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# Introduction

# BACKGROUND

The 2005 Currituck County Land Use Plan represents an update to the 1990 Currituck County Land Use Plan, which was prepared by the Currituck County Planning Board, Board of Commissioners and Planning Department. The 1990 plan was locally adopted by the Currituck County Board of Commissioners on June 3, 1991, and was certified by the Coastal Resources Commission (CRC) on July 25, 1991. A draft update to the 1990 Land Use Plan was prepared in 1998, but was not adopted by the County. As a result, the 1990 plan remained the "plan of record" or official land use plan. However, there was beneficial information contained in the 1998 draft plan, which was used to assist in development of the current planning effort.

The 2005 Currituck County Land Use Plan Update is prepared in accordance with the requirements contained in the North Carolina Coastal Area Management Act (CAMA), the North Carolina Coastal Resources Commission (CRC) Land Use Planning Requirements [15A NCAC7B] and the relevant planning process requirements of Local Planning and Management Grants [1 5A NCAC 7L]. The Land Use Plan Update also utilizes the methodology and data sources suggested by the Technical Manual for Coastal Land Use Planning, prepared by the North Carolina Department of Environment and Natural Resources.

In November 2001, the CRC adopted revisions to the 1996 Land Use Planning Requirements. The new guidelines are designed to be less complicated than past guidelines, better tailored to the needs of local governments and more in line with the goals of CAMA. The revised guidelines became effective in August 2002, and are the basis for this planning effort.

The CAMA legislation requires that each of the twenty coastal counties prepare and adopt a land use plan. Incorporated municipalities within these counties have either the option of adopting individual plans, or the option of falling under the authority of the County plan. This Land Use Plan encompasses the entirety of the County.

# PURPOSE OF THE PLAN

The Land Use Plan is intended to provide a framework that will guide local government officials and private citizens as they make day-to-day and long-term decisions affecting development. The Land Use Plan contains information about the physical appearance of Currituck County as it exists today, what directions the County should take in the future and the steps that need to be taken to get there.

By serving as the overall "blueprint" for development of Currituck County, the implementation of the Land Use Plan will result in the most suitable and appropriate use of the land and provision of public services. Use of the Plan will lead to the protection of natural resources, as well as public health, safety and welfare.

The Land Use Plan focuses on the physical development of Currituck County. It contains policy statements established through the identification of community goals (broad statements describing the values of the community) and implementation actions (i.e. actions to be taken to fulfill community goals and to implement policies). The Plan is general, or "broad brush," in that its recommendations are area-wide, rather than site specific. The Land Use Plan is also comprehensive in that it includes all areas of the County, as well as all elements that affect its physical development (such as population trends, environmental features, utilities, transportation and housing).

# A GUIDE TO DECISION-MAKING

The Land Use Plan serves as a policy guide for decision making on matters related to the physical development of the County. Typical decisions facing appointed and elected officials include rezoning requests and proposals to change land use regulations. In addition to serving as a policy guide, the Land Use Plan is used by citizens, developers, and administrators to obtain facts about the County. The Plan will also be used by local, state and federal agencies in various permitting decisions (including CAMA permits), project funding and project consistency determinations. The effective period for the 2005 Land Use Plan Update is the ten-year period following adoption of the plan.

# PLANNING SUBAREAS

Currituck County is geographically divided into three distinct subareas:

- Mainland, including Gibbs Woods;
- Knotts Island; and
- Outer Banks beaches.

Due to the vast differences (such as geography, development patterns, and economy) the Land Use Plan addresses these areas individually. For an overview map of the townships and communities in Currituck County, see Map 1.1.

Even with these distinctions between subareas, there are also large differences within these subareas. For example, the Outer Banks beaches are really composed of two vastly different beach communities. The northern most part called Carova and often referred to as the "Off-Road" area, approximately 8 miles in length, has no asphalted or improved roads, no central water or sewer systems and is designated by the Federal Government as a C.B.R.A (Coastal Barrier Resource Act zone) which prohibits any federal flood insurance policies to be written for this area.

In contrast, Corolla, or the "On Road" area of the Outer Banks beaches has access from a State maintained road (NC-12 Ocean Trail), is developed mostly as PUD's with central water and sewage, and all utilities underground.

Major distinctions can also be drawn between the Northern Mainland, with the huge influence of Hampton Roads, Virginia area creating demands for residential development, while in the Southern sector, the effect of service related businesses to serve Currituck and Dare County beaches is creating a metal building/manufacturing land use that is conflicting with upscale residential development.

# **CITIZEN PARTICIPATION IN PLAN DEVELOPMENT**

The Coastal Resources Commission places great emphasis on involving citizens and property owners in the development and implementation of the Land Use Plan. The goal is to involve as many citizens as possible in the development of the plan, and thereby enhance the likelihood that the plan will be implemented. Accordingly, as part of the planning process, the Currituck County Board of Commissioners adopted a Citizen Participation Plan (Appendix A) that designated a Steering Committee as the lead group responsible for preparation of the Land Use Plan. The Steering Committee is composed of citizens that represent a broad cross-section of the population of Currituck County. The purpose of the Citizen Participation Plan is to ensure that all interested citizens have an opportunity to participate in the development of the plan. The Citizen Participation Plan describes the public participation. The Citizen Participation Plan also provides a general outline of the Steering Committee's meeting schedule for discussion and development of the Land Use Plan.

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## Phase 1 Citizen Participation Meetings

In accordance with the Citizen Participation Plan for Phase 1, the Steering Committee held a series of initial public information meetings in the three subareas. These meetings were held to receive public input from citizens on issues, concerns and opportunities available to the County. The following meetings were held and the number of attendees is shown below:

- November 24, 2003 at the Old Historic Courthouse Building in Currituck (16)
- December 9, 2003 at the Corolla Fire Department
- January 20, 2004 at Knotts Island Elementary School (42)
- January 26, 2004 at Griggs Elementary School (12)

A total of 94 people attended and contributed to these discussions.

## **Phase 2 Citizen Participation Meetings**

Citizen participation during Phase 2 also focused on a series of face-to-face meetings around the county to receive public input from citizens on proposed policies, actions and the land classification map. Future of Currituck Week featured four open-house-style public input meetings hosted by the Steering Committee and designed to maximize citizen comment and dialogue with the Committee members. Each of the four meetings was held in a different area of the county to allow for maximum participation by citizens nearby. The following meetings were held and the number of attendees is shown below:

•	February 14,	2005 at Moyock Middle School	(75)
•	February 15,	2005 at the Corolla Fire Department	(150)
•	February 16,	2005 at Griggs Elementary School	(65)
•	February 17,	2005 at Knotts Island Elementary School	(35)
	June 16,	2005 at Powells Point Community Center	
•	July 21,	2005 at Powells Point Community Center	(75)

More than 325 people attended and contributed to these discussions.

## Other Avenues for Public Input

All meetings of the Steering Committee held over the course of the plan's development were open to the public. Participation by non-resident property owners in the planning process was encouraged by regular planning updates to the Currituck County website, including the posting of an opinion survey or questionnaire (see Appendix B) to be submitted online. Viewers of the website were encouraged to direct questions and comments to the consultant retained by the County to assist in development of the Plan.

**During Phase 1**, the Land Use Plan Steering Committee reviewed the technical information developed for the Land Use Plan Update and identified major land use assets and problems as a basis for the description of the Community Concerns and Aspirations section of this document. The assets, problems and key planning issues identified through this process, as well as public comments provided at the Public Information Meetings were used by the Steering Committee to develop the Community Vision. The Community Vision serves as the foundation for the objectives and policies contained in the Land Use Plan.

During Phase 2, the Steering Committee reviewed each and every policy and implementation action proposed for the plan. The Committee also reviewed all mapped information leading to the

development of the Land Classification Map. Committee members were directly involved in framing land use trends and policy directions for all subareas of the County. They also served as hosts for the Future of Currituck meetings, actively engaging citizens in dialogue about the proposed policies and actions during a "walk-around survey". Following the Open Houses, the Committee met again to review and edit those policy and action statements for which there was some level of disagreement. Finally, Committee members met jointly with the board of County Commissioners and County Planning Board twice during Phase 2 to identify priority issues and to discuss proposed policy solutions.

## **GROWTH ANALYSIS**

One of several steps in the planning process included an analysis of existing and emerging conditions that affect Currituck County. Examples include current and projected population trends, housing characteristics and economic conditions. Natural systems and environmental hazards were analyzed and compiled onto an environmental composite map, customized for each subarea. This map depicts environmentally sensitive areas where development may already be limited or limited in the future due to public safety issues or protection of the environment. Other factors that were analyzed and considered in the planning process included exiting land use and development patterns, projected land use needs and community facilities and utilities.

A land suitability analysis was conducted to determine the relative suitability for development of land in each subarea of the County. Considerations included proximity to important natural features, existing and planned community services and existing developed areas. The impact of existing local, state and federal regulations affecting growth and development was also factored in to the analysis.

# A PLAN FOR THE FUTURE

A Plan for the Future was developed and includes land use and development goals and policies for the County and its subareas. This section of the Land Use Plan addressed the CRC's management topics, which include the following: Public Access, Land Use Compatibility, Infrastructure Carrying Capacity, Natural Hazard Areas, Water Quality and Local Areas of Concern. A Land Classification Map was developed to show areas designated for conservation / open space as well as areas that are expected to see future growth and development of varying degrees.

# TOOLS FOR MANAGING DEVELOPMENT

An implementation strategy, or Tools for Managing Development, was developed to describe Currituck County's implementation strategies for the updated Land Use Plan. This includes a description of existing ordinances, policies, codes and regulations and how they will be coordinated and employed to implement land use and development policies. This section also describes additional tools, such as new or amended ordinances, capital improvements, property acquisitions or other specific projects selected by the County to implement the updated Land Use Plan.

#### **CURRITUCK COUNTY 2006 LAND USE PLAN**

#### **Board of County Commissioners**

Eldon L. Miller, Jr. J. Owen Etheridge Ernie Bowden Paul R. Martin, Vice-Chairman S. Paul O'Neal, Chairman

#### Land Use Plan Steering Committee

David Palmer, Chair Martha Burns Woody Gardner Eddie Hawley Connie Johnson Joe Kovacs Phil Kratzer Sandra Sutton Ginger Webster Jerry Wright

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#### Consultants

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## Currituck is Calling

Currituck is calling...can you hear The chant of the Canadas, Snow geese and Swan; The lapping of waters against bulkheads and shore And the mighty Nor'easters roar?

Currituck is calling...can you see That round red moon winking at me And the rising sun flaming up o'er the edge As pink clouds float out to the sea?

Currituck is calling...can you feel The warmth 'midst neighbors genuine and as real As the cool breezes sneaking up from the sounds And gale forces stronger than steel?

Currituck is calling...calling still Calling out from the distant past To a future with challenges vast Providing opportunities for any and all Who will hear and see and feel... Currituck is calling...

-Hope Slaughter, Moyock

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# SECTION 1: COMMUNITY CONCERNS AND ASPIRATIONS

# INTRODUCTION

The purpose of the Community Concerns and Aspirations section of the Currituck County Land Use Plan is to provide overall guidance and direction for the development of the plan. The Land Use Plan Steering Committee used the following three-part process to describe dominant growth-related conditions that influence land use and development patterns in Currituck County, describe key planning issues and develop a community vision:

- Review of technical information related to existing and emerging conditions;
- Identification of major community assets and problems related to land use and development on a subarea basis; and
- Development of the community vision statement to serve as the foundation for more specific objectives and policies stated elsewhere in the Land Use Plan.

# **KEY PLANNING ISSUES BY SUBAREA**

Between November 2003 and January 2004, the Land Use Plan Steering Committee held four community meetings with a combined total of 94 citizens attending these meetings. The purpose of the meetings was to familiarize the residents of the subareas with the planning process, as well as the public participation tools that would be used to involve the public in plan development. Citizens who attended the meetings also helped to identify and summarize the planning conditions and concerns that are important to the future of each subarea of Currituck County.

Committee members and citizens who participated in the meetings identified the most pressing land use issues or concerns facing each subarea. Beginning with the community meeting in Knotts Island, participants were asked to focus their comments around the Coastal Resources Commission's management topics. The management topics are categories of local land use and development policies determined by the CRC to be essential for proper use, development and protection of natural and manmade resources in the coastal area. The management topics include public access, land use compatibility, infrastructure carrying capacity, natural hazard areas, water quality and local areas of concern.

Following the identification of issues that should be the focus of the Land Use Plan, participants were asked to vote on the most important issues. The results of the citizens' comments are summarized below. Appendix C contains a complete list of issues identified during these meetings and the number of votes each issue received.

## Dominant Factors Effecting Growth Countywide

Over the last three decades Currituck County has experienced a phenomenal increase in population, which is expected to continue into the next century. In 2004, Currituck was ranked the second fastest growing county of the 100 counties in North Carolina and the 54th fastest growing county in the country. County building permits for single-family homes have been exceeding 600 per year over the last three years. Countywide this growth is attributable to several factors including close proximity to the metropolitan area of Hampton Roads Virginia and Dare County, low taxes and housing costs, a high quality of life, excellent schools and an abundance of desirable shoreline property. These factors are described in more detail for each subarea below.

#### Mainland (Subarea 1)

This is the largest subarea of the County and extends from the Virginia line south to Point Harbor and from Camden County to North Landing River (See Map 0.1). The dominant growth related concerns for this area include the conversion of farmland to residential development and the associated challenge of expanding infrastructure to support this conversion. In addition, and as the Soil Suitability Map (See Map 3.2) shows, most of the Mainland has "severe limitations" for on-site septic systems. Due to the lack of central wastewater treatment facilities to serve this area, coupled with the huge economic pressure for development, threats to adjacent water quality and groundwater may become more pronounced in the future.

Adding to this concern is the availability of potable water to serve these new developments. Currently the County is producing one million gpd at its mainland plant located in Maple. However, due to higher demands, it has been purchasing 200,000 gpd since 2000 from Camden County. Because of this, Currituck is now exploring reverse osmosis (R.O.) technology to meet the projected demands created by expanding residential and commercial land uses. This treatment process will require a discharge permit for the residual R.O. brine.

Although County development regulations are considered to be extremely strong, stormwater management concerns have been escalating as impervious surfaces and associated run-off have increased. For the Mainland, these concerns focus mostly on the abandonment and filling in of relic as well as functioning farm ditches to accommodate new development. Moreover, highly engineered stormwater management plans are being proposed to meet county requirements while existing, yet less sophisticated, systems are not being well maintained.

An additional Mainland concern is the Mid-Currituck Sound Bridge. As conditions exist today without this bridge, weekend traffic backs up as far north as Grandy on US- 158 "imprisoning" residents within their homes until the weekday. This has a devastating effect on the quality of life, the ability to deliver emergency services, the local economy and the ambient air quality of the area. A recent NCDOT study found that a bridge is not necessary if certain widening projects occur on US 158 and NC 12. Proponents of the bridge believe that it is very much needed to improve east-west travel, enhance economic development, and provide better delivery of services to the Currituck Outer Banks. This continues to be a major issue both for the Mainland and the Outer Banks beaches.

Two meetings were held on the mainland during the issue identification stage of plan development. The first meeting was held on November 24, 2003, at the Old Historic Courthouse in Currituck, for residents and property owners from the upper portion of the mainland. Major concerns identified at the upper mainland meeting include the following:

- Open space and rural areas are important to the quality of life in Currituck County
- Currituck County should continue to examine and consider the purchase of development rights
- Citizens are satisfied with the level of environmental protection provided by state and county regulations
- More economic development activity is desired to improve or generate additional revenue and improve the economy of the area
- Drainage issues are a concern that needs to be addressed
- Citizens are concerned with the loss of farmland caused by development pressures
- Maintaining the traditional way-of-life is important to long-time residents
- Additional street lights and sidewalks are desired
- Equal levels of fire protection should be provided throughout the County

A second issue identification meeting was held for residents and property owners of the lower mainland area at Griggs Elementary School on January 26, 2004. Citizen comments revolved around six land use plan management topics and are summarized below:

#### Public Water Access

- Citizens are primarily in favor of additional public water access
- A land-banking plan for acquisition of waterfront property / access facilities throughout the County is favored

## Natural Hazards

- The proposed mid-County bridge is needed to assist in hurricane evacuations
- Control of drainage problems associated with storm events needs to be coordinated with the NC Department of Transportation (NCDOT) and Currituck County

## Infrastructure Carrying Capacity

- The mid-County bridge is needed to alleviate traffic congestion in the southern part of the County
- The County's water system needs improvements to provide sufficient fire suppression capability

## Land Use Compatibility

- Construction of commercial buildings should be regulated by aesthetics/architectural design standards and restrictive covenants
- The appearance of the Highway 158/168 corridor needs improvement; suggestions include reducing the number of billboards and increasing landscape buffers

## Water Quality

• The ban on discharge into non-ocean surface waters should be continued to protect water quality

#### Local Areas of Concern

- The County needs the proposed mid-County bridge
- A police/sheriff substation is needed in the southern part of the County

#### Knotts Island (Subarea 2)

Knotts Island represents the smallest subarea of the County. Infrastructure related concerns and increased density pressures from the Hampton Roads area represent the dominant issues for the residents. Having no central water or sewer system (and no future desire for such), a very high seasonal water table, limited access and extensive wetlands on the western half of the island all argue for the need for large lot zoning of this area. Currently, the minimum lot size is 3 acres; however exceptions to this zoning rule allow up to five 40,000 square foot lots to be subdivided from the parent parcel.

Residents have mixed feeling about large lot zoning and the desire to subdivide an acre as a gift for family members. In addition, issues concerning the preservation of the small town rural character and the protection of the natural environment are foremost in residents' minds as pressure for more residential development continues. A community meeting was held at Knotts Island Elementary School on January 20, 2004. Major concerns for Knotts Island identified at this meeting revolved around the Land Use Plan management topics and are summarized below:

## Public Water Access

- Public water access on Knotts Island is adequate, with the exception of the need for additional parking at some sites, especially those on Cason Point Road and Brumley Road
- There is little support for developing additional water access sites on Knotts Island (However it should be noted that the Land Use and Development Policies 2005 Citizen Opinion Survey conducted by Eastern Carolina University indicated support for additional public water access)

## Natural Hazards

- Improved public communications from the County's public information office to residents following hurricanes and other disasters is needed
- Disaster-related communications could be facilitated by the establishment of an information phone line for Knotts Island residents

## Infrastructure Carrying Capacity

- Road maintenance and drainage improvements are greatly needed; residents encouraged better coordination with the NCDOT regarding roadside ditch maintenance
- A paid fire department and improved fire rating (for insurance purposes) are needed

## Land Use Compatibility

- Residents strongly support a minimum three-acre lot size for Knotts Island
- Many residents do not support cluster developments
- Caps on mobile home parks are needed

## Water Quality

- Reduce building density to protect and improve water quality.
- Initiate a water-testing program

## Local Areas of Concern

Residents identified the need for additional County services on Knotts Island, including a public library, additional recreation programs, and trash collection.

## **Outer Banks Beaches (Subarea 3)**

The tremendous increase in the value and demand for beach property fueled by investment interests is rapidly changing the unique character that distinguishes this community from other "Beach Towns". As described earlier, this subarea can be further divided into the areas of Corolla and Carova.

## Corolla

Although this section of the beach is approximately 82% built out, there are a variety of growth related issues that Corolla continues to struggle with, including the following:

• Large Houses - The demand for bigger homes with more bedrooms and amenities is a

major concern both in terms of the loss of the natural environment and the associated stress it places on the infrastructure.

- Stormwater Especially in the older subdivisions such as Whalehead, stormwater management problems are becoming more pronounced as larger houses consume more natural infiltration areas and create greater impervious surfaces. Without outfalls or large detention basins, stormwater has flooded low-lying homes and streets. Emergency pumping of this water to the ocean has been approved twice by the Division of Water Quality in the last four years. Efforts have been made to create a solution to this growing concern.
- Mid Currituck Sound Bridge As mentioned earlier, this major transportation improvement has been a divisive issue and will certainly change the pace if not the character of development both on the Mainland and the beach.

#### Carova

Only 19% of this portion of the beach is built out principally because of the lack of improved roads to access this section of the Outer Banks. Much as of this land area has been subdivided into substandard sized lots prior to the County's adoption of the a subdivision ordinance. Extensive wetlands and natural habitat areas characterize much of this area with an abundance of wildlife and maritime forests.

Even with no improved roads, this area is also struggling with the same growth related concerns that Corolla is experiencing. In addition, this portion of the beach has been designated by Congress as a Coastal Barrier Resource Act zone; this means that Federal grants and programs are not available, including federal flood insurance. With small lots, minimum basic infrastructure, and access only by four wheel drive vehicles, planning for growth in this section of the subarea will be most challenging.

The issue identification meeting for the Outer Banks beaches was held on December 9, 2003, at the Corolla Fire Department in the Whalehead Subdivision. Residents identified the following issues or areas of concern:

- New development should not be approved without adequate infrastructure
- Additional public facilities are needed to improve quality of life for permanent residents
- Commercial uses on the beach should be centralized
- Transportation improvements are needed to facilitate ease of travel
- The number of very large houses and resulting seasonal population is stressing the infrastructure of the area
- Issues with the four-wheel-drive beach road need to be addressed
- Adequate water service is needed
- Maintaining the cleanliness of the beach is important

# LAND USE PLAN QUESTIONNAIRE

In addition to the numerous subarea meetings held throughout the County, the Planning Staff also attempted to garner opinions from those property owners who were unable to attend these meetings. This was done by posting a Land Use Plan Questionnaire on the County website from October 2004 to March 2005. A total of 41 questionnaires were completed on-line and a summary of the responses are provided below:

• The majority of respondents were non-resident property owners (73%).

- Open Space and the natural environment is what 71% said they liked most about the County.
- "Travel/Access to Corolla" is what 42% said they liked least about the County followed by "lack of local control or decision making" (33%).
- Concerning public access to the beach and to public trust waters, 76% said the County "Has about the right number of accesses".
- 63% indicated that the County land development regulations are "inadequate in protecting the environment".
- Reducing the risk of natural hazards such as hurricanes and nor'easters, 38% felt the county was doing a "fair job" while 33% "Don't know".
- In terms of protecting water quality, most thought the County development regulations were adequate with an average rating of "5" on a scale of 1 to 10.
- The most important issue facing the County in the next 5 years is "Over population" (36%) followed by the "Northern Bridge" with 33%.
- Lastly, 46% expressed a desire for the County to "limit development" when asked if there are any other comments you would like to make.

These survey results appear to support the views of those in attendance at the subarea meetings on similar but not identical issues. In addition, the proposed policy statements identified by the Steering Committee address most if not all the concerns raised in this website questionnaire.

# VISION STATEMENT

In conjunction with public participation, the Vision Statement for Currituck County was developed by the Land Use Plan Steering Committee. The purpose of the Vision Statement is to provide the foundation for setting priorities, defining goals and developing land use policies to achieve local government goals. The following is Currituck County's Planning Vision:

Having been entrusted by the Currituck County Board of Commissioners to assist in the development of a comprehensive Land Use Plan (LUP) that fulfills the specific requirements of the CAMA Land Use Plan Guidelines and Coastal Resources Commission (CRC) certification, and having been entrusted to oversee the preparation of the LUP, including the advisement and coordination of the plan development based upon each subarea 's special environment and its socioeconomic requirements, as well as the stated expectations of citizens and property owners, we the Currituck County Land Use Plan Steering Committee submit the following Community Vision Statement:

We want to protect our vital land and water natural resources and preserve farmland and open spaces while building a thriving and sustainable local economy.

We will strive to maintain and enhance the quality of life within our communities for present and future generations by providing:

- economic opportunities and affordable housing for all citizens
- quality schools and educational, health and safety services
- additional and enhanced recreational facilities
- sound transportation planning and water, waste, and stormwater services for a growing population
- an aesthetically pleasing environment

We value open and honest communication with all residents and property owners and continuing opportunities for public involvement in the development, implementation and updates of the Land Use Plan.

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# SECTION 2: POPULATION, HOUSING AND ECONOMY

## POPULATION

Information on Currituck County's permanent and seasonal population and the degree to which it will change during the planning period is an important component of the land use planning process. Population analysis can help identify growth areas, as well as the amount of land that should be allocated for future uses. Population trend analysis provides information on expected impacts on the area's natural resources and future infrastructure needs. Population age and income characteristics help estimate demands for different types of housing and related land use, as well as special needs of the community. Appendix D provides an explanation of demographic and population statistics and how they are compiled.

## County Growth Relative to Other NC Counties, Including Coastal Counties

Eighteen of the twenty North Carolina counties regulated by the Coastal Area Management Act (CAMA), including Currituck County, experienced a net permanent population growth from 1990 to 2000. During this period, only two coastal counties lost population (Bertie and Washington Counties). Currituck was the fourth fastest growing county of the CAMA counties and number eleven in growth of the 100 counties in North Carolina (Table 2.1).

Among the CAMA counties, the highest rates of permanent population growth from 1990 through 2000 have occurred in oceanfront counties including Brunswick, Currituck, Dare, New Hanover, and Pender (Table 2.1).

Counties (CAMA)	kegulated C	ounties in	gray)		
COUNTY	Year			Percent Cha	ange
	1980	1990	2000	1980-1990	1990-2000
JOHNSTON	70,599	81,306	121,942	15.2%	50.0%
WAKE	301,429	426,301	627,847	41.4%	47.3%
HOKE	20,383	22,856	33,646	12.1%	47.2%
UNION	70,436	84,210	123,671	19.6%	46.9%
BRUNSWICK	35,777	50,985	73,143	42.5%	43.5%
PENDER	22,262	28,855	41,082	29.6%	42.4%
MECKLENBURG	404,270	511,481	695,471	26.5%	36.0%
HARNETT	59,570	67,833	91,025	13.9%	34.2%
NEW HANOVER	103,471	120,284	160,327	16.2%	33.3%
CABARRUS	85,895	98,935	131,063	15.2%	32.5%
CURRITUCK	11,089	13,736	18,190	23.9%	32.4%
IREDELL	82,538	92,935	122,660	12.6%	32.0%
DARE	13,377	22,746	29,967	70.0%	31.7%
FRANKLIN	30,055	36,414	.,	21.2%	29.8%
HENDERSON	58,617	69,326	89,193	18.3%	28.7%
CHATHAM	33,415	38,759	49,329	16.0%	27.3%
SAMPSON	49,687	47,297	60,161	-4.8%	27.2%
POLK	12,984	14,416	18,324	11.0%	27.1%
MACON	20,178	23,499	29,811	16.5%	26.9%
LINCOLN	42,372	50,319		18.8%	26.8%
MOORE	50,505	59,000	74,769	16.8%	26.7%
GRANVILLE	34,043	38,341	48,498	12.6%	26.5%
DAVIE	24,599	27,859	34,835	13.3%	25.0%
JACKSON	25,811	26,846	33,121	4.0%	23.4%
PITT	90,146	108,480	133,813	20.3%	23.4%
GREENE	16,117	15,384	18,974	-4.5%	23.3%

Table 2.1 Total Population and Percent Change for North Carolina
Counties (CAMA Regulated Counties in gray)

North Carolina (	Joundes	(CAMA		
COUNTY	Year		Perc	ent Change
	1980	1990	2000 1980	)- 1990-2000
ORANGE	77,055	93,851	115,53721.8%	23.1%
DURHAM	152,235	181,854	223,314 19.5%	22.8%
DUPLIN	40,952	39,995	49,063 -2.3%	22.7%
CLAY	6,619	7,155	8,775 8.1%	22.6%
RANDOLPH	91,300	106,546	130,471 16.7%	
ALEXANDER	24,999	27,544	33,603 10.2%	22.0%
GUILFORD	317,154	347,420	421,0489.5%	21.2%
ALAMANCE	99,319	108,213	130,7949.0%	20.9%
CHEROKEE	18,933	20,170	24,298 6.5%	20.5%
STOKES	33,086	37,223	44,711 12.5%	20.1%
CATAWBA	105,208	118,412	141,68612.6%	19.7%
YADKIN	28,439	30,488	36,348 7.2%	19.2%
LEE	36,718	41,370	49,208 12.7%	
MCDOWELL	35,135	35,681	42,151 1.6%	18.1%
BUNCOMBE	160,897	174,778	206,3108.6%	18.0%
PERSON	29,164	30,180	35,623 3.5%	18.0%
ROWAN	99,186	110,605	130,34011.5%	
BURKE	72,504	75,740	89,145 4.5%	17.7%
ROBESON	101,610	105,170	123,2453.5%	17.2%
CAMDEN	5,829	5,904	6,885 1.3%	16.6%
DAVIDSON	113,162	126,677	147,24611.9%	
MADISON	16,827	16,953	19,635 0.7%	15.8%
WARREN	16,232	17,265	19,972 6.4%	15.7%
WATAUGA	31,666	36,952	42,695 16.7%	
AVERY	14,409	30,932 14,867	17,167 3.2%	15.5%
SURRY	59,449	61,704	71,219 3.8%	15.4%
YANCEY	14,934	15,419	17,774 3.2%	15.3%
FORSYTH	243,704	265,878	306,06 9.1%	15.1%
HAYWOOD	46,495	46,942	54,033 1.0%	15.1%
SWAIN	10,283	11,268	12,968 9.6%	15.1%
TRANSYLVANIA	23,417	25,520	29,334 9.0%	14.9%
MONTGOMERY	22,469	23,352	26,822 3.9%	14.9%
NASH	67,153	76,677	87,420 14.2%	
PAMLICO	10,398.0	11,368.0	12,934.9.3%	13.8%
CLEVELAND	83,435	84,713	96,290 1.5%	13.7%
CASWELL	20,705	20,693	23,501 -0.1%	13.6%
GATES	8,875	9,305	10,516 4.8%	13.0%
CARTERET	41,092	52,553	59,383 27.9%	
BLADEN STANLY	30,491	28,663	32,278 -6.0% 58,100 6.7%	12.6%
STANLY	48,517	51,765		12.2%
CRAVEN	71,043	81,613	91,436 14.9%	12.0%
WILSON	63,132	66,061	73,814 4.6%	11.7%
PASQUOTANK	28,462	31,298	34,897 10.0%	11.5%
ALLEGHANY GRAHAM	9,587 7,217	9,590 7,196	10,677 0.0% 7,993 -0.3%	11.3%
				11.1%
RUTHERFORD	53,787	56,919	62,899 5.8%	10.5%
JONES	9,705 58 657	9,414	10,403 -3.0%	10.5%
WILKES	58,657	59,393	65,632 1.3%	10.5%
VANCE	36,748	38,892	42,954 5.8%	10.4%
COLUMBUS	51,037	49,587	54,749 -2.8%	10.4%
CUMBERLAND	247,160	274,713	302,96 11.1%	10.3%
CALDWELL *	67,746	70,709	77,708 4.4%	9.9%
ASHE	22,325	22,209	24,384 -0.5%	9.8%
PERQUIMANS	9,486	10,447	11,368 10.1%	8.8%

 Table 2.1 Continued Total Population and Percent Change for

 North Carolina Counties (CAMA Regulated Counties in gray)

in gray)					
COUNTY	Year			Percent C	Change
	1980	1990	2000	1980-	1990-2000
GASTON	162,568	175,093	190,362	7.7%	8.7%
MITCHELL	14,428	14,433	15,687	0.0%	8.7%
WAYNE	97,054	104,666	113,329	7.8%	8.3%
ANSON	25,649	23,474	25,275	-8.5%	7.7%
HYDE	5,873	5,411	5,826	-7.9%	7.7%
TYRRELL	3,975	3,856	4,149	-3.0%	7.6%
ROCKINGHAM	83,426	86,064	91,928	3.2%	6.8%
SCOTLAND	32,273	33,763	35,998	4.6%	6.6%
BEAUFORT	40,355	42,283	44,958	4.8%	6.3%
NORTHAMPTON	22,195	20,798	22,086	-6.3%	6.2%
CHOWAN	12,558	13,506	14,150	7.5%	4.8%
RICHMOND	45,161	44,518	46,564	-1.4%	4.6%
LENOIR	59,819	57,274	59,614	-4.3%	4.1%
HALIFAX	55,076	55,516	57,370	0.8%	3.3%
HERTFORD	23,368	22,523	22,977	-3.6%	2.0%
MARTIN	25,948	25,078	25,554	-3.4%	1.9%
ONSLOW	112,784	149,838	150,355	32.9%	0.3%
EDGECOMBE	55,988	56,692	55,606	1.3%	-1.9%
WASHINGTON	14,801	13,997	13,723	-5.4%	-2.0%
BERTIE	21,024	20,388	19,763	-3.0%	-3.1%
North Carolina	5 880 095	6,632,448	8 048 962	12.8%	21.4%

Table 2.1 Continued Total Population and Percent Changefor North Carolina Counties (CAMA Regulated Countiesin gray)

Source: NC State Data Center \*Note 2000 population for Caldwell County (and, hence, North Carolina) contains an unofficial census correction.

# Currituck County Relative to Its Metropolitan Statistical Area

Currituck County is part of the Norfolk-Virginia Beach-Newport News Metropolitan Statistical Area (MSA) and is one of ten counties in Region R. Population has increased in Region R and the MSA since 1970 but the growth rate in Currituck County has been at much greater. This was especially true from 1970 to 1980 when the County experienced 59% growth. From 1990 to 2000 the growth rate was twice as high in the county as Region R and almost 4 times greater than the MSA (Table 2.2).

 Table 2.2 Population and Percent Change for Currituck County, Norfolk-VA Beach-Newport News MSA and Region R

Place	Year F			Percent Growth			
	1970	1980	1990	2000	1970-1980	1980-1990	1990-2000
Currituck County	6,976	11,089	13,736	18,190	59.0%	23.9%	32.4%
MSA	1,056,027	1,200,998	1,443,244	1,569,54	13.7%	20.2%	8.8%
Region R	97,302	114,325	130,206	149,671	17.5%	13.9%	14.9%

Source: US Census

## Geographic Distribution of Growth

The Currituck County subareas have had different growth trends over the past 30 years. Subarea 1, the mainland, accounts for majority of the county's population. The growth rate was over 58% from 1970-1980. Growth slowed during the 80s but increased again to over 31% from 1990 to

2000. Growth is attributed to the popularity of the mainland for commuters to Dare County and the metropolitan area of southeastern Virginia.

The population in subarea 2, Knotts Island, has almost tripled in size between 1970 and 2000 with the largest growth occurring between 1980 and 1990. The growth rate from 1990-2000 was similar to the rate on the mainland. Subarea 3, the Outer Banks, tripled its population between 1970 and 1980. Of the three subareas, the Outer Banks is the only one that experienced negative growth at some point since 1970. The period of negative growth occurred between 1980 and 1990. The growth rate then increased to 80% from 1990-2000, which is much higher than the growth rate on the mainland and Knotts Island. A reason for the overall growth increase is the national trend of population movement toward the coast. Although the growth rate on the Outer Banks is much higher than the mainland, the Outer Banks population only accounts for a fraction of the overall county population. Table 2.3 shows population changes for the County's subareas from 1970 to 2000.

		Year			Percent Growt	n	
Subarea	1970	1980	1990	2000	1970-1980	1980-1990	1990-2000
1 - Mainland	6407	10144	12324	16152	58.3%	21.5%	31.1%
2 - Knotts Island	457	519	1052	1390	13.6%	102.7%	32.1%
3 - Outer Banks	112	426	360	648	280.4%	-15.5%	80.0%
Total	6976	11089	13736	18190	59.0%	23.9%	32.4%

#### Table 2.3 Total Population and Percent Change for Currituck County and Subareas

Source: 1990 and 2000: DP-1 General Population and Housing Characteristics US Census Source: 1970 and 1980 Census Boundaries/Population NCCGIA

## **Population Age Characteristics**

An analysis of population broken down by age provides insight into the population trends that affect Currituck County. This data provides valuable information for use in projecting infrastructure, service, housing, and other special needs of the County, as well as land use needs.

Approximately 54% of the population on the mainland was between the ages of 20 and 59 in 1990. This percentage increased slightly to 55.5% in 2000. Although the percent of the population under 5 decreased by 1% from 1990 to 2000, the percent of the school age (5 to 19) population increased by 0.7%. The percent of the population over 60 years old decreased from 17.8% in 1990 to 16.7% in 2000. These trends indicate a stable population. The population is increasing over time and across population groups. No groups are experiencing significant increases or decreases. Table 2.4 shows the break down by age of the mainland population.

		1- Mainland		
Age	1990	% population	2000	% population
under 5	899	7.3%	1,012	6.3%
5-9	881	7.1%		1,1206.9%
10-14	879	7.1%	1,289	8.0%
15-19	809	6.6%	1,073	6.6%
20-29	1,709	13.9%	1,659	10.3%
30-39	2,149	17.4%	2,583	16.0%
40-49	1,614	13.1%	2,716	16.8%
50-59	1,193	9.7%	1,996	12.4%
60-69		1,1849.6%	1,344	8.3%
70-79	722	5.9%	912	5.6%
80+	285	2.3%	448	2.8%
Total	12,324		16,152	

Table 2.4 Mainland Population by Age Group

Source: US Census QT-P1Age Groups and Sex

Approximately 55% of the population on Knotts Island was between the ages of 20 and 59 in 1990. This percentage increased slightly to 57.2% in 2000. Although the percent of the population under 5 decreased by 3.7% from 1990 to 2000, the percent of the school age (5 to 19) population increased by 3%. The percent of the population over 60 years old decreased from 15.6% in 1990 to 13.9% in 2000. As on the mainland, these trends indicate a stable population. The population is increasing over time and across population groups. No groups are experiencing significant increases or decreases. Table 2.5 shows the break down by age of the Knotts Island population.

		2 - Knotts Islan		•
Age	1990	% population	2000	% population
under 5	91	8.7%	69	5.0%
5-9	85	8.1%	110	7.9%
10-14	65	6.2%	124	8.9%
15-19	69	6.6%	98	7.1%
20-29	148	14.1%	131	9.4%
30-39	199	18.9%	229	16.5%
40-49	141	13.4%	255	18.3%
50-59	90	8.6%	181	13.0%
60-69	88	8.4%	98	7.1%
70-79	60	5.7%	67	4.8%
80+	16	1.5%	28	2.0%
Total	1,052		1,390	

Table 2.5 Knotts Island Population by Age Group

Source: US Census QT-P1 Age Groups and Sex

On the Outer Banks persons over 60 years old made up 13.6% of the population in 1990. This number doubled to 27.3% of the population in 2000. Coastal areas, such as the Outer Banks, are popular retirement locations. Immigration and population aging account for the increase. This

trend has significant implications for housing, transportation, medical care and other personal and professional services. The younger working group population (20-39) accounted for 25.6% of the population in 1990 but fell to 17.7% in 2000. The decline may reflect high real estate prices and a lack of year round permanent employment resulting in the emigration of the younger working group population. A direct link with this decline is the decrease in the school age (5 to 19) percentage of the population. It has decreased from 18.1% of the total population in 1990 to 9.3% in 2000. These trends have implications for economic development planning, schools and other services. Table 2.6 shows the breakdown of the Outer Banks population by age group.

		3 - Outer Bank	• •	•
Age	1990	% population	2000	% population
under 5	12	3.3%	20	3.1%
5-9	15	4.2%	18	2.8%
10-14	22	6.1%	22	3.4%
15-19	28	7.8%	20	3.1%
20-29	45	12.5%	46	7.1%
30-39	47	13.1%	69	10.6%
40-49	72	20.0%	105	16.2%
50-59	70	19.4%	171	26.4%
60-69	43	11.9%	134	20.7%
70-79	5	1.4%	39	6.0%
80+	1	0.3%	4	0.6%
Total	360		648	

 Table 2.6 Outer Banks Population by Age Group

Source: US Census QT-P1 Age Groups and Sex

## State Estimates and Projections of Population Change

Population projections prepared by the State of North Carolina show an increasing growth rate for the total population until 2015 (See Table 2.7 below). From 2015 to 2030 the growth rate begins to decrease. The age group with the greatest growth rates for the 28-year time frame is the 60-69 group from 2002 until 2015. The growth rate is high for the 50-59 group until 2015 when negative growth rates appear. The growth rate for the 70 and up age group increases over time. This trend of increasing growth rates in the above 50 population has implications for economic growth and planning throughout the county.

Age		U	Popula		y Age	-			U	Percen	t		
	2002	2005	2010	2015	2020	2025	2030	02-05	05-10	10-15	15-20	20-25	25-
0-4	1,234	1,291	1,377	1,508	1,623	1,712	1,804	4.62	6.66	9.51	7.63	5.48	5.37
5-19	4,104	4,060	4,365	4,551	5,017	5,271	5,684	-1.07	7.51	4.26	10.24	5.06	7.84
20-29	2,027	2,366	2,557	2,993	2,881	3,242	3,272	16.72	8.07	17.05	-3.74	12.53	0.93
30-39	2,852	2,717	2,830	3,103	3,547	3,737	3,871	-4.73	4.16	9.65	14.31	5.36	3.59
40-49	3,482	3,626	3,558	3,450	3,522	3,852	4,230	4.14	-1.88	-3.04	2.09	9.37	9.81
50-59	2,563	2,900	3,557	4,063	4,046	3,942	4,037	13.15	22.66	14.23	-0.42	-2.57	2.41
60-69	1,744	1,990	2,503	2,951	3,630	4,059	4,112	14.11	25.78	17.90	23.01	11.82	1.31
70 & up	1,626	1,641	1,897	2,298	2,860	3,473	4,337	0.92	15.60	21.14	24.46	21.43	24.88
Total	19,632	20,591	22,644	24,917	27,126	29,288	31,34	4.88	9.97	10.04	8.87	7.97	7.03

Source: State Agency Data: Ofice of the Governor (projections)

## Additional Population Growth Scenarios

In reviewing the above State population growth projections, the Currituck County Planning Department has concluded that these estimates may significantly understate potential growth. This is because such projections were based on 1990s growth trends that do not take into account the accelerated growth of the late 1990's and early 2000's. For this reason, two other growth scenarios have been developed.

As a baseline for these projections, the County relied on the Currituck County School Facilities Needs Analysis and Long-Range Improvement Plan, authored by PMA Planners (October 2004). This study determined that the County population in 2005 would be 22,500, based on the actual rate of building permit activity over the preceding five years. This population number was then used as the baseline for projecting the following "Medium and "High Growth" scenarios.

#### Medium Growth Scenario

The medium growth scenario was established by computing a trend line from 1970 through 2005 using the U.S. Census data for the years 1970-2000; the State's estimates for the mid-census years 1975-1995 and the PMA Planners estimate for 2005 as described above. The trend line for this scenario is exponential, which more nearly represents the residential growth curve in Currituck County over this period.

## High-Growth Scenario

The high-growth scenario also uses an exponential trend line, but it is computed using a shorter time span, specifically, Census and State figures from 1990 through 2000 and PMA's estimate for 2005. The basic difference between the medium growth trend line and high-growth trend line is that the high-growth scenario puts more emphasis on recent growth activity. Staff believes that the medium growth and high growth scenarios more accurately represent the future population growth of the County over the next 10 and 20 years. The results of all three growth projections are given in Table 2.8 following.

Year	Low Growth	Medium Growth	High-Growth
2000	18,190	18,190	18,190
2005	20,591	22,500	22,500
2010	22,644	24,589	26,154
2015	24,917	28,142	30,376
2020	27,126	32,330	35,800
2025	29,288	36,800	41,400

 Table 2.8 Projected Year Round Population Growth 2000-2025

## **Peak Season Population Estimates**

Like other coastal communities, the summer season marks a dramatic increase in the population of Currituck County. On the Mainland, a variety of campgrounds, rental homes, and tents, as well as a limited number bed and breakfast rooms, are available. On the Outer Banks, rental houses dominate, supplemented by a number of relatively new hotel accommodations. At the same time, Knotts Island offers a small number of seasonal housing units, plus a fairly large number of campsites. The specifics of these numbers are shown in Table 2.9 below.

Accommodations	Units	Occupancy/Unit	Seasonal Population
MAINLAND <sup>1</sup>			
Campground Spaces/Tents	410	3.8	1558
Motels/Bed and Breakfast	25	2	50
Seasonal Rental Homes <sup>2</sup>	659	6.7	4,415
OUTER BANKS			
Seasonal Rental Homes	2,693	14.0	37,702
Motels/Bed and Breakfast	185	3.7	685
KNOTTS ISLAND			
Seasonal Rental Homes	41	6.7	275
Campground Spaces/Tents	185	3.8	703
GUESTS IN YR ROUND HOMES <sup>3</sup>	1650	4.0	6,600
Total Seasonal Counts	5,848		51,988
Total Year Round Counts			18,190
TOTAL PEAK SEASON POP			70,178

 Table 2.9 Currituck County's 2000 Peak Seasonal Population

\* Currituck County Planning and Inspections Department

Note that, according to area Realtors, each rental unit on the Currituck Outer Banks during a typical summer week is occupied by between 12 and 17 persons. For purposes of establishing a seasonal population figure, it is estimated that each Outer Banks rental unit will average 14 persons. This high number is based on the growing size of "single family" homes constructed over the past five years that have been averaging between 6 and 7 bedrooms per house. This trend has been continuing with some rental homes exceeding 12 bedrooms and over 6,000 square feet of heated space.

In all, it is estimated that the peak summer population in the year 2000 was 51,988. (Table 2.9) When this figure is added to the year round population, the total estimated peak season population was 70,178 for the year 2000.

## Estimates of Future Peak Season Populations

*Mainland and Knotts Island.* Due to existing land use regulations prohibiting the creation of new campgrounds as well as the expansion of old campgrounds, it is not expected that the number of campground units on the Mainland will increase. However, seasonal housing units for summer workers, especially in the southern Mainland area, will expand to fulfill the demand for affordable housing opportunities not available on the Currituck or Dare County beaches.

*Outer Banks*. Looking at the past five years of Outer Banks building activity, it is estimated that an average of 150 houses per year are added to the rental home inventory of the Currituck Outer Banks. This means that during each 5-year period between 2000 and 2025, an additional 750 residential units will be available for rent in the Corolla and Carova areas.

<sup>&</sup>lt;sup>1</sup> Data for Campground Spaces/Tents and Motel and Bed and Breakfast Rooms came from the Currituck County Chamber of Commerce Website.

<sup>&</sup>lt;sup>2</sup> Data on Seasonal Rental Homes for all 3 subareas came from Tables 2.11 through 2.13 below, US Census 2000.

<sup>&</sup>lt;sup>3</sup> This calculation assumes that at any given time during the peak summer season, about 15% of all year round housing units in Currituck County have out of town house guests.

Combine the numbers for the Outer Banks area of the county with the smaller additions to the seasonal housing market on the Mainland and Knotts Island, and add in guests staying with year rounders, and it can be estimated that the seasonal population of the county will increase by about 12,500 people every five years. With this information, the following numbers may be calculated:

Year	Seasonal	Permanent	Total
	Population	Population <sup>o</sup>	
2000	51,988	18,190	70,178
2005	64,488	22,500	86,988
2010	76,988	24,589	101,577
2015	87,488	28,142	115,630
2020	99,988	32,330	132,318
2025	112,488	36,800	149,288

#### Table 2.10 Currituck County Estimated Total Population During Summer Season<sup>4</sup>

Thus, by the year 2025, both the seasonal population and the year round population will have more than doubled.

## HOUSING

#### Housing Characteristics

On the mainland, housing stock increased by 26.7% between 1990 and 2000. The majority, 86%, of the housing is occupied. Data from the year 2000 shows that owners reside in almost 77% of the occupied housing units. This is a slight decrease from 1990 when owners resided in 80% of the occupied housing units. The number of vacant units decreased by almost 8% as over 100 seasonal/rental units became unavailable between 1990 and 2000. Table 2.11 provides an overview of the characteristics of the mainland's housing.

Statistics	Year	Percent Change
	1990 20	000 1990-2000
Total Housing Units	5,561 7,	,046 26.7%
Occupied Housing Units	4,484 6,	,052 3 5.0%
Owner Occupied	3,616 4,	,945 36.8%
Renter Occupied	868 1,	,107 27.5%
Vacant Units	1,077 99	94 -7.7%
Seasonal/Rental Units	768 65	-14.2%
Other Vacant*	309 33	8.4%

Table 2.11 - Mainland, Currituck County Housing Characteristics

Source: 1990 - QT-H1 Occupancy, Tenure, and Age of Householder

Source: 2000 - QT-H1 General Housing Characteristics

\* Vacant includes units for sale, rented or sold but unoccupied, for migratory workers and other

<sup>&</sup>lt;sup>4</sup> This estimate does not include "Day Trips" to the Outer Banks. Resulting estimates are based on the "Medium Growth Scenario".

<sup>&</sup>lt;sup>5</sup> Estimates of Permanent Population employ the "Medium Growth Scenario".

The housing stock on Knotts Island increased by almost 30% between 1990 and 2000. The housing characteristics of Knotts Island are very similar to the mainland. Approximately 87% of the housing units are occupied. As on the mainland, owners reside in the majority, 78%, of the occupied housing units. This is also a slight decrease from 1990 when owners occupied 85%. The number of seasonal/rental units decreased by 25.5% over the 10-year period. The number of vacant houses not used as seasonal/rental units increased greatly from 15 units to 41. Table 2.12 provides an overview of the characteristics of the Knotts Island housing.

Statistics	Year		Percent Change
	1990	2000	1990-2000
Total Housing Units	476	618	29.8%
Occupied Housing Units	406	536	32.0%
Owner Occupied	308	417	3 5.4%
Renter Occupied	98	119	21.4%
Vacant Units	70	82	17.1%
Seasonal/Rental Units	55	41	-25.5%
Other Vacant*	15	41	173.3%

 Table 2.12 - Knotts Island, Currituck County Housing Characteristics

Source: 1990 - QT-H1 Occupancy, Tenure, and Age of Householder

Source: 2000 - QT-H1 General Housing Characteristics

\* Vacant includes units for sale, rented or sold but unoccupied, for migratory workers and other

The Outer Banks housing stock increased between 1990 and 2000 from 1,330 to 3,023 units. This is a 127.3% increase. Contrary to the Mainland and Knotts Island, the Outer Banks housing stock is mainly seasonal/rental units. There are 2,693 units that account for 89% of the housing stock. The number of seasonal/rental units grew by 140% between 1990 and 2000. There are 314 permanently occupied housing units of which the majority are owner occupied. The 112.2% change in the number of occupied housing units from 1990 to 2000 parallels the 80% growth rate in the permanent population.

		y nousing onur	
Statistics	Year		Percent Change
	1990	2000	1990-2000
Total Housing Units	1,330	3,023	127.3%
Occupied Housing Units	148	314	112.2%
Owner Occupied	123	268	117.9%
Renter Occupied	25	46	84.0%
Vacant Units	1,182	2,709	129.2%
Seasonal/Rental Units	1,122	2,693	140.0%
Other Vacant*	60	16	-73.3%

Table 2.13 - Outer Banks, Currituck County Housing Characteristics

Source: 1990 QT-H1 Occupancy, Tenure, and Age of Householder, 1990 Census

Source: 2000 QT-H1 General Housing Characteristics, 2000 Census

\* Vacant includes units for sale, rented or sold but unoccupied, for migratory workers and other

## Housing Types

Table 2.14 portrays the types of housing units that make up the Mainland's housing stock. In 2000, the majority, or 68.2% of the housing consisted of single-family detached dwellings.

Table 2.14 - Types of Housing	Units Main	land, Currit	uck County	
Occupied units in structure	1990	1990% 20	2000%	
Single-family detached	3,320	59.7% 4,7	68.2%	
1 unit attached	24	0.4% 54	0.8%	
2 to 4 units	42	0.8% 67	1.0%	
5 to 9 units	16	0.3% 68	1.0%	
10 to 19 units	2	0.0% 6	0.1%	
More than 20 units	0	0.0% 5	0.1%	
Mobile homes, trailer or other	2,157	38.8% 2,0	29.0%	
Total housing units	5,561	7,0	21	

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Mobile homes are the second largest type of housing at 29%.

Source: 1990 DP-1 Genearl Population and Housing U.S. Census Bureau

Source: 2000 DP-4 Profile of Selected Housing Characteristics - U.S. Census Bureau \* Total Housing Units 2000 are calculated from sample data and are estimates. For actual Total Housing Units see Table 2.8

Table 2.15 portrays the types of housing units that make up the housing stock on Knotts Islands. In 2000, the majority, or 53.6% of the housing consisted of single-family detached dwellings. Mobile homes are the second largest type of housing at 31.9%.

Table 2.15 - Types of Housing One	5 IXHOUS ISH	mu, Cui i nuci	x County
Occupied units in structure	1990	1990% 200	0 2000%
Single-family detached	255	53.6% 414	65.7%
1 unit attached	2	0.4% 0	0.0%
2 to 4 units	2	0.4% 8	1.3%
5 to 9 units	0	0.0% 0	0.0%
10 to 19units	0	0.0% 7	1.1%
Mobile homes, trailer or other	217	45.6% 201	3 1.9%
Total housing units	476	630	)

Table 2.15 - Types of Housing Units Knotts Island, Currituck County

Source: 1990 DP-1 Genearl Population and Housing U.S. Census Bureau

Source: 2000 DP-4 Profile of Selected Housing Characteristics - U.S. Census Bureau \* Total Housing Units 2000 are calculated from sample data and are estimates. For actual Total Housing Units see Table 2.9

Table 2.16 portrays the types of housing units that make up the housing stock on Outer Banks. In 2000, almost all, 93.1%, of the housing consisted of single-family detached dwellings. Almost 4% of the housing units are 1 unit attached.

Table 2.16 - Types of Housing Units Outer Banks, Currituck County
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Tuble 2.10 Types of Housing entry	Jutter Dum		ivacii coui	
Occupied units in structure	1990	1990%	2000	2000%
Single-family detached	1,150	86.5%	2,826	93.1%
1 unit attached	58	4.4%	119	3.9%
2 to 4 units	24	1.8%	23	0.8%
5 to9 units10		0.8%	12	0.4%
10 to 19 units	35	2.6%	44	1.4%
Mobile homes, trailer or other	53	4.0%	12	0.4%
Total housing units	1,330		3,036	

Source: 1990 DP-1 Genearl Population and Housing U.S. Census Bureau

Source: 2000 DP-4 Profile of Selected Housing Characteristics - U.S. Census Bureau \* Total Housing Units 2000 are calculated from sample data and are estimates. For actual Total Housing

Units see Table 2.10

## Housing Age

Over 50% of the housing units on the mainland and Knotts Island were built after 1980. On the Outer Banks, over 96% of the housing units were built after 1980. Since 1995 1,077 housing units, 35% of the total, were built on the Outer Banks. Table 2.17 provides a summary of the age of Currituck County's housing stock.

Year Housing Unit Built	Number of Housing Units Mainland	Number of Housing Units Knotts Island	Number of Housing Units Outer banks
1999 to March 2000	186	23	147
1995 to 1998	1021	85	930
1990 to 1994	829	97	1,209
1980 to 1989	1694	117	640
1970 to 1979	1468	58	79
1960 to 1969	604	86	0
1940 to 1959	793	69	19
1939 or earlier	426	95	12
Total Housing Units	7021	630	3,036

#### Table 2.17 Housing Unit Age

Source: 2000 DP-4 Profile of Selected Housing Characteristics - U.S. Census Bureau \* Total Housing Units 2000 are calculated from sample data and are estimates. For actual Total Housing Units see Table 2.8, 2.9 and 2.10

## **Building Permits**

Table 2.18 provides information on the number and type of building permits issued by Currituck County since 1998. Approximately two thirds of the permits are issued to the mainland each year, about one third to the Outer Banks and a small number to Knotts Island. On the mainland, the number of permits for commercial structures and manufactured housing decreased between 1998 and 2003. The number of residential permits has grown each year since 1998. Building has declined on Knotts Island. The number of permits issued per year has fallen every year starting at 24 in 1998 and ending with 11 in 2003. Building on the Outer Banks declined slightly during 1999 and 2000 but picked up again in 2001 and has continued to increase.

Statistics							Percent C	Change			
	1998	1000	2000	2001	2002	2002	1998-99	U	2000-01	2001-02	2002-03
Mainland Total	<u> </u>	368	309	343	433	482	1.1%	-16.0%	11.0%	26.2%	11.3%
Single Family	155	142	160	198	306	359	-8.4%	12.7%	23.8%	54.5%	17.3%
Multi Family	0	10	0	0	0	0	NA	NA	NA	NA	NA
Manufacturedhousing	136	116	95	113	91	95	-14.7%	-18.1%	18.9%	-19.5%	4.4%
Commercial	73	100	54	32	36	28	37.0%	-46.0%	-40.7%	12.5%	-22.2%
Knotts Island Total	24	25	24	20	17	11	4.2%	-4.0%	-16.7%	-15.0%	-35.3%
Single Family	16	13	15	15	13	9	-18.8%	15.4%	0.0%	-13.3%	-30.8%
Multi Family	0	0	0	0	0	0	NA	NA	NA	NA	NA
Manufactured housing	6	8	9	4	4	2	33.3%	12.5%	-55.6%	0.0%	-50.0%
Commercial	2	4	0	1	0	0	100.0%	-100.0%	NA -100	0.0%	NA
Outer Banks Total	227	200	178	196	201	202	-11.9%	-11.0%	10.1%	2.6%	0.5%
Single Family	219	191	161	192	195	197	-12.8%	-15.7%	19.3%	1.6%	1.0%
Multi Family	0	0	0	0	0	0	NA	NA	NA	NA	NA
Manufactured housing	0	0	0	0	0	0	NA	NA	NA	NA	NA
Commercial	8	9	17	4	6	5	12.5%	88.9%	-76.5%	50.0%	-16.7%
Currituck County Total	615	593	511	559	651	695	-3.6%	-13.8%	9.4%	16.5%	6.8%

## Table 2.18 Currituck County Building Permits

# **ECONOMY**

## **Overview of Key Economic Indicators**

Currituck County's economy is strong and has been growing consistently over the last twenty years. Retail sales have grown over 50% since 1998. Retail sales only grew 13.6% for the state during the same time period (Table 2.19).

#### Table 2.19 Gross Retail Sales (in 1000's)

	1998	1999	2000	2001	2002	2003			
NC	\$116,762,211	\$126,253,339	\$128,493,660	\$132,176,353	\$127,256,302	\$132,682,106			
Currituck	\$181,040	\$197,588	\$235,342	\$264,097	\$257,153	\$278,447			
Source: Stat	ource: State Agency Data: Department of Revenue								

Source: State Agency Data: Department of Revenue

The employed labor force saw a steady growth from 1998 to 2002 and the percent employed remained constant at 97%. This was higher than the state employment rate during the same period. Paralleling this employment growth, income in the county has increased significantly since 1970 (Table 2.21).

**Table 2.20 Employment Status by Place of Residence** 

	Currituck			North Carolina	L	
Year	Labor Force	Employed	d Percent	Labor Force	Employed	Percent
			Employed			Employed
1998	8,699	8,469	97.4%	3,798,193	3,667,122	96.5%
1999	8,908	8,704	97.7%	3,868,374	3,746,412	96.8%
2000	9,459	9,224	97.5%	4,145,152	3,995,484	96.4%
2001	10,026	9,765	97.4%	4,201,714	3,971,115	94.5%
2002	10,073	9,805	97.3%	4,171,462	3,890,025	93.3%

Source: State Agency Data: Department of Commerce

The cost of housing has paralleled the area's growth in economic activity. The 2000 median housing value in Currituck County was \$115,500 compared to the state average of \$108,300. The median gross rent was \$590 compared to the state average of \$548. Despite the fact that the county's economy is growing significantly, and because the housing cost is only marginally above the state average, Currituck County should not be considered exclusionary to low or moderate-income persons. Key economic indicators for Currituck County are in Table 2.21.

Table 2.21 - Cullinuck	County Key	Leonomie	mulcators				
Statistics	Years				Percent Cha	inge	
*Per capita income	1970	1980	1990	2000	1970-1980	1980-1990	1990-2000
Currituck County							
North Carolina	\$2,094	\$5,266	\$12,630	\$19,908	151 .5%	139.8%	57.6%
Total personal income (\$1,000 s)	\$2,492	\$6,133	\$12,885	\$20,307	110.1%	110.1%	57.6%
Median family income	\$21,440	\$87,011	\$215,761	\$459,860	305.8%	148.0%	113.1%
Median occupied housing value	\$6,428	\$14,697	\$31,422	\$46,382	128.6%	113.8%	47.6%
Median gross rent**	\$8,500	\$33,900	\$78,900	\$115,500	298.8%	132.7%	46.4%
	\$55	\$222	\$423	\$590	303.6%	90.5%	39.5%

Source: 1980-2000 PCI - Federal Agency Data: Bureau of the Census - Census of Population and Housing, obtained from LINC March 2004 \*PCI is total money income per resident of the area, including young children, elderly, and others who may not be earning money

## **Employment**

The retail industry is the major employer in Currituck County. Other major industries include construction, accommodation and food services and health care and social assistance.

Industry	N	umber of	Employees	
	1998	1999	2000	2001
Forestry, fishing, hunting, and agriculture support	*	0-19	0-19	*
Construction	311	356	434	406
Manufacturing	100	129	141	137
Wholesale Trade	61	91	103	98
Retail Trade	737	830	842	887
Transportation & warehousing	58	62	20-99	20-99
Information	0-19	0-19	56	20-99
Finance & insurance	20-99	49	20-99	51
Real Estate, rental & leasing	100-249	285	328	425
Professional, scientific & technical	20-99	57	115	90
Management of companies & enterprises	0-19	0-19	0-19	0-19
Admin., support, waste management, remediation	85	71	72	20-99
Health care & social assistance	219	180	212	205
Arts, entertainment & food services	125	143	171	159
Accomodation & food services	319	330	398	351
Other services (except public administration)	121	129	159	141
Unclassified establishments	2	6	7	1

Table 2.22 Currituck County Business Patterns

Source: U.S.Census Bureau

## Place of Employment

In 1984 only 29% of Currituck County's labor force of 6,312 actually worked in the County for a total of 1,838 jobs. According to the 2000 US Census 33% or 2,838 of this work force now works within the County with a total work force of 8,603. Even with this increase there continues to be a majority of workers commuting to the Hampton Roads Virginia area from Currituck County

(37%) with an additional 18% of the workers commuting to Dare County. (Table 2.22) These statistics have implications for County revenues as numerous studies have shown in general residential developments use more tax dollars in services such as schools, health, fire, etc. then it provides in taxes. Conversely, agriculture, commercial, and industrial development usually pays more tax dollars than services consumed. Therefore, for the financial health of the County, it is important that Currituck continue the trend of increasing the number of jobs available within the County.

