place only when and where adequate services, including water, sewage disposal, road access and schools, are available to support that development.*

Issue: Economic and Community Development

Both Edenton and Chowan County strongly support the ongoing implementation of responsible economic and community development projects throughout the area. The Town's Unified Development Ordinance establishes the types of development that are encouraged and permitted within Edenton and the extra-territorial jurisdictional area. The County has no specific land use controls for the local of industry and economic development.

1998 Economic and Community Development Policies:

General Community Attitudes and Goals for Growth and Development

1. *Manage and direct growth and development in balance with available support services.*
2. *Continue to work toward a diversified economy including industry, tourism and improved technical educational opportunities.*
3. *Continue land use planning and directing growth in the Town by enforcing the relevant ordinances. (Town policy only)*
4. *Guide new development so as not to encroach or destroy Areas of Environmental Concern (AECs) and other special and sensitive areas, as reflected in policies for Resource Protection and Resource Production and Management.*
5. *Direct new development in accordance with soil capacity to accommodate water and sewer needs.*
6. *Approve new development only when and where adequate public facilities and services to support it are available.*
7. *Develop strengths within the local school system to respond to the needs of the local economy so that the area will be able to provide educational and professional career opportunities for the next generation of local residents*

Types and Locations of Industries Desired

The County favors industrial development which could take advantage of existing natural resources and/or expand upon the existing industry in the area. Edenton also invites

industry or commercial establishments which will create new jobs, increase the tax base and upgrade the standard of living for all residents. The locational characteristics of the Town and County are diverse with each jurisdiction providing different opportunities for industrial development. The following policies regarding industrial growth apply to both jurisdictions.

1998 Industrial Development Policies:

1. *Require industry to use the best available technology to avoid pollution of air or water during both construction and operation of new industrial facilities.*
2. *Locate new facilities on land having stable, well-drained soils adequately protected from flooding and easily accessible to public utilities and transportation routes.*
3. *Together, Edenton and Chowan County should aim for a diversified future economy driven by several small-to-medium-sized employers. Such a strategy would help to diversify the local economy and decrease the risk associated with a locality relying solely upon one or two industries for jobs and tax revenue.*
4. *The Town and County shall continue to work cooperatively in identifying suitable sites for economic development and marketing them to expanding firms that would generate new job opportunities for local residents.*
5. *Both localities should continue to work closely with the Edenton Chamber of Commerce and the North Carolina Department of Commerce in promoting the area as a desirable location for prospective industries.*
6. *Continue to seek technical assistance and financial help to begin the development of the Air Transpark outside of Edenton. This industrial park site offers the area a unique opportunity for attracting new industry and future economic development. Great potential exists to link the airport with other transportation alternatives (water, new and existing roads, etc.) in order to develop a true commercial transportation center.*
7. *Actively promote a local farmers' market in Downtown Edenton.*

Community commitment to provision of supporting services to economic development

The Town and the County are committed to providing appropriate levels of public services, facilities and infrastructure in support of economic and industrial development where economically feasible, environmentally sound and otherwise, in the best public interest.

1998 Support Services Policies:

1. *The Town will provide water and sewer services only to areas that petition for voluntary annexation. If no petition exists, the developer must pay all costs for service installation.*

2. *Support facilities and services provided by or within the County, such as police and fire protection, health services, social services, solid waste collection, and library services, appear to be adequate to support planned growth and development for the entire planning period.*
3. *The Town and County will continue to work together to provide services where needed, and as feasible, for new development.*
4. *The County will explore the various options for improving the sewage treatment problems that exist in many of the septic systems in the Country Club subdivision, and in other areas where needed. **(County policy only)***
5. *Prepare a Market and Economic Impact Study for future commercial and economic development in Edenton and its ETJ. **(Town policy only)***

Desirable Urban Growth Patterns

The Town of Edenton is the single, most significant “urban” area in Chowan County. The balance of the County is largely devoted to scattered residential development with a pronounced rural pattern, with the exception of several subdivisions.

1998 Urban Growth Policies:

1. *Encourage growth to occur and expand in geographical areas in and around the Town as portrayed in the respective Land Classification Maps.*
2. *Examine growth patterns and review the Land Classification Map and Unified Development Ordinance when deemed necessary and appropriate based on development pressures. **(Town policy only)***

Type, Densities, and Location of Future Residential Development

Edenton can anticipate a relatively slow growth rate over the coming decade. Therefore, it shall be Edenton’s policy to continue to allow residential growth as permitted in the Town’s Unified Development Ordinance with respect to type, density, location and units per acre of future development. On the other hand, demographic trends indicate that Chowan County has increasing potential for additional residential growth. Further, due to the County’s relatively low cost of land as well as its lack of modern zoning and land development standards, subdivision developers can undertake projects without concern for permitting delays, giving them a near-term competitive advantage over development opportunities in other communities.

1998 Future Residential Development Policies:

1. *Enforce the County’s existing subdivision regulations in all future subdivisions. **(County policy only)***
2. *Continue to encourage the rural cluster community patterns evident in subdivisions such as Village Creek. **(County policy only)***
3. *Provide more affordable, quality housing opportunities for the area’s young professionals. It is believed that the community has a real need for more housing*

in the \$60,000-\$80,000 range to provide first-time home buyers with a broader range of housing opportunities.

- 4. Investigate the possible incentives available to developers for providing housing in this low-moderate price range.*
- 5. Investigate the potential for channeling the increasing number of mobile homes into mobile home communities and for prohibiting the relocation of older units (those constructed before 1977) into the County.*
- 6. Investigate the viability of implementing improved forms of cluster residential development in the Town and in the County in order to protect existing public roads.*
- 7. Support the conversion of businesses to residences in appropriate areas of Downtown Edenton. (Town policy only)*

Redevelopment of Developed Areas Including Relocation of Structures Due to Erosion

While there are substandard structures located throughout Chowan County, there are few substantial concentrations of decaying areas due to erosion. However, several residential subdivisions in the County have been identified as being “threatened.” Threatened neighborhoods are defined as those whose stability is undermined by substandard, deteriorated or dilapidated housing conditions. These conditions threaten the health, safety and welfare of community residents. Special care must be taken to identify opportunities in these areas for improved maintenance, enhanced code enforcement and where appropriate, redevelopment.

Edenton is also home to several older “threatened” neighborhoods which suffer from deteriorated or dilapidated housing conditions. In addition, several scattered mobile homes suffer from substandard living conditions. Further deterioration will lead to slum conditions, loss of housing resources and erosion of the tax base. Additionally, Edenton’s historic downtown business district is important to the Town’s economic viability and should be preserved.

1998 Redevelopment Policies:

- 1. Undertake a study to identify specific neighborhoods in the County and in Edenton in need of rehabilitation.*
- 2. Fund rehabilitation efforts through a Community Development Block Grant. Apply for CDBG funds annually in order to address areas of concentrated, substandard housing.*
- 3. Continue to support applications for needed federal or State financial assistance to fund rehabilitation efforts.*
- 4. Continue active implementation of minimum housing code maintenance requirements on an ongoing basis.*

5. *Make use of the HUD sponsored "HOME" program and other programs funded through the North Carolina Housing Finance Agency (NCHFA) which are used to upgrade existing neighborhoods.*
6. *Continue to support and fund development of affordable housing in the Edenton/Chowan County area.*
7. *Continue to encourage a variety of choice in existing neighborhoods through a balance of preservation, rehabilitation and new development.*
8. *Continue to use a low interest loan pool to encourage downtown business owners to rehabilitate their establishments.*
9. *Continue to support market-driven trends in redevelopment and reuse, particularly in the retirement/assisted living care facility segment of the housing market.*

Commitment to State and Federal Programs Including Erosion Control, Public Access, Highway Improvements, Port Facilities, Dredging and Military Facilities

State and federal programs play an important part in the development of both the Town and the County. Both jurisdictions are generally receptive to these programs and will continue to support them.

1998 Commitment to State and Federal Programs Policies:

1. *Continue to support and provide public information pertaining to groups such as the NRCOG, the Regional Development Institute, and the Small Business Institute at East Carolina University, which provide assistance to economic development projects.*
2. *The community remains committed to State and Federal programs in planning areas related to community and economic development, including erosion control, public access, and highway improvements.*

Channel Maintenance and Beach Nourishment Projects Including Financial Aide, Providing Spoil Areas or Providing Easements

Proper maintenance of channels, including periodic dredging, is very important in the planning district, mainly because of the economic impact of commercial fisheries and tourist boat traffic. If silt or other deposits fill in the channels, this could impede efficient mobility and docking of commercial and recreational vessels. With adequate channel maintenance, the community can make better utilization of its waterways for water transportation purposes.

Energy Facilities Siting

In some coastal counties, the siting or location of energy facilities relates to either peat mining, phosphate mining, or off-shore oil exploration. However, in the absence of significant peat reserves, phosphate, or oil resources, no specified, detailed policies in this area can be formulated at this time. Nevertheless, should the siting of an energy facility become a realistic possibility for the planning area including the possibility of electrical energy facilities, it shall be the policy of both localities to carefully review each

such project on a case-by-case basis and require strict adherence to federal, State and any local environmental regulations.

1. *Support construction of a natural gas pipeline through Chowan County*
2. *Natural Gas corridor shall be reviewed by the Chowan County Planning Board and Board of Commissioners concerning environmental issues. (Chowan County Only)*

Tourism

Tourism in Edenton and Chowan County is likely to have a significant impact upon the local economy in the future. Although most of the local tourist economy revolves around Historic Edenton, Chowan County has the potential to benefit from tourism-driven economic activities as well. With its numerous environmental and historical resources, the area has a vast and unfulfilled potential to expand tourism. Edenton and Chowan should make a serious commitment to take full advantage of the opportunities available in the market.

1998 Tourism Policies:

1. *Continue to study and pursue programs aimed to promote and enhance levels of tourism and related development opportunities in the community. The area should focus on finding and maximizing appropriate market niche opportunities in economic development and tourism, including attracting additional transient boat traffic and eco-tourists.*
2. *Support and promote the waterfront areas as potential locations for seasonal/annual festivals, markets and recreational activities.*
3. *Continue to support the activities of local and regional public interest groups responsible for promoting tourism in the community such as the Edenton Chamber of Commerce.*
4. *Solicit all available sources of State and federal funds to assist in the promotion of tourism.*
5. *Support efforts to develop an annual calendar of special events to be held throughout the community. Publicize monthly listing of events in appropriate local, regional and national publications.*
6. *Explore alternatives for attracting tourists during the off-seasons (from November to early December and January to March).*
7. *Future attempts to successfully cultivate tourism based on the numerous existing historical resources should focus on a "real" or "living" history interpretation.*

Coastal and Estuarine Water Access

Public waters are a major natural resource for recreational activities. Throughout the planning area, there is a real need for improved and additional public access to the waterfront areas.

1998 Water Access Policies:

Remove the sunken tugboat and barges from the Downtown waterfront area in Edenton Bay immediately, and ensure that the appropriate environmental measures are implemented within the process to protect the Edenton Bay from further fuel leakage. (Town policy only)

Enhance opportunities in the community for waterfront access. Support access programs sponsored by CAMA and Wildlife resources.

- *The Town of Edenton should investigate the feasibility of constructing a public harbor along its Downtown waterfront area. This public harbor would provide much needed public access to Edenton Bay and could include a marina, slips and a town waterfront plaza. This development could attract transient boaters seeking safe harbor during a storm or a stop-over on a trip up the Intercoastal Waterway. The Town could incorporate the Leary Oil facility into this public harbor concept. (Town policy only)*
- *The County should investigate the viability of eco-tourism development along its waterfront areas. Eco-tourism is a thriving “clean” industry that takes advantage of existing environmental characteristics such as creeks, lakes and rivers to promote recreational activities and attract visitors. Such an industry would be ideal for the County given its existing environmental resources. The County could explore the development of several creek trails, for example, that could be used for recreational purposes. (County policy only)*

The community shall continue to provide for the diverse recreational needs of the permanent and seasonal populations as well as tourists by supporting the design and construction of the extensive waterfront area.

Estuarine water access must comply with State standards for access locations. These access areas should be studied and indicated on maps which could be incorporated into the Land Use Plan at some time in the future.

Undertake efforts with the State Division of Coastal Management and Office of Water Resources to obtain public trust water access assistance in funding the planning, land acquisition and site development of these improvements.

The County and the Town both support the notion of providing a permanent mooring in the area to provide safe and efficient docking and boat storage opportunities to local residents.

Land use trends and management policies related to future growth

The overall land use trends forecasted for the future include: continuing urban land development and clearing activities in and around the Town, continued emphasis on agricultural use of land in the County and increasing pressures for waterfront residential development and recreational activities in both communities.

1998 Land Use Management Policies:

1. *Employ the Land Classification Map as a means of selecting and designating appropriate areas of each community for future commercial, industrial and other economic development land uses.*
2. *Participate in the extension of infrastructure into the developing areas as necessary and financially feasible.*
3. *Utilize the Land Classification Map at the Planning Board level for each locality to guide growth-related land use decisions in areas most conducive to commercial and industrial development, while employing the Map to discourage intensive economic development activities in remote areas of the community which are not currently served by adequate public facilities and public access.*
4. *Explore the community's support for the designation of a formal greenbelt system around the Town designed to serve as a symbolic and functional growth management tool.*
5. *Continue the use of zoning controls in the Town and extra-territorial areas as a mechanism to select, designate, and reserve optimal economic development sites for future industry and commerce. (Town policy only)*
6. *Continue to strengthen and utilize zoning practices in the Town to establish appropriate controls for the location, density and standards for future residential development. (Town policy only)*
7. *Continue to support and amend existing subdivision ordinance provisions so as to preserve the rural character of the community's outlying areas and to prevent to platting of small lot frontages along the County's limited number of public roads. (County policy only)*
8. *Through the continued implementation and refinement of the existing zoning and subdivision ordinances, insure that future growth pressures do not overwhelm the needs of the agricultural community.*
9. *The community will be pro-active in pursuing State and federal assistance and other methods of funding to be utilized for revitalization and other improvements as deemed appropriate.*
10. *Coordinate with NCDOT to ensure that roads and streets in the community are adequately maintained and upgraded in a fashion consistent with the existing zoning ordinances of the Town and the County, respectively and the 1998 Land Use Plan's land use objectives.*
11. *Revise the Town's Unified Development Ordinance where appropriate to achieve compatibility with the recommendations contained in the Land Use Plan. (Town policy only)*

12. *Study the feasibility of a limited County Unified Development Ordinance, which would place its primary emphasis on protecting prime agricultural lands and directing high density development into areas which do not require major public expenditures for roads and infrastructure. (County policy only)*
13. *Continue to develop a unified approach for parking facilities and the management thereof in the Downtown area. (Town policy only)*
14. *Develop and implement a master plan for sidewalks and pedestrian walkways in the Town. (Town policy only)*
15. *Enforce property maintenance and zoning regulations to ensure the continued viability and quality of all property within the Town and County.*
16. *Work with property owners and subdividers to encourage cluster forms of residential development to ensure that the capacity and character of the County's public road frontages are maintained. (County policy only)*
17. *Depending upon water availability and septic capability, subdivisions may develop outside of the currently developed areas served by public utilities. (County policy only)*
18. *The location and intensity of commercial uses should be guided by the availability of public services, accessibility and be in compliance with development standards.*
19. *Initiate an inter-jurisdictional entrance corridor planning study to protect and improve the major entrance corridors into the Town and the County, recognizing that the visual quality and function of these entrances transcend jurisdictional boundaries.*
20. *Establish formal design guidelines to establish the master plan for development for undeveloped and redeveloped parcels along the highway rights-of-way and adjacent lands. (Town policy only)*
21. *Investigate the feasibility of developing a comprehensive plan to provide a community-wide framework for establishing the location, type, scale and distribution of land uses throughout the Town and the ETJ. (Town policy only)*
22. *Promote the development of bikepaths in the Town and along major thoroughfares in the County and coordinate path development with the design strategy of the planned greenbelt system.*
23. *Explore the possibilities of providing more recreational facilities (i.e. ballfields, jogging trails, etc.) in the northern portion of the County. (County policy only)*

Issue: Storm Hazard Mitigation

In order to minimize the damage potentially caused by the effects of a hurricane or other major storm, Edenton, as part of Chowan County, is subject to all plans, policies and procedures related to storm hazard mitigation discussed below.