Workplace State-County Name	Count	Percent
Brevard Co. FL	13	*
Broward Co. FL	6	*
Fulton Co. GA	8	*
Kane Co. IL	7	*
Prince George's Co. MC	53	*
Somerset Co. MD	7	*
Bergen Co. NJ	9	*
New York Co. NY	4	*
Queens Co. NY	12	*
Camden Co. NC	59	*
Chowan Co. NC	36	*
Currituck Co. NC	2881	33.5
Dare Co. NC	1539	17.9
Edgecombe Co. NC	7	*
Herford Co. NC	6	*
Hoke Co. NC	8	*
Hyde Co. NC	9	*
Iredell Co. NC	7	*
Pasquotank Co. NC	428	5.0
Pender Co. NC	19	*
Perquimans Co. NC	11	*
Pitt Co. NC	7	*
Polk Co. NC	12	*
Sampson Co. NC	7	*
Tyrell Co. NC	7	*
Wake Co. NC	8	*
Washington Co. NC	6	*
Florence Co. SC	9	*
Sullivan Co. TN	6	*
Fairfax Co. VA	7	*
Henrico Co. VA	17	*
Charlottesville city VA	21	*
Cheasapeake city, VA	1270	14.5
Hampton city VA	10	*
Newport News city VA	31	*
Norfolk city VA	771	9.0
Portsmouth city VA	171	2.0
Richmond city VA	49	*
Suffolk city VA	33	*
Virginia Beach city VA	1032	12.0
TOTALS	8603	
* All Other Workplaces		6.1

# Table 2.23 Workplace for Currituck County Labor ForceSorted by Workplace County and State, 2000

Source: US Census Bureau

## Economy by Subarea

## Mainland

When examining the 2002 NAICS Business Patterns for the Mainland of Currituck, (See Table 2.24) the largest numbers of employment sectors in descending order are: Construction with 99 businesses, followed by Retail Trade with 77 and lastly "Other Services" with a total of 40 centers. These places of business are also the largest employers however, they do not account for government that includes military (Federal), State and County workers with an estimated 1,134 employees. (NC Dept. of Commerce – County Profiles – 2004)

Industry Code Description	Corolla	Knotts Island	Lower Currituck	Upper Currituck	Totals
Total	110	16	208	197	531
Construction	9	6	65	34	114
Manufacturing		1	12	6	19
Wholesale trade			7	11	18
Retail trade	36	2	38	39	115
Transportation & warehousing		1	3	5	9
Information	1		4	4	9
Finance & insurance	2		2	5	9
Real estate & rental & leasing	20		14	10	44
Professional, scientific & technical services	3		10	15	28
Management of companies & enterprises			1		1
Admin, support, waste mgt, remediation services	3	1	9	6	19
Educational services				2	2
Health care and social assistance	1		4	14	19
Arts, entertainment & recreation	4		8	5	17
Accommodation & food services	26	2	14	9	51
Other services (except public administration)	4	3	15	25	47
Unclassified establishments	1		2	6	9

#### Table 2.24 2002 NAICS BUSINESS PATTERNS BY ZIP CODE

Source: US Census http://censtats.census.gov/cgi-bin/cbpnaic/cbpsect.pl

Lower Currituck - Aydlett, Grandy, Harbinger, Jarvisburg, Point Harbor, Popular Branch & Powells Point Upper Currituck - Barco, Coinjock, Currituck, Maple, Moyock & Shawboro

The Mainland economy is distinctly different when comparing the Moyock in the north to Point Harbor in the south. As mentioned earlier, the influence of Hampton Roads is creating a commuting workforce which is most pronounced in the Moyock area. This is driven by the desire to live in a rural environment with low taxes, good schools and high quality of life all of which contribute to a "bedroom" style community. This desire has resulted in huge demands for residential subdivisions, loss of prime agricultural farmland and more congestion on roadways and most particularly NC-168.

The Point Harbor and southern part of the Mainland are also undergoing similar trends as the

availability of reasonably priced housing and land in Dare County becomes rare. In addition, for those businesses requiring substantial amounts of land such as warehousing and manufacturing operations, southern Currituck is quickly becoming the logical center for many beach-based businesses. These demands for land are also propelling the loss of farmland as land prices soar and farm revenues fall.

Lastly, mineral extraction and most particularly sand mining operations continue to play an economic role in southern Currituck County. As of 2001 there were 18 active and inactive mining sites (either gravel or sand) according to the Division of Land Quality, State Mining Division. While the expansion of mining activities has had a positive effect on the local economy it is important that they not have an adverse impact on the adjoining properties and the natural environment.

#### Knotts Island

On the entire island there are only four (4) parcels of land designated as General Business according to the Official County Zoning Map (2005). Like the northern Mainland, this subarea is largely dependent on the economy of the Hampton Roads area with a commuting workforce serving both commercial and governmental occupations.

The largest number of business establishments is in the field of Construction for a total of six. (2002 NAICS Business Patterns). In terms of retail there are two stores (Sandy Point Campgrounds and Knotts Island Market), two wineries and one active restaurant. Commercial fishing and crabbing have historically been the focus of local economic activity and this continues with some minor conflicts arising with growing residential neighborhoods. The new emerging economy may focus more on agritourism (wineries and associated businesses) and retirees on substantial but fixed incomes.

## Outer Banks

Tourism is the economic engine for the Outer Banks. Of the 3,297 total seasonal housing units in the County in the year 2000, 2,693 or 82% are located at the beach (Table 2.13). As shown in table 2.10 the number of seasonal housing units has more than doubled when comparing 1990 units (1,122) to the 2000-year unit count (2,693) up 140%. The economic impact of tourism countywide is shown I table 2.24. According to the 2002 NAICS Business Patterns, there are a total of 110 business establishments at the beach. The largest number of these are in the Retail sector (36) followed by Accommodation and Food Services (26) and Real Estate and Rental and Leasing (20).

A major concern for the Corolla area is the over-commercialization of the community. Most of the year-round residents and many of the cottage rental owners wish to minimize the amount of land zoned for commercial purposes. This has principally been accomplished by limiting the amount of commercially designated land in Planned Unit Developments (PUD's). Of the seven (7) existing PUD's, six are restricted to a maximum of 10% of the land area for these uses while one is limited to only 7%. Even with this limitation, most of the PUD's have not yet utilized their full allotment of commercial land. Moreover, some of these commercial uses may need to be re-examined in terms of their appropriateness for a beach setting as well as the existing allowance for "professional offices" in residential neighborhoods.

In the Carova area, due to the lack of paved roads and basic infrastructure, no commercially zoned land exists. Recently in the Swan Beach community of Carova, a rezoning proposal has been advanced along with a zoning text amendment to create a "Swan Beach Historic Overlay

District" for the purpose of allowing minimum commercial uses on parcels of 25 acres or larger. Concerns about accessibility and the Federal Governments C.B.R.A. designation continue to be obstacles to this proposal.

## Tourism Impact

Much of the local economic activity in Currituck County is based on tourism. Restaurants, accommodations, fishing, retail trade, services, construction, and the real estate and finance industries benefit directly from the impact of tourism. In 2000, approximately 30.9% of all housing in Currituck County was considered to be for seasonal or recreational use. This ranked Currituck County fifth in North Carolina for the number of seasonal housing units. Table 2.25 shows the CAMA-regulated counties and their seasonal housing units in 2000.

County	Seasonal Housing Units		
1 Brunswick County	15,540		
2Dare County	13,355		
3 Carteret County	13,333		
4 New Hanover County	4,387		
5 Currituck County	3,297		
6 Onslow County	2,906		
7 Pender County	2,881		
8 Beaufort County	1,890		
9 Pamlico County	903		
10 Hyde County	666		
11 Perquimans County	614		
12 Craven County	433		
13 Bertie County	354		
14 Chowan County	337		
15 Tyrrell County	246		
16 Washington County	208		
17 Pasquotank County	157		
18 Hertford County	82		
19 Gates County	72		
20 Camden County	44		

 Table 2.25 - 2000 Seasonal Housing Units Ranking

Source: 2000 - NC State Agency Data: Ofice of the Governor, obtained March 2004

The Currituck County tourism industry generated \$99.82 million dollars in revenue and was ranked 25th in the state in total revenue in 2003. The Currituck County tourism industry also employed approximately 1,590 people and generated an annual payroll of \$23.05 million in 2003, up 8.5% from 2002. Table 2.26 shows the economic impact tourism has on Currituck County.

	Payroll (\$Millions)	Employment (\$Thousands)	State Tax Receipts (\$Millions)	Local Tax Receipts (\$Millions)
2003	23.05	1.59	4.64	5.06
2002	21.25	1.48	4.21	4.57
2001	18.06	1.26	3.5	3.75
2000	17.24	1.22	3.41	3.68
1999	16.17	1.24	3.28	3.7
1998	15.16	1.17	2.68	2.76
1997	7.98	0.65	1.53	1.84
1996	8.22	0.74	1.67	1.94
1995	7	0.63	1.41	1.72
1994	6.75	0.62	1.31	1.65
1993	5.24	0.49	1.11	1.35
1992	3.41	0.29	0.76	1.14
1991	2.86	0.26	0.58	0.98
1990	2.59	0.21	0.49	0.97

Table 2.26 - Tourism Impact in Currituck County

Source: NC Department of Commerce Tourism - County by County Statistics, obtained September 2000

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# **SECTION 3: NATURAL SYSTEMS ANALYSIS**

## INTRODUCTION

This section of the Land Use Plan provides a description of the natural features and environmental conditions within Currituck County and an analysis of the suitability or limitation of these features for development. The following requirements of the Coastal Resources Commission's Land Use Planning Guidelines [15A NCAC 7B] are addressed in this section:

- A summary of the inventory of the major natural features and an interpretation of the capabilities or limitations that these features have for development;
- A composite map that shows the extent and overlap of environmental features in Currituck County and the compatibility of these features for development; and
- An assessment of environmental conditions and trends with an emphasis on water quality, natural hazards and natural resources.

# NATURAL FEATURES INVENTORY

The inventory of natural systems addresses the following features and conditions:

- Areas of Environmental Concern (AECs)
- Soil characteristics
- Water quality classifications
- Primary nursery areas
- Flood and other natural hazard areas
- Storm surge areas
- Non-coastal wetlands
- Environmentally fragile areas

## Areas of Environmental Concern (AECs)

Areas of Environmental Concern (AECs) are the foundation of the Coastal Resources Commission's (CRC) permitting program for coastal development. AECs are areas of natural importance and are classified by the CRC. The purpose of the AEC classification is to protect these areas from uncontrolled development, which may cause irreversible damage to property, public health or the environment. Development within the designated Areas of Environmental Concern is limited by CAMA regulations and minimum use standards. The CRC establishes minimum standards to regulate development in AECs. However, a local government, through its CAMA Land Use Plan, can establish development standards for AECs that are more stringent than state standards.

In Currituck County there are two categories of AECs. These are the estuarine system AECs and ocean hazard system AECs. Estuarine system AECs are made up of public trust areas, estuarine waters, coastal shorelines and coastal wetlands. The ocean hazard system AECs consist of ocean erodible areas and high hazard flood areas. The CRC has designated these AECs based on the following descriptions contained in 1 5A NCAC 7H State Guidelines for Areas of Environmental Concern.

## Estuarine System AECs

Public trust areas are all waters of the Atlantic Ocean and the lands underneath, from the normal high water mark on shore to the state's official boundary three miles offshore; all navigable natural water bodies and the lands underneath, to the normal high watermark on shore (a body of

water is considered navigable if you can float a canoe in it), not including privately owned lakes where the public does not have access rights; all water in artificially created water bodies that have significant public fishing resources and are accessible to the public from other waters; and all waters in artificially created water bodies where the public has acquired rights by prescription, custom, usage, dedication or any other means. Public trust areas often overlap with estuarine waters.

Estuarine waters are the ocean, sounds, tidal rivers and their tributaries that stretch across coastal North Carolina and link to other parts of the estuarine system: public trust areas, coastal wetlands and coastal shorelines. For regulatory purposes, the inland/upstream boundary of estuarine waters is the same line used to separate the jurisdictions of the NC Division of Marine Fisheries and the NC Wildlife Resources Commission.

Coastal shorelines include all lands within 75 feet of the normal high water level of estuarine waters. This definition also includes lands within 30 feet of the normal high water level of public trust waters located inland of the dividing line between coastal fishing waters and inland fishing waters. Along Outstanding Resource Waters (ORWs), this definition includes lands within 575 feet of the normal high water level. (Note: There are no ORWs in the Currituck County planning jurisdiction). Uses in coastal shoreline AECs can significantly impact water quality and the productivity of the estuary.

Coastal *wetlands* are any marsh in the 20 coastal counties that regularly or occasionally floods by lunar or wind tides and that includes one or more of 10 plant species:

- Spartina alterniflora: Salt Marsh (Smooth) Cord Grass
- Juncus roemerianus: Black Needlerush Salicornia spp: Glasswort
- Distichlis spicata: Salt (or Spike) Grass Limonium spp: Sea Lavender
- Scirpus spp: Bulrush
- Cladium jamaicense: Saw Grass Typha spp: Cattail
- Spartina patens: Salt Meadow Grass
- Spartina cynosuroides: Salt Red or Giant Cord Grass

Freshwater swamps and inland, non-tidal wetlands are not in the CAMA permit jurisdiction, unless the CRC specifically designates them as AECs. However, these wetlands are protected by the federal Clean Water Act. An Army Corps of Engineers 404 permit may be required for projects taking place in these wetlands.

In Currituck County, estuarine waters include the Currituck/Albemarle Sounds, adjacent bays, and the lower reaches of the North and Northwest Rivers. Public trust areas include all estuarine waters, upper reaches of the North and Northwest Rivers, a number of small creeks (including Tulls Creek and Landing Creek) and the Atlantic Ocean. The coastal shoreline AEC consists of the shorelines of these water bodies. Coastal wetlands can be found adjacent the Currituck Sound and along the western portion of the Outer Banks. Significant amounts of coastal wetlands are also located on the west side of Knotts Island, the Northwest River at Tulls Bay and along the North River on the western side of the Currituck mainland.

Permitted uses in public trust areas, estuarine waters and coastal wetlands include those allowed by the Currituck County Unified Development Ordinance and the CRC's standards. While the CRC's use standards give priority to the conservation of coastal wetlands, estuarine waters and public trust areas, certain water-dependent uses are allowed. Generally, those uses which require water access and which cannot function elsewhere, such as simple access channels, structures to prevent erosion, navigation channels, boat docks, marinas, piers, wharfs and mooring pilings are allowed provided construction occurs in compliance with state standards.

In Currituck County, uses allowed in the coastal shoreline AEC include those allowed by state standards and those uses listed in the Currituck County Unified Development Ordinance. The CRC's guidelines for development within the coastal shoreline AEC are found in 15A NCAC 7H. Key guidelines include the following:

- Not weaken or eliminate natural barriers to erosion;
- Limit impervious surfaces such as buildings, paved parking lots and roads to the amount necessary to support the use and generally not exceed 30% of the AEC area of the lot, except along the shoreline of an Outstanding Resource Water (ORW) where the built-upon limit is 25% of the AEC area; and
- Maintain a buffer zone for a distance of 30 feet landward of the normal water level, except along shorelines where the Environmental Management Commission has adopted its own buffer standards.

## Ocean Hazard System AECs

The Ocean Erodible AEC includes beaches and other oceanfront lands that are subject to longterm erosion and significant shoreline changes. The seaward boundary of this AEC is the mean low water line. The landward limit of the AEC is measured from the first line of stable natural vegetation and is determined by adding a distance equal to 60 times the long-term, average annual erosion rate for the shoreline to the distance of erosion expected during a major storm. The width of this AEC varies from about 145 feet to more than 700 feet. Virtually Currituck County's entire oceanfront coastline is located within the ocean erodible area.

The High Hazard Flood AEC includes lands subject to flooding, high waves and heavy water currents during a major storm. These are the lands identified as coastal flood with velocity hazard, or V zones, on flood insurance rate maps prepared by the Federal Emergency Management Agency (FEMA). V zones are determined by an engineering analysis of expected flood levels during a storm, expected wave and current patterns and the existing topography of the land. The high hazard flood AEC often overlaps with the ocean erodible AEC. Detailed flood maps are available for review at the Currituck County Planning and Inspections Department.

Appropriate development in the ocean hazard AECs includes those uses which are consistent with the CRC's standards contained in 15A NCAC 7H and the Currituck County Unified Development Ordinance. A key consideration contained in the CRC's standards includes compliance with setback requirements based on erosion rates. The erosion setback line extends inland from the first line of stable vegetation and varies based on size of the structure as well as local erosion rates.

Due to map scale and size, the exact locations of AECs are difficult to map. However, for general informational purposes, a general depiction of the location of AECs in Currituck County is found on Areas of Environmental Concern Map (Map 3.1) contained in Appendix E. It is stressed that this map is for informational purposes only. The exact location of AECs must be identified onsite by permitting staff of the NC Division of Coastal Management (DCM).

## Soil Characteristics

A detailed soils survey was completed in 1982 in Currituck County by the United States Department of Agriculture (USDA) Soil Conservation Service, now known as the United States

Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS). According to the survey, the majority of the County contains soils with severe limitations for conventional onsite waste treatment systems (septic systems). In general, the soils in the County have limitations for many uses due to wetness, flooding and high sand content. All soil types in Currituck County have slight erosion hazard ratings.

The soil survey is for planning purposes and is not completed at the detailed scale needed for permit decisions. The Soil Suitability for Septic Systems Map (Map 3.2) contained in Appendix E is based on the soil survey and provides a general soils map of Currituck County. The map is intended to compare the septic system suitability of large areas of land for general land use and should not be used for selecting a specific site for development. All determinations of septic suitability must be made by onsite investigation by a licensed soil scientist or county environmental systems health specialist.

Soils with moderate to slight limitations for septic systems are limited in Currituck County. In general they are located in the lower portions of the mainland and along the eastern portions of Knotts Island. Virtually all of the soils on the Outer Banks and in the remaining areas have severe limitations for septic systems.

The extent of soils suitable for development is important due to the continuing development of the area and the absence of centralized sewer systems. Planned development densities in areas without central sewer service must consider soil suitability for septic tank or alternative systems must be developed. Consideration of soil conditions in areas expected to experience growth should influence decisions regarding development densities and/or central sewer considerations.

## Water Quality Classifications

All surface waters in North Carolina are assigned a primary classification by the NC Division of Water Quality (DWQ). These classifications are based on the best-intended uses of the water. Primary Nursery Areas are defined by the Marine Fisheries Commission. Water Quality Classes and Subbasins Map (Map 3.3) found in Appendix E provides the use classifications for estuarine waters in Currituck County. As shown on the map, a wide range of primary and supplemental classifications are present. These classifications are described in Table 3.1 DWQ Primary Classifications. Further discussion of surface waters is provided under the Environmental Assessment discussion found later in this section.

#### **Table 3.1 DWQ Primary Classifications**

Class B	
	Waters used for primary recreation and other uses suitable for Class C. Primary recreational activities include swimming, skin diving, water skiing and similar uses involving human body contact with water where such activities take place in an organized manner or on a frequent basis. There are no restrictions on watershed development or types of discharges.
Class C	Waters protected for secondary recreation, fishing, wildlife, fish and aquatic life propagation and survival, agriculture and other uses suitable for Class C. Secondary recreation includes wading, boating, and other uses involving body contact with water where such activities take place in an infrequent, unorganized or incidental manner. There are no restrictions on watershed development or types of discharges.
Class SC	All tidal salt waters protected for secondary recreation such as fishing, boating and other activities involving minimal skin contact; aquatic life propagation and survival; and wildlife. Stormwater controls are required under CAMA and there are no categorical restrictions on discharges.
Class SB	Surface waters that are used for primary recreation, including frequent or organized swimming and all SC uses. Stormwater controls are required under CAMA and there are no categorical restrictions on discharges.
DWQ SUPPLE	MENTAL CLASSIFICATIONS
Swamp Waters	Supplemental classification intended to recognize those waters that generally have naturally occurring very low velocities, loss of pH and low dissolved oxygen. No specific restrictions on discharge types or development are involved.
ADDITIONAL	CLASSIFICATIONS BY OTHER AGENCIES
Primary Nursery Areas (PNA)	Primary Nursery Areas, as defined by the Marine Fisheries Commission, are those areas in the estuarine system where initial post-larval development takes place. These areas are usually located in the uppermost sections of a system where populations are uniformly very early juveniles. The Division of Marine Fisheries is responsible for preserving, protecting and developing Primary Nursery Areas for commercially important finfish and shellfish.

## **Primary Nursery Areas**

Table 3.1 above also describes Primary Nursery Areas. As noted in the table, primary nursery areas are generally located in the upper reaches of creeks and bays. These areas are usually shallow with soft muddy bottoms and are surrounded by marshes and wetlands. These are growing areas for juvenile finfish and shellfish of economic importance.

There are no coastal primary nursery areas in Currituck County. Inland primary nursery areas are located in Deep Creek, Lutz Creek, Tulls Creek and Tulls Bay on the mainland and represent a total of approximately 1127 acres. Primary nursery areas are shown on the map of Fragile Areas located in Appendix E.

## Flood Hazards and Storm Surge Areas

Flood hazard areas are usually defined by the 100-year floodplain (one percent chance of flooding in any year). Due to its low elevation, much of Currituck County is included in these hazard areas. Virtually all of the Outer Banks area is included in the 100-year flood hazard area. The majority of the western portion and areas along the eastern waterfront of Knotts Island are designated as flood hazard areas. Significant portions of the both the upper and lower Mainland are also included. The western portion of the upper Mainland is not mapped in the 100-year flood zone.

In Currituck County, the flood hazard areas include the following:

- A zones one percent chance of flooding in any year
- V zones one percent chance of flooding in any year that includes wave action
- X shaded zones 0.2 percent annual chance of flooding and areas with a one percent
- chance of flood with average depths of less than one foot or with drainage areas less than
- one square mile
- X zones areas determined to be outside of 0.2 percent annual chance of flooding

Currituck County has participated in the National Flood Insurance Program (NFIP) since 1984. The NFIP is a federal program that enables property owners in participating communities to purchase insurance protection against losses from flooding. By participating in the NFIP, Currituck County has adopted a Flood Damage Ordinance, which requires basic floodproofing for all new construction to the base flood elevation or the elevation of the 100-year flood. Currituck County also participates in the Community Rating System (CRS). This is a voluntary program whereby deductions on flood insurance rates are provided when participating communities exceed the minimum NFIP requirements. A general depiction of the 100-year floodplain is shown in Appendix E. Flood Hazard Areas Map (Map 3.4) . More detailed flood maps prepared by the Federal Emergency Management Agency (FEMA) are available for review at the Currituck County Planning and Inspections Department.

Storm surge is the relatively rapid rise in sea level caused by water being pushed towards shore by the force of the winds associated with a hurricane or other intense storm. As the water comes ashore with the storm, it causes flooding that is often a hurricane's most dangerous and damaging characteristic. Extensive areas of Currituck County are vulnerable to storm surge hazards associated with hurricanes. Depending upon the severity and speed of the storm, much of the County could be impacted by storm surge. According to the storm surge models prepared by FEMA, slow-moving Category 1-3 storms (forward velocities less than 15 miles per hour) would impact greater areas than fast moving Category 1-3 storms. Likewise, fast-moving Category 4-5 storms (forward velocities greater than 15 miles per hour) would produce a more intense impact than slow-moving Category 4-5 storms. The Flood Hazard Areas Map (Appendix E) depicts the areas subject to storm surge based on the most intense storm intensity and speed. The entire County, with the exception of a small triangle of land in the upper western corner of the Mainland, is included in the storm surge.

## Anadromous fish spawning areas

Anadromous fish spawning areas are those tributary streams where certain species of fish spawn. Anadromous fish migrate from their primary ocean habitat to spawn, or breed, in freshwater areas. Anadromous fish are valuable recreational and commercial species and are an important component of the ecosystem.

In Currituck County, anadromous fish spawning areas are located only on the Mainland (Appendix E. Fragile Areas Map). The largest spawning area is the upper reaches of the North River, including Taylor Bay, Narrow Bridge Creek, Indiantown Creek, East Creek, Bump Landing Creek and a portion of the Intracoastal Waterway. Other areas include Tulls Creek, Tulls Bay, Roland Creek, Cowells Creek and Moyock Run.

## Non-Coastal Wetlands

According to the US Army Corps of Engineers (USACE), wetlands are "areas that are periodically or permanently inundated by surface or groundwater and support vegetation adapted for life in saturated soil." Wetlands include swamps, marshes, bogs and similar areas. Wetlands serve important functions relating to fish and wildlife; food chain production; habitat; nesting; spawning; rearing and resting sites for aquatic and land species; protection of other areas from wave action and erosion; storage areas for storm and flood waters; natural recharge areas where ground and surface water are interconnected; and natural water filtration and purification functions.

While individual alterations of wetlands may constitute a minor change, the cumulative effect of numerous changes often results in major damage to wetland resources. The USACE regulates development in wetlands under Section 404 of the Clean Water Act, which determines which areas qualify for protection as wetlands.

The Fragile Areas Map (Map 3.5) in Appendix E shows areas that may be classified as noncoastal wetlands. While this map does not provide a lot-by-lot identification of wetlands, it does provide information as to the general areas that may contain non-coastal wetlands. These areas are extensive in Currituck County and must be determined by onsite investigation. On the Outer Banks non-coastal wetlands are generally located between coastal wetlands and uplands along the Currituck Sound. The largest area of non-coastal wetlands on Knotts Island occurs in the southwestern portion of the subarea. Major areas of non-coastal wetlands on the Mainland occur along the Northwest River, along the western County boundary, and generally on either side of US Highway 158 between the communities of Maple and Grandy.

## Natural Heritage Areas

The Fragile Areas Map also shows general locations of areas classified as Significant Natural Heritage Areas by the NC Natural Heritage Program. The Program inventories, catalogues and facilitates protection of the rarest and the most outstanding elements of the natural diversity of our state. These elements of natural diversity include those plants and animals that are so rare, or the natural communities that are so significant, they merit special attention as land use decisions are made.

The Natural Heritage Program is not a regulatory program, although some of these sites may be protected or regulated by other state or federal agencies. Many of these sites are unprotected. Significant Natural Heritage Areas in Currituck County include the Great Marsh on Knotts Island; and the Currituck Banks / Swan Island Natural Area, Currituck Banks Corolla Natural Area and Pine Island / Currituck Club Natural Area on the Outer Banks. Major Heritage Areas on the Mainland include the Green Sea in the northwestern tip of the County; the area around Northwest River including the Northwest River Marsh Game Land, Nellie Bell Ponds Marsh and Cedar Swamp, Gibbs Woods / Tull Bay Marshes, Gibbs Point Forests and Marshes and Lower Tull Creek Woods and Marsh; the Buckskin Creek / Great Swamp and Indiantown Creek / North River Cypress Forest west of the community of Maple; the Church Island Marsh, Maple Swamp Gordonia Forest and North River / Deep Creek Marshes and Forest near Coinjock; and the Mamie Marshes and Ponds and Harbinger Marshes on the southern tip of the Mainland.

# **ENVIRONMENTAL COMPOSITE MAP**

The Currituck County Environmental Composite Map (Appendix E, Map 3.6) shows the extent and overlap of natural features described in this section. Based on the County's analysis of these features, and the determination of the capabilities and limitations of these areas for development, this map also contains the general locations of three categories, or classes, of land. The land classes shown on the Environmental Composite Map, the description of the classes, and the natural features contained in each class are shown below:

## Class I

Class I is land containing only minimal hazards and having only slight limitations that may be addressed by accepted land planning and development practices. In Currituck County, this class contains the following natural features:

- Soils with slight to moderate limitations for septic tanks
- Non-wetland areas
- Land on Knotts Island and the Mainland located inside 100-year flood hazard area
- Land on Knotts Island and the Mainland located inside storm surge area

## Class II

Class II is land containing development hazards and limitations that may be addressed by methods such as restrictions on types of land uses, special site planning, or provision of public services. In Currituck County, this class contains the following natural features:

- Estuarine shoreline
- Public Trust Shoreline
- Ocean erodible area
- High hazard flood area
- Non-coastal wetlands rated as beneficial significance (NC-CREWS)
- Land on the Outer Banks located within a 100-year flood hazard area
- Land on the Outer Banks located within a storm surge area
- Soils on Knotts Island and the Mainland with severe limitations for septic tanks
- Significant Natural Heritage Areas

## Class III

Class III is land containing serious hazards for development or lands where the impact of development may cause serious damage to the functions of natural systems. In Currituck County, this class contains the following natural features:

- Coastal wetlands
- Estuarine waters
- Public trust areas
- Unvegetated beach areas
- Non-coastal wetlands rated as substantial significance or exceptional significance (NC-CREWS)
- Soils on the Outer Banks with severe limitations for septic tanks
- Protected lands

Map 3.1 Environmental Composite Map (Appendix E) is a "broad-brush" depiction of the location of the three land classes discussed above. Due to the size and scale of the map, it cannot be used for permit decision-making or for final development plans. The Geographic Information System (GIS) – based model that was used to create the map uses one-acre units. Therefore, one "cell" in the model represents one acre. When the different data sets overlay in the model, the highest class present will be assigned to the cell. For example, on the Mainland, an area that is located inside an exceptional wetland (Class III) inside the storm surge area (Class I) and in an area with soils with severe limitations for septic systems (Class II) will be assigned to Class III.

Special Note Concerning Primary Nursery Areas— As noted previously, there are inland primary nursery areas in Currituck County located in Deep Creek, Lutz Creek, Tulls Creek and Tulls Bay (See Fragile Areas Map, Appendix E). The Environmental Composite Map (Map 3.1, Appendix E) identifies the wetlands and marshes on the north and west sides of Tulls Bay, as well as both sides of Tulls Creek as Class III areas, meaning that these areas are poorly suited for development. The south side of Tulls Bay, on the other hand, is shown as mostly Class II, with a few much smaller areas of Class I. and Class III. The predominant Class II designation is appropriate for the higher and dryer properties located on the south side of the bay, compared to the extensive wetland areas located north and west of the bay. Tulls Creek Road, which provides access to the properties along the south side of Tulls Bay, has seen considerable residential development, with more expected. As additional properties on the south side of Tulls Bay become developed, the County's policies concerning estuarine shorelines including, for example, the use of vegetated buffers, will help mitigate adverse impacts.

Special Note Concerning Water Supply Watersheds and Wellhead Protection Area Plans—All potable water supplies in Currituck County are derived from ground water sources. Therefore, there are no surface water supply watersheds in the county. Further, concerning groundwater resources in particular, there have been no wellhead protection plans submitted or approved for any of the three county-owned water supply systems in Currituck County: (1) Currituck Mainland Water Department in Maple (2) Ocean Sands Water and Sewer District in Corolla, and (3) the Southern Outer Banks Water System, also in Corolla. (Gale Johnson, Division of Environmental Health, Public Water Supply Section, Department of Environment and Natural Resources, telephone interview, 919-715-2853) Information concerning wells supplying private or community water systems was not available from private sources.

## **ENVIRONMENTAL CONDITIONS**

This section of the Land Use Plan provides an assessment of the following environmental conditions and features and discusses their limitations or opportunities for development: water quality, natural hazards and natural resources.

## Water Quality in Currituck County and Surrounding Region

## Surface Water and Impaired Streams

Currituck County lies within the Pasquotank River Basin in subbasin 03-01-54. The subbasin boundary roughly makes up the county boundary although it includes a small portion of Camden County. The Pasquotank River Basin comprises not only the Pasquotank River but also other major waterbodies including the North River, Northwest River, Perquimans River, Little River, Alligator River, Scuppernong River, Croatan Sound, Currituck Sound, Albemarle Sound and a portion of the Pamlico Sound. Major waterbodies in Currituck County include Currituck Sound, North Landing River and Northwest River. The North River makes up a portion of the county's southwestern boundary. A large portion Currituck Sound serves as a critical part of the Atlantic Flyway for migratory waterfowl (NCDENR-A).

Several reports outline water quality in Currituck County and the surrounding region. The Chowan/Pasquotank River Basinwide Assessment Report covers the period from 1995 to 2000 and was published in early 2002. The Pasquotank River Basinwide Water Quality Management Plan was published in late 1997. Both reports were created by the NC Division of Water Quality (DWQ). According to DWQ almost all waterbodies listed in Currituck County are classified a SC or C-Swamp. The three exceptions are Roland Creek and Tull Creek, listed as B-Swamp, and Albemarle Sound, listed as SB. A classification of SC or C rates the water body to be used for

aquatic life propagation/protection and secondary recreation (boating/fishing); SB or B also includes primary recreation (swimming) in addition to SC and C uses; and the swamp designation indicates that the waterbody will naturally be more acidic and have lower levels of dissolved oxygen. None of the waterbodies in Currituck County are rated SA (commercial shellfish harvesting).

In 2003, the Army Corps of Engineers initiated a comprehensive study of Currituck Sound to determine why the water quality was in a state of decline and perhaps equally important, what salinity level should this water body be from a natural resource management point of view.

Historically Currituck Sound has been both a salt and fresh water body. The salinity has been influenced from both fresh water canals migrating from Virginia as well as relic ocean inlets across the Outer Banks. This study is expected to be completed in 2007.

The report entitled "A Comprehensive Environmental Management Plan and Model Development for Currituck Sound Drainage Basin" completed by the Albemarle-Pamlico National Estuary Program (APNEP) identified, through local questionnaires and surveys, that the areas of greatest concern in the community were declining water quality, loss of wildlife habitat, and lack of coordinated management efforts.

According to the 1997 DWQ report, the majority of nutrients (nitrogen and phosphorus) in Pasquotank Subbasin 03-01-54 are resultant from agriculture and atmospheric deposition on areas of open water. Nutrients from point sources and developed land in the county make up only 1% of the total nutrient load to the surface water. Pollution traveling into the county from the highly urbanized Tidewater area of Virginia is another important water quality issue for Currituck County.

Mercury was detected above the EPA screening values in multiple 1995 fish tissue samples in Tulls Bay and Indiantown Creek. PCB concentrations exceeding EPA screening values were found in fish tissue samples in Tulls Bay and heptachlor epoxide (pesticide) was detected in fish tissue samples in the mouth of Currituck Sound (NCDENR). Hog Quarter Landing, Currituck Sound upstream of Dews Island and North River are closed to shellfishing (NCDENR-A).

In 1995, Currituck Sound saw the resurgence of aquatic vegetation resulting in an improved clarity compared to previous years. The aquatic vegetation growth decreases turbidity by settling incoming sediments; and provides vital nursery habitat for fish, shellfish and other animals (NCDENR). Between 1995 and 2001, no algae blooms were documented (NCDENR-A).

The federal Clean Water Act requires states to identify waters not meeting standards. Waters not meeting standards can be placed on a list termed the 303(d) list. Waters are placed on North Carolina's 303(d) list primarily due to a partially or not supporting use support rating. In Currituck County only one waterbody, the Atlantic Ocean is listed on the 2002 North Carolina §303(d) list (NCDENR 2003). Listed as "the waters of the Atlantic Ocean contiguous to that portion of Pasquotank River Basin that extends from the North Carolina-Virginia State Line to the northeast tip of Ocracoke Island," it comprises approximately 23 miles of County shoreline and is classified as SB (NCDENR 2003). The Atlantic Ocean is impaired for fish consumption due to high mercury levels, and is listed as a low priority for further study (NCDENR 2003).

There are two permitted minor National Pollutant Discharge Elimination System (NPDES) dischargers in the subbasin that could also impact water quality. They are the Currituck County Water Treatment Plant and the Corolla North Utilities. Both facilities have a good history of

compliance with the limitations of the discharge permits.

There are nine large surface sewage treatment plants in the County that have potential for impacting water quality. Three of these plants are located in Moyock, one is located in Maple and five are located on the Outer Banks. Of these plants, the Currituck County Planning and Inspections Department has noted capacity problems with the Monteray Shores Sewage Treatment Plant.

There are 64 large underground septic systems in the County. Of these systems, the basinwide plan notes that Carolina Village Mobile Home Park in Moyock has been in continual violation of its State permit due to problems with the spray irrigation. Little effort appears to have been expended by the owner to alleviate the problem.

#### Shellfish Waters

As noted above, there are no water bodies in Currituck County that are rated SA (suitable for commercial shellfish harvesting). In addition, consultation with the Shellfish Sanitation and Recreational Water Quality Section of the State Division of Environmental Health (telephone interview March 24, 2005, with Assistant Section Chief Patricia Fowler, 252-726-6827) revealed that the waters of Currituck County generally have insufficient salinity levels to support commercial shellfish. While the North River is one water body that has physical characteristics appropriate for shellfish beds, high fecal coliform counts require that the river be closed to shellfishing. Prospects for opening the area for shellfish harvesting are not good, given the trend toward increased development and greater stormwater runoff levels draining into the river.

## Public Health Hazards

Overall, water quality is still considered good in subbasin 03-01-54 (surface waters of Currituck County). Based on a perceived trend in slight water quality decline, growth management, or other measures will be necessary to maintain water quality (NCDENR-A). As noted above, the Atlantic Ocean is classified as partially supporting for fish consumption because of high levels of mercury. Mercury is assumed to be entering the subbasin from the atmosphere and is not considered a locally generated pollutant (NCDENR-A).

There is one active confined animal feedlot operation in Currituck County which is also within this subbasin. This registered swine operation is listed as Robert Kovacs Farm, located in Gibbs Woods on the Mainland. It is a wean to feeder/feeder to finish/farrow to wean operation with an estimated 687 swine (NCDENR-D). Robert Kovacs Farm is currently in active operation and has two (2) State permits in adjacent properties. (See Map 4.1 Existing Land Use Map). There are no other confined animal feedlot operations in the County.

#### Beaches

Since 1997, there have been two (2) beach advisories in Currituck County recorded by the North Carolina Division of Environmental Health. An advisory for the beach a Bell Island Campground was issued in July 1997 for high levels of fecal coliform (NCDHE 2004). The second advisory, also at Bell Island Campground, was issued on July 8, 1998 and lifted on August 6, 1998 for high levels of fecal coliform bacteria (NCDEH 2004). In both instances the elevated levels of fecal coliform were due to migratory waterfowl in the area.

## Natural Hazards

## Assessment of areas subject to storm hazards.

Currituck County consists of approximately 273 square miles and is divided into four natural land areas: 1) the mainland, which comprises a major portion of the county, forms a peninsula that extends from the Virginia line to the Wright Memorial Bridge; 2) Gibbs Woods, which is accessible only through Virginia, is bounded on the west by the North West River and on the east by North Landing River; 3) Knotts Island forms an island that is bounded on the west by North Landing River and on to the east by Knotts Island Bay. Access to the island is possible only through Virginia and by ferry; and 4) the final major division is the Outer Banks. Bounded on the east by the Atlantic Ocean and the west by the Currituck Sound access is limited to NC 12 (two-land) through Dare County. The northern portion of the Outer Banks is further limited to four-wheel drive vehicles along the oceanfront.

Currituck County has suffered numerous natural hazards over the past 50 years. Because of the County's proximity to coastal waters and its topography, a significant portion of the County is at risk to flooding associated with storm events. While it is not feasible to prohibit development in these vulnerable areas, the County recognizes this vulnerability and has adopted policies to minimize and mitigate damages associated with these natural hazards.

According to the Hazard Identification and Analysis matrix, the entire county is vulnerable to hurricanes, severe winter storms, and thunderstorms. The size of these storm systems is great enough to threaten all of the areas within the county. A good portion of the county is at risk to nor'easters and associated flooding, particularly the riverside and soundside areas. Smaller areas are vulnerable to earthquakes/tsunamis, landslides, tornado/waterspout, flooding, and wildfire.

Hurricanes pose the greatest risk to Currituck County of all natural hazards. The proximity of Currituck County, coupled with the size of tropical storms and hurricanes, makes Currituck County especially vulnerable to high winds and storm surge. Hurricanes and tropical storms still pack much of their punch when they affect Currituck County. As the tropical systems move inland, they lose the ability to refresh themselves with warm water. Currituck County is surrounded on its eastern and southern borders with water. The waterfront areas (Currituck Outer Banks, Point Harbor, Church Island, Knott's Island, Gibbs Woods) are at the most risk from storm surge flooding. The entire county is at risk to high winds associated with tropical systems.

## Structures Subject to Hazards

There are 156,150 acres within the boundaries of Currituck County. This analysis included incorporated and unincorporated areas of the county. Susceptibility of property in Currituck County was analyzed using three different flooding scenarios: 100-year, SLOSH – Slow, and SLOSH – Fast. (See Table 3.2)

The Currituck County GIS data used for this analysis did not contain a land use code. Therefore, analysis of residential, commercial, and institutional properties was not possible without conducting a detailed land use survey of the entire county. However, the GIS data included a field for Total Value and a field for Current Land Value. By subtracting the Current Land Value from the Total Value, it was possible to determine how many developed properties were located within the study area and the value of those structures. Projections of potential damage were not included with this analysis. Currituck County is sparsely developed and has numerous environmental constraints on development. Therefore, projections made by using average structure values and application to undeveloped properties would not be useful.

Using the 100-year flood models (the FIRM model, or the model insurance rates are based on), the A Zone contains 119 acres of developed property. The AE Zone contains 34,360 acres of developed property. The VE Zone contains 284 acres of developed property. According to the Currituck County tax records, the developed properties in the A Zone contain structures that (the total property value minus the land value) amount to \$10,040,608. The developed properties in the AE Zone contain structures amount to \$278,031,073. The VE Zone contains structures amounting to \$66,438,596.

The SLOSH Slow Storm Zone contains 33,199 developed acres that would be affected by a Category 1 or Category 2 hurricane. A storm of this magnitude would affect structures worth \$438,747,897. A Category 3 storm would affect structures with a total building value of \$338,139,522. A Category 4 or 5 storm would affect structures with a total building value of \$320,437,404.

The SLOSH Fast Storm Zone contains 31,427 developed acres that would be affected by a Category 1 or Category 2 hurricane. A storm of this magnitude would affect structures worth \$319,132,367. A Category 3 storm would affect structures with a total building value of \$464,025,978. A Category 4 or 5 storm would affect structures with a total building value of \$338,239,621.

#### Repetitive Loss Properties

Over 2.5 million buildings are insured by the National Flood Insurance Program (NFIP), but a fraction of them (less than 2%) account for 33% of the flood insurance claims paid since 1978. This is because these few properties have been flooded more than once, and some of them have been flooded numerous times. Repetitive loss properties are defined by FEMA as properties for which two or more claims of at least \$1,000 have been paid by the NFIP within any 10-year period since 1978. (CRS Coordinator's Manual, 1999. Federal Emergency Management Agency, National Flood Insurance Program, Community Rating System. p. 500-3.)

Currituck County has 14 repetitive loss properties within its jurisdiction, according to a recent FEMA list of repetitive loss properties. All 4 of these properties are located within the AO Zone. There are 10 repetitive loss properties located in the B and X Zones.

	Current Conditions							Future Projections		
	Vacant Acres	Developed Acres	Total Acres	Building Value (\$)	Land Value (\$)	Total Value (\$)	Projected Number of People <sup>1</sup>	Total Projected Value $(\$)^2$		
INUNDATION SLOW										
Category 1 and	59,797	33,199	92,997	438,747,897	662,051,483	1,100,799,380	26,227	2,641,909,813		
Category 3	21,400	14,639	36,039	338,139,522	323,912,656	662,052,178	9,386	945,487,538		
Category 4 and	24,589	8,988	33,577	320,437,404	291,260,892	611,698,296	10,784	1,086,397,094		
TOTAL	105,786	56,826	162,613	1,097,324,823	1,277,225,031	2,374,549,854	46,397	4,673,794,445		
INUNDATION FAST										
Category 1 and	60,689	31,427	92,117	319,132,367	611.393,956	930,526,323	26,618	2,681,342,239		
Category 3	17,844	14,339	32,184	464,025,978	360,071,380	824,097,358	7,827	788,395,365		
Category 4 and	26,802	11,890	38,692	338,239,621	324,477,614	662,717,235	11,755	1,184,157,276		
TOTAL	105,335	57,656	162,993	1,121,397,966	1,295,942,950	2,417,340,916	46,200	4,653,894,880		
100-Year Floodplain										
А	4,081	119	4,201	10,040,608	4,798,819	14,839,427	1,790	180,335,355		
AE	65,088	34,360	99,448	278,031,073	553,033,486	831,064,559	28,547	2,875,654,695		
VE	145	284	429	66,438,596	90,914,529	157,353,125	64	6,427,894		
TOTAL	69,314	34,763	104,078	354,510,277	648,746,834	1,003,257,111	30,401	3,062,417,944		

*Estimates of public and private damage resulting from floods and wind that has occurred since the last plan update.* 

The following table describes hazard damage developed as part of the Currituck County Hazard Mitigation plan, adopted in 2004. No data was developed that specified damage estimates since the last Land Use Plan (1990).

<sup>&</sup>lt;sup>1</sup> Projected Number of People was determined by dividing the 2001 county population (18,861) by the developed acres, to determine how many persons per acre there are in Currituck County (2.28), then dividing Undeveloped Acres by Persons Per Acre.

<sup>&</sup>lt;sup>2</sup> Total Projected Value was determined by dividing the total developed acres by Total Value to determine the average value per acre (\$44,181), then multiplying Vacant Acres by the average value per acre.

Events	Numbers	Deaths	Injuries	Property	Crop	Total
			Ū	Damage*	Damage*	Damage*
Currituck	•			• –	· _	· –
Excessive Heat	1	0	0	\$0	\$0	\$0
Extreme Cold	1	0	0	\$0	\$0	\$0
Hail	8	0	0	\$0	\$0	\$0
Heavy Rain	2	0	0	\$0	\$0	\$0
Snow	3	0	0	\$0	\$0	\$0
Floods	1	0	0	\$584,237	\$584,237	\$1,168,474
Flash Flood	1	0	0	\$0	\$0	\$0
Lightening	1	0	0	\$322,839		\$322,839
Thunderstorm	2	0	0	\$0	\$0	\$0
Thunderstorm	11	0	0	\$21,128	\$0	\$21,128
Wind						
High Winds	3	0	0	\$276,295		\$276,295
Funnel Cloud	1	0	0	\$0	\$0	\$0
Tornado	5	0	0	\$356,814		\$356,814
Subtotal	40	0	0	\$1,561,313	\$584,237	\$2,145,550
Hurricanes, Tropic	cal Storms &	Winter Sto	rms (multi-c	county events th	at affected Curriti	ıck
Hurricanes	8	2	0	\$28,553,424	\$64,995,052	\$93,548,475
Tropical Storms	1	0	0	\$107,613	\$0	\$107,613
Winter Storms	3	0	0	\$24,998	\$0	\$24,998
Subtotal	12	2	0	\$28,686,034	\$64,995,052	\$93,681,086

**Table 3.3 Summary of Reported Storm-Related Damage and Casualties in Currituck County** [Period of Record: Storms (1/1993-7/1999, except 6-7/1993); Tornadoes (1/1950-12/1992): Wind and hail (1/1959-12/1992)]

*Source: NOAA, National Climatic Data Center (Reports from National Weather Service in Categories)* \*Damages are in 2002 US dollars, adjusted using the consumer price index (US Bureau of Labor Statistics, March 2002, USDL-02-222, <u>http://www.bls.gov/news.release/cpi.nr0.htm</u>) Hurricane, tropical storm, and winter storm damages are multi-county estimates and storm-specific

## Shoreline Erosion

The NC Division of Coastal Management (DCM) develops long-term average erosion rate maps based on the average amount of erosion that occurs each year over a period of about 50 years. Long-term average annual erosion rates are used by DCM to determine setback distances for oceanfront construction. Setbacks are measured from the first line of stable, natural vegetation. DCM standards require that, for small structures and single-family residences of any size, the setback distance is determined by multiplying the average annual erosion rate by 30. For example, on a property where the erosion rate is three feet per year, the setback is a minimum of 90 feet from the vegetation line. In areas that are naturally gaining sand or have an erosion rate of two feet a year or less, the setback distance is a minimum of 60 feet. Setbacks for multi-family residences, such as condominiums, and commercial structures larger than 5,000 square feet are determined by multiplying the average annual erosion rate by 60. In areas where the erosion rate is greater than 3.5 feet per year, the setback for large structures is determined by multiplying the erosion rate of 2 feet a year or less, the setback distance is a minimum of 120 feet.

Updated erosion rate maps became effective on April 1, 2004. According to DCM, the new maps

are more accurate, more detailed and easier to use than previous erosion rate maps. The new maps were calculated using photographs taken in 1998. Previous maps were based on 1992 photography. Updated Erosion Rate Maps for the Outer Banks beaches are found in Appendix E, as Maps 3.7 through 3.11.

These maps can also be viewed at: <u>http://www.nccoastalmanagement.net/Maps/ER\_1998/</u> <u>SB\_Factor.htm</u>

According to the 1998 erosion rate maps, almost the entire County oceanfront shoreline has an erosion rate factor of 2.0 feet/year. The Swan Beach area midway between Carova Beach and Corolla has higher erosion rate factors ranging from 4.5 to 8.5 feet/year.

## Natural Resources

## Significant Natural Heritage Sites

There are approximately 34 Natural Heritage areas in Currituck County, comprising over 71,000 acres (NCDENR-E 2002). Additional information on the Natural Heritage Program is provided the natural features discussion in this chapter.

#### Mining Permits

Growth trends in Currituck County and the state have resulted in increases in the construction industry and associated expansion of the mining of clay and sand to support construction projects. According to 2000 North Carolina mining statistics issued by NCDENR, sand and gravel mining consists of 64% of all mining in the state. Of 574 sand and gravel mines in North Carolina, 18 are located in Currituck County (NCGS 2001). These mines are scattered throughout the mainland and have increased in number in recent years.

Local mining activities are regulated by both North Carolina and Currituck County. NCDENR administers a mining permit process and the County regulates through conditional use permits. The Currituck County Unified Development Ordinance requires mining operations to comply with all state guidelines, as well as local standards. This provision allows the County to respond quickly to any mining related provision, this eliminating dependency on limited state resources. By responding quickly, the County can minimize negative environmental impacts.

#### Agricultural Resources

Historically, agriculture has been an integral part of Currituck County's economy and way of life. However, as seen in many areas experiencing growth pressures, the number of farms in the County is shrinking for a variety of reasons including the conversion of farmland to residential subdivisions, low wages or incomes, high assessed tax values of farmland and simply the desire for better job or more secure job opportunities in other occupations. As growth continues, this trend is expected to continue with the loss of prime farmland.

Currently the County has approximately 30,000 acres in agricultural production as well as one commercial timber operation; however, that amount has been diminishing by about 500 acres annually for the past five years. In addition, this loss represents some of the most productive farmland in the County. To help address this problem the County has established a "Farmland Preservation Agricultural Advisory Board" initiated in May 2001 with the goal of trying to preserve 5,000 acres per year over the next 10 years. Funding for this program comes from grants from USDA, and NRCS (50% matching) and with local government funds.

Prime farmland soils are among the best suited for septic tank absorption fields. Since septic

tanks are the primary type of sewage disposal system on the Mainland, areas containing these soils are vulnerable for conversion to residential uses. Prime farmland soils are also those that are best suited to production of food, feed, forage, fiber and oilseed crops (USDA-NRCS 1982). There are five prime farmland soil types found in Currituck County, accounting for 6.2% (10,846 acres) of all the soils in the county (USDA-NRCS 1982).

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# **SECTION 4: EXISTING LAND USE AND DEVELOPMENT**

# INTRODUCTION

This section of the Land Use Plan provides a description of current and emerging development trends in the three subareas of Currituck County and a forecast of future development based on existing trends. The analysis of existing development is a major component of the foundation upon which land use policies and the future land use map are built. It provides a base for projecting future land needs and for forecasting the location of development.

# **EXISTING LAND USE**

Currituck County has three distinct areas in terms of general land use. These are the three subareas that are the basis for the land use plan. The first subarea consists of the Mainland portion of Currituck County and Gibbs Woods. The second subarea consists of Knotts Island. The third subarea is the Outer Banks beaches and includes both Corolla and the "off-road" beach area known as Carova Beach.

Land use patterns are different for the three subareas and are represented on Map 4.1 (See Appendix E) Existing Land Use. This map was created from data compiled by the Currituck County Geographic Information Systems (GIS) Department in March 2004.

General land use categories used to develop this map and the descriptions of uses in the categories follow:

- Residential single-family homes, duplexes and multifamily housing (apartments, townhouses and condominiums).
- Commercial general and specialty retail, conveniences stores, central business districts, personal services, professional services and offices, mixed uses, hotels and motels.
- Industrial intensive and extensive manufacturing operations, warehousing and distribution establishments, research parks.
- Institutional churches, hospitals, schools and related establishments, public parks, golf courses, swimming pools beach and estuarine access locations, dedicated open space, public or privately owned land with development restrictions. Some of these areas, such as federal or state lands, are sometimes referred to as "protected" lands.
- Agriculture bona fide farms.
- Undeveloped land in an idle state and not used for any open-space function. This category includes Forestry.
- Other golf courses, cemeteries, parking lots, etc.

The following table of land use in Currituck County is an extension of the information contained on the Existing Land Use Map (Table 4.1, Appendix E). The table shows the number of acres in each land use category in each of the three subareas. Table 4.2 shows the percent of land use of the developed land, including agriculture.

Land Use	Mainland	Knotts Island	Outer Banks	Total Acres	% County
Commercial	1390	20	128	1,539	1%
Industrial	1,906	0	114	2,021	1%
Institutional	717	6,971	2,441	10,129	6%
Residential	11,247	1,094	1,741	14,083	9%
Other	1,624	0	319	1,943	1%
Total Developed	16,884	8,085	4,743	29,715	18%
Agriculture	43,878	1,257	0	45,134	29%
Undeveloped	75,031	1,330	6,702	83,062	53%
Total	135,793	10,673	11,445	157,911	100%

 Table 4.1 Currituck County Land Use (acres)

Land Use Category	Percentage of Developed Land in County
Commercial	5.2%
Industrial	6.8%
Institutional	34.1%
Residential	47.4%
Other	6.5%

As shown above, more than 80% of the land area of Currituck County is currently undeveloped (including agriculture). Residential uses constitute the largest percentage of developed uses with institutional uses ranking second. (It is important to note that the institutional category includes state and federal owned gamelands, wildlife refuges and public access sites).

According to records maintained by the Currituck County Planning and Inspections Department, the total number of annual residential building permits issued in the County has increased steadily from 1998 through 2003, except for a slight decrease in 2000. Residential permit activity is primarily single family homes. No multi-family (duplex, triplex or condominium) permits have been issued since 1999, when ten multi-family projects were permitted. Commercial building permit activity was strong in 1998 and 1999, with decreases beginning in 2000 and continuing through 2003. Additional information on building permit activity is found in Section 2 Population, Housing and Economy.

Currituck County maintains records on land development for major, minor and private access subdivisions. Major subdivisions are those with more than five lots; minor subdivisions have five or less lots; and private access subdivisions are those with five or less lots and private roads. In addition to these categories of subdivisions, exempt subdivisions are those with individual lots larger than ten acres. Minor and private access subdivisions are only required to meet minimal County requirements. Exempt subdivisions are not subject to the County's subdivision requirements or the adequate facilities regulations.

Major subdivision activity in the County remained fairly steady from 1998 through 2000, with increased activity in 2001 and again in 2003. Between 1998 and 2003, a total of 1535 major subdivision lots, including 192 commercial lots, were approved by Currituck County (Table 4.3). In 2001, the County approved major subdivisions totaling 266 residential lots and 72 commercial lots. In 2003, major subdivision approvals added 281 residential lots and 22 commercial lots. In

April 2002 a major subdivision moratorium was enacted by the County that expired in April 2003. Minor / private access / exempt subdivision activity fluctuated through 2001, then increased and remained steady in 2002 and 2003. Between 1998 and 2003, 834 lots were established in these subdivisions.

Tuble 4.5 Approved Subdivision Lots 1990 2005				
Subarea	Major lots (includes commercial lots)	Minor / Private Access / Exempt Lots		
Mainland	1079	709		
Knotts Island	11	78		
Outer Banks Beaches	445	47		
Total	1535	831		

As of July 2006, there were a total of 3,827 platted but undeveloped lots on the Currituck Mainland. Of those, 607 are located in Moyock Township, 718 in Crawford Township, and 2502 in Poplar Branch Township.

To effectively evaluate land use in the County, the Land Use Plan analyzes land use in the three subareas: the Mainland, Knotts Island and the Outer Banks beaches. The following section provides charts summarizing the percentage of total acres and of developed land in each land use category for the subareas. Descriptions of general development patterns for the subareas are also provided.

## Mainland Land Use Summary

Approximately 67% of developed land on the Mainland is currently in residential use (Table 4.4). Building permit records from 1998 indicate that single family residential has steadily increased, while the growth of manufactured homes has decreased. The area has seen limited multi-family development.

Land Use	Number of acres	Percentage of total acres in subarea	Percentage of Developed Land in subarea
Commercial	1,390	1.1%	8.2%
Industrial	1,906	1.4%	11.3%
Institutional	717	0.5%	4.2%
Residential	11,247	8.3%	66.7%
Other	1,624	1.2%	9.6%
Total Developed	16,884	12.5%	100%
Undeveloped	75,031	55.2%	n/a
Agriculture	43,878	32.3%	n/a
Total	135,793	100%	

 Table 4.4 Land Use Percentages for the Mainland

There are numerous small communities in the Mainland sub-area. None of these communities are incorporated municipalities. The Currituck County Mainland is heavily influenced by the metropolitan areas of southeastern Virginia to the north and Dare County to the south. Since development in the northern portion of the Mainland in the Moyock area is strongly affected by the economic hubs of neighboring Virginia, new residential growth in this area tends to be of a "bedroom community" nature. Subsequently, commercial uses in this area tend to be residential support services. As a result of continued residential growth, additional commercially zoned properties are developing in this area. Blackwater, a paramilitary training business and manufacturer of target silhouettes, located in Camden County, provides spin-off business benefits to the area. Additionally, the business owns property in Currituck and thus has the potential for expansion. Access to the Blackwater site is through Currituck County.

There is a strong economic interest in capturing tourist dollars from travelers en route to the Outer Banks beaches. As a result, commercial uses in the lower portion of the Mainland tend to involve retail sales and warehousing adjacent to NC Highway 168 related to the support of the Outer Banks resort/retirement economy. Commercial uses targeting boaters are also found along the Atlantic Intracoastal Waterway in the Coinjock area. Development is clustered in several small communities including Currituck, Maple and Barco.

Gibbs Woods is predominantly residential, with limited commercial uses. Large portions are currently in agricultural use, with much undeveloped land. There is one active confined animal feedlot operation located in Gibbs Woods. The Robert Kovacs Farm is currently in active operation and has two (2) State permits in adjacent properties.

The Currituck County Government Complex is located on the Mainland in the Village of Currituck. State-owned lands in the subarea include East Carolina Great Dismal Swamp Research Facility, NC Wildlife Resources Commission (WRC) Northwest River Marsh Gameland, WRC North River Gameland, WRC Poplar Branch Management Area and the WRC Coinjock Access Area.

Currituck County Airport is a publicly owned, public use general aviation airport located on the north side of US Highway 158 in Maple. The airstrip consists of a concrete runway 4,000 feet long by 150 wide, although plans are underway to extend the runway to 5,500 feet to accommodate corporate jets.

There are three industrial parks located in the Mainland subarea. The Moyock Industrial Park is located just south of Moyock on NC Highway 168. The Harbinger Industrial Park is located in the southern portion. Another industrial park is operated by Currituck County at the County Airport site as part of its Maple Complex. The Maple Complex is made up of approximately 400 acres and houses the County Airport, the Maple Industrial Park, a Community Park and County government facilities.

The number of farms in the area is decreasing, due to conversion from agriculture to residential subdivisions. However, agricultural uses continue to comprise a substantial amount of land, approximately 32% in the Mainland subarea. Farmland is scattered throughout, with several large tracts located in the northwestern portion of the County. Farms in this area actively produce corn, soybeans and sweet potatoes. Soils in the lower Mainland tend to be poor, but are suitable for peanut and grape production. As a result, new vineyards are being established in the Barco and Grandy areas. Currituck County is a participant in the NC Farmland Preservation Trust Fund program, which provides funds for the preservation and continued use of prime farmlands. The program provides for individual ownership of prime farmlands, with the County maintaining development rights to ensure continued agricultural use. Numerous roadside stands are located along Highways 168 and 158 which sell a variety of fresh local produce in the summer.

More than 55% of the land on the Mainland is currently classified as undeveloped. The availability of land, combined with the growing residential and commercial demands on the area,

allows opportunities for continued development, as long as support services, such as water and sewer systems, can be provided.

Due to the existing diversity of land uses on the Mainland coupled with the growing pressure for residential development some conflicts between uses are inevitable. These incompatible uses include mineral extraction activities (sand and gravel mines) and the affect on "in-use" residential wells and the often associated dewatering discharges of groundwater; mini-storage and warehousing uses and the aesthetics as well as the volume of storm water generated from these sites; farming practices in close proximity to housing developments; possible air pollution, groundwater contamination, and waste disposal associated with confined animal feeding operations; and the appearance of billboards.

## Knotts Island Land Use Summary

Knotts Island comprises the second subarea of Currituck County. This subarea is accessed via state ferry or private boat from the Mainland and the Outer Banks area or by land through southern Virginia. The largest land use on Knotts Island is the Mackay Island National Wildlife Refuge, which comprises approximately 6,971 acres in the central and western portions adjacent the Currituck Sound and the North Landing River. The Refuge makes up the majority of the Institutional category in Table 4.5. The remaining area of Knotts Island is primarily residential, with limited commercial uses.

Land Use	Number of Acres	Percentage of Total Acres in Subarea	Percentage of Developed Land in Subarea
Commercial	20	0.2%	0.1%
Industrial	0	0%	0%
Institutional	6,971	65.3%	86.3%
Residential	1,094	10.3%	13.6%
Other	0	0	0%
Total Developed	8,085	75.8%	100%
Undeveloped	1,330	12.5%	n/a
Agriculture	1,257	11.7%	n/a
Total	10,673	100%	

 Table 4.5 Land Use Percentages for Knotts Island

As noted in Table 4.3, from 1998 to 2003, the Knotts Island subarea experienced the least amount of subdivision activity in the County. During this period, a total of 89 subdivision lots were created. Of subdivisions recorded since 1996 a total of 49 recorded but unimproved lots remain in Gibbs Woods and 80 recorded but unimproved lots remain on Knotts Island. Single-family homes predominate, with no multi-family developments occurring during this time period. Permits for new manufactured housing have seen a small decline.

Knotts Island has a significant retiree population. Many residents commute to jobs in the Virginia Beach area.

Currently there is relatively little farming in Knotts Island, although there are two vineyards (Martin and Moonrise Vineyards) with associated wineries located in the subarea. Although once a fishing village, there is currently little commercial fishing activity.

Citizen participation in public meetings associated with the Land Use Plan update process resulted in a call for increased lot sizes (minimum 10 acre) on Knotts Island and no desire for central water or sewer services. Provided these sentiments are adopted by Currituck County, combined with limited available undeveloped land, it is unlikely that the area will see significant growth during the planning period.

As mentioned earlier, traditional commercial crabbing activities, both on Knotts Island and the Mainland have generated some conflicts with sound front residential uses but with no associated water quality impacts.

## **Outer Banks Beaches Land Use Summary**

The Outer Banks Beaches represent the third subarea of Currituck County. Predominantly a resort/retirement community, this area has experienced tremendous growth pressures in recent years. The Outer Banks beaches represent two distinct areas. One is the highly developed area of Corolla south to the Dare County line. Carova Beach, or the "off-road" area north of Corolla to the Virginia state line, represents the second area.

Land Use	Number of Acres	Percentage of Total Acres in Subarea	Percentage of Developed Land in Subarea
Commercial	128	1.1%	2.7%
Industrial	114	1.0%	2.4%
Institutional	2,441	21.3%	51.5%
Residential	1,741	15.2%	36.7%
Other	319	2.8%	6.7%
Total Developed	4,743	41.4%	100%
Undeveloped	6,702	58.6%	n/a
Agriculture	0	0%	n/a
Total	11,445	100%	

#### Table 4.6 Land Use Percentages for the Outer Banks Beaches

The Corolla area is primarily second homes and rental vacation properties. Currituck County staff indicates that the Carova Beach area is more evenly divided between permanent and seasonal residents, with approximately 60% of the homes used as permanent residences.

Much of the Outer Banks Beaches subarea consists of Planned Unit Developments (PUDs) and subdivisions. Many of the PUDs in Corolla provide water and sewer service to residents and businesses, while residences in Carova Beach rely upon septic tanks.

Commercial uses within the PUDs are limited to 10% of the area. Much of the available commercial areas have yet to be developed, with less than three percent of existing development consisting of commercial uses (Table 4.6).

Since 1998, housing trends on the Outer Banks Beaches reflected in building permit records show steady growth of single family structures, no new multi-family developments and significant commercial gains with the most commercial permits being issued in 2000.

Another housing trend observed in the subarea is the construction of very large houses, particularly in Corolla. Residents at public participation meetings associated with the Land Use

Plan update indicated concern with the stresses placed on the area's infrastructure caused by these homes, many of which are seasonal.

According to the Currituck County Planning and Inspections Department, as of December 2003, the northern Outer Banks area contained a total 3,100 residential lots. Of these lots, 436 (15%) were developed. The southern Outer Banks area had a much higher developed rate. Of the 4,279 existing residential lots, 3,330 (78%) were developed.

While undeveloped platted lots are available in Corolla, very limited land exists for new subdivision development in the southern portion of the subarea. The only area with growth potential is the northern end of Monteray Shores. Phases I and II of this PUD have been approved, with Phase III currently in the design phase. Undeveloped land exists in the Carova Beach area, but constraints to development, including oceanfront erosion and lack of community facilities, must be considered in determining growth policies.

Significant areas on the Outer Banks are in state and federal ownership. These areas are considered "protected" lands and are unavailable for development. Included are the Currituck National Wildlife Refuge and the North Carolina Coastal Management Currituck Estuarine Sanctuary.

The Outer Banks Beaches subarea also contains the historic Whalehead Club, built in the 1920's. In 1992, Currituck County acquired the building and 28.5 acres of land to restore the structure to house the Currituck Wildlife Museum. Adjacent the Whalehead Club are two additional restored structures, the Currituck Beach Lighthouse and the Lighthouse Keeper's Residence.

There are few incompatible land uses occurring in either Corolla or Carova. These few may however include the following: Large Houses – Modest second homes and rental cottages are being overshadowed by very large, high amenity rental machines that take on the appearance of commercial buildings. Because these structures maximize coverage they reduce areas for storm water infiltration and generate high volumes of run-off. Secondly, within PUDs the location and future siting of wastewater treatment plants is a growing concern to existing and established residential neighborhoods. In the Carova area there is an inherent conflict between increasing development and the desire to preserve fragile natural areas and protection of the wild horse population. Lastly, in the Carova area, and more specifically North Swan Beach, there are several concentrations of abandoned automobiles that are in close proximity to sound waters and may have an impact on adjacent water quality.

## DEVELOPMENT TRENDS PROJECTED FOR THE NEXT FIVE YEARS

A review of development approvals and building permits by the Currituck County Planning Department resulted in the above analysis of subdivision and commercial development activity by subarea from 1998 to 2003. This section takes that information and, with the insights of the County Planning Director and Steering Committee for the Land use Plan, extrapolates levels of near-term future development for various parts of the county. Specifically, various locations in the county are evaluated for their growth potential over the next 5 years (2005 to 2010).

As before, the analysis is organized around the three principle areas of the County (Mainland, Outer Banks Beaches, and Knotts Island). Then, prospects for development at specific locations within each of these areas are further described, as influenced by transportation improvements, availability of water and sewer services, housing trends and other factors. For each location, an assessment of future development compatibility with the Environmental Composite Map (See Appendix E), as evidenced by the designation of Class I, II and III soils, is offered.

It is important to note that this analysis speaks only to the compatibility of near-term development with the suitability of the land according to the three classes on the Environmental Composite Map (Appendix E). Just because land is suitable for development does not mean that development is to be encouraged at that location. For example, many high and dry properties in Currituck County are currently in productive agricultural use. To encourage their development simply because the land is suitable would in many instances, promote urban sprawl, decrease valuable open space and destroy of an agrarian way of life for the affected farmers and their families. Thus, while this section focuses on near term development trends in relation to land suitability, the Land Classification section of this plan sets forth policy choices from an even broader perspective.

## Future Development by Planning Subareas, Next Five Years

#### Moyock

<u>Development Trend</u>: Moyock's emergence as a bedroom community for the Tidewater Area of Virginia will become more pronounced over the next five years. New residential subdivisions will continue to move into the area, spawning retail services and other non-residential development. <u>Potential Conflict with Class II or III Land</u>: Some conflict possible--Most of the Moyock Area is classified as Class II land, largely due to poor soil suitability for septic tanks. This limitation can be overcome by the use of package sewage treatment plants, which may ultimately join together into a centralized sewage collection and treatment system. For those developments that employ on-site septic systems, some conflicts with the capabilities of Class II land are possible.

#### Gibbs Woods

<u>Development Trend</u>: Gibbs Woods' relatively remote location, lack of services and substantial wetlands along the sound and creek shorelines of the area should keep Gibbs Woods out of the path of substantial development over the next five years.

<u>Potential Conflict with Class II or III Land</u>: No conflict--Most of the interior portion of Gibbs Woods is classified as Class II land; the coastal margins of this area are Class III. The lack of development pressure in this area is favorable, given these less suitable classifications.

## Shawboro/Crawford

<u>Development Trend</u>: The Shawboro/Crawford area is the largest, most extensive rural area of Currituck County. While most development is apt to focus in Moyock to the north and the Grandy to Point Harbor area to the south, the rising cost of land throughout much of the County may prompt some developers to begin looking at more remote properties in locations like Shawboro and Crawford.

<u>Potential Conflict with Class II or III Land</u>: Little or no conflict -- While most of the area is shown as Class II, there are significant vacant properties adjoining the area's roads that are Class I. Interestingly, while environmental conditions may not preclude development here, the County's policies discouraging residential sprawl in this area would work against it.

#### Courthouse Area

<u>Development Trend</u>: This area is expected to see continued modest growth related primarily to the local government service function traditionally associated with this area.

Potential Conflict with Class II or III Land: No conflict—The Courthouse area is benefited by relatively large areas of vacant Class I land, particularly on the east side of Route 168 adjoining

the sound. These Class I land areas should be sufficient to accommodate anticipated growth in this area for the next five years.

## Barco/Coinjock/Airport Area

<u>Development Trend</u>: Like the Courthouse area, this area is expected to see continued modest growth over the next five years. (Upon completion of the proposed Mid-County Bridge development pressures here will intensify greatly, but that is beyond the timeframe of the next five years.)

<u>Potential Conflict with Class II or III Land</u>: No conflict—The Barco/Coinjock/Airport Area has significant acreages of vacant suitable Class I land, particularly adjoining the major roadways serving the area. These Class I lands should be sufficient to accommodate anticipated growth in this area for the next five years.

## Intersection of Proposed Mid-County Bridge and US Highway 158

<u>Development Trend</u>: Upon completion of the proposed Mid-County Bridge, development pressures here will intensify significantly, but that is beyond the timeframe of the next five years. <u>Potential Conflict with Class I orI Land</u>: No conflict—This area is benefited by large tracts of vacant suitable Class I land, particularly on the east side of Route 158. Pressures to develop these lands in the next five years should not be great, especially if no firm closure is brought to the Mid-County Bridge issue during that timeframe.

## Grandy Area

<u>Development Trend</u>: This area is second only to the Moyock area in terms of near-term development pressures. Over the next five years, Grandy will continue to be an attractive location for relatively affordable housing, when compared to housing costs on the Outer Banks.

<u>Potential Conflict with Class II or III Land</u>: No conflict—Compared to most areas of the Mainland, Grandy has some of the most extensive areas of vacant Class I soils, meaning that the area is relatively well suited for development. Class I lands in the Grandy area should be more than sufficient to accommodate anticipated growth in this area for the next five years.

## Jarvisburg Area

<u>Development Trend</u>: The Jarvisburg area is just beginning to feel the pressure for new residential developments and associated commercial uses. The area has many relatively large tracts of land in agricultural use that are already cleared, level and well drained.

<u>Potential Conflict with Class II or III Land</u>: Some conflict possible— While much of the area is shown as Class II, there are significant vacant properties, many now in farmland, that are Class I. Similar to the Shawboro/Crawford area, environmental conditions may not preclude development here, but the County's policies discouraging residential sprawl in this area would work to contain new development in compact clusters.

## Point Harbor Area

<u>Development Trend</u>: The Point Harbor area has traditionally been the bedroom community offering affordable housing options for workers providing services to the Outer Banks. In recent years, however, the Point Harbor area has taken on the characteristics of a full service community in its own right.

<u>Potential Conflict with Class II or III Land</u>: Some conflict possible— While Point Harbor has sizable land areas in Class I, many of the most suitable land tracts have long since been developed. Future development, therefore, is likely to move into less favorable Class II areas. Similar to Moyock, development on these less suitable sites can be accommodated by the use of

package sewage treatment plants, which may ultimately join together into a centralized sewage collection and treatment system.

#### Corolla Area

<u>Development Trend</u>: While the Corolla area is nearly fully developed, the near-term future of the area rests largely with the redevelopment of existing properties. As the value of Outer Banks (i.e. barrier island) real estate has sky rocketed, the economic incentive to tear down and replace first and second generation beach cottages with much larger structures has grown commensurately. <u>Potential Conflict with Class II or III Land</u>: Conflict certain.—(See Appendix E) Nearly the entire Corolla area is shown as Class III on the Environmental Composite Map (Appendix E). The intensification of land use on existing properties in this area will only add to the inappropriateness of intensive development in this fragile barrier island ecosystem. Even so, this conflict between development and land suitability is inherent throughout North Carolina's barrier island chain. It appears that efforts to mitigate development impacts through improved building practices and caps on the size of replacement structures may be the best recourse available.

#### Carova Area

<u>Development Trend</u>: Unlike the Corolla area, the Carova area has hundreds of previously platted lots that have not yet been developed. Like the Corolla area, however, fast escalating real estate values have called for new structures of considerable size. Growth pressures here are tempered only by the lack of infrastructure (paved roads, centralized water and sewer), the absence of commercial services, and the unavailability of federally subsidized flood insurance.

<u>Potential Conflict with Class II or III Land</u>: Conflict certain.— As with the Corolla area, all but a very few small parcels in the Carova area are shown as Class III on the Environmental Composite Map (Appendix E). The continued development of existing properties in this area, particularly on previously platted smaller lots, will add to the inappropriateness of development on this low lying barrier island. The best means of minimizing adverse impacts is by holding firm on policies against providing infrastructure and commercial services to the area. There should also be a cap on the size of structures, justified not only by environmental concerns but also by public safety issues related to inadequate fire suppression capabilities.

## Knotts Island

<u>Development Trend</u>: Knotts Island will likely see continued modest residential development over the next five years.

<u>Potential Conflict with Class II or III Land</u>: Little or no conflict— The heart of the Knotts Island community is located on the eastern side of the island, where Class I and II lands predominate in almost equal measure. Much of the island's early development occurred in Class I areas. Near-term development will likely continue in the remaining Class I areas, largely due to the controlling influence of soil suitability for septic systems.

# FUTURE LAND USE NEEDS FORECAST

## *Methodology*

There are a number of ways to determine future land use needs in a growing area. Two of the most commonly used methods involve estimates of (1) population growth relative to land consumed and (2) building permits issued relative to land consumed. Given the extreme variability in estimates of seasonal population, the Currituck County Planning Department has

chosen to use the building permit method<sup>1</sup>. In choosing this method, there is greater reliability in the data. County records show, for example, the precise number of building permits issued for residential structures by location in the county. In reviewing site plans and subdivision plats, as well as allowable development densities under the County zoning ordinance, County planners are able to estimate, with reasonable accuracy, the average lot size or units per acre for new development within the three subareas of the county: the Mainland, Knotts Island, and the Outer Banks.

The process of determining future land use needs is therefore as follows:

- 1. Document residential building permits issued annually in recent years by the three subareas of the County. (Table 2.18 of this plan provides this documentation.)
- 2. Determine the average annual number of permits issued by subarea and whether these annual averages are likely to go up, down, or stay the same over the planning period. (Table 4.7) (These numbers were determined using an arithmetic mean and then adjusting the number based on the Planning Department's working knowledge of recent trends.)
- 3. Determine the average gross acreage consumed per residential dwelling unit by subarea. (Planning Department review of applications submitted in recent years.) (Table 4.7)
- 4. Multiply the number of permits issued annually by the gross acreage required per unit. Multiply this number by five to determine the additional land required per subarea in five-year increments. (Table 4.7)
- 5. Using land use data from the past 15 years, determine the percentage of all developed land consumed by each major land use category. (Table 4.8)
- 6. Employ the land use percentage by type to calculate non-residential land use relative to residential land use over the twenty-five year period. (Tables 4.9 and 4.10)

#### **Residential Land Use Needs**

Table 4.7 uses the methodology described above to forecast residential land use needs for the twenty year period from 2005 to 2025.

<sup>&</sup>lt;sup>1</sup> Estimates of persons per seasonal dwelling unit in Currituck County range from a low of 6 to a high of 20 or more persons per "single family" rental house. Most Realtors in the local rental industry point out that the average household size for rental beach house is closer to the high end than to the low end. Thus, in determining peak season population levels for Currituck County, a figure of 14 persons is employed. (See Section 2, Seasonal Population Estimates.) Even so, this variation in seasonal household size points up a fundamental problem in using population estimates to predict future land use needs in a heavily tourist-oriented, second home area like Currituck County. It is much easier to accurately calculate the amount of land needed for future development when building permit data is employed. Under the County's development standards, a single family home must be built upon a lot of a specified size or it cannot secure a building permit. It does not matter whether the structure will ultimately house two persons or twenty; the same amount of land is required by the zoning ordinance. At the same time, estimates of seasonal population have their place in determining demand for services and infrastructure. Those estimates are set forth in Section 2 of this document.

		acreage required	acreage required	acreage required	acreage	Gross acreage required 2015 to 2020	required	TOTAL acreage required 2005 to 2025
Mainland	310	2.0	620	3,100	3,100	3,100	3,100	12,400
Knotts Is.	20	3.0	60	300	300	300	300	1,200
Outer Banks	200	0.33	66	330	330	330	330	1,320
Totals	530		746	3,730	3,730	3,730	3,730	14,920

Table 4.7 Future Land Needs for Residential Development During the Period 2005 to 2025

## Non-Residential Land Use Needs for the Period 2005 to 2025

This section takes the data related to residential land use needs and uses that information to estimate future non-residential land use needs. The premise for these estimates is that in any community, there tends to be a relatively consistent proportion of the total developed land area in various land use categories. In many communities, for example, it would not be unusual for residentially developed areas to make up about 75% of the total developed land area. In the case of Currituck County, that percentage runs closer to about 78%.

Table 4.8 below summarizes developed acreages by land use category in Currituck County over the past 15 years.

Land Use Category <sup>3</sup>	Acres 1990	Acres 1995	Acres 2005	% of Acres 1990	% of Acres 1995	% of Acres 2005
Residential	4,875	6790	14,083	78%	81%	78%
Commercial	409	535	1,539	7%	6%	9%
Industrial	54	56	500	1%	1%	3%
Other	875	1059	1943	14%	12%	11%
TOTALS	6213	8440	18,065	100%	100%	100%

 Table 4.8 Existing Land Use In Development, 1990 to 2005<sup>2</sup>

For the purposes of calculating future land use needs, this plan assumes that the most recent land use percentages for 2005 will remain roughly constant over the twenty-year planning period. Table 4.9 below takes the residential land use needs calculated previously and projects non-

<sup>&</sup>lt;sup>2</sup> The figures for 1990 and 1995 are from Table 5A in the 1997 Draft Land Use Plan for Currituck County. The figures for 2005 are from Table 4.1 of this plan. Two figures from Table 4.1 have been adjusted to match the format for estimating existing land use acreages as employed in the 1997 plan. The institutional category in Table 4.1, for example, includes extensive acreage in natural heritage sites, while Table 5A from the 1997 plan did not. Also, the industrial category in Table 4.1 includes the sizeable acreage of the County Airport, while Table 5A from the 1997 plan did not. These adjustments have been made in the calculations.

<sup>&</sup>lt;sup>3</sup> While Map 4.1 Existing Land Use indicates a wider variety of land use categories, it should be noted that Agriculture is not included in Tables 4.8, 4.9, and 4.10 because land in active cultivation is considered undeveloped is therefore not considered when identifying land currently developed or required for future development. In addition lands identified as Institutional and Other on the Map are combined within the Other category within the Tables.

Table 4.9	Projected La	nd Use In	Developm	nent, 2010	) to 2025		
Land Use	% of	Acres	Acres	Acres	Acres	Acres	Square
Category	Developed	2005	2010	2015	2020	2025	Miles
	Land						2025
Residential	78%	14,083	17,813	21,524	25,273	29,003	45.3
Commercial	9%	1,625	2,055	2,484	2,916	3,346	5.2
Industrial	3%	542	685	828	972	1,115	1.7
Other	11%	1,986	2,512	3,035	3,564	4,090	6.4
TOTALS	100%	18,065	22,837	27,595	32,401	37,183	58.1

residential land use needs based on these percentages.

	I I ojecteu Bu		2010101				
Land Use	% of	Acres	Acres	Acres	Acres	Acres	Square
Category	Developed	2005	2010	2015	2020	2025	Miles
	Land						2025
Residential	78%	14,083	17,813	21,524	25,273	29,003	45.3
Commercial	9%	1,625	2,055	2,484	2,916	3,346	5.2
Industrial	3%	542	685	828	972	1,115	1.7
Other	11%	1,986	2,512	3,035	3,564	4,090	6.4
TOTALS	100%	18,065	22,837	27,595	32,401	37,183	58.1

2010 4- 2025

Thus, if the development pattern, pace and density of growth of the past 15 years were to hold true for the next 20 years, the amount of developed land in Currituck County would more than double. Stated another way, for every one of the roughly 18,000 acres of developed land in Currituck County today, an additional acre of developed land would be required by 2025, bringing the total developed acreage in the County to over 37,000 acres in 2025. Thus, in the absence of growth management policies to the contrary, it is expected that some 58 square miles of Currituck County would be in some form of development by 2025. (See TOTAL of last column to right, above)

Finally, Table 4.10 below takes the total projected land use in development from Table 4.9 above and calculates the additional acreage needed for development in each major land use category by five-year increments.

1 abic 7.10 Auu	Table 4.10 Adultional Land Area Accucu for Development, 2005 to 2020								
Land Use	Additional	Additional	Additional	Additional	Total added				
Category	land needed	land needed	land needed	land needed	land needed				
	2005-2010	2010-2015	2015-2020	2020-2025	2005-2025				
Residential	3,730	3,711	3,749	3730	14,920				
Commercial	430	429	432	430	1721				
Industrial	143	143	144	143	573				
Other	526	523	529	526	2104				
TOTALS	4,829	4,806	4,854	4829	19,318				

Table 4.10 Additional Land Area Needed for Development, 2005 to 2020

All figures are in acres of land needed if present development trends continue and the population continues to increase in keeping with the Medium Growth Scenario discussed in Section 2: Population, Housing and Economy.

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# **SECTION 5: COMMUNITY FACILITIES ANALYSIS**

# INTRODUCTION

This section of the Land Use Plan analyzes the existing and planned capacity and adequacy of Currituck County's water, wastewater and transportation systems. This section is also meant to evaluate the location and adequacy of facilities to serve the existing and planned population and economic base and to protect environmental factors such as water quality and to guide land development. Maps of these systems are also provided in Appendix E.

# WATER SYSTEMS

Currituck County's water supply system is composed of 16 individual facilities with three (3) of these being County Public systems. All of these facilities are listed below. Currituck County operates the Currituck Mainland Water Department, Southern Outer Banks Water System, and the Ocean Sands Water and Sewer District (OSWSD). The other systems are private entities providing service to individual developments or neighborhoods. These private systems were designed and constructed to meet the finite demands of the planned developments that have been or are nearly complete and were not designed for future expansions. A listing of all of these water systems is provided below:

#### Mainland Systems

Currituck Mainland Water Department (County) Universal (Orchard) Park Bells Island Campground Ponderosa Mobile Home Park Sentara Nursing Home Currituck Shores

#### **Knotts Island Water Systems**

Anchor Christian Retreat Sandy Point Resort

#### **Outer Banks Water Systems**<sup>1</sup>

Ocean Sands Water and Sewer District (OSWSD-County)) Southern Outer Banks Water System (County) Corolla Light PUD Monteray Shores Phases 1 and 2 Buck Island The Currituck Club Pine Island

Operational and engineering information is readily available for the county-operated systems, which are shown on the Water and Sewer Systems Map in Appendix E. These systems are described below.

The difficulty in assessing future demands for central water based on population growth particularly for the Mainland is that existing development is not required to connect to this

<sup>&</sup>lt;sup>1</sup> Monteray Shores, Buck Island, Corolla Light, The Currituck Club, and Pine Island are served by Carolina Water

system. However current regulations require that new development within a prescribed distance from the distribution system connect to the County's system. Because the system is relatively new and because the ground water for residential wells is generally good, the option of connecting at a monthly cost is hard to predict with any level of certainty. As a result there are no "planned service areas" for County water. Given the medium growth projection of 36,800 people in 2025 discussed in Section 2 and the County's average of 2.61 people per household (2000 Census) it can be estimated that approximately 7,000 new households will be established between 2000 and 2025. It is further estimated that each household uses approximately 200 gallons of water per day. Multiplying the projected number of households by the average daily residential water usage translates into a need for the County to produce approximately 1,400,000 additional gallons of water per day by 2025 not including commercial or industrial users. Currently the central distribution line follows US-158 and NC 168 and as opportunities present themselves for expansions into new areas the County and development interest will jointly make improvements to the system.

## Water Services in the Mainland Subarea

The Currituck Mainland Water Department began providing centralized water service to the northern and central portions of the Mainland in 1990. Central water service has since been extended to the southern end of the Mainland. The system consists of 28 6-inch and 8-inch groundwater supply wells located at its Maple water plant site.

In 2002, there were 3,914 metered connections, 1% (10) of the connections was institutional, 7% (289) of the connections were commercial, and the remaining 92% (3,615) were residential. According to the 2002 Water Quality Report, the system had no violations and drinking water met or exceeded all federal and state requirements.

In 2003, the average daily use was 0.71 MGD and the peak use was 1.15 MGD. The average daily use represented 75% of the available supply. In 2003, the peak daily demands exceeded the water treatment supply for four months from June through September. Beginning in 2004, the system began purchasing an additional 0.2 MGD (million gallons per day) from Camden County. The total available water supply from these 28 wells and Camden County is 1.1 MGD. The total finished storage capacity of the system is 2.3 MGD. With the additional water purchased from Camden County, the average daily use in 2004 represents 65% of the available supply. During the spring and summer of 2006 there was a spike in water consumption causing the County to halt water connections for a period of 9 months. As of June 2006 the average daily flow equaled 949,009 gallons per day (5/30/06) or 140% of plant capacity. Approximately 75% of the water demand is in the northern portion of the County (north of the Intercoastal Waterway). It is anticipated that future growth will result in a similar distribution of water flow in the County.

Projections regarding future supply and demand are currently being evaluated and may result in updated projections being released in 2005. According to current projections, demand is expected to grow rapidly by 2020, with peak daily demands expected to exceed the water treatment plant capacity by 2010. From 2003 - 2007 the system has contracted to purchase 0.2 MGD from Camden County to alleviate demand, which represents a short-term solution. The system has also requested help with a leak detection plan; 15% of the water supply was unaccounted for in 2001.

According to the Environmental Assessment for the Reverse Osmosis Water Treatment Plant completed by Hobbs, Upchurch and Associates using the high growth scenario average daily demand for the water system will be 3,013,952 million gallons with a peak daily demand of

4,520,928 million gallons per day. The County is currently formulating a master plan for the water system to address future water demand.

Future plans include constructing a 5.0 MGD Reverse Osmosis (RO) Treatment Plant by 2010 to draw water from deep wells in the Lower Yorktown Aquifer, which is high in chlorides. Further evaluation of the system and projected growth of the County may result in changes to the size of the proposed plant. The major limiting issue to this new treatment plant is obtaining a wastewater discharge permit. For the permit to be issued, both the state and Currituck County must satisfactorily address plans for brine discharge into North River. The cost of the Reverse Osmosis Treatment Plant is estimated at \$10 to \$15 million.

#### Water Services in the Beach Subarea

The Southern Outer Banks Water System (SOBWS) with a treatment capacity of 2 million gallons per day is also part of the Currituck County water system. The treatment plant went into service on March 23, 2005. The plant has both reverse osmosis as well as conventional treatment capabilities. The system includes deep wells for RO treatment and shallow wells, primarily from the Ocean Sands system, for conventional treatment.

The SOBWS has a National Pollutant Discharge Elimination System (NPDES) permit for backwash discharge into the Atlantic Ocean. The discharge system consists of a dual 8" perforated pipe system placed approximately 15 feet below the ocean floor and approximately 250 feet off shore. The discharge pipe was constructed by horizontally drilling from behind the primary dune to eliminate surface damage to the dune and beach.

The system's service area includes the 1,100 customers in the SOBWS System (Ocean Sands A, B, & C, Whalehead Section, Corolla Village, Ocean Hill Section 1, and the Villages of Ocean Hill). The plant serves 950 customers in the Ocean Sands Water and Sewer District. The plant also serves 900 customers in Monteray Shores and Corolla Light under a six month contract that was signed with Carolina Water Service in June 2006 and has two six month extensions. At its peak over the July 4<sup>th</sup> holiday in 2006 the plant was at 93 percent capacity.

The Ocean Sands Water and Sewer District (OSWSD) is also part of the Currituck County water system. This system has five shallow wellfields with a total capacity as of 2004 of approximately 500gpm (gallons per minute). The existing treatment plant was running at approximately 90% capacity in the summer of 2003 with approximately 915 connections. This plant was taken out of service in the fall of 2004 upon the completion of the Southern Outer Banks Water System (SOBWS). The OSWSD wells furnish raw water to the SOBWS plant, which will in turn treat the water and return the equivalent amount to the OSWSD for consumption. Additional wellfields will be added as needed from the developer of Ocean Sands as growth requires. The current OSWSD service district has approximately 1,161 potential residential customers. There are only residential customers at this time. Total customer base at build out of OSWSD is projected to be approximately 2,852 equivalent residential customers.

There is no county-owned or privately operated central water service in the northern section of the Outer Banks. Water service is provided by individual wells.

#### Water Services in the Knotts Island Subarea

There are two small water systems on Knotts Island to serve the Anchor Christian Retreat and the Sandy Point Resort. Neither system is operated by Currituck County. The majority of Knotts Island is served by individual wells. Additionally there is no desire from the residents of Knotts

Island for central water as demonstrated in previous opinion polls and most recently in the Land Use Plan meetings.

# SEWER SYSTEMS

There are no large central sewer systems in Currituck County. However, there are 9 large surface sewage treatment plants and 64 on-site wastewater treatment systems that serve individual developments on the Mainland and in the southern section of the Outer Banks. There are no large surface sewage treatment plants in the northern portion of the Outer Banks or in Knotts Island, or extensive sections of the Mainland. These areas are primarily served by individual septic systems. The large surface sewage treatment plants are listed below:

#### Sewer Services in the Mainland Subarea

Carolina Village MHP (60,000 gpd capacity) Moyock Commons Shopping Center (40,000 gpd capacity) Mill Run / Eagle Creek (350,000 gpd capacity) Maple Prison New Town Sewer System (CDBG Grant) (15,000 gpd capacity) **Sewer Services in the Beach Subarea** Villages at Ocean Hill Corolla Light Plant #1 Monteray Shores Ocean Sands Water and Sewer District Currituck Club / Pine Island

## More Details on Sewage Disposal in Currituck County

The Ocean Sands Water and Sewer District wastewater plant is the only large surface sewage treatment plan operated by Currituck County and is the only system that has readily available operational and engineering information. It has a current capacity of 500,000 gpd (gallons per day) and operated at approximately 80% capacity during the summer of 2003. Its treated wastewater is discharged by a high rate infiltration system, which is common on the southern Outer Banks. It serves the same customer base as the water plant described above. The existing plant has the capacity to handle its current service area of approximately 1,161 customers. This service area represents approximately 41% of the total 2,852 equivalent residential customers at build out. The timing and location of future expansions will be affected by land the developer is required to provide for this purpose and the timing of the development of the last two large areas (Sections G and T). A study is now underway by the County to evaluate the consolidation and /or centralization of the existing PUD private systems. The study will also consider providing service to unsewered areas, which are Sections A, B, and C of Ocean Sands; Whalehead Beach; Corolla Village Area; and Section 1 of Ocean Hill.

In addition to the large surface sewage treatment plants, there are 64 large underground septic systems in Currituck County. The combined permitted capacity of the 64 systems is very limited at 294,042 gallons per day.

There are two (2) private wastewater treatment systems currently in violation of their State Division of Water Quality Permits. The first is on the Mainland and serves Carolina Mobile Home Park. The Notice of Violation was issued in May 2001 for excessive ponding and improper operation and maintenance. County Planning has been working with the owner and the inspections department to reduce the number of units with the park. The second violation is on the Outer Banks and is the Monteray Shores Wastewater Treatment Plant. The plant is exceeding its capacity to treat the wastewater and a moratorium was established by D.W.Q. in January 2002. Recently plans are being prepared to address this by expanding the plant and relying on re-use standards for disposal.

Soils with severe septic system limitations dominate the County. The extent of these soils is depicted on the Soil Suitability for Septic Systems Map in Appendix E. In the absence of central sewer service, the County must rely upon individual septic systems to accommodate development. Failing septic systems are also a problem. On the Mainland, the Coinjock Canal tends to be the dividing line, with the northern section experiencing more septic failures than those areas located south of the canal. Lack of sewer and severe soil limitations limit the potential for growth.

In 2001, Hobbs, Upchurch and Associates completed a Centralized Sewer System Feasibility Study for the Mainland. At the time of that study it was anticipated that the majority of the growth in the County would take place in the Moyock area. Given the poor quality of the soils in that area the consultant assumed that any public wastewater infrastructure investment would take place in the northern portion of the County. The study estimates system demand in the service area at an average of 4,648 gallons per month per residential customer, 2,500 gallons per month fir small businesses with no food preparation facilities, 7,500 gallons per month for medium sized businesses including food preparation, and 100,000 gallons per month for significant users such as Southland and Moyock Elementary School. The treatment system identified in the study included lagoon and spray irrigation. Depending upon the service area chosen within Moyock, the cost of the system in 2001 dollars ranged from \$4.8 million to \$11.8 million. It can be assumed that given the anticipated growth in the southern portion of the County a similar system would be considered.

In summary, the vast majority of the County is served by individual on-site wastewater systems while conversely a remarkably small percentage (less than 5%) of the population is served by community wastewater. The County does not anticipate that percentage to change appreciably as it develops and therefore provision of public wastewater is not planned for the future.

# TRANSPORTATION SYSTEMS

## Thoroughfare Plans

The 1988 Currituck County Thoroughfare Plan is the most recent adopted transportation plan for the County. Although a plan was prepared in 1999, it was not adopted. The 1988 plan recommends improving and widening US 158 from Barco to Point Harbor and NC 168 from Barco to the Virginia state line. These projects have been accomplished. It also recommends widening Wright Memorial Bridge to 4 lanes or looking at alternatives such as a ferry or new bridge. The bridge has since been widened and a study is under way to determine the location of a new bridge from Coinjock to Corolla. The 1988 plan also recommends widening NC 12 to three lanes from Dare County to Corolla. This has not been completed.

The 1988 Thoroughfare Plan recommended the following classification for roads in Currituck County:

- Minor Arterials are US 158 and NC 168
- Major collector roads are NC 34 from Camden County to NC 168, NC 615 from the ferry landing on Knott's Island to the Virginia line, SR 1140 from US 158 to SR 1137 at Aydlett, a proposed bridge from Aydlett to Corolla, and NC 12 from Dare County to Corolla.

• Minor collector roads include NC 3, SR 1131, SR 1142, SR 1246, SR 1242, SR 1222, SR 1227, SR 1218, and SR 1147.

## **Bridges**

The 1988 plan identified 13 bridges that were functionally obsolete. The 1999 plan identified 6 bridges that were functionally obsolete and 8 bridges that were structurally deficient. Most of the bridges identified in 1999 are the same bridges identified in 1988. Only two of the bridges identified in 1988 were repaired or replaced before 1999. These are the bridge over Currituck Sound on SR1313 and the bridge over a canal on SR1217.

A functionally obsolete bridge has below average ratings in approach roadway alignment, under clearance, deck geometry, waterway adequacy, or structural condition. A structurally deficient bridge has below average ratings in deck superstructure, substructure, overall structural condition, or waterway adequacy.

# Table 5.1 Functionally Obsolete and Structurally Deficient Bridges (1988 and 1999 Thoroughfare Plans

Bridge Location	Identified 1988	Identified 1999	TIP
NC168 at Duckskin Creek	Х	Х	
NC168 at Cowell's Creek	Х	Х	
NC615 at Creek	X	X	B-3445
NC168 at New Bridge Creek		Х	
NC6 15 Ferry Ramp at Currituck Sound	Х	X	
SR1242 Ferry Ramp at Currituck Sound	Х	X	
SR1232 at Tulls Creek	Х	Z	B-4494
SR1222 at Tulls Creek	X	Z	B-2950
SR1228 at Shingle Landing Creek	X	Z	
SR1245 at Coinjock Bay	X	Z	
NC 168 at Guinea Mill Run		Z	
NC168 at Roland Creek	X	Z	
NC168 at Shingle Landing Creek		Z	
SR1222 at Shingle Landing Creek	X	Z	B-4094

X = Functionally Obsolete, Z = Structurally Deficient

## Capacity and Traffic Volume

A 1995 analysis of road capacity in Currituck County revealed none was over capacity although US 168 was very close to the capacity for a two-lane road. The widening of NC 168 to a five-lane roadway has remedied this situation.

An analysis of expected conditions in 2025 reveals three road segments that will exceed capacity. These are US 158 from Camden County to NC 168, US 158 from NC 168 to the Wright Memorial Bridge, and NC 168 from US 158 to the Virginia state line. The first deficiency will be remedied by Transportation Improvement Program (TIP) project R-2574, which consists of the widening of US 158. The construction of the Mid-Currituck Bridge will alleviate congestion on the southernmost portion of US 158.

Road	Location	1999	2002
NC168	Just south of SR1229 (north of Moyock)	15000	22000
SR1228	East of NC168 (in Moyock)	700	720
SR1228	West of NC168 (in Moyock)	820	1100
NC168	South of SR1216 (in Moyock)	13000	20000
SR1214	Near intersection with SR1222	420	720
SR1222	Near SR1232	2100	2100
SR1222	South of SR 1239	1800	1800
SR1239	Near SR1222	600	740
SR1202	Near Snowden	160	230
NC168	North of Sligo	16000	16000
NC168	Between SR1203 and SR1232	17000	12000
SR1232	North of NC168	740	930
NC34	South of Sligo	3300	5500
NC34	West of SR 1205	3000	4600
SR1205	Between NC34 and SR 1147	90	110
SR1222	Just north of intersection with NC 168	1800	2200
SR1246	Near Maple	1200	1300
NC168	In Barco (north of US 158)	16000	18000
SR1148	Just south of intersection with Us 158	170	190
SR1147	Just north of intersection with Us 158	670	850
US158	Between SR 1200 and SR 1246	5600	7700
US158	South of intersection with NC168	16000	18000
SR1405	Just south of Coinjock	1000	1100
SR1140	East of US 158	890	1100
SR1139	Near intersection with SR1140	680	800
US158	Just north of Bertha	14000	15000
NC136	East of intersection with SR 1136	230	330
SR1136	North of NC 136 near Poplar Branch	160	160
SR1135	Between SR 1136 and NC136	940	1000
SR1175	Near intersection with SR1131	780	800
US158	Between SR1421 and SR1127	14000	18000
SR1124	Near US158	190	220
US158	Just north of SR1120	14000	18000
SR1118	North of SR1121	160	270
US158	Just south of SR 1111	15000	19000
US158	Near Point Harbor before bridge	16000	21000

Table 5.2 1999 and 2002 Traffic Volumes

Source: NCDOT 1999, 2002

Average daily traffic volume has either increased or remained the same between 1999 and 2002 for all observed road segments except for NC 168 between SR1203 and SR1232 near Sligo (Table 5.2). Traffic volume on NC 168 has increased greatly in the northern part of the county around Moyock. Traffic volume on monitored areas of NC34 has also increased. A consistent increase of between 4,000 and 5,000 vehicles per day has occurred at monitored segments of US 158 after it intersects with NC 168.

#### 2004-2010 Transportation Improvement Program (NC DOT for Currituck County

Projects included in the TIP is listed below:

#### Road Improvements

R-2574

US 168: Widen to multi-lanes from east of NC34 at Belcross in Camden

	County to NC158.
R-4429	SR1222 Tulls Creek Rd: Upgrade existing roadway from NC168 to north
	of SR1232 and from SR1213 to SR1216.

#### Bridge Replacements

B-2950 SR1222: Replace bridge #4 over Tulls CreekB-3445 NC615: Replace bridge #7 over creekB-4094 SR1222: Replace bridge #28 over Shingle Landing CreekB-4494 SR1232: Replace bridge #3 over Tulls Creek

#### Study Area

R-2576

New route and structure from Coinjock to Corolla (Mid-Currituck Bridge)

In addition, the 2004-20 10 TIP includes work on bulkheads, renovation of the rest area south of Coinjock on US158, and construction of a new rest area on US 158.

# Impact of Planned Transportation Improvements on Growth Levels and Development Patterns

There are three planned or proposed transportation improvements that promise to have an especially significant impact on growth levels and development patterns in Currituck County. In order of magnitude, they are:

#### Mid-County Bridge

The Mid-County Bridge will have a huge influence on development patterns throughout much of Currituck County:

- Approaches north and south of the intersection of the proposed bridge landing and US 158 will come under intense pressure for commercial development.
- US 158 south of the new bridge intersection will likely become a bypass for those headed to Carova from the south who wish to avoid the more congested areas of NC 12 through Duck and Corolla. This bypass function will add even more pressure for commercial development along 158.
- Demand for additional residential development in the Grandy area will intensify. Commercial services will follow.
- The Barco/Coinjock/Airport area will likely become the main community center for the mid-section of Mainland Currituck County. It will likely assume a role similar to the role that Point Harbor plays for Dare County's Outer Banks.
- Pressure for additional development in Corolla and especially Carova will increase dramatically with improved access to these two areas.

#### NC 168 Bypass, West of Moyock

The NC 168 Bypass will have a major impact on the northwestern and central parts of Currituck County:

- Properties near the new Bypass, just west of Moyock will witness increased pressure for both residential and commercial development, as this new roadway will improve access for additional "bedroom community" development.
- The bypass will send large volumes of traffic through the currently rural, western part of the county, effectively opening up extensive, open land to development interests.
- Intersections of NC 34 and US 158 with the proposed bypass will also likely result in

greater demand for both residential and commercial development.

- Properties near the intersection of US 158 and existing NC 168 will become prime real estate, as both branches of NC 168 will merge together here.
- The Barco/Coinjock/Airport area's role as the principle community center for the midsection of the Mainland will be further strengthened by this three-pronged traffic pattern coming together at Barco.

#### Widening of NC 168 and US 158 South of Barco to 7 Lanes

The widening of the mainland's only true north-south travel corridor will intensify the demand for development with immediate access to this roadway:

- Where communities once straddled the 168/158 roadway, the greater width of the pavement will effectively divide areas east and west of the highway into separate communities.
- Commercial development along this corridor will continue to intensify.
- Residential developments will seek to locate with convenient access to the improved traffic moving capacity of the widened highway.

#### Widening of NC 34 from Camden to NC 158

The widening of this primary east-west travel corridor will intensify the demand for development with immediate access to this roadway. The demand for commercial zoning along the corridor will likely increase substantially as will the interest in residential development thereby dramatically altering the rural character of the area.

# **STORMWATER / DRAINAGE**

#### Responsibility for Stormwater and Drainage

Like most counties in North Carolina, Currituck County does not maintain stormwater infrastructure. All such structures associated with public roadways are maintained by the North Carolina Department of Transportation (NCDOT). The NCDOT generally maintains records through County Maintenance Engineers for all culverts (but not other stormwater system components) in the systems they maintain. The location of these, however, is generally only referenced by a sketch and estimated mileage to nearest intersections. Similarly, Currituck County does not regulate stormwater systems owned by private entities as these systems are regulated by NCDENR under the Division of Water Quality (D.W.Q.).

The Albemarle Soil and Water Conservation District - Currituck Field Office (Division of Soil and Water Conservation) has taken on an active role in the maintaining and improving drainage by obtaining grants and by reviewing development proposals on a monthly basis. While D.W.Q. regulations emphasize the retention of the first inch to two inches of rainfall, the County U.D.O. regulations require development to address the 10-year storm event or the first 4.3 inches of rainfall. By requiring developers to submit detailed engineered drainage plans demonstrating that "post development" run-off volumes will not exceed "pre-development" conditions, the County is protecting adjacent water quality from both normal rainfall events as well as extraordinary ones.

#### Existing Drainage Problems by Subarea

#### Mainland

Due to a large variety of soil types many of which are clay especially in the northern portion of the County Mainland coupled with a high seasonal water table has resulted in a number of both

#### Currituck County 2006 Land Use Plan

acute and chronic drainage problems. The acute problems, such as minor flooding of parking lots, ponding of water on private roads and driveways usually occur when design storm conditions have been exceeded. Chronic problems on the other hand have been addressed by the creation of "Drainage Service Districts" by the County. By establishing these districts everyone within a specified watershed shares the cost of maintaining drainage within that watershed through a fee system. On the Mainland there are three (3) such districts:

- 1. <u>The Guinea Mill Watershed Improvement Service District</u>. This serves the Guinea Mill Canal area that has been in existence for over 100 years to provide drainage for timbering of the Great Dismal Swamp. The basin includes eight (8) major residential subdivisions and approximately 2,000 acres of cropland that is quickly being converted to residential uses making Guinea Mill Canal an important utility with a need for yearly maintenance. Because of the identified need for a consistent and cohesive management of stormwater, flood control and protection for water quality in Tulls Creek and Currituck Sound, the Guinea Mill Service District was established in February 2000.
- 2. <u>Moyock Watershed Improvement Service District</u>. Much like the Guinea Mill Canal area, the Moyock area is rapidly changing from rural farming community to a more urbanized setting resulting in more stormwater run-off from more impervious surfaces. Traditionally the farmers and landowners have maintained the drainage but with the recent changes taking place this is no longer the case. With the lack of maintenance resulting in chronic flooding and no entity responsible for overseeing these drainage ways, this service district was created by the County in June 2002. The resident population within this district is approximately 850 people with approximately 325 homes on 405 parcels. (Source: Currituck County Soil Conservation Office).
- 3. <u>Northwest Watershed Improvement Service District</u>. This community is located on Northwest Backwoods Road between Carolina Village and the Virginia State line and is a mix of residential and agricultural uses which experiences flooding problems due to its flat topography and poorly drained soils. While NCDOT has made few drainage improvements, farmers cannot justify improving this drainage system alone particularly with more and more of the area transforming from agricultural to residential uses. The resident population is approximately 160 people with about 64 houses on 73 parcels. There is approximately 1,000 acres of cropland and forestland in this district.

There are no drainage districts in the southern part of the mainland as soil conditions are more sandy and infiltration and storage capacities of the soil are greater. In addition, there are no known outfalls or point sources of discharges of stormwater or wastewater. Currituck County through its zoning and drainage regulations prohibits any stormwater discharges into any Sound, rivers, tributaries or streams. (Source: UDO Article 6, Section 615)

#### Outer Banks

Reoccurring stormwater problems ensue in this subarea from a high seasonal ground water table in conjunction with low-lying coastal areas (elevations + 4 feet M.S.L.) This coupled with the fact that there are no identified outfalls to allow stormwater to be diverted to either the ocean or the sound has created isolated but chronic flooding problems. Nowhere is this more pronounced than in the Whalehead Subdivision that represents the fourth drainage district in the County.

Whalehead Service District. This subdivision was platted in 1972 with little thought about stormwater and the necessary infrastructure to support it. Streets and intersections throughout the

subdivision are flooded and often impassable after periods of moderate rainfall. Low lying vacant lots that once held stormwater are presently being filled and built upon which displaces the water out into the streets and onto other lots. Of the total 864 lots, approximately 700 are currently built upon. Health issues have arisen with septic tanks and wells being flooded, however, County central water is currently being installed to serve this area. With the District having been created in May 2003, engineered stormwater solutions are now under review by the Whalehead Advisory Board and full implementation is expected in the next four to six years.

Similar but dispersed stormwater flooding issues are also prevalent in the Carova section of the beach. The unimproved rights-of-way, many of which have severe depressions, are acting like stormwater retention basins, as the seasonal water table is high and no outfalls exist.

#### Knotts Island

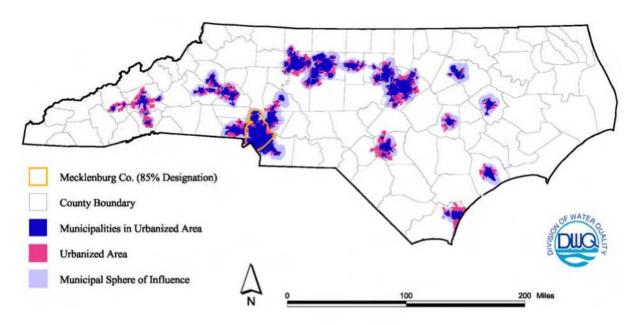
Similar to the lower Mainland peninsula of the County, Knotts Island is also plagued by lowlying depressed areas, a high seasonal water table and few if any outlets to Currituck Sound. There are no County drainage service districts on the island. Stormwater is generally conveyed to NCDOT rights-of-ways and swales that often results in acute flooding problems when normal rainfall events are exceeded.

# Stormwater System Requirements Subject to EPA's Stormwater Phase II Final Rules

In response to concerns about stormwater impacts on water quality nation-wide, the U.S. Environmental Protection Agency, working in cooperation with environmental agencies at the state level, has been in the process of implementing stormwater management legislation. The law is known as NPDES (National Pollution Discharge Elimination System) Stormwater Phase II. This stormwater management initiative requires, among other things, treatment of stormwater runoff so that it does not pollute receiving surface waters. Compliance with the new law may have a sweeping effect on the way in which subdivisions, shopping centers and new roads in designated communities are built and maintained.

Under the legislation, there are three ways in which a community may become designated as a participating local government: (1) automatic designation under the federal rules (2) designation by the state and (3) designation by petition of a third party. At the time of this writing, the following map was available from the State Division of Water Quality, showing those areas of the state designated for mandatory participation under the Phase II program:

# North Carolina Phase II Stormwater Program 2 11/22/04



Thus, Currituck County has not been designated under any of the three applicable methods. While local governments may volunteer to participate in the Phase II program, none have reportedly done so to date, due to the costs involved in implementing such a program. For the sake of providing appropriate information about the Phase II requirements, however, the following is an overview of the program requirements:

EPA regulation (40CFR 122.34) requires permittees (e.g. local governments) at a minimum to develop, implement, and enforce a stormwater program designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable. The stormwater management program must include these six minimum control measures:

- 1. Public education and outreach on stormwater impacts
- 2. Public involvement/participation
- 3. Illicit discharge detection and elimination
- 4. Construction site stormwater runoff control
- 5. Post-construction stormwater management in new development and redevelopment
- 6. Pollution prevention/good housekeeping for municipal operations

The program is intended to be carried out in two steps: (1) plan preparation and (2) plan implementation. Most work to date has been in the area of plan preparation.

# Schools

Education is a vital part of our community. Currituck County is proud have one of the State's top performing school systems. The Board of Commissioners is responsible for providing funding for

<sup>&</sup>lt;sup>2</sup> Source of map and program requirements: NC Division of Water Quality website (3/24/05): <u>http://h2o.enr.state.nc.us/su/NPDES Phase I Stormwater Program.htm</u>#Phase2\_quick\_links

facilities for the Currituck County Public School System and supplements the state's funding for school operations. There are currently five (5) elementary schools, two (2) middle schools, and one (1) high school located throughout the County. The high school and Currituck Middle School are located in Barco. Central Elementary is located in nearby Maple while JP Knapp elementary is located in Currituck. A middle school and elementary school each are located in Moyock, one elementary school is located in Poplar Branch Township, and a fifth elementary school is located on Knotts Island. Two new elementary schools are planned for construction; one in the southern end of the County and the other in the Shawboro area at a cost of approximately \$34 million. Construction of a new high school is anticipated within the next ten (10) years estimated to cost approximately \$40 million. The County relies upon an Adequate Public Facilities Ordinance to ensure its ability to provide schools is not outpaced by the rate of development.

Within close proximity of Currituck County are several higher education institutions. These universities and colleges include Elizabeth City State University, Old Dominion University, and College of the Albemarle. Elizabeth City State University and The College of the Albemarle are the two (2) closest institutions. The College of the Albemarle is a community college that serves Currituck and six other counties. COA's three campuses are a short drive away in Elizabeth City, Dare County, and Chowan County. The college offers a wide variety of educational programs and services. For over 100 years, Elizabeth City State University has provided quality education for students in northeast North Carolina. The university offers baccalaureate programs in the basic arts and sciences and in selected professional and pre-professional areas. The University's Graduate Center, in conjunction with other constituent institutions, also provides master's level programs for advanced professional study. ECSU is located in Elizabeth City.

# Public Safety

In carrying out its responsibility for ensuring public safety, the County operates a Sheriff's Department as well as an Emergency Management Department, and funds the volunteer fire departments.

The Currituck County Sheriff's Office is responsible for a full range of law enforcement and court related duties. The Sheriff's Office is comprised of officers assigned to work patrol, serve civil process, and conduct major crime investigations, drug offense investigations, court security, as well as hold crime prevention and education training. The duties of the officers are to respond to emergency and routine calls for service in addition to conducting self-initiated prevention and detection of law violations, investigate criminal activity, and traffic accidents. The Sheriff's Office works cooperatively with the North Carolina State Highway Patrol in an effort to maintain the safety of all those who travel on the roadways throughout Currituck County.

The Emergency Management Department provides leadership and assistance to reduce the loss of life and property in Currituck County from a variety of man-made and natural hazards. The department is responsible for teaching people how to prepare for disasters, coordinating countywide disaster response, and making sure that disaster assistance is available to all government agencies, businesses, and citizens of Currituck County.

Another responsibility of the Emergency Management Department is to provide assistance to managers of various County agencies that play a role in the response and recovery effort. In addition, the Emergency Management Department maintains the Emergency Operations Plan (EOP) for the County. This plan describes the concept of emergency operations and assigns duties and responsibilities to agency heads or organizations, which are either part of, or will serve

in support of, Currituck County government in time of emergency.

The Fire Marshal's office is responsible for enforcing fire prevention codes, performing safety inspections, reviewing plans for development, fire investigations, public education, public information, and other related issues. The Fire Marshal also addresses the many diverse hazards and life safety concerns, including water supplies, hazardous materials, life safety, and fire investigations.

Since 1985, it has been mandated that all structures -- new and existing -- be periodically inspected. This excludes one and two family dwellings. The hazards are then listed for the owner/occupant. It has been estimated that there are approximately 600 facilities in Currituck County that would fall under this mandate.

There are six (6) volunteer fire departments throughout the county including:

Carova Beach Volunteer Fire Department, Inc. Corolla Fire and Rescue Squad, Inc. Crawford Township Volunteer Fire Department, Inc. Knotts Island Volunteer Fire Department, Inc. Lower Currituck Volunteer Fire Department, Inc. Moyock Volunteer Fire Department, Inc.

The fire departments strive to offer the best service possible, which includes updating and maintaining equipment, fire suppression, fire prevention, auto extrication, and search and rescue. Department volunteers also assist County Emergency Medical Services staff and are pivotal to Emergency Management functions in regard to man-made and natural disasters. In addition, they are constantly staying on the leading edge of new and improved training techniques, logging thousands of hours of training each year. It is anticipated that as development continues throughout the county, additional substations will be required, particularly in the areas identified as full service.

Currituck County Emergency Medical Services (EMS) provides emergency pre-hospital Advanced Life Support and transportation for citizens and visitors of Currituck County. The department is staffed by Basic, Intermediate, and Paramedic Medical Technicians. Responds to calls for EMS and fire related assistance (complemented by the volunteer fire departments). EMS operates six stations in Moyock, Grandy, Crawford, Lower Currituck, Corolla, and Knotts Island.

# Parks and Recreation

The Currituck County Parks and Recreation Department offers citizens an opportunity to develop their leisure time and interests. Activities that promote the enrichment of life in the community help to make Currituck a desirable place to live. Recreation offers a creative outlet for developing physical fitness, sportsmanship, leadership, cultural arts, family unity, and community spirit. The Department offers youth athletic programs including flag football, tackle football, basketball, soccer, wrestling, and cheerleading. The Department also offers athletic programs for adults including adult league softball (men and women) and basketball (open gyms).

The County also operates five (5) public parks including:

- Maple Park and Maple Skate Park located at the Maple Airport Complex
- Veterans Memorial Park on the Intracoastal Waterway in Coinjock

- Knotts Island Ruritan Park, located on Brumley Road, Knotts Island
- Walnut Island Park, located at Walnut Island, Grandy
- Sound Park, located in Harbinger

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# **SECTION 6: LAND SUITABILITY ANALYSIS**

# What is Land Suitability Analysis?

The land suitability analysis (LSA) is a process for identifying land in Currituck County that is most suitable for development. The analysis is not intended to "rule out" any land or site from development. The LSA simply ranks land from least suitable to most suitable for development. It is intended to provide this information to local decision-makers to guide the formulation of local policies.

The LSA is based on consideration of several factors. These include the following:

- Natural features and their capabilities
- Existing development
- Compatibility with existing land uses
- Proximity/availability of community facilities
- Regulatory restrictions on land development

#### Land Suitability Map

As part of the land suitability analysis, the CAMA Land Use Planning Guidelines require the development of a Land Suitability Map. (The Land Suitability Map for this plan is located in Appendix E.) The Division of Coastal Management (DCM), in conjunction with the NC Center for Geographic Information and Analysis, has provided a geographic information system (GIS)-based model for analyzing land suitability and development of the LSA map. This system utilizes the suitability factors shown in the table on the following page.

#### Suitability Rating System

The LSA model puts land areas into one of four categories: least, low, medium, and high suitability. Areas that are the most undesirable for development, such as coastal wetlands, are placed into the least suitable category and cannot be weighted or changed in the model.

The remaining characteristics, such as soil septic suitability or proximity to water lines, are weighted as important, very important or extremely important in determining suitability. Using a weighting scale, the local planners and decision-makers can determine the relative importance of these characteristics. The chart below illustrates the weighting scale.

Relative Importance	Numerical Weight
Important	1
Very important	2
Extremely important	3

To develop the local LSA map, the Currituck County Land Use Plan Steering Committee assigned numerical weights indicating the relative importance of each factor. Table 6.1 represents the factors included in the analysis, the suitability rating of each factor and the locally assigned weights.

Suitability factor	Least	Low	Medium	High	Mainland	Knotts Is.	Outer Bks.
jucior	Suitable Rating	Suitability Rating	Suitability Rating	Suitability Rating	Assigned Weight	Assigned Weight	Assigned Weight
A) Coastal Wetlands	Inside		Outside		n/a	n/a	n/a
<ul><li>B) Exceptional</li><li>&amp; Substantial</li><li>Noncoastal</li><li>Wetlands</li></ul>	Inside		Outside		n/a	n/a	n/a
C) Estuarine Waters	Inside		Outside		n/a	n/a	n/a
D) Protected Lands	Inside		Outside		n/a	n/a	n/a
E) Beneficial Noncoastal Wetlands		Inside		Outside	1	1	3
F) Storm Surge Areas		Inside		Outside	1	1	2
G) Soils with septic limitations		Severe	Moderate	Slight	2	2	3
H) Flood Zones		Inside		Outside	2	2	3
I) Significant Natural Heritage Areas		<500'		>500'	1	1	1
J) Hazardous Substance Disposal Sites		<500'		>500'	3	3	3
K) NPDES Sites		<500'		>500'	2	2	2
L)Airports		<500'		>500'	2	1	2
M) Developed Land		>1 mi	.5 – 1 mi	<.5 mi	2	2	2
N) Primary Roads		>1 mi	.5 – 1 mi	<.5 mi	2	1	2
O) Water Pipes		>.5 mi	.25 – .5 mi	<.25 mi	2	1	2
P) Sewer Pipes		>.5 mi	.25 – .5 mi	<.25 mi	n/a	n/a	2

Table 6.1 Currituck County Land Suitability Analysis Weights

Note: Shaded area "A" through "D" represent development suitabilities as determined by Division of Coastal Management, while shaded area "M" through "P" represent suitabilities as determined by the County. Factor P) Sewer Pipes, is listed as n/a for the Mainland, because there are no central sewage facilities there, and n/a for Knotts Island because there are none present and no desire to have any.

The suitabilities have been established using the LSA model created by DCM. Factors in rows A through D are established by DCM as least suitable for development and cannot be weighted. However, the Steering Committee has determined the importance of each of the other factors (rows E through P) and assigned weights (1, 2 or 3) to meet local goals and policies. Weights have been assigned based on the local government's determination of the importance of each factor as it relates to suitability to development. Each subarea was processed separately, as representatives from each subarea chose their own respective weights. Outputs from each subarea are compiled on Map 6.1 (Appendix E). The map shows four classes of land – least suitable, low suitability, medium suitability and high suitability. In general, the higher suitability areas are located on the southern outer banks, on the east side of Knotts Island, from Grandy to Point Harbor, near Moyock, south of Shawboro and along the shore in and around the community of Currituck.

#### Assessment of Land Suitability Map as to Vacant or Underutilized Land that is Suitable for Development

The Land Suitability Map shows a total of 52,500 acres of land in either the *Medium Suitability* or *High Suitability* rating category. (Collectively, these two categories represent those parts of the county most suited for development.) Previously, it was determined that, in 2005, there were 18,000 acres of developed land in Currituck County. (See Section 4: Existing Land Use) Subtracting the existing developed acreage from the acreage in the two most suitable rating categories (52,500-18,000) yields a remainder of 34,500 acres of vacant land generally suitable for development. Interestingly, the *analysis of future land use needs* (Also in Section 4) showed that an additional 19,000 acres of land will be needed to accommodate new development through the year 2025. Thus, the amount of land deemed suitable for development should be sufficient to accommodate anticipated growth for the next twenty years, based on current projections.

It may also be observed that the areas of land suitable (high and medium suitability) for development (52,500 acres) is less than the amount of land shown as Class I and Class II (65,920) on the Environmental Composite Map (See Appendix E). This is because the Land Suitability Map takes additional factors into consideration, mainly, proximity to roads and utilities, making some areas more "suitable" than others.