High Winds

Chowan County will continue to support and enforce the N.C. State Building Code, particularly requirements of construction standards to meet wind-resistive factors such as design wind velocity. The County also supports provisions in the state Building Code requiring tie-downs for mobile home, which help resist wind damage.

Flooding

Chowan County is supportive of the hazard mitigation elements of the National Flood Insurance Program as contained in the County's Flood Damage Prevention Ordinance. Chowan County has participated in the regular phase of the insurance program since 1985. The County also supports continued enforcement of the CAMA and 404 Wetlands development permit processes in areas potentially susceptible to flooding. There are also special provisions in the subdivision ordinance relative to development densities and setbacks for waterfront development.

Wave Action and Shoreline Erosion

Chowan County supports the CAMA development permit process for estuarine shoreline areas and the requisite development standards which encourage both shoreline stabilization and facilitation of proper drainage

Policies Discouraging development in Most Hazardous Areas:

- 1. The community will continue to discourage development, especially high density or large structures, in its most hazardous areas.*
- 2. The community remains supportive of CAMA permitting processes for development standards for shoreline stabilization and drainage along the community's estuarine shoreline areas.*
- 3. The community utilizes existing Land Use regulations supportive of and complementary to State and Federal policies related to Most Hazardous Areas.*
- 4. The community utilizes the existing Land Use Ordinance which requires location of new development in accordance with the requirements and limitations set forth in local, State and federal regulations as they apply to natural hazard areas.*

Policies regarding Land acquisition in Most Hazardous areas:

Neither the County or the Town, at this time, intends to commit local funds to implement any widespread public acquisition of land in the Most Hazardous Areas. Certain areas may be deemed appropriate for purchase where specific circumstances dictate.

Policies related to citizen evacuation:

- 1. The Town and County continue to follow the Hurricane Evacuation Plan which outlines extensive procedures for efficient and safe evacuation of residents.*

2. *Both jurisdictions support limited development density in Most Hazardous Areas so as to decrease the number of people needing to be evacuated.*
3. *The location and form of new development must fit within the framework of the existing subdivision and zoning documents in each jurisdiction.*
4. *The evacuation plan encourages the adequate planning, development and use of motels, schools and other large-scale structures for adequate and sufficient emergency shelter for residents.*

GENERAL IMPLEMENTATION RECOMMENDATIONS

1. Develop an Urban Design Manual for the Town of Edenton. ***(Town policy only)***
2. Place areas designated by the Land Use Classification Map for Conservation in the Resource Zone. ***(Town policy only)***
3. Enforce more stringent design and drainage requirements for development proposals.
4. Publicize and enforce marina and dock requirements.
5. Assist channel maintenance by providing dredge spoil disposal sites, applying for necessary permits, and pursuing financial assistance.
6. Require Federal 404 wetlands permits before issuing Town building permits. ***(Town policy only)***
7. With CAMA's help, set up citizen work shops designed to interact with residents to:
 - open lines of communication
 - establish dialogue concerning history and past experiences
 - share research about both the local area and research in other areas
8. Create a comprehensive strategy for raising the funds necessary to implement dredging, channel maintenance, etc.
9. Develop a detailed plan for procuring CAMA and other State funding, as well as Federal grants.
10. Adopt an annexation ordinance which spells out strategies for voluntary and involuntary annexation. ***(Town policy only)***
11. Identify the historic district in the Downtown area and adopt an historic district ordinance to regulate development, redevelopment and demolition in the area. ***(Town policy only)***

12. Adopt a formal street improvement plan which includes a survey of problem areas, a rank future projects based on need, and which identifies available funds. ***(Town policy only)***
13. Support public education workshop on motorist safety, neighborhood safety.
14. Identify landmarks with plaques or other markers.
15. Update the Town's 100-year flood plain map. ***(Town policy only)***
16. Educate the community on the value and significance of natural resources.

EDENTON UDO RECOMMENDATIONS

1. Require all development proposals to include a map and design for drainage
2. When a rezoning occurs, the newly adopted zoning classification should be appropriate and consistent with the Land Use Plan regarding the allowable uses and development standards for the area in question.
3. Adopt two new zoning districts to govern the development of shopping centers and "strip" commercial development.
4. Adopt upgraded application requirements and design review guidelines for Conditional Use District rezonings applications.
5. Adopt updated landscape and screening standards for commercial development.
6. Adopt requirements and guidelines for traffic impact assessments, fiscal impact assessments and environmental performance standards for large scale or "big box" commercial development proposals.
7. Adopt updated application requirements and standards for major site plans.

While revision to the UDO will effectuate the implementation of the Land Use Plan's objectives within Edenton, true influence over future development cannot be realized without changes to the subdivision ordinances in both Edenton and Chowan County.

The following recommendations shall apply to both the Town and the County as the jurisdictions set out to make the necessary changes to their respective subdivision ordinances which will implement the goals and objectives set forth in the 1998 Land Use Plan Update.

1. Incorporate greater detail on design standards for both public and private streets as well as conditions relating to when other public improvements (such as sidewalks and curb and gutter) would be required.
2. Incorporate language to protect environmentally sensitive areas identified in the Plan (those being susceptible to flooding and other hazards and fires, areas of

special biological and resource significance, areas of special cultural significance and the like).

CAPITAL IMPROVEMENT RECOMMENDATIONS

Capital Improvements are new or expanded physical facilities for the community that are typically large size, are relatively expensive and are permanent in nature. Examples relating to the Land Use Plan recommendations are street and sidewalk improvements, public buildings and park improvements. The Town should incorporate these implementation strategies into the CIP review process, and when the appropriate funds become available, these initiatives should be included in the formal consideration of future projects by the Board of Commissioners.

Schedule for policy implementation by local officials

The citizens, community Staffs, and appointed and elected officials of Edenton and Chowan County shall be responsible for outlining a detailed schedule for the implementation of the policies contained in the 1998 Land Use Plan Update. This scheduling effort shall be completed within the same timeframe as the adoption of the upcoming fiscal budget. It is suggested that the staff and officials adopt a phasing strategy when developing the implementation schedule which will assist them in prioritizing initiatives and focus on the long-range goals of the community.

Phase I: *Six months - two years after Plan adoption*

- Update the Town's Unified Development Ordinance.
- Develop the Town's new urban design manual.
- Hold citizen workshops to educate community on a variety of issues.
- Update the County subdivision ordinance.
- Undertake plans and feasibility studies for mid- to long-range goals.
- Prepare and adopt a Comprehensive Plan for Edenton and its ETJ.
- Prepare and adopt Corridor Design Guidelines for Edenton and its ETJ.
- Prepare a Market and Economic Impact Study for future commercial and economic development in Edenton and the surrounding region.

Phase II: *Two to five years after Plan adoption*

- Secure funding from state and federal sources for planned programs.
- Review and update CIP to meet demands for public improvements.
- Initiate projects recommended in plans undertaken during Phase I.

Phase III: *Five to ten years after Plan adoption*

- Maintain programs and improvements completed during Phases I and II.
- Undertake long range projects planned during Phases I and II.
- Review policies and regulations in effect since last Plan adoption and evaluate their applicability to future plans.

Appendix B:
1998 CAMA Land Use Plan Goals and Objectives

The following is a summary of the major 1998 CAMA Land Use Plan goals and objectives developed by the Town of Edenton and Chowan County to guide future growth and development

I. COMMUNITY CHARACTER AND THE ENVIRONMENT

Goal: Protect and enhance the natural and built environment of the community.

Objectives:

A. Historic Preservation

1. Protect the Downtown Edenton Historic Area and plan for adjacent land uses which do not encroach upon its unique character.
2. Protect the integrity of the visual and historic character of Downtown Edenton and other periods and styles of the Town's urban evolution.

B. Urban Design

1. Improve the character and quality of future development in the area by discouraging strip development practices and enacting creative urban design standards and implementation procedures.
2. Maintain the Town's pedestrian scale and small town, neighborhood "feel".
3. Promote intergovernmental cooperation and initiate formal actions to protect and improve the area's major entrance corridors, recognizing that the visual quality of these entrances transcend jurisdictional boundaries.
4. Strive to link the restored cotton mill & surrounding village to the Downtown area.

C. Environment

1. Encourage the conservation of open space in the area and actively promote the long-term preservation and maintenance of valuable natural resource areas through public acquisition, private dedication of easements, and other cooperative efforts.
2. Identify environmentally sensitive areas for all properties within the County and Town, and implement enhanced growth management procedures which promote design sensitivity to environmental issues at a site-specific level.
3. Coordinate environmental preservation efforts with neighboring jurisdictions, and establish an action plan which targets environmental concerns that require a regional approach.
4. Investigate the feasibility of establishing a greenbelt around the Town as a means of managing growth in the area. The greenbelt would serve as a physical and symbolic

boundary, as well as a continuous buffer zone designed to interrupt the flow of constant growth.

II. TRANSPORTATION

Goal: Ensure the location, character, and capacity of transportation facilities is compatible with the Land Use Plan and encourages optimal community development patterns while allowing for safe and efficient transit.

Objectives:

A. Implement road and street improvements which are of the appropriate scale and capacity to serve long-range traffic demands, while respecting the environment and scale of the surrounding neighborhoods and communities.

B. Establish properly planned access points from existing streets and highways to undeveloped and redeveloped properties.

C. Discourage the development of private road systems within single-family residential subdivisions.

D. Establish a uniform set of design standards and construction guidelines for public streets.

E. Expand local coordination efforts with NCDOT transportation planning officials.

III. HOUSING

Goal: Provide for decent, safe and sanitary housing for all Town and County residents, recognizing the need for all types of housing to serve the citizens of the area.

Objectives:

A. Identify and support efforts to upgrade substandard dwellings. Adopt a pro-active housing program which targets substandard dwellings for rehabilitation and/or replacement.

B. Support and work with local, state and federal agencies to identify opportunities and strategies for housing rehabilitation, development of moderately priced owner-occupied housing, and the efficient implementation of associated public infrastructure.

C. Provide more affordable, quality housing opportunities for the area's young professionals. The Town in particular should investigate possible incentives to developers for providing housing in this price range.

D. The County should investigate the possibility of limiting the entrance of older mobile homes into the community.

E. The Town and County should encourage local developers to explore market niche opportunities in the retirement/assisted living segment of the housing market.

F. Design standards and planning guidelines should be developed for new residential development.

IV. LAND USE

Goal: Plan for an integrated mix of residential, commercial and industrial uses which will provide suitable housing, shopping, recreation and employment opportunities, while recognizing the expanding tourism marketplace.

Objectives:

A. Land Development

1. Identify and promote new land development opportunities which are compatible with and sensitive to the preservation of stable and desirable neighborhoods as well as the Land Use Classification map.
2. Identify, target and implement procedures which will result in the conservation of environmentally sensitive land areas during new development and redevelopment activities.
3. Ensure that future growth pressures do not overwhelm the needs of the agricultural community.
4. Reserve suitable areas for commercial, office, research and economic development uses to provide tax revenues to balance the cost of providing services for anticipated residential development.
5. Ensure that new development can be adequately supported by existing or planned public services and infrastructure.

B. Preservation

1. Preserve stable residential and commercial areas.
2. Support the ongoing restoration of the Downtown area.
3. Protect historic and environmentally sensitive lands from industrial and other high density uses.

C. Redevelopment

1. Identify redevelopment opportunities and provide public/private initiatives to enhance the development of these properties.
2. Implement creative growth management techniques and design guidelines which foster suitable redevelopment activities.

V. PUBLIC SERVICES AND INFRASTRUCTURE

Goal: Provide an adequate level of public services and infrastructure to all the people of Edenton and Chowan County, recognizing the regional aspects of certain facilities and services and the need for regional planning, inter-governmental cooperation, and equitable financial participation for the jurisdictions involved.

Objectives:

A. Water, Sewer, Solid Waste and Stormwater Management

1. Cooperate with other regional jurisdictions in advancing regional planning and implementation programs for raw water supply sources to serve the long-range municipal water supply requirements for the Town, County and region.
2. Coordinate planning for future water and sewer facilities between Town and County officials, where appropriate.
3. Plan for the most effective timing and routing of public utility systems.
4. Continue working with the other six counties in the regional solid waste consortium to develop adequate solid waste disposal programs which meet community needs and state mandates in the region.
5. Improve the existing drainage system within the Town and investigate the feasibility of introducing new stormwater management measures into local regulatory ordinances.

B. Public Buildings

1. Promote the use of the mill campus as a regional cultural center.
2. Explore the feasibility of developing an appropriately sized convention center in the Downtown area.

C. Public Safety

1. Provide adequate facilities and management systems for police, fire, rescue and judicial operations which fully protect and serve Town and County residents and visitors.

D. Education

1. Support and advance programs, activities and facilities to create the highest quality of public education for all students in the combined school system of Edenton and Chowan County.
2. Develop the local school system and economy so that the area will be able to provide educational and career opportunities for the next generation of residents.
3. Improve access to the local community college and other academic and vocational opportunities.

E. Parks, Recreation and Open Space

1. Expand and enhance the existing system of parks and open space in both the Town and the County in order to provide recreation, while preserving scenic vistas, natural areas and historic sites.
2. Plan for neighborhood parks as new residential development occurs.
3. Explore the feasibility of a public space greenbelt to protect and preserve the Town's waterfront.

VI. ECONOMIC DEVELOPMENT

Goal: Expand the emerging tourism and retirement economic base in Edenton and Chowan County while exploring other ways to expand upon other economic development opportunities.

Objectives:

- A. Provide the necessary infrastructure, especially much needed transportation improvements, needed to make the Air Transpark commercially viable to new businesses.
- B. Link the airport with other transportation alternatives (water, new and existing roads, etc.) in order to develop a true commercial transportation center.
- C. Continue to cultivate future tourism efforts focusing on the "real" or "living" history interpretation in Downtown Edenton.
- D. Focus on targeted tourism marketing and public relations campaigns that center on finding and maximizing appropriate market niche opportunities in economic development and tourism.
- E. Encourage non-tourist related retail and service development in appropriate areas as denoted on the Land Classification Map in order to diversify the region's economic base.
- F. Identify areas suitable for new industrial development, with an emphasis on long-term planning opportunities for corporate headquarters and research and development facilities.
- G. Work with existing businesses and property owners to ensure the continued viability of the region's existing commercial areas.
- H. Identify areas suitable for redevelopment, particularly along the Town's major entrance corridors, and develop target specific strategies on a site-by-site basis to encourage such redevelopment.
- I. Promote a diversified future economy driven by several small-to-medium-sized industries.