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# **SECTION 7: REVIEW OF EXISTING POLICIES**

# Introduction

The purpose of this section is to review and evaluate the current land use plan and the implementation of policies contained in the plan. The current "plan of record" is the 1990 Currituck County Land Use Plan, which was locally adopted in June 1991, and certified by the Coastal Resources Commission in July 1991. The 1990 plan contains approximately 41 policies, with accompanying implementation strategies. The policies address the Coastal Resources Commission's land use planning requirements that were in effect at the time of plan development. In addition, the plan speaks to other local areas of concern. The following chart represents a review of the key policies and the strategies of the County's implementation efforts. Of the 41 Goals and 104 strategies identified in the plan, 73% were considered effective in directing desirable development patterns, while 12% were considered ineffective and 14% were not applicable. *Note: Under each "goals" statement, one of the following initials is used to indicate the following: (E) Effective in reaching the goal, (I) Ineffective in reaching the goal, (N/A) Not applicable as the County had little or no control in realizing the goal.* 

Goal	Strategy	Implementation
1.1: To Encourage	1. To Encourage the use of citizen advisory groups to	a. Citizen Advisory Group formulated to evaluate
Maximum Public	help formulate policies on land use issues facing the	highway corridor (US 158- NC168) study and
Participation in the	county;	improvements. (1994)
Land Use Planning	<b>RESPONSIBLE AGENCY:</b> Board of	b. Currituck County Farmland Preservation Board
Process. (E)	Commissioners	established to protect prime agricultural farmland.
	TIME FRAME: Ongoing	(2001)
		c. Currituck County Land Use Plan Steering
		Committee appointed to oversee the policy
		development of the 2005 CAMA Land Use Plan.
		(2003)
	2. Have all agencies with tasks outlined in the Land	No formal structure has been identified that
	Use Plan report on an annual basis to the Planning	encourages or requires agencies to report routinely
	and Zoning Commission on the status of	to the Planning Board.
	implementing strategies.	
	<b>RESPONSIBLE AGENCY:</b> Agricultural Extension	
	Office, Soil Conservation Service, Health	
	Department, and Emergency Services.	
	TIME FRAME: Annually	
	3. Appointments to boards, commissions, and	The Board of Commissioners continues to appoint
	advisory groups should be bipartisan and represent	a diverse group of individuals to participate on a
	all age groups, geographical locations, sex and racial	variety of boards and advisory groups.
	make-up of the County.	
	<b>RESPONSIBLE AGENCY: Board of</b>	
	Commissioners	
	TIME FRAME: Ongoing	
3.1: Expand the	1. Establish an economic development authority in	The County Economic Development Board,
economic base of	order to formalize a plan for expanding the economic	composed of citizens and business leaders was
Currituck county to	base of Currituck County.	established by the Board of Commissioners (1991)
improve employment	<b>RESPONSIBLE AGENCY: Board of</b>	
opportunities while	Commissioners	
ensuring adequate	TIME FRAME: 1991	

Goal	Strategy	Implementation
environmental	2. Hire an economic development coordinator to	The County hired an Economic Development
protection. (I)	promote economic development and carry out the	Director and established a County Department
	plans adopted by the Economic Development	(1991)
	Authority.	
	<b>RESPONSIBLE AGENCY: Board of</b>	
	Commissioners	
	TIME FRAME: 1992	
	3. Recruit only those industries that will not have a	Currituck County continues to pursue "clean
	negative impact on Currituck County's fragile	industries" coupled with strong environmental
	environment (i.e., minimal effect on water quality,	local regulations which together ensure the
	no excessive smoke and noise, etc.)	protections of AECs and other features of the
	<b>RESPONSIBLE AGENCY: ED Board/Coordinator</b>	natural environment
	TIME FRAME: Ongoing	
	4. Have the Board of Adjustment issue conditional	The Unified Development Ordinance (UDO)
	use permits for heavy industry uses and request	continues to be amended to require certain
	disclosure from the industries on environmental	commercial and industrial uses to submit
	impacts and hazardous materials to be used	application to the Board of Adjustment (CUPs)
	<b>RESPONSIBLE AGENCY: Board of Adjustment</b>	based on the potential impact to the natural and
	TIME FRAME: Ongoing	man-made environment.
	5. Involve the Agricultural Extension Office in	Membership on the Economic Development Board
	promoting economic development in Currituck	includes farming and other agricultural interests.
	<b>RESPONSIBLE AGENCY: Agricultural Extension</b>	
	Office	
	TIME FRAME: Ongoing	
	6. Consider the location of light industrial, wholesale	The County Board of Commissioners has rezoned
	and warehouse activities in the northern part of the	approximately 200 acres in the northern Moyock
	County adjacent to as well as remote from Highway	area since 1990 for these uses with an eye toward
	168 provided:	meeting or exceeding the specified conditions in
	-transportation facilities are adequate to meet the	the plan.
	needs of the use and would not place an undue	
	burden on local roads;	
	-the use is adequately buffered by physical and	
	natural barriers from residential and agricultural uses	
	and would not detract from the quality of life	
	enjoyed by neighbors;	
	-the use would not detract from the rural character of	
	the area;	
	-the use has adequate access to utilities and,	
	preferably, has County water available;	
	-the use does not locate in an area that is	
	environmentally sensitive.	
	RESPONSIBLE AGENCY: Board of Commissioners	
	TIME FRAME: Ongoing	
3.2: To continue to	Promote the use of cluster development (Planned	Clustered or "Conservation" style subdivisions are
	· · ·	now mandated for any residential division of
support agricultural uses in those areas	Subdivisions, Planned Unit Development - PUD) in	greater than 40 lots (2003). For subdivisions of
best suited to be	order to preserve the land best suited for farming.	less than 40 lots but greater than 20 lots requires
farmed and to	RESPONSIBLE AGENCY: Board of	open space proportional to the number of lots
promote agricultura		created.
promote agricultura practices that are	TIME FRAME: Existing	cicaidi.
practices that are	Thrie Fredrie. Existing	

Goal	Strategy	Implementation
sensitive to the environment. (E)	Promote the use of Best Management Practices and to encourage less dependence on chemicals. RESPONSIBLE AGENCY: Soil Conservation Service TIME FRAME: Ongoing Explore potential of Transfer Development Rights (TDR \$) to preserve open space. RESPONSIBLE AGENCY: Currituck County Planning Department TIME FRAME: 1994	Long term "no till" Best Management Practices have been encouraged and employed for the past 10 years as well as water control structures in farm fields for the protection of water quality in adjacent sounds and tributaries Although the expected time frame to investigate this approach to protecting prime agricultural farmland was established for 1994, new efforts, as directed by the Board of Commissioners will be reconsidered in 200-6-2007. North Carolina Statutory Authority is required for this initiative
3.3: To continue to allow the extraction of minerals to support growth provided extraction activities have a minimum impact on the environment and surrounding properties. (E)	Amend the Unified Development Ordinance to limit the negative impacts mines have on the environment and surrounding properties (i.e., drainage, erosion, noise, visual impact, etc.) and allow timely enforcement by the County in the event of violations. RESPONSIBLE AGENCY: Currituck County Planning Department TIME FRAME: 1991	The UDO was amended in 1997 and 2000 to better protect the environment and surrounding land use from any negative impacts associated with this use. Essentially, the UDO requirements now meet or exceed State Mining Standards for all mines in excess of one (1) acre.
3.4: Continue to expand the role tourism plays in Currituck County (E)	<ol> <li>Support the establishment of the Wildlife Museum through monetary means and staff resources.</li> <li>RESPONSIBLE AGENCY: Board of Commissioners TIME FRAME: 1995</li> <li>Establish a visitors 'center at the proposed Wildlife Museum to advise tourists on areas of interest in Currituck County. RESPONSIBLE AGENCY: Board of Commissioners TIME FRAME: 1995</li> </ol>	The Outer Banks Center for Wildlife Education opened in 2006. This facility, established by the NC Wildlife Recourses Commission is a 20,000 sq. ft. center located between the Whalehead Club and the Currituck Beach Lighthouse The Outer Banks Center for Wildlife Education opened in 2006. This facility, established by the NC Wildlife Recourses Commission is a 20,000 sq. ft. center located between the Whalehead Club
	<ul> <li>3. Request the State provide a manned information center on NC 168 just south of the Virginia state line at the time the roadway is expanded.</li> <li>RESPONSIBLE AGENCY: Board of Commissioners</li> <li>TIME FRAME: 1991</li> <li>4. Provide information about Currituck County at the existing State rest stop facility south of Coinjock.</li> </ul>	and the Currituck Beach Lighthouse Due to State budgetary constraints a Welcome Center at this location has not become a reality The NCDOT Rest Area south of Coinjock has an abundance of information on Currituck County
3.5: Maintain the economic and historical significance of commercial and recreational fishing and hunting in Currituck County. (E)	<ul> <li>RESPONSIBLE AGENCY: County Manager's Office TIME FRAME: 1991</li> <li>1. Improve the quality of the sounds and adjoining tributaries.</li> <li>(Policy Stated in Environmental Chapter)</li> <li>2. Encourage the preservation of wildlife habitat by promoting cluster development. RESPONSIBLE AGENCY: Currituck County Planning Department TIME FRAME: Completed</li> </ul>	See 7.1, Item 1 – Environment County adopted "Conservation Subdivision" regulations as a UDO amendment which preserved wetlands and wildlife habitat

Goal	Strategy	Implementation
	3. Explore the potential of establishing conservation easements allowing a landowner to maintain title to the property but prohibit development of sensitive areas in exchange for financial consideration. RESPONSIBLE AGENCY: Currituck County Planning Department TIME FRAME: 1994	See #2 above
3.6: To ensure commercial timber harvesting is done in a manner that has minimal impact to the environment. (N/A)	1. Commercial timber harvesting shall adhere to best management practices established by the North Carolina Forest Service and comply with 404 wetland regulations. RESPONSIBLE AGENCY: NC Forest Service and USACE TIME FRAME: Ongoing	No action taken, but commercial timbering operations have followed recommended BMPs
4.1: To have a transportation system that effectively, efficiently and safely moves motoring and bicycle traffic throughout Currituck County and that	<ol> <li>Implement the recommendations listed in the 1988 Thoroughfare Plan.</li> <li>RESPONSIBLE AGENCY: NCDOT TIME FRAME: Ongoing</li> <li>Amend the Unified Development Ordinance in order to establish regulations for driveways on individual property and within subdivisions;</li> </ol>	The 1988 Thoroughfare Plan is outdated. A 1999 Thoroughfare Plan has been developed by NCDOT but not yet adopted by the County. Many of these recommendations have been implemented in the UDO Amendments to the UDO, particularly Article 9, Subdivision Standards and Article 3, Streets and Sidewalks have been adopted regulating the
assures access to transportation for the elderly and financially disadvantaged. (E)	RESPONSIBLE AGENCY: Currituck County Planning Department TIME FRAME:1991 3. Request that the Department of Transportation	number and location of curb cuts (January 1996, June 1998, August 1999, and April 2003) No NCDOT road widening projects for the
uisauvaitageu. (E)	<ul> <li>widens the following roads to accommodate bicycle traffic:</li> <li>a) Highway 158 from Belcross (Camden County to Barco),</li> <li>b) Along NC 12 on the Currituck Outer Banks,</li> <li>c) On the Mid-County Bridge,</li> <li>d) NC 615 on Knotts Island,</li> <li>e) Highway 168 from the Virginia state line to Barco,</li> <li>f) Tulls Creek Road (SR 1222);</li> <li>RESPONSIBLE AGENCY: Board of Commissioners</li> <li>TIME FRAME: Ongoing</li> </ul>	purpose of the six (6) names roads. A resolution requesting the noted improvements be added to the State's Transportation Improvement Program was sent to DOT September 5, 1990. Further follow- up on bikeway improvements shall be the responsibility of the Recreation Committee
	4. Establish a system to ensure all elderly and financially disadvantaged residents in Currituck County have access to transportation; RESPONSIBLE AGENCY: Board of Commissioners to establish agency TIME FRAME: 1991	No system for enhancing transportation for these groups has occurred

Goal	Strategy	Implementation
	5. Request the Board of Transportation make site specific improvements on Highway 168 (i.e., left turn lanes, deceleration lanes, stop lights, etc.) until roadway is widened according to the Transportation Improvement Plan. RESPONSIBLE AGENCY: Board of Commissioners TIME FRAME: Ongoing	Widening NC168 has occurred as well as additional traffic signals and deceleration lanes installed
4.2: Encourage development patterns on highway 158/168 that will enhance economic development in the county, will be aesthetically pleasing,	<ol> <li>Continue nodal development patterns along the Highway 158/168 corridor. This strategy should be reviewed after completion of a corridor study. Recommendations from that study should be considered for implementation; RESPONSIBLE AGENCY: Board of Commissioners</li> </ol>	Nodal development concepts fro commercial uses has had limited success along 158/168. The corridor continues to be stripped out for commercial activity.
and will provide for safe and efficient movement of traffic. (E)	TIME FRAME: Ongoing 2. Prepare a highway corridor study for identifying measures that will promote economic development and safe and efficient traffic movement along Highway 158/168. The report should also contain recommendations for improving the appearance of the Highway 158/168 corridor. RESPONSIBLE AGENCY: Currituck County Planning Department TIME FRAME: 1991-1992	Highway Corridor Plan was adopted by the County (1996) and the plan was awarded the NCADA Small Community Planning Award in 1997.
4.3 To provide for timely evacuation of residents and guests on the Currituck Outer Banks during	1. Support construction of a mid-county bridge in the next five years; RESPONSIBLE AGENCY: Board of Commissioners TIME FRAME: Ongoing	The Board of Commissioners continues to support the construction of the Mid-County Bridge, however, NCDOT has not prioritized this project.
major storm events and improve the accessibility of community facilities and availability of community services. (I)	2. Operate satellite County offices as needed on the Currituck Outer Banks. RESPONSIBLE AGENCY: County Manager's Office TIME FRAME: 1991	County opened the Corolla Office to house Planning, Inspections, Sheriff, and Magistrate's Offices (1992)
4.4: To provide a safe means of access north of corolla that will have a negligible impact on the environment. (N/A)	<ol> <li>Prepare an access feasibility study for areas north of Corolla addressing both short range and long range needs which addresses the following:         <ul> <li>a) identify issues relating to north beach access;</li> <li>b) review historical developments of access to northern beaches;</li> <li>c) analyze growth trends of the northern beaches; and,</li> <li>d) identify available alternatives.</li> </ul> </li> <li>RESPONSIBLE AGENCY: Currituck County Planning Department TIME FRAME: 1992</li> </ol>	No formal study was completed, however, access issues, recreational uses, and improved traffic management have occurred as amendments to both the UDO and the County Code of Ordinances.

Goal	Strategy	Implementation
4.5: To allow the use of off-road vehicles in a safe and responsible manner on the Currituck Outer	1. Continue to enforce the existing Outer Banks Vehicular and Barrier Strand Ordinance.	The ordinance continues to be enforced and in addition ATV rental operations have been prohibited as of 12/31/04
Banks. (N/A) 4.6: To encourage greater utilization of airport facilities. (E)	1. Appoint an Airport Authority to oversee the operation of the airport; RESPONSIBLE AGENCY: Board of Commissioners TIME FRAME: 1991	The Airport Advisory Board was established in December 1990.
	2. Carry-out the recommendations established in the Airport Master Plan. RESPONSIBLE AGENCY: Board of Commissioners and Airport Advisory Board TIME FRAME: Ongoing	Te Airport Master Plan continues to be implemented with a 1,500 foot extension to the runway and the construction of a Terminal Building. (2003-2004)
5.1: To encourage a variety of residential developments offering a high quality of life for residents and having limited	1. Keep the minimum lot size for conventional subdivisions in Currituck County at 30,000 square feet except in the RO1 zoning district where the minimum lot size is 40,000 square feet and RO2 zoning district where the minimum lot size is 120,000 square feet (excluding PUD sh, PRD sh);	Conventional minimum lot sizes have been increased to 40,000 sq. ft. in the R zoning district and a minimum of 3 acres in the A district.
negative impact on the environment. (E)	<ol> <li>Encourage cluster development by continuing to utilize existing Planned Unit Development (PUD), Planned Residential Development (PRD) and Open Space Subdivision regulations. Require open space to include usable land and discourage undesirable development patterns such as high density PRD s and PUD s in remote areas without proper infrastructure;</li> </ol>	Additional amendments requiring "Conservation Subdivisions" for developments in excess of 40 lots and open space subdivisions for developments between 20 lots and 40 lots have recently been adopted (2003). These standards facilitate cluster style development.
	3. Explore the options available for centralized sewer systems within developments and make the information available to the development community; RESPONSIBLE AGENCY: Currituck County Planning Department and Health Department TIME FRAME: 1992	Community wide sewage treatment system for the Moyock area was studies for the purpose of serving existing and proposed commercial development along NC 168. Although still under study, initial cost estimates and expected revenues could not support this project.
	4. Explore feasibility of a county-wide or community-wide sewage treatment system; RESPONSIBLE AGENCY: Currituck County Departments of Planning and Public Works TIME FRAME: 1995	Community wide sewage treatment system for the Moyock area was studies for the purpose of serving existing and proposed commercial development along NC 168. Although still under study, initial cost estimates and expected revenues could not support this project.
	5. Remove residential development from the list of permitted uses in the LM "Light Manufacturing" and HM "Heavy Manufacturing" zoning district; RESPONSIBLE AGENCY: Currituck County Planning Department TIME FRAME:1991	Residential development has been eliminated from those manufacturing zoning districts as an amendment to the UDO (1992).

Goal	Strategy	Implementation
	6. The Unified Development Ordinance should be	Several UDO amendments have been adopted that
	amended to promote hierarchical street patterns	either restrict access onto major arterials (US 158,
	based on traffic function and proper setting for	NC 168, NC 12, NC 34, and NC 136) or mandate a
	residential neighborhoods;	reduction in curb cuts by utilizing shared drives or
	RESPONSIBLE AGENCY: Currituck County	frontage roads.
	Planning Department TIME FRAME: 1992	
-	7. Where appropriate amend the Unified	See #6 above.
	Development Ordinance to encourage the use of	
	proper design principles when developing residential	
	subdivisions and to minimize the number of curb	
	cuts along state maintained roads. Consideration	
	should be given to providing incentives for	
	excellence in design.	
	RESPONSIBLE AGENCY: Currituck County	
	Planning Department	
	TIME FRAME: 1991	
5.2: Encourage the	1. Amend the Unified Development Ordinance to	Issue studied in 2000 with no action taken.
development of	allow greater flexibility in the design of multi-family	
affordable housing. (I)	housing;	
8 ( )	RESPONSIBLE AGENCY: Currituck County	
	Planning	
	Department	
	TIME FRAME: 1992	
	2. Continue the present mobile home policy of	These provisions are already in the UDO. No
	allowing double-wides meeting specific appearance	additional actions taken as the County continues to
	criteria by right in all residential zoning districts;	enforce all provisions of this policy.
	allowing Class "B" mobile homes (built after July 1,	
	1976) in existing mobile home parks and on large	
	lots in limited circumstances and for temporary	
	replacement of a condemned home; and prohibiting	
	class "C" mobile homes (built before July 1, 1976);	
	3. Continue to promote Planned Unit Developments	Provisions are already in the UDO. No additional
	(PUD \$), Planned Residential Developments (PRD \$)	actions taken.
	and Open Space Subdivisions.	
5.3: To continue to	1. Agricultural Extension Office to hold seminars	No actions taken to address this policy.
revitalize existing	around the County advising residents of available	1 5
residential	housing rehabilitation as well as new construction	
developments in order	programs;	
to provide safe and	RESPONSIBLE AGENCY: Agricultural Extension	
affordable housing for	Office	
the residents of	TIME FRAME: Start in January 1991 and meet	
Currituck County. (E)	semi-annually	
	2. Continue infrastructure improvement efforts in	County successfully implemented a CDBG grant
	Newtown, Moyock Township;	to provide needed central wastewater facilities for
	RESPONSIBLE AGENCY: Albemarle Commission	the Newtown, Moyock area (1995).
	TIME FRAME: 1991	
	3. Apply for a grant to rehabilitate homes in	CDBG "Scattered Site Housing Projects"
	Newtown, Moyock Township:	administered by the Albemarle Commission have
	Newtown, Moyock Township; RESPONSIBLE AGENCY: Albemarle Commission	administered by the Albemarle Commission have successful been targeted in this neighborhood.

Goal	Strategy	Implementation
	4. Prepare a study to determine housing needs and	No action taken.
	identify areas that qualify for housing grants. RESPONSIBLE AGENCY: Currituck County	
	Planning Department	
	TIME FRAME: 1994	
6.1: To ensure that	1. All residential lots shall have 125 foot of frontage	UDO has been amended with these road frontage
rapid development	along streets except in Planned Unit Developments,	standards adopted except for commercial lots
occurring in	Planned Residential Developments, and Open Space	(1992).
Currituck County will not detract from the	Developments. Further, all commercial lots shall have a minimum road frontage of 200 feet;	
quality of life nor	RESPONSIBLE AGENCY: Currituck County	
cause a loss in quality	Planning Department	
of providing	TIME FRAME: 1991	
community services.	2. Establish an impact fee system to have new	County has be unsuccessful in obtaining special
(E)	development help offset the cost of expanding	legislation to impose impact fees, however efforts
	community facilities attributed to that development;	still continue.
	RESPONSIBLE AGENCY: Currituck County	
	Planning Department TIME FRAME: 1993	
	3. Assess development trends in the community to	No known assessment taken to address this policy.
	determine if federal, state and the Unified	
	Development Ordinance regulations are promoting	
	development consistent with County long range	
	goals. RESPONSIBLE AGENCY: Currituck County	
	Planning Department	
	TIME FRAME: 1992	
6.2: To ensure	1. Continue to work with the Division of Land	County Technical Review Committee established
development activities	Resources and Division of Environmental	in 2003 to oversee compliance with all local, state,
occur in compliance	Management in reviewing and implementing erosion	and federal regulations. DWQ and Land Quality
with state and federal regulations and to	control plans and storm water control plans, respectively;	permits are now required at this review stage.
pursue state and	RESPONSIBLE AGENCY: Currituck County	
federal funding	Planning Department and Soil Conservation Service	
programs that will	TIME FRAME: Ongoing	
enhance the	2. Continue to apply for CAMA, Wildlife Resources,	a. CAMA beach access grant for Pine Island
accessibility of water	and related grants for ocean and sound accesses, boat	awared to Currituck County (September 1996).
resources. (E)	ramps, piers, navigational dredging and the like.	b. Parks and Recreation Trust Fund Grant for
	RESPONSIBLE AGENCY: Currituck County Planning Department	Harbinger Sound Access and Recreation awarded 2002.
	TIME FRAME: Ongoing	c. CAMA Beach Access Grant for Corolla Village
		awarded to Currituck County March 2005.
6.3: To encourage	1. Make sure all developments indicate well	Policy continues to be enforced by County
development that will	locations on their lots and adjoining lots to ensure	Planning Department and ARHS (Health
not negatively impact	100 foot separation from septic systems;	Department).
potable water supplies	RESPONSIBLE AGENCY: Currituck County	
in terms of water	Planning Department	Sec. Co. 15.1. States 1 - 20. 114
quality and quantity.	2. Explore the feasibility of a County-wide or	See Goal 5.1, Strategies #3, #4.
( <b>E</b> )	community-wide sewage treatment system; (STATED IN 5.1)	
	3. Determine the volume of potable water supplies	Reverse Osmosis (RO) Water Plant was identified
	on the Outer Banks by establishing and monitoring	as a county solution to potable water. Plant
	test wells. (Stated in 8.5)	Construction completed 2005.
		-

Goal	Strategy	Implementation
6.4: To prohibit the establishment of floating home development. (E)	1. Maintain provisions in the Unified Development Ordinance that prohibit the use of floating home development.	Provisions are already in the UDO. Floating homes continue to be prohibited by the UDO.
6.5: To permit marina development (including marinas associated with residential subdivisions) only when it can clearly be shown that the marina has no significant impact on the public trust waters, estuarine areas and surrounding properties. (N/A)	<ol> <li>Amend the Unified Development Ordinance to permit marinas subject to established design principles such as the following:         <ul> <li>a) Marinas shall be planned in such a manner as to minimize the risk of water pollution.</li> <li>b) Marinas shall be located in areas where there is a high rate of water "turnover" (the time required for tidal action or water flow to replace water of a boat basin with new water from another source). Ideally, marinas should have a water turnover rate of 2 to 4 days.</li> <li>c) Marinas in upland areas shall be encouraged.</li> <li>d) Marina access channels shall be designed to maximize circulation and avoid dead-end spots.</li> <li>e) Marina shall minimize alteration of existing shoreline configurations and disturbance of vital habitat areas.</li> <li>g) Dredging operations shall not occur during critical periods of fish migration and breeding.</li> <li>h) The method of dredging shall be chosen that will have the least environmental impact and, all dredged materials shall be placed in a manner so as not to pollute surrounding areas.</li> <li>i) Proposals for marina development shall be accompanied by a modeling study indicating expected flushing.</li> </ul> </li> <li>RESPONSIBLE AGENCY: Currituck County Planning Department TIME FRAME: 1991</li> </ol>	No large scale marinas have been constructed in the County since the adoption of this Plan.
	2. Permit marinas as an accessory use to residential development. Marinas not associated with residential developments and dry stack storage facilities shall only be permitted in accordance with the Unified Development Ordinance.	Provisions are already in the UDO. No action necessary as the Ordinance remains unchanged.
6.6: To allow the development of islands that would best promote the public interests. (N/A)	1. Allow island development that complies with the County s zoning regulations; RESPONSIBLE AGENCY: Board of Commissioners TIME FRAME: Ongoing	No island development has occurred since the adoption of this Plan.
	<ol> <li>Permit the development of Monkey Island for the purpose of public education or research and related purposes.</li> <li>RESPONSIBLE AGENCY: Board of Commissioners and Board of Education TIME FRAME: Ongoing</li> </ol>	Monkey Island is under sever erosion and County, State, and Federal efforts are now underway to determine how best to save this unique resource (2005).

Goal	Strategy	Implementation
6.7: To permit the use	1. Require all bulkhead installations be done	Policy is being implemented by County Planning
of bulkheads for	according to CAMA regulations.	and Inspections with oversight by DCM.
stabilizing non-ocean	<b>RESPONSIBLE AGENCY: Currituck County</b>	
shorelines. (E)	Planning Department and Division of Coastal	
	Management	
	TIME FRAME: Ongoing	
6.8 To protect the	1. Oppose all drilling off the coast of North Carolina	County continues to support this policy.
fragile coastal	and oppose the location of any associated support or	
environment from	processing facilities within Currituck County; RESPONSIBLE AGENCY: Board of	
negative impacts of energy facilities. (E)	Commissioners	
energy facilities. (E)	TIME FRAME: Ongoing	
	2. Allow energy generating plants in accordance with	Same as above.
	the provisions of the Unified Development	Same as above.
	Ordinance as long as it is consistent with	
	environmental protection, health, and welfare of the	
	community.	
	<b>RESPONSIBLE AGENCY:</b> Board of	
	Commissioners	
	TIME FRAME: Ongoing	
7.1: To maintain and	1. Request the state to reevaluate the stream	The Board of Commissioners passed a resolution
improve the water	classification of the Currituck Sound and associated	requesting the State to reevaluate the classification
quality in the	tributaries to see if they warrant upgrading, thereby	of the Currituck County and associated tributaries
Currituck and	affording a higher level of protection by the state.	on July 2, 1990. Further actions on this policy are
Albemarle Sounds. (E)	(Note: the Currituck Sound and associated	unknown; however, a grant request has been
	tributaries were last evaluated by the state in 1961 at	submitted to the Clean Water Management Trust Fund to reevaluate these water classifications.
	which time they were classified as "SC" waters. This designation affords the least amount of	Fund to reevaluate these water classifications.
	protection with respect to allowable discharges);	
	RESPONSIBLE AGENCY: Board of	
	Commissioners	
	2. Review results from the Albemarle Pamlico	No known actions taken to implement
	Estuary Study (APES) and implement suggested	environmental strategies in this study.
	environmental management strategies for improving	
	and maintaining the quality of the Currituck Sound	
	and associated tributaries where appropriate;	
	RESPONSIBLE AGENCY: Planning Board and	
	Board of Commissioners	
	TIME FRAME:1992         3. Develop communication channels with	
	southeastern Virginia communities in order to inform	
	them of the status, concerns and programs being	
	undertaken relating to the water quality of the	
	Currituck Sound;	
	RESPONSIBLE AGENCY: Currituck County	
	Planning Department	
	TIME FRAME: 1991	
	4. Continue to oppose discharges from water and	County supports no discharges of waste water,
	wastewater treatment facilities;	however, discharges of reverse osmosis brine
	RESPONSIBLE AGENCY: Board of	where a "finding of no significant impact" can be
	Commissioners	determined continues to be supported by the
		County.

Goal	Strategy	Implementation
	5. Discuss with the state the feasibility of allowing wastewater from water treatment plants to be injected into the ground as opposed to being discharged into surface water bodies. RESPONSIBLE AGENCY: Board of Commissioners and County Manager TIME FRAME: 1993	State environmental laws continue to prohibit this activity.
7.2: To maintain the high quality of estuarine waters and to promote appropriate development along estuarine shorelines so as not to degrade the estuarine system. (E)		UDO amendments support this goal in two (2) ways: a. Zoning adjacent to estuarine waters is consistent with DWQ low intensity options. b. Post development stormwater run off shall not exceed pre-development standards.
<ul> <li>7.3 Keep all public trust waters open for navigation including those areas under the jurisdiction of the federal government.</li> <li>(E)</li> <li>7.4: To protect coastal wetlands so that they can continue to serve their vital function in the environment. (E)</li> </ul>		The County continues to support this policy and its attempts to maintain the historic access to the Whalehead Club in Corolla; however efforts have been frustrated by CAMA and USACE regulations. The County will continue to attempt to demonstrate that the channel historically existed and project is in fact maintenance dredging. Coastal Wetlands have been protected by employing "Conservation" style subdivisions which excludes these sensitive areas from density calculations (2003).
7.5: To allow limited development in the ocean hazard area that is sensitive to the fragile environment. (I)		Development in Ocean Hazard AECs continues to follow Division of Coastal Management's requirements.
7.6: Protect swamps from encroaching development in order to preserve vegetation and their function as	1. Continue to review development proposals for location of 404 and CAMA wetlands. RESPONSIBLE AGENCY: Currituck County Planning Department TIME FRAME: Ongoing	Both 404 and CAMA Wetlands are required to be identifies on all development plans and excluded from density calculations (1999 and 2003).
an important habitat for wildlife. (E) 7.7: To protect maritime and petrified forests from encroaching development. (N/A)	1. Delineate boundaries of maritime forests and establish local regulations for their protection instead of guidelines; RESPONSIBLE AGENCY: Currituck County Planning Department and NC Department of the Environment TIME FRAME: 1992	No County regulations for the mandatory preservation of either Maritime or Petrified Forests have occurred during the planning period.

Goal	Strategy	Implementation
7.8: To ensure that	2. Identify the location of petrified forests and	<b>↑</b>
there is continuous	establish local regulations for their protection.	
access to and from the	RESPONSIBLE AGENCY: Currituck County	
beaches north of	Planning Department	
corolla where no	TIME FRAME: 1993	
improved road exist.	1. Support a beach nourishment program only for	Although no beach nourishment program has been
(I)	enhancement of beach traffic in the event a north	advanced to address continuous access to beaches
7.9: To insure	beach access road is not provided and erosion is	north of Corolla, the County has adopted a local
development is	sufficient to limit access along the beaches.	Nuisance Ordinance that prohibits erosion
sensitive to the		threatened structures situated in public trust areas
physical constraints of		to remain in place.
the land. (E)	<ol> <li>Prohibit development requiring sewage treatment on soils that are unsuitable for on site septic systems unless sewerage can be pumped to soils that are suitable;</li> <li>RESPONSIBLE AGENCY: Currituck County Health Department TIME FRAME: Ongoing</li> <li>Continue participating in the National Flood Insurance Program;</li> <li>RESPONSIBLE AGENCY: Currituck County Planning Department TIME FRAME: Ongoing</li> <li>Encourage package treatment plants for Planned Unit Developments (PUD \$), Planned Residential Developments (PRD \$) and Open Space Subdivisions. Use of alternative sewerage disposal systems that are environmentally safe should be encouraged (i.e., constructed wetlands);</li> </ol>	Local Health Department has been responsible for enforcing this policy. In addition, the County has adopted an ordinance prohibiting the "off-site" pumping of sewage, except to a wastewater treatment plant. Currituck County is a participant in both NFIP and the Community Rating System. Centralized wastewater treatments plants are required for all PUDs and PRDs only (1992-1993).
	RESPONSIBLE AGENCY: Planning Board and Board of Commissioners TIME FRAME: Ongoing 4. Explore the potential of having a wildlife inventory prepared for Currituck County; RESPONSIBLE AGENCY: Currituck County Planning Department TIME FRAME: 1993	No action taken by the County on this strategy.
	5. Develop procedures for County review of drainage and storm water control plans and establish a system to verify plans have been implemented in the field; RESPONSIBLE AGENCY: Currituck County Planning Department, County Engineer, and Soil Conservation Service TIME FRAME: 1991	Technical review Committee established to review developments drainage plans on a monthly basis (2003). Verification of plan implementation relegated to County Engineer, Soil Conservation, and Zoning Administration. (See 6.2, #1)
	<ul> <li>6. Continue ordinance provisions requiring the planting of vegetation in developments and to encourage the preservation of existing vegetation, particularly along water bodies.</li> <li>RESPONSIBLE AGENCY: Currituck County Planning Department TIME FRAME: 1991</li> </ul>	Ordinance provisions in place (1992).

Goal	Strategy	Implementation
8.1: To provide	1. Establish a Recreation Committee to assess the	County-wide Recreation Department established
enough recreational	recreational needs of Currituck County and to make	by Board of Commissioners (2000).
facilities to meet the	recommendations for developing a county-wide	
needs of all citizens	comprehensive recreational program;	
and to take advantage	<b>RESPONSIBLE AGENCY: Board of</b>	
of the natural amenities of	Commissioners TIME FRAME: 1991	
Currituck County. (E)	2. Establish a Parks and Recreation Department to implement recommendations of the Recreation Committee; RESPONSIBLE AGENCY: Board of Commissioners TIME FRAME: 1992	County-wide Recreation Department established by Board of Commissioners (2000).
	3. Encourage funding of recreational programs through private funds, grants and public funds (i.e., impact fees); RESPONSIBLE AGENCY: Parks and recreation Department TIME FRAME: Ongoing	Public funds and State grants form North Carolina Parks and Recreation Trust Fund support recreation facilities and programs.
	4. Continue to require dedication of land in large developments (20 lots or more) for public purposes and allow the payment of fees instead of dedication where appropriate.	Through incentives (Density Bonuses), dedication of land for public facilities has been provided for in the UDO. "Useable" open space for recreation purposes is required for all residential subdivisions over 20 lots.
8.2: To increase the number of public beach and sound accesses and associated facilities.	1. Inventory all potential ocean and sound access points and establish a priority rating for funding as part of a comprehensive recreation program; RESPONSIBLE AGENCY: Recreation Committee TIME FRAME: 1992	No action taken.
(E)	2. Apply for CAMA, WRC (Wildlife Resources Commission) and applicable land and water conservation funds to establish more ocean and sound accesses in the County on the Outer Banks and the mainland; SEE COMMITMENT TO FEDERAL/STATE PROGRAMS	See goal 6.2, #2.
	3. Establish three public restroom facilities on the Outer Banks, one near the Dare County line, one in Corolla and one in Carova Beach; RESPONSIBLE AGENCY: Currituck County Planning Department TIME FRAME: 1995	Public restroom facilities have been established at the Pine Island Beach Access site (1996) and DCM grant to construct bath facilities in Corolla Village approved March 2005.
	4. Establish additional County recreational and boating facilities in Currituck. RESPONSIBLE AGENCY: Currituck County Planning Department TIME FRAME: Ongoing	The County continues to work with WRC in establishing additional boat launching facilities for public use. Also see Goal 6.2, #2.
8.3: To provide the residents of Currituck the highest level of	1. The County shall identify sites for the jail facility, social services building and senior citizens center; RESPONSIBLE AGENCY: Board of Commissioners	All three (3) new County facilities have been completed with the most recent being the County Jail (2004).
county services and to		

Goal	Strategy	Implementation
facilities are available to meet current and long range needs of the County. (E)	<ul> <li>2. The County shall proceed with finalizing plans and establishing a location for an administrative building;</li> <li>RESPONSIBLE AGENCY: Board of Commissioners</li> <li>TIME FRAME: 1991</li> <li>3. The County shall prepare a capital improvements</li> </ul>	New Administrative buildings completed (2000). Ten-year capital improvement plans now a part of
	plan to guide the expansion of all county facilities; RESPONSIBLE AGENCY: Board of Commissioners TIME FRAME: 1992	annual County budgeting process.
	4. A long range facilities plan shall be prepared for Currituck County schools. RESPONSIBLE AGENCY: Board of Commissioners TIME FRAME: 1993	Board of Commissioners and Board of Education agreed to approve a 10-year Capital Facilities plan for new school construction and expansion.
8.4: To ensure that solid waste materials are disposed of properly and to encourage recycling. (E)	1. Establish a solid waste task force committee to formulate a long range plan addressing the disposal of solid waste in Currituck County; RESPONSIBLE AGENCY: Board of Commissioners to make appointments TIME FRAME: 1992	Plan established by Public Works identifying new locations for disposal and recycling centers all of which have been implemented.
	2. Support a regional waste facility; RESPONSIBLE AGENCY: County Manager's Office TIME FRAME: Immediately	Regional waste facility established for Northeast North Carolina.
	3. Comply with provisions of Senate Bill 111 by emphasizing recycling and properly disposing of materials considered to be hazardous. RESPONSIBLE AGENCY: Board of Commissioners TIME FRAME: Ongoing	Community recycling established with disposal centers in all townships of the County including Carova (Fruitville Township).
8.5: To provide centralized water throughout the county. (E)	1. Implement the recommendations contained in the Mainland Water Facilities Phase II/III Study prepared by Black and Veatch in 1989; RESPONSIBLE AGENCY: Board of Commissioners TIME FRAME: Complete Installation by 2010	Many of the recommendations have been implemented creating a trunk line of water service from the Virginia line to Point Harbor. With the recent completion of the County RO Plant and on- going installation of distribution lines in Corolla, comprehensive County water service is now being provided.
	2. Prepare a study on the potential for having water and sewer services under central control for the entire Outer Banks; RESPONSIBLE AGENCY: Public Works Department TIME FRAME: 1995	Studies for both water (1997) and sewer (2004) for the Corolla Outer Banks have been completed with an emphasis on plant capacities and potential limitations.

Goal	Strategy	Implementation
	3. Prepare a plan to provide centralized water to Gibbs Woods, Knotts Island and the Currituck Outer Banks; RESPONSIBLE AGENCY: Board of Commissioners to authorize study TIME FRAME: 1995	Central water services now available for the Corolla Outer Banks. No request or demand for this service for Knotts Island or Gibbs Woods.
	4. Monitor the availability of water on the Outer Banks using test wells. RESPONSIBLE AGENCY: Public Works Department TIME FRAME: 1993	No action taken, except for monitoring water availability associated with the Outer Banks RO Plant and private water utility companies to ensure future availability.
8.6: to ensure the Currituck Outer Banks is provided with suitable electrical service. (E)	<ol> <li>Board of Commissioners to keep in touch annually with North Carolina Power and Virginia Power to assess the best way to service the area and upgrade facilities;</li> <li>RESPONSIBLE AGENCY: Board of Commissioners</li> <li>TIME FRAME: 1991-1995</li> </ol>	Annual presentations made to the Board of Commissioners concerning electrical expansions and facility upgrades.
	2. Continue to support underwater power lines. RESPONSIBLE AGENCY: Board of Commissioners TIME FRAME: Ongoing	Underground power required for all new residential and commercial subdivisions (UDO 1993).
8.7: To encourage the preservation of significant historical and cultural sites. (E)	1. County to assist individuals who want to have their structures listed on the National Register; RESPONSIBLE AGENCY: Currituck County Planning Department TIME FRAME: Ongoing	The County has taken the initiative to fully fund the rehabilitation and restoration of the Whalehead Club in Corolla (1992) and the "Colored School" in Jarvisburg (2004) as these are significant historical and cultural resources. In addition, the Historic Currituck County Courthouse building continues to be restored in compliance with the National Register Guidelines.
	<ol> <li>North Carolina Department of Environment, Health and Natural resources to review development plans that require CAMA permits; RESPONSIBLE AGENCY: NC Department of the Environment TIME FRAME: Ongoing</li> <li>Support the Century Farm Family recognition program administered by the Department of Agriculture. RESPONSIBLE AGENCY: Agricultural Extension Office TIME FRAME: Ongoing</li> </ol>	
9.1: To ensure the county can effectively handle a major storm event in terms of immediate needs and long range reconstruction. (E)	<ol> <li>Emergency Services to educate all agencies involved during major storm events of their proper roles; A plan shall be prepared that outlines the County s policies on reconstruction after a major storm event.</li> <li>RESPONSIBLE AGENCY: Emergency Services TIME FRAME: Ongoing</li> </ol>	Currituck County adopted its first Hazard Mitigation Plan which was subsequently approved by both North Carolina and FEMA (2004). This plan describes reconstruction policies after a natural hazard as well as the hazards to which the County is most vulnerable.

Currituck County 2006 Land Use Plan

# **SECTION 8: LAND USE AND DEVELOPMENT GOALS**

# Introduction to the Goals

For any long rang plan to be effective, it is important that the plan have several overriding goals. Such goals provide a compass, overall purpose and central thrust to the plan. At the same time, they can serve as criteria with which to evaluate the plan's policies and recommendations. The following goals flow from the issues and ideas identified by the public at numerous meetings held during the plan's preparation and as further identified by the Currituck County Commissioners, the Currituck County Planning Board, and the Land Use Plan Steering Committee.

#### Ten Land Use and Development Goals

- 1. To protect and conserve the area's natural beauty and coastal resources as the County's greatest asset for economic development and a high quality of life.
- 2. To provide suitable public access opportunities to the County's public trust waters and shorelines so as to allow for a wide range of activities.
- 3. To conserve the County's remaining prime agricultural areas, while recognizing the economic realities of farm operations and private property rights.
- 4. To avoid taking or approving actions related to infrastructure and the provision of services that could induce intensive development in environmentally fragile areas; examples include the north beaches of the Outer Banks and Knotts Island.
- 5. To diversify the County's economic base, to include environmentally compatible businesses and industries that reach beyond the tourist-based economy.
- 6. To preserve critical natural areas as the source of biological diversity and productivity of the County's ocean and estuarine environments.
- 7. To exercise caution, foresight, and common sense in dealing with the risks of coastal development.
- 8. To preserve the traffic carrying capacity of existing roadways and provision of new roadways and roadway improvements in accordance with carefully developed plans.
- 9. To preserve and improve water quality in the coastal waters of Currituck County.
- 10. To properly distribute development forms in accordance with the suitability of the land, infrastructure available and the compatibility of surrounding land uses.

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# **SECTION 9: LAND USE AND DEVELOPMENT POLICIES**

# Introduction to the Policies

The following pages contain the official policies of the Currituck County Land Use Plan. These policies are presented in response to growth and development issues identified by the public at numerous meetings held during the plan's preparation and as further identified by the Currituck County Commissioners, the Currituck County Planning Board, and the Land Use Plan Steering Committee. They are also intended to fulfill the requirements of North Carolina's CAMA Land Use Planning Program.

The policy statements are presented in bold type and numbered for easy reference. When adopted, they are to be viewed as official policy positions of Currituck County government. As such, the policies should remain substantially unchanged over time. Frequent changes to the policies would undermine their effectiveness in achieving intended planning and management objectives. Indeed, the policies are designed to maintain a consistent and predictable direction for County government decisions over a period of several years. The policies provide a basis for future decisions regarding growth and development, capital improvements, provision of County services, environmental protection, intergovernmental planning and cooperation, and other related matters.

## How to tell a policy from an implementation action or a standard.

In reviewing the policies of this plan, questions may arise as why policy statements are written the way they are. Some reviewers may say they are written too broadly, while others may say they are too specific. Sometimes there is confusion as to what a <u>policy statement</u> is and what an <u>implementation action</u> is. Occasionally, it may be tempting to try to include ordinance-like standards in policy statements—where they do not belong. Below are some useful rules of thumb for evaluating whether a policy statement is written at the appropriate level of specificity. These rules are intended to reveal whether a particular statement is truly a policy, or has crossed the line into becoming an <u>implementation action</u> or a <u>standard</u>. (All of the policies and implementation actions contained in this plan are intended to perform their proper roles.)

### Rules of thumb

- If you can use a statement over and over again to guide decisions, and it doesn't diminish or go away, it is probably a policy.
- If you can use a statement only once and it goes away, (like an item on a "to-do list") it is probably an implementation action.
- If something in a statement sounds like a specific requirement or standard, it probably is. Such standards should be codified into an ordinance rather than placed in a policy statement or document.

### Simple Examples:

What follows are three statements addressing the same issue that exemplify the differences between a Policy, an Implementation Action, and a Standard.

**POLICY:** Currituck County shall discourage high-density development in environmentally sensitive areas.

IMPLEMENTATION ACTION: The County Planning Department will prepare a new zoning

district for environmentally sensitive areas of Currituck County to be considered for adoption by the Board of County Commissioners during FY 2005-2006.

**STANDARD:** The minimum lot size in the Environmental District is 3 acres.

#### Key words, often used in the policy statements, have special meaning.

Certain key words are used frequently in policy statements. The following glossary is intended to convey the specific meaning of these key words as used in the Land Use Plan Policy Statements.

adequate:	sufficient to achieve the intended purpose or prevent harm allow/permit:
	authorize; official action to let something happen
control: to regul	ate or direct
discourage:	to not favor; to dissuade
encourage:	to favor or foster (also see support)
endorse:	to approve of an action, often by another party
may: provide	s the option, but not required
preferred:	among alternatives, the favored course
pro hi bit:	not allowed, period
promote:	to proactively encourage, to take positive steps
reasonable	practical, even-handed, sensible, not extreme
require: to mand	late something
shall: mandat	ory, not optional
should: ought to	o, if no valid reason not to
significant:	important, as determined by quantity or relative impact
support:	to shore up; may imply financial support

### **Organization of the Policies**

CAMA Land Use Planning Guidelines require that certain required policy categories be organized under five management topics: (a) **Public Access**, (b) **Land Use Compatibility**, (c) **Infrastructure Carrying Capacity**, (d) **Natural Hazard Areas**, and (e) **Water Quality**. A sixth topic area, called **Local Concerns** allows the local government to address other growth and development issues that may not be covered under the first five topics. In the case of the Currituck County Land Use Plan, a seventh policy category, **Subarea Concerns**, has also been added to allow for policies specific to the three subareas of the county. The full listing of all seven topics and their subcategories is shown below.

### PUBLIC ACCESS

Public Access Policies

### LAND USE COMPATIBILITY POLICIES

Policies to Conserve Environmentally Sensitive Areas (ES) Agricultural and Rural Area Preservation Policies (AG) Housing and Neighborhood Development Policies (HN) Commercial Development Policies (CD) Industrial Development Policies (ID)

#### INFRASTRUCTURE CARRYING CAPACITY

Transportation Policies (TR) Water and Sewer Service Policies (WS) Policies for School Facilities (SF) Solid Waste Management Policies (SW) Parks and Recreation Policies (PR) Policies on Paying For Infrastructure and Services

NATURAL HAZARD AREAS Natural Hazard Area Policies (NH)

WATER QUALITY Water Quality Policies (WQ)

#### LOCAL COUNTYWIDE CONCERNS

Economic Development Policies (ED) Community Appearance Policies (CA) Historic Preservation Policies (HP) Policies on Public Safety Services (PS)

#### SUBAREA CONCERNS<sup>1</sup>

Special Policies Applicable to the Mainland Area (ML) Special Policies Applicable to the Outer Banks (OB) Special Policies Applicable to Knotts Island (KI)

The policies of the Currituck County Land Use Plan begin on the following page. Please note that each of the five required policy areas is preceded by the Management Goal and Planning Objective set forth in the CAMA Land Use Planning Guidelines for that policy area.

# **Public Access**

CAMA Management Goal

Maximize public access to the beaches and the public trust waters of the coastal region.

**CAMA Planning Objective** 

Develop comprehensive policies that provide beach and public trust water access opportunities for the public along the shoreline within the planning jurisdiction.

# PUBLIC ACCESS POLICIES (PA)

<u>POLICY PA1</u>: Public access to the sound and ocean waters of Currituck County is essential to the quality of life of residents and visitors, as well as the economy of the area. The County supports the establishment of ADDITIONAL PUBLIC AND PRIVATE ACCESS opportunities to the waters of Currituck County. (Also see Outer Banks Policy Section.)

<u>POLICY PA2</u>: The County supports MANY FORMS OF "ACCESS" to the water, including scenic outlooks and boardwalks, boat ramps, marinas and docks, fishing piers, canoe and kayak launches, and other means of access. Whenever possible, such facilities shall be designed to

<sup>&</sup>lt;sup>1</sup> The Special Subarea Policies allow for the development of policy positions that are custom tailored to concerns and perspectives in each of the three subareas of the County. In instances where a countywide policy and a sub-area policy address the same subject matter, the sub-area policy shall take precedence over the countywide policy.

accommodate the needs of handicapped individuals.

<u>POLICY PA3</u>: Properties owned by the County, State or other cooperating public agencies shall be considered as special opportunities for public access sites. MULTIPLE USE OF APPROPRIATE SITES (e.g. utility station and public boat ramp site) shall be encouraged.

<u>POLICY PA4</u>: The LOCATION OF PUBLIC ACCESS SITES shall generally be determined by a rational examination of the sound and ocean resource, the distribution of existing access sites, and the availability of appropriate new sites. In addition to advanced planning, however, the County will remain open to any site that offers good shoreline access for the public, as unforeseen opportunities may arise.

<u>POLICY PA5</u>: PUBLIC AND PRIVATE MARINAS offering access to area waters should be encouraged when developed in accordance with the CAMA specific use standards for marinas (i.e. docks for more than 10 vessels). Marinas shall not be approved, however, that are incompatible with nearby land uses or whose designs fail to meet the environmental quality and development standards of the County's Unified Development Ordinance.

<u>POLICY PA6</u>: MARINAS IN UPLAND LOCATIONS generally shall be preferred over marinas in open water, thereby better preserving the visual appearance of the shoreline as well as avoiding the "consumption" of available public trust surface waters.

<u>POLICY PA7</u>: Currituck County marina owners shall be encouraged to participate in BEST PRACTICE OPERATING PROGRAMS, such as the "Clean Marina" program sponsored by the NC Division of Coastal Management and the NC Marine Trades Services organization. The County encourages marina operators to apply for grants that may be available to help pay for pump-out facilities or other environmental improvements.

<u>POLICY PA8</u>: DEVELOPMENT STANDARDS FOR BOAT RAMPS AND/OR PARKING AREAS associated with public access sites shall address, at a minimum, requirements for stormwater runoff, water quality protections, aesthetic concerns and adequate water depth at low tide.

<u>POLICY PA9</u>: Currituck County shall discourage developments which would have the effect of "WALLING OFF THE WATER", thereby eliminating views to the water from adjoining streets, roads, walkways and other public spaces.

<u>POLICY PA10</u>: Opportunities for protecting or creating public access shall be pursued when drafting and administering development standards for ocean front and sound front projects in the County.

# LAND USE COMPATIBILITY

#### CAMA Management Goal

Ensure that 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.

#### CAMA Planning Objective

- Adopt and apply local development policies that balance protection of natural resources and fragile areas with economic development.
- Policies shall provide clear direction to assist local decision-making and consistency for zoning, division of land, and public and private projects.

# POLICIES TO CONSERVE ENVIRONMENTALLY SENSITIVE AREAS (ES)

<u>POLICY ES1</u>: New development shall be permitted to locate only in areas with SUITABLE SOIL and where ADEQUATE INFRASTRUCTURE is available. For existing development located on poor soils, and where sewage treatment upgrades are necessary, engineering solutions may be supported, provided that environmental concerns are fully addressed.

<u>POLICY ES2</u>: NON-COASTAL WETLANDS, including FRESHWATER SWAMPS, AND INLAND, NON-TIDAL WETLANDS, shall be conserved for the important role they play in absorbing floodwaters, filtering pollutants from stormwater runoff, recharging the ground water table, and providing critical habitat for many plant and animal species. Currituck County supports the efforts of the U.S. Army Corps of Engineers in protecting such wetlands through the Section  $404^2$  permit program of the Clean Water Act, as well as Section  $401^3$  water quality certifications by the State of North Carolina.

<u>POLICY ES3</u>: COASTAL WETLANDS shall be conserved for the valuable functions they perform in protecting water quality and in providing critical habitat for the propagation and survival of important plant and animal species. CAMA use standards and policies for coastal wetlands shall be supported. Uses approved for location in a coastal wetland must be water dependent (i.e. utility easements, bridges, docks and piers) and be developed so as to minimize adverse impacts.

POLICY ES4: In approving new developments, Currituck County shall support the retention or

<sup>&</sup>lt;sup>2</sup> Section 404 of the federal Clean Water Act establishes a program to regulate the discharge of dredged and fill material into waters of the United States, including wetlands. Activities in waters of the United States that are regulated under this program include fills for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports), and conversion of wetlands to uplands for farming and forestry. The US Environmental Protection Agency and the US Army Corps of Engineers jointly administer the program. See <a href="http://www.epa.gov/owow/wetlands/facts/fact10.html">http://www.epa.gov/owow/wetlands/facts/fact10.html</a> for a full description of the 404 permit program.

 $<sup>^3</sup>$  Section 401 of the federal Clean Water Act delegates authority to the states to issue a 401 Water Quality Certification for all projects that require a Federal Permit (such as a Section 404 Permit). The "401" is essentially verification by the state that a given project will not degrade Waters of the State or otherwise violate water quality standards. See <u>http://h2o.enr.state.nc.us/ncwetlands/basic401.html</u> for a full description of the 401 program in North Carolina

creation of a vegetated buffer area along ESTUARINE SHORELINES as a simple, effective and low-cost means of preventing pollutants from entering estuarine waters. Exceptions to this requirement may include developments involving pre-existing man-made features such as hardened shorelines, ditches, and canals. Farming and forestry operations that abide by appropriate "best management practices" are also exempt. The County also supports CAMA use standards for all COASTAL SHORELINES, whether estuarine or otherwise.

<u>POLICY ES5</u>: Uses allowed in ESTUARINE WATERS must be water dependent (public access, docks, piers, erosion control, and other CAMA-approved uses) and must not interfere with the proper function, cleanliness, salinity, and circulation of the resource. FLOATING HOMES shall not be approved for placement in the estuarine waters of Currituck County. (Also see the Public Access section of this plan for policies concerning new MARINAS.)

<u>POLICY ES6</u>: The location and design of piers and docks shall not unduly interfere with the rights of the public to the free and unobstructed use of PUBLIC TRUST WATERS for navigation, fishing, and other uses. Efforts to limit the length of piers into public trust waters shall be supported.

<u>POLICY ES7</u>: MARITIME FORESTS and SAND DUNES shall receive a high level of environmental protection and special consideration when reviewing public and private sector development proposals in Currituck County.

<u>POLICY ES8</u>: Areas of the County identified for significant future growth shall avoid NATURAL HERITAGE AREAS (e.g. Great Marsh on Knotts Island, Currituck Banks/Swan Island Natural Area, Currituck Banks Corolla Natural Area, Pine Island/Currituck Club Natural Area, Northwest River Marsh Game Land, and many other marsh areas on the mainland.)

### AGRICULTURAL AND RURAL AREA PRESERVATION POLICIES

<u>POLICY AG1</u>: ACTIVE AGRICULTURAL LANDS having a high productive potential, and especially those removed from infrastructure and services, should be conserved for continued agricultural use.

<u>POLICY AG2</u>: Farms and woodlands shall be recognized as an integral part of the county's OPEN SPACE SYSTEM. Efforts to keep these areas viable as part of the area's resource-based economic sector, shall be encouraged.

<u>POLICY AG3</u>: County ACTIONS CONCERNING INFRASTRUCTURE (e.g. schools, parks, and utilities) and regulations shall serve to direct new development first to targeted growth areas near existing settlements identified as Full Service Areas on the Future Land Use Map, rather than "leapfrogging" to locations in the midst of farmland and greenspace identified as Rural and Conservation areas on the Future Land Use Map.

<u>POLICY AG4</u>: County growth management tools, including particularly zoning, should provide PROTECTION TO AGRICULTURE and other RESOURCE BASED ACTIVITIES from incompatible land uses, such as a residential subdivision in the midst of generally uninterrupted farm land.

<u>POLICY AG5</u>: The County encourages beneficial programs (farmland preservation trust fund, conservation easements, purchase or transfer of development rights, farmland preservation districts, etc.) that encourage VOLUNTARY PROPERTY OWNER STEWARDSHIP of valuable

farm and open space areas for future generations.

<u>POLICY AG6</u>: For areas experiencing intense development pressure, new residential development may be allowed to locate in COMPACT, VILLAGE-LIKE CLUSTERS, PREFERABLY NEAR EXISTING, NON-AGRICULTURAL ACTIVITIES AND SERVICES, or in other locations that will not interfere with resource production activities. Overall density shall remain very low, with permanent open space, dedicated during the development review process, surrounding such clusters of homes.

# HOUSING AND NEIGHBORHOOD DEVELOPMENT POLICIES

<u>POLICY HN1</u>: Currituck County shall encourage development to occur at densities appropriate for the location. LOCATION AND DENSITY FACTORS shall include whether the development is within an environmentally suitable area, the type and capacity of sewage treatment available to the site, the adequacy of transportation facilities providing access to the site, and the proximity of the site to existing and planned urban services. For example, projects falling within the Full Services areas of the Future Land Use Map would be permitted a higher density because of the availability of infrastructure as well as similarity to the existing development pattern. Such projects could be developed at a density of two (2) or more dwelling units per acre. Projects within areas designated as Limited Service would be permitted a density of one (1) to one and one half (1.5) units per acre depending upon the surrounding development pattern and availability of resources. Projects within areas designated as Rural or Conservation by the Future Land Use Plan would be permitted a much lower density of 1 dwelling unit per 3 acres because of the lack of infrastructure in the area, the existing low density development pattern, and presence of environmentally sensitive natural areas.

<u>POLICY HN2</u>: Currituck County recognizes that large-lot mini-estates (i.e. 5 to 10 acres) consume large amounts of land, often without economic purpose. Estate lots having no relationship to agriculture or other resource-based activities promote sprawl and make the provision of infrastructure and services very costly. The County shall therefore encourage alternatives to large lot developments through INNOVATIVE DEVELOPMENT CONCEPTS AND CORRESPONDING ZONING techniques.

<u>POLICY HN3</u>: Currituck County shall especially encourage two forms of residential development, each with the objective of avoiding traditional suburban sprawl:

- 1. OPEN SPACE DEVELOPMENTS that cluster homes on less land, preserving permanently dedicated open space and often employ on-site or community sewage treatment. These types of developments are likely to occur primarily in the Conservation, Rural, and to a certain extent the Limited Service areas identified on the Future Land Use Map.
- 2. COMPACT, MIXED USE DEVELOPMENTS or DEVELOPMENTS NEAR A MIXTURE OF USES that promote a return to balanced, self-supporting community centers generally served by centralized water and sewer. The types of development are contemplated for the Full Service Areas identified on the Future Land Use Map.

<u>POLICY HN4</u>: Currituck County shall discourage all forms of housing from "LEAPFROGGING" INTO THE MIDST OF FARMLAND and rural areas, thereby eroding the agricultural resource base of the county.

<u>POLICY HN5</u>: Currituck County recognizes that there are many types of housing, in addition to manufactured housing (i.e. mobile homes), that are often overlooked in meeting the

AFFORDABLE HOUSING NEEDS of young families, workers of modest income, senior citizens and others. To encourage affordable housing other than just manufactured housing, Currituck County may reserve appropriate areas of the county for stick-built housing forms only, and other areas of the county for accessory units in association with a principal structure.

<u>POLICY HN6</u>: Currituck County recognizes the diversity of HOUSING NEEDS FOR SENIOR CITIZENS including, but not limited to, active adult retirement communities, assisted living facilities, nursing homes, granny flats, and accessory apartments within the principal structure of a home. The County shall encourage a range of housing forms and costs to meet a broad income spectrum.

<u>POLICY HN7</u>: The County shall encourage development patterns and housing choices that allow for more COST-EFFECTIVE TRANSPORTATION OPTIONS for those citizens who cannot or choose not to drive, including senior citizens, lower wage workers, handicapped persons, and the young. Such a policy will also work to reduce traffic congestion on the county's already overburdened primary road system.

<u>POLICY HN8</u>: To protect the County's tax base and to ensure the long-term viability of the County's neighborhoods and housing stock, the County will continue to enforce appropriate CONSTRUCTION AND SITE DEVELOPMENT STANDARDS for residential developments. Such standards may include, for example, that all homes have a permanent masonry foundation (except where flood levels require elevation) and a pitched roof and overhang, and that local roads must be built to meet NCDOT acceptance standards. (See Transportation Policies for details concerning requirements for paved roads.)

<u>POLICY HN9</u>: Proposed residential development that would expose residents to the harmful effects of INCOMPATIBLE LAND USES or to ENVIRONMENTAL HAZARDS shall be prohibited. This would include, for example, residential development in locations adversely impacted by proximity to the airport or to activities involving excessive noise, light, odors, dust, fertilizers and insecticides (e.g. certain farm operations, mining activities, etc.).

<u>POLICY HN10</u>: Currituck County shall not allow the INAPPROPRIATE USE OF MANUFACTURED OR SITE BUILT HOMES for storage, illegal occupancy or their abandonment without proper disposal.

# **COMMERCIAL DEVELOPMENT POLICIES**

<u>POLICY CD1</u>: NEIGHBORHOOD SERVING COMMERCIAL DISTRICTS should be encouraged to locate where a collector or secondary street intersects with a street of equal or greater size. Appropriately designed, small-scale businesses may also be near other neighborhood serving facilities such as schools and parks.

<u>POLICY CD2</u>: Commercial and office development of greater than a neighborhood scale shall be encouraged to cluster in COMMERCIAL OR MIXED-USE CENTERS to curtail the proliferation of strip development, and minimize traffic generation.

<u>POLICY CD3</u>: LARGE COMMERCIAL CENTERS should be located adjacent to the intersections of major roadways; planned concentrations of employment and housing should be encouraged to locate convenient to these centers.

POLICY CD4: HIGHWAY ORIENTED COMMERCIAL USES should be clustered along

segments of highways and contain land uses which are mutually compatible and reinforcing in use and design; they should be designed in such a way as to minimize signage, access points, and to prevent unsightly, dysfunctional STRIP DEVELOPMENT. (See esp., Policy CD9 below concerning connected parking areas.)

<u>POLICY CD5</u>: Incompatible or poorly planned COMMERCIAL ENCROACHMENT within or immediately adjoining existing residential areas shall be prohibited. Such incompatible encroachments often include, but are not limited to, large-scale commercial uses or automobile-oriented commercial uses such as service stations, car lots, car washes, drive through restaurants, and the like. (Also see Policy HN9)

<u>POLICY CD6</u>: Appropriate OFFICE AND INSTITUTIONAL DEVELOPMENT, such as professional offices, small churches, individual medical offices, and the like, shall be encouraged to locate as a transitional land use between residential areas and commercial or industrial activities of higher intensity. "Activities of higher intensity" are typically large-scale commercial uses or automobile-oriented commercial development but may also include major thoroughfares.

<u>POLICY CD7</u>: Attractive, environmentally beneficial LANDSCAPING shall be provided by new commercial or office developments, and in the rehabilitation and upgrading of existing developments. Appropriate BUFFERING or other effective DESIGN FEATURES may be employed to allow less intensive forms of commercial and office development to adjoin existing or planned residential uses.

<u>POLICY CD8</u>: MIXED-USE DEVELOPMENTS, properly planned from the outset, which allow for a compatible mixture of residential and non-residential uses with a pedestrian scale and design, are encouraged. Similarly, businesses may be located adjoining (and therefore convenient to) an existing residential area, when such businesses can be shown to satisfy design considerations similar to a newly planned, pedestrian-scaled, mixed use development.

<u>POLICY CD9</u>: Businesses shall be encouraged to coordinate their SITE DESIGNS with other nearby businesses. Design factors should include, at a minimum, shared or connected parking and access, convenient pedestrian and vehicular movement, and consistent sign standards.

# INDUSTRIAL DEVELOPMENT POLICIES

<u>POLICY ID1</u>: To diversify the local economy and broaden the local tax base, the County shall encourage a public service and regulatory environment conducive to COMPATIBLE INDUSTRIAL DEVELOPMENT. "Compatible" shall be defined as, among other things, industries that do not adversely impact the environmental quality of the area, or overburden the local infrastructure.

<u>POLICY ID2</u>: Industrial uses should not be located in areas that would diminish the desirability of existing and planned NON-INDUSTRIAL DEVELOPMENTS, nor shall incompatible non-industrial uses be allowed to encroach upon existing or planned industrial sites.

<u>POLICY ID3</u>: Industrial development shall be located on land that is physically suitable and has unique locational advantages for industry. Advanced planning for the identification of such land shall be encouraged. Designation of "CERTIFIED" INDUSTRIAL SITES shall be especially pursued.

POLICY ID4: LIGHT OR LOW IMPACT INDUSTRIAL USES may be located in or near

existing built up areas (other than residential) to take advantage of available services and to minimize home to work distances. Light industry is generally considered a "manufacturing activity that uses moderate amounts of partially processed materials to produce items of relatively high value per unit weight". Such industries tend to require less space for production, are generally more environmentally friendly, and produce goods targeted toward consumers rather than businesses. Examples light industrial uses include research and development facilities, warehousing and distribution, and manufacturing of office or household goods. Careful design and/or buffering shall be required to ensure compatibility with surrounding areas and to create a positive image along area roadways.

<u>POLICY ID5</u>: WAREHOUSING, STORAGE AND DISTRIBUTION facilities shall have access to thoroughfares of adequate traffic carrying capacity, and shall be appropriately designed and/or visually buffered according to the visibility of their location.

<u>POLICY ID6</u>: New industrial development shall be encouraged to locate in existing and/or planned INDUSTRIAL PARKS.

<u>POLICY ID7</u>: Facilities for the disposal of HAZARDOUS WASTE, whether chemical, biological, radioactive or other, shall not be located in Currituck County. Neither shall Currituck County accept SOLID WASTE FROM OUTSIDE THE COUNTY for disposal at any site inside the county.

<u>POLICY ID8</u>: MINING ACTIVITIES, or secondary impacts of mining activities not subject to permit approval by the State of North Carolina, may be subject to review and management by Currituck County. Activities to be addressed may include, but not be limited to, the adequacy of roads serving the mine site, visual impacts during operation and after closing of the mine site, noise and dust considerations, etc.

<u>POLICY ID9</u>: Currituck County shall not support the exploration or development of ENERGY PRODUCING FACILITIES within its jurisdiction including, but not limited to, oil and natural gas wells, and associated staging, transportation, refinement, processing or on-shore service and support facilities.

# INFRASTRUCTURE CARRYING CAPACITY

CAMA Management Goal

Ensure that public infrastructure systems are appropriately sized, located, and managed so the quality and productivity of AECs and other fragile areas are protected or restored.

#### **CAMA Planning Objective**

Establish level of service policies and criteria to ensure that the location and capacity of public infrastructure is consistent with the County's growth and development goals and the projections of future land needs.

# TRANSPORTATION POLICIES

<u>POLICY TR1</u>: Opportunities to enhance REGIONAL TRANSPORTATION CONNECTIONS between Currituck County and other parts of the state and region shall be supported. The County shall actively participate in regional transportation planning efforts.

<u>POLICY TR2</u>: Transportation planning shall be employed to promote a HIERARCHICAL, FUNCTIONAL TRANSPORTATION SYSTEM and to promote the proper arrangement of land

patterns by controlling the location and appropriate use of streets, highways, trails, and other modes of transportation. Generally, the design of major roads should give first priority to moving traffic, while smaller roads may give greater emphasis to serving adjoining land uses.

<u>POLICY TR3</u>: A program of improvements and maintenance to maximize the FUNCTIONAL LIFE OF EXISTING ROADWAYS shall be endorsed as a cost effective and environmentally sound means of meeting area transportation needs.

<u>POLICY TR4</u>: ACCESS TO THE COUNTY'S MAJOR ROADWAYS shall be managed so as to preserve the intended purpose of the highway, protect taxpayer dollars invested, and minimize hazardous turning movements in and out of traffic flows. Methods may include, for example, limits on the frequency of driveway cuts, shared driveway access, minimum lot frontages, connections between adjoining parking lots, central medians, etc.

<u>POLICY TR5</u>: So as to preserve the traffic moving function of the County's primary roads, minimize traffic accidents and avoid land locking interior land parcels, Currituck County shall discourage RESIDENTIAL AND COMMERCIAL STRIP DEVELOPMENT along the county's primary roads. FLAG LOTS shall not be permitted along designated roads unless justified by unusual or unforeseeable parcel or topographic constraints.

<u>POLICY TR6</u>: HIGHWAY 158/168 shall receive special attention concerning the proper development of land and properties adjoining and/or accessing this critical arterial.

<u>POLICY TR7</u>: A system of LOCAL CONNECTOR ROADS shall be identified and implemented to allow local traffic to move in a north-south direction without having to use and further burden US 158.

<u>POLICY TR8</u>: Local streets shall be designed and built to allow for convenient CIRCULATION WITHIN AND BETWEEN NEIGHBORHOODS and to encourage mobility by pedestrians and bicyclists. Care shall be taken to encourage local street "connectivity" without creating opportunities for cut-through traffic from outside the connected areas.

<u>POLICY TR9</u>: BIKEWAY FACILITIES shall be encouraged as energy-efficient, healthful, and environmentally sound alternatives to the automobile. The inclusion of bikeways, sidewalks, trails, and other alternatives to the automobile shall be encouraged in both public and private developments.

<u>POLICY TR10</u>: Designs for all future road construction and improvements shall consider opportunities for the inclusion of BIKE LANES within the project. Particular attention should be given to priority bikeway facility needs as submitted for inclusion in the State Transportation Improvement Program.

<u>POLICY TR11</u>: ACCESS TO HIGHER INTENSITY DEVELOPMENT shall generally not be permitted through an area of lower intensity development. For example, access to a multi-family development, a major park facility or other large traffic generator shall not be permitted through a local street serving a single-family residential neighborhood.

<u>POLICY TR12</u>: New residential developments shall provide for the installation of PAVED PUBLIC ROADWAY AND DRAINAGE INFRASTRUCTURE at the time of development. This policy is intended to prevent the creation of substandard developments that must later correct for infrastructure problems that could have been avoided, had they been installed properly from the beginning. Family subdivisions and non-asphalt roads serving the northern beaches are the only exceptions to this policy.

<u>POLICY TR13</u>: A new MID-COUNTY BRIDGE between the mainland and Corolla shall be supported to provide critical traffic relief to US 158, to improve emergency access to and evacuation from the Currituck Outer Banks, to promote economic development, and to provide better access to public and private services not readily available on the Outer Banks. To protect the character of communities near the bridge (e.g. Aydlett, Churches Island, Poplar Branch), the road leading to the bridge shall have no access points before its intersection with US 158.

<u>POLICY TR14</u>: Plans for IMPROVEMENTS TO NC 12 shall be an integral part of the planning for the management of traffic to and from the Currituck Outer Banks.

<u>POLICY TR15</u>: NCDOT officials have determined that NC 168 would need to be widened to 7 lanes to accommodate projected traffic volumes in 2016. To avoid this, Currituck County shall continue to lobby for the construction of a NEW NC 168 (MOYOCK) BYPASS.

<u>POLICY TR16</u>: The CURRITUCK SOUND FERRY SYSTEM shall continue to be supported as an essential transportation service between the mainland and Knotts Island and the mainland and Corolla.

<u>POLICY TR17</u>: Currituck County is not served by an interstate highway. The relative remoteness of the County makes it attractive for many, inconvenient for others. The CURRITUCK COUNTY AIRPORT shall continue to be supported as an important means of alternative transportation for those traveling greater distances.

<u>POLICY TR18</u>: The operational success of existing and future TRANSIT SERVICES shall be supported through the encouragement of some compact, transit-sensitive developments. Recommendations for area transportation improvements shall recognize public and private transit as an integral part of the transportation system.

# WATER AND SEWER SERVICE POLICIES

<u>POLICY WS1</u>: Currituck County shall support a variety of means of obtaining potable water for the county, thereby keeping open MULTIPLE OPTIONS FOR FUTURE WATER SUPPLIES. These options may include ground water from shallow and deep aquifers, surface water sources (if available), and cooperative arrangements with other public and private sources. Treatment may be conventional, reverse osmosis or other innovative methods.

<u>POLICY WS2</u>: Currituck County may support efforts to REGIONALIZE AND INTERCONNECT WATER SUPPLY SYSTEMS. The benefits may include (1) lower capital investment and operating costs per capita, (2) improved ability to meet stricter water quality standards, (3) rate structures which balance and equalize customer charges throughout the region, and (4) the flexibility to shift supplies, better control groundwater pumping and share capacity during periods of high demand or limited supply.

<u>POLICY WS3</u>: Currituck County endorses UTILITIES EXTENSION POLICIES that focus water and sewer services (1) within existing developed areas and in nearby targeted growth areas identified as Full Service and Limited Service areas, (2) where development densities would make the provision of all public services more efficient, (3) where the land is particularly well suited for development and (4) away from environmentally sensitive areas, such as areas with extensive wetlands or the northern beaches of the Outer Banks.

<u>POLICY WS4</u>: Currituck County endorses utilities extension policies that avoid those parts of the county best suited for agriculture and to PROTECT FARMLAND FROM DEVELOPMENT PRESSURES brought about by such utilities. Exceptions to this policy may include extensions for major economic development initiatives, and extensions to address imminent public health problems or related environmental hazards.

<u>POLICY WS5</u>: Currituck County may ASSIST IN THE EXPENSE OF EXTENDING WATER AND SEWER services when such assistance (1) will result in the development of desirable new or expanded industry and the creation of permanent jobs in numbers commensurate with the expenditure required, (2) will result in a positive payback to the county's taxpayers, in terms of the taxes generated by the new industry versus the costs incurred, (3) would not otherwise be provided, potentially playing a critical role in a location decision by the prospective industry, and would not result in a significant degradation of environmental quality.

<u>POLICY WS6</u>: Currituck County endorses the proper use and maintenance of APPROVED SEPTIC SYSTEMS in suitable soils as an environmentally acceptable means of treating and dispersing waste from low-density development.

<u>POLICY WS7</u>: Currituck County allows for the appropriate use of PACKAGE SEWAGE TREATMENT PLANTS as a means of achieving more efficient land use, while properly disposing of waste. Such systems shall have a permanent organizational ownership to guarantee their proper management, including operation, maintenance and replacement needs. Depending on their location in the county, such systems may be required to have a design that allows for assimilation into a centralized system at a future date.

<u>POLICY WS8</u>: CENTRAL AND PACKAGE TREATMENT PLANTS shall be designed using best available technology to eliminate or reduce odors. In addition, such plants shall be properly located so as not to adversely impact nearby land uses.

(Note: Policies on Water Treatment Discharges and Stormwater Runoff and Management are included under the Water Quality section)

# **POLICIES FOR SCHOOL FACILITIES**

<u>POLICY SF1</u>: Currituck County shall support and actively engage in ADVANCED PLANNING FOR THE LOCATION OF NEW SCHOOLS. Such locations shall serve to reinforce contiguous growth patterns near existing developments rather than promoting sprawl in more rural locations. New schools shall be viewed as a cornerstone of the communities in which they are located and shall serve to proactively influence growth.

<u>POLICY SF2</u>: Currituck County encourages OFFERS OF LAND FOR THE SITING OF NEW SCHOOLS, particularly in conjunction with related community development. Acceptance of such properties shall be based on approved location and design criteria.

<u>POLICY SF3</u>: Site planning for TRAFFIC MANAGEMENT AND SAFETY IN THE VICINITY OF PUBLIC SCHOOLS shall be a priority.

<u>POLICY SF4</u>: Currituck County shall continue to support a service level policy for schools that calls for the construction and maintenance of classroom space sufficient to AVOID THE USE OF

#### MOBILE CLASSROOMS.

## PARKS AND RECREATION POLICIES

<u>POLICY PR1</u>: Future park development and open space preservation shall provide for the rational DISTRIBUTION OF RECREATION AND OPEN SPACE opportunities within the County.

<u>POLICY PR2</u>: In determining FUTURE SITES FOR PARK, RECREATION AND WATER ACCESS FACILITIES, multiple objectives for natural area conservation, visual enhancement, preservation of cultural and historic resources, and watershed and flood prone area protection shall be considered.

<u>POLICY PR3</u>: Currituck County shall continue to work cooperatively with the County school system to maximize the use of RECREATION FACILITIES LOCATED AT PUBLIC SCHOOL SITES, and to foster the joint development of additional public park facilities at new public school sites.

<u>POLICY PR4</u>: The County shall seek to identify, plan for and develop a system of OPEN SPACE GREENWAYS, HIKING and BIKING TRAILS as opportunities may allow. The use of (1) natural corridors such as streams and floodplains, and (2) man-made corridors such as utility and transportation rights-of-way and easements, shall be emphasized.

<u>POLICY PR5</u>: LAND ACQUISITION for new park, recreation, and open space sites in advance of need shall be encouraged to achieve desirable locations at cost effective levels.

<u>POLICY PR6</u>: All new residential development shall provide for ADEQUATE OPEN SPACE AND RECREATION IMPROVEMENTS including, as may be appropriate, funding in proportion to the demand created by the development. The amount of open space and improvements may be determined according to the number of dwelling units in the development and/or by a percentage of the total acreage in the development. Fees in lieu of land dedication shall be based on the inflation adjusted assessed value of the development or subdivision for property tax purposes.

<u>POLICY PR7</u>: New park and recreation facilities, as well as improvements to existing facilities, shall give special consideration to the needs of HANDICAPPED PERSONS.

<u>POLICY PR8</u>: New mixed use developments, office and business parks, and other non-residential areas shall be encouraged to include WALKWAYS WITHIN THE DEVELOPMENT.

### SOLID WASTE MANAGEMENT POLICIES

<u>POLICY SW1</u>: Currituck County belongs to the Albemarle Regional Solid Waste Management Authority. Local area needs for solid waste collection and disposal shall continue to be met through advanced, cooperative, REGIONAL PLANNING between the County and other member governments participating in the Authority.

<u>POLICY SW2</u>: The County shall continue to pursue a variety of WASTE REDUCTION STRATEGIES, including waste prevention, recycling and reuse.

<u>POLICY SW3</u>: Currituck County encourages residential COMPOSTING AND MULCHING, as well as approved, large-site processing and recycling of organic materials, yard waste and storm

debris in volume.

<u>POLICY SW4</u>: Currituck County supports EDUCATION and activities that reduce litter and illegal dumping, foster clean up of dumpsites, promote recycling and reuse, and encourage participation in programs such as Adopt-A-Highway and the Governors Litter Sweep.

<u>POLICY SW5</u>: Currituck County shall enforce harsh penalties against those who would seek to DUMP TRASH ILLEGALLY or improperly dispose of JUNKED CARS or other debris.

<u>POLICY SW6</u>: Currituck County supports solid waste program FINANCING STRATEGIES that reasonably assess the costs of waste collection and disposal in accordance with the amount of waste each generator produces, while at the same time discouraging illegal dumping.

<u>POLICY SW7</u>: Currituck County waste CONVENIENCE/COLLECTION AND RECYCLING CENTERS shall continue to be designed, located, improved and maintained to facilitate their use.

<u>POLICY SW8</u>: Some portions of Currituck County may be provided with DOOR TO DOOR TRASH PICK UP, based upon the characteristics of each area and the most appropriate means of assuring proper management of waste. The Corolla area of the Outer Banks, with a highly transient rental population, is an example of an area suitable for door-to-door service. Knotts Island, which is far less transient and more sparsely developed, is not.

# POLICIES ON PLANNING AND PAYING FOR INFRASTRUCTURE AND SERVICES

<u>POLICY PP1</u>: The County shall support and actively engage in LONG RANGE PLANNING AND BUDGETING FOR CAPITAL FACILITIES, with particular emphasis on water supply, public schools, parkland, storm water management facilities, public safety buildings and equipment, and other necessary facilities.

<u>POLICY PP2</u>: Currituck County shall continue to implement a policy of ADEQUATE PUBLIC FACILITIES, sufficient to support associated growth and development. Such facilities may include but not be limited to water supply, school capacity, park and open space needs, fire fighting capability, and law enforcement.

<u>POLICY PP3</u>: The costs of infrastructure, facilities and services (e.g. schools, parks, water supply, etc.) related to the DEMAND CREATED BY NEW GROWTH AND DEVELOPMENT shall be borne, in equitable proportion, by those creating the additional demand. So as to lessen the burden on the general property tax payer, this approach may include a land transfer tax, impact fees on new development, upzoning fees, and user fees for new facilities.

# NATURAL HAZARD AREAS (NH)

#### CAMA Management Goal

Conserve and maintain barrier dunes, beaches, flood plains, and other coastal features for their natural storm protection functions and their natural resources, giving recognition to public health, safety, and welfare issues.

CAMA Planning Objective

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.

# NATURAL HAZARD AREA POLICIES

<u>POLICY NH1</u>: The County recognizes the risks to life and property that exist within SPECIAL FLOOD HAZARD AREAS (i.e. areas having a 1% chance of flooding in any year) that may be inundated during major storm events. The County will continue taking measures to mitigate these risks and will avoid taking any action in these areas that materially increases risks to life and property.

<u>POLICY NH2</u>: The County shall require development and redevelopment within SPECIAL FLOOD HAZARD AREAS to meet the standards of the National Flood Insurance Program and the County's Flood Damage Prevention Ordinance. Particular attention shall be given to development in VE (i.e. velocity wave) zones concerning standards for breakaway walls, no land disturbing activities, and no permanent enclosures below the base flood level.

<u>POLICY NH3</u>: New PUBLIC FACILITIES AND STRUCTURES, as well as improvements to existing pubic facilities and structures, shall be located and designed to mitigate natural hazards. When placement in a natural hazard area is unavoidable, compliance with the National Flood Insurance Program and County Flood Damage Prevention Ordinance shall be required.

<u>POLICY NH4</u>: The County shall periodically update and enforce a HAZARD MITIGATION PLAN that addresses the full range of natural hazards facing the county. Continuation of the COBRA (Coastal Barriers Resource Act) zone, particularly as applied to RO-2 zoned areas (Carova, off-road area) of the county, shall continue to be supported. The plan shall meet the standards of the NC Division of Emergency Management and FEMA.

<u>POLICY NH5</u>: The County shall work in an on-going basis to improve its COMMUNTIY RATNG SYSTEM (CRS) SCORE to make the county safer and to reduce premiums for Federal Flood Insurance.

<u>POLICY NH6</u>: The County shall make EMERGENCY EVACUATION a priority in the development and approval of transportation plans and improvements included in the NC DOT Transportation Improvement Program.

<u>POLICY NH7</u>: Currituck County supports BEACH PRESERVATION AND RESTORATION methods as recommended by current research completed by the UNC Sea Grant Program. Generally, non-hardened, and therefore less environmentally damaging approaches to shoreline stabilization, shall be preferred.

<u>POLICY NH8</u>: Currituck County encourages owners of PROPERTIES ALONG ESTUARINE SHORELINES to employ the least hardened approach to shoreline stabilization (i.e. marsh grass

favored over riprap favored over bulkheading, etc.), provided that reasonable access is available to install the technology available.

<u>POLICY NH9</u>: Currituck County encourages efforts to fully inform prospective real estate purchasers of the inherent SHORELINE EROSION RISKS associated with oceanfront property.

<u>POLICY NH10</u>: The County will continue public education efforts with respect to protecting property from hazards particularly flood and wind damage as well as construction requirements related to the NFIP.

# Water Quality

CAMA Management Goal

Maintain, protect, and where possible enhance water quality in all coastal wetlands, rivers, streams, and estuaries.

CAMA Planning Objective

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

<u>POLICY WQ1</u>: Currituck County's GROUND WATER RESOURCES shall receive a level of protection commensurate with their enormous value. Efforts shall be made to monitor the quantity and quality of groundwater resources, with an eye toward preventing pollution, saltwater intrusion, or excessive drawdowns. Particular attention shall be given to locations near water and sewer treatment plants and areas with concentrations of septic tanks.

<u>POLICY WQ2</u>: Currituck County supports periodic reexamination of WATER QUALITY CLASSIFICATIONS (SA, SB, SC, etc.) with the objective of not just sustaining the status quo but, rather, seeking to achieve higher water quality conditions and associated ratings whenever possible.

<u>POLICY WQ3</u>: Currituck County supports policies, plans and actions that help protect the water quality of the county's estuarine system by preventing SOIL EROSION AND SEDIMENTATION, and by controlling the quantity and quality of STORMWATER RUNOFF entering the estuary.

<u>POLICY WQ4</u>: RUNOFF AND DRAINAGE from development, forestry and agricultural activities shall be of a quality and quantity as near to natural conditions as possible. Post-development runoff shall not exceed pre-development volumes.

<u>POLICY WQ5</u>: Development that preserves the NATURAL FEATURES OF THE SITE, including existing topography and significant existing vegetation, shall be encouraged. COASTAL AND NON-COASTAL WETLANDS shall not be considered part of a lot's acreage for the purpose of determining minimum lot size or development density. Open space developments shall be encouraged to REDUCE IMPERVIOUS SURFACE AREAS associated with new development and redevelopment.

<u>POLICY WQ6</u>: Currituck County supports the retention or preservation of VEGETATED BUFFERS along the edge of drainage ways, streams and other components of the estuarine system as an effective, low cost means of protecting water quality.

<u>POLICY WQ7</u>: The environmental benefits of properly designed, VEGETATED ROADSIDE DRAINAGE SWALES shall be recognized. Curb and gutter shall be reserved to developments that are urban in character (i.e. less than 10,000 square foot lot sizes) and that are served by adequate stormwater collection, retention and slow release facilities.

<u>POLICY WQ8</u>: Currituck County shall support the development and maintenance of a countywide COMPREHENSIVE DRAINAGE AND FLOOD MANAGEMENT PLAN, including public and private actions in support of plan implementation. Currituck County shall support County, NCDOT and property owner cooperation in preventing and resolving stormwater problems.

<u>POLICY WQ9</u>: Currituck County supports the efforts of the Currituck Soil and Water Conservation District and the United States Department of Agriculture - Natural Resources Conservation Service to assist farmers and timber operators in the county in implementing BEST MANAGEMENT PRACTICES to protect and improve water quality.

<u>POLICY WQ10</u>: SEWAGE TREATMENT DISCHARGES shall not be permitted into the waters of Currituck County. WATER TREATMENT DISCHARGES may be allowed if such discharge would not cause significant degradation of water quality (e.g. negatively affecting the fisheries resource).

# LOCAL COUNTYWIDE CONCERNS

CAMA Management Goal

Integrate local concerns with the overall goals of CAMA in the context of land use planning.

### CAMA Planning Objective

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

# ECONOMIC DEVELOPMENT POLICIES

<u>POLICY ED</u>1: NEW AND EXPANDING INDUSTRIES AND BUSINESSES should be especially encouraged that: 1) diversify the local economy, 2) train and utilize a more highly skilled labor force, and (3) are compatible with the environmental quality and natural amenity-based economy of Currituck County.

<u>POLICY ED2</u>: CAPITAL EXPENDITURES for the purpose of economic development shall be targeted toward areas that are most suited for development. Targeted areas should include raw land as well as the revitalization and reuse of currently unused or underutilized structures, sites and infrastructure. Targeted areas primarily include those located within the Full Service Areas identified on the Future Land Use Map and to a lesser extent those included in the Limited Service Areas.

<u>POLICY ED3</u>: The County supports COORDINATION OF ECONOMIC DEVELOPMENT ACTIVITIES among various economic development agencies and encourages regional cooperation and interaction among areas with shared economic interests.

<u>POLICY ED4</u>: In addition to the recruitment and expansion of major new industries, the considerable value of SMALL BUSINESS START-UPS, EXPANSIONS AND SPIN-OFFS shall also be recognized.

Also see POLICIES TR1, TR13 and TR14 concerning the relationship of transportation improvements to economic development.

# COMMUNITY APPEARANCE POLICIES

<u>POLICY CA1</u>: The important economic, tourism, and community image benefits of attractive, functional MAJOR HIGHWAY CORRIDORS through Currituck County shall be recognized. Such highway corridors, beginning with US 158 and NC 168, shall receive priority attention for improved appearance and development standards, including driveway access, landscaping, buffering, signage, lighting and tree preservation.

<u>POLICY CA2</u>: A CANOPY OF STREET TREES shall be encouraged along all major highways in the County. This canopy may be implemented through the preservation of existing trees or the planting of trees that will reach substantial size at maturity. The preservation or planting of such trees shall be encouraged in the area immediately adjoining the right of way.

<u>POLICY CA3</u>: LANDSCAPE IMPROVEMENTS at existing and new commercial developments, particularly as related to breaking up and softening the appearance of expansive parking areas, and absorbing storm water runoff, shall be required.

<u>POLICY CA4</u>: SIGN POLICIES AND STANDARDS should be established and periodically updated to enhance community appearance and create a quality business image. Such standards may be tailored to achieve different development characters for different parts of the county.

<u>POLICY CA5</u>: Currituck County recognizes that an attractive, less commercialized landscape, particularly along heavily traveled land and water routes, is essential to the tourist-based economy of the area. The placement of additional BILLBOARDS AND OFF-SITE ADVERTISING SIGNS shall not be permitted in Currituck County.

<u>POLICY CA6</u>: To foster an improved community appearance, promote public safety, and help prevent service outages, the placement of UTILITY WIRES UNDERGROUND shall be encouraged in all public and private developments.

<u>POLICY CA7</u>: The County shall continue to monitor the placement of COMMUNICATION AND OTHER TOWERS in Currituck County, and shall take action as may be determined necessary to regulate their design and location.

<u>POLICY CA8</u>: The County shall not permit the INAPPROPRIATE USE OF MANUFACTURED OR SITE BUILT HOMES for storage; nor shall abandonment be permitted without proper maintenance or disposal/demolition.

<u>POLICY CA9</u>: The County shall not permit the establishment and operation of UNLICENSED JUNKYARDS. Similarly, JUNKED CARS shall not be permitted to remain in locations visible from any public right of way.

<u>POLICY CA10</u>: Organize or facilitate a program whereby JUNKED CARS MAY BE HAULED AWAY AND RECYCLED at the least possible cost, if any, to the vehicle owners.

<u>POLICY CA11</u>: LITTERING OF PUBLIC ROADSIDES, SHORELINES AND OTHER PROPERTIES, whether from individual "litterbugs", illegal dumping, or drivers of inadequately covered trucks, shall not be tolerated. The County supports programs that prevent litter, clean up

roadsides and shorelines, as well as fines that hold accountable those who would abuse the environment and denigrate the image of the area.

### HISTORIC PRESERVATION POLICIES

<u>POLICY HP1</u>: Local efforts to identify, designate and preserve SITES, BUILDINGS AND DISTRICTS OF PARTICULAR HISTORIC SIGNIFICANCE shall be supported.

<u>POLICY HP2</u>: Multiple and appropriate ADAPTIVE REUSE OF HISTORIC RESOURCES shall be encouraged.

<u>POLICY HP3</u>: Development of the TOURISM AND EDUCATIONAL POTENTIAL of the area s architectural, historic and cultural resources shall be encouraged.

<u>POLICY HP4</u>: The DESTRUCTION OF SIGNIFICANT ARCHITECTURAL, HISTORIC AND ARCHAEOLOGICAL RESOURCES in the planning area shall be discouraged.

<u>POLICY HP5</u>: DEVELOPMENT SITES CONTAINING SIGNIFICANT HISTORIC RESOURCES shall be encouraged to honor such resources within the design of their development proposals. Opportunities may include, for example, incorporating such resources into common open space, donating such areas for tax credits, or making such areas available for acquisition and preservation.

<u>POLICY HP6</u>: Economic development efforts shall encourage the REVITALIZATION AND REUSE of currently unused or underutilized structures, sites and infrastructure in appropriately located areas.

<u>POLICY HP7</u>: The County, working in cooperation with non-profit groups and private organizations, shall seek to maintain and restore the architectural and cultural HERITAGE OF VARIOUS "COMMUNITIES" in Currituck County.

## POLICIES ON PUBLIC SAFETY SERVICES

<u>POLICY PS1</u>: As the area grows, the County may establish strategically located SUBSTATIONS FOR PUBLIC SAFETY SERVICES (i.e. law enforcement, fire fighting and rescue), provided that sufficient resources can be made available to properly staff and equip them.

<u>POLICY PS2</u>: Currituck County shall support and encourage the development and improvement of FIRE FIGHTING SERVICES that enhance the security and safety of life and property, while resulting in the added benefit of lower property insurance rates. The need for additional fire stations or improvements to existing fire stations shall be examined annually to keep pace with the growth of the area.

Also see POLICIES TR13 and TR14 concerning the relationship of transportation improvements to emergency evacuation, enhanced emergency medical services, and improved law enforcement for the Currituck Outer Banks.

# SUBAREA CONCERNS

This section addresses concerns that may be associated with one of three sub-areas of the county: (1) the Mainland (2) the Outer Banks and (3) Knotts Island. In some instances, issues of special concern clearly warrant a distinct policy. In other instances, the concern has been addressed in other parts of the plan, eliminating the need to set forth duplicate policies here.

# SPECIAL POLICIES APPLICABLE TO THE MAINLAND

<u>POLICY ML1</u>: Currituck County recognizes the particular interest of residents and property owners in the Mainland Area in PRESERVING FARMLAND AND OPEN SPACE. The County shall exercise diligence in applying policies, plans and actions that will encourage compact growth and the preservation of farmland and open space in the Mainland Area.

<u>POLICY ML2</u>: Currituck County supports efforts to establish a modern INDUSTRIAL PARK in the Mainland Area, developed in accordance with State approved standards and certifications.

<u>POLICY ML3</u>: The interests of Mainland Area residents in having ACCESS TO THE AREA'S OCEAN AND ESTUARINE WATERS shall be fostered through County actions to increase the number of additional public access sites at a rate commensurate with the population growth of the Currituck County. Included in the actions taken to increase public access shall be a consideration given to transportation needs, including boat docks and ferry services.

<u>POLICY ML4</u>: Currituck County recognizes that the appearance and traffic moving function of the NC 168/ US 158 CORRIDOR is of exceptional importance to both the near term quality of life and long-term economic prospects for residents and property owners in the Mainland Area. The Transportation and Community Appearance policy sections of this plan shall be implemented to give priority to this issue.

# SPECIAL POLICIES APPLICABLE TO THE OUTER BANKS

<u>POLICY OB1</u>: Currituck County supports the provision of INFRASTRUCTURE (e.g. potable water) AND SERVICES (e.g. law enforcement officers) adequate to meet basic quality of life and public health and safety requirements of residents on the Outer Banks, while at the same not stimulating inappropriate intensive development in environmentally fragile, hazardous barrier island areas.

<u>POLICY OB2</u>: So as to minimize COMMERCIAL STRIP DEVELOPMENT and maximize the traffic moving capability of NC 12, Currituck County shall encourage commercial development to cluster at appropriate locations rather than dispersing along NC 12.

<u>POLICY OB3</u>: Currituck County recognizes that, on the Outer Banks in particular, "single family" homes are being built that accommodate 15, 20, 25 or more people. Thus, these LARGE RESIDENTIAL STRUCTURES are circumventing existing zoning laws that could not anticipate the advent of these building forms. Development regulations and project approvals shall therefore be based upon the actual nature of the structure rather than the label (e.g. single family) that may be attached to it.

<u>POLICY OB4</u>: Currituck County supports policies and actions that require the square footage, number of bedrooms, and/or occupancy levels of RESIDENTIAL STRUCTURES to be determined in proportion to lot size, as well as public health and safety issues concerning water supply and sewage disposal, fire safety, emergency services, parking, traffic loads during evacuations, etc.

<u>POLICY OB5</u>: Currituck County, through its actions and decisions, shall seek to preserve the historic character and heritage of the COROLLA VILLAGE area of the Outer Banks.

<u>POLICY OB6</u>: Concerning the OFF-ROAD AREAS OF THE OUTER BANKS, Currituck County shall not permit or encourage the provision of growth-inducing facilities and services to

these areas, including for example, commercial services, centralized sewage treatment and hard surface roads.

<u>POLICY OB7</u>: VEHICULAR ACCESS TO THE NORTH BEACHES (off-road area) shall not compromise the environmental integrity of wildlife refuges, the estuarine research reserve, other ecologically sensitive areas, or habitat for wild horses. Structures or other man-made improvements not specifically serving the public interest shall not be permitted to block vehicular access along the beach.

<u>POLICY OB8</u>: In order to protect WILD HORSES, Currituck County shall not permit nor encourage the provision of hard surface roads in the off-road area of Carova.

<u>POLICY OB9</u>: LARGE HOMES ON OCEANFRONT LOTS IN THE OFF-ROAD AREA should be located as far west as possible. Structures should not be built forward of protective dunes, thereby impeding dune recovery. County minimum setbacks may exceed CAMA minimum setbacks in ocean erodible areas.

# SPECIAL POLICIES APPLICABLE TO KNOTTS ISLAND

<u>POLICY KI1</u>: The need for ACCESS TO PUBLIC TRUST WATERS in the Knotts Island area shall be met through periodic improvements to existing public facilities. The County also recognizes that private sector facilities may play a role in satisfying access needs to the water.

<u>POLICY KI2</u>: Currituck County shall encourage NCDOT efforts to provide essential maintenance and improvements to ROADS AND ROADSIDE DITCHES serving the Knotts Island Area, especially including the Marsh Causeway Bridge.

<u>POLICY KI3</u>: Currituck County shall support efforts to improve community services in the Knotts Island area. Services which may warrant improvement include: (1) FIRE SERVICE, to address fire safety as well as reducing insurance costs and (2) COMMUNICATIONS following major storm events (3) access to LIBRARY SERVICES, and (4) access to INDOOR RECREATION facilities.

<u>POLICY KI4</u>: Currituck County shall not provide or encourage the provision of INFRASTRUCTURE OR UTILITIES that would foster greater development densities on Knotts Island, including particularly, centralized sewage treatment services.

<u>POLICY KI5</u>: Land use and zoning initiatives on Knotts Island shall give consideration to limiting MANUFACTURED HOME (I.E. MOBILE HOME) PLACEMENTS in this part of the county.

# SECTION 10: RELATIONSHIP OF PLAN TO MANAGEMENT TOPICS

The planning guidelines require the local government to provide two types of analysis of its land use and development policies and the future land use map. Each analysis is described below.

# **Consistency between Goals/Policies and Management Topics**

# A. Public Access.

Applicable Goal from Section 8:

• To provide suitable public access opportunities to the County's public trust waters and shorelines so as to allow for a wide range of activities.

*Analysis:* The policies call for a wide variety of additional public and private access opportunities to all waters of Currituck County. Cooperation between public agencies to identify joint use sites and opportunities are to be especially encouraged. Reviews and approvals of waterfront developments are to address the protection of public access to the water resource, both physically and visually. Finally, recommended actions include the preparation of a new plan for public access to the ocean and sound. Such a plan would be able to complete the detailed research necessary to identify opportunity sites and the methods to be employed to procure the sites.

# B. Land Use Compatibility.

Applicable Goal from Section 8:

• To properly development forms in accordance with the suitability of the land, infrastructure available and the compatibility of surrounding land uses.

*Analysis:* The plan calls for development to be located where soils are suitable. Prime agricultural lands are to be conserved by encouraging new development to locate in areas where appropriate infrastructure and access to services is available. Compact, mixed-use developments are to be encouraged so as to minimize sprawl and discourage automobile dependency. New commercial development of a scale and design compatible with nearby residential areas is also to be encouraged for similar reasons. The compatibility of mining operations, such as borrow pits for fill material, is also addressed.

# C. Infrastructure Carrying Capacity

### Applicable Goal from Section 8:

- To avoid taking or approving actions related to infrastructure and the provision of services that could induce intensive development in environmentally fragile areas; examples include the north beaches of the Outer Banks and Knotts Island.
- To preserve the traffic carrying capacity of existing roadways and provision of new roadways and roadway improvements in accordance with carefully developed plans.

*Analysis:* The plan's policies emphasize the need to protect the function of existing roadways as cost effective and environmentally sound. Methods include limiting driveway cuts, discouraging strip development and flag lots along major roadways, and requiring adjoining parking lots to be connected. Highway158/168 is singled out for special protections. Support for the construction of

the proposed Mid-County Bridge is set forth, along with related improvements to NC 12 on the Currituck Outer Banks. Multiple options for future water supply resources are advocated. Water and sewer extension polices are to be used to proactively direct growth rather than passively respond to it. Criteria for the appropriate use of septic systems and package sewage treatment plants are set forth. Advanced planning for schools and park facilities is also supported along with certain criteria for their location. Policies call for the assignment of infrastructure costs to the new growth creating the demand for services.

# D. Natural and Man-Made Hazards

#### Applicable Goal from Section 8:

• To exercise caution, foresight, and common sense in dealing with the risks of coastal development.

*Analysis:* The plan calls for continued enforcement of the standards of the National Flood Insurance Program and provisions of the County's flood damage prevention ordinance. Further, to improve the County's insurance rating under the "Community Rating System", the plan recommends amending the UDO to require a minimum of one (1) foot of "freeboard" above the minimum NFIP base flood elevations. Expansion of the Currituck County Mitigation Plan to include a Post Storm Reconstruction Plan is also advocated. Finally, the plan calls for the creation of an interagency task force whose purpose is to develop a plan for the RO-2 COBRA zone to address growth issues likely to come about as a result of the proposed mid-county bridge.

### E. Water Quality.

Applicable Goals from Section 8:

- To preserve and improve water quality in the coastal waters of Currituck County.
- To preserve critical natural areas as the source of biological diversity and productivity of the County's ocean and estuarine environments.

*Analysis:* Under the plan's policies, wetlands are to be conserved for multiple reasons, including flood hazard mitigation, water quality preservation, and habitat protection. New developments are to preserve a vegetated buffer along estuarine shorelines. Runoff and drainage from development, forestry and agricultural activities is to be of a quality and quantity as near to natural conditions as possible. The State is to be petitioned for a reexamination of water quality designations in Currituck Sound, to have those designations elevated if possible. A countywide drainage and flood management plan, including public and private actions is to be undertaken.

### F. Local Concerns

#### Applicable Goals from Section 8:

- To conserve the County's remaining prime agricultural areas, while recognizing the economic realities of farm operations and private property rights.
- To diversify the County's economic base, to include environmentally compatible businesses and industries that reach beyond the tourist-based economy.
- To protect and conserve the area's natural beauty and coastal resources as the County's greatest asset for economic development and a high quality of life.

Analysis: The plan has three major goals (above) that embody major local concerns: (1) balancing the preservation of farmland with private property rights, (2) promoting a diverse local

economy and (3) protecting the areas natural beauty and resources. The relationship of the plan's policies and actions to these goals is summarized below.

- 1. *Farmland Preservation*. The plan encourages land use patterns and voluntary actions by landowners to help protect the county's remaining prime agricultural areas.
- 2. *Economic Development*. The plan identifies the characteristics of businesses that are consistent with the county's goals for both economic development and environmental quality.
- 3. *Community Appearance*. The plan address several major issues related to community appearance: development conditions along the County's major highway corridors, proper disposal of abandoned mobile homes, better controls over junk yards and junked cars and stronger enforcement of anti-litter laws.

# Consistency between Future Land Use Map and CAMA Land Use Plan Requirements.

#### **Residential Development Density**

*Analysis:* The residential densities depicted on the map for each major land class and planning subarea are consistent with the capabilities of the county's natural systems. Typical density levels are:

Major Land Class	Development Density	
Conservation	1 unit per 3 acres or less	
Rural Areas	1 unit per 3 acres or less	
Limited Service Areas	Base Density - 1 unit per acre	
	Overlay Zones – up to 1.5 units per acre	
	Served by individual on-site waste water	
	Neighborhood commercial uses	
Full Service Areas	Base Density – 2 units per acre	
	Overlay Zones – 3-4 units per acre	
	Served by central sewer	
	Large scale commercial uses	

 Table 10.1 Future Land Classifications Related to Development Density

Sub-Areas	Development Intensity	
Moyock	Full Service	
	Limited Service	
	Rural	
	Conservation	
	Base Density of 2 units per acre with significant area of 1 unit	
	per acre	
Shawboro/Crawford	Primarily Rural and Conservation	
	Base Density of 1 unit per 3 acres	
Courthouse Area	Primarily Full Service and Limited Service	
	Base Density of 2 units per acre	
Barco/Coinjock/Airport Area	Primarily Full Service and Limited Service	
	Base Density of 2 units per acre	
Intersection of Proposed Mid-	Primarily Limited Service	
County Bridge and US	Base Density of 1 unit per acre	
Highway 158		
Aydlett and	Primarily Limited Service	
Waterlily/Churches Island	Base Density of 1 unit per acre	
Grandy	Primarily Full Service and Limited Service	
	Base Density of 2 units per acre	
Jarvisburg	Primarily Limited Service	
	Base Density of 1 unit per acre	
Point Harbor	Primarily Limited Service with an area of Full Service	
	Base Density of primarily 1 unit per acre with limited 2 units	
	per acre	
Corolla	Full Service	
	Base Density of 3 units per acre	
Carova	Limited Service and Conservation	
	Base Density of 1 unit per 3 acres	
Knotts Island and Gibbs	Limited Service and Conservation	
Woods	Base Density of 1 unit per 3 acre	

Table 10.2 Sub-Areas	<b>Related</b> to	<b>Development Density</b>

# Comparison of Environmental Composite Map, Land Suitability Map, and Land Classification Map.

# Environmental Composite Map and Land Classification Map

*Analysis:* These maps are very consistent with each other. There are only two (2) readily identifiable differences between the maps. The first concerns certain limited areas shown as Class III on the Environmental Map that are shown as High Suitability on the Land Suitability Map. This difference, in turn, carries over to the Land Classification Map. This difference can be explained, however, by the fact that the Class III areas in question have been designated as such due to their Severe Limitations for Septic Tanks. Since these areas are served by central or package sewage treatment plants, the Class III designation has no material significance. The second difference is in the vicinity of the Regional Airport in Maple. The Environmental Composite Map shows the area to be Class I (minimal hazards for development) and Class II, yet the Land Suitability Map indicates this area as "Least Suitable" for development. The

discrepancy is likely to due with the fact that the airport is located on a former dump site.

### Land Suitability Map and Land Classification Map

*Analysis:* Generally there are no material differences between these maps. By and large all of the areas shown on the Land Suitability Map as Least Suitable are classified as Conservation on the Land Classification Map. It should be noted however that in an effort to make the Future Land Use Map easier to interpret, pockets of land considered Least Suitable for development that would ordinarily be classified as Conservation are shown as Limited Service or Full Service Areas. Every effort was made to create the boundaries of the land use classifications following natural boundaries, parcel lines, and roads for ease of use. The pockets of Least Suitable land included in the Limited Service and Full Service Areas are generally environmentally sensitive and subject to additional federal, state, or local restrictions limiting their development regardless of the land use classification.

# Comparison of Spatial Patterns of Land Classification and Planned Extension of Water and Sewer Services

*Analysis:* The likelihood of the future provision of centralized or package sewage collection and treatment services was a primary factor in identifying lands shown as Full Service Areas on the Land Classification Map. While the County has no plans to create additional centralized sewage services, the County recognizes that some areas served by package treatment services in the near term may be appropriate for absorption into a larger consolidated system in the future. Policies therefore call for the installation of collection systems with piping and other components compatible with a larger area system. The availability of centralized water services in Currituck County is not considered to be a critical factor in development decisions and the spatial pattern of land classes.

### Natural Hazards: Land Use and Development in Natural Hazard Areas

#### Analysis:

- Policies for land uses in the high hazard flood area adopt the CAMA use standards. The use standards ensure that risks to life and property in these areas are reasonable.
- In flood hazard areas, the County will continue to enforce its flood damage prevention ordinance and the state building code to manage risks.
- The County's major evacuation route is the 158 and 168 highway corridor. Plans call for widening this roadway as necessary to keep up with traffic volumes, including possibly from 5 to 7 lanes. Longer range possibilities include the proposed Mid-County Bridge, offering a more direct evacuation route from the Currituck Outer Banks, and the proposed 168 Bypass offering an alternative route around the west side of the rapidly growing Moyock area.

## Comparison of Spatial Patterns of Land Classification and Protection of Shellfish Waters

*Analysis:* As noted previously in this plan (See Section 3: Natural Systems Analysis), there are no commercial shellfish areas in Currituck County, largely due to non-supporting salinity levels in the sound.

# Analysis of Impacts of Currituck County Policies and Actions on

# **Management Topics**

# Public Access Policies Impact on:

*PUBLIC ACCESS:* Do the access policies result in additional public access opportunities to river, creek, sound, and beach areas? Will such access points be environmentally compatible with their location?

### Beneficial

- Calls for the preparation of a special plan for public access opportunity sites at the regional, local, and neighborhood level. (Detailed planning needed).
- Encourages multiple uses of publicly owned properties, including opportunities for public access.
- Encourages marinas in upland locations to avoid 'consuming' public trust water in open water marinas.
- Calls for development standards to ensure environmental compatibility.
- Discourages developments that would 'wall off' the water from view.
- Calls for standards and incentives for waterfront projects that preserve and provide for public access.
- Calls for a fee in lieu of land dedication to fund public access.
- Calls for removal of structures on the beach blocking public access.
- Continues the requirement that major subdivisions provide for public access to adjoining waters.

*LAND USE COMPATIBILITY:* Do the policies promote development patterns that protect natural systems while protecting development from natural and man-made hazards? Do the policies allow for economic development while providing clear direction for land use decision-making?

### Neutral-Beneficial

• Requires new marinas to be environmentally compatible with their location and adjoining land uses.

*Infrastructure and Carrying Capacity*: Are the development patterns encouraged by the policies consistent with location and capacity of water, sewer, roads, and stormwater systems? Do they help prevent harm to AEC's and fragile areas? Do the policies support the desired pattern of growth?

### Neutral-Beneficial

- Encourage multiple uses of publicly owned properties, for various infrastructure purposes.
- Calls for a fee in lieu of land dedication to fund public access facilities.
- Continues the requirement that major subdivisions provide for public access to adjoining waters.

**NATURAL HAZARD AREAS:** Do the policies work to conserve barrier dunes, beaches, floodplains, and other features that provide natural storm protection? Do the policies help minimize threats to life, property and natural resources by appropriate design and locational criteria?

#### Neutral-Beneficial

- Offers incentives for the construction of no-wetland, upland marinas, thereby conserving the value of the wetland resource.
- Calls for the preservation of a buffer strip of land along the estuarine shoreline, thereby proving a measure of protection during storm events.
- Requires the removal of structures on the beach that could pose a hazard to the public.

*WATER QUALITY:* Do the policies maintain, protect and, if possible, enhance water quality in wetlands and bodies of water?

#### **Beneficial** –Neutral

- Disapproves of any marina that fails to meet environmental quality standards.
- Promotes the Clean Marina program.
- Requires development standards for boat ramps and parking areas that address stormwater runoff and water quality concerns, among others.
- Calls for incentives for the preservation of a strip of land adjoining the water's edge.
- Provides incentives for non-wetland, upland marinas.

*LOCAL COUNTYWIDE CONCERNS:* Do the policies maintain, protect and, if possible, enhance water quality in wetlands and bodies of water?

#### **Neutral Beneficial**

• Supports additional public access as essential to the health of the local economy.

# LAND USE COMPATIBILITY: Environmentally Sensitive Areas, Agricultural/Rural Preservation, Housing and Neighborhood Development, Commercial Development, Industrial Development Policies Impact on:

*PUBLIC ACCESS:* Do the access policies result in additional public access opportunities to river, creek, sound, and beach areas? Will such access points be environmentally compatible with their location?

#### **Beneficial-Neutral**

- Calls for the preservation of a naturally vegetated buffer area along all estuarine shorelines, to help preserve views to and from the water.
- Requires uses in estuarine waters to be water dependent, such as structures for public access (docks, piers, ramps, etc.).
- Calls for greater controls on the length of piers that would otherwise block the public's movement in public trust waters.
- Withholds support for any action that would commercialize the public beach.
- Encourages conservation easements that could potentially benefit public access opportunities.

LAND USE COMPATIBILITY: Do the policies promote development patterns that protect natural systems while protecting development from natural and man-made hazards? Do the

policies allow for economic development while providing clear direction for land use decisionmaking?

#### Beneficial

- Requires that development be located on suitable soils.
- Calls for the conservation of remaining wetland areas.
- Requires that areas slated for future growth avoid natural heritage areas and similar lands.
- Calls for a review of zoning and permitted land uses to be consistent with environmentally sensitive areas.
- Requires that County actions on infrastructure guide new development to targeted growth areas.
- Calls for preservation of prime agricultural lands.
- Calls for the application of zoning and other growth management tools to avoid leapfrog development.
- Encourages a variety of housing forms to meet all income levels.
- Prohibits residential developments that would place inhabitants in a location subject to incompatible development or man-made hazards.
- Establishes locational criteria for residential, office, and institutional, commercial and industrial land uses.
- Encourages compatible industrial development for economic diversification.

*Infrastructure and Carrying Capacity:* Are the development patterns encouraged by the policies consistent with location and capacity of water, sewer, roads, and stormwater systems? Do they help prevent harm to AEC's and fragile areas? Do the policies support the desired pattern of growth?

#### **Beneficial-Neutral**

- Requires adequate infrastructure as a condition for development to proceed.
- Calls for new developments to locate in environmentally suitable areas and convenient to adequate infrastructure, thereby reinforcing planned infrastructure.
- Encourages development patterns that support transportation alternatives beyond the automobile.
- Calls for commercial and industrial developments to locate consistent with the available road infrastructure.

*Natural Hazard Areas*: Do the policies work to conserve barrier dunes, beaches, floodplains, and other features that provide natural storm protection? Do the policies help minimize threats to life, property and natural resources by appropriate design and locational criteria?

#### **Beneficial-Neutral**

- Calls for the conservation of remaining wetland areas.
- Specifies that a high level of protection be afforded to maritime forests and sand dunes when reviewing development proposals.
- Calls for the avoidance of natural heritage areas, which have the added benefit of mitigating storm hazards.
- Prohibits new residential developments that would expose residents to environmental hazards.

*Water Quality*: Do the policies maintain, protect and, if possible, enhance water quality in wetlands and bodies of water?

## **Beneficial-Neutral**

- Calls for the conservation of remaining wetland areas, as important filter of stormwater runoff.
- Calls for the preservation of a naturally vegetated buffer area along all estuarine shorelines, as a means of preventing pollutants from entering estuarine waters.
- Disapproves of the disposal of hazardous waste in Currituck County, as well as solid waste from outside the county.
- Calls for regulatory standards for mining operations in excess of state requirements, including sludge disposal and water reclamation.

*Local Countywide Concerns*: Do the policies maintain, protect and, if possible, enhance water quality in wetlands and bodies of water?

## **Beneficial-Neutral**

- Calls for the preservation of a naturally vegetated buffer area along all estuarine shorelines, to help preserve views to and from the water.
- Calls for preservation of prime agricultural land (economic value as well as way of life).
- Calls for a variety of affordable housing types, including housing for senior citizens and for seasonal workers.
- Calls for environmentally compatible industrial development to diversity the local economy.

## INFRASTRUCTURE CARRYING CAPACITY: Transportation, Water and Sewer Service, School Facilities, Solid Waste Management, Parks and Recreation, Paying for Infrastructure and Services Impact on:

*PUBLIC ACCESS:* Do the access policies result in additional public access opportunities to river, creek, sound, and beach areas? Will such access points be environmentally compatible with their location?

#### **Beneficial-Neutral**

- Calls for a Mid-County Bridge that would enhance public access to the Outer Banks of Currituck County, especially for day-trippers.
- Continues support for ferry service between the Mainland and other points in the county, thereby providing for 'public access' to the sound for those who may not have other means of getting on the water.
- Calls for advanced planning for park sites that serve multiple objectives, including opportunities for public access.
- Calls for hiking and biking trails within natural stream corridors.
- Calls for open space and parkland dedication, or fees in lieu of such dedications, which could include public access sites.
- Calls for development of new revenue sources directly related to the mitigation of development impacts, to be paid for by the new development creating the demand.

Revenues could then be applied to public access sites among other service and infrastructure needs.

*LAND USE COMPATIBILITY:* Do the policies promote development patterns that protect natural systems while protecting development from natural and man-made hazards? Do the policies allow for economic development while providing clear direction for land use decision-making?

## Beneficial

- Supports regional transportation connections in furtherance of economic development.
- Generally does not permit access to a higher density development though a lower density development.
- Requires development along roads leading to the proposed Mid-County Bridge to be of especially high quality.
- Encourages the use of utility extensions to influence the desired pattern of growth and protect farmland from development, while allowing for beneficial economic development where justified.
- Calls for an assessment of secondary impacts related to the Mid-County Bridge including likely land use impacts.
- Calls for special development standards for US 158 and NC 168.
- Calls for the proactive placement of schools to influence a desired growth pattern.
- Calls for consistency between infrastructure and the new development it must support.

*INFRASTRUCTURE AND CARRYING CAPACITY:* Are the development patterns encouraged by the policies consistent with location and capacity of water, sewer, roads, and stormwater systems? Do they help prevent harm to AEC's and fragile areas? Do the policies support the desired pattern of growth?

#### Beneficial

- Calls for regional cooperation in transportation planning and road improvements.
- Calls for preserving the traffic moving function of existing roads, through access management.
- Calls for a special highway corridor overlay district on US 158 and NC 168 to preserve the function and aesthetics of this primary spine road.
- Calls for consistency between infrastructure and new development
- Calls for development on roads leading to the proposed Mid-County Bridge to be of exceptional quality thereby preserving taxpayer investment in the bridge.
- Allows the use of package sewage treatment plants to encourage more efficient land use, with the objective of connecting smaller treatment facilities together in the future.
- Calls for even greater emphasis on requiring adequate public facilities to support new growth and development.
- Calls for the development of new revenue sources directly related to the mitigation of development impacts, to be paid for by the new development creating the demand.

NATURAL HAZARD AREAS: Do the policies work to conserve barrier dunes, beaches,

floodplains, and other features that provide natural storm protection? Do the policies help minimize threats to life, property and natural resources by appropriate design and locational criteria?

#### **Beneficial-Neutral**

- 1 Calls for the selection of open space and park sites using multiple objectives, including watershed and flood prone area protection.
- <u>32</u> Calls for the establishment of a system of open space greenways, including streams and floodplains.
- <u>53</u> Prohibits any new wastewater treatment plant from locating in any Area of Environmental Concern.

*WATER QUALITY:* Do the policies maintain, protect and, if possible, enhance water quality in wetlands and bodies of water?

#### Neutral-Beneficial

- Calls for the establishment of an education program for the proper maintenance of septic tanks and financial incentives for discounted pump out service.
- Prohibits new wastewater treatment plants from locating in an AEC.

*Local Countywide Concerns*: Do the policies maintain, protect and, if possible, enhance water quality in wetlands and bodies of water?

#### **Beneficial-Neutral**

- Calls for enhanced regional highway connections as critical to long-term economic development.
- Endorses the strategic use of utilities extensions to support desirable economic development opportunities.
- Calls for harsh penalties against illegal dumping and improper disposal of junked cars.
- Calls for special highway corridor development controls along NC 168 and US 158.

## NATURAL HAZARD AREAS IMPACT ON:

*PUBLIC ACCESS:* Do the access policies result in additional public access opportunities to river, creek, sound, and beach areas? Will such access points be environmentally compatible with their location?

#### Neutral-Beneficial

- Calls for beach preservation and restoration methods that employ non-hardening approaches, thereby preserving the sand beach for the public.
- Calls for estuarine shoreline property owners to use the least hardened approach to shoreline stabilization, thereby preserving the intertidal zone for access by the public.

*LAND USE COMPATIBILITY:* Do the policies promote development patterns that protect natural systems while protecting development from natural and man-made hazards? Do the policies allow for economic development while providing clear direction for land use decision-making?

## Neutral-Beneficial

• Requires development and redevelopment within flood hazard areas to meet special building standards and other requirements.

*Infrastructure and Carrying Capacity*: Are the development patterns encouraged by the policies consistent with location and capacity of water, sewer, roads, and stormwater systems? Do they help prevent harm to AEC's and fragile areas? Do the policies support the desired pattern of growth?

## Beneficial

- Calls for new public facilities and structures to be located to avoid natural hazard areas or, if unavoidable, to be designed to mitigate against such hazards.
- Supports continuation of the COBRA policies for the north beach area, denying infrastructure investments that would facilitate growth there.

*Natural Hazard Areas*: Do the policies work to conserve barrier dunes, beaches, floodplains, and other features that provide natural storm protection? Do the policies help minimize threats to life, property and natural resources by appropriate design and locational criteria?

#### Beneficial

- Requires development and redevelopment within flood hazard areas to meet special building standards and other requirements.
- Calls for new public facilities and structures to be located to avoid natural hazard areas or, if unavoidable, to be designed to mitigate against such hazards.
- Calls for beach preservation methods that employ non-hardening approaches, thereby preserving the sand beach for the public.
- Calls for estuarine shoreline property owners to use the least hardened approach to shoreline stabilization, thereby preserving the intertidal zone for wave action amelioration.
- Requires real estate agents to disclose risks of building in hazardous location.

*WATER QUALITY*: Do the policies maintain, protect and, if possible, enhance water quality in wetlands and bodies of water?

## Neutral

*Local Countywide Concerns*: Do the policies maintain, protect and, if possible, enhance water quality in wetlands and bodies of water?

#### Neutral

## WATER QUALITY IMPACT ON:

*PUBLIC ACCESS:* Do the access policies result in additional public access opportunities to river, creek, sound, and beach areas? Will such access points be environmentally compatible with their location?

## Neutral-Beneficial

- Calls for the preservation of a naturally vegetated buffer area along all estuarine shorelines, to help protect water quality, while also preserving views to and from the shoreline.
- Calls for the identification of land parcels for acquisition or restoration, largely to protect water quality, but would also provide opportunity sites for public access.

*LAND USE COMPATIBILITY:* Do the policies promote development patterns that protect natural systems while protecting development from natural and man-made hazards? Do the policies allow for economic development while providing clear direction for land use decision-making?

#### Neutral-Beneficial

• Calls for developments to preserve the natural features of the site.

*INFRASTRUCTURE AND CARRYING CAPACITY*: Are the development patterns encouraged by the policies consistent with location and capacity of water, sewer, roads, and stormwater systems? Do they help prevent harm to AEC's and fragile areas? Do the policies support the desired pattern of growth?

## Neutral-Beneficial

• Calls for groundwater monitoring, especially near water and sewer treatment plants.

*NATURAL HAZARD AREAS:* Do the policies work to conserve barrier dunes, beaches, floodplains, and other features that provide natural storm protection? Do the policies help minimize threats to life, property and natural resources by appropriate design and locational criteria?

#### **Beneficial-Neutral**

- Calls for developments to preserve the natural features of the site, including wetland areas that absorb stormwater runoff and potential flooding.
- Calls for the development of a comprehensive drainage and flood management plan.
- Calls for continued implementation of ordinance requiring certification that new development will not cause flooding on adjoining properties.

*WATER QUALITY*: Do the policies maintain, protect and, if possible, enhance water quality in wetlands and bodies of water?

#### Beneficial

- Calls for ground water monitoring.
- Calls for policies and actions to prevent soil erosion and sedimentation and minimize stormwater runoff to a degree more restrictive than State standards.
- Calls for the preservation of a naturally vegetated buffer area along all estuarine shorelines, to help protect water quality.
- Calls for the identification of land parcels for acquisition or restoration, largely to protect water quality.
- Calls for comprehensive drainage and flood management plan.

• Prohibits sewage treatment discharges and limits water treatment discharges into the waters of Currituck County.

*LOCAL COUNTYWIDE CONCERNS*: Do the policies maintain, protect and, if possible, enhance water quality in wetlands and bodies of water?

## Neutral

## LOCAL COUNTYWIDE CONCERNS: Economic Development, Community Appearance, Historic Preservation, Public Safety Services impact on:

*PUBLIC ACCESS:* Do the access policies result in additional public access opportunities to river, creek, sound, and beach areas? Will such access points be environmentally compatible with their location?

## Neutral

*LAND USE COMPATIBILITY:* Do the policies promote development patterns that protect natural systems while protecting development from natural and man-made hazards? Do the policies allow for economic development while providing clear direction for land use decision-making?

#### Beneficial

- Establishes criteria for identifying desirable new business and industry.
- Calls for coordination among economic development agencies and encourages regional cooperation and interaction.
- Acknowledges the value of small business start-ups, expansions and spin-offs.
- Calls for the advanced identification of primary and secondary sites suited for compatible industrial development.
- Reinforces the need for special development controls along US 158 and NC 168.
- Calls for community character districts in locations of significant historic significance such as around the old courthouse in Currituck and in Corolla Village.

*INFRASTRUCTURE AND CARRYING CAPACITY*: Are the development patterns encouraged by the policies consistent with location and capacity of water, sewer, roads, and stormwater systems? Do they help prevent harm to AEC's and fragile areas? Do the policies support the desired pattern of growth?

## **Beneficial-Neutral**

- Encourages the placement of overhead utilities underground to help prevent service outages.
- Requires controls over the placement of communication towers and other towers in the county.
- Calls for an evaluation of the need for additional public safety substations in the county.

*NATURAL HAZARD AREAS*: Do the policies work to conserve barrier dunes, beaches, floodplains, and other features that provide natural storm protection? Do the policies help

minimize threats to life, property and natural resources by appropriate design and locational criteria?

#### Neutral

*WATER QUALITY*: Do the policies maintain, protect and, if possible, enhance water quality in wetlands and bodies of water?

#### **Neutral-Beneficial**

• Prohibits littering of shorelines, including litterbugs and illegal dumping.

*LOCAL COUNTYWIDE CONCERNS*: Do the policies maintain, protect and, if possible, enhance water quality in wetlands and bodies of water?

#### Beneficial

- Encourages new and expanding industries that satisfy selection criteria.
- Targets capital expenditures toward areas most suited for economic development.
- Calls for coordination among economic development agencies and encourages regional cooperation and interaction.
- Acknowledges the value of small business start-ups, expansions and spin-offs.
- Calls for the advanced identification of primary and secondary sites suited for compatible industrial development.
- Reinforces the need for special development controls along US 158 and NC 168.
- Calls for community character districts in locations of significant historic significances such as the old courthouse in Currituck and in Corolla Village.
- Prohibits littering of public roadsides, shorelines, and other properties.
- Supports and encourages historic preservation initiatives.
- Calls for an evaluation of the need for additional public safety substation in the county.

## SUBAREA CONCERNS: Mainland Area, Outer Banks, Knotts Island:

**PUBLIC ACCESS:** Do the access policies result in additional public access opportunities to river, creek, sound, and beach areas? Will such access points be environmentally compatible with their location?

#### Beneficial

- Calls for the provision of additional public access sites to ocean and estuarine waters at a rate commensurate with the population growth rate.
- Calls for public access opportunities to include consideration for transportation needs, including boat docks and ferry services.
- Calls for continued enforcement of the public nuisance ordinance requiring the removal of buildings that, due to shoreline erosion, have become located in the public trust area of the beach.
- Calls for better management of public access for vehicles driving on the beach. (The potential additional restrictions on off-road driving are considered to be outweighed by the improved enjoyment and safety for al those using the beach.)
- Calls for improvements to existing public access facilities on Knotts Island.

*LAND USE COMPATIBILITY:* Do the policies promote development patterns that protect natural systems while protecting development from natural and man-made hazards? Do the policies allow for economic development while providing clear direction for land use decision-making?

## Beneficial

- Calls for enhanced development standards for manufactured homes.
- Calls for better controls over very large single-family homes.

*INFRASTRUCTURE AND CARRYING CAPACITY*: Are the development patterns encouraged by the policies consistent with location and capacity of water, sewer, roads, and stormwater systems? Do they help prevent harm to AEC's and fragile areas? Do the policies support the desired pattern of growth?

## **Beneficial-Neutral**

- Calls for implementation actions to protect the traffic moving function of the NC 168 and US 158 highway corridor.
- Supports the provision of adequate infrastructure and services on the Outer Banks, but not so as to stimulate intensive development.
- Calls for controls over massive single-family structures so as not to overwhelm available infrastructure on the outer Banks.
- Calls for no infrastructure services that would promote intensive development on Knotts Island.
- Calls for the establishment of a stormwater management service district on Knotts Island.

*NATURAL HAZARD AREAS*: Do the policies work to conserve barrier dunes, beaches, floodplains, and other features that provide natural storm protection? Do the policies help minimize threats to life, property and natural resources by appropriate design and locational criteria?

#### **Beneficial-Neutral**

• Discourages the provision of growth-inducing facilities and services to the particularly vulnerable off-road areas of the Outer Banks.

*WATER QUALITY*: Do the policies maintain, protect and, if possible, enhance water quality in wetlands and bodies of water?

#### Neutral

*LOCAL COUNTYWIDE CONCERNS*: Do the policies maintain, protect and, if possible, enhance water quality in wetlands and bodies of water?

## **Neutral-Beneficial**

- Encourages commercial developments to cluster at appropriate locations according to designated location criteria.
- Calls for a comprehensive assessment of community facility needs on Knotts Island, including public safety services.

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# SECTION 11: LAND CLASSIFICATION SYSTEM

## **Purpose of Land Classification System**

The CAMA Land Use Planning Guidelines require that local governments in the coastal area classify various parts of their planning jurisdictions in accordance with the desired density, character of development and level of services provided for each area. By delineating land classes on a map, the County can specify where various forms of development and redevelopment might best occur, and where natural and cultural resources should be conserved.

The Land Classification Map or Future Land Use Plan Map (See Appendix E for the Currituck County Land Classification Map for this plan) is to be supported and complemented by zoning, subdivision regulations, infrastructure investments and other local growth management tools; these local tools should be consistent with the classification system as much as possible. Although general areas are outlined on the Land Classification Map, it must be remembered that land classification is in and of itself a policy and is not, in the strict sense of the term, a regulatory mechanism. Rather as with the balance of the Land Use Plan should be used as a guide in adopting implementation ordinances and evaluating subdivision, land development, and rezoning requests.

## **Proposed Land Classifications**

## **Conservation Areas**

The purpose of the Conservation class is to provide for the long-term management and protection of significant, limited, or irreplaceable areas. Proper management is needed to conserve the natural, cultural, recreational, scenic or biologically productive values of these areas. The Conservation class should be applied to areas that should not be developed at all (preserved), or if developed, done so in a very limited manner characterized by careful planning and cautious attention to the conservation of environmental features. Infrastructure and services, public or private, should not be provided in these areas as a catalyst that could stimulate development. The Conservation class includes:

- 1. Areas of Environmental Concern, as defined in 15A NCAC 7H (e.g. coastal wetlands, estuarine and coastal shorelines, estuarine waters, public trust waters, etc.)
- 2. Freshwater wetland areas under the jurisdiction of the US Army Corps of Engineers' 404 Wetlands Permit Program and as generally identified by the National Wetlands Inventory of the U.S. Fish and Wildlife Service.
- 3. Certain critical wildlife habitat areas as may be designated by the State Natural Heritage Program and approved by the County Commissioners for inclusion in this class. (e.g. Great Marsh on Knotts Island, Currituck Banks/Swan Island Natural Area, Currituck Banks Corolla Natural Area, Pine Island/Currituck Club Natural Area, Northwest River Marsh Game Land, and many other marsh areas on the mainland.)
- 4. Other similar lands, environmentally significant because of their natural role in the integrity of the coastal region and which include, but are not limited to: bottom land hardwoods, pocosins, and swamp forests containing significant productive, natural, scenic, cultural or recreational resources, and as may be approved by the County Commissioners for inclusion in this class.

Due to the low-lying nature of much of Currituck County, and the prevalence of wetlands in the County, the Conservation class is the most extensive of the four land classes. Oftentimes, the scattered, widespread nature of such areas (e.g. 404 wetlands) precludes their mapping except at a very generalized level of detail. In such instances, the standards of the Conservation class shall be applied in accordance with the site specific information made available during special studies and/or the land development process.

As stated above, much of the land included in the Conservation classification is environmentally sensitive and therefore already protected through existing, federal, state, and local regulations. However, for areas within the classification that would be considered developable, uses such as agriculture, agriculture related services, and extremely low density residential development (1 unit per 3 acres or less) would be permitted. With the exception of agricultural related uses, nonresidential uses should not be encouraged. It is anticipated that any uses within the Conservation area would be served by individual on-site water and wastewater.

## Rural Areas (Areas Preferred for Open Space and Agricultural Preservation)

The Rural class is intended to provide for agriculture, forestry, and other allied uses traditionally associated with a rural area. The Rural class is the broadest of the several general land classes and thus constitutes the second largest land area on the Currituck County Land Classification Map. Interior land areas including a significant amount of prime farmland, away from the ocean and sound, and not assigned to the Conservation Class, have been designated Rural.

Preferred uses include very low-density dispersed development associated directly with farm uses. Residential dwellings associated with farm activity typically employ on-site water supply (e.g. individual wells) and waste disposal (i.e. septic systems). Areas meeting the intent of this classification are appropriate for or presently used for agriculture, forestry, and other similar uses. Agri-tourism related uses should also be considered appropriate.

Population densities are generally very low and development density is anticipated at no more than 1 unit per 3 acres. In addition, any development in the Rural Areas would be served by individual on-site water and septic.