J. Support and preserve the existing local agribusiness economy.

VII. IMPLEMENTATION

Goal: Implement the objectives and policies of the Land Use Plan through the application of conservative and creative zoning and subdivision measures, recognizing the broad diversity in the levels of community acceptance of zoning and related growth management controls.

Objectives:

- A. Review all recommended policies to ensure that each is financially and politically feasible and implementable.
- B. Develop formal implementation strategies that respond directly to specific policies included in the Land Use Plan.
- C. Establish a formal timeline for the implementation of each recommended strategy.
- D. Ensure that the Town and County staffs have the appropriate resources at their disposal to efficiently and effectively carry out the identified implementation strategies.

Appendix C: Soil Characteristics

This Appendix contains the following Chowan County soils data prepared by the Natural Resources Conservation Service, US Department of Agriculture:

- C1 Acreage and Proportionate Extent of the Soils. A description of soil name by soil map symbol and the acreage within each soil map unit.
- C2 Sewage Disposal. Rating classes and limiting features for septic tank absorption fields and sewage lagoons.
- C3 Dwellings and Small Commercial Buildings. Rating classes and limiting features for dwellings without basements, dwellings with basements, and small commercial buildings.
- C4 Hydric Soils. Delineates soils that are classified as hydric soils.
- C5 Prime and Other Important Farmland Soils. Delineates soils that are classified as prime farmland.

The Chowan County soil survey was published in September 1986. Soils maps have been digitized. Soils maps and tabular data are available from the Natural Resources Conservation Service at www.nrcs.usda.gov. Soils maps and data are also available for public review and inspection at the Chowan Soil and Water Conservation District Office located in the Chowan Agriculture Building at 730 North Granville Street, Suite B, Edenton, NC.

Acreage and Proportionate Extent of the Soils

Chowan County, North Carolina

Map symbol	Map unit name	Acres	Percent
AaA	Altavista fine sandy loam, 0 to 2 percent slopes	3,482	2.2
Ap	Arapahoe fine sandy loam	2,377	1.5
At	Augusta fine sandy loam	3,029	2.0
Au	Augusta-Urban land complex	463	0.3
BoA	Bojac loamy fine sand, 0 to 3 percent slopes	373	0.2
CaB	Cainhoy fine sand, 0 to 6 percent slopes	879	0.6
Cf	Cape Fear loam	690	0.4
Ch	Chapanoke silt loam	1,191	0.8
CO	Chowan silt loam	4,980	3.2
CtB	Conetoe loamy sand, 0 to 5 percent slopes	5,256	3.4
DgA	Dogue fine sandy loam, 0 to 2 percent slopes	4,527	2.9
DgB	Dogue fine sandy loam, 2 to 6 percent slopes	3,075	2.0
DO	Dorovan muck	6,908	4.5
Ds	Dragston loamy fine sand	1,226	0.8
Ec	Echaw fine sand	3,625	2.3
Ic	Icaria fine sandy loam	6,157	4.0
Ly	Lynn Haven sand	2,603	1.7
MuA	Munden loamy fine sand, 0 to 2 percent slopes	709	0.5
Nm	Nimmo loamy fine sand	780	0.5
Pe	Perquimans silt loam	2,270	1.5
Pt	Portsmouth loam	8,416	5.4
Ro	Roanoke silt loam	20,111	13.0
Sc	Scuppernong muck	956	0.6
Se	Seabrook fine sand	1,383	0.9
StA	State loamy fine sand, 0 to 2 percent slopes	1,854	1.2
StB	State loamy fine sand, 2 to 6 percent slopes	1,882	1.2
SuA	State-Urban land complex, 0 to 2 percent slopes	295	0.2
Tm	Tomahawk loamy fine sand	3,619	2.3
To	Tomotley fine sandy loam	7,676	5.0
UD	Udorthents, loamy	208	0.1
Ur	Urban land	299	0.2
VaB	Valhalla fine sand, 0 to 6 percent slopes	1,994	1.3
W	Water	44,874	29.0
WaA	Wahee fine sandy loam, 0 to 2 percent slopes	1,851	1.2
WnB	Wando fine sand, 0 to 5 percent slopes	3,771	2.4
YeA	Yeopim loam, 0 to 2 percent slopes	687	0.4
YeB	Yeopim loam, 2 to 6 percent slopes	308	0.2
Total		154,784	100.0

* Less than 0.1 percent.

Sewage Disposal

Chowan County, North Carolina

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows only the top five limitations for any given soil. The soil may have additional limitations]

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
AaA:					
Altavista	80	Very limited		Very limited	
		Depth to saturated zone	1	Seepage	1
		Seepage	1	Depth to saturated zone	1
		Slow water movement	0.5		
Ap:					
Arapahoe, drained	80	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Seepage	1	Seepage	1
Arapahoe, undrained	10	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Seepage	1	Seepage	1
At:					
Augusta	85	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Slow water movement	0.5	Seepage	0.5
Au:					
Augusta	45	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Slow water movement	0.5	Seepage	0.5
Urban land	45	Not rated		Not rated	
BoA:					
Bojac	85	Very limited		Very limited	
		Seepage	1	Seepage	1
		Depth to saturated zone	1	Depth to saturated zone	0.71
CaB:					
Cainhoy	80	Very limited		Very limited	
		Seepage	1	Seepage	1
		Filtering capacity	1	Slope	0.08

Sewage Disposal

Chowan County, North Carolina

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Cf:					
Cape Fear, drained	80	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Seepage	1	Seepage	1
		Slow water movement	0.68	Flooding	0.4
		Flooding	0.4		
Cape Fear, undrained	10	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Seepage	1	Seepage	1
		Slow water movement	0.68	Flooding	0.4
		Flooding	0.4		
Ch:					
Chapanoke, drained	45	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Slow water movement	1		
Chapanoke, undrained	40	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Slow water movement	1		
CO:					
Chowan, undrained	90	Very limited		Very limited	
		Flooding	1	Flooding	1
		Depth to saturated zone	1	Depth to saturated zone	1
		Seepage	1	Seepage	1
				Organic matter content	1
CtB:					
Conetoe	85	Very limited		Very limited	
		Seepage	1	Seepage	1
				Slope	0.08

Sewage Disposal

Chowan County, North Carolina

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
DgA:					
Dogue	85	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Slow water movement	1		
		Seepage	1		
DgB:					
Dogue	85	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Slow water movement	1	Slope	0.32
		Seepage	1		
DO:					
Dorovan, undrained	90	Very limited		Very limited	
		Flooding	1	Flooding	1
		Depth to saturated zone	1	Depth to saturated zone	1
		Subsidence	1	Seepage	0.5
		Slow water movement	0.5		
Ds:					
Dragston, undrained	45	Very limited		Very limited	
		Depth to saturated zone	1	Seepage	1
		Seepage	1	Depth to saturated zone	1
Dragston, drained	45	Very limited		Very limited	
		Depth to saturated zone	1	Seepage	1
		Seepage	1	Depth to saturated zone	1
Ec:					
Echaw	75	Very limited		Very limited	
		Depth to saturated zone	1	Seepage	1
		Seepage	1	Depth to saturated zone	0.92
		Filtering capacity	1		

Sewage Disposal

Chowan County, North Carolina

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Ic:					
Icaria, drained	80	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Seepage	1	Seepage	1
		Slow water movement	0.5		
Icaria, undrained	10	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Seepage	1	Seepage	1
		Slow water movement	0.5		
Ly:					
Lynn Haven, undrained	85	Very limited		Very limited	
		Depth to saturated zone	1	Seepage	1
		Seepage	1	Depth to saturated zone	1
MuA:					
Munden	85	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Seepage	1	Seepage	1
Nm:					
Nimmo, drained	80	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Seepage	1	Seepage	1
		Slow water movement	0.5		
Nimmo, undrained	10	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Seepage	1	Seepage	1
		Slow water movement	0.5		
Pe:					
Perquimans, drained	80	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Slow water movement	1		

Sewage Disposal

Chowan County, North Carolina

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Pe:					
Perquimans, undrained	10	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Slow water movement	1		
Pt:					
Portsmouth, drained	80	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Seepage	1	Seepage	1
		Slow water movement	0.5		
Portsmouth, undrained	10	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Seepage	1	Seepage	1
		Slow water movement	0.5		
Ro:					
Roanoke, drained	80	Very limited		Very limited	
		Slow water movement	1	Depth to saturated zone	1
		Depth to saturated zone	1	Seepage	1
		Seepage	1		
Roanoke, undrained	10	Very limited		Very limited	
		Slow water movement	1	Depth to saturated zone	1
		Depth to saturated zone	1	Seepage	1
		Seepage	1		
Sc:					
Scuppernon, drained	80	Very limited		Very limited	
		Depth to saturated zone	1	Seepage	1
		Seepage	1	Depth to saturated zone	1
		Subsidence	1	Organic matter content	1
		Flooding	0.4	Flooding	0.4

Sewage Disposal

Chowan County, North Carolina

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Sc:					
Scuppernong, undrained	10	Very limited		Very limited	
		Depth to saturated zone	1	Seepage	1
		Seepage	1	Depth to saturated zone	1
		Subsidence	1	Organic matter content	1
		Flooding	0.4	Flooding	0.4
Se:					
Seabrook	85	Very limited		Very limited	
		Depth to saturated zone	1	Seepage	1
		Seepage	1	Depth to saturated zone	1
		Filtering capacity	1		
StA:					
State	85	Very limited		Very limited	
		Seepage	1	Seepage	1
		Depth to saturated zone	1	Depth to saturated zone	0.71
		Slow water movement	0.5		
StB:					
State	85	Very limited		Very limited	
		Seepage	1	Seepage	1
		Depth to saturated zone	1	Depth to saturated zone	0.71
		Slow water movement	0.5	Slope	0.32
SuA:					
State	50	Very limited		Very limited	
		Seepage	1	Seepage	1
		Slow water movement	0.5		
		Depth to saturated zone	0.4		
Urban land	45	Not rated		Not rated	
Tm:					
Tomahawk	80	Very limited		Very limited	
		Depth to saturated zone	1	Seepage	1
		Seepage	1	Depth to saturated zone	1

Sewage Disposal

Chowan County, North Carolina

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
To:					
Tomotley, drained	80	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Seepage	1	Seepage	1
		Slow water movement	0.68	Flooding	0.4
		Flooding	0.4		
Tomotley, undrained	10	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Seepage	1	Seepage	1
		Slow water movement	0.68	Flooding	0.4
		Flooding	0.4		
UD:					
Udorthents, loamy	95	Not rated		Not rated	
Ur:					
Urban land	50	Not rated		Not rated	
VaB:					
Valhalla	85	Very limited		Very limited	
		Seepage	1	Seepage	1
		Depth to saturated zone	0.4	Slope	0.08
W:					
Water	100	Not rated		Not rated	
WaA:					
Wahee	85	Very limited		Very limited	
		Slow water movement	1	Depth to saturated zone	1
		Depth to saturated zone	1	Seepage	1
		Seepage	1		
WnB:					
Wando	85	Very limited		Very limited	
		Seepage	1	Seepage	1
		Filtering capacity	1	Slope	0.08
		Depth to saturated zone	0.4		

Sewage Disposal

Chowan County, North Carolina

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
YeA:					
Yeopim	85	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Slow water movement	1	Seepage	1
		Seepage	1		
YeB:					
Yeopim	85	Very limited		Very limited	
		Depth to saturated zone	1	Depth to saturated zone	1
		Slow water movement	1	Seepage	1
		Seepage	1	Slope	0.32

Dwellings and Small Commercial Buildings

Chowan County, North Carolina

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows only the top five limitations for any given soil. The soil may have additional limitations]

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AaA:							
Altavista	80	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1	Somewhat limited Depth to saturated zone	0.98
Ap:							
Arapahoe, drained	80	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1
Arapahoe, undrained	10	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1
At:							
Augusta	85	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1	Somewhat limited Depth to saturated zone	0.98
Au:							
Augusta	45	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1	Somewhat limited Depth to saturated zone	0.98
Urban land	45	Not rated		Not rated		Not rated	
BoA:							
Bojac	85	Not limited		Somewhat limited Depth to saturated zone	0.61	Not limited	
CaB:							
Cainhoy	80	Not limited		Not limited		Not limited	
Cf:							
Cape Fear, drained	80	Very limited Flooding Depth to saturated zone	1 1	Very limited Flooding Depth to saturated zone	1 1	Very limited Flooding Depth to saturated zone	1 1
Cape Fear, undrained	10	Very limited Flooding Depth to saturated zone	1 1	Very limited Flooding Depth to saturated zone	1 1	Very limited Flooding Depth to saturated zone	1 1

Dwellings and Small Commercial Buildings

Chowan County, North Carolina

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Ch:							
Chapanoke, drained	45	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1
Chapanoke, undrained	40	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1
CO:							
Chowan, undrained	90	Very limited Flooding Depth to saturated zone	1 1	Very limited Flooding Depth to saturated zone Organic matter content	1 1 1	Very limited Flooding Depth to saturated zone	1 1
CtB:							
Conetoe	85	Not limited		Not limited		Not limited	
DgA:							
Dogue	85	Somewhat limited Depth to saturated zone Shrink-swell	0.98 0.5	Very limited Depth to saturated zone Shrink-swell	1 0.5	Somewhat limited Depth to saturated zone Shrink-swell	0.98 0.5
DgB:							
Dogue	85	Somewhat limited Depth to saturated zone Shrink-swell	0.98 0.5	Very limited Depth to saturated zone Shrink-swell	1 0.5	Somewhat limited Depth to saturated zone Shrink-swell	0.98 0.5
DO:							
Dorovan, undrained	90	Very limited Subsidence Flooding Depth to saturated zone	1 1 1	Very limited Subsidence Flooding Depth to saturated zone	1 1 1	Very limited Subsidence Flooding Depth to saturated zone	1 1 1
Ds:							
Dragston, undrained	45	Somewhat limited Depth to saturated zone	0.81	Very limited Depth to saturated zone	1	Somewhat limited Depth to saturated zone	0.81
Dragston, drained	45	Somewhat limited Depth to saturated zone	0.81	Very limited Depth to saturated zone	1	Somewhat limited Depth to saturated zone	0.81

Dwellings and Small Commercial Buildings

Chowan County, North Carolina

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Ec:							
Echaw	75	Not limited		Somewhat limited Depth to saturated zone	0.73	Not limited	
lc:							
Icaria, drained	80	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1
Icaria, undrained	10	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1
Ly:							
Lynn Haven, undrained	85	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1
MuA:							
Munden	85	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1	Somewhat limited Depth to saturated zone	0.39
Nm:							
Nimmo, drained	80	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1
Nimmo, undrained	10	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1
Pe:							
Perquimans, drained	80	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1
Perquimans, undrained	10	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1
Pt:							
Portsmouth, drained	80	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1