## Limited Service Areas\* (Areas Preferred for Low Density Development)

The purpose of the Limited Services Area class is to provide for primarily residential development at low densities. While low-density development may continue to locate in these areas, it is recognized that soil limitations, flood prone areas, and a lack of infrastructure and services may prevent these areas from ever reaching an urban level of development. Residences in these areas usually employ wells and private septic tanks. Because many of the areas identified for Limited Service also include prime farmland efforts should be made to ensure that thriving agricultural operations are protected from encroaching development through the use of buffering, landscaping, and conservation oriented design.

Despite the overall low density of these areas, efforts should be made to encourage clusters of residential uses to preserve open space and to provide for a sense of a "community". Base development density should be 1 unit per acre but could be increased to 1.5 units per acre through overlay zoning depending upon whether service facilities are in place or planned and the potential impact on the surrounding community. In the same instances where slightly higher density is considered appropriate a moderate mix of housing types such as semi-detached would also be considered reasonable.

With respect to nonresidential uses, it is essential that the existing community character be preserved. Design criteria should be established to ensure that commercial development protects and preserves the existing community in scale, architectural style, materials, landscaping, and site design. In general, neighborhood commercial uses are more appropriate than large scale commercial complexes. However, business designed to serve the tourist industry such as small gift shops or agri-tourism related uses should not be prohibited provided the character and intensity of the use is in keeping with the character of the surrounding area.

Very limited municipal-type services, such as fire protection, emergency services, and community water, may be available; centralized sewage collection and treatment systems whether public or community may be appropriate for these areas.

## Full Service Areas\* (Areas Preferred for Community Centers)

Areas designated as Full Service are those parts of the county where a broad range of infrastructure and service investments have been provided or will be made available by the public and/or private sectors. Infrastructure investments may include, for example, community level or centralized water, parks, schools, fire and rescue facilities. Central wastewater treatment and disposal whether public or community is considered reasonable in the Full Service Areas.

With respect to residential development, base development density is contemplated to be 2 units per acre but could be increased to 3-4 units per acre through overlay zoning depending upon services available and the potential impact on the surrounding area. A greater diversity in housing types (i.e. semi-detached, attached, multi-family) would be considered appropriate in the Full Service areas.

With respect to nonresidential uses, it is essential that the existing community character be preserved. Design criteria should be established to ensure that commercial development protects and preserves the existing community in scale, architectural style, materials, landscaping, and site design. Nonresidential uses may include clusters of businesses serving the immediate area and, where appropriate, a more extensive market territory.

Some of the areas identified for Full Service also include prime farmland. In an effort to protect existing agricultural operations, efforts should be made to buffer them from encroaching development through the use of landscaping and conservation oriented design.

\*It is important to note that the intent of these last two land classes is not to blanket the entire landscape with development, but rather to encourage new developments to occur in village like patterns on pockets of land within these broader areas. Except in the totally residential Carova, Aydlett, and Churches Island/Waterlily areas, these village-like areas may include retail services of a scale compatible with their location and the immediately adjoining area. This will discourage unnecessary increases in traffic volumes on the County's few main roads by encouraging residents to shop for their basic needs closer to home, even within walking or biking distance when possible. At the same time, the use of clustered developments is intended to allow for the allocation of permanent open space around and between such clusters. This development pattern is entirely consistent with the desires of County residents to preserve open space while allowing growth to occur in a managed way.

## **Sub-Area Concerns and Policies**

The text accompanying the Land Classification Map goes one step farther to describe the unique character and policy emphasis assigned to various planning sub-areas of Currituck County. Knotts Island, for example, has a very different development character than the Carova area. These two areas call for different policy emphases, even though their overall land classification (Limited Service Area) is the same. To treat each area the same from a policy standpoint would eventually destroy those characteristics that make each part of Currituck County unique. For each planning sub-area, a brief Summary Of Area Character is presented, followed immediately by a statement of Policy Emphasis to be employed by the County in making development decisions for that area.

## Moyock Area

#### Summary of Area Character

The Moyock area is the fastest growing part of Currituck County. Development densities currently range from 1 to 3 units per acre depending upon development type. It is coming under increasing development pressure as a "bedroom community" for the Tidewater Area of Virginia. This means that people moving into the Moyock area often work across the state line in Virginia but prefer to have their residence in Currituck County. Heightened development interest in this area has brought with it pressure for more subdivisions, as well as the retail services that follow such development. It also brings with it concerns about heavier traffic, loss of open space, increased stormwater runoff and drainage issues, overburdened schools, a need for enhanced police, fire and rescue services, and demand for centralized water and sewer services.

#### Policy Emphasis:

The policy emphasis of this plan is on properly managing the increased urban level of growth that this area is sure to experience over the next decade and beyond. Residential development densities should be medium to high depending upon available services. In areas where on-site wastewater is proposed and other County services are limited, development density should be limited to 1-2 units per acre. However in areas where central sewer is proposed or existing, additional services are available and the character of the surrounding areas supports it, higher density ranging from 3-4 units per acre could be considered through the use of overlay zones.

Clustered housing developments, with open space required by ordinance, will need to be encouraged. If sewage treatment collection systems are built, whether publicly or privately, all such systems should be designed so as to allow them to be tied together into a single system at some point in the future.

The proposed 168 Bypass will be needed to address the increased traffic loads passing into and through this area. Protections should be put in place before the Bypass is built so as to conserve the integrity and traffic moving function of this new roadway. Appropriate land use controls and access management will be critical in protecting the public's investment in the new roadway. A selected right of way corridor that gives proper consideration to avoiding existing home sites will be important. Traffic management on secondary and local roads will also need to receive attention.

Given the existing development pattern and availability of services, much of the Moyock area is planned as Full Service. However, it should be noted that all four (4) land use classifications are

included in Moyock and the surrounding area. There are existing environmentally sensitive areas that cannot support higher density development and do not have access to services that are therefore classified in either the Conservation or Rural Areas. In addition, it is not the County's intention to develop all of Moyock intensely but rather create specific service centers and to provide a buffer of Limited Service Areas at lower density development between Full Service Areas and those within the Rural and Conservation classifications.

#### Shawboro/Crawford

#### Summary of Area Character

The predominantly rural Shawboro/Crawford area contains some of the best, most extensive agricultural lands in the county. Current development density is 1 unit per 3 acres. There are no schools, parks or utilities serving this area and hence, no incentives for significant residential development to locate here. At the same time, there is the potential for conflicting views among landowners in the area. On one hand, there are the landowners who have profitable farm operations and a strong desire to continue farming for as long as they, and perhaps their children and grandchildren, are able to do so. These landowners are concerned about residential subdivisions moving into the area, whose residents soon begin complaining about the dust, odors, tractors on the road and other factors customarily associated with farming. On the other hand, there are the landowners afloat, or who may be reaching retirement age with no offspring interested in taking over the farm. These landowners may have an interest in selling some or all of their land for development.

#### Policy Emphasis:

The policy emphasis of this plan is to encourage the preservation of agriculture and open space in the Shawboro/Crawford area whenever possible. While this area will be impacted by the proposed NC 168 Bypass, the overarching development policies of the area should hold. The purpose of the proposed bypass is to move traffic through the County rather than create an additional development center and therefore access should be limited. The County should study the area more closely as it proceeds with an update to the Thoroughfare Plan.

Residential development, when approved, should bear some direct relationship to agricultural activity so as to minimize land use conflicts between farm operations and nearby residents. When residential development does occur, it should be strategically located to minimize conflicts. Common sense examples include placing residential development: (1) upwind of prevailing winds and open fields (2) behind or in and among wooded areas (3) clustered near existing nonfarm uses such as a church, general store or other residences. "Leapfrog" residential subdivisions, unrelated to farm activities, and that would interrupt a large expanse of agriculture and open space, should be strongly discouraged. Small businesses serving the needs of a rural area (general store, farm supply, hardware, etc.) should be encouraged to locate at road intersections. Residential development density equal to or less than one unit per three acres is to be encouraged in the Shawboro/Crawford area and it has therefore been identified as a mix Conservation and Rural Areas on the Future Land Use Map. Private access subdivisions, which allow up to five one-acre lots to occur anywhere without review or input from the Planning Board or Farmland Preservation Board, are to be especially discouraged here.

## Courthouse Area

#### Summary of Area Character

For many years and continuing to this day, the Courthouse area of the mainland has been the traditional governmental center of Currituck County. Development densities range from 1 to 2 units per acre. In addition to the old original courthouse, the area also contains the new Currituck County Governmental Center, a fire/EMS station, an elementary school, other County offices, and the mainland ferry landing. Several small businesses also operate within the area. Significantly, this is one of the few areas of the mainland where reasonably high and dry developable land fronts directly on the waters of the sound.

## Policy Emphasis:

The policy emphasis of this plan is for the Courthouse area to continue to grow as a small community center therefore much of the area is considered Full Service and Limited Service. Given the existing cluster of services and local government functions here, and the sizable area of developable land adjoining the sound, it is likely that the Courthouse area will continue to see limited growth over the next decade. This growth is not apt to be as significant as in the Moyock area, where substantial numbers of workers will work in Tidewater Virginia but choose to live in Currituck County. Similarly, the completion of the proposed Mid-County Bridge will likely spawn the construction of some residences for workers commuting to jobs on the Outer Banks, but not to the same degree as in the Barco/Coinjock area. Even so, as Currituck County continues to grow, new residences will move into the Courthouse area, and a commensurate number of new businesses will likely follow.

Residential development densities should be medium to high depending upon available services. In areas where on-site wastewater is proposed and other County services are limited, development density should be limited to 1-2 units per acre. However in areas where central sewer is proposed or existing, additional services are available and the character of the surrounding areas supports it, higher density ranging from 3-4 units per acre could be considered through the use of overlay zones. Regardless of the level of growth, care should be taken to encourage quality development and the preservation of open space in conjunction with development approvals.

## Barco/Coinjock/Airport Area

## Summary of Area Character

While this area is, at present, quite sparsely developed (approximately 1 unit per acre), it has many of the ingredients in place to become a significant community center for the mainland over the next 10 to 15 years. Consider that the area envelops the strategically important intersection of US 158 and NC 168. Upon completion of the proposed NC 168 by-pass (which will also feed into US 158, farther to the west) this intersection will only grow in importance. This area also includes an elementary school, a middle school and a high school, the airport, the landfill/transfer station, the Sheriff's office and jail, a County Park, a fire/EMS station, and a water treatment plant. A number of small businesses are also located within the area. Compared to many areas of the mainland, this area has a significant amount of land that is not in wetlands.

#### Policy Emphasis:

The policy emphasis of this plan is for the Barco/Coinjock/Airport area to emerge as the principal community center serving the central area of the mainland and is therefore included as a Full Service Area. In addition, once the proposed Mid-County Bridge is completed, it is quite likely

that this area will become a major new mainland service area for the Corolla and Carova areas of Currituck County. This means that the area is apt to see a large number of residences built for workers commuting to construction and service jobs on the Outer Banks. Further, as the area comes into its own as a distinct community center, the reciprocal needs of homes and businesses will feed off each other, adding even more growth to the area. As is the case with the Courthouse area, care should be taken to encourage quality development and the preservation of open space in conjunction with development approvals.

Residential development densities should be medium to high depending upon available services. In areas where on-site wastewater is proposed and other County services are limited, development density should be limited to 1-2 units per acre. However in areas where central sewer is proposed or existing, additional services are available and the character of the surrounding areas supports it, higher density ranging from 3-4 units per acre could be considered through the use of overlay zones.

## Intersection of Proposed Mid-County Bridge and US Highway 158

#### Summary of Area Character

The present location of the intersection of the proposed Mid-County Bridge and US Highway 158 is largely undeveloped. Current development density is approximately 1 unit per acre. Highway 158 at this location runs along a relatively narrow, north-south running ridge of higher ground. To the east and west of this ridge are low-lying areas generally characterized as wetlands. Beyond the wetlands to the east lies the small community of Aydlett, which has voiced concerns about the potential impact of the new bridge on their community.

#### Policy Emphasis:

The policy emphasis of this plan is for there to be no access from the bridge road into the Aydlett community, thereby protecting the community from unwanted commercial development. Rather, commercial development spawned by the bridge should be clustered just off US 158 north and south of the new intersection with the bridge road. Further, it is expected that wetlands will block commercial development from occurring at locations removed from the US 158 corridor. For these reasons the area is identified on the Future Land Use Map as Limited Service.

At the same time, care should be taken to adequately control the location and design of commercial development so as not to compromise the traffic moving function of the new bridge and roads leading to it. Community aesthetics and image associated with new development along this major travel corridor should also receive strong consideration is setting standards for development approval here. While currently limited to 1 housing unit per acre, residential development densities in this area could be increased to 1.5 units per acre upon completion of the proposed Mid-County Bridge and availability of services.

## Aydlett and Waterlily/Churches Island

#### Summary of Area Character

The communities of Aydlett, Waterlily and Churches Island offer some of the most attractive areas for development on the mainland of Currituck County. Situated atop an ancient, north-south running ridge of relatively high and dry ground, these areas directly abut the western shoreline of Currituck Sound, with very little intervening marsh. Home sites have panoramic views across the sound to the Outer Banks. It is not surprising, then, that these areas are among the most attractive for new residential development and redevelopment. In recent years, as the value of the land here

has dramatically increased, older smaller homes have begun to be replaced by much larger structures. Existing zoning in these areas calls for 40,000 square foot lots or a density of 1 unit per acre. There is little or no commercial development in these areas.

## Policy Emphasis:

The policy emphasis of this plan is for developable areas of Aydlett, Waterlily and Churches Island to remain as low-density residential areas at 1 unit per acre. The area is a mix of Limited Service and Rural classifications on the Future Land Use Map. Generally, no centralized sewer services should be provided to these areas that would induce more intensive development; residences will continue to rely upon individual septic systems. While services that satisfy direct public health, safety and general welfare needs, such as fire protection, law enforcement, and emergency medical services are to be welcomed, no commercial development should be permitted in these areas. Finally, as noted in the preceding discussion of the Mid-County Bridge, there is to be no access from the bridge road into communities near the landfall for the bridge.

## Grandy

## Summary of Area Character

Grandy is the second fastest growth area in Currituck County, second only to the Moyock area. Existing development density is approximately 1 to 2 units per acre with a fair amount of nonresidential development as well. Despite a fairly lengthy commute to the Outer Banks (compared to Point Harbor, for example), Grandy is nonetheless the home of many workers who provide services to the predominantly residential areas of the Outer Banks. Grandy is also emerging as a distinct service center in the southern part of mainland Currituck County, though not to the same degree as the Point Harbor area. Housing in the Grandy area is still relatively affordable, although escalating real estate prices throughout much of Currituck County threaten to place homes even in this area out of the reach of some workers. In addition, the advent of the proposed Mid-county Bridge will undoubtedly strengthen Grandy's position as a service area for the Outer Banks of Currituck County.

## Policy Emphasis:

The policy emphasis of this plan is to allow Grandy to further evolve as a community center in its own right and it is identified as a Full Service area on the Future Land Use Plan. Residential development densities should be medium to high depending upon available services. In areas where on-site wastewater is proposed and other County services are limited, development density should be limited to 1-2 units per acre. However in areas where central sewer is proposed or existing, additional services are available and the character of the surrounding areas supports it, higher density ranging from 3-4 units per acre could be considered through the use of overlay zones.

Clustered housing developments, with open space required by ordinance, is encouraged. If sewage treatment collection systems are built, whether publicly or privately, all such systems should be designed so as to allow them to be tied together into a single system at some point in the future.

Given the existing development pattern and availability of services, much of the Grandy area is planned as Full Service. However, it should be noted that three (3) of the land use classifications are included in Grandy and the surrounding area. There are existing environmentally sensitive areas that cannot support higher density development and are therefore classified as Conservation Areas. In addition, it is not the County's intention to develop all of Grandy intensely but rather

create specific service centers and to provide a buffer of Limited Service Areas at lower density development between Full Service Areas and those within the Conservation classification.

## Jarvisburg

## Summary of Area Character

Despite its favorable location relative to the Outer Banks, the Jarvisburg area has thus far remained largely rural in character with a development density of 1 unit per acre or less. Signs are emerging, however, that may soon bring considerable change to the area's heretofore bucolic landscape. Like the Grandy area, the Jarvisburg area is coming under increasing pressure for development. The same land characteristics that traditionally have made this area suitable for farming (cleared, relatively level land with man-made drainage), also make the area quite attractive for development. Currently, land speculation has become more commonplace in the Jarvisburg area, as optioned properties (closing often contingent upon rezoning), offer current owners purchase prices of three or four times their present value.

## Policy Emphasis:

The policy emphasis of this plan is to allow the Jarvisburg area to accommodate quality residential development at low densities while preserving the rural landscape between such developments. Similar to the Grandy area, but at a lower overall density, new residential development should be encouraged to locate in compact, village like clusters, preferably near existing, non-agricultural activities and services. An example might be a new compact, walkable neighborhood of homes built near an existing or proposed church, school or compatibly designed general store. Residential development density can be higher than the truly expansive Shawboro/Crawford rural area, but still much less that the densities to be found in Grandy to the north or Point Harbor to the south. The area is encompassed both the Conservation and Limited Service classifications and an average density of 1 unit per acre is contemplated.

## Point Harbor

#### Summary of Area Character

Point Harbor has gradually been assuming the characteristics of a full service community with a residential development density of approximately 1 unit per acre with a fair amount of nonresidential development. In addition to a range of housing prices, Point Harbor is today served by a variety of retail and other business establishments. As a result, residents of Point Harbor need not travel great distances to find most of the every day needs. At the same time, with convenience comes the potential for conflicts between land uses; the area must be watchful not to allow poorly planned non-residential uses to adversely impact the character of the area and the peace and quiet traditionally enjoyed by its residents.

#### Policy Emphasis:

The policy emphasis of this plan is to allow portions of the Point Harbor area to continue to evolve as a full service community, but with better attention to the planning needed to protect residential areas and the natural features that make the area so attractive. Policies and actions contained in the land use plan should work to: (1) preserve and enhance the roadside appearance of land uses along US 158, (2) place stricter controls over mining to assure that such operations do not adversely impact nearby areas, (3) cluster retail and other service businesses in carefully planned clusters, rather than encourage ordinary strip centers along the highway, (4) Require vegetated buffers around non-residential uses to protect existing and planned neighborhoods (5)

Require vegetated buffers along shorelines to preserve public access and open space at the waters edge and to protect water quality in the sound (6) and coordinate with NCDOT for the strategic placement of traffic signals along US 158 in the Southern portion of the Mainland. Housing in the Point Harbor area should continue to reflect a range of housing types and prices with emphasis on single-family site-built homes.

The majority of the area is included in the Limited Service and Conservation classifications which support densities ranging from 1 unit per 3 acres to 1 unit per acre. However, portions of the area currently evolving as full service community centers have been identified for Full Service contemplating development densities ranging from 1-1.5 units per acre where on-site wastewater is proposed and other County services are limited. Where central sewer is proposed or existing, additional services are available and the character of the surrounding areas supports it, density may be increased to 3-4 units per acre through the use of overlay zones. As with the Moyock and Grandy areas the Limited Service Area will act as a transition or buffer between the Conservation and Full Service Areas.

## Corolla

## Summary of Area Character

The Corolla area is 85 to 90 percent developed. There is little reason to believe that most of Corolla's growth is behind it, however. On the contrary, the future of this area will be determined less by new development on vacant lots and more by second and third generation redevelopment of lots already built upon. As the value of barrier island property has continued to escalate, the economic incentive for redevelopment of existing properties has heightened dramatically. In other words, the value of the land can justify a much greater investment in the structure placed upon it. This means that older era beach cottages can be torn down and replaced by much larger and more massive residential structures. It also means that, as this phenomenon takes effect, the Corolla area will witness increases in impervious surface areas, greater demand for drinking water and wastewater treatment capacities, the need for more parking, greater traffic generation, and the need for greater fire flows to handle much larger, bulkier structures.

## Policy Emphasis:

The policy emphasis of this plan is to allow for predominantly medium density residential development (2 to 3 units per acre) with minimal commercial development arranged in clusters. An overall density of no more than 3 units per acre should also apply to PUDs, the prevailing development form in the Corolla area. PUDs should also have a mandated 30% permanent open space requirement. Strip commercial development is to be avoided for both aesthetic as well as traffic moving considerations. Development and redevelopment should be capable of being supported by the area's infrastructure and services—particularly drinking water, sewage treatment, road capacity, parking areas, and required fire suppression capabilities. Development standards should recognize that massive residential structures, whether built as a "single family" structure or partitioned into multi-family condominiums, can be equally intense in terms of the number of occupants, number of cars, water consumed, traffic generated, etc. Reasonable development/redevelopment limits should be set which balance the property rights of the individual against legitimate concerns about public health and safety.

## Carova

## Summary of Area Character

The Carova area is also called the "Off-Road" or "4 Wheel Drive" area of Currituck County. While current regulations require minimum lot sizes of 120,000 square feet (equivalent to about 1 unit per 3 acres), there are many pre-existing vacant lots, platted under the County's previous land use standards at 15,000 square feet per lot (equivalent to about 3 units per acre). This area has also been designated by the Federal government as a COBRA (Coastal Barriers Resource Act) area, meaning that no structure in this area is eligible for Federal flood insurance and no Federal money may be spent in this area that would stimulate development.

## Policy Emphasis:

The policy emphasis of this plan is to allow for very low to medium density residential development (see above) without infrastructure or service investments that could stimulate growth and development. In terms of infrastructure, this means that no centralized water and sewer services, public or private, will be approved and no hard surface roads will be allowed. Further, only services that protect the health, safety, and welfare (i.e. law enforcement, fire and rescue.) will be authorized. Commercial and other convenience services shall not be allowed.

## Knotts Island and Gibbs Woods

## Summary of Area Character

Knotts Island and Gibbs Woods have several characteristics in common, and are therefore treated jointly here. First, both areas possess geographic positions and overland transportation linkages that tie them as much to Tidewater Virginia as to Currituck County. Second, they are very much residential in character, with vast areas of open space, influenced in large measure, by extensive wetlands. The existing development density is 1 unit per 3 acres. The two areas have few services, in terms of both business and infrastructure, and the residents have expressed no strong desire to change that. In fact, there is an apparent consensus among many residents of Knotts Island and Gibbs Woods that no services or infrastructure should be provided to these two areas (chiefly centralized water and sewer) that would encourage higher density development.

#### Policy Emphasis:

The policy emphasis of this plan is for developable areas of Knotts Island and Gibbs Woods to remain as low to very low density residential areas. This means predominantly 1 unit per 3 acres. In keeping with the wishes of the majority of residents in these two areas, no services or infrastructure should be provided that would serve as an inducement to more intensive development. This means that residences will continue to rely upon individual wells and septic systems for their water supply and sewage treatment needs. Services that satisfy direct public health, safety and general welfare needs, such as fire protection, law enforcement, and emergency medical services should, however, be periodically evaluated and improved as necessary.

## Analysis of Future Land Use Map

The planning guidelines require an analysis of the amount of land allocated to each of the land classes shown on the Land Classification Map and a comparison with the land needs analysis of Section 4, Future Land Use Needs. The table below details this analysis.

Land Use Class	Total Acres Allocated to Each Land Class (a)	% of Each Land Class in Development (b)	Total Acreage Available for Development as Projected (a) x (b)	Total Acreage Projected for Development
Full Service Areas	17,653	80%	14,122	
Limited Service Areas	26,626	65%	17,306	
Rural Areas	40,218	10%	4,021	
Conservation	81,223	2%	1,624	
Totals	165,720		37,073	37,183

 Table 11.1 Comparison of Land Allocated to Future Land Use and Projected Land

 Needs, 2025

Amended 08-18-2008 (PB 08-22)

The total acreage projected for development (37,183) comes from Section 4 of this plan, Projected Land Use In Development, 2025. The table acknowledges that some 10% of Rural Areas will go into development as certain farmers will wish to sell out and close down their farm operations. Full Service Areas have the highest percentage of their land in development due to the availability of sewer service to many of these areas by the year 2025. Limited Service Areas have a lower percentage of their acreage in development due to their dependency on septic tanks and variable soil conditions found here. Conservation Areas include some development, to acknowledge that some limited acreage within this broad classification will likely be acceptable for development (i.e. the wetland map may be wrong in some instances, or simply not detailed enough). Total Acreage Available for Development as Projected includes acreages that will be set aside as permanently dedicated open space during the development process. These areas are considered part of the development and therefore included as developed acreage for this analysis.

As stated above, not all of the acreage dedicated to the four (4) land use classifications is anticipated to fully develop within the planning horizon. The Plan is intended to be a generalized guide showing areas targeted for development. The designation of Limited Service and Full Service areas is conservative and intended to direct the most intense development in areas where public services exist or are planned. Given the anticipated development rate, the amount of land allocated for development on the Future Land Use Map comports with the acreage needed for future development (Section 4).

		Existing Land Use Classifications (Additional Land Area Needed for Development from Table 4.10)				
		Residential 15,248 A	Commercial 2,005 A	Industrial 701 A	Other (including undeveloped) 147,476	Total Acreage 165,730
Future Land Use Designations (2006 LUP)						
Full Service 17,613 A (11%)	80% in Development 14,090A	6,100 A	1,000 A	400 A	10,113	17,613
Limited Service 26,706 A (16%)	65% in Development 17,359A	4,748 A	884 A	301 A	20,711	26,706
<b>Rural</b> 40,218 A (24%)	10% in Development 4,021 A	3,000 A	121 A		37,097	40,218
Conservation 81,183 A (49%)	2% in Development 1,624A	1,400 A			79,855	81,183
Total Acreage 165,720	Total Acreage in Development 37,094	15,248	2,005	701	147,776	165,720

Table 11.2 Distribution of Acreages between the Classifications and Land Use Designations

As stated above, the County does not expect the areas designated for development will build out within the planning period. A percentage is estimated for each of the categories. Full Service Areas will likely see the majority of development and therefore a build out of 80 percent is estimated. Limited Service Areas are likely to also experience a significant demand for development and therefore a 65 percent development rate is anticipated. Development of Rural Areas is already constricted by existing regulations and a development rate of 10 percent is anticipated. Conservation Areas are severely limited by sensitive environmental features and therefore only 2 percent of the land area is anticipated to develop within the planning horizon.

As illustrated by the table above, it is anticipated that the majority of the development in the County within all four (4) future land use designations will be residential in nature. Commercial development is likely to take place in the Full Service and Limited Service Areas with limited demand for agriculturally based services in the Rural Area. Similarly, industrial uses will likely be directed toward the Full Service and Limited Service Areas. The balance of the land in the County is likely to remain undeveloped during the planning horizon.

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## **SECTION 12: TOOLS FOR MANAGING DEVELOPMENT**

## Introduction

This section of the plan describes the relationship between Currituck County's existing development management structure and its official Land Use and Development Policies. It concludes by describing several recommended changes in that existing structure to further the goals and policies of the new Land Use Plan. The section includes three parts:

- 1. Description of the role of the plan and the status of its policies as applied by various users involved in the County's land use and development decisions.
- 2. Description of the County's existing development management program, including ordinances and plans, and how these ordinances and plans are used to implement the County's growth management objectives.
- 3. Identification of additional tools that will be used to implement the plan.

Immediately following this section is Section 13: Action Plan and Schedule, which enumerates the many implementation strategies that are recommended for consideration in carrying out the policies.

## Role and Status of Plan/Primary Users of the Plan

The Currituck County CAMA Land Use Plan will serve both day-to-day and long-range functions. The day-to-day functions relate primarily to the County's administrative staff on preparation and administration of development management ordinances and the public's understanding and use of these ordinances for land use and development decisions regarding their own property. Other users of the Plan include the following:

## **Board of County Commissioners**

For the Board of Commissioners, the Plan will be a policy and decision guide on matters related to land use and land development. It will not have the status of a local ordinance or code, except in matters related to development or land use within Areas of Environmental Concern, but the policies and the land classification map will guide decisions on applicable ordinances and policies such as the zoning ordinance and subdivision regulations. The plan will also be used in the Board of Commissioners' decision-making on the capital and annual operating budgets. The Board will review the implementation plan periodically and make necessary adjustments based on budgetary considerations, coordination with other projects, and community needs.

## County Planning Board

The Planning Board will use the plan and its policies to determine consistency of project plans and development proposals with County goals in making decisions to grant or deny requests, such as a zoning change or subdivision plat, or to approve project plans.

## **Property Owners and Developers**

Plan will provide guidance on the types of land uses and development that are desired by the county. The policies will help owners or developers formulate proposals that are consistent with

the goals and objectives of the community, thereby increasing the likelihood of approval. In addition, the plan points to basic sources of information that will help owners and developers understand the capabilities and limitations of their property.

## County Residents, Generally

The plan will provide information that will allow residents and property owners to better understand plans for public projects or private development and will provide a reference when supporting or opposing such proposals.

## County Administrative Staff

The staff of the County will use the plan as a tool for evaluating development proposals and for preparing plans for public facilities. Staff will also check existing ordinances for consistency with the plan and recommend any necessary adjustments to the Planning Board and Board of Commissioners. Staff will also use the plan and implementation strategy when preparing its budget recommendations and will make reference to the plan when preparing applications for grants and other assistance.

# North Carolina Division of Coastal Management/Other State and Federal Agencies

The Division of Coastal Management will use the Plan for consistency determinations on major development permits and by other state and federal agencies on the consistency of their projects and programs with local plans and policies.

## Existing Development Management Program

Currituck County's existing development management program continues to provide a comprehensive and consistent approach in implementing the policies identified in the 1990 Land Use Plan. Currently, the program includes the following ordinances, plans and programs:

## Existing Ordinances and Plans

Unified Development Ordinance, which includes the following:

- Subdivision Regulations-sets standards for subdividing raw land into smaller parcels for purchase and building.
- Countywide Zoning-determines the most appropriate use of a given parcel of land, based on many natural and man-made factors.
- Adequate Public Facilities Ordinance-requires that new development must not overburden the ability of existing public facilities to support it.
- Flood Damage and Prevention Program-sets standards for development to prevent the loss of life and property due to flooding

#### NFIP Community Rating System Plan

Use objective criteria established by the National Flood Insurance Program to gauge the effectiveness of a particular local government's polices and standards in preventing flood damage. Affects flood insurance rates paid by property owners in the area.

#### Hazard Mitigation Plan

Sets forth advanced planning to mitigate damage from hazardous events.

US 158/NC 168 Highway Corridor Plan

Identifies specific standards for protecting both the traffic moving function as well as the general appearance of this important highway corridor

#### NCDOT 1988 Thoroughfare Plan

The official transportation plan for Currituck County, prepared as a cooperative effort of the State Department of Transportation and local officials.

#### Maple Airport Master Plan

The official long range plan of improvements for this County-owned facility

## **Review Boards/Committees**

In addition to the Board of County Commissioners:

#### Currituck County Farmland Preservation Board

Advises the County on measures and decisions to preserve and protect important farmland resources in Currituck County

#### Technical Review Committee

County Committee charged with responsibility for technical review of development proposals, including issues of drainage, public safety, service delivery, roads, etc.

#### DCM Local Permit Officer (LPO) Program

Local permit officer, operating under the auspices of the North Carolina Division of Coastal Management, charged with responsibility for administering the minor CAMA permit program.

## **Other Growth Management Tools in Place**

#### State Building Code

Beyond the primary management programs listed above, the County also enforces the State Building Code in all areas of Currituck County. Currently, the Mainland office is staffed with five building inspectors, three permit officers, five planners and one code enforcement officer. In 1992, a new Building Inspections Department was established on the beach in Corolla due to the increase in building permit activity. This office is staffed with two building inspectors, two permit officers and one planner.

#### Stormwater Management

The Currituck County Soil Conservation Service is responsible for administrating the locally adopted stormwater management program, which addresses both the quality and quantity of stormwater runoff. These standards exceed the State Division of Water Quality standards and are enforced at the local level.

These development regulations and staffing levels have helped insure a comprehensive and coordinated approach in managing development throughout the county

## **New Growth Management Tools Recommended**

As shown in Section 13 Action Plan and Schedule that immediately follows this section, this plan recommends that a wide range of implementation actions be explored to carry out the goals and policies contained in the Land Use Plan. For a complete listing of the various actions, as well as an assessment of their priority and anticipated timeframe for

completion, the reader is directed to the Action Plan. Some of the more significant new studies, plans, and ordinance amendments recommended in the plan are shown below by general subject area:

## Public Access, Parks and Open Space

- A new plan for public access to the ocean and sound, including opportunity sites for regional, local and neighborhood access facilities.
- A master parks and recreation plan to identify park and recreation needs, suggest park and recreation additions and improvements, set forth cost estimates, and propose the means of financing.
- A developer fee in lieu of land dedication for park and recreation facilities, including funding for the acquisition and improvement of public access facilities to the sound and ocean.
- A program allowing for the purchase or transfer of development rights as a means of promoting open space preservation in Currituck County, particularly in designated areas of the Mainland.

## **Development Controls/Standards**

- A new multi-family zoning district or overlay, to be applied only in locations served by centralized water and sewer, adequate road infrastructure and convenient to services.
- Amendment to the UDO to require a minimum of one (1) foot of "freeboard" above the minimum NFIP base flood elevations as shown on the most recent Flood Insurance Rate Maps.

## Community Appearance

- A special highway corridor overlay district for the US 158/ NC 168 highway corridor. The overlay district would include standards for façade materials (i.e. no metal buildings) signage, landscaping, parking lot connections and other factors to help preserve the appearance and function of this critical transportation artery.
- New local nuisance law standards concerning the proper removal and disposal of old manufactured housing units prior to the issuance of a permit for the placement or construction of a new residence or other structure on the same site.

## **Development Impacts**

- A Task Force to look at the broad implications of a mid county bridge and its potential impacts, such as growth in the RO2 COBRA zone, beach access and other infrastructure needs of increased numbers of day visitors, changes in county services such as law enforcement, economic impacts on the Mainland and the Outer Banks, etc.
- Amendment to the Currituck County UDO to address the real impacts of large "single family" homes. Employ lot coverage, floor area ratios, house massing, fire suppression issues, number of bedrooms and baths, and other factors to properly control the location, construction and use of these structures.

## Housing Needs

- New requirements for businesses on the Outer Banks to provide compatibly designed affordable housing for their employees in suitable quarters built above or attached to the place of business.
- A new multi-family zoning district or overlay, to be applied only in locations served by centralized water and sewer, adequate road infrastructure and convenient to services.

## **County Finances**

- New financial tools for recovering infrastructure and service costs related to new growth and development. (e.g. impact fees, land transfer tax, upzoning fee, user fees, etc.)
- A "School Impact Fee" to address the capital cost associated with school construction.

## Environmental Quality

- A countywide storm water management plan, including sub-area district plans to address problems in particular watersheds or sub-area drainage basins of the county.
- An examination of existing zoning districts and permitted land uses to eliminate potential threats to environmentally sensitive areas.

The reader is also directed to Section 10 of this plan, where a detailed assessment of the various strategies recommended in the plan are analyzed in depth as to their likely impact on each of the policy areas required by CAMA.

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# **SECTION 13: ACTION PLAN AND SCHEDULE**

## Introduction

This section of the land use plan sets forth implementation actions to carry out the policies. While the plan may list several dozen actions, it is important to note that only a portion of these actions are likely to be implemented in the five-year period between land use plan updates. Implementation actions are not mandatory items but, rather, are intended to suggest a number of options available to the County. While the policies of the plan should remain relatively unchanged over time, implementation actions should be revisited annually and updated. With each annual review, the list of actions should change as new opportunities and needs arise.

1. Actions Concerning Public Access	Policy Foundation	Priority	Time	Who Leads
Action PA-1: Develop a plan for public access to the ocean and sound, including opportunity sites for regional, local and neighborhood access facilities.	PA1, PA2, PA3, PA4, PA8, PA10	Priority	4 to 6 years	County Commissioners, County Planning Board
Action PA-2: Establish a developer fee in lieu of land dedication for park and recreation facilities, including funding for the acquisition and improvement of public access facilities to the sound and ocean.	PA1, PA2	Priority	4 to 6 years	County Manager
Action PA-3: Amend the Currituck County Unified Development Ordinance to provide incentives to development proposals that reserve a strip of land for public access along the water's edge.	PA1, PA2	Priority	4 to 6 years	County Commissioners, County Planning Board
Action PA-4: Establish financial mechanisms by which non- resident visitors to the County might fund their fair share of the cost of acquiring and improving public access facilities to the sound and ocean.	PA1, PA2	Low priority	Greater than 6 years	County Manager
Action PA-5: Open water marinas often "consume" large areas of public trust surface waters and can interfere with the rights of navigation for small sailing vessels and other water users. Amend the Currituck County Unified Development Ordinance to provide incentives for constructing non-wetland, upland marinas as opposed to open water marinas.	PA6	Low priority	Greater than 6 years	County Commissioners, County Planning Board
Action PA-6: The County shall continue to require major residential subdivisions that abut public trust waters to provide public access to those waters. Access for the general public is preferred.	PA1, PA2, PA9, PA10	High priority	On- Going	County Commissioners, County Planning Board

Action PA-7: The County shall actively pursue the elimination/removal of any structure that, due to erosion and subsequent damage, interferes with access to and movement on the public trust beaches of Currituck County.	PA9, PA10	High priority	1 to 3 years	County Commissioners
2. Actions Concerning Environmentally Sensitive Areas	Policy Foundation	Priority	Time	Who Leads
Action ES-1: Conduct an examination of existing zoning districts and permitted land uses to eliminate potential threats to environmentally sensitive areas.	ES 1, ES3, ES5, ES8	Priority	4 to 6 years	County Planning Board
Action ES-2: Currituck County will continue to support CAMA requirements concerning the preservation of open space buffers along estuarine shorelines. Further, consider adopting buffering standards greater than those required by CAMA.	ES4	Priori ty	4 to 6 years	County Planning Board
Action ES-3: Explore the development of a wetlands mitigation bank, whether public or private, for the purpose of allowing desirable economic development to take place while conserving the total inventory of wetlands in Currituck County.	ES1, ES2, ES3	Low priority	Greater than 6 years	County Commissioners, Planning Board and USACE
Action ES-4: The County shall consider amending the UDO to provide a higher level of protection for maritime forests and significant natural sand dunes as these features form the image of Currituck Outer Banks Beaches.	ES7	Low priority	Greater than 6 years	County Commissioners, Planning Board
Action ES-5: The County shall not support actions to commercialize the public beach rather permitting only clustered commercial development in Corolla and prohibiting commercial development in the four wheel drive area.	OB1, OB2,OB5	Low priority	Greater than 6 years	County Commissioners, Planning Board
3. Actions Concerning Agricultural and Rural Area Preservation	Policy Foundation	Priority	Time	Who Leads
Action AG-1: Have the Currituck County Planning Department, in its review of development proposals, refer to Soil Conservation Service mapping of prime agricultural soils in making determinations as to highly productive farmland.	AG1, AG2	Priority	4 to 6 years	Farmland Preservation Board, County Planning Department

Action AG-2: Involve the Farmland Preservation Board in the review of sketch plans for major residential subdivisions for the purpose of preserving prime agricultural land.	AG1, AG2	Priority	4 to 6 years	Farmland Preservation Board, County Planning Department
Action AG-3: Amend the Currituck County Unified Development Ordinance to allow open space, dedicated as part of a development proposal or set aside in a conservation easement, to be transferred and used for economic activity (e.g. <i>compatible</i> timber management or farming), so long as the restriction or easement preventing future development remains permanent, properly monitored, and lawfully recorded.	AG1, AG2	High priority	1 to 3 years	County Planning Board, County Commissioners
Action AG-4: The County, in cooperation with the Farmland Preservation Board, shall explore the merits of and opportunities for implementing voluntary mechanisms for property owners to preserve their farmland. Included among such mechanisms shall be a program for the transfer of development rights.	AG1, AG2, AG5	Priority	4 to 6 years	County Commissioners, Farmland Pres Board
4. Actions Concerning Housing and Neighborhood Development	Policy Foundation	Priority	Time	Who Leads
Trughou nou Development				
Action HN-1: Continue the initiative to amend the Currituck County Unified Development Ordinance to create a new multi-family zoning district or overlay, to be applied only in locations served by centralized water and sewer, adequate road infrastructure and convenient to services.	HN1, HN3, HN5,	High priority	1 to 3 years	County Planning Board
Action HN-1: Continue the initiative to amend the Currituck County Unified Development Ordinance to create a new multi-family zoning district or overlay, to be applied only in locations served by centralized water and sewer, adequate road	HN1, HN3,	Ũ		• •

Action HN-4: To curtail the rental abuses associated with large numbers of peak season employees piling into single family homes, and to reduce unnecessary traffic congestion on NC 12, explore requirements for businesses on the Outer Banks to provide compatibly designed affordable housing for their employees in suitable quarters built above or attached to the place of business.	HN5	Priority	4 to 6 years	County Planning Board
Action HN-5: Establish local nuisance law standards concerning the proper removal and disposal of old manufactured housing units prior to the issuance of a permit for the placement or construction of a new residence or other structure on the same site.	HN10	Priority	4 to 6 years	County Commissioners
5. Actions Concerning Commercial Development	Policy Foundation	Priority	Time	Who Leads
<ul> <li>Action CD-1: In evaluating rezoning requests for commercial development, employ policies that:</li> <li>Encourage the clustering, rather than stripping, of commercial uses</li> <li>Encourage commercial uses at intersections, rather than in strips</li> <li>Do not create spot zoning situations</li> </ul>	CD1, CD2, CD3, CD4	Low priority	Greater than 6 years	County Planning Department
<ul> <li>Action CD-2: Amend the Currituck County Unified Development Ordinance to establish regulatory standards for:</li> <li>Low profile pole mounted signs, monument style signs and appropriate lighting.</li> <li>Connections between adjoining parking lots</li> <li>Improved landscaping requirements</li> <li>Prohibitions against pre-fab and metal building facades</li> </ul>	CD7, CD8, CD9	Priority	4 to 6 years	County Planning Board
Action CD-3: Consider amending the UDO to prevent any PUD from redesignating open space or residential areas to any commercial district after initial sketch plan approval.	CD5	Priority	4 to 6 years	County Planning Board

6. Actions Concerning Industrial	Policy	Priority	Time	Who Leads
Development	Foundation			
Action ID-1: Amend the Currituck County Unified Development Ordinance to establish regulatory standards for certain aspects of mining operations, sludge disposal sites and similar activities not adequately addressed by state laws. (e.g. truck traffic, noise levels, exterior lighting levels, hours of operation, visual impacts, water management reclamation and reuse following closure of the site, etc.)	ID4, ID8	Low priority	Greater than 6 years	County Planning Board
Action ID-2: Currently, mining operations (e.g. borrow pits, one acre or less) are permitted by right in all zoning districts in the County. To provide for an improved measure of control over these operations, amend the Currituck County Unified Development Ordinance to limit minor mining operations and other similar activities to the agricultural district by right, and in other districts only by special use permit.	ID4, ID8	Priority	4 to 6 years	County Planning Board
Action ID-3: Amend the Currituck County Unified Development Ordinance to require warehousing, storage and distribution facilities to provide a vegetated buffer strip along property boundaries facing a major public road or residential development.	ID5	High priority	1 to 3 years	County Planning Board
7. Actions Concerning Transportation	Policy Foundation	Priority	Time	Who Leads
Action TR-1: The County shall continue to be an active participant in lobbying efforts for planned roadway improvements to US 158, NC 168, NC 34, and NC12.	TR1, TR3, TR4, TR10, TR15	High priority	On Going	County Commissioners
Action TR-2: Conduct a community involvement based process to evaluate proposals for improved access to and movement up and down the Currituck Outer Banks. Identify the pros and cons of the proposed mid-county bridge, improvements to NC 12, enhanced ferry service, or a combination of all three.	TR1, TR4, TR5, TR13, TR14	High priority	On Going	County Commissioners
Action TR-3: Establish a Task Force to look at the broad implications of a mid county bridge and its potential impacts, such as growth in the RO2 COBRA zone, beach access and other infrastructure needs of increased numbers of day visitors, changes in county services such as law enforcement, economic impacts on the Mainland and the Outer Banks, etc. The findings of such a task force should be made available well in advance of the construction of the bridge.	TR13, TR14	Priority	4 to 6 years	County Commissioners

	T	I	I	
Action TR-4: Continue enforcing restrictions on	TR2, TR3,	High	On-	County
curb cuts and driveway access to major state-	TR4, TR5,	priority	Going	Planning Board
maintained roads including, specifically, US 158,	TR6			
NC 168, NC 34 and NC 12.				
Action TR-5: Amend the Currituck County	TR4, TR5,	High	1 to 3	County
Unified Development Ordinance to establish a	TR6, TR14	priority	years	Planning Board
special highway corridor overlay district for	,	1 5	5	0
the US 158/ NC 168 highway corridor. The				
overlay district would include standards for				
façade materials (i.e. no metal buildings) signage,				
landscaping, parking lot connections and other				
factors to help preserve the appearance and				
function of this critical transportation artery.				
function of this critical transportation aftery.				
Action TR-6: Revisit the 1994 US Highway 158	TR4, TR5,	High	1 to 3	County Planning
and NC Highway 168 Corridor Plan to	TR6, TR14	priority	years	Board
determine those appearance and functional				
recommendations that remain appropriate for				
implementation (e.g. landscaping, signage,				
driveway cuts, lighting, etc.).				
Action TR-7: Adopt the Draft NCDOT	TR2, TR3,	High	1 to 3	County
Thoroughfare Plan (1999) or an updated version	TR4, TR10,	priority	years	Commissioners,
of the Plan.	TR13, TR15	priority	jeurs	NCDOT
	11110, 11110			110201
Action TR-8: The County shall continue to	TR7, TR8	High	On-	County Planning
encourage street connectivity between similar	110, 110	priority	Going	Board
land uses.		phoney	Comp	Dourd
Action TR-9: The County shall actively pursue	TR9, TR10	Priority	4 to 6	County
grants and exactions for the installation of bike	110, 1110	Thomy	years	Commissioners,
paths, sidewalks and multi-use paths once a			years	NCDOT
plan for these improvements has been adopted.				NCDOI
plan for these improvements has been adopted.				
8. Actions Concerning Water and Sewer	Policy	Priority	Time	Who Leads
Service	Foundation	linority	1 mic	Who Leads
Action WS-1: Continue with on-going study to	WS1	High	On-	County
determine if Currituck County can become more		priority	Going	Commissioners
independent from outside sources of potable		Priority	Come	Commissioners
water (i.e. Camden County) by creating sufficient				
water treatment capacity and obtaining the				
necessary discharge permits for disposing of				
brine.				
Action WS-2: Establish an education program for	WS6	Low	Greater	County
	06.00		than 6	Commissioners
the proper maintenance of septic tanks. Include		priority		Commissioners
a financial incontina whereby the County			VOOTO	
a financial incentive, whereby the County			years	
a financial incentive, whereby the County arranges for a discounted pump-out service for septic tank owners who participate.			years	

Action WS-3: Amend the Currituck County Unified Development Ordinance to require that package sewage treatment plants to be located and designed so as not to adversely impact nearby existing and proposed developments. Encourage such facilities to be located away from water bodies and exterior property lines if possible.	WS7, WS8	Low priority	Greater than 6 years	County Planning Board
Action WS-4: Prohibit any new wastewater treatment plant from locating in any Area of Environmental Concern (AEC) as designated by CAMA.	WS3, WS5, WS8	High priority	1 to 3 years	County Planning Board
Action WS-6: The County shall scrutinize the use and reliability of engineered septic systems (e.g. peat systems) in locations that would otherwise not be suitable for conventional septic systems. The County shall report its findings to the State.	ES1, HN1, WS6, WS7 , WQ1	Priority	4 to 6 years	County Planning Department
9. Actions Concerning School Facilities	Policy Foundation	Priority	Time	Who Leads
Action SF-1: Form an interdepartmental project team whose purpose is to fully implement County objectives for growth management and adequate public facilities as applicable to schools and parks. Bring together top school administrators, planning department personnel, and the parks department, among others, to prepare a plan of action for review by the School Board and County Commissioners.	SF1	Priority	4 to 6 years	County Commissioners, County School Board
Action SF-2: Continue to pursue a "School Impact Fee" to address the capital cost associated with school construction.	SF1	High priority	On- Going	County Commissioners, County School Board
<b>10. Actions Concerning Parks and Recreation</b>	Policy Foundation	Priority	Time	Who Leads
Action PR-1: Commission a master parks and recreation plan to identify park and recreation needs, suggest park and recreation additions and improvements, set forth cost estimates, and propose the means of financing.	PR1, PR2, PR5	Priority	4 to 6 years	County Commissioners, Parks Department
Action PR-2: Set forth, as a goal for the County, the establishment of a system of district parks, serving districts as identified in the master parks and recreation plan.	PR1	Low priority	Greater than 6 years	County Commissioners, Parks Department

Action PR-3: Implement a fee in lieu of land dedication, to be applied to new developments, for the purpose of generating revenues for the development of park assets and additional public access opportunities in Currituck County. Consider placing such revenues in reserve accounts, tied to the designated districts within which the fees were generated.	PR6, PR1, PR5	Priority	4 to 6 years	County Commissioners, Parks Department, Planning Board
Action PR-4: Form an interdepartmental project team whose mission is to orchestrate the full utilization of (1) the County's school properties for recreational use when not being employed for school purposes and (2) the County's park and recreation assets for school use. Bring together school facility managers and parks department personnel, among others, to prepare a plan of action for review by the School Board and County Commissioners.	PR3	Low priority	Greater than 6 years	County Commissioners, County School Board
11. Actions Concerning Solid Waste Management	Policy Foundation	Priority	Time	Who Leads
Action SW-1: Continue to monitor the flow of waste into the County's transfer station and landfill. Periodically adjust the rates that the County charges to accept solid waste, including dumping fees for construction and demolition (C&D) materials. Ensure that the County's rates are on a par with other rates in the region.	SW1, SW6	High Priority	On- Going	County Commissioners
Action SW-2: Pursue the development of a solid waste management program where recyclable materials are, in fact, recycled.	SW2, SW3, SW4, SW7	Low priority	Greater than 6 years	County Commissioners
Action SW-3: Require waste management companies operating in Currituck County to accept gasoline.	SW2, SW4	Priority	4 to 6 years	County Commissioners
Action SW-4: Implement a program to encourage property managers of rental houses to educate renters of their responsibilities (e.g. not parking in street, keeping trash off the beach, having an adequate number of waste receptacles for the volume of waste generated, etc.	SW2, SW4	Low priority	Greater than 6 years	County Commissioners
Action SW-5: Make waste drop off at the County's waste collection and recycling centers more convenient by placing ramps in front of waste containers or lowering the containers into	SW7	Priority	4 to 6 years	County Commissioners

12. Actions Concerning Planning and Paying	Policy	Priority	Time	Who Leads
for	Foundation	, i i i i i i i i i i i i i i i i i i i		
Infrastructure and Services Action PP-1: Continue the initiative for a legally defensible, rational process by which new residential units may be allocated to major subdivisions in a manner consistent with adequate public facilities (e.g. schools, parks, etc.)	PP2	High priority	On- Going	County Planning Director
Action PP-2: Conduct a study of the fiscal impacts of rental properties on the financial balance sheet of the County. Identify how seasonal demand for services affects the cost of capital facilities, equipment and certain year round personnel. Determine how these costs match up with the tax revenues coming back to the County from seasonal properties and their occupants.	PP3	Low priority	Greater than 6 years	County Manager as directed by the County Commissioners
Action PP-3: The County shall explore the merits of and opportunities for financial tools for recovering infrastructure and service costs related to new growth and development. (e.g. impact fees, land transfer tax, upzoning fee, user fees, etc.)	PP3	Priority	4 to 6 years	County Manager as directed by the County Commissioners
13. Actions Concerning Natural Hazard Areas	Policy Foundation	Priority	Time	Who Leads
Action NH-1: Form an interagency task force whose purpose is to develop a plan for the RO-2 COBRA zone to address growth issues likely to come about as a result of the proposed mid-county bridge. Bring together personnel from the US Fish and Wildlife Service, the US Army Corps of Engineers, the State Division of Coastal	NH1, NH2, NH3, NH4	Priority	4 to 6 years	County Commissioners to initiate the task force
Management, the Nature Conservancy, Currituck County, as well as area property owners, to prepare the plan.				
Management, the Nature Conservancy, Currituck County, as well as area property owners, to	NH1, NH2,	Low priority	Greater than 6 years	County Planning Board

Action NH-4: Develop a "Shoreline/Sand Management Plan" as storm hazard mitigation tool.	NH1, NH2, NH4, NH7	Low priority	Greater than 6 years	County Manager as directed by the County Commissioners
Action NH-5: Expand the Currituck County Mitigation Plan to include a Post Storm Reconstruction Plan.	NH1, NH2, NH3, NH4	Low priority	Greater than 6 years	County Manager as directed by the County Commissioners
Action NH-6: To improve the County's "Community Rating System, amend the UDO to require a minimum of one (1) foot of "freeboard" above the minimum NFIP base flood elevations as shown on the most recent Flood Insurance Rate Maps.	NH1, NH2, NH5	Priority	4 to 6 years	County Planning Board, County Commissioners
14. Actions Concerning Water Quality	Policy Foundation	Priority	Time	Who Leads
Action WQ- 1: Facilitate the establishment of a new water quality monitoring program to focus on likely areas of pollution, such as near sewage treatment plants, land application areas for sewage effluent and septage, concentrations of septic tanks, and stormwater outfalls leading from developed areas.	WQ 1, WQ3, WQ4	Low priority	Greater than 6 years	County Commissioners
Action WQ-2: Petition the State for a reexamination of water quality designations (e.g. SA, SB, SC) in Currituck Sound, to have those designations elevated if possible.	WQ2	High priority	1 to 3 years	County Commissioners
Action WQ-3: Continue to implement the recently adopted amendment to the Currituck County Unified Development Ordinance requiring an engineer's certification that new development will not cause flooding on adjacent properties.	WQ3, WQ4	High priority	On- Going	County Planning Department
Action WQ-4: Amend the Currituck County Unified Development Ordinance to require limits	WQ3, WQ4	Priority	4 to 6 years	County Planning Board
on stormwater runoff that are more strict than those required by the State Division of Water Quality. (DWQ requires that only the first 1" of rain be retained on site.)				

Action WQ-6: Work with other government entities and nonprofit groups to identify parcels of land that should be considered for protection or restoration to preserve water quality.	WQ8	High priority	1 to 3 years	County Engineer, as directed by the County Manager
Action WQ-7: Amend the UDO to provide incentives for buffers and setbacks for development adjacent to public trust waters.	WQ3, WQ4, WQ5, WQ6	Priority	4 to 6 years	County Planning Board
Action WQ-8: Consider amending the UDO to incorporate "Low Impact Development" (LID) concepts for all new development in the County. LID concepts focus especially on minimizing impervious surface areas, preserving natural vegetative ground covers, absorbing stormwater runoff into the ground rather than collecting and piping it elsewhere, and ultimately cutting down on stormwater runoff into the estuary.	WQ3, WQ4, WQ5, WQ6, WQ7,	Low priority	Greater than 6 years	County Planning Board
15. Actions Concerning Economic Development	Policy Foundation	Priority	Time	Who Leads
Action ED-1: Finalize the Economic Development Plan for Currituck County and begin implementation.	ED2, ED3, ED4	Priority	4 to 6 years	County Econ Develop Director, Econ
				Develop Advisory Board, and Planning Director
Action ED-2: Amend the Currituck County Unified Development Ordinance to create an overlay district to accommodate significant entertainment-oriented developments.	ED1, ED2, ED3	High priority	1 to 3 years	Develop Advisory Board, and Planning

16. Actions Concerning Community Appearance	Policy Foundation	Priority	Time	Who Leads
Action CA-1: Amend the Currituck County Unified Development Ordinance to establish a special highway corridor overlay district for the US 158/ NC 168 highway corridor. The overlay district would include standards for driveway cuts, signage, landscaping, parking lot connections and other factors to help preserve the appearance and function of this critical transportation artery.	CA1, CA2	High priority	1 to 3 years	County Planning Board
Action CA-2: Amend the Currituck County Unified Development Ordinance to affirm prohibitions against off-site signs and businesses sharing the same lot (2 principal uses not allowed on same lot.).	CA1, CA5	Low priority	Greater than 6 years	County Planning Board
Action CA-3: Amend the Currituck County Unified Development Ordinance to clarify standards for on-site and off-site signage.	CA4	Priority	4 to 6 years	County Planning Board
Action CA-4: Currituck County will continue to enforce the Junked Car Ordinance as developed under the State model for such local laws.	CA9	High priority	On- Going	County Planning Department
Action CA-5: Do not rezone property to either Light or Heavy Manufacturing if it fronts on either US 158 or NC 168.	CA1, CA5,	Priority	4 to 6 years	County Planning Board, County Commissioners
17. Actions Concerning Historic Preservation	Policy Foundation	Priority	Time	Who Leads
Action HP-1: Commission a state or foundation sponsored inventory and assessment of historic structures and sites in Currituck County.	HP1, HP2, HP3, HP4, HP5, HP6	Priority	4 to 6 years	County Commissioners
Action HP-2: Appoint a task force made up of representatives of non-profit groups, private organizations, and interested citizens for the purpose of preserving and promoting the architectural and cultural heritage of Currituck County and its various "communities" e.g. Aydlett, Snowden, Gibbs Woods, etc.).	HP1, HP3, HP7	Low priority	Greater than 6 years	County Commissioners
Action HP-3: Develop the areas around the Old Courthouse and in Corolla Village as historic districts or "community character districts", with consideration given to tying together the various amenities associated with these unique locations.	HP1, HP2, HP3, HP5, HP6, HP7	High Priority	1 to 3 years	County Commissioners

18. Actions Concerning Public Safety	Policy	Priority	Time	Who Leads
	Foundation			
Action PS-1: Conduct a study of the need for additional public safety substations (i.e. fire and rescue, law enforcement) for strategic service	PS1	Priority	4 to 6 years	County Manager, and Public Safety Service Providers
areas of the County.				
19. Special Actions Concerning the Mainland	Policy	Priority	Time	Who Leads
Area	Foundation	TT: 1	1	
Action ML-1: Explore the feasibility of establishing a program allowing for the purchase or transfer of development rights as a means of promoting open space preservation in Currituck County, particularly in designated areas of the Mainland.	ML1	High priority	1 to 3 years	County Planning Board
Action ML-2: Enhance development standards for Class A manufactured homes, in terms of both their location and design (aesthetic) standards, and with an eye toward preserving open space and farmland.	ML4	Low priority	Greater than 6 years	County Planning Board
20. Special Actions Concerning the Outer	Policy Foundation	Priority	Time	Who Leads
Banks           Action OB-1: Amend the Currituck County UDO	OB4, OB5	High	1 to 3	County Planning
to address the real impacts of large "single family" homes. Employ lot coverage, floor area ratios, house massing, fire suppression issues, number of bedrooms and baths, and other factors to properly control the location, construction and use of these structures.	004, 005	priority	years	Board
Action OB-2: Amend the Currituck County Unified Development Ordinance to create a new zoning district or zoning overlay district and related controls explicitly for large houses. Houses with more than 8 bedrooms would be required to locate in areas properly zoned for the new district.	OB4, OB5	High priority	1 to 3 years	County Planning Board
Action OB-3: Amend the Currituck County Unified Development Ordinance to implement a zoning overlay district to preserve the historic character of Corolla Village.	OB6	High priority	1 to 3 years	County Planning Board
Action OB-4: Continue to enforce the public nuisance ordinance concerning the condemnation and removal of buildings that, due to shoreline erosion, have become located in the public trust area of the beach.	OB8	High priority	On- Going	County Planning Board
Action OB-5: Monitor the level of traffic volume driving on the beach by season, day of week, time of day, etc. Explore ordinance changes or a permit system for beach vehicular traffic to protect public health and safety.	OB8	Priority	4 to 6 years	County Planning Board

Action OB-6: Amend the County's UDO to affirm that only residential uses are permitted in the non- PUD areas of the RO1 district.	OB2	High priority	1 to 3 years	County Planning Board
21. Special Actions Concerning Knotts Island	Policy Foundation	Priority	Time	Who Leads
Action KI-1: Conduct a community needs assessment to evaluate public facility and service needs in the Knotts Island area, to include, for example, fire service, communications, library, and recreation.	KI3	Priority	4 to 6 years	County Planning Department
Action KI-2: Establish a stormwater management service district to address stormwater runoff and chronic flooding problems on Knotts Island.	KI2	Priority	4 to 6 years	County Manager/County Engineer
Action KI-3: Amend the Currituck County Unified Development Ordinance to create a new zoning district or zoning overlay district regulating the placement of new manufactured homes (i.e. mobile homes) on Knotts Island.	KI5	Low priority	Greater than 6 years	County Planning Board
22. Actions Concerning Plan Distribution and Follow Up	Policy Foundation	Priority	Time	Who Leads
Action DF- 1: Members of appropriate Boards and Commissions of Currituck County, as well as all Department Heads and other appropriate staff, will be given copies of the Land Use Plan.	General	ASAP after adoption and printing	NA	County Manager
Action DF-2: Copies of the Land Use Plan will be placed in visible locations at the County Library, and other County offices frequented by the public. Such copies shall be available for inspection, and for purchase.	General	ASAP after adoption and printing	NA	County Manager
Action DF-3: Copies of the Land Use Plan shall be delivered to members of the news media for their information and reference. Delivery will be done in conjunction with an information session on the purpose and uses of the Plan.	General	ASAP after adoption and printing	NA	County Planning Director
Action DF-4: County staff will employ the policies of the Land Use Plan in evaluating development proposals and will quote such policies in drafting staff recommendations to the County Planning Board and County Commissioners.	General	ASAP after adoption	NA	County Planning Director and Planning Staff

Action DF-5: Appoint an implementation oversight group to meet semi-annually to review progress on various actions set forth in the land use plan. Involve a combination of "implementers" and citizens in the group.	General	At the time of adoption	NA	County Commissioners and various implementing agencies
Action DF-6: Prepare an annual report (one to two page memo) to the Board of County Commissioners summarizing actions taken to implement the Land Use Plan during the previous year.	General	1 year after plan adoption	NA	County Manager with input from Oversight Group

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# REFERENCES

Albemarle Regional Health Services. (03/29/04). Type 4, 5, and 6 Septic Systems Database. Elizabeth City, NC.

(Currituck County-A) Currituck County. (2004). Currituck County Water Department. Water Service Area Locator. Obtained from the Internet 04/15/04 at: <u>http://www.co.currituck.nc.us/government/departments/water/waterservicearealocator.as</u> <u>px</u>

(Currituck County-B) Currituck County GIS (2004). Landmarks. Currituck, North Carolina

Currituck County. (2003). Planning Department. Southern Outer Banks Water System. Currituck County Southern Outer Banks 05/17/2003. Estimated Average Peak Daily Summer Water Needs at Build Out.

Currituck County. (2002). Water Department. 2002 Annual Drinking Water Quality Report, Currituck County Water PWSID # 04-16-197, May 1, 2002.

North Carolina Department of Environment and Natural Resources (NCDENR). (02/2003). North Carolina Water Quality Assessment and Impaired Waters List: 2002 Integrated 305(b) and 303(d) Report, February 2003. Division of Water Quality/Planning. Available on the Internet at:

http://h2o.enr.state.nc.us/tmdl/General\_303d.htm#Downloads

(NCDENR-C) North Carolina Department of Environment and Natural Resources (NCDENR). (3/02/2004). Division of Water Quality. Environmental Enforcement Data. Available on the Internet at: <u>http://www.enr.state.nc.us/novs/wq0503.pdf</u>

(NCDENR-D) North Carolina Department of Environment and Natural Resources (NCDENR). (03/12/2004). Division of Water Quality (DWQ). Non-Discharge Permitting Unit. Animal Waste Permits Database. Raleigh, North Carolina.

(NCDENR-E) North Carolina Department of Environment and Natural Resources (NCDENR). Division of Parks and Recreation, Natural Heritage Program. (0 1/28/2002) Significant Natural Heritage Areas Database. Distributed by the North Carolina Center for Geographic Information & Analysis (NCCGIA). Raleigh, North Carolina.