Dwellings and Small Commercial Buildings

Chowan County, North Carolina

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Pt:							
Portsmouth, undrained	10	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1	Very limited Depth to saturated zone	1
Ro:							
Roanoke, drained	80	Very limited Depth to saturated zone Shrink-swell	1 0.5	Very limited Depth to saturated zone Shrink-swell	1 0.5	Very limited Depth to saturated zone Shrink-swell	1 0.5
Roanoke, undrained	10	Very limited Depth to saturated zone Shrink-swell	1 0.5	Very limited Depth to saturated zone Shrink-swell	1 0.5	Very limited Depth to saturated zone Shrink-swell	1 0.5
Sc:							
Scuppernong, drained	80	Very limited Subsidence Flooding Depth to saturated zone Organic matter content	1 1 1 1	Very limited Subsidence Flooding Depth to saturated zone	1 1 1	Very limited Subsidence Flooding Depth to saturated zone Organic matter content	1 1 1 1
Scuppernong, undrained	10	Very limited Subsidence Flooding Depth to saturated zone Organic matter content	1 1 1 1	Very limited Subsidence Flooding Depth to saturated zone	1 1 1	Very limited Subsidence Flooding Depth to saturated zone Organic matter content	1 1 1 1
Se:							
Seabrook	85	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1	Somewhat limited Depth to saturated zone	0.39
StA:							
State	85	Not limited		Somewhat limited Depth to saturated zone	0.61	Not limited	
StB:							
State	85	Not limited		Somewhat limited Depth to saturated zone	0.61	Not limited	

Dwellings and Small Commercial Buildings

Chowan County, North Carolina

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
SuA:							
State	50	Not limited		Somewhat limited Depth to saturated zone	0.15	Not limited	
Urban land	45	Not rated		Not rated		Not rated	
Tm:							
Tomahawk	80	Somewhat limited Depth to saturated zone	0.07	Very limited Depth to saturated zone	1	Somewhat limited Depth to saturated zone	0.07
To:							
Tomotley, drained	80	Very limited Flooding Depth to saturated zone	1 1	Very limited Flooding Depth to saturated zone	1 1	Very limited Flooding Depth to saturated zone	1 1
Tomotley, undrained	10	Very limited Flooding Depth to saturated zone	1 1	Very limited Flooding Depth to saturated zone	1 1	Very limited Flooding Depth to saturated zone	1 1
UD:							
Udorthents, loamy	95	Not rated		Not rated		Not rated	
Ur:							
Urban land	50	Not rated		Not rated		Not rated	
VaB:							
Valhalla	85	Not limited		Somewhat limited Depth to saturated zone	0.15	Not limited	
W:							
Water	100	Not rated		Not rated		Not rated	
WaA:							
Wahee	85	Very limited Depth to saturated zone Shrink-swell	1 0.5	Very limited Depth to saturated zone Shrink-swell	1 0.5	Very limited Depth to saturated zone Shrink-swell	1 0.5
WnB:							
Wando	85	Not limited		Somewhat limited Depth to saturated zone	0.15	Not limited	

Dwellings and Small Commercial Buildings

Chowan County, North Carolina

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
YeA:							
Yeopim	85	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1	Somewhat limited Depth to saturated zone	0.98
YeB:							
Yeopim	85	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1	Somewhat limited Depth to saturated zone	0.98

Hydric Soils

Chowan County, North Carolina

[This report lists only those map unit components that are rated as hydric. Dashes (---) in any column indicate that the data were not included in the database. Definitions of hydric criteria codes are included at the end of the report]

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
AaA:					
Altavista fine sandy loam, 0 to 2 percent slopes	Tomotley, undrained	5	Depressions, Flats	Yes	2B3
Ap:					
Arapahoe fine sandy loam	Arapahoe, drained	80	Flats	Yes	2B3
	Arapahoe, undrained	10	Flats	Yes	2B3
At:					
Augusta fine sandy loam	Tomotley, undrained	5	Depressions, Flats	Yes	2B3
Au:					
Augusta-Urban land complex	Roanoke, undrained	3	Depressions, Flats	Yes	2B3
	Tomotley, undrained	2	Depressions, Flats	Yes	2B3
Cf:					
Cape Fear loam	Cape Fear, drained	80	Depressions, Flats	Yes	2B3
	Cape Fear, undrained	10	Depressions, Flats	Yes	2B3
Ch:					
Chapanoke silt loam	Perquimans, undrained	3	Depressions, Flats, Marine terraces	Yes	2B3
	Roanoke, undrained	2	Depressions, Flats	Yes	2B3
CO:					
Chowan silt loam	Chowan, undrained	90	Flood plains	Yes	2B3, 4
CtB:					
Conetoe loamy sand, 0 to 5 percent slopes	Leon	5	Flats, Marine terraces	Yes	2B1
DO:					
Dorovan muck	Dorovan, undrained	90	Flood plains	Yes	1, 4
Ds:					
Dragston loamy fine sand	Portsmouth, undrained	3	Depressions, Flats, Marine terraces	Yes	2B3
	Nimmo, undrained	2	Depressions, Flats	Yes	2B3
Ec:					
Echaw fine sand	Leon	5	Depressions	Yes	2B1
	Murville	5	Depressions	Yes	2B1

Hydric Soils

Chowan County, North Carolina

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
Ic:					
Icaria fine sandy loam	Icaria, drained	80	Depressions	Yes	2B3
	Icaria, undrained	10	Depressions	Yes	2B3
Ly:					
Lynn Haven sand	Lynn Haven, undrained	85	Flats, Marine terraces	Yes	2B1
MuA:					
Munden loamy fine sand, 0 to 2 percent slopes	Nimmo, undrained	5	Depressions, Flats	Yes	2B3
Nm:					
Nimmo loamy fine sand	Nimmo, drained	80	Depressions, Flats, Marine terraces	Yes	2B3
	Nimmo, undrained	10	Depressions, Flats, Marine terraces	Yes	2B3
Pe:					
Perquimans silt loam	Perquimans, drained	80	Depressions, Flats, Marine terraces	Yes	2B3
	Perquimans, undrained	10	Depressions, Flats, Marine terraces	Yes	2B3
Pt:					
Portsmouth loam	Portsmouth, drained	80	Depressions, Flats, Marine terraces	Yes	2B3
	Portsmouth, undrained	10	Depressions, Flats, Marine terraces	Yes	2B3
Ro:					
Roanoke silt loam	Roanoke, drained	80	Depressions, Flats, Marine terraces	Yes	2B3
	Roanoke, undrained	10	Depressions, Flats, Marine terraces	Yes	2B3
Sc:					
Scuppernong muck	Scuppernong, drained	80	Depressions, Flats, Pocosins	Yes	1
	Scuppernong, undrained	10	Depressions, Flats, Pocosins	Yes	1
Se:					
Seabrook fine sand	Nimmo, undrained	5	Depressions, Flats, Marine terraces	Yes	2B3
	Leon	2	Flats, Marine terraces	Yes	2B1

Hydric Soils

Chowan County, North Carolina

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
Tm:					
Tomahawk loamy fine sand	Leon	3	Flats	Yes	2B1
	Icaria, undrained	2	Depressions	Yes	2B3
	Woodington, undrained	2	Depressions	Yes	2B3
To:					
Tomotley fine sandy loam	Tomotley, drained	80	Depressions, Flats, Marine terraces, Stream terraces	Yes	2B3
	Tomotley, undrained	10	Depressions, Flats, Marine terraces, Stream terraces	Yes	2B3
WaA:					
Wahee fine sandy loam, 0 to 2 percent slopes	Roanoke, undrained	5	Depressions, Flats	Yes	2B3
WnB:					
Wando fine sand, 0 to 5 percent slopes	Leon	3	Flats, Marine terraces	Yes	2B1
	Muckalee, undrained	2	Flood plains	Yes	2B3

Explanation of hydric criteria codes:

1. All Histels except for Folistels, and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
 - A. are somewhat poorly drained and have a water table at the surface (0.0 feet) during the growing season, or
 - B. are poorly drained or very poorly drained and have either:
 - 1.) a water table at the surface (0.0 feet) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or
 - 2.) a water table at a depth of 0.5 foot or less during the growing season if permeability is equal to or greater than 6.0 in/hr in all layers within a depth of 20 inches, or
 - 3.) a water table at a depth of 1.0 foot or less during the growing season if permeability is less than 6.0 in/hr in any layer within a depth of 20 inches.
3. Soils that are frequently ponded for long or very long duration during the growing season.
4. Soils that are frequently flooded for long or very long duration during the growing season.

Prime and other Important Farmlands

Chowan County, North Carolina

Map symbol	Map unit name	Farmland classification
AaA	Altavista fine sandy loam, 0 to 2 percent slopes	All areas are prime farmland
BoA	Bojac loamy fine sand, 0 to 3 percent slopes	All areas are prime farmland
DgA	Dogue fine sandy loam, 0 to 2 percent slopes	All areas are prime farmland
DgB	Dogue fine sandy loam, 2 to 6 percent slopes	All areas are prime farmland
StA	State loamy fine sand, 0 to 2 percent slopes	All areas are prime farmland
StB	State loamy fine sand, 2 to 6 percent slopes	All areas are prime farmland
YeA	Yeopim loam, 0 to 2 percent slopes	All areas are prime farmland
YeB	Yeopim loam, 2 to 6 percent slopes	All areas are prime farmland
Cf	Cape Fear loam	Farmland of statewide importance
CtB	Conetoe loamy sand, 0 to 5 percent slopes	Farmland of statewide importance
Ds	Dragston loamy fine sand	Farmland of statewide importance
MuA	Munden loamy fine sand, 0 to 2 percent slopes	Farmland of statewide importance
Nm	Nimmo loamy fine sand	Farmland of statewide importance
Ro	Roanoke silt loam	Farmland of statewide importance
Tm	Tomahawk loamy fine sand	Farmland of statewide importance
VaB	Valhalla fine sand, 0 to 6 percent slopes	Farmland of statewide importance
WaA	Wahee fine sandy loam, 0 to 2 percent slopes	Farmland of statewide importance
Ly	Lynn Haven sand	Farmland of unique importance
Ap	Arapahoe fine sandy loam	Prime farmland if drained
At	Augusta fine sandy loam	Prime farmland if drained
Ch	Chapanoke silt loam	Prime farmland if drained
Ic	Icaria fine sandy loam	Prime farmland if drained
Pe	Perquimans silt loam	Prime farmland if drained
Pt	Portsmouth loam	Prime farmland if drained
To	Tomotley fine sandy loam	Prime farmland if drained

Appendix D: **Citizen Participation Plan**

Subchapter 7B of the North Carolina Administrative Code, Land Use Planning Guidelines, requires that the Land Use Plan update process include a variety of educational efforts and participation techniques to assure that all segments of the community have a full and adequate opportunity to participate in all stages of the preparation of the land use plan. It is therefore the responsibility of the Town of Edenton and Chowan County to involve, inform and educate a broad cross-section of the community's populace. It is the intent of the Town of Edenton and Chowan County to have a continuous citizen participation and education process that achieves these purposes.

The following steps will be taken to provide information to the public and to encourage citizen involvement:

1. Establishment of Joint Land Use Plan Advisory Committee

An Advisory Committee representing a cross-section of the community will be organized to serve as the body responsible for guiding the Joint Land Use Plan formulation effort. The Advisory Committee will serve in a review and advisory capacity to the elected officials of Edenton and Chowan County and to the project Planning Consultant, The Wooten Company. The Advisory Committee will meet on a periodic basis with the Planning Consultant and Edenton-Chowan County Planning and Inspection Department staff to assist the Planning Consultant in defining land use and development issues and concerns, reviewing draft land use plan components prepared by the Planning Consultant, providing recommendations regarding land use plan content, and provide general input. The Advisory Committee members will keep their respective elected governing/appointed board apprised of their activities and progress through regular oral and/or written reports. The composition of the membership of the Advisory Committee is described in Attachment A.

The local staffing of the Advisory Committee will be handled through the staff of the Edenton-Chowan County Planning and Inspections Department. The Director of Planning and Inspections will serve as the local coordinator of the Joint CAMA Land Use Plan project.

2. Joint Land Use Plan Advisory Committee Orientation

An orientation meeting of the Joint Land Use Plan Advisory Committee will be held in January 2006. The meeting will focus on the purposes of the CAMA Joint Land Use Plan, the process and schedule for preparing the plan, an overview of the 7B Land Use Planning Guidelines, and a review of the draft Citizen Participation Plan. This meeting will be open to the public and its time and location will be advertised in the local media. It is anticipated that this meeting may be held prior to the initial public informational meeting.

3. Initial Public Informational Meeting

A meeting of the Joint Land Use Plan Advisory Committee will be held in January 2006 to serve as an educational opportunity to inform the general public of the purpose of the CAMA Joint Land Use Plan and the process for preparing the Plan and to provide an opportunity to solicit citizen comments. In addition, the following specific topics will be discussed:

- The local policy statements contained in the current CAMA land use plans.
- The effect of those policies on the community.
- Ways the current CAMA land use plans have been used to guide development during the past planning period.
- The methods to be utilized to inform the general public of the plan preparation process and to solicit the views of citizens in the development of updated policy statements.
- Key planning concerns and issues regarding public access to public trust waters, land use compatibility, infrastructure carrying capacity, natural hazard areas, water quality, and other growth and land development issues of local concern.
- Community aspirations and visions for the future.

Notification of the meeting will be achieved through local newspaper notices, preparation and distribution of public service announcements to local radio and television stations, and posting on the Town and County Web pages. Written notice of the public informational meeting will be published in a local newspaper twice prior to the meeting date. The first notice will be published not less than 30 days prior to the public informational meeting and the second notice, not less than 10 days prior to the meeting. Notice of the meeting will also be provided to the Coastal Resources Advisory Council member and the Division of Coastal Management District Planner.

4. Periodic Joint Land Use Plan Advisory Committee Meetings

It is anticipated that the Joint Land Use Plan Advisory Committee will meet at strategic points throughout the land use planning process to provide general input into the plan development and to review materials prepared by the Planning Consultant. Meetings will be held to identify project goals and objectives; identify key planning and land use issues and concerns; review an analysis of existing and emerging conditions; review draft policy statements, land use suitability analyses, and future land use maps; review land use management implementation plans and schedules; and review a draft of the entire land use plan document. Advisory Committee meetings will be held from January 2006 to May 2007. Newspaper notices and public service announcements to radio and television stations will be

prepared and distributed prior to each meeting. An opportunity for public comment and input will be invited and encouraged at each meeting.

It is anticipated that at least six Advisory Committee meetings will be held. The location for Advisory Committee meetings will be in the Panel Room of the 1767 Courthouse located on King Street in Edenton. A tentative meeting schedule of the Advisory Committee is attached as Attachment B.

At all regular meetings of the Advisory Committee, time will be provided on the meeting agenda for public comment. A list of the names of the speakers providing public comment and a copy of any written comments provided will be kept on file by the Director of the Edenton-Chowan County Planning and Inspections Department. A copy of the written comments will also be provided to the Division of Coastal Management District Planner for use in the CAMA land use plan review process.

5. Public Informational Meeting Regarding the Preliminary Draft Land Use Plan

Following the completion of a preliminary draft Land Use Plan Update, a public informational meeting will be held by the Advisory Committee. The purpose of this meeting will be to review the draft Plan, particularly the land use and development policies, future land use map, and implementation plan and schedule. The public informational meeting date is projected to be held in January 2007. Copies of the full preliminary draft Land Use Plan as well as executive summaries will be available at municipal and county facilities. Notification of the meeting will be achieved through local newspaper notices and the preparation and distribution of public service announcements to local radio and television stations. Notice of the meeting will also be provided to the Coastal Resources Advisory Council member and the Division of Coastal Management District Planner.

6. Planning Board Review Meeting

The purpose of this joint worksession meeting with the Planning Boards of Edenton and Chowan County is to provide a review of the preliminary draft land use plan and to provide another opportunity for general public comments.

7. Elected Officials Review Meetings

The purpose of these worksession meetings is to provide a review of the preliminary draft land use plan by the Edenton Town Council and the Chowan County Board of County Commissioners and to provide another opportunity for general public comments.

8. Public Hearings

A formal public hearing will be held by the elected officials of the Town of Edenton and Chowan County to review the final draft Joint Plan and to solicit citizen comments. Following the public hearings each elected board will consider action on adoption of the Plan. The public hearings will be advertised by newspaper notice at least 30 days prior to the date of the public hearings which is anticipated to be held in April 2007. Notice of the public hearings will also be posted at municipal and

county facilities. Additional means of public notification will include notices on Web pages and radio and television public service announcements. Copies of the final draft Joint Land Use Plan and executive summaries will be available for review at municipal and county facilities and at the local public library.

9. Additional Means of Soliciting Public Involvement

In addition to the meetings outlined above, Edenton and Chowan County will utilize the following means to increase public involvement and to disseminate public information:

- Monthly project progress reports will be made available to the local media and posted on the City and County Web pages.
- Presentations by representatives of Edenton and Chowan County staffs and/or Advisory Committee members to civic, business, community, and similar groups, as requested.
- Use of local CATV and City and County Web pages for meeting schedules, meeting notices, project progress reports, plan drafts, and other public educational materials.
- The Town and County may also utilize its utilities billings as a means to provide meeting notices and/or general information regarding the land use plan update.

10. Additional Meetings

In addition to the meetings outlined above and in Attachment B, Edenton and Chowan County may elect to hold additional meetings if it is determined that more meetings are needed to provide project information and/or provide additional opportunities for soliciting citizen comments and public participation in the Land Use Plan preparation process.

11. Stakeholder Groups

During the Land Use Plan preparation process, specific stakeholder or interest groups may be identified. Such groups or individuals will, if requested, receive mailed meeting notices and will be specifically encouraged to participate at all stages of the Land Use Plan preparation process.

12. Amendment to the Citizen Participation Plan

This Citizen Participation Plan will be reevaluated at the end of Phase I of the project (June 2006) by the Director of the Edenton-Chowan County Department of Planning and Inspections and amendments may be recommended. Any amendment to the Plan will be approved by Edenton and Chowan County in the same manner as adoption of the original Plan.

Attachment A
Advisory Committee Membership

Name	Address	Representing	Contact Information
Jimmy Alligood		Chowan County Board of Commissioners	
Roger Spivey		Chowan County Planning Board	
Fred Smith		Chowan County Planning Board Chair	
Phyllis Britton		Edenton Town Council	
Willie Boone		Edenton Planning Board	
Bob Partin		Edenton Planning Board	
<i>The following individuals will provide technical planning assistance to the Advisory Committee:</i>			
Elizabeth Allen Bryant	108 East King Street, Edenton	Director, Edenton-Chowan County Planning and Inspections Department	252-482-5618
Buddy Blackburn, AICP	Raleigh, NC	The Wooten Company	919-828-0531

Attachment B
Tentative Advisory Committee Meeting Schedule
Joint Town of Edenton-Chowan County Core Land Use Plan

Target Date	Type of Meeting
January 2006	Advisory Committee Orientation Meeting
January 2006	Initial Public Informational Meeting
March 2006	Advisory Committee #2 re: Community Concerns and Aspirations
May 2006	Advisory Committee #3 re: Analysis of Existing And Emerging Conditions
October 2006	Advisory Committee #4 re: Plan for the Future
November 2006	Advisory Committee #5 re: Management Tools
January 2007	Public Informational Meeting re: preliminary land use plan document
January 2007	Joint Planning Board review of draft land use plan document
February 2007	Elected officials review of draft document
February 2007	Advisory Committee #6 re: final review of draft land use plan document and recommendation for approval
Feb.07-Mar. 07	Intergovernmental and DCM review of draft land use plan document
April 2007	Public Hearing
May 2007	Elected officials meetings re: adoption of land use plan
Post May 2007	CRC review and approval

Regularly scheduled Advisory Committee meetings will be held in the Panel Room of the 1767 Courthouse on King Street in Edenton. The location of all other meetings will be determined at a later date. Meeting dates are tentative and are subject to change. Notification of the meetings will be achieved through local newspaper notices, preparation and distribution of public service announcements, and/or posting on the Town and County Web pages. Notice of the meetings will also be provided to the Coastal Resources Advisory Council member and the Division of Coastal Management District Planner.

Attachment C Local Media Resources

1. Local Newspaper: The Chowan Herald
2. Local Public Access CATV station:
3. Chowan County Web: <http://www.chowancounty-nc.gov/>
4. Town of Edenton Web: <http://www.townofedenton.com/>

Appendix E: Evaluation of Effectiveness of 1998 Land Use Plan Policies and Implementation Activities

Effectiveness of Current Land Use Plan Policies

The 1998 LUP Policy statements, while good goals for environmental protection, emergency management, and public recreation access, did not provide a specific set of guidelines for use by the Edenton Town Council and Chowan County Board of Commissioner when making land development decisions. The policies, while addressing growth management and land use in a general sense, did not give the Planning Boards or elected bodies explicit tenets by which they could guide growth and development in the Town and County. Rather than being a "toolbox" for the Boards, Council, and Board of Commissioners to use and rely on, the 1998 Land Use Plan became more of a encyclopedia of existing land use patterns and categories, with idealized statements about future land use and environmental concerns.

Local Use of the 1998 Land Use Plan Policies

Planning staff includes relevant land use policy statements in staff reports to the Edenton Planning Board, Edenton Board of Adjustment, and Edenton Town Council. Chowan County, due to its lack of countywide zoning, has relied on the Land Use Plan document infrequently in land use decision making. Both the Town of Edenton and Chowan County staff have used the document in scheduling and prioritizing emergency management, public recreation access, and environmentally sensitive land acquisition activities.

1998 Land Use Plan Implementation Activities

1. Preservation of remaining Bandon Plantation buildings.
2. Redevelopment of Edenton Cotton Mill & Mill Village.
3. County Sewer Feasibility Study
4. Town & County require a drainage plan to accompany all major development site plans
5. Holliday Island acquired by County and preserved as passive open space with camping platforms on Chowan River
6. Town & County enacted development fees to set up funds to pay for infrastructure expansion
7. Farmer's Market in Downtown Edenton
8. Formed Edenton-Chowan Affordable Housing Commission
9. Mobile Home Year Ordinance enacted in Town & County
10. CDBG Scattered Site Rehabilitation Grants in 2001 and 2004
11. Expand ecotourism with water based recreation sites at Holladay Island, Cannon's Ferry, Pembroke Creek and Wildlife Boat Ramps
12. 2003 Edenton-Chowan Greenways & Open Space Plan
13. County Zoning Study 2005-06
14. Town of Edenton Major Corridor Overlay Plan
15. Northern Chowan Recreation Center
16. 2003 Edenton-Chowan Hazard Mitigation Plan

Appendix F: Natural Areas and Rare Species

Major Group	Scientific Name	Common Name	State Status	Federal Status	State Rank	Global Rank	County - Status	Map - Habitat
Invertebrate Animal	Anodonta implicata	Alewife Floater	T	None	S1	G5	Chowan - Current	Link
Invertebrate Animal	Lampsilis radiata radiata	Eastern Lampmussel	T	None	S1S2	G5T5	Chowan - Current	Link
Invertebrate Animal	Leptodea ochracea	Tidewater Mucket	T	None	S1	G3G4	Chowan - Current	Link
Invertebrate Animal	Ligumia nasuta	Eastern Pondmussel	T	None	S1	G4G5	Chowan - Current	Link
Natural Community	Coastal plain semipermanent impoundment	None	None	None	S4	G5	Chowan - Current	Link
Natural Community	Cypress--gum swamp (blackwater subtype)	None	None	None	S5	G5T5	Chowan - Current	Link
Natural Community	Dry-mesic oak--hickory forest	None	None	None	S5	G5	Chowan - Current	Link
Natural Community	Mesic mixed hardwood forest (coastal plain subtype)	None	None	None	S4	G5T5	Chowan - Current	Link
Natural Community	Nonriverine swamp forest	None	None	None	S2S3	G2G3	Chowan - Current	Link
Natural Community	Pond pine woodland	None	None	None	S4	G4G5	Chowan - Current	Link
Natural Community	Tidal cypress--gum swamp	None	None	None	S3	G4	Chowan - Current	Link
Natural Community	Tidal freshwater marsh	None	None	None	S2S3	G4	Chowan - Current	Link
Vascular Plant	Bacopa innominata	Tropical Water-hyssop	SR-P	None	SH	G3G5	Chowan - Historical	Link
Vascular Plant	Bidens coronata	Crowned Beggar-ticks	SR-P	None	SH	G5	Chowan - Historical	Link
Vascular Plant	Ceratophyllum australe	Southern Hornwort	SR-P	None	S1	G5TNR	Chowan - Current	Link
Vascular Plant	Ludwigia ravenii	Raven's Seedbox	SR-T	FSC	S2?	G2?	Chowan - Historical	Link
Vascular Plant	Malaxis spicata	Florida Adder's-mouth	SR-P	None	S1	G4?	Chowan - Obscure	Link
Vascular Plant	Psilotum nudum	Whiskfern	SR-D	None	S1	G5	Chowan - Current	Link
Vascular Plant	Spartina pectinata	Freshwater Cordgrass	SR-P	None	S1	G5	Chowan - Obscure	Link
Vertebrate Animal	Corynorhinus rafinesquii macrotis	Rafinesque's Big-eared Bat - Coastal Plain Subspecies	T	FSC	S3	G3G4TNR	Chowan - Current	Link
Vertebrate Animal	Crotalus horridus	Timber Rattlesnake	SC	None	S3	G4	Chowan - Obscure	Link
Vertebrate Animal	Haliaeetus leucocephalus	Bald Eagle	T	T	S3B,S3N	G5	Chowan - Current	Link
Vertebrate Animal	Myotis austroriparius	Southeastern Myotis	SC	FSC	S3	G3G4	Chowan - Obscure	Link

*Source: North Carolina Natural Heritage Program. NCNHP database updated: August 11th, 2006
Search performed on Tuesday November 2, 2006 at 11:19*

EXPLANATION OF CODES FOR COUNTY AND QUAD STATUS LISTS

The county and quadrangle status lists provided by the NC Natural Heritage Program tally the elements of natural diversity (rare plants and animals, rare and exemplary natural communities, and special animal habitats) known to occur in all North Carolina counties and USGS 7.5-minute quadrangles. The information on which these lists is based comes from a variety of sources, including field surveys, museums, herbaria, scientific literature, and personal communications. These lists are dynamic, with new records continually being added and old records being revised as new information is received. As a result, a list cannot be considered a definitive record of the elements of natural diversity present in a given county or quad and should not be used as a substitute for field surveys. When this information is used in any document, we request that the date this list was compiled be given and that the NC Natural Heritage Program be credited.

STATE STATUS

CODE	STATUS	CODE	STATUS
E	Endangered	SR	Significantly Rare
T	Threatened	EX	Extirpated
SC	Special Concern	P_	Proposed (used only as a qualifier of the ranks above)
C	Candidate		

NOTE: the definitions of state statuses of plants and animals differ. Below are summaries of the statuses for each group.

Plant statuses are determined by the Plant Conservation Program (NC Department of Agriculture) and the Natural Heritage Program (NC Department of Environment and Natural Resources). Endangered, Threatened, and Special Concern species are protected by state law (Plant Protection and Conservation Act, 1979). Candidate and Significantly Rare designations indicate rarity and the need for population monitoring and conservation action. Note that plants can have a double status, e.g., E-SC, indicates that while the plant is endangered, it is collected or sold under regulation.

CODE	STATUS	DEFINITION
E	Endangered	"Any species or higher taxon of plant whose continued existence as a viable component of the State's flora is determined to be in jeopardy" (GS 19B 106: 202.12). (Endangered species may not be removed from the wild except when a permit is obtained for research, propagation, or rescue which will enhance the survival of the species.)
T	Threatened	"Any resident species of plant which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range" (GS 19B 106:202.12). (Regulations are the same as for Endangered species.)
SC	Special Concern	"Any species of plant in North Carolina which requires monitoring but which may be collected and sold under regulations adopted under the provisions of [the Plant Protection and Conservation Act]" (GS 19B 106:202.12). (Special Concern species which are not also listed as Endangered or Threatened may be collected from the wild and sold under specific regulations. Propagated material only of Special Concern species which are also listed as Endangered or Threatened may be traded or sold under specific regulations.)
C	Candidate	Species which are very rare in North Carolina, generally with 1-20 populations in the state, generally substantially reduced in numbers by habitat destruction (and sometimes also by direct exploitation or disease). These species are also either rare throughout their ranges (fewer than 100 populations total) or disjunct in North Carolina from a main range in a different part of the country or world. Also included are species which may have 20-50 populations in North Carolina, but fewer than 50 populations rangewide. These are species which have the preponderance of their distribution in North Carolina and whose fate depends largely on their conservation here. Also included are many species known to have once occurred in North Carolina but with no known extant occurrences in the state (historical or extirpated species); if these species are relocated in the state, they are likely to be listed as Endangered or Threatened. If present land use trends continue, candidate species are likely to merit listing as Endangered or Threatened.
SR	Significantly Rare	Species which are very rare in North Carolina, generally with 1-20 populations in the state, generally substantially reduced in numbers by habitat destruction (and sometimes also by direct

		exploitation or disease). These species are generally more common somewhere else in their ranges, occurring in North Carolina peripherally to their main ranges, mostly in habitats which are unusual in North Carolina. Also included are some species with 20-100 populations in North Carolina, if they also have only 50-100 populations rangewide and are declining.
-L	Limited	The range of the species is limited to North Carolina and adjacent states (endemic or near endemic). These are species which may have 20-50 populations in North Carolina, but fewer than 50 populations rangewide. The preponderance of their distribution is in North Carolina and their fate depends largely on conservation here. Also included are some species with 20-100 populations in North Carolina, if they also have only 50-100 populations rangewide and declining.
-T	Throughout	These species are rare throughout their ranges (fewer than 100 populations total)
-D	Disjunct	The species is disjunct to NC from a main range in a different part of the country or world.
-P	Peripheral	The species is at the periphery of its range in NC. These species are generally more common somewhere else in their ranges, occurring in North Carolina peripherally to their main ranges, mostly in habitats which are unusual in North Carolina.
-O	Other	The range of the species is sporadic or cannot be described by the other Significantly Rare categories
P_	Proposed	A species which has been formally proposed for listing as Endangered, Threatened, or Special Concern, but has not yet completed the legally mandated listing process.

Animal statuses are determined by the Wildlife Resources Commission and the Natural Heritage Program. Endangered, Threatened, and Special Concern species of mammals, birds, reptiles, amphibians, freshwater fishes, and freshwater and terrestrial mollusks have legal protection status in North Carolina (Wildlife Resources Commission). The Significantly Rare designation indicates rarity and the need for population monitoring and conservation action.

CODE	STATUS	DEFINITION
E	Endangered	"Any native or once-native species of wild animal whose continued existence as a viable component of the State's fauna is determined by the Wildlife Resources Commission to be in jeopardy or any species of wild animal determined to be an 'endangered species' pursuant to the Endangered Species Act." (Article 25 of Chapter 113 of the General Statutes; 1987).