North Carolina Department of Environment and Natural Resources (NCDENR). (2004). Division of Environmental Health. On-Site Wastewater Section. Laws and Rules for Sewage Treatment and Disposal Systems. Obtained 04/12/04 from the internet at: <u>http://www.deh.enr.state.nc.us/oww/Rulelaw/rules.htm.</u>

North Carolina Department of Environment and Natural Resources (NCDENR). (2002). Division of Water Resources. 2002 Local Water Supply Plan DRAFT for Currituck County Mainland. Part 1: Water Supply System Report for Calendar Year 2002; Part 2: Water Supply Planning Report; Part 3: Water conservation and Demand Management. Raleigh, NC. Available on the Internet at: <u>http://dwr.ehnr.state.nc.us/cgi-bin/foxweb.exe/c:%5Cfoxweb%5Clwsp972%5E04-27-01</u>0

North Carolina Department of Transportation (NCDOT). (1988). Currituck County Thoroughfare Plan.

North Carolina Department of Transportation (NCDOT). (1999). Thoroughfare Plan Technical Report for Currituck County.

North Carolina Department of Transportation (NCDOT). (2003). 2004-2010 Transportation Improvement Program. Available at http://www.ncdot.org/planning/development/TIP/TIP/

North Carolina Department of Transportation. (1999). Traffic Survey County Maps 1999. Available at <u>http://www.ncdot.org/planning/statewide/gis/DataDist/GISTrafSurvMaps.html</u>

North Carolina Department of Transportation. (2002). Traffic Survey County Maps 2002. Available at http://www.ncdot.org/planning/statewide/gis/DataDist/GISTrafSurvMaps.html

North Carolina Division of Water Quality (NCDWQ). (2004). Large Surface Sewage Treatment Plants Permitted/Inspected by Division of Water Quality. Obtained from the Currituck County Planning Department 03/23/04.

(NCREDC – A) North Carolina Rural Economic Development Center (NCREDC). (1998). Water Distribution Systems - Type A Service Areas: NC Center for Geographic Information & Analysis, Raleigh, North Carolina.

(NCREDC – B) North Carolina Rural Economic Development Center (NCREDC). (1998). Water Distribution Systems - Type B Service Areas: NC Center for Geographic Information & Analysis, Raleigh, North Carolina.

North Carolina Division of Environmental Health (NCDEH). (03/12/04) Shellfish Sanitation Section & Recreation Water Quality Division. (3/12/2004). Recreational Water Quality Monitoring and Advisory Information Database. Raleigh, North Carolina.

North Carolina Geological Survey (NCGS) (08/25/200 1) Permitted Active and Inactive Mines in North Carolina. Retrieved March 01, 2004, from: http://www.geology.enr.state.nc.us/Permitted%20Mines%201999-2000/permitte.htm

United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS), 1982. Soil Survey of Currituck County, NC.

# APPENDICES

# APPENDIX A. CITIZEN PARTICIPATION PLAN

(As Approved at the Start of Phase 1)

Currituck County will be updating the 1990 CAMA Land Use Plan during FY 2003-2004 and FY 2004-2005. Grant funding assistance has been received from the Department of Environment and Natural Resources (DENR) through the Local Government Planning and Management Grant Program to prepare the update. The funding agreement provides that Currituck County will "employ a variety of educational efforts and participation techniques to assure that all socio-economic segments of the community and non-resident property owners have opportunities to participate during plan development" [15A NCAC7L .0506 (a)].

Development and implementation of the Currituck County Citizen Participation Plan is the main resource to address these public participation requirements.

The Citizen Participation Plan provides the following opportunities:

- Sharing of information about the CAMA land use planning process between the local government, the State, and local residents
- Actively involving citizens in the process of identifying land use issues, identifying and evaluating options and the development of land use policies

Active citizen involvement in the development of the Land Use Plan is essential to the development of a quality plan and the success of its implementation. To provide information to the public and to encourage adequate citizen involvement, the following Citizen Participation Plan will be utilized by Currituck County.

**Designation of Lead Planning Group:** The Currituck County Board of Commissioners has appointed a Land Use Plan Steering Committee to oversee preparation of the Land Use Plan Update. The Land Use Plan Steering Committee is composed of residents of the County's three sub-areas. Members of the Steering Committee and their contact information are listed on an attachment to the Citizen Participation Plan.

The Land Use Plan Steering Committee will advise and coordinate plan development with the Currituck County Board of Commissioners and the County's consultant, BLUE: Land, Water, Infrastructure, PA (BLWI).

The Land Use Plan Steering Committee will have the following duties and responsibilities:

- Provide overall direction for development of the Draft Land Use Plan
- Serve as a public contact for citizens to get information and to comment on the proposed plan
- Review technical planning materials for accuracy
- Assist with preparation of major plan elements, including identification of concerns and key planning issues, development of a community vision, goal development, preparation of draft policies and future land use map
- Assist with organization, management and facilitation of public participation events
- Help publicize public participation events in the community
- Recommend and present a draft land use plan to the Currituck County Board of Commissioners

The Steering Committee will usually meet on the fourth Monday of each month at 7:00 PM. Meeting locations will rotate among the County's sub-areas. Meetings on the Mainland will take place on the 2nd floor of the Old Historic County Courthouse Building located at 153 Courthouse Road in Currituck, and Griggs Elementary School. Meetings on the Outer Banks beaches will occur at the Corolla Fire Department in Whalehead Subdivision. Knotts Island/Gibbs Woods meetings will take place at Knotts Island Elementary School.

All Land Use Plan Steering Committee meetings will be advertised in advance. The meeting notices will specify date, time, and location and meeting topic.

All meetings of the Steering Committee will include time for public comment from citizens. A sign-up sheet for those who wish to address the Steering Committee will be provided at each meeting. The County will keep a record of residents and property owners who speak at Land Use Plan meetings and other plan events and will retain any written comments that are received. The names of the speakers and written comments will be provided to the Division of Coastal Management (DCM) District Planner for use in draft plan review.

An initial orientation meeting with the Steering Committee is scheduled for Monday, October 27, 2003 at 7:00 PM on the second floor of the Old Historic Courthouse Building in Currituck.

**Initial Public Information Meetings:** The County's funding agreement with DENR requires a public information meeting(s) at the beginning of the process. The Currituck County Land Use Plan Update process will include four public information meetings. The meetings will provide educational opportunities to inform the general public of the purpose of the CAMA Land Use Plan and to outline the County's public participation process. The meetings are tentatively scheduled as follows:

- 1. Monday, November 24, 2003 at 7:00 PM at the Old Historic County Courthouse Building, 153 Courthouse Road, Currituck
- 2. Tuesday, December 9, 2003 at 7:00 PM at the Corolla Fire Department in Whalehead Subdivision
- 3. Tuesday, January 20, 2004 at 7:00 PM at Knotts Island Elementary School
- 4. Monday, January 26, 2004 at 7:00 P.M. at Griggs Elementary School

The following items will be discussed at the Initial Public Information Meetings:

- Policy statements contained in the current (1990) Currituck County Land Use Plan
- Effect of current policies on the County
- Ways the current plan has been used to guide development during the last planning period
- An explanation of how Currituck County will report to the public and solicit the views of citizens in the development of updated policy statements
- The tools to be used to report on the planning process to the public during plan development
- A description of the methods and techniques that shall be used to solicit public participation and input from residents of the County and non-resident property owners, including the results that are expected from these methods and techniques
- The general meeting schedule for meetings of the Land Use Plan Steering Committee to discuss the Land Use Plan

In addition to providing information to citizens regarding the land use planning process, these initial meetings will also serve as Community Meetings to receive input from the public on issues, concerns and opportunities.

The County will give two public notices for each of the initial public information meetings. The first notice will be published in the <u>Daily Advance, Coastland Times</u> and <u>Virginia Pilot</u> not less than 30 days before the meeting. The second notice will be published not less than 10 days before the meeting. In addition, the County will notify local members of the Coastal Resources Advisory Council (CRAC) and the DCM District Planner of the date, time, and place of the meeting.

**Public participation tools:** Currituck County will use several methods to solicit public participation in the Land Use Plan process. These methods were selected to assist in meeting the citizen participation objectives of education, listening, collaboration and support. The public participation tools include:

- Community meetings, in conjunction with the Initial Land Public Information Meetings, will be held in each of the County's sub-areas (Knotts Island/Gibbs Woods, the Mainland and the Currituck County Outer Banks beaches) at the beginning of the process. These meetings will provide an opportunity for a wide range of residents and property owners to express their views on land use and development issues and will assist in development of a preliminary assessment of opinions and attitudes. It will also provide an opportunity for citizens to learn about the views of others. This method will help meet the listening, education and collaborative goals of the citizen participation program and develop support for the land use planning process. The Community Meetings for the Mainland will occur on November 24, 2003 at the Old Historic Courthouse Building in Currituck and on January 26, 2004 at Griggs Elementary School. The Community Meeting for the Outer Banks beaches will take place on December 9, 2003 at the Corolla Fire Department in Whalehead Subdivision. The Community Meeting for Knotts Island/Gibbs Woods will take place on January 20, 2004 at Knotts Island Elementary School.
- Open houses will allow for public review of maps and policies. This will provide an opportunity for the community to express
  views and concerns about what is being proposed. It provides an informal setting for stakeholders to examine work
  products and to interact with members of the planning group. This technique will assist in meeting the listening and
  collaborative objectives of the citizen participation program.
- Media releases will keep the community informed and educated about the Land Use Plan process. Newspaper articles and
  public service announcements (radio and TV) will be used to report planning progress, as well as to encourage
  participation in and support for the planning process. Information will also be submitted for publication in Homeowner
  Association Newsletters.
- Currituck County website updates will be used to report planning progress to and solicit participation by the public, including non-resident property owners.
- Information flyers concerning land use plan meetings will also be posted in the community. Notices will be posted at public locations such as the Post Office, Food Lion, fire departments and the Currituck County Satellite Office.

### TENTATIVE PUBLIC PARTICIPATION SCHEDULE

Date	Location	Event	Outcomes Expected
10/27/03	Old Historic Courthouse Building, Currituck	Steering Committee	<ul> <li>Introduce SC to the CAMA planning process</li> <li>Familiarize members with SC role/responsibilities</li> <li>Identify SC concerns and issues</li> <li>Discussion of Citizen Participation Plan</li> </ul>
11/17/03	Old Historic Courthouse Building, Currituck	Board of Commissioners	Approval of Citizen Participation Plan
11/24/03	Old Historic Courthouse Building, Currituck	Initial Public Information/ Mainland Sub-area Community Meeting	<ul> <li>Increase community understanding of current land use and development policies, their effect, and way current plan is used</li> <li>Familiarize community with process for reporting to public</li> <li>Familiarize public with process for soliciting community input</li> <li>Receive public input on issues, concerns and</li> </ul>
			<ul> <li>opportunities</li> <li>Review and discuss previous opinion surveys</li> <li>Develop list of most important issues and concerns</li> </ul>
12/9/03	Corolla Fire Department, Whalehead Subdivision	Initial Public Information Meeting/Outer Banks beaches Sub-area Community Meeting	Same as above
1/20/04	Knotts Island Elementary School	Initial Public Information Meeting - Knotts Island/Gibbs Woods Sub-area Community Meeting	Same as above
1/26/04	Griggs Elementary School	Initial Public Info Meeting/Lower Currituck Mainland Sub-area Community Meeting	Same as above
2/23/04	Corolla Fire Department , Whalehead Subdivision	Joint Meeting with Steering Committee/Currituck County Economic Development Board	<ul> <li>Develop and agree upon the following:</li> <li>Most important existing and emerging growth- related conditions for Currituck County</li> <li>Key planning issues for Currituck County</li> <li>Vision statement for Currituck County Review technical analyses of following: Population, Housing , Economy</li> </ul>
3/22/04	Knotts Island Elementary School	Steering Committee	Review technical analyses of following: • Natural systems • Existing land use
4/26/04	Old Historic Courthouse Building, Currituck	Steering Committee	Review technical analyses of the following: • Stormwater • Community Facilities
5/24/04	Griggs Elementary School	Steering Committee	Review technical analyses of the following: • Land suitability • Current plans and policies
6/28/04	Old Historic Courthouse Building, Currituck	Community Open House with Steering Committee	Citizens review and comment on work completed on Land Use Plan
7/26/04	Griggs Elementary School	Steering Committee	<ul> <li>Identify needed adjustments to Phase II Citizen Participation Plan</li> <li>Begin review of preliminary draft land use plan policies</li> </ul>

Date	Location	Event	Outcomes Expected
8//04	Old Historic Courthouse Building, Currituck	Board of Commissioners	Approval of Phase II Citizen Participation Plan
8/23/04	Old Historic Courthouse Building, Currituck	Steering Committee	Complete review of draft land use plan policies
9/27/04	Corolla Fire Department, Whalehead Subdivision	Community Open House with Steering Committee	<ul> <li>Citizens review and comment on work completed on Land Use Plan</li> <li>Steering Committee review Future Land Use Map and Tools for Managing Development</li> </ul>
10/25/04	Knotts Island Elementary School	Community Open House with Steering Committee	<ul> <li>Citizens review and comment on work completed on Land Use Plan</li> <li>Steering Committee complete review and agree on preliminary draft Land Use Plan</li> </ul>
11/04	Old Historic Courthouse Building, Currituck	Board of Commissioners	<ul> <li>Present preliminary draft Land Use Plan</li> <li>Identify any needed changes</li> </ul>
11/22/04	Corolla Fire Department, Whalehead Subdivision	Steering Committee	<ul> <li>Review revised draft Land Use Plan</li> <li>Receive public comment on revised draft plan</li> </ul>
1/24/05	Knotts Island Elementary School	Steering Committee	Continue review of revised draft Land Use Plan     Receive public comment on revised draft plan
4/25/05	Old Historic Courthouse Building, Currituck	Steering Committee	Review DCM plan comments and make necessary adjustments
5/05	Old Historic Courthouse Building, Currituck	Board of Commissioners	Required Public Adoption Hearing

#### CURRITUCK COUNTY LAND USE PLAN STEERING COMMITTEE

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### **CITIZEN PARTICIPATION PLAN**

(As Amended And Approved For Phase 2)

# CAMA Land Use Plan Update for Currituck County Summary of Planning Process, Public Involvement Opportunities and Schedule

Timeframe*	Task	Activity	Public Meeting	During Visit #
	TASK 1:	<b>ORGANIZE FOR PLANNING &amp; PUBLIC INVOLVEMENT</b>		
Mid-August	1.1	Project Organization/Admin. Priorities/Phase 1 Debriefing		1
Late August		Gather Materials and Products from the Phase 1 Effort		1
	TASK 2:	LEADERSHIP ORIENTATION/ DISCUSSION OF MAJOR GROWTH ISSUES		
August 30	2.1	Steering Committee/ County Commissioners/ Planning Board Orientation/ Issue Identification/ Public Involvement	Yes	1
August 30	2.2	Meeting with Steering Committee to Discuss Growth Issues	Yes	1
	TASK 3:	DEVELOP POLICY STATEMENTS AND GROWTH STRATEGY MAP		
Sept/Oct/Nov	3.1	Develop Draft Policy Statements		
Sept/Oct/Nov	3.2	Develop Prelim Growth Strategy (Land Classification) Map		
Oct 25, Nov 22, Dec 13	3.3	Review Policy Statements and Land Classification Map with Steering Committee	Yes	2,3,4
	TASK 4:	IMPLEMENTATION ACTIONS		
December		Draft Preliminary Implementation Actions		
January 10th '05		Review Implementation Actions with Steering Committee.	Yes	5
	TASK 5:	REVIEW PLAN POLICIES, GROWTH STRATEGY MAP AND IMPLEMENTATION ACTIONS WITH THE PUBLIC		
January	5.1	Prepare for "Future of Currituck: Land Use Week"		
Feb 14, 15, 16, 17	5.2	Future of Currituck Land Use Week (4 Open Houses)	Yes, 4	6
February 18	5.3	Review Public Comments with Steering Committee	Yes	6
Feb/March	5.4	Revise Policies and Implementation Actions.		
		PREPARE NARRATIVE FOR POLICY STATEMENTS & GROWTH STRATEGY (LAND CLASSIFICATION) MAP		
March	6.1	Prepare Draft Narrative		
March	6.2	Distribute Draft Phase 2 Document to Steering Committee		
April 5	6.3	Review Draft Phase 2 Document with Steering Committee	Yes	7
	TASK 7:	INFORMAL STEERING COMMITTEE WORK SESSION WITH PLANNING BRD & COUNTY COMMISSIONERS		
May 3	7.1	Hold Joint Work Session of Steering Committee, County Commissioners, and Planning Board	Yes	8
	TASK 8:	COUNTY COMMISSIONERS TO APPROVE PHASE 2 POLICY DOCUMENT FOR STATE REVIEW		
May16	8.1	County Commissioners approve an "adoptable" plan, for the purposes of sending it on to the State for their review.	Yes	9
	TASK 9:	STATE REVIEW/REVISIONS		
May 17	9.1	Submission of "adoptable" Phase 2 Policy document to State for review and comment. Wait for comments.		
w/in 14 days after comments	9.2	Consultant will review State comments and draft recommended revisions for incorporation into a revised plan.		
w/in 14 days of approval	9.3	Make revisions as authorized by County Commissioners.		
	<b>TASK 10:</b>	<b>CO COMMISSIONERS PUBLIC HEARING &amp; ADOPTION</b>		
30 days notice	10.1		Yes	10
w/in 14 days of hearing	10.2	Make Final Revisions to Plan If Necessary		
		CRC APPROVAL		
As scheduled		CRC approval of Land Use Plan.	Yes	CRC
w/in 14 days of CRC Approval	TASK 12:	DELIVER FINAL PHASE 2 DOCUMENT FOR PRINTING		

\*Dates are tentative/subject to change

#### DETAILS CONCERNING PHASE 2 PUBLIC PARTICIPATION PLAN CAMA Land Use Plan Update for Currituck County

The preceding page provides a comprehensive overview as to how various parts of the plan will be developed in concert with public input, review and comment. It also suggests a tentative schedule for completing the plan and holding numerous public meetings. The following paragraphs provide greater detail as to the purpose of various public input meetings. Also described below are other opportunities for public education and input that may not require attendance at a public meeting, work session or hearing.

The public participation plan includes the following elements:

- **Public Input from Phase 1.** Public input gathered and documented during Phase 1 shall be reviewed for use in drafting the Policies and Actions of Phase 2, as well as the Growth Strategy Map. Research conducted during Phase 1 in response to citizen concerns shall also serve as a reference for plan development during Phase 2.
- Lead Planning Group. The Land Use Plan Steering Committee shall continue to serve in a leadership role and as a conduit and sounding board for citizen input during Phase 2. Committee members shall take an active role in leading and facilitating public input meetings. They shall also review and comment upon draft policies, actions and mapping during plan development.
- **Committee Meetings.** All Steering Committee meetings shall be open to the public and the news media. All growth policies, land classification mapping and implementation actions, (as well as subsequent revisions), shall be discussed openly at Steering Committee meetings. Citizens especially interested in following the course of policy development may find "sitting in" on these Committee meetings informative.
- Joint Work Session with County Commissioners and Planning Board. The County Commissioners and County Planning Board shall be directly consulted during a joint work session with the Steering Committee at the beginning of the Phase 2 process. The primary purpose of this joint work session will be to allow County leaders serving on these boards the opportunity to identify what they believe to be the major growth issues facing the county. This work session shall be open to the general public as well as the news media. Major issues identified will be documented for distribution to the news media as the County may see fit.
- Future of Currituck Week-- Around the County. "Future of Currituck Week" will feature four open-housestyle public input meetings hosted by the Steering Committee and designed to maximize citizen comment and dialogue with the Committee members. Each of the four meetings will be held in a different area of the county to allow for maximum participation by citizens nearby.
- Walk Around Survey. A "walk-around survey" shall be employed during the open house meetings to solicit
  public input on polices, actions and the growth strategy map in an efficient, organized and enjoyable manner.
  The survey shall also be designed to have a self-educating affect on those who participate. Upon completion of
  these open house meetings, the Committee should have both a quantitative and qualitative assessment of
  which policies and actions have the greatest support of area citizens and which do not.
- Survey May Continue Beyond Future of Currituck Week. At the County's discretion, large, wallmounted survey sheets written upon during Future of Currituck Week may be posted for public display even after the week is over, allowing other citizens to see the results from the open house meetings and to add their views to the same sheets.
- Special Outreach to County Appointed and Elected Officials. All County appointed and elected officials will be invited to attend one or more of the Future of Currituck Week open houses.
- Active Recruitment of Area Citizens by Steering Committee and County Staff. Steering Committee Members and County staff will be charged with specific responsibility for actively recruiting citizens to Future of Currituck Week open houses.
- Public Notice of Future of Currituck Week. Notice of Future of Currituck Week meetings shall be run in local newspaper(s) of general circulation.
- **Special Flyer/Announcement.** A specially designed flyer announcing Future of Currituck Week and describing the purpose of the land use plan shall be prepared for general distribution in the weeks leading up to the

meetings.

- Use of County Website. The County shall continue to present information about the Land Use Plan and its
  progress on the County website. Citizens will be invited to also submit their comments on land use issues via this
  medium. This method may be especially helpful to out of town property owners and second homeowners who
  wish to express their viewpoint without having to travel to the County specifically for one or more public meetings.
- Second Joint Work Session with County Commissioners and Planning Board. The County Commissioners and County Planning Board shall be directly consulted for a second time during a joint work session with the Steering Committee near the end of the Phase 2 process. The primary purpose of the second joint work session will be to allow Steering Committee members to present an overview of the plan to members of the County Commission and the Planning Board in an informal, non-pressured setting. This work session shall be open to the general public as well as the news media.
- Public Hearing of the County Commissioners. The County Commissioners will hold an advertised formal public hearing near the end of the planning process to ensure that citizens may speak directly to their elected officials about the proposed land use plan.
- Certification of the Plan by the Coastal Resources Commission. Review and certification of the land use plan by the Coastal Resources Commission will provide an additional opportunity for citizen comment at more than a local level of interest.
- Plan Printing and Distribution. Following local adoption and State certification of the Land Use Plan, multiple copies of the plan will be printed and made available by the County for public review. The County will also issue copies of the plan to all relevant County boards involved in growth and development issues.

## APPENDIX B. OPINION SURVEY/QUESTIONAIRE

Below is a copy of the web-based public opinion survey that was employed to garner the views of citizens who may not have been able to attend the many public meetings held for the land use plan.

#### Web Site Questionnaire Concerning Issues, Problems and Opportunities That Should be Considered when Updating Currituck County 2003-2005 Land Use Plan

Please take a few minutes to answer the questions below. Your input will be valuable to the county as it develops goals and strategies as part of the Land Use Plan Update process. Comments can also be sent to our Planning Consultant at <u>kbvinson@blwi.com</u>.

Which best describes you:

- Resident Property Owner
- Non-Resident Property Owner
- \_\_\_\_Other
- 1. What do you like most about Currituck County?
- 2. What do you like least about Currituck County?
- 3. Concerning the availability of public accesses to the beach and public trust waters, do you think the county has:
  - a. Not enough accesses \_\_\_\_\_
  - b. Too many accesses \_\_\_\_\_
- '4. Balancing economic development with the need to protect our sensitive environment, do you think our land development regulations are:
  - a. Adequate in protecting our environment \_\_\_\_\_
  - Inadequate in protecting our environment \_\_\_\_\_
  - c. Don't know \_
- 5. In terms of reducing the risk of natural hazards from such events as hurricanes and nor'easters, do you think the county is doing a:
  - a. Good job \_\_\_\_
  - b. Fair job \_\_\_\_
  - c. Poor job\_
  - d. Don't know \_\_\_\_
- 6. Protecting and maintaining high water quality in our sounds, rivers and estuaries has been a high priority for the county. On a scale of 1 to 10 (1 represents poor and 10 represents excellent), how would you rate our development regulations in protecting the resources?
- 7. Over the next 5 years, what do you think will be the most important issues facing Currituck County?
- 8. Are there any other comments you would like to make concerning the Land Use Plan Update?

## APPENDIX C. MAJOR LAND USE ISSUES IDENTIFIED BY CITIZENS AT COMMUNITY MEETINGS

The Land Use Plan Update process in Currituck County was initiated by a series of four community meetings held throughout the County. Meetings were held in the upper Mainland (Old Historic Courthouse), Outer Banks beaches (Corolla Fire Department), Knotts Island (Knotts Island Elementary School) and the lower Mainland (Griggs Elementary School). The meetings were held from November 2003 through January 2004.

The purpose of the meetings was to familiarize Steering Committee members and citizens with the CAMA land use planning process and public participation tools to promote citizen involvement. As part of the meetings, citizens were asked to identify urgent/pressing land use concerns. At the end of the meetings, those present were given the opportunity to vote on the most important issues that had been identified.

Beginning with the meeting in Knotts Island, citizens were asked to identify issues related to the Coastal Resources Commission's management topics for land use planning: Public Water Access, Natural Hazards, Infrastructure Carrying Capacity, Land Use Compatibility, Water Quality, Local Areas of Concern.

Listed below are the issues identified by citizens at the community meetings. The number of votes each issues received is indicated in parentheses following the issue statement.

#### Upper Mainland (Old Historic Courthouse) November 24, 2003

- Like open space/rural areas in the County (10)
- Need to continue to examine the purchase of development rights (10)
- Like or satisfied with environmental protection provided by state and county regulations (9)
- Desire more economic development activity to generate additional revenue (7)
- Need to plan for better drainage (6)
- Concerned with farmland loss caused by economic pressures (6)
- Dislike the fact that folks move to Currituck County and then want to change it (5)
- Need more street lights and sidewalks (5)
- Dislike inequality of fire protection throughout the County (5)
- Like the high building code standards in the County (4)
- Need more water (4)
- Need more indoor recreation facilities (3)
- Not enough affordable housing (2)
- Not enough water (2)
- Need more retirement (adult) communities (2)
- Traffic concerns (2)
- Some land in Currituck County should not be developed (2)
- Like the convenience of Knott's Island to Virginia (1)

The following issues were identified, but received no votes:

- Rising water table is a concern
- Recreation facilities need to be better sited for citizens

#### Outer Banks Beaches December 9, 2003

- Government allowing development without requiring adequate infrastructure (13)
- Quality of life (9)
  - Provide facilities for social life
  - Provide public facilities on the beach
- Consider north/south and east/west solutions to transportation problems (8)
- Commercial uses should be centralized (8)

- 4WD beach road issues (5)
- Stress of very large houses on the community (5)
- Inadequate water (5)
- Maintain cleanliness of beaches (5)

• As permanent population increases, would like more emphasis as a year-round rather than a tourist destination (4)

- Housing density and population density/intensity (3)
- Are we a permanent or resort community? (3)
- Drainage concerns (3)
- Sand fences impeding transportation to Carova Beach (2)
- More connection between government and people on the beach (2)
- Lack of schools to entice families with children (2)
- Need a Deputy County Manager to deal with beach issues (2)
- Growth has outpaced existing transportation capacity, need solutions <u>now</u> (2)
- Not enough facilities for the resort population (1)
- Large number of bedrooms in beach houses (1)
- Wastewater concerns (1)

The following issues were identified, but received no votes:

- Commercialization of Outer Banks Beaches
- Economic impact on density of development
- Public parking and access to ocean/sound
- Inadequate transportation infrastructure
- Need short-term and long-term solutions to transportation problems
- Accommodating service workers
- Dissatisfaction of solid waste collection
- Improve Ocean Pearl Road
- Lack of public recreation facilities for those without subdivision amenities
- Incorporation of the beach
- Integration of facilities (water, sewer, etc.) among beach neighborhoods
- Establish timeline for needed improvements
  - Water, sewer, drainage, maximum density
- Need long-range plan to meet projected water needs
  - State should conduct another water study
  - Water should not be a County problem
  - Look at a regional water system
- Beach tax revenues go to mainland rather than funding improvements on the beach
- Non-resident property owners have different priorities than full-time residents
- Need to protect appearance of the area
- Concern with proximity of wastewater facilities to drinking water wells
- No one person on the beach has power/authority to fix problems on the beach
- Voter apathy

Knotts Island January 20, 2004

The specific topics and comments are as follows (the votes that were posted by each topic after the meeting are in parenthesis):

#### Public Water Access

- Need more access / there is not enough parking on the Brumley Road Access (0)
- The Cason Point Road access does not have any parking and the bulkhead is not safe (1)
- There is a need to balance public access with private enterprise / private marinas (0)
- People who use the ramps may be from outside NC but also some people use the ramp to access property in Carova (0)
- Inadequate roads and other infrastructure associated with access (0)
- There should not be any public funding for new public access/ boat ramps (5)
- More public access will necessitate the need for more Sheriff/EMS services for boating traffic (0)

#### Infrastructure Carrying Capacity

- There is a need for better roads (9)
- The culvert on Brumley Road does not drain well(2)
- DOT needs more personnel for road maintenance (3)
- There is a need for the road ditches to be maintained better (8)
- The Marsh Causeway Bridge is dangerous and needs to be fixed (9)
- DOT needs to do a traffic study for Marsh Causeway to see if the road will support more development (0)
- Why was Moyock Middle School built too small and \$20 Million Dollars wasted (0)
- There is a need for better planning for schools and what the future needs will be 0)
- There needs to be a cap on mobile homes to cut down on the number of students (0)
- There is a problem with the management of the solid waste facility not being dumped enough (1)
- There needs to be a paid fire department (6)
- A better fire rating is needed for Knotts Island (6)
- No central wastewater systems on Knotts Island (3)

#### Land Use Compatibility

- Minimum 3 Acre Lot Size on Knotts Island (24)
- Minimum 2 Acre Lot Size on Knotts Island because the land is so hard to maintain (9)
- Against "cluster development" (10)
- Maintain caps on Mobile Home Parks (6)
- Taxes commensurate with services on mobile home parks (0)

#### Natural Hazards

- Better public communications to residents after disasters better use of Public Information Officer (2)
- Establish public access / phone line for Knotts Island (2)
- Availability of Knotts Island School or other public buildings during disasters as shelters (0)
- Better utility service recovery after power loss (0)
- Use Virginian Pilot to get information to Knotts Island. (0)

#### Water Quality

- Initiate a water quality testing program (3)
- Restricting boating access because gasoline engines could harm waters with leaks (1)
- The County needs to provide support and funding for pumping septic systems (1)
- Increased lot sizes to reduce building density and thereby improving water quality (7)

#### Local Areas of Concern

- Control/behavior of school children on the ferry (1)
- Commissioners need more citizen input on major purchases of land (1)
- The schools are good and we need to maintain the quality (0)
- Problems with wells being near septic systems; need better records and investigations before new septic permits are given (0)
- Need a County Library on Knotts Island (6)
- Need more access to school facilities after hours and re-open community center (3)
- Need more recreation programs on Knotts Island (5)
- Preserve farmland (1)
- Don't pursue and give up on the Currituck Lighthouse (0)
- No more subdivisions with Open Space (0)
- Trash pickup is needed (4)

#### Lower Mainland January 26, 2004

The specific topics and comments are as follows (the votes that were posted by each topic after the meeting are in parenthesis):

#### Public Water Access

- More public beach access is needed (5)
- Need a land banking plan for acquisition of water access property throughout the County (4)
- More public water accesses are needed throughout County, especially in areas where there is no public or private access available (3)

- Water access planning is needed and should include provisions for buffer zones from surrounding properties (1)
- The County should provide support for ecotourism (1)

#### Natural Hazards

- A mid-County bridge is needed for hurricane evacuation (8)
- Stormwater control needs organization/coordination between the County and NCDOT (6)
- More local stormwater controls are needed (2)
- County staff should provide more/better education on drainage issues (0)

#### Infrastructure Carrying Capacity

- A mid-county bridge is needed to address traffic congestion on 158 in the southern part of the county (4)
- The County needs a water supply that is adequate and available for fire suppression (2)
- Secondary roads should be connected (2)
- The County needs a central sewer system (1)
- More water towers are needed to increase fire flows (1)
- The County should allow municipalities to incorporate and let them handle water/sewer issues (1)
- Central sewer districts are needed to address growth (0)
- Central sewer districts are not needed, and will only increase growth (0)

#### Land Use Compatibility

- Restrict commercial buildings by aesthetics/architectural design standards/restrictive covenants (3)
- Improve appearance of 158/168 corridor (1)
- Eliminate/reduce billboards along 158/168 corridor (1)
- Increase landscape buffering to improve appearance of businesses (0)
- Zoning should be compatible with surroundings and spot zoning should be eliminated (0)

#### Water Quality

- Continue ban on discharge into waters to protect water quality (including brine from RO treatment, except into ocean) (3)
- Regulation of upstream water pollution from VA (1)
- Require on-site retention ponds and regulate more strictly than DWQ
- Provide education to citizens on landscape buffer zones to stop runoff
- Create landscape regulations to address stormwater runoff (0)

#### Local Areas of Concern

• A mid-county bridge is needed (4)

• A police/sheriff substation is needed in the southern part of County to speed up emergency response times (3)

- Incorporate municipalities to provide more/better services (2)
- Provide equestrian paths and opportunities for equestrian activities/shows (2)
- Provide another rest area for beach traffic along the 15 8/168 corridor (2)
- Continue with historic preservation effort throughout the County initiative that began with the County's purchase of the Whalehead Club (1)
- Provide landscape medians on 158/168 to improve appearance and increase traffic safety (1)
- Provide more pedestrian ferries from the mainland to the beach consider running one from Poplar Branch to Corolla (1)
- More interconnected bicycle paths are needed throughout the county (0)
- The County should provide more recreational opportunities for youth (0)

# APPENDIX D. EXPLANATION OF DEMOGRAPHIC AND POPULATION STATISTICS

According to the US Census Bureau (USCB) decennial census statistics are considered to be 100% data based on shortform questionnaires that are sent to every person and housing unit and long-form questionnaires that are sampled of every 1 in 6 persons and households. All demographic data for the non-decennial years are estimates based on the latest decennial data. Population estimates are released annually by the US Census Bureau and are calculated by using predictor variables or administrative records that are available on an annual basis. Examples of some administrative records include: birth and death certificates, Internal Revenue Service data, Medicare enrollment records, Armed Forces data, etc. Growth rates based on changes in these administrative records are combined with the latest decennial census statistics to form the yearly demographic estimates (USCB 2003).

#### Population Estimates

U.S. Census Bureau annual demographic estimates are considered to be rough estimates based on administrative records easily available to Federal Demographers. State Demographers are privy to more detailed annual administrative records and may have access to local data from the Department of Motor Vehicles, housing permits, Medicare, birth and death data, and school enrollment data which can be analyzed to produce population estimates. The North Carolina Demographers Unit uses a similar methodology and any annual administrative records available to make their population estimates.

For example, in calculating the 2002 North Carolina county population estimates, the North Carolina State Demographer used the 2002 US Census Bureau population estimates (that were released in April 2003) as a starting base (North Carolina State Demographics Unit 2003). For this 2002 estimate, the U.S. Census Bureau assumed that the institutional population for each North Carolina county would be the same as that of 2001 (NCSDU 2003). Available data from current state Medicare enrollees and all North Carolina military bases and institutions proved that assumption invalid, so the data was used to adjust the US Census Bureau's original estimate (NCSDU 2003). Due to the fact the North Carolina Demographer has access to more detailed administrative records, demographic data released by the state may differ slightly from US Census Bureau data estimates and can be considered to be more accurate.

#### Population Projections

A population projection differs from an estimate in that it relies on certain assumptions about long-term trends in data that are not yet available, while an estimate is based on data from predictor variables or administrative records that are available for the estimate year. Recent population projections were released in June 2002 by the North Carolina Office of State Budget and Management for all geography types in the state. The base decade used to determine the forecasting trend for the population projections is 1990-2000 (NCSDU 2002). The most fundamental base year for these projections is the 2000 US Census Bureau's modified age, race and sex file (NCSDU 2002). The most basic technique used to project the population projections for age, race and sex is to combine the trends of birth and death data, migration data and institutional population (NCSDU 2002). It is important to note that it was assumed all institutional population would remain constant after 2000 (NCSDU 2002).

#### Housing, Income, Employment and Economic Statistics

Statistics regarding housing, income, employment and economics are not generated by the North Carolina State Demographics Unit. They are listed on the North Carolina State Demographics Internet site for convenience, but are generated by federal agencies including the US Census Bureau and the Bureau of Economic Analysis. All data of this type included in this report has been checked for consistency between the federal agencies and the North Carolina State Demographics Unit. Any discrepancies have been noted.

# APPENDIX E. FUTURE LAND USE PLAN COMPATIBILITY MATRIX

#### Table A-1 Consistency Review of Future Land Use Map Designations and Existing Zoning Districts

Zoning Districts		A	RA	R	RO1	RO2	RR	GB	С	LBH	LM	НМ	PUD	PRD	RMF
	Minimum Lot Size (Sq. Ft.):	3 ac	1 ac	1 ac	1 ac	3 ac	15,000	25,000	35,000	15,000	25,000	25,000	10,000- 20,000	10,000- 20,000	5 ac
	Maximum Lot Coverage (Sq. Ft.):	30%	30%	30%	30%	30%	30%	65%	65%	65%	65%	65%	30%	35%	
	Maximum Building Height (Ft.):	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'
Land Use Designations	Density (Du Per Acre):														
Conservation	1/3	•	-	-	-	-	-	-	-	-	-	-	-	-	-
Rural	1/3	•	_	_	_	_	-	-	-	-	-	-	-	-	-
Limited Service	1/1 - 1.5/1	-	•	•	•	•	•	×	•	-	-	-	Δ	Δ	Δ
Full Service	1/1 - 4/1	-	•	•	•	•	•	•	•	•	•	•	•	•	•
<ul> <li>"generally con</li> <li>∆ "conditionally</li> <li>× "inconsistent"</li> <li>- "not applicable</li> </ul>	consistent"	1	1	1	1	1	1				1	1	1	1	

As evidenced by the table above, the Future Land Use Plan Map and the existing Zoning District regulations are fairly compatible. However, in order to fully implement the policies associated with the Limited Service and Full Service Areas particularly with respect to density and design criteria, the County anticipates revisions to the existing overlay districts.

# APPENDIX F. FUTURE LAND USE PLAN COMPATIBILITY MATRIX

# Table A-2 Consistency Review of Policies Suggesting Regulatory Action and Existing Zoning Districts and Development Standards

Development Standards														
POLICIES SUGGESTING REGULATORY ACTION	Α	RA	R	RO1	RO2	RR	GB	С	LBH	LM	HM	PUD	PRD	RMF
POLICY PA1: Public access to the sound and ocean waters of														
Currituck County is essential to the quality of life of residents														
and visitors, as well as the economy of the area. The County	-	-											-	
supports the establishment of ADDITIONAL PUBLIC AND	•	•	•	•	•	-	-	-	-	-	-	•	•	•
PRIVATE ACCESS opportunities to the waters of Currituck														
County. (Also see Outer Banks Policy Section.)														
POLICY PA2: The County supports MANY FORMS OF														
"ACCESS" to the water, including scenic outlooks and														
boardwalks, boat ramps, marinas and docks, fishing piers,														
	_	_	-	_	_	_	_	-	-	_	_	-	_	_
canoe and kayak launches, and other means of access.														
Whenever possible, such facilities shall be designed to														
accommodate the needs of handicapped individuals.														
POLICY PA3: Properties owned by the County, State or other														
cooperating public agencies shall be considered as special														
opportunities for public access sites. MULTIPLE USE OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
APPROPRIATE SITES (e.g. utility station and public boat														
ramp site) shall be encouraged.														
POLICY PA4: The LOCATION OF PUBLIC ACCESS														
SITES shall generally be determined by a rational														
examination of the sound and ocean resource, the distribution														
of existing access sites, and the availability of appropriate	•	•	•	•	•	_	_	-	-	_	_	•	•	•
new sites. In addition to advanced planning, however, the														
County will remain open to any site that offers good shoreline														
access for the public, as unforeseen opportunities may arise.														
POLICY PA5: PUBLIC AND PRIVATE MARINAS offering														
access to area waters should be encouraged when developed														
in accordance with the CAMA specific use standards for														
marinas (i.e. docks for more than 10 vessels). Marinas shall	-	-											-	•
not be approved, however, that are incompatible with nearby	•	•	•	•	•	•	•	•	•	•	•		•	•
land uses or whose designs fail to meet the environmental														
quality and development standards of the County's Unified														
Development Ordinance.														
POLICY PA6: MARINAS IN UPLAND LOCATIONS														
generally shall be preferred over marinas in open water,														
thereby better preserving the visual appearance of the	•	•	•	•	•	•	•	•	•	•	•	•	•	•
shoreline as well as avoiding the "consumption" of available	•	•	•	•	•	•	•	•	•	•	•	•	•	•
public trust surface waters.														
<u>POLICY PA7</u> : Currituck County marina owners shall be														
encouraged to participate in BEST PRACTICE OPERATING														
PROGRAMS, such as the "Clean Marina" program sponsored														
by the NC Division of Coastal Management and the NC	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
Marine Trades Services organization. The County encourages														
marina operators to apply for grants that may be available to														
help pay for pump-out facilities or other environmental														
improvements.					<u> </u>							<u> </u>		
POLICY PA8: DEVELOPMENT STANDARDS FOR BOAT			1					1						
RAMPS AND/OR PARKING AREAS associated with public				_										•
access sites shall address, at a minimum, requirements for		•	•	•		•	•	•	•	•	•	•	•	•
stormwater runoff, water quality protections, aesthetic														
concerns and adequate water depth at low tide.			<u> </u>					<u> </u>						
POLICY PA9: Currituck County shall discourage			1					1						
developments which would have the effect of "WALLING	-	-	-		-	-	-	-	_			_	-	
OFF THE WATER", thereby eliminating views to the water	•	•		•	•	•	•		•	•	•		•	٠
from adjoining streets, roads, walkways and other public			1					1						
spaces.			<b> </b>											
POLICY PA10: Opportunities for protecting or creating			1					1						
public access shall be pursued when drafting and	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
administering development standards for ocean front and														
sound front projects in the County.														

POLICIES SUGGESTING REGULATORY ACTION	Α	RA	R	RO1	RO2	RR	GB	С	LBH	LM	НМ	PUD	PRD	RMF
POLICY ES1: New development shall be permitted to locate only in areas with SUITABLE SOIL and where ADEQUATE INFRASTRUCTURE is available. For existing development located on poor soils, and where sewage treatment upgrades are necessary, engineering solutions may be supported, provided that environmental concerns are fully addressed. POLICY ES2: NON-COASTAL WETLANDS, including	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
FRESHWATER SWAMPS, AND INLAND, NON-TIDAL WETLANDS, shall be conserved for the important role they play in absorbing floodwaters, filtering pollutants from stormwater runoff, recharging the ground water table, and providing critical habitat for many plant and animal species. Currituck County supports the efforts of the U.S. Army Corps of Engineers in protecting such wetlands through the Section 404 permit program of the Clean Water Act, as well as Section 401water quality certifications by the State of North Carolina.	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
POLICY ES3: COASTAL WETLANDS shall be conserved for the valuable functions they perform in protecting water quality and in providing critical habitat for the propagation and survival of important plant and animal species. CAMA use standards and policies for coastal wetlands shall be supported. Uses approved for location in a coastal wetland must be water dependent (i.e. utility easements, bridges, docks and piers) and be developed so as to minimize adverse impacts.	•	•	•	•	•	•	•	•	•	•	•	•	•	•
POLICY ES4: In approving new developments, Currituck County shall support the retention or creation of a vegetated buffer area along ESTUARINE SHORELINES as a simple, effective and low-cost means of preventing pollutants from entering estuarine waters. Exceptions to this requirement may include developments involving pre-existing man-made features such as hardened shorelines, ditches, and canals. Farming and forestry operations that abide by appropriate "best management practices" are also exempt. The County also supports CAMA use standards for all COASTAL SHORELINES, whether estuarine or otherwise.	×	×	×	×	×	×	×	×	×	×	×	×	×	×
<u>POLICY ES5</u> : Uses allowed in ESTUARINE WATERS must be water dependent (public access, docks, piers, erosion control, and other CAMA-approved uses) and must not interfere with the proper function, cleanliness, salinity, and circulation of the resource. FLOATING HOMES shall not be approved for placement in the estuarine waters of Currituck County. (Also see the Public Access section of this plan for policies concerning new MARINAS.)	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<u>POLICY ES6</u> : The location and design of piers and docks shall not unduly interfere with the rights of the public to the free and unobstructed use of PUBLIC TRUST WATERS for navigation, fishing, and other uses. Efforts to limit the length of piers into public trust waters shall be supported.	•	•	•	٠	•	٠	•	•	٠	٠	•	•	•	•
POLICY ES7: MARITIME FORESTS and SAND DUNES shall receive a high level of environmental protection and special consideration when reviewing public and private sector development proposals in Currituck County.	×	×	×	×	×	×	×	×	×	×	×	×	×	×
POLICY ES8: Areas of the County identified for significant future growth shall avoid NATURAL HERITAGE AREAS (e.g. Great Marsh on Knotts Island, Currituck Banks/Swan Island Natural Area, Currituck Banks Corolla Natural Area, Pine Island/Currituck Club Natural Area, Northwest River Marsh Game Land, and many other marsh areas on the mainland.)	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
<u>POLICY AG1</u> : ACTIVE AGRICULTURAL LANDS having a high productive potential, and especially those removed from infrastructure and services, should be conserved for continued agricultural use.	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ

POLICIES SUGGESTING REGULATORY ACTION	Α	RA	R	RO1	RO2	RR	GB	С	LBH	LM	НМ	PUD	PRD	RMF
POLICY AG2: Farms and woodlands shall be recognized as an integral part of the county's OPEN SPACE SYSTEM. Efforts to keep these areas viable as part of the area's	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
resource-based economic sector, shall be encouraged. <u>POLICY AG3</u> : County ACTIONS CONCERNING INFRASTRUCTURE (e.g. schools, parks, and utilities) and regulations shall serve to direct new development first to targeted growth areas near existing settlements identified as Full Service Areas on the Future Land Use Map, rather than "leapfrogging" to locations in the midst of farmland and greenspace identified as Rural and Conservation areas on the Future Land Use Map.	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
POLICY AG4: County growth management tools, including particularly zoning, should provide PROTECTION TO AGRICULTURE and other RESOURCE BASED ACTIVITIES from incompatible land uses, such as a residential subdivision in the midst of generally uninterrupted farm land.	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
POLICY AG5: The County encourages beneficial programs (farmland preservation trust fund, conservation easements, purchase or transfer of development rights, farmland preservation districts, etc.) that encourage VOLUNTARY PROPERTY OWNER STEWARDSHIP of valuable farm and open space areas for future generations.	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
POLICY AG6: For areas experiencing intense development pressure, new residential development may be allowed to locate in COMPACT, VILLAGE-LIKE CLUSTERS, PREFERABLY NEAR EXISTING, NON-AGRICULTURAL ACTIVITIES AND SERVICES, or in other locations that will not interfere with resource production activities. Overall density shall remain very low, with permanent open space, dedicated during the development review process, surrounding such clusters of homes.	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
POLICY HN1: Currituck County shall encourage development to occur at densities appropriate for the location. LOCATION AND DENSITY FACTORS shall include whether the development is within an environmentally suitable area, the type and capacity of sewage treatment available to the site, the adequacy of transportation facilities providing access to the site, and the proximity of the site to existing and planned urban services. For example, projects falling within the Full Services areas of the Future Land Use Map would be permitted a higher density because of the availability of infrastructure as well as similarity to the existing development pattern. Such projects could be developed at a density of two (2) or more dwelling units per acre. Projects within areas designated as Limited Service would be permitted a density of one (1) to two (2) units per acre depending upon the surrounding development pattern and availability of resources. Projects within areas designated as Rural or Conservation by the Future Land Use Plan would be permitted a much lower density of 1 dwelling unit per 3 acres because of the lack of infrastructure in the area, the existing low density development pattern, and presence of environmentally sensitive natural areas.	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
POLICY HN2: Currituck County recognizes that large-lot mini-estates (i.e. 5 to 10 acres) consume large amounts of land, often without economic purpose. Estate lots having no relationship to agriculture or other resource-based activities promote sprawl and make the provision of infrastructure and services very costly. The County shall therefore encourage alternatives to large lot developments through INNOVATIVE DEVELOPMENT CONCEPTS AND CORRESPONDING ZONING techniques.	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
<u>POLICY HN3</u> : Currituck County shall especially encourage two forms of residential development, each with the objective of avoiding traditional suburban sprawl:														

POLICIES SUGGESTING REGULATORY ACTION	Α	RA	R	RO1	RO2	RR	GB	С	LBH	LM	НМ	PUD	PRD	RMF
1. OPEN SPACE DEVELOPMENTS that cluster homes on less land, preserving permanently dedicated open space and often employ on-site or community sewage treatment. These types of developments are likely to occur primarily in the Conservation, Rural, and to a certain extent the Limited Service areas identified on the Future Land Use Map.	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2. COMPACT, MIXED USE DEVELOPMENTS or DEVELOPMENTS NEAR A MIXTURE OF USES that promote a return to balanced, self-supporting community centers generally served by centralized water and sewer. The types of development are contemplated for the Full Service Areas identified on the Future Land Use Map.	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
POLICY HN4: Currituck County shall discourage all forms of housing from "LEAPFROGGING" INTO THE MIDST OF FARMLAND and rural areas, thereby eroding the agricultural resource base of the county.	×	×	×	×	×	×	×	×	×	×	×	×	×	×
<u>POLICY HN5</u> : Currituck County recognizes that there are many types of housing, in addition to manufactured housing (i.e. mobile homes), that are often overlooked in meeting the AFFORDABLE HOUSING NEEDS of young families, workers of modest income, senior citizens and others. To encourage affordable housing other than just manufactured housing, Currituck County may reserve appropriate areas of the county for stick-built housing forms only, and other areas of the county for accessory units in association with a principal structure.	×	×	×	×	×	×	×	×	×	×	×	×	×	×
<u>POLICY HN6</u> : Currituck County recognizes the diversity of HOUSING NEEDS FOR SENIOR CITIZENS including, but not limited to, active adult retirement communities, assisted living facilities, nursing homes, granny flats, and accessory apartments within the principal structure of a home. The County shall encourage a range of housing forms and costs to meet a broad income spectrum.	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
<u>POLICY HN7</u> : The County shall encourage development patterns and housing choices that allow for more COST- EFFECTIVE TRANSPORTATION OPTIONS for those citizens who cannot or choose not to drive, including senior citizens, lower wage workers, handicapped persons, and the young. Such a policy will also work to reduce traffic congestion on the county's already overburdened primary road system.	×	×	×	×	×	×	×	×	×	×	×	×	×	×
POLICY HN8: To protect the County's tax base and to ensure the long-term viability of the County's neighborhoods and housing stock, the County will continue to enforce appropriate CONSTRUCTION AND SITE DEVELOPMENT STANDARDS for residential developments. Such standards may include, for example, that all homes have a permanent masonry foundation (except where flood levels require elevation) and a pitched roof and overhang, and that local roads must be built to meet NCDOT acceptance standards. (See Transportation Policies for details concerning requirements for paved roads.)	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<u>POLICY HN9</u> : Proposed residential development that would expose residents to the harmful effects of INCOMPATIBLE LAND USES or to ENVIRONMENTAL HAZARDS shall be prohibited. This would include, for example, residential development in locations adversely impacted by proximity to the airport or to activities involving excessive noise, light, odors, dust, fertilizers and insecticides (e.g. certain farm operations, mining activities, etc.).	×	×	×	×	×	×	×	×	×	×	×	×	×	×
<u>POLICY HN10</u> : Currituck County shall not allow the INAPPROPRIATE USE OF MANUFACTURED OR SITE BUILT HOMES for storage, illegal occupancy or their abandonment without proper disposal.	•	•	•	•	•	•	•	•	•	•	•	•	•	•

POLICIES SUGGESTING REGULATORY ACTION	Α	RA	R	RO1	RO2	RR	GB	С	LBH	LM	НМ	PUD	PRD	RMF
POLICY CD1: NEIGHBORHOOD SERVING														
COMMERCIAL DISTRICTS should be encouraged to locate														
where a collector or secondary street intersects with a street of	_	_	_	_	_	_	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
equal or greater size. Appropriately designed, small-scale businesses may also be near other neighborhood serving														
facilities such as schools and parks.														
POLICY CD2: Commercial and office development of greater														
than a neighborhood scale shall be encouraged to cluster in														
COMMERCIAL OR MIXED-USE CENTERS to curtail the	_	_	_	_	_	_	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
proliferation of strip development, and minimize traffic	-	_	-	-	-	_	-	_	-	_	_	_	_	-
generation.														
POLICY CD3: LARGE COMMERCIAL CENTERS should														
be located adjacent to the intersections of major roadways;							Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
planned concentrations of employment and housing should be	-	-	-	-	-	-	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
encouraged to locate convenient to these centers.														
POLICY CD4: HIGHWAY ORIENTED COMMERCIAL														
USES should be clustered along segments of highways and														
contain land uses which are mutually compatible and														
reinforcing in use and design; they should be designed in such	-	-	-	-	-	-	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
a way as to minimize signage, access points, and to prevent														
unsightly, dysfunctional STRIP DEVELOPMENT. (See esp., Policy CD9 below concerning connected parking areas.)														
POLICY CD5: Incompatible or poorly planned														
COMMERCIAL ENCROACHMENT within or immediately														
adjoining existing residential areas shall be prohibited. Such														
incompatible encroachments often include, but are not limited	_	_	_	_	_	_	×	×	×	×	×	Δ	Δ	Δ
to, large-scale commercial uses or automobile-oriented												_	_	
commercial uses such as service stations, car lots, car washes,														
drive through restaurants, and the like. (Also see Policy HN9)														
POLICY CD6: Appropriate OFFICE AND														
INSTITUTIONAL DEVELOPMENT, such as professional														
offices, small churches, individual medical offices, and the														
like, shall be encouraged to locate as a transitional land use														
between residential areas and commercial or industrial	-	-	-	-	-	-	-	-	-	-	-	Δ	Δ	Δ
activities of higher intensity. "Activities of higher intensity"														
are typically large-scale commercial uses or automobile- oriented commercial development but may also include major														
thoroughfares.														
<u>POLICY CD7</u> : Attractive, environmentally beneficial														
LANDSCAPING shall be provided by new commercial or														
office developments, and in the rehabilitation and upgrading														
of existing developments. Appropriate BUFFERING or other	_	_	_	_	_	_	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
effective DESIGN FEATURES may be employed to allow														
less intensive forms of commercial and office development to														
adjoin existing or planned residential uses.														
POLICY CD8: MIXED-USE DEVELOPMENTS, properly														
planned from the outset, which allow for a compatible														
mixture of residential and non-residential uses with a														
pedestrian scale and design, are encouraged. Similarly,												•	•	
businesses may be located adjoining (and therefore	-	-	-	-	-	-	-	-	-	-	-	Δ	Δ	Δ
convenient to) an existing residential area, when such														
businesses can be shown to satisfy design considerations similar to a newly planned, pedestrian-scaled, mixed use														
development.														
<u>POLICY CD9</u> : Businesses shall be encouraged to coordinate							1							
their SITE DESIGNS with other nearby businesses. Design														
factors should include, at a minimum, shared or connected	_	_	_	_	_	_	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
parking and access, convenient pedestrian and vehicular	_	_	_	-	-	_								
movement, and consistent sign standards.								L						
POLICY ID1: To diversify the local economy and broaden														
the local tax base, the County shall encourage a public service														
and regulatory environment conducive to COMPATIBLE														
INDUSTRIAL DEVELOPMENT. "Compatible" shall be	-	-	-	-	-	-	-	-	-	Δ	Δ	-	-	-
defined as, among other things, industries that do not														
adversely impact the environmental quality of the area, or														
overburden the local infrastructure.							1	I					1	

POLICIES SUGGESTING REGULATORY ACTION	Α	RA	R	RO1	RO2	RR	GB	С	LBH	LM	НМ	PUD	PRD	RMF
POLICY ID2: Industrial uses should not be located in areas														
that would diminish the desirability of existing and planned														
NON-INDUSTRIAL DEVELOPMENTS, nor shall incompatible non-industrial uses be allowed to encroach upon	-	-	-	-	-	-	-	-	-	Δ	Δ	-	-	-
existing or planned industrial sites.														
POLICY ID3: Industrial development shall be located on land														
that is physically suitable and has unique locational														
advantages for industry. Advanced planning for the										Δ	Δ			
identification of such land shall be encouraged. Designation	-	-	-	-	-	-	-	-	-	Δ	Δ	-	-	-
of "CERTIFIED" INDUSTRIAL SITES shall be especially														
pursued. POLICY ID4: LIGHT OR LOW IMPACT INDUSTRIAL														
USES may be located in or near existing built up areas (other														
than residential) to take advantage of available services and to														
minimize home to work distances. Light industry is generally														
considered a "manufacturing activity that uses moderate														
amounts of partially processed materials to produce items of														
relatively high value per unit weight". Such industries tend to										•	•			
require less space for production, are generally more environmentally friendly, and produce goods targeted toward	-	-	-	-	-	-	-	-	-	Δ	Δ	-	-	-
consumers rather than businesses. Examples light industrial														
uses include research and development facilities, warehousing														
and distribution, and manufacturing of office or household														
goods. Careful design and/or buffering shall be required to														
ensure compatibility with surrounding areas and to create a														
positive image along area roadways.														
POLICY ID5: WAREHOUSING, STORAGE AND														
DISTRIBUTION facilities shall have access to thoroughfares of adequate traffic carrying capacity, and shall be							×	×	×	×	×			
appropriately designed and/or visually buffered according to	-	-	-	-	-	-	^	^	^	^	^	-	-	-
the visibility of their location.														
POLICY ID6: New industrial development shall be														
encouraged to locate in existing and/or planned	-	_	-	_	_	-	-	-	-	-	-	_	-	-
INDUSTRIAL PARKS.														
POLICY ID7: Facilities for the disposal of HAZARDOUS														
WASTE, whether chemical, biological, radioactive or other, shall not be located in Currituck County. Neither shall														
Currituck County accept SOLID WASTE FROM OUTSIDE	•	•	•	•	•	•	•	•	•	•	•	•	•	•
THE COUNTY for disposal at any site inside the county.														
POLICY ID8: MINING ACTIVITIES, or secondary impacts														
of mining activities not subject to permit approval by the State														
of North Carolina, may be subject to review and management														
by Currituck County. Activities to be addressed may include,	•	•	•	٠	•	•	•	•	•	•	•	•	•	•
but not be limited to, the adequacy of roads serving the mine														
site, visual impacts during operation and after closing of the mine site, noise and dust considerations, etc.														
<u>POLICY ID9</u> : Currituck County shall not support the														
exploration or development of ENERGY PRODUCING														
FACILITIES within its jurisdiction including, but not limited														
to, oil and natural gas wells, and associated staging,	-	-	-	-	-	-	-	-	-	-	-	-	-	-
transportation, refinement, processing or on-shore service and														
support facilities.														
POLICY TR1: Opportunities to enhance REGIONAL TRANSPORTATION CONNECTIONS between Currituck														
County and other parts of the state and region shall be	_	_	_	_	_	_	_	_	_	_	_	_	_	
supported. The County shall actively participate in regional	-	-	-	-	-	-	-	-	-	-	-	-	-	-
transportation planning efforts.			L											
POLICY TR2: Transportation planning shall be employed to														
promote a HIERARCHICAL, FUNCTIONAL														
TRANSPORTATION SYSTEM and to promote the proper														
arrangement of land patterns by controlling the location and	×	×	×	×	×	×	×	×	×	×	×	×	×	×
appropriate use of streets, highways, trails, and other modes of transportation. Generally, the design of major roads should														
give first priority to moving traffic, while smaller roads may														
give must priority to moving utarite, while smaller roads may give greater emphasis to serving adjoining land uses.														
									r					i

POLICIES SUGGESTING REGULATORY ACTION	Α	RA	R	RO1	RO2	RR	GB	С	LBH	LM	НМ	PUD	PRD	RMF
POLICY TR3: A program of improvements and maintenance to maximize the FUNCTIONAL LIFE OF EXISTING ROADWAYS shall be endorsed as a cost effective and environmentally sound means of meeting area transportation needs.	•	•	•	٠	•	٠	•	•	•	•	•	•	•	•
POLICY TR4: ACCESS TO THE COUNTY'S MAJOR ROADWAYS shall be managed so as to preserve the intended purpose of the highway, protect taxpayer dollars invested, and minimize hazardous turning movements in and out of traffic flows. Methods may include, for example, limits on the frequency of driveway cuts, shared driveway access, minimum lot frontages, connections between adjoining parking lots, central medians, etc.	×	×	×	×	×	×	×	×	×	×	×	×	×	×
POLICY TR5: So as to preserve the traffic moving function of the County's primary roads, minimize traffic accidents and avoid land locking interior land parcels, Currituck County shall discourage RESIDENTIAL AND COMMERCIAL STRIP DEVELOPMENT along the county's primary roads. FLAG LOTS shall not be permitted along designated roads unless justified by unusual or unforeseeable parcel or topographic constraints.	×	×	×	×	×	×	×	×	×	×	×	×	×	×
<u>POLICY TR6</u> : HIGHWAY 158/168 shall receive special attention concerning the proper development of land and properties adjoining and/or accessing this critical arterial.	×	×	×	×	×	×	×	×	×	×	×	×	×	×
POLICY TR7: A system of LOCAL CONNECTOR ROADS shall be identified and implemented to allow local traffic to move in a north-south direction without having to use and further burden US 158.	×	×	×	×	×	×	×	×	×	×	×	×	×	×
<u>POLICY TR8</u> : Local streets shall be designed and built to allow for convenient CIRCULATION WITHIN AND BETWEEN NEIGHBORHOODS and to encourage mobility by pedestrians and bicyclists. Care shall be taken to encourage local street "connectivity" without creating opportunities for cut-through traffic from outside the connected areas.	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
<u>POLICY TR9</u> : BIKEWAY FACILITIES shall be encouraged as energy-efficient, healthful, and environmentally sound alternatives to the automobile. The inclusion of bikeways, sidewalks, trails, and other alternatives to the automobile shall be encouraged in both public and private developments.	×	×	×	×	×	×	×	×	×	×	×	×	×	×
POLICY TR10: Designs for all future road construction and improvements shall consider opportunities for the inclusion of BIKE LANES within the project. Particular attention should be given to priority bikeway facility needs as submitted for inclusion in the State Transportation Improvement Program.	×	×	×	×	×	×	×	×	×	×	×	×	×	×
<u>POLICY TR11</u> : ACCESS TO HIGHER INTENSITY DEVELOPMENT shall generally not be permitted through an area of lower intensity development. For example, access to a multi-family development, a major park facility or other large traffic generator shall not be permitted through a local street serving a single-family residential neighborhood.	•	•	•	•	•	•	•	•	•	•	•	•	•	•
POLICY TR12: New residential developments shall provide for the installation of PAVED PUBLIC ROADWAY AND DRAINAGE INFRASTRUCTURE at the time of development. This policy is intended to prevent the creation of substandard developments that must later correct for infrastructure problems that could have been avoided, had they been installed properly from the beginning. Family subdivisions and non-asphalt roads serving the northern beaches are the only exceptions to this policy.	•	•	•	•	•	•	•	•	•	•	•	•	•	•