T	Threatened	"Any native or once-native species of wild animal which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range, or one that is designated as a threatened species pursuant to the Endangered Species Act." (Article 25 of Chapter 113 of the General Statutes; 1987).
SC	Special Concern	"Any species of wild animal native or once-native to North Carolina which is determined by the Wildlife Resources Commission to require monitoring but which may be taken under regulations adopted under the provisions of this Article." (Article 25 of Chapter 113 of the General Statutes; 1987).
SR	Significantly Rare	Any species which has not been listed by the N.C. Wildlife Resources Commission as an Endangered, Threatened, or Special Concern species, but which exists in the state in small numbers and has been determined by the N.C. Natural Heritage Program to need monitoring. (This is a N.C. Natural Heritage Program designation.) Significantly Rare species include "peripheral" species, whereby North Carolina lies at the periphery of the species' range (such as Hermit Thrush). The designation also includes marine and estuarine fishes identified as "Vulnerable" by the N.C. State Museum of Biological Sciences (Ross et al., 1988, <u>Endangered, Threatened, and Rare Fauna of North Carolina. Part II. A Reevaluation of the Marine and Estuarine Fishes</u>).
EX	Extirpated	A species which is no longer believed to occur in the state.
P_	Proposed	Species has been proposed by a Scientific Council as a status (Endangered, Threatened, Special Concern, Watch List, or for De-listing) that is different from the current status, but the status has not yet been adopted by the Wildlife Resources Commission and by the General Assembly as law. In the lists of rare species in this book, these proposed statuses are listed in parentheses below the current status. Only those proposed statuses that are different from the current statuses are listed.

FEDERAL STATUS

These statuses are designated by the US Fish and Wildlife Service. Federally listed Endangered and Threatened species are protected under the provisions of the Endangered Species Act of 1973, as amended through the 100th Congress. Unless otherwise noted, definitions are taken from the *Federal Register*, Vol. 56, No. 225, November 21, 1991 (50 CFR Part 17).

CODE	STATUS	DEFINITION
E	Endangered	A taxon "in danger of extinction throughout all or a significant portion of its range."
T	Threatened	A taxon "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."
EXN	Endangered, nonessential experimental population.	The Endangered Species Act permits the reintroduction of endangered animals as "nonessential experimental" populations. Such populations, considered nonessential to the survival of the species, are managed with fewer restrictions than populations listed as endangered.
T(S/A)	Threatened due to Similarity of Appearance.	The Endangered Species Act authorizes the treatment of a species (subspecies or population segment) as threatened even though it is not otherwise listed as threatened if: (a) The species so closely resembles in appearance a threatened species that enforcement personnel would have substantial difficulty in differentiating between the listed and unlisted species; (b) the effect of this substantial difficulty is an additional threat to a threatened species; and (c) such treatment of an unlisted species will substantially facilitate the enforcement and further the policy of the Act. The American Alligator has this designation due to similarity of appearance to other rare crocodilians. The Bog Turtle (southern population) has this designation due to similarity of appearance to Bog Turtles in the threatened northern population.
C	Candidate.	A taxon under consideration for which there is sufficient information to support listing. This category was formerly designated as a Candidate 1 (C1) species.
FSC	Federal "Species of Concern"	(Also called "Species at Risk"). Formerly defined as a taxon under consideration for which there is insufficient information to support listing; formerly designated as a Candidate 2 (C2) species.
PE	Proposed Endangered	Species has been proposed for listing as endangered.
PD	Proposed De-listed	Species has been proposed for de-listing.

GLOBAL AND STATE RANKS

These ranks are determined by The Nature Conservancy's system of measuring rarity and threat status. "Global" refers to worldwide ranks and "State" to statewide ranks.

STATE RANK	DEFINITIONS
S1	Critically imperiled in North Carolina because of extreme rarity or otherwise very vulnerable to extirpation in the state.
S2	Imperiled in North Carolina because of rarity or otherwise vulnerable to extirpation in the state.
S3	Rare or uncommon in North Carolina.
S4	Apparently secure in North Carolina, with many occurrences.
S5	Demonstrably secure in North Carolina and essentially ineradicable under present conditions.
SA	Accidental or casual; one to several records for North Carolina, but the state is outside the normal range of the species.
SH	Historic record: the element is either extirpated from the county or quad, or there have not been any recent surveys to verify its continued existence.
SR	Reported from North Carolina, but without persuasive documentation for either accepting or rejecting the report.
SX	Believed to be extirpated from North Carolina.
SU	Possibly in peril in North Carolina, but status uncertain; more information is needed.
S?	Unranked, or rank uncertain.
S_B	Rank of breeding population in the state. Used for migratory species only.
S_N	Rank of non-breeding population in the state. Used for migratory species only.
SZ_	Population is not of significant conservation concern; applies to transitory, migratory species.
GLOBAL RANK	DEFINITIONS
G1	Critically imperiled globally because of extreme rarity or otherwise very vulnerable to extinction throughout its range.
G2	Imperiled globally because of rarity or otherwise vulnerable to extinction throughout its range.
G3	Either very rare and local throughout its range, or found locally in a restricted area.
G4	Apparently secure globally, although it may be quite rare in parts of its range (especially at the periphery).
G5	Demonstrably secure globally, although it may be quite rare in parts of its range (especially at the periphery).
GH	Of historical occurrence throughout its range.

GX	Believed to be extinct throughout its range.
GU	Possibly in peril, but status uncertain; more information is needed.
G?	Unranked, or rank uncertain.
G_Q	Of questionable taxonomic status.
G_T_	Status of subspecies or variety; the G-rank refers to the species as a whole, the T-rank to the subspecies.

ADDITIONAL DEFINITIONS

Elements within a county or quad are subdivided into "Current", "Historic", "Obscure" or "Potential" records.

Current record: the element has been observed in the county or quad recently.

Historic record: the element is either extirpated from the county or quad, or there have not been any recent surveys to verify its continued existence.

Obscure record: the date the element was last observed in the county or quad is uncertain.

Potential record: the element has the potential to be found in the county or quad.

NOTE: Scientific and common names listed in parentheses are synonyms listed in US Fish and Wildlife Service, 1992, Endangered and Threatened Species of the Southeastern United States (The Red Book).

Appendix G:

Impact of Chowan County and Edenton Policies on CRC Land Use Plan Management Topics

<i>Impact of Chowan County Policies on CRC Land Use Plan Management Topics and Benchmarks</i>						
	Public Water Access	Land Use Compatibility	Infrastructure Carrying Capacity	Natural Hazard Areas	Water Quality	Local Areas of Concern
Land Use and Development Policies (see Table 46 for the details of each policy)	<ul style="list-style-type: none"> • <i>Improvements to existing access locations</i> • <i>Development of new access areas</i> 	<ul style="list-style-type: none"> • <i>Reduce the placement of incompatible land uses</i> • <i>Preservation of existing character</i> 	<ul style="list-style-type: none"> • <i>Water, sewer, and other services being available in required locations at adequate capacities to support development</i> 	<ul style="list-style-type: none"> • <i>Land uses and development patterns that reduce the vulnerability to natural hazards</i> • <i>Planning for adequate evacuation infrastructure</i> 	<ul style="list-style-type: none"> • <i>Land use and development measures that abate impacts that degrade water quality</i> 	<ul style="list-style-type: none"> • <i>Promote affordable housing</i> • <i>Support tourism</i> • <i>Encourage historic preservation</i> • <i>Support economic development</i> • <i>Conserve natural and cultural resources</i>
A. Public Water Access Policies:						
• Policy A1	Beneficial	Beneficial				Beneficial
• Policy A2	Beneficial					
• Policy A3	Beneficial					
• Policy A4	Beneficial					Beneficial
• Policy A5	Beneficial					Beneficial
• Policy A6	Beneficial					Beneficial
• Policy A7	Beneficial	Beneficial				
• Policy A8	Beneficial					

	Public Water Access	Land Use Compatibility	Infrastructure Carrying Capacity	Natural Hazard Areas	Water Quality	Local Areas of Concern
B. Land Use Compatibility Policies:						
• Policy B1		Beneficial				Beneficial
• Policy B2		Beneficial				
• Policy B3		Beneficial			Beneficial	
• Policy B4		Beneficial	Beneficial		Beneficial	Beneficial
• Policy B5		Beneficial				
• Policy B6		Beneficial		Beneficial		
• Policy B7		Beneficial				
• Policy B8		Beneficial			Beneficial	Beneficial
• Policy B9		Beneficial	Beneficial			
• Policy B10		Beneficial				
• Policy B11		Beneficial				
• Policy B12		Beneficial				
• Policy B13		Beneficial	Beneficial			
• Policy B14		Beneficial				
• Policy B15		Beneficial				Beneficial
• Policy B16		Beneficial				Beneficial
• Policy B17		Beneficial				
• Policy B18		Beneficial			Beneficial	
• Policy B19		Beneficial			Beneficial	Beneficial
• Policy B20		Beneficial	Beneficial			
• Policy B21		Beneficial				
• Policy B22		Beneficial			Beneficial	
• Policy B23		Beneficial	Beneficial			
• Policy B24		Beneficial				Beneficial
• Policy B25		Beneficial	Beneficial			Beneficial
• Policy B26		Beneficial				Beneficial

	Public Water Access	Land Use Compatibility	Infrastructure Carrying Capacity	Natural Hazard Areas	Water Quality	Local Areas of Concern
• Policy B27		Beneficial				Beneficial
• Policy B28		Beneficial	Beneficial			
• Policy B29		Beneficial				
• Policy B30		Beneficial				Beneficial
• Policy B31		Beneficial				
• Policy B32		Beneficial				Beneficial
• Policy B33		Beneficial				
C. Infrastructure Carrying Capacity Policies						
• Policy C1		Beneficial	Beneficial			
• Policy C2			Beneficial			Beneficial
• Policy C3			Beneficial			
• Policy C4			Beneficial		Beneficial	
• Policy C5			Beneficial			Beneficial
• Policy C6			Beneficial			
• Policy C7			Beneficial			
• Policy C8			Beneficial		Beneficial	
• Policy C9			Beneficial			
• Policy C10		Beneficial	Beneficial			
D. Natural Hazard Areas Policies:						
• Policy D1				Beneficial		
• Policy D2		Beneficial		Beneficial		
• Policy D3				Beneficial		
• Policy D4				Beneficial		
• Policy D5		Beneficial		Beneficial		
• Policy D6				Beneficial		
• Policy D7		Beneficial		Beneficial		
• Policy D8				Beneficial	Beneficial	

	Public Water Access	Land Use Compatibility	Infrastructure Carrying Capacity	Natural Hazard Areas	Water Quality	Local Areas of Concern
• Policy D9				Beneficial	Beneficial	
• Policy D10		Beneficial		Beneficial		
• Policy D11				Beneficial		
• Policy D12				Beneficial	Beneficial	
E. Water Quality Policies:						
• Policy E1		Beneficial			Beneficial	
• Policy E2					Beneficial	
• Policy E3		Beneficial			Beneficial	
• Policy E4		Beneficial			Beneficial	
• Policy E5			Beneficial		Beneficial	
• Policy E6					Beneficial	
• Policy E7					Beneficial	Beneficial
• Policy E8					Beneficial	
• Policy E9		Beneficial			Beneficial	
• Policy E10		Beneficial			Beneficial	
F. Areas of Environmental Concern Policies:						
• Policy F1		Beneficial				
• Policy F2		Beneficial			Beneficial	
• Policy F3		Beneficial			Beneficial	
• Policy F4		Beneficial				
• Policy F5		Beneficial				Beneficial
• Policy F6		Beneficial				Beneficial
• Policy F7		Beneficial			Beneficial	
• Policy F8		Beneficial		Beneficial		
• Policy F9		Beneficial				
G. Areas of Local Concern Policies:						
• Policy G1		Beneficial				Beneficial

	Public Water Access	Land Use Compatibility	Infrastructure Carrying Capacity	Natural Hazard Areas	Water Quality	Local Areas of Concern
• Policy G2					Beneficial	Beneficial
• Policy G3						Beneficial
• Policy G4		Beneficial				Beneficial
• Policy G5						Beneficial
• Policy G6			Beneficial			Beneficial
• Policy G7						Beneficial
• Policy G8						Beneficial
• Policy G9				Beneficial		Beneficial
• Policy G10		Beneficial				Beneficial
• Policy G11						Beneficial
• Policy G12						Beneficial
• Policy G13	Beneficial			Beneficial		Beneficial
• Policy G14		Beneficial			Beneficial	Beneficial

Note: Blank space in table indicates neutral impact. All local policies have been determined to have either a positive or neutral impact on CRC management topics. No specific actions or programs are required to mitigate negative impacts.

Appendix H:
Summary of CRC Land Use Plan Management Topic Goals, Planning Objectives, and Land Use Plan Requirements

<i>Public Access</i>	
<i>Goal</i>	Maximize public access to the beaches and the public trust waters of the coastal region
<i>Objective</i>	Develop comprehensive policies that provide access opportunities for the public along the shoreline within the planning jurisdiction
<i>Land Use Plan Requirements</i>	Provisions for public access to all segments of the community, including persons with disabilities
	Local criteria for frequency and type of public waterfront access facilities
	Access criteria for beach areas targeted for nourishment
<i>Land Use Compatibility</i>	
<i>Goal</i>	Ensure the development and use of resources or preservation of land minimizes direct and secondary environmental impacts, avoids risks to public health, safety and welfare, and is consistent with the capability of the land based on considerations of interactions of natural and manmade features
<i>Objective</i>	Adopt and apply local development policies that balance protection of natural resources and fragile areas with economic development
	Policies should provide clear direction to assist local decision making and consistency findings for zoning, divisions of land, and public and private projects
<i>Land Use Plan Requirements</i>	Establishing building intensity and density criteria consistent with the land suitability analysis
	Establishing local mitigation criteria and concepts such as cluster subdivision design, impervious surface limits, innovative stormwater management alternatives
<i>Infrastructure Carrying Capacity</i>	
<i>Goal</i>	Ensure that public infrastructure systems are appropriately sized, located, and managed so that the quality and productivity of AECs and other fragile areas are protected or restored
<i>Objective</i>	Establish level of service policies and criteria for infrastructure consistent with future land needs projections
<i>Land Use Plan Requirements</i>	Establishing service area boundaries for existing and future infrastructure
	Correlating future land use map categories with existing and planned infrastructure such as water, sewer, and transportation facilities
<i>Natural Hazard Areas</i>	
<i>Goal</i>	Conserve and maintain barrier dunes, beaches, floodplains, and other coastal features for their natural storm protection functions and their natural resources giving recognition to public health, safety, and welfare issues
<i>Objective</i>	Develop policies that minimize threats to life, property, and natural resources resulting from development located in or adjacent to hazard areas such as those subject to erosion, high winds, storm surge, flooding, or sea level rise
<i>Land Use Plan Requirements</i>	Developing location, density, and intensity criteria for new, existing development, and redevelopment (including public facilities and infrastructure) so as to avoid or better withstand natural hazards
	Correlating existing and planned development with existing and planned evacuation infrastructure
<i>Water Quality</i>	
<i>Goal</i>	Maintain, protect and, where possible, enhance water quality in all coastal wetlands, rivers, streams, and estuaries
<i>Objective</i>	Adopt policies for coastal waters within the planning jurisdiction to help ensure that water quality is maintained if not impaired and improved if impaired
<i>Land Use Plan Requirements</i>	Devising policies to prevent or control nonpoint source discharges (sewage and storm water) such as impervious surface limits, vegetated riparian buffers, wetland protection, etc.

	Establishing policies and land use categories for protecting open shellfishing waters and restoring closed shellfishing waters
<i>Local Areas of Concern</i>	
<i>Goal</i>	Integrate local concerns with the overall goals of CAMA in the context of land use planning
<i>Objective</i>	Identify and address local concerns and issues, such as cultural and historic areas, scenic areas, economic development, downtown revitalization or general health and human service needs
<i>Land Use Plan Requirements</i>	Evaluate local concerns and issues for the development of goals, policies, and implementation strategies May include timeliness and identification of funding options
Source: CAMA Land Use Planning Guidelines, Subchapter 7B .0702(d)(3)	

Appendix I:
Hazard Mitigation Plan Recommendations

The following is a summary of the hazard mitigation measures recommended in the *Chowan County/Edenton Hazard Mitigation Plan*, February 2005:

Hurricanes

Due to the unpredictable nature of hurricanes there is nothing that can be done to prevent a hurricane from occurring. However, there are steps that can be taken in order to better prepare Chowan County and the Town of Edenton. By mapping previously damaged areas, creating prevention steps, and making the public aware of what can be done in advance, all communities of the County can be better prepared in case of damage.

Recommended Mitigation Measure	Mitigation Category	Responsible Organization	Target Completion Date	Cost Effectiveness
1. Mapping previous damage by hurricanes				
1.1 Create a GIS map of areas in critical need of improvement, due to Hurricane Floyd and Isabel.	Awareness	Chowan County Land Records	2005	Currently, the County has budgeted for GIS work; this additional mapping would be covered under the same budget.
1.2 GIS mapping locations of damaged utilities caused by previous hurricanes.	Awareness	Chowan County Land Records	2005	Currently, the county has budgeted for GIS work; this additional mapping would be covered under the same budget.
2. Prevention				
2.1 Require all public utility companies as well as County and Town owned utilities to inspect and repair damage due to Hurricane Isabel within a 5-year time frame.	Prevention	Chowan County Board of Commissioners & Town of Edenton Town Council	2009	Create additional funding within County and Town utilities departments.
2.2 Locate different funding sources that can aid in the improvements of drainage within the Town and County due specifically to Hurricane Isabel.	Prevention	Chowan/Edenton Administration	2010	Chowan County and the Town of Edenton will be applying for aid through FEMA due to Hurricane Isabel
3. Public awareness				
3.1 Provide public service messages that discuss preparations in the event of a hurricane to be sent out annually in the early spring.	Awareness	Chowan County & Town of Edenton Administration	2005	There is a budget currently for advertisements and mailings for both the County and Town.
Monitoring and Evaluation Indicators for the Task Force: <ul style="list-style-type: none"> ■ Send public questionnaire on utility repair progression and job performance. ■ Include in questionnaire specific questions regarding public opinion on whether public service messages are helpful. ■ Required the ability to gain access to documentation regarding utility progress throughout the County and Town. 				

Flooding

Flooding doesn't come only from hurricanes, but also by heavy rainfall amounts and problems with the existing drainage systems throughout the County and Town. The following is a list of mitigation measures that will identify, categorize, and eventually relieve the flooding problems throughout the County and Town.

Recommended Mitigation Measure	Mitigation Category	Responsible Organization	Target Completion Date	Cost Effectiveness
1. Map areas of both County and Town with repetitive flooding damage				
1.1 Utilize GPS to transfer to GIS mapping system. Include consistent problem areas on the current flood maps. Those areas include Pembroke Circle, Dillard Mill, and Cypress Point Marina, as well as Woodlawn Park.	Prevention	Chowan County Land Records	2004	Currently, the County has budgeted for GIS work; this additional mapping would be covered under the same budget.
1.2 Update and identify all areas not previously labeled on the 100-year flood map that were flooded during major rainfall events and hurricanes.	Prevention	Chowan County and Town of Edenton Administration	2005	Currently, the County has budgeted for additional mapping.
2. Reduce Repetitive Loss Structures				
2.1 Elevate repetitive loss structures or acquire repetitive loss properties.	Property Protection	Chowan County & Town of Edenton Administration	As funds become available	Funds for this would need to be obtained through a federal or state grant.
3. Locate repetitive damage areas and structures				
3.1 List areas in need of repair, replacement and improvement.	Awareness	Chowan County & Town of Edenton Administration	2005	There are no additional funds required for this measure.
3.2 Determined priority level by past flooding experience, extent and value of damage and cost of repairs.	Awareness	Chowan County & Town of Edenton Administration	2005	There are no additional funds required for this measure.
3.3 Find a new location and begin plans for the 911 center located on Water Street in Edenton. The building is currently located in the 100-year flood zone.	Emergency Services	Chowan County Emergency Services	2005	The town is actively looking for a new location and, once found, the cost will be budgeted for.
3.4 Determine specific reasons why each area was damaged (amount of times flooded, and whether this damage is expected from future flooding). The majority of these areas would be located in the Town of Edenton.	Prevention	Chowan County & Town of Edenton Administration	2005	There are no additional funds required for this measure.
4. Identify all structures within the flood hazard area				
4.1 Identify all structures located within the revised Areas of Special Flood Hazard (ASFH).	Property Protection	Chowan Planning & Inspection Department	2007	No additional costs are expected.
4.2 For structures located within the ASFH, determine whether the structure's finished floor elevation (FFE) is above or	Property Protection	Chowan Planning & Inspection Department	Within 12 months	No additional costs are expected.

below the base flood elevation (BFE).				
4.3 Identify structures that have been damaged by flooding in the past due to distance and/or height of structure.	Property Protection	Chowan County & town of Edenton Administration	Within 12 months	No additional costs are expected.
Monitoring and Evaluation Indicators for the Task Force:				
<ul style="list-style-type: none"> ■ Track how many structures are located in the Flood Hazard Area ■ Track the number of structures that have a FFE below the BFE ■ Chart greatest to least risk of future damage and what structures are eligible for State/Federal Aid. ■ Track how many development permits are denied, and the reason for denial. ■ Require routine site evaluations for new constructions to determine whether installation is installed effectively. 				
5. Amend zone regulations				
5.1 Use special consideration for development permits for structures proposed within the Areas of Special Flood Hazard (ASFH).	Property Protection	Chowan Planning & Inspection Department	Case-by-case basis	No additional costs are expected.
5.2 Require all new structures finished floor elevation (FFE) be elevated at or above the current BFE*.	Property Protection	Chowan Planning & Inspection Department	Case-by-case basis	No additional costs are expected
*This technique of requiring FFE to be a certain height is being used throughout the coastal regions of the state and is environmentally sound depending on the type of material used. Depending on the terrain of the proposed building site, the FFE will be technically feasible; however, this will have to be determined by the local Building Inspector.				
5.3 Require all new structures to include drainage ditches and/or culverts installed around perimeter of property to prevent flooding and flood damage to structures*.	Property Protection	Chowan Planning & Inspection Department	Case-by-case basis	No additional costs are expected
*The local Building Inspector and the Planning Board, if necessary, will determine if rerouting the flow of ditches is environmentally sound. Depending on the situation, a CAMA permit may also need to be issued before any installations begin.				
6. Locate outside funding sources				
6.1 Locate different funding sources that can aid in the improvements of drainage within the Town and County caused by regular flooding events (such as grants through CDBG, DENR, etc...)	Prevention	Chowan/Edenton Administration	2010	Chowan County & the Town of Edenton will be applying for aid through FEMA due to Hurricane Isabel
7. Consider alternatives to preventing coastal flooding				
7.1 Research possible seawall options to prevent tidal flooding.	Prevention	Chowan County Board of Commissioners & Town of Edenton Town Council to appoint representatives to research and report findings with recommendations individually to County & Town.	The recommendation and report due 2007. Decision by County & Town to be determined by members.	The findings from required research by both County & Town will determine financially feasible
Monitoring and Evaluation Indicators:				
<ul style="list-style-type: none"> ■ Review revised maps with Hurricane Floyd flooding information included. 				

- Determine if County/Town has purchased GPS unit.
- Determine if studies have been done and cost estimates have been received for improvements of critical areas damaged severely by Hurricane Floyd and Hurricane Isabel.
- Review and begin applying for grant money if still available during current cycle. If no, prepare for next cycle.

8. Awareness and prevention

8.1 Compile flood mitigation information and make it available to Chowan County and Edenton residents and business owners. One option is to prepare a disaster safety calendar that focuses on flood hazard preparedness/mitigation measures.	Property Protection	Chowan County Planning & Inspection Department, which will focus on both the County and the Town of Edenton	2006	There is a budget currently for advertisements and mailings.
8.2 Work with the curriculum directors of both the public and private schools to add flood disaster, hurricane, tornado, and wildfire prevention and preparedness information.	Property Protection	Chowan County EMS/EMT personnel and Chowan County & Town of Edenton Fire Dept. personnel	Case by case	There is a budget currently for advertisements and mailings for both the County and Town.
8.3 Work with local charities, Meals on Wheels and/or Habitat for Humanity chapters, to apply nonstructural mitigation measures to the homes of low-income senior citizen in the Flood Hazard Area.	Property Protection	Chowan County & Town of Edenton Administration to organize volunteer groups	Case by case	No additional funds would be needed for this project.

Monitoring and Evaluation Indicators for the Task Force:

- Determine if educational material is being distributed
- Conduct school drills to make sure information is being absorbed

Erosion

Due to events such as Nor'easters, hurricanes, and heavy rainfall, erosion could be a potential problem along the coastal areas of the County and Town if left unmonitored. When erosion is not monitored and replenishment efforts are not used, coastal erosion could cause a loss of land and coastline. However, the first step in taking erosion precautions is identifying where and to what extent this erosion has occurred in a specific time period, for instance 20-50 years. This is why monitoring and research is so important.

Recommended Mitigation Measure	Mitigation Category	Responsible Organization	Target Completion Date	Cost Effectiveness
1. Erosion monitoring & research				
1.1 Begin monitoring erosion complaints, considering locations, possible events, and past complaints about the areas.	Monitoring	Chowan County Planning & Inspection Department	Case by case continual monitoring	Budget may need to be created (for the County and Town) at a later date depending on amount of complaints and legitimacy.
1.2 Research and interview with property owners	Research	Chowan County Planning & Inspection Department	Case by case continual monitoring	Budget may need to be created (for the County and Town) at a later date depending on amount of complaints and legitimacy.
2. Researching solutions to the problem				
2.1 Research possible seawall options to prevent future erosion along Edenton Bay and rivers	Prevention	Chowan County Board of Commissioners & Town of Edenton Town Council to appoint representatives to research and report findings with recommendations individually to County & Town	Recommendation and report due 2007. Decision by County & Town to be determined by members.	The findings from required research by both County and Town will determine financial feasibility
2.2 Consider bringing in fill and additional necessary materials to replace erosion in designated areas.	Prevention	Chowan County Board of Commissioners & Town of Edenton Town Council to consider repair measures.	Case by case	Budget may need to be created (for the County and Town) at a later date depending on amount of complaints and legitimacy.
3. Public awareness				
3.1 Posting signs in areas considered eroded.	Awareness	Chowan County Planning & Inspection Department	Case by case continual monitoring	Budget may need to be created (for the County and Town) at a later date depending on amount of complaints and legitimacy.
Monitoring and Evaluation Indicators for the Task Force:				
<ul style="list-style-type: none"> ■ Review research materials as well as personally visit sites to make determination of progress. ■ Send public questionnaires regarding progress of the Plan to property owners who have complained about erosion. 				

Storm Surge

Storm surge events, due to severe storms in the Atlantic Ocean, such as hurricanes or tropical storms, can be financially draining on individuals and a community as a whole. As discussed in Section II, storm surge from Hurricane Isabel was as high as 8 feet above normal sea levels.

Properly functioning drainage throughout the county and town is the best prevention available to protect all areas of the County and Town. The County and town are well aware, due to the recent affects of Hurricane Isabel, that drainage is a top priority and one that is currently being handled.

Recommended Mitigation Measure	Mitigation Category	Responsible Organization	Target Completion Date	Cost Effectiveness
1. Identify eroded areas				
1.1 Research and interview with property owners	Research	Chowan County Planning & Inspection Department	Case by case continual monitoring	Budget may need to be created (for the County and Town) at a later date depending on amount of complaints and legitimacy.
1.2 Document specific accounts of storm surge levels within different areas per storm & calculate value of loss. *Information to be included in future Hazard Mitigation Plan updates (once every 5 years).	Research	Chowan County Planning & Inspection Department	Case by case continual monitoring	Budget may need to be created (for the County and Town) at a later date depending on amount of complaints and legitimacy.
2. Prevention				
2.1 Research possible seawall options to prevent future erosion along Edenton Bay and rivers	Prevention	Chowan County Board of commissioners & Town of appointment representatives to research and report findings with recommendations individually to County & Town	The recommendation and report due 2007. Decision by County & Town to be determined by members.	The findings from required research by both County & Town will determine financial feasibility.
3. Public awareness				
3.1 Provide public mailings to discuss what to do in case of expected storm surge.	Awareness	Chowan County Emergency Services and Town of Edenton Fire & Police Departments	Annually	The County and the town of Edenton has a budget for mailings, of which some money will be allocated to the County EMS as well as the Town fire & police departments.
Monitoring and Evaluation Indicators for the Task Force:				
<ul style="list-style-type: none"> ■ Review documentation provided by the public and include storm surge events in updated Hazard Mitigation Plan. 				

Tornadoes

Because tornadoes are so unpredictable and can occur anywhere, narrowing down a striking area is difficult to do with much precision. However, with the help of meteorologists, people are alerted about dangerous weather conditions quickly, in order to prevent possible disasters. Knowing the weather conditions and getting the word out quickly is really the only thing that can be done to keep people safe. This is why providing warnings are very instrumental in keeping people safe.

Recommended Mitigation Measure	Mitigation Category	Responsible Organization	Target Completion Date	Cost Effectiveness
1. Public Awareness				
1.1 Provide safety warning radio broadcasts, determining the approximate time and area a tornado would be likely to hit.	Public awareness	EMS/Chowan County & Town of Edenton Fire & Law Enforcement	Case by case	The County has budgeted for radio broadcasts and possible advertising that would also include the Town of Edenton listening area.
1.2 Create a county wide warning system, posting electrical highway signs that warn of the weather conditions expected.	Public Awareness	EMS/Chowan County & Town of Edenton Fire & Law Enforcement	Case by case	The County has budgeted for radio broadcasts and possible advertising that would also include the Town of Edenton listening area.
1.3 Start radio or newspaper advertisement, to warn citizens of hazards and safety precautions that should be taken.	Public Awareness	Chowan County Emergency Services	Annually	The County has budgeted for radio broadcasts and possible advertising that would also include the town of Edenton listening area.
1.4 Prepare a series of mailings to citizens discussing the proper safety procedures for each hazard addressed in this plan.	Public Awareness	Chowan County Emergency Services and Town of Edenton Fire & Police Departments	Annually	The County and the town of Edenton has a budget for mailings of which some money will be allocated to the County EMS as well as the Town fire & police departments.
Monitoring and Evaluation Indicators for the Task Force:				
<ul style="list-style-type: none"> ■ Use public input as a means of evaluating whether or not these extra steps are effective. 				

Nor'easters

Although Nor'easters are a regular occurrence on the east coast of North Carolina, the high, sustained winds that come from the north off the ocean can do a lot of damage, specifically to older homes and those in high elevations. In addition to wind damage, there are flash flood occurrences along the western and southern border.