$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	POLICIES SUGGESTING REGULATORY ACTION	Α	RA	R	RO1	RO2	RR	GB	С	LBH	LM	НМ	PUD	PRD	RMF
In IIIs relief to US 158, to improve entregency access to and execution from the Curritok. Our Banks, to provide better access to public and private services not reality automation on the Outer Banks, to provide better access to public and private services to reality automation of the Outer Banks, to provide better access to public and private services to reality automation of the Outer Banks, to provide the construction of the Outer Banks, to provide the construction of the Outer Banks, to provide Banks, the Outer Banks, the	POLICY TR13: A new MID-COUNTY BRIDGE between the														
secandia from the Currinck Outer Banks, to promote ecconomic development, and to provide better access to point of the pointing better access to point the first intervention of the pointing better access to point the first intervention of the pointing better access to point the currice of the pointing better access to point the currice of the pointing better access to point the currice of the pointing better access to point the currice of the pointing better access to point the currice of the pointing better access to point the currice of the pointing better access to point the currice of the pointing better access to point the currice of the pointing better access to point the currice of the pointing better access to point the currice of the pointing better access to point the currice of the pointing better access to point the currice of the pointing better access to point the currice of the pointing better access to point the currice of the pointing better access to point the currice of the pointing better access to point the currice of the pointing better access to point the currice of the pointing better access to point the currice of the pointing better access to point the currice of the pointing better access the point the access the point the access the pointing better access the point the pointing better access the point the pointing better access the pointing better access the point the p	mainland and Corolla shall be supported to provide critical														
$ \begin{array}{c} \begin{array}{c} \begin{array}{c} construct development, and ro provide better access in public and private services and reality analysis on the othig etc. g. Applied, Caucheskin, the real etal graph of the bridge C.g. Applied, Caucheskin, the real etal graph of the bridge C.g. Applied, Caucheskin, the real etal graph of the bridge C.g. Applied, Caucheskin, the real etal graph of the bridge C.g. Applied, Caucheskin, the real etal graph of the bridge C.g. Applied, Caucheskin, the real etal graph of the bridge C.g. The transportation of the construction of the NEW of the Caucheskin of the construction of the NEW of the Caucheskin of t$	traffic relief to US 158, to improve emergency access to and														
and private services not reality available on the Outer Ranks $[-1]$ $[$															
To protect the character of communities near the bridge (e.g., Apdiet, Currents bland, Popel Teams), the root leading to the bridge shall have no access points herine is intersection with US 183. Polary TRIS TRANGER TABLE STATES AND ADDED TO NC 12 shall projected traffic or and none frame or and no															
Aydier, Churches Island, Poplar Branch), the road leading to the hidge shall have no access points before its intersection with US 158. <ul> <li>DOLKYTRLE Plans for MROVEMENTS TO NC 12 shall be an integral part of the transport means that NC POLKYTRLE Plans for MROVEMENTS TO NC 12 shall be an integral part of the transport plans.</li> <li>POLKYTRLE Plans for MROVEMENTS TO NC 12 shall be an integral part of the transport plans.</li> <li>POLKYTRLE Plans For MROVEMENTS TO NC 12 shall be an integral part of the transport plans.</li> <li>POLKYTRLE Plans For MROVEMENTS TO NC 12 shall be an integral part of the transport plans.</li> <li>POLKYTRLE Plans For MROVEMENTS TO NC 12 shall be an integral part of the transport plans.</li> <li>POLKYTRLE Plans For MROVEMENTS TO NC 12 shall be an integral part of the transport of a sin second plans.</li> <li>POLKYTRLE Plans CURRITUCK SOUND FRRY SYSTEM shall continue to lobby for the construction of a NEW.</li> <li>POLKYTRLE Plans Current the second plans the transport of a sin part and transport of a sin and plans the transport of a sin more transport of a sin and plans the transport of sin more plans the transport of sin and plans the transport of a sin and plans the transport of the transport of a sin and plans the transport plans to an inflast the angle plans the transport of a sin and plans the angle plans the transport of the transport and sin and plans the transport of a sing of the transport and sing of the transport of a sing of the</li></ul>		-	-	-	-	-	-	-	-	-	-	-	-	-	-
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with US 158.	Aydlett, Churches Island, Poplar Branch), the road leading to														
IPOLICY TR14-Plans for MPROVEMENTS TO NC 12 shall	the bridge shall have no access points before its intersection														
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instific to add from the Currinck Outer Banks.															
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projected traffic volumes in 2016. To avoid this, Curritude															
Coursy shall continue to lobby for the courstruction of a NEW NCI 168 (MOYOCK) BYPASS.       Image: Course of the CURRITUCK SOUND FERRY SYSTEM shall continue to be supported as an essential transportation service between the mainland and Knotts Island															
NC 168 (MOYOCK) BYPASS:	projected traffic volumes in 2016. To avoid this, Currituck	-	_	-	-	-	-	-	-	-	-	-	-	-	-
POLICY TR16       The CURRITUCK SOUND FERRY         SYSTEM shall continue to be supported as an esential transportation service between the mainland and Knotts Island       -	County shall continue to lobby for the construction of a NEW														
SYSTEM shall continue to be supported as an essential transportation service between the mainland and Kototi Island       -	NC 168 (MOYOCK) BYPASS.														
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and the mainland and Corolla.  <															
POLECY TR17: Currluck County is not served by an interstatic highway. The relative remotences of the County makes it attractive for many, inconvenient for others. The CURRITUCK COUNTY AIRPORT shall continue to be supported as an important means of alternative transportation for those traveling greater distances.       -<	transportation service between the mainland and Knotts Island	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Iand is particularly well suited for development and (4) away         from environmentally sensitive areas, such as areas with         extensive wetlands or the northern beaches of the Outer	provision of all public services more efficient, (3) where the		Δ		Δ			Δ		Δ	Δ	Δ	Δ	Δ	Δ
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Banks.	extensive wetlands or the northern beaches of the Outer														
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POLICIES SUGGESTING REGULATORY ACTION	Α	RA	R	RO1	RO2	RR	GB	С	LBH	LM	НМ	PUD	PRD	RMF
POLICY WS4: Currituck County endorses utilities extension policies that avoid those parts of the county best suited for agriculture and to PROTECT FARMLAND FROM														
DEVELOPMENT PRESSURES brought about by such utilities. Exceptions to this policy may include extensions for major economic development initiatives, and extensions to address imminent public health problems or related	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
environmental hazards. POLICY WS5: Currituck County may ASSIST IN THE														
EXPENSE OF EXTENDING WATER AND SEWER services when such assistance (1) will result in the development of desirable new or expanded industry and the creation of permanent jobs in numbers commensurate with the expenditure required, (2) will result in a positive payback to the county's taxpayers, in terms of the taxes generated by the new industry versus the costs incurred, (3) would not otherwise be provided, potentially playing a critical role in a location decision by the prospective industry, and would not result in a significant degradation of environmental quality. <u>POLICY WS6</u> : Currituck County endorses the proper use and	-	-	-	-	-	-	-	-	-	-	-	-	-	-
maintenance of APPROVED SEPTIC SYSTEMS in suitable soils as an environmentally acceptable means of treating and dispersing waste from low-density development.	•	•	•	٠	•	•	•	•	٠	•	•	•	•	•
POLICY WS7: Currituck County allows for the appropriate use of PACKAGE SEWAGE TREATMENT PLANTS as a means of achieving more efficient land use, while properly disposing of waste. Such systems shall have a permanent organizational ownership to guarantee their proper management, including operation, maintenance and replacement needs. Depending on their location in the county, such systems may be required to have a design that allows for	•	•	•	•	•	•	•	•	•	•	•	•	•	•
assimilation into a centralized system at a future date. <u>POLICY WS8</u> : CENTRAL AND PACKAGE TREATMENT PLANTS shall be designed using best available technology to eliminate or reduce odors. In addition, such plants shall be properly located so as not to adversely impact nearby land uses.	•	•	•	•	•	●	•	•	•	•	•	•	•	•
<u>POLICY SF1</u> : Currituck County shall support and actively engage in ADVANCED PLANNING FOR THE LOCATION OF NEW SCHOOLS. Such locations shall serve to reinforce contiguous growth patterns near existing developments rather than promoting sprawl in more rural locations. New schools shall be viewed as a cornerstone of the communities in which they are located and shall serve to proactively influence growth.	-	-	-	-	_	_	_	-	_	-	-	-	_	-
<u>POLICY SF2</u> : Currituck County encourages OFFERS OF LAND FOR THE SITING OF NEW SCHOOLS, particularly in conjunction with related community development. Acceptance of such properties shall be based on approved location and design criteria.	•	•	•	•	•	•	•	•	•	•	•	•	•	•
POLICY SF3: Site planning for TRAFFIC MANAGEMENT AND SAFETY IN THE VICINITY OF PUBLIC SCHOOLS shall be a priority.	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
POLICY SF4: Currituck County shall continue to support a service level policy for schools that calls for the construction and maintenance of classroom space sufficient to AVOID THE USE OF MOBILE CLASSROOMS.	•	•	•	•	•	●	•	•	•	•	•	•	•	•
<u>POLICY PR1</u> : Future park development and open space preservation shall provide for the rational DISTRIBUTION OF RECREATION AND OPEN SPACE opportunities within the County.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
POLICY PR2: In determining FUTURE SITES FOR PARK, RECREATION AND WATER ACCESS FACILITIES, multiple objectives for natural area conservation, visual enhancement, preservation of cultural and historic resources, and watershed and flood prone area protection shall be considered.	-	-	-	-	-	-	-	-	-	-	-	-	-	-

POLICIES SUGGESTING REGULATORY ACTION	Α	RA	R	RO1	RO2	RR	GB	С	LBH	LM	НМ	PUD	PRD	RMF
POLICY PR3: Currituck County shall continue to work				_	_		_	-				_		
cooperatively with the County school system to maximize the														
use of RECREATION FACILITIES LOCATED AT PUBLIC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SCHOOL SITES, and to foster the joint development of														
additional public park facilities at new public school sites. <u>POLICY PR4</u> : The County shall seek to identify, plan for and														
develop a system of OPEN SPACE GREENWAYS, HIKING														
and BIKING TRAILS as opportunities may allow. The use of														
(1) natural corridors such as streams and floodplains, and (2)	×	×	×	×	×	×	×	×	×	×	×	×	×	×
man-made corridors such as utility and transportation rights-														
of-way and easements, shall be emphasized.														
POLICY PR5: LAND ACQUISITION for new park,														
recreation, and open space sites in advance of need shall be										_				
encouraged to achieve desirable locations at cost effective	-	-	-	-	-	-	-	-	-	-	-	-	-	-
levels.														
POLICY PR6: All new residential development shall provide														
for ADEQUATE OPEN SPACE AND RECREATION														
IMPROVEMENTS including, as may be appropriate, funding in proportion to the demand created by the development. The														
amount of open space and improvements may be determined	_	_	_	_	_	_								
according to the number of dwelling units in the development	•	•	•	•	•	•	-	-	-	-	-	•	•	•
and/or by a percentage of the total acreage in the														
development. Fees in lieu of land dedication shall be based on														
the inflation adjusted assessed value of the development or														
subdivision for property tax purposes.														
POLICY PR7: New park and recreation facilities, as well as														
improvements to existing facilities, shall give special	×	×	×	×	×	×	-	-	-	-	-	×	×	×
consideration to the needs of HANDICAPPED PERSONS.														
POLICY PR8: New mixed use developments, office and business parks, and other non-residential areas shall be														
encouraged to include WALKWAYS WITHIN THE	×	×	×	×	×	×	×	×	×	×	×	×	×	×
DEVELOPMENT.														
POLICY SW1: Currituck County belongs to the Albemarle														
Regional Solid Waste Management Authority. Local area														
needs for solid waste collection and disposal shall continue to														
be met through advanced, cooperative, REGIONAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PLANNING between the County and other member														
governments participating in the Authority.														
POLICY SW2: The County shall continue to pursue a variety														
of WASTE REDUCTION STRATEGIES, including waste	-	-	-	-	-	-	-	-	-	-	-	-	-	-
prevention, recycling and reuse. <u>POLICY SW3</u> : Currituck County encourages residential														
COMPOSTING AND MULCHING, as well as approved,														
large-site processing and recycling of organic materials, yard	-	-	-	-	-	-	-	-	-	-	-	-	-	-
waste and storm debris in volume.														
POLICY SW4: Currituck County supports EDUCATION and	İ						1	1		1				
activities that reduce litter and illegal dumping, foster clean														
up of dumpsites, promote recycling and reuse, and encourage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
participation in programs such as Adopt-A-Highway and the														
Governors Litter Sweep.														
POLICY SW5: Currituck County shall enforce harsh penalties														
against those who would seek to DUMP TRASH ILLEGALLY or improperly dispose of JUNKED CARS or	-	-	_	_	_	_	-	-	-	-	_	-	-	_
other debris.														
<u>POLICY SW6</u> : Currituck County supports solid waste														
program FINANCING STRATEGIES that reasonably assess														
the costs of waste collection and disposal in accordance with	-	_	_	_	_	_	_	-	_	_	_	_	_	_
the amount of waste each generator produces, while at the														
same time discouraging illegal dumping.														
POLICY SW7: Currituck County waste														7
CONVENIENCE/COLLECTION AND RECYCLING	_	_	_	_	_	_	_	_	_	_	_	_	_	
CENTERS shall continue to be designed, located, improved	-	-	-	-	-	_	-	-	-	-	-	-	-	
and maintained to facilitate their use.										L				

POLICIES SUGGESTING REGULATORY ACTION	Α	RA	R	RO1	RO2	RR	GB	С	LBH	LM	НМ	PUD	PRD	RMF
POLICY SW8: Some portions of Currituck County may be				-	_		_	_				_		
provided with DOOR TO DOOR TRASH PICK UP, based														
upon the characteristics of each area and the most appropriate														
means of assuring proper management of waste. The Corolla	_	_	_	_	_	_	_	_	_	_	_	_	_	_
area of the Outer Banks, with a highly transient rental population, is an example of an area suitable for door-to-door														
service. Knotts Island, which is far less transient and more														
sparsely developed, is not.														
POLICY PP1: The County shall support and actively engage														
in LONG RANGE PLANNING AND BUDGETING FOR														
CAPITAL FACILITIES, with particular emphasis on water	_	_	_	_	_	_	_	_	_	_	_	_	_	_
supply, public schools, parkland, storm water management	-	-	-	-	-	-	-	-	-	-	-	_	-	-
facilities, public safety buildings and equipment, and other necessary facilities.														
POLICY PP2: Currituck County shall continue to implement														
a policy of ADEQUATE PUBLIC FACILITIES, sufficient to														
support associated growth and development. Such facilities	•	•		•	•	•			•	•	•			
may include but not be limited to water supply, school	•	•	•	•	•	•	•	•	•	•	•	•	•	•
capacity, park and open space needs, fire fighting capability,														
and law enforcement.														
POLICY PP3: The costs of infrastructure, facilities and														
services (e.g. schools, parks, water supply, etc.) related to the														
DEMAND CREATED BY NEW GROWTH AND DEVELOPMENT shall be borne, in equitable proportion, by														
those creating the additional demand. So as to lessen the	×	×	×	×	×	×	×	×	×	×	×	×	×	×
burden on the general property tax payer, this approach may														
include a land transfer tax, impact fees on new development,														
upzoning fees, and user fees for new facilities.														
POLICY NH1: The County recognizes the risks to life and														
property that exist within SPECIAL FLOOD HAZARD														
AREAS (i.e. areas having a 1% chance of flooding in any														
year) that may be inundated during major storm events. The County will continue taking measures to mitigate these risks	•	•	•	•	•	•	•	•		•	•	•	•	•
and will avoid taking any action in these areas that materially														
increases risks to life and property.														
POLICY NH2: The County shall require development and														
redevelopment within SPECIAL FLOOD HAZARD AREAS														
to meet the standards of the National Flood Insurance														
Program and the County's Flood Damage Prevention	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Ordinance. Particular attention shall be given to development in VE (i.e. velocity wave) zones concerning standards for														
breakaway walls, no land disturbing activities, and no														
permanent enclosures below the base flood level.														
POLICY NH3: New PUBLIC FACILITIES AND	1		1				1							
STRUCTURES, as well as improvements to existing pubic														
facilities and structures, shall be located and designed to														
mitigate natural hazards. When placement in a natural hazard	-	-	-	-	-	-	-	-	-	-	-	-	-	-
area is unavoidable, compliance with the National Flood Insurance Program and County Flood Damage Prevention														
Ordinance shall be required.														
POLICY NH4: The County shall periodically update and	İ —					1			-	1	1	1	1	
enforce a HAZARD MITIGATION PLAN that addresses the														
full range of natural hazards facing the county. Continuation														
of the COBRA (Coastal Barriers Resource Act) zone,	_	_	_	_	_	_	_	_	_	_	_	_	_	_
particularly as applied to RO-2 zoned areas (Carova, off-road	-		-	-	_		-	_	-			-		_
area) of the county, shall continue to be supported. The plan shall meet the standards of the NC Division of Emergency														
Management and FEMA.														
<u>POLICY NH5</u> : The County shall work in an on-going basis to														
improve its COMMUNTIY RATNG SYSTEM (CRS)														
SCORE to make the county safer and to reduce premiums for	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal Flood Insurance.														
POLICY NH6: The County shall make EMERGENCY														
EVACUATION a priority in the development and approval of	-	_	_	_	_	_	_	_	_	_	_	_	_	_
transportation plans and improvements included in the NC DOT Transportation Improvement Program.														
DOT Hansportation improvement i logiani.						1	I	1		I	I	I	1	

POLICIES SUGGESTING REGULATORY ACTION	Α	RA	R	RO1	RO2	RR	GB	С	LBH	LM	НМ	PUD	PRD	RMF
POLICY NH7: Currituck County supports BEACH														
PRESERVATION AND RESTORATION methods as														
recommended by current research completed by the UNC Sea	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Grant Program. Generally, non-hardened, and therefore less environmentally damaging approaches to shoreline														
stabilization, shall be preferred.														
POLICY NH8: Currituck County encourages owners of														
PROPERTIES ALONG ESTUARINE SHORELINES to														
employ the least hardened approach to shoreline stabilization	^	^	^	^	۸	Δ	^	^	Δ	^	^	Δ	Δ	^
(i.e. marsh grass favored over riprap favored over	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
bulkheading, etc.), provided that reasonable access is														
available to install the technology available.														
POLICY NH9: Currituck County encourages efforts to fully														
inform prospective real estate purchasers of the inherent	_	_	_	_	_	_	_	_	_	_	_	_	_	_
SHORELINE EROSION RISKS associated with oceanfront property.														
<u>POLICY NH10</u> : The County will continue public education														
efforts with respect to protecting property from hazards														
particularly flood and wind damage as well as construction	-	-	-	-	-	-	-	-	-	-	-	-	-	-
requirements related to the NFIP.														
POLICY WQ1: Currituck County's GROUND WATER														
RESOURCES shall receive a level of protection														
commensurate with their enormous value. Efforts shall be														
made to monitor the quantity and quality of groundwater	×	×	×	×	×	×	×	×	×	×	×	×	×	×
resources, with an eye toward preventing pollution, saltwater	~	~	^	~	~	~		^	~	~	~	~	~	~
intrusion, or excessive drawdowns. Particular attention shall														
be given to locations near water and sewer treatment plants														
and areas with concentrations of septic tanks.           POLICY         WQ2:         Currituck         County         supports         periodic														
reexamination of WATER QUALITY CLASSIFICATIONS														
(SA, SB, SC, etc.) with the objective of not just sustaining the	_	_	_	_	_	_	_	_	_	_	_	_	_	_
status quo but, rather, seeking to achieve higher water quality	-	_	-	-	-	-	-	-	-	-	-	-	-	-
conditions and associated ratings whenever possible.														
POLICY WQ3: Currituck County supports policies, plans and														
actions that help protect the water quality of the county's														
estuarine system by preventing SOIL EROSION AND	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SEDIMENTATION, and by controlling the quantity and														
quality of STORMWATER RUNOFF entering the estuary.														
POLICY WQ4: RUNOFF AND DRAINAGE from														
development, forestry and agricultural activities shall be of a quality and quantity as near to natural conditions as possible.														
Post-development runoff shall not exceed pre-development	•	•	•	•	•	•	•	•	•	•	•	•	•	•
volumes.														
POLICY WQ5: Development that preserves the NATURAL														
FEATURES OF THE SITE, including existing topography														
and significant existing vegetation, shall be encouraged.														
COASTAL AND NON-COASTAL WETLANDS shall not be														
considered part of a lot's acreage for the purpose of	×	×	×	×	×	×	×	×	×	×	×	×	×	×
determining minimum lot size or development density. Open														
space developments shall be encouraged to REDUCE														
IMPERVIOUS SURFACE AREAS associated with new development and redevelopment.														
<u>POLICY WQ6</u> : Currituck County supports the retention or														
preservation of VEGETATED BUFFERS along the edge of														
drainage ways, streams and other components of the estuarine	×	×	×	×	×	×	×	×	×	×	×	×	×	×
system as an effective, low cost means of protecting water		-	-	-		-	-		-	-			-	
quality.														
POLICY WQ7: The environmental benefits of properly														
designed, VEGETATED ROADSIDE DRAINAGE SWALES														
shall be recognized. Curb and gutter shall be reserved to	•	•	•	•	•	•	•	•	•	•	•	•	•	•
developments that are urban in character (i.e. less than 10,000 general fact lat give) and that are general by adapted														
square foot lot sizes) and that are served by adequate stormwater collection, retention and slow release facilities.														
stormwater concetton, retenuon and slow release racinties.		I		l			L	L		1			l	

development and maintance of a computed OCMPREHENSINE DANALOG PARKE and Finder AND ELOCH REAL PARKET DANALOG PARKET AND FLOOD MANACOMENT IT AN, including parket and from a company apport Courty, NOCI and property over cooperation in preventing and exolving summary proferences. PROLET Way: Conservation FUELOWS the offers of the Contract Not and Water Conservation District and the Contract Not and Water Conservation District and the Contract Not and Water Conservation District and the Contract Not and Water Conservation District and the Contract Not and Water Conservation District and the Contract Not and Water Conservation District and the Contract Not and Water Conservation District and the Contract Not and Water Conservation District and the Contract Not and Water Conservation District and the Contract Not and Water Conservation District and the Contract Not and Water Conservation District and the Contract Not and Not and the contract and the Water TREATMINT DISCHARCED WATER	POLICIES SUGGESTING REGULATORY ACTION	Α	RA	R	RO1	RO2	RR	GB	С	LBH	LM	НМ	PUD	PRD	RMF
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$POLICY CA2: A CANOPY OF STREET TREES shall be encouraged along all major highways in the County. This canopy may be implemented through the preservation of existing trees or the planting of trees that will reach substantial size at maturity. The preservation or planting of such trees shall be encouraged in the area immediately adjoining the right of way. \frac{POLICY CA3: LANDSCAPE IMPROVEMENTS at existing and new commercial developments, particularly as related to breaking up and softening the appearance of expansive parking areas, and absorbing storm water runoff, shall be required. \frac{POLICY CA4: SIGN POLICIES AND STANDARDS should be established and periodically updated to enhance community appearance and create a quality business image. A A A A A A A A A A A A A A A A A A A$															
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adjoining the right of way. $\square$															
$\frac{\text{POLICY CA3: LANDSCAPE IMPROVEMENTS at existing}}{\text{and new commercial developments, particularly as related to} \\ \text{breaking up and softening the appearance of expansive} \\ \text{parking areas, and absorbing storm water runoff, shall be} \\ \text{required.} \\ \frac{\text{POLICY CA4: SIGN POLICIES AND STANDARDS should}}{\text{be established and periodically updated to enhance} \\ \text{community appearance and create a quality business image.} \\ \Delta & \Delta & \Delta & \Phi \\ \text{Such standards may be tailored to achieve different} \\ \end{array} $															
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$\begin{array}{c c c c c c c c c c c c c c c c c c c $	breaking up and softening the appearance of expansive	×	×	×	×	×	×	×	×	×	×	×	×	×	×
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Such standards may be tailored to achieve different		Δ	Δ	Δ	•	•	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
		-		_											
aevelopment characters for different parts of the county.	development characters for different parts of the county.														

POLICIES SUGGESTING REGULATORY ACTION	Α	RA	R	RO1	RO2	RR	GB	С	LBH	LM	НМ	PUD	PRD	RMF
POLICY CA5: Currituck County recognizes that an attractive,														
less commercialized landscape, particularly along heavily														
traveled land and water routes, is essential to the tourist-based	•	•	•	•	•	•	•	•	•	•	•	•	•	•
economy of the area. The placement of additional BILLBOARDS AND OFF-SITE ADVERTISING SIGNS														
shall not be permitted in Currituck County.														
POLICY CA6: To foster an improved community appearance,														
promote public safety, and help prevent service outages, the		-			-									
placement of UTILITY WIRES UNDERGROUND shall be	•	•	•	•	•	•	•	•	•	•	•	•	•	•
encouraged in all public and private developments.														
POLICY CA7: The County shall continue to monitor the														
placement of COMMUNICATION AND OTHER TOWERS	•	•	•	•	•	•	•	•	•	•	•	•	•	•
in Currituck County, and shall take action as may be	-	-	-	•	-	-	-	-	•	•	•	-	•	•
determined necessary to regulate their design and location.														
POLICY CA8: The County shall not permit the INAPPROPRIATE USE OF MANUFACTURED OR SITE														
BUILT HOMES for storage; nor shall abandonment be	•	•	•	•	•	•	•	•	•	•	•	•	•	•
permitted without proper maintenance or disposal/demolition.														
POLICY CA9: The County shall not permit the establishment														
and operation of UNLICENSED JUNKYARDS. Similarly,				•					•					
JUNKED CARS shall not be permitted to remain in locations				-		-			-	-		-		
visible from any public right of way.					ļ		<u> </u>							
<u>POLICY CA10</u> : Organize or facilitate a program whereby														
JUNKED CARS MAY BE HAULED AWAY AND	•	•	•	•	•	•	•	•	•	•	•	•	•	•
RECYCLED at the least possible cost, if any, to the vehicle owners.														
POLICY CA11: LITTERING OF PUBLIC ROADSIDES,														
SHORELINES AND OTHER PROPERTIES, whether from														
individual "litterbugs", illegal dumping, or drivers of														
inadequately covered trucks, shall not be tolerated. The														
County supports programs that prevent litter, clean up	-	-	-	-	-	-	-	-	-	-	-	-	-	-
roadsides and shorelines, as well as fines that hold														
accountable those who would abuse the environment and														
denigrate the image of the area.														
POLICY HP1: Local efforts to identify, designate and preserve SITES, BUILDINGS AND DISTRICTS OF														
PARTICULAR HISTORIC SIGNIFICANCE shall be	×	×	×	×	×	×	×	×	×	×	×	×	×	×
supported.														
POLICY HP2: Multiple and appropriate ADAPTIVE REUSE	~	~	~	~	~	~	~	~	v	~	~	~	~	~
OF HISTORIC RESOURCES shall be encouraged.	×	×	×	×	×	×	×	×	×	×	×	×	×	×
POLICY HP3: Development of the TOURISM AND														
EDUCATIONAL POTENTIAL of the area's architectural,	×	×	×	×	×	×	×	×	×	×	×	×	×	×
historic and cultural resources shall be encouraged.														
POLICY HP4: The DESTRUCTION OF SIGNIFICANT														
ARCHITECTURAL, HISTORIC AND ARCHAEOLOGICAL RESOURCES in the planning area	×	×	×	×	×	×	×	×	×	×	×	×	×	×
shall be discouraged.														
POLICY HP5: DEVELOPMENT SITES CONTAINING					1		1	1					1	
SIGNIFICANT HISTORIC RESOURCES shall be								1						
encouraged to honor such resources within the design of their								1						
development proposals. Opportunities may include, for	×	×	×	×	×	×	×	×	×	×	×	×	×	×
example, incorporating such resources into common open														
space, donating such areas for tax credits, or making such areas available for acquisition and preservation														
areas available for acquisition and preservation. <u>POLICY HP6</u> : Economic development efforts shall encourage			<u> </u>											
the REVITALIZATION AND REUSE of currently unused or														
underutilized structures, sites and infrastructure in	-	-	-	-	-	-	-	-	-	-	-	-	-	-
appropriately located areas.														
POLICY HP7: The County, working in cooperation with non-			1											
profit groups and private organizations, shall seek to maintain		_	_	_		_		Ι.	_	_	_			
and restore the architectural and cultural HERITAGE OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VARIOUS "COMMUNITIES" in Currituck County.			<u> </u>					<u> </u>						
POLICY PS1: As the area grows, the County may establish strategically located SUBSTATIONS FOR PUBLIC														
SAFETY SERVICES (i.e. law enforcement, fire fighting and								1						
rescue), provided that sufficient resources can be made	-	-	-	-	-	-	-	-	-	-	-	-	-	-
available to properly staff and equip them.								1						
		•		-	•	•	•	•	-	•	•	•	•	

POLICIES SUGGESTING REGULATORY ACTION	Α	RA	R	RO1	RO2	RR	GB	С	LBH	LM	НМ	PUD	PRD	RMF
<u>POLICY PS2</u> : Currituck County shall support and encourage the development and improvement of FIRE FIGHTING SERVICES that enhance the security and safety of life and property, while resulting in the added benefit of lower property insurance rates. The need for additional fire stations or improvements to existing fire stations shall be examined annually to keep pace with the growth of the area.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
POLICY ML1: Currituck County recognizes the particular interest of residents and property owners in the Mainland Area in PRESERVING FARMLAND AND OPEN SPACE. The County shall exercise diligence in applying policies, plans and actions that will encourage compact growth and the preservation of farmland and open space in the Mainland Area.	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<u>POLICY ML2</u> : Currituck County supports efforts to establish a modern INDUSTRIAL PARK in the Mainland Area, developed in accordance with State approved standards and certifications.	-	-	_	_	-	-	-	-	-	-	-	_	-	-
<u>POLICY ML3</u> : The interests of Mainland Area residents in having ACCESS TO THE AREA'S OCEAN AND ESTUARINE WATERS shall be fostered through County actions to increase the number of additional public access sites at a rate commensurate with the population growth of the Currituck County. Included in the actions taken to increase public access shall be a consideration given to transportation needs, including boat docks and ferry services.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
POLICY ML4: Currituck County recognizes that the appearance and traffic moving function of the NC 168/ US 158 CORRIDOR is of exceptional importance to both the near term quality of life and long-term economic prospects for residents and property owners in the Mainland Area. The Transportation and Community Appearance policy sections of this plan shall be implemented to give priority to this issue.	×	×	×	×	×	×	×	×	×	×	×	×	×	×
POLICY OB1: Currituck County supports the provision of INFRASTRUCTURE (e.g. potable water) AND SERVICES (e.g. law enforcement officers) adequate to meet basic quality of life and public health and safety requirements of residents on the Outer Banks, while at the same not stimulating inappropriate intensive development in environmentally fragile, hazardous barrier island areas.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>POLICY OB2</u> : So as to minimize COMMERCIAL STRIP DEVELOPMENT and maximize the traffic moving capability of NC 12, Currituck County shall encourage commercial development to cluster at appropriate locations rather than dispersing along NC 12.	-	-	-	Δ	Δ	-	-	-	-	-	-	-	-	-
<u>POLICY OB3</u> : Currituck County recognizes that, on the Outer Banks in particular, "single family" homes are being built that accommodate 15, 20, 25 or more people. Thus, these LARGE RESIDENTIAL STRUCTURES are circumventing existing zoning laws that could not anticipate the advent of these building forms. Development regulations and project approvals shall therefore be based upon the actual nature of the structure rather than the label (e.g. single family) that may be attached to it.	-	_	_	×	×	_	-	_	_	-	-	_	_	-
<u>POLICY OB4</u> : Currituck County supports policies and actions that require the square footage, number of bedrooms, and/or occupancy levels of RESIDENTIAL STRUCTURES to be determined in proportion to lot size, as well as public health and safety issues concerning water supply and sewage disposal, fire safety, emergency services, parking, traffic loads during evacuations, etc.	-	-	-	×	×	-	-	-	-	-	-	-	-	-
<u>POLICY OB5</u> : Currituck County, through its actions and decisions, shall seek to preserve the historic character and heritage of the COROLLA VILLAGE area of the Outer Banks.	-	-	-	×	×	_	-	-	-	-	-	-	-	-

POLICIES SUGGESTING REGULATORY ACTION	Α	RA	R	RO1	RO2	RR	GB	С	LBH	LM	HM	PUD	PRD	RMF
POLICY OB6: Concerning the OFF-ROAD AREAS OF THE														
OUTER BANKS, Currituck County shall not permit or														
encourage the provision of growth-inducing facilities and	_	_	_	_	Δ	_	_	_	_	_	_	_	_	_
services to these areas, including for example, commercial							_			_				
services, centralized sewage treatment and hard surface roads.														
POLICY OB7: VEHICULAR ACCESS TO THE NORTH														
BEACHES (off-road area) shall not compromise the														
environmental integrity of wildlife refuges, the estuarine														
research reserve, other ecologically sensitive areas, or habitat	_	_	_	_	Δ	_	_	_	_	_	_	_	_	_
for wild horses. Structures or other man-made improvements	_		_		_	_	_	_	-	_	_	_	_	_
not specifically serving the public interest shall not be														
permitted to block vehicular access along the beach.														
POLICY OB8: In order to protect WILD HORSES, Currituck														
County shall not permit nor encourage the provision of hard					•									
surface roads in the off-road area of Carova.	-	-	-	-	•	-	-	-	-	_	-	-	-	-
POLICY OB9: LARGE HOMES ON OCEANFRONT LOTS	<u> </u>		<u> </u>											
IN THE OFF-ROAD AREA should be located as far west as														
possible. Structures should not be built forward of protective														
dunes, thereby impeding dune recovery. County minimum	-	_	_	_	Δ	-	-	_	-	-	-	_	-	-
setbacks may exceed CAMA minimum setbacks in ocean														
erodible areas. POLICY KI1: The need for ACCESS TO PUBLIC TRUST														
WATERS in the Knotts Island area shall be met through														
periodic improvements to existing public facilities. The	-	-	-	-	-	-	-	-	-	-	-	-	-	-
County also recognizes that private sector facilities may play														
a role in satisfying access needs to the water.														
POLICY KI2: Currituck County shall encourage NCDOT														
efforts to provide essential maintenance and improvements to	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ROADS AND ROADSIDE DITCHES serving the Knotts	_		_		_	_	_	_	_	_	_	_	_	_
Island Area, especially including the Marsh Causeway Bridge.														
POLICY KI3: Currituck County shall support efforts to														
improve community services in the Knotts Island area.														
Services which may warrant improvement include: (1) FIRE														
SERVICE, to address fire safety as well as reducing insurance	-	-	-	-	-	-	-	-	-	-	-	-	-	-
costs and (2) COMMUNICATIONS following major storm														
events (3) access to LIBRARY SERVICES, and (4) access to														
INDOOR RECREATION facilities.														
POLICY KI4: Currituck County shall not provide or														
encourage the provision of INFRASTRUCTURE OR														
UTILITIES that would foster greater development densities	-	-	-	-	-	-	-	-	-	-	-	-	-	-
on Knotts Island, including particularly, centralized sewage														
treatment services.														
POLICY KI5: Land use and zoning initiatives on Knotts														
Island shall give consideration to limiting	×	×	×	×	×	×	×	×	×	×	×	×	×	×
MANUFACTURED HOME (I.E. MOBILE HOME)	<b>^</b>	^	<b>^</b>	^		^	^	$\mathbf{}$	^	│ <b>^</b>	<b>^</b>	^	│ <b>^</b>	^
PLACEMENTS in this part of the county.														
"generally consistent"														
$\Delta$ "conditionally consistent"														
× "inconsistent"														
			_	"not	applicab	le								
					••									

As illustrated by the table above, the policies included in the Land Use Plan are by and large consistent with existing County regulations. There are some notable exceptions primarily related to transportation concerns, architectural standards, and overall site design criteria. The County anticipates consideration of ordinance amendments to address those inconsistencies.

APPENDIX G - Infrastructure Analysis			
Table A-3 Current Conditions			
LAND CLASSIFICATION	Conservation	Rural	Limited Service
	In general the most environmentally sensitive areas of the County. Majority is already protected by existing federal, state, and local regulations. Minimal single-family residential development at 1DU/3 Acres. Lot coverage limited to 30% and building height limited to 35 ft. Minimum lo size - 3 acres	Generally used for very low density residential development (1DU/3 Acres). Primarily in agricultural production or forestry. Nonresidential uses generally include services related to the farming industry. Lot coverage 30% and building height limited to 35 ft. Minimum lot size 3 acres	Generally low densi on a minimum 20,00 height.Nonresidentii with 30% lot covera nonresidential limite
<sup>1</sup> WASTEWATER/ WATER INFRASTRUCTURE (estimated at 200 gallons per day per household)	Served by individual on-site water and wastewater.	Served by individual water and wastewater	Sewer Services in the Carolina Village MH Moyock Commons Mill Run / Eagle Creat Maple Prison New Town Sewer S Water Service Main connections was inst remaining 92% (3,6
<sup>2</sup> TRANSPORTATION	Generally served by rural state maintained and private roads. Least traffic generation and therefore the highest level of service.	Generally served by rural state maintained and private roads. Least traffic generation and therefore the highest level of service.	Area is served prim Road, NC 168, and the County and on t
SCHOOLS (Using national averages for school age student generation, one can expect .4243 elementary students, .084 middle school students and .1568 high school students per household). It is essential to remember that all of these students will not be entering the school system at one time.			
RECREATION (using a standard of 15 acres per 1,000 residents)			
<sup>1</sup> The creation of this scenario is for an interim analysis only. Conditions may be different pending future development and redevelopment.			
<sup>2</sup> Level of Service (LOS) Data was unaviable for this analysis.			

nsity residential development (1DU/Acre); single-family detached dwellings 0,000 square foot lot. Generally 30% lot coverage, 35' building ential uses concentrated along the major corridors. Minimum lot size 20,000 erage and maximum 35 ft. building height. Maximum lot coverage for nited to 65% with 35 ft. height limit.

in the Mainland Subarea MHP (60,000 gpd capacity) ons Shopping Center (40,000 gpd capacity) Creek (350,000 gpd capacity)

er System (CDBG Grant) (15,000 gpd capacity) lainland - In 2002, there were 3,914 metered connections, 1% (10) of the institutional, 7% (289) of the connections were commercial, and the 3,615) were residential.

rimarily by major collectors and arterials including Tulls Creek Road, Aydlett and US 158. Level of Service is compromised primaily in the southern end of on the Outer Banks during the peak tourist season.

APPENDIX G - Infrastructure Analysis			
Table A-3 Current Conditions			
LAND CLASSIFICATION	Full Service	Moyock Area	Shawboro/Crawfo
APPROXIMATE LEVEL OF INTENSITY AND DENSITY	Generally low to medium density residential uses (1DU/Acre on the Mainland, 3 DUs/Acre in Corolla, and 120,000 sq.ft. lots in Carova). In both Carova and on the Mainland, there are some smaller previously platted lots. Primarily single-family detached dwellings with a small amount of attached and multi-family. Generally 30% lot coverage, 35' building height. Non residential uses generally located along the major corridors of NC168, US 158, and NC 12. Minimum lot size ~20,000 sq. ft.with 30% lot coverage and maximum 35 ft. building heigh with smaller lot sizes in PUDs on the Outer Banks. Maximum lot coverage for nonresidential limited to 65% with 35 ft. height limit.	Development densities currently range from 1 to 3 units per acre depending upon development type on lots ranging from 20,000 sq. ft. to 1 acre. The area is coming under increasing development pressure as a "bedroom community" for the Tidewater Area of Virginia. Heightened development interest in this area has brought with it pressure for more subdivisions, as well as the retail services that follow such development. Nonresidential uses are primarily service and retail based. 2000 Census population 4,647. Minimum lot size 20,000 with 30% lot coverage and maximum 35 ft. building height. Maximum lot coverage for nonresidential limited to 65% with 35 ft. height limit	
<sup>1</sup> WASTEWATER/ WATER INFRASTRUCTURE (estimated at 200 gallons per day per household)	Sewer Services in the Mainland Subarea Carolina Village MHP (60,000 gpd capacity) Moyock Commons Shopping Center (40,000 gpd capacity) Mill Run / Eagle Creek (350,000 gpd capacity) Maple Prison New Town Sewer System (CDBG Grant) (15,000 gpd capacity) Water Service Mainland - In 2002, there were 3,914 metered connections, 1% (10) of the connections was institutional, 7% (289) of the connections were commercial, and the remaining 92% (3,615) were residential.	The developing area of Moyock is served by County water. The area is still largely served by individual on-site septic however there are some individual developments served by community wastewater systems (Moyock Commons, Eagle Creek). Estimated water and wastewater flow ~ 356,000 gpd	Some areas are s area is served by flow ~ 127,000 gp
<sup>2</sup> TRANSPORTATION	Area is served primarily by major collectors and arterials including Tulls Creek Road, Aydlett Road, NC 168, and US 158. Level of Service is compromised primaily in the southern end of the County and on the Outer Banks during the peak tourist season. Connectivity and pedestrian circulation is lacking.	Major thoroughfares include NC 168 and Tulls Creek Road. NC 168 was recently improved to 5 lanes. Connectivity among developments and pedestrian circulation are limited. Level of service along the highway decreases during the height of the tourist season.	Served by NC 34, service is general
SCHOOLS (Using national averages for school age student generation, one can expect .4243 elementary students, .084 middle school students and .1568 high school students per household). It is essential to remember that all of these students will not be entering the school system at one time.		Elementary School Capacity - 1304; Remaining Seats302	
		Middle School Capacity - 1142; Remaining Seats - 80; High School Capacity - 1356; Reminaing Seats50	-
RECREATION (using a standard of 15 acres per 1,000 residents)			
<sup>1</sup> The creation of this scenario is for an interim analysis only. Conditions may be different pending future development and redevelopment.			
<sup>2</sup> Level of Service (LOS) Data was unaviable for this analysis.			

rural; contains some of the best, most extensive agricultural lands in the at development density is 1 unit per 3 acres; primarily single-family ctures on 3 acre lots. 2000 census population 1,662. Lot coverage 30% eight limited to 35 ft. Minimum lot size 3 acres. Maximum lot coverage for limited to 65% with 35 ft. height limit.

re served by County water however the majority of development in the by individual on-site water and septic. Estimated water and wastewater g gpd

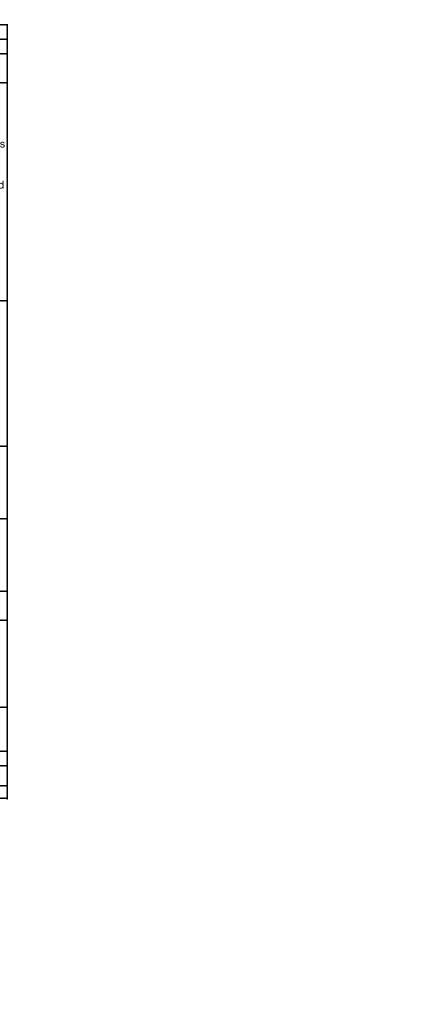
34, US 158, and NC 168 as well as a system of rural local roads. Level of erally high.

APPENDIX G - Infrastructure Analysis			
Table A-3 Current Conditions			
LAND CLASSIFICATION	Courthouse Area	Barco/Coinjock/Airport Area	Intersection of Propose
APPROXIMATE LEVEL OF INTENSITY AND DENSITY	The Courthouse area of the mainland has been the traditional governmental center of Currituck County. Development densities range from 1 to 2 units per acre on lots ranging from 20,000 sq. ft. to 40,000 sq. ft. In addition to the old original courthouse, the area also contains the new Currituck County Governmental Center, a fire/EMS station, an elementary school, other County offices, and the mainland ferry landing. Several small businesses also operate within the area. Estimated population ~1500. Minimum lot size 20,000 with 30% lot coverage and maximum 35 ft. building height. Maximum lot coverage for nonresidential limited to 65% with 35 ft. height limit.	Sparsely developed (approximately 1 unit per acre) on lots averaging 40,000 sq. ft. This area also includes an elementary school, a middle school and a high school, the airport, the landfill/transfer station, the Sheriff's office and jail, a County Park, a fire/EMS station, and a water treatment plant. A number of small businesses are also located within the area. Compared to many areas of the mainland, this area has a significant amount of land that is not in wetlands. 2,500. Minimum lot size 20,000 with 30% lot coverage and maximum 35 ft. building height. Maximum lot coverage for nonresidential limited to 65% with 35 ft. height limit.	Largely undeveloped. approximately 1 unit pe this location runs along ridge of higher ground. size 20,000 with 30% lo height. Maximum lot co with 35 ft. height limit.
<sup>1</sup> WASTEWATER/ WATER INFRASTRUCTURE (estimated at 200 gallons per day per household)	The area is served by County water and individual on-site septic. Estimated water and wastewater flow ~ 114,942 gpd	Served by County water and individual on-site septic.	County water generally septic.
<sup>2</sup> TRANSPORTATION	The area is bisected by NC 168 and is served by a system of private and public local roads. Level of Service is compromised during the tourist season.	At the intersection of US 158 and NC 168. As with most of the County the level of service is lower at specific times during the tourist season.	Located along US 158 a proposed Mid-County B
SCHOOLS (Using national averages for school age student generation, one can expect .4243 elementary students, .084 middle school students and .1568 high school students per household). It is essential to remember that all of these students will not be entering the school system at one time.			Elementary School Cap
RECREATION (using a standard of 15 acres per 1,000 residents)	Maple Park - 1 major pavilion with restrooms and grills 1 baseball/softball field; 1 tot lot playground; 4 gazebo picnic shelters with grills; 2 volleyball courts; 1 badminton court; 2 horseshoe pits; 1 fitness trail; 1 concrete walking trail; 1 skate park; also, horse trails, hiking trails, and a fishing lake		Veterans' Memorial Par Coinjock includes: 1 pavilion (20' waterfront boardwalk wi with plaque and flags
<sup>1</sup> The creation of this scenario is for an interim analysis only. Conditions may be different pending future development and redevelopment.			
<sup>2</sup> Level of Service (LOS) Data was unaviable for this analysis.			

sed Mid-County Bridge and US Highway 158
<ul> <li>d. Current development density is per acre on a mix of lot sizes. Highway 158 at ng a relatively narrow, north-south running d. Estimated populaiton ~ 1000. Minimum lot o lot coverage and maximum 35 ft. building coverage for nonresidential limited to 65% t.</li> </ul>
lly available; served by individual on-site
8 and the location of the intersection of the / Bridge and US Highway 158.
apacity - 565; Remaining Seats136
Park, located on the Intracoastal Waterway in
20'X28') with grills; 1 horseshoe pit; 1 with fishing deck; also, a Veteran's Memorial ;

APPENDIX G - Infrastructure Analysis		
Table A-3 Current Conditions		
LAND CLASSIFICATION	Aydlett and Waterlily/Churches Island	Grandy
APPROXIMATE LEVEL OF INTENSITY AND DENSITY	The communities of Aydlett, Waterlily and Churches Island offer some of the most attractive areas for development on the mainland of Currituck County. Situated atop an ancient, north-south running ridge of relatively high and dry ground, these areas directly abut the western shoreline of Currituck Sound, with very little intervening marsh. Home sites have panoramic views across the sound to the Outer Banks. It is not surprising, then, that these areas are among the most attractive for new residential development and redevelopment. In recent years, as the value of the land here has dramatically increased, older smaller homes have begun to be replaced by much larger structures. Existing zoning in these areas calls for 40,000 square foot lots or a density of 1 unit per acre. There is little or no commercial development in these areas. estimated population ~ 1000. Minimum lot size 20,000 with 30% lot coverage and maximum 35 ft. building height. Maximum lot coverage for nonresidential limited to 65% with 35 ft. height limit.	Grandy is the second fastest growth area in Currituck County, second only to the Moyock area. Existing development density is approximately 1 to 2 units per acre with a fair amount of nonresidential development as well. Despite a fairly lengthy commute to the Outer Banks (compared to Point Harbor, for example), Grandy is nonetheless the home of many workers who provide services to the predominantly residential areas of the Outer Banks. Grandy is also emergin as a distinct service center in the southern part of mainland Currituck County, though not to the same degree as the Point Harbor area. Housing in the Grandy area is still relatively affordable, although escalating real estate prices throughout much of Currituck County threaten to place home even in this area out of the reach of some workers. In addition, the advent of the proposed Mid- county Bridge will undoubtedly strengthen Grandy's position as a service area for the Outer Banks of Currituck County. Estimated population ~ 2,500. Minimum lot size 20,000 with 30% lot coverage and maximum 35 ft. building height. Maximum lot coverage for nonresidential limited to 65% with
<sup>1</sup> WASTEWATER/ WATER INFRASTRUCTURE (estimated at 200 gallons per day per household)	County water generally available; served by individual on-site septic.	County water generally available; served by individual on-site septic with some communities serve by community sewer.
<sup>2</sup> TRANSPORTATION	Served by a system of local roads and minor collectors feeding into US 158.	Served by a system of local roads and minor collectors feeding into US 158.
SCHOOLS (Using national averages for school age student generation, one can expect .4243 elementary students, .084 middle school students and .1568 high school students per household). It is essential to remember that all of these students will not be entering the school system at one time.		
RECREATION (using a standard of 15 acres per 1,000 residents)		Walnut Island Park, located at Walnut Island, Grandy Includes: 1 pavilion with grills; 1 tot lot playground
<sup>1</sup> The creation of this scenario is for an interim analysis only. Conditions may be different pending future development and redevelopment.		
<sup>2</sup> Level of Service (LOS) Data was unaviable for this analysis.		

APPENDIX G - Infrastructure Analysis		
Table A-3 Current Conditions		
LAND CLASSIFICATION	Jarvisburg	Point Harbor
APPROXIMATE LEVEL OF INTENSITY AND DENSITY	Despite its favorable location relative to the Outer Banks, the Jarvisburg area has thus far remained largely rural in character with a development density of 1 unit per acre or less. Signs are emerging, however, that may soon bring considerable change to the area's heretofore bucolic landscape. Like the Grandy area, the Jarvisburg area is coming under increasing pressure for development. The same land characteristics that traditionally have made this area suitable for farming (cleared, relatively level land with man-made drainage), also make the area quite attractive for development. Currently, land speculation has become more commonplace in the Jarvisburg area, as optioned properties (closing often contingent upon rezoning), offer current owners purchase prices of three or four times their present value. Estimated population ~ 900. Lot coverage 30% and building height limited to 35 ft. Minimum lot size 3 acres. Maximum lot coverage for nonresidential limited to 65% with 35 ft. height limit.	community with a residential development density of approximately 1 unit per acre with a fair amount of nonresidential development. In addition to a range of housing prices, Point Harbor is today served by a variety of retail and other business establishments. As a result, residents of Point Harbor need not travel great distances to find most of the every day needs. At the same time, with convenience comes the potential for conflicts between land uses; the area must be watchful not to allow
<sup>1</sup> WASTEWATER/ WATER INFRASTRUCTURE (estimated at 200 gallons per day per household)	County water generally available; served by individual on-site septic.	County water generally available; served by individual on-site septic.
<sup>2</sup> TRANSPORTATION	Served by a system of local roads and minor collectors feeding into US 158. Confronted with level of service challenges during the tourist season.	Served by a system of local roads and minor collectors feeding into US 158. Confronted with level of service challenges during the tourist season.
SCHOOLS (Using national averages for school age student generation, one can expect .4243 elementary students, .084 middle school students and .1568 high school students per household). It is essential to remember that all of these students will not be entering the school system at one time.		
RECREATION (using a standard of 15 acres per 1,000 residents)	Sound Park, located in Harbinger Includes: 2 pavilions with grills and restrooms; 2 boat ramps; 1 boardwalk with 2 gazebos; 1 wildlife overlook on the Sound; 2 playgrounds; 1 paved walking trail; 2 baseball/softball fields; 2 volleyball courts; 2 multi-use playing fields	
<sup>1</sup> The creation of this scenario is for an interim analysis only. Conditions may be different pending future development and redevelopment.		
<sup>2</sup> Level of Service (LOS) Data was unaviable for this analysis.		



APPENDIX G - Infrastructure Analysis			
Table A-3 Current Conditions			
LAND CLASSIFICATION	Corolla	Carova	Knotts Islar
	this area will be determined less by new development on vacant lots and more by second and third generation redevelopment of lots already built upon. As the value of barrier island property has continued to escalate, the economic incentive for redevelopment of existing properties has heightened dramatically This means that older era beach cottages can be torn down and replaced by much larger and more massive residential structures. It also means that, as this phenomenon takes effect, the Corolla area will witness increases in impervious surface areas, greater demand for drinking water and wastewater treatment capacities, the need for more parking, greater traffic generation, and the need for greater fire flows to handle much larger, bulkier structures. Estimated population ~ 400. Minimum lot size 7500 sq. ft. with 30% lot coverage and maximum 35 ft. building height. Maximum lot coverage for nonresidential limited to 65% with 35 ft. height limit. Estimated Seasonal Population ~ 29,000	The Carova area is also called the "Off-Road" or "4 Wheel Drive" area of Currituck County. While current regulations require minimum lot sizes of 120,000 square feet (equivalent to about 1 unit per 3 acres), there are many pre-existing vacant lots, platted under the County's previous land use standards at 15,000 square feet per lot (equivalent to about 3 units per acre). This area has also been designated by the Federal government as a COBRA (Coastal Barriers Resource Act) area, meaning that no structure in this area is eligible for Federal flood insurance and no Federal money may be spent in this area that would stimulate development. Estimated population ~ 100. Lot coverage 30% and building height limited to 35 ft. Minimum lot size 3 acres. No nonresidential uses permitted. Est. Seasonal Population - 9,600	Knotts Islar therefore tr overland tra Currituck C areas of op existing dev services, in expressed i 1390. Lot c acres. Max limit.
gallons per day per household)	Served by a combination of county and community water and community sewer. SOBWS System connections– 1,100; Ocean Sands Water and Sewer District – 950; Corolla Light and Monteray Shores – 900. Currituck Club 350,000 GPD, Pine Island 250,000 GPD water and waste water.	Served by individual on-site water and septic.	Served by i
<sup>2</sup> TRANSPORTATION	Served by a system of local roads and minor collectors feeding into US 158. Confronted with level of service challenges during the tourist season.		Served by a ferry acces
SCHOOLS (Using national averages for school age student generation, one can expect .4243 elementary students, .084 middle school students and .1568 high school students per household). It is essential to remember that all of these students will not be entering the school system at one time.			Elementary
RECREATION (using a standard of 15 acres per 1,000 residents)			Knotts Islar Includes:1
			Senior Cen
<sup>1</sup> The creation of this scenario is for an interim analysis only. Conditions may be different pending future development and redevelopment.			
-			
<sup>2</sup> Level of Service (LOS) Data was unaviable for this analysis.			

sland and Gibbs Woods

sland and Gibbs Woods have several characteristics in common, and are e treated jointly here. First, both areas possess geographic positions and d transportation linkages that tie them as much to Tidewater Virginia as to k County. Second, they are very much residential in character, with vast open space, influenced in large measure, by extensive wetlands. The development density is 1 unit per 3 acres. The two areas have few s, in terms of both business and infrastructure, and the residents have ed no strong desire to change that. Population as of the 2000 census ot coverage 30% and building height limited to 35 ft. Minimum lot size 3 Maximum lot coverage for nonresidential limited to 65% with 35 ft. height

by individual on-site water and septic.

by a system of local and collector roads with bridge access to Virginia and cess to the Currituck mainland.

ary School Capacity - 219; Remaining Seats - 71

sland Ruritan Park, located on Brumley Road, Knotts Island and pavilion with grills and restrooms; 1 tot lot playground; Knotts Island Center is located next to the park

APPENDIX H - Infrastructure Analysis			
Table A-4 Projection for Maximum Density Buildout			
LAND CLASSIFICATION	Conservation	Rural	Limited Service
APPROXIMATE LEVEL OF INTENSITY AND DENSITY	Primarily land already protected. Development will be primarily residential in nature; single-family detached on large lots of a minimum if 3 acres. Lot coverage limited to 30% and building height limited to 35 ft. Only 2% of the total land area is expected to develop in the planning period. Est. Population - 1,200.	to 35 ft. Any nonresidential development should be agriculturally based. Of the developed area 97% is expected to be residential with 3% nonresidential. The remaining undeveloped area is expected to remiain in agriculture. Est. Population - 2,000.	Despite the overall low density of these areas, efforts should be made to encourage clusters of residential uses to preserve open space and to provide for a sense of a "community". Base development density should be 1 unit per acre but could be increased to 1.5 units per acre through overlay zoning depending upon whether service facilities are in place or planned and the potential mpact on the surrounding community. Minimum lot size ~ 20,000 with ~30% lot coverage and naximum 35 ft. building height. In the same instances where slightly higher density is considered appropriate a moderate mix of housing types such as semi-detached would also be considered easonable. With respect to nonresidential uses, it is essential that the existing community character be preserved. Design criteria should be established to ensure that commercial development protects and preserves the existing community in scale, architectural style, materials, landscaping, and site design. In general, neighborhood commercial uses are more appropriate than large scale commercial complexes.
			However, business designed to serve the tourist industry such as small gift shops or agri-tourism lelated uses should not be prohibited provided the character and intensity of the use is in keeping with the character of the surrounding area. Maximum lot coverage for nonresidential limited to 65% with 35 t. height limit. 65% expected to develop within planning period; 96.5% residential; 3.5% nonresidential. Est. Population - 12,000. Very limited municipal-type services, such as fire protection, emergency services, and community water, may be available, but centralized sewage collection and teatment systems whether public or community are not appropriate for these areas. Est. Seasonal Population - 7,000
WASTEWATER/WATER INFRASTRUCTURE	Vill continue to be served by individual on-site water and wastewater.	Vill continue to be served by individual on-site water on a wastewater.	Central water ~1.4 million gpd and individual on-site septic.
TRANSPORTATION -	Iraffic generation is anticipated to remain low and therefore a prigher level of service maintained.	rivate roads. Traffic generation is anticipated to emain low and therefore a higher level of service hould be maintained with the exception of areas long US 158 at defined times during the tourist eason.	As development comes on-line, level of service is likely to decrease. Emphasis on interconnectivity among local roads. Consider requiring traffic impact studies as part of the development review process to address level of service impacts. Much of the Limited Service Area is located along the US to 8 corridor where level of service is already compromised during the summer season. The projected crease in seasonal population coupled with the increae in year round population is likely to decrease evel of service along the highway further necessitating improvement to intersections as well as connectivity of secondary roads.
SCHOOLS (Using national averages for school age sudent generation, one can expect .4243 elementary sudents, .084 middle school students and .1568 high school students per household). It is essential to remember that all of these students will not be entering the school system at one time.	197 elementary school students; 39 middle school students; 73 high school students	424 elementary school students; 84 middle school students; 156 high school students	2,813 elementary school students; 556 middle school students; 1,039 high school students
RECREATION (using a standard of 15 acres per 1,000 residents)	Need for additional 15 acres of park area, likely to be provided by neighborhood recreation areas given the limited population density. Residents will also be served by community and regional parks located in the limited and full service areas.	Need for an additional 30 acres of park area, most of which will be served by neighborhood recreation areas given the limited population density. Residents will also be served by community and regional parks located in the limited and full service areas.	Need for an additional 400 acres of park area. Likely to be a mix of neighborhood and community parks.

APPENDIX H - Infrastructure Analysis		
Table A-4 Projection for Maximum Density		
Buildout LAND CLASSIFICATION	Full Service	Moyock Area
DENSITY	Areas designated as Full Service are those parts of the county where a broad range of infrastructure and service investments have been provided or will be made available by the public and/or private sectors. Infrastructure investments may include, for example, community level or centralized water, parks, schools, fire and rescue facilities. Central wastewater treatment and disposal whether public or community is considered reasonable in the Full Service Areas. With respect to residential development, base development density is contemplated to be 2 units per acre but could be increased to 3-4 units per acre through overlay zoning depending upon services available and the potential impact on the surrounding area. Minimum lot size ~10,000 sq. ft.with ~40% lot coverage and maximum 35 ft. building height. A greater diversity in housing types (i.e. semi-detached, attached, multi-family) would be considered appropriate in the Full Service areas.	Residential development densities should be medium to high depending upon ava where on-site wastewater is proposed and other County services are limited, deve limited to 1-2 units per acre. However in areas where central sewer is proposed o are available and the character of the surrounding areas supports it, higher density acre could be considered through the use of overlay zones. Clustered housing de required by ordinance, will need to be encouraged. If sewage treatment collection publicly or privately, all such systems should be designed so as to allow them to be system at some point in the future.
	With respect to nonresidential uses, it is essential that the existing community character be preserved. Maximum lot coverage for nonresidential limited to 65% with 35 ft. height limit. Design criteria should be established to ensure that commercial development protects and preserves the existing community in scale, architectural style, materials, landscaping, and site design. Nonresidential uses may include clusters of businesses serving the immediate area and, where appropriate, a more extensive market territory. Est. Population - 29,500. 80% expected to develop during planning period; 93.2% residential; 6.8% nonresidential. Some of the areas identified for Full Service also include prime farmland. In an effort to protect existing agricultural operations, efforts should be made to buffer them from encroaching development through the use of landscaping and conservation oriented design. Est. Seasonal Population - 7,000.	
	Residential County water ~4.8 million gpd. If sewage treatment collection systems are built, whether publicly or privately, all such systems should be designed so as to allow them to be tied together into a single system at some point in the future.	County water in full service and limited service areas. If sewage treatment collecti publicly or privately, all such systems should be designed so as to allow them to be system at some point in the future.
	As development comes on-line, level of service is likely to decrease. Emphasis on interconnectivity among local roads as well as pedesrian circulation. Consider requiring traffic impact studies as part of the development review process to address level of service impacts. Much of the Full Service Area is located along the US 158 corridor where level of service is already compromised during the summer season. The projected increase in seasonal population coupled with the increase in year round population is likely to decrease level of service along the highway further necessitating improvement to intersections as well as connectivity of secondary roads.	The proposed 168 Bypass will be needed to address the increased traffic loads pa area. Protections should be put in place before the Bypass is built so as to consen moving function of this new roadway. Appropriate land use controls and access m protecting the public's investment in the new roadway. A selected right of way corr consideration to avoiding existing home sites will be important. Traffic managemen roads will also need to receive attention.
SCHOOLS (Using national averages for school age student generation, one can expect .4243 elementary students, .084 middle school students and .1568 high school students per household). It is essential to remember that all of these students will not be entering the school system at one time.	10,352 elementary school students; 2,049 middle school students; 3,825 high school students	
RECREATION (using a standard of 15 acres per 1,000 residents)	Need for an additional 440 acres of park area. Likely to be a mix of neighborhood, community, and regional services.	

vailable services. In areas velopment density should be l or existing, additional services sity ranging from 3-4 units per developments, with open space on systems are built, whether be tied together into a single
ction systems are built, whether
be tied together into a single
passing into and through this erve the integrity and traffic management will be critical in
orridor that gives proper nent on secondary and local

APPENDIX H - Infrastructure Analysis			
Table A-4 Projection for Maximum Density			
Buildout			
LAND CLASSIFICATION	Shawboro/Crawford	Courthouse Area	Barco/Coinjock/Airport Area
	nearby residents. When residential development does occur, it should be	The policy emphasis of this plan is for the Courthouse area to continue to grow as a small community center therefore much of the area is considered Full Service and Limited Service. Given the existing cluster of services and local government functions here, and the sizable area of developable land adjoining the sound, it is likely that the Courthouse area will continue to see limited growth over the next decade. This growth is not apt to be as significant as in the Moyock area, where substantial numbers of workers will work in Tidewater Virginia but choose to live in Currituck County. Similarly, the completion of the proposed Mid-County Bridge will likely spawn the construction of some residences for workers commuting to jobs on the Outer Banks, but not to the same degree as in the Barco/Coinjock area. Even so, as Currituck