Recommended Mitigation Measure	Mitigation Category	Responsible Organization	Target Completion Date	Cost Effectiveness
1. Minimize damage by high-sustained winds and heavy rainfall amounts.				
1.1 Improve the wind resistance of structures within the County and Town by continuing to enforce the North Carolina Building Code through the County's minimum housing code.	Prevention	Chowan County and Town of Edenton Building Inspector	Continuous	Because this is part of the current task for the Building inspector, no additional costs would result.
1.2 Monitor trees and branches at risk of breaking or falling in windstorms. Prune or thin trees or branches on County or Town property when they would pose an immediate threat to property, utility lines or other significant structures or critical facilities in the County	Prevention and Monitoring	Chowan County and Town of Edenton Public Works Department	Continuous	Because this is part of the current task for the Public Works Department, no additional costs would result.
1.3 Require all new structures to include drainage ditches and/or culverts installed around perimeter of property to prevent flooding and flood damage to structures.	Property Protection	Chowan Planning & Inspection Department	Case by case basis	No additional costs are expected.
2. Public awareness				
2.1 Provide safety warning radio broadcasts, determining the approximate time and area a nor'easter would be likely to hit.	Public awareness	EMS/Chowan County & Town of Edenton Fire and Law Enforcement	Case by case	The County has budgeted for radio broadcasts and possible advertising that would also include the Town of Edenton listening area.
2.2 Prepare a series of mailings to citizens discussing what the proper safety procedures for each hazard addressed in this Plan.	Public Awareness	Chowan County Emergency Services and Town of Edenton Fire & Police Departments	Annually	The County and the Town of Edenton has a budget for mailings of which some money will be allocated to the County EMS as well as the Town fire & police departments
Monitoring and Evaluation Indicators for the Task Force:				
<ul style="list-style-type: none"> ■ Monitor critical facilities to ensure pruning is completed. ■ Compare records of past nor'easters to the current amount of downed trees and utility poles in the area to judge whether or not the actions are effective. 				

Wildfires

The top reason wildfires are started is due to human negligence. Within the years of 1998 and 1997, humans have caused almost 2 million acres of damage due to fires. This fact shows just how careless, and possibly, uneducated people are about wildfires. With these proposed measures, the citizens can be aware of the possible dangers of being careless and may think twice.

Recommended Mitigation Measure	Mitigation Category	Responsible Organization	Target Completion Date	Cost Effectiveness
1. Public awareness & prevention				
1.1 Post warning signs in areas stating the likelihood of fires in the area due to the current weather conditions, including the dangers that may lead to wildfires.	Public Awareness	Chowan County Fire Department and Town of Edenton Fire Department. This work would be mainly the responsibility of Chowan County due to the lack of wooded area in the Town of Edenton.	Annually	Already included in the budget.
1.2 Require owners (by advertisement in the local papers) to annually remove any brush or downed limbs promptly to prevent fires from moving quickly along the ground.	Land Use	Chowan County Board of Commissioners & Town of Edenton Town Council to add new amendment to ordinances	Annually	Already included in the budget.
<p>Monitoring and Evaluation Indicators for the Task Force: Public input will be the effective evaluation tool to see if the advertisements are noticed. Compare records of past years to the current amount of fires in the area to judge whether or not the advertisements are effective.</p>				

Drought

Drought is not the type of hazard that can be prevented. We cannot control water and where and when it may rain, or how hot and humid it will get throughout the day. What we can do is take precautions, once a drought has occurred, and try to prevent unnecessary usage of water during that time.

Recommended Mitigation Measure	Mitigation Category	Responsible Organization	Target Completion Date	Cost Effectiveness
1. Minimize damage by drought in advance				
1.1 Assign new regulations that will revise the current water level for both the Town of Edenton Water Department and The Chowan County Water Department	Prevention	County and Town Water Departments working together to revise current water levels. Chowan County Board of Commissioners and the Town of Edenton Town Council to amend the water levels.	Assigning new regulations in 2005	No additional costs to either the County or Town water departments.
2. Public awareness				
2.1 Prepare County and Town notification when water conservation plans are in effect once the water levels drop below the revised County and Town water levels.	Prevention	County and Town Water Departments to notify public of low levels through mailings and radio announcements	Notify public as needed	Create additional funding within County and Town water departments.
Monitoring and Evaluation Indicators for the Task Force: Assign certain time of the year for water table level to be reviewed. Compare water table levels with past levels to determine if change is effective.				

Severe Winter Storms

Severe winter storms are not the type of hazard that can be prevented. We cannot control weather and where a cold front and moisture in the area is to be released. What we can do is take precautions before a severe winter storm occurs and try to prevent unnecessary travel during that time.

Recommended Mitigation Measure	Mitigation Category	Responsible Organization	Target Completion Date	Cost Effectiveness
1. Minimize damage from heavy snowfall amounts				
1.1 Map previously damaged areas due to heavy snowfall amounts, such as roof and power line damage.	Prevention	Chowan County Land Records to handle mapping with help from Emergency Services.	2005	Currently, the County has budgeted for GIS work; this additional mapping would be covered under the same budget.
2. Public Awareness				
2.1 Start radio or newspaper advertisement, to warn citizens of hazards and safety precautions that should be taken.	Public Awareness	Chowan County Emergency Services	Annually	The County has budgeted for radio broadcasts and possible advertising, which would also include the Town of Edenton listening area.
2.2 Prepare a series of mailings to citizens discussing what the proper safety procedures for each hazard addressed in this Plan.	Public Awareness	Chowan County Emergency Services and Town of Edenton Fire & Police Departments	Annually	The County and the Town of Edenton has a budget for mailings of which some money will be allocated to the County EMS as well as the Town fire and police departments.
Monitoring and Evaluation Indicators for the Task Force:				
Use public input as a means of evaluating whether or not these extra steps are effective.				

A. Capability Assessment

The above recommended mitigation measures are a direct result of the Town and County analyzing their own capability to implement mitigation efforts within their jurisdictions. As addressed in Section VI of this Plan, the legal, institutional, and technical capability exists to implement mitigation efforts due to the Town and County's wide array of available staff and departments. Because the town and County have a good working relationship, much information and resources are shared, which helps extend funds when they are limited. Ordinances and plans are already in place in order to satisfy the legal capability in implementing these hazard mitigation goals. The Town and County have selected responsible organizations in the above tables based on their knowledge of the mitigation action, the adequate staffing to perform the task, and their legal capability to do so.

The political climate within the Town of Edenton and Chowan County could not be better for a positive response to hazard mitigation. The Town and County, having just experienced the wrath of Hurricane Isabel and the numerous months of recovery that

followed, are anxious to execute the goals necessary, within their fiscal capability, to mitigate future hazards.

Fiscal capability is a very important consideration for a Town and County with limited income. As stated earlier, the mitigation actions stated above are direct result of an assessment of costs for each action and a time for completion, based on the availability of funds. These proposed actions were not only reviewed by the departments in charge of implementation, but also by those in the town and County in charge of the budget. Therefore, the Town and County have chosen to implement only those goals that are realistic based on their fiscal capability.

**Appendix J:
Future Land Use Map Classification Compatibility Matrix**

*Chowan County Jurisdiction
Zoning Ordinance Requirements*

	Chowan County Zoning Districts										
	R5	R15	R25	RMH25	R40	A1	B1	B2	B3	I1	I2
Min. Lot Area Requirements (sq. ft.)											
<i>Single-family dwelling</i>	5,000	15,000	25,000	25,000	40,000	40,000	5,000	5,000	5,000	N/A	N/A
<i>Two-family dwelling</i>	9,100	N/A	32,500	32,500	N/A	N/A	9,100	9,100	9,100	N/A	N/A
Multifamily dwelling											
1 st dwelling unit	5,000	N/A	N/A	N/A	N/A	N/A	5,000	5,000	5,000	N/A	N/A
2 nd dwelling unit	4,100	N/A	N/A	N/A	N/A	N/A	4,100	4,100	4,100	N/A	N/A
Each add'l dwelling unit	4,100	N/A	N/A	N/A	N/A	N/A	4,100	4,100	4,100	N/A	N/A
<i>Other permissible uses</i>	5,000	15,000	25,000	25,000	40,000	40,000	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>
Maximum dwellings per acre*	10.4 du/ac*	2.9 du/ac*	1.7 du/ac*	1.7 du/ac*	1.0 du/ac*	1.0 du/ac*	10.4 du/ac*	10.4 du/ac*	10.4 du/ac*	N/A	N/A
Building Height (ft.)	35	35	35	35	35	35	<i>b</i>	<i>b</i>	35	<i>b</i>	<i>b</i>
Future LU Map Classifications											
Residential Agricultural >1du/ac	IN	IN	IN	IN	IN	GC	IN	IN	IN	IN	IN

Low Density Residential 1-2 du/ac	CC	CC	GC	GC	GC	IN	IN	IN	IN	IN	IN
	R5	R15	R25	RMH25	R40	A1	B1	B2	B3	I1	I2
Medium/High Density Residential 3-7 du/ac	GC	GC	IN	IN	IN	IN	GC	GC	GC	IN	IN
Commercial 1 per ac	IN	IN	IN	IN	IN	IN	GC	GC	GC	CC	CC
Industrial 1 per 20 ac	IN	IN	IN	IN	IN	IN	CC	CC	IN	GC	GC
Conservation/Open Space	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

* Maximum residential density limits for traditional neighborhood developments is as follows: 15 units per acre in R5, B1, B2, and B3 zoning districts; 6 units per acre in R15 zoning districts; 4 units per acre in R25 and RMH25, R40, and A1 zoning districts.

- a As needed to comply with applicable setback, parking, and screening requirements (Zoning Ordinance Article 10) plus the minimum lot area determined by the Environmental Health Services Division of the Albemarle Regional Health Department to be necessary for an on-site septic system, if applicable.
- b No maximum building height. However, all building setbacks shall increase one foot for every foot in height between 50 feet and 80 feet. No additional setback is required for buildings greater than 80 feet in height.

GC Generally Consistent
 CC Conditionally Consistent
 IN Inconsistent
 N/A Not Applicable

Note: Zoning requirements and standards delineated in this table are current as of November 12, 2007 and are subject to amendment by the Chowan County Board of County Commissioners. This matrix illustrates general compatibility between future land use map classifications and current zoning regulations and is not intended for regulatory or permitting purposes. A use consistent with any future amendment to the cited zoning regulations delineated in this table will not, pursuant to North Carolina General Statute §153A-341, be necessarily considered by the Chowan County Board of Commissioners as being inconsistent with this Land Use Plan as adopted. Consistency of a proposed use or proposed development plan with zoning regulations and this Land Use Plan can only be determined after a thorough evaluation of the specifics of the proposal, including submission of any required permit application and site or plot plan, and a complete review of all applicable zoning regulations.

This chart shows which zoning classification(s) are compatible with each Future Land Use Map classification. Zoning classifications are 'Generally Consistent' with the FLUM categories when the range of uses or intensity of development allowed within the zoning classification are similar to those generally anticipated in the FLUM category. Zoning classifications are 'Conditionally Consistent' with the FLUM categories when the use or intensity of development permitted in the zoning classification would, under prescribed conditions and safeguards, be compatible with the uses anticipated in the FLUM category. Zoning classifications are 'Inconsistent' with the FLUM categories when the use or intensity of development permitted in the zoning classification would not be compatible with the uses or intensity of development anticipated in the FLUM category.

*Town of Edenton Jurisdiction
Unified Development Ordinance Requirements*

	Edenton Zoning Districts											
	RA	R40	R20	R14	R10	R5	CD	CH	CN	MA/OS	IW	SC
Min. Lot Area Requirements (sq. ft.)												
<i>Single-family dwelling</i>	5 acres	40,000	20,000	14,000	10,000	5,000	5,000	5,000	5,000	5,000	N/A	5 acres
<i>Two-family dwelling</i>	N/A	N/A	N/A	21,000	15,000	7,500	7,500	7,500	7,500	7,500	N/A	N/A
Multifamily dwelling												
1 st dwelling unit	N/A	40,000	20,000	14,000	10,000	5,000	5,000	5,000	5,000	5,000	N/A	N/A
2 nd dwelling unit	N/A	40,000	20,000	7,000	5,000	2,500	2,500	2,500	2,500	2,500	N/A	N/A
Each add'l dwelling unit	N/A	40,000	20,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	N/A	N/A
<i>Other permissible uses</i>	5 acres	40,000	20,000	14,000	10,000	5,000	N/A	30,000	N/A	<i>a</i>	N/A	5 acres
Maximum dwellings per acre*	1.0 per 5 acres	1.0	2.1	9.5	11.5	14.0	14.0	14.0	14.0	14.0	N/A	N/A
Building Height (ft.)	35	35	35	35	35	35	50	50	50	50	50	50
Future LU Map Classifications												
Low Density Residential 1-3 du/ac	GC	GC	GC	CC	CC	CC	CC	IN	CC	IN	IN	IN
Medium/High Density Residential 3-7 du/ac, medium 8-10 du/ac, high	IN	IN	IN	GC	GC	GC	CC	CC	IN	CC	IN	IN

	RA	R40	R20	R14	R10	R5	CD	CH	CN	MA/OS	IW	SC
General Commercial 1 per ac to 1 per 5 ac	IN	IN	IN	IN	IN	IN	IN	GC	GC	IN	CC	GC
Downtown Mixed Use 4 per ac	IN	IN	IN	IN	IN	IN	GC	IN	IN	IN	IN	IN
Public & Institutional 1 per 5 ac	IN	IN	IN	IN	IN	IN	CC	CC	IN	GC	IN	CC
Industrial 1 per 3 ac	IN	IN	IN	IN	IN	IN	IN	CC	IN	IN	GC	IN
Conservation/Open Space	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

a No minimum, except that permissible residential uses must have a minimum of 20,000 square feet.

GC Generally Consistent
 CC Conditionally Consistent
 IN Inconsistent
 N/A Not Applicable

Note: Zoning requirements and standards delineated in this table are current as of November 12, 2007 and are subject to amendment by the Edenton Town Council. This matrix illustrates general compatibility between future land use map classifications and current zoning regulations and is not intended for regulatory or permitting purposes. A use consistent with any future amendment to the cited zoning regulations delineated in this table will not, pursuant to North Carolina General Statute §160A-383, be necessarily considered by the Edenton Town Council as being inconsistent with this Land Use Plan as adopted. Consistency of a proposed use or proposed development plan with zoning regulations and this Land Use Plan can only be determined after a thorough evaluation of the specifics of the proposal, including submission of any required permit application and site or plot plan, and a complete review of all applicable zoning regulations.

This chart shows which zoning classification(s) are compatible with the Future Land Use Map classifications. Zoning classifications are 'Generally Consistent' with the FLUM categories when the range of uses or intensity of development allowed within the zoning classification are similar to those generally anticipated in the FLUM category. Zoning classifications are 'Conditionally Consistent' with the FLUM categories when the use or intensity of development permitted in the zoning classification would, under prescribed conditions and safeguards, be compatible with the uses anticipated in the FLUM category. Zoning classifications are 'Inconsistent' with the FLUM categories when the use or intensity of development permitted in the zoning classification would not be compatible with the uses or intensity of development anticipated in the FLUM category. Overall, the existing zoning district regulations are compatible with the FLUM categories. No zoning text or map amendments are anticipated to further ensure compatibility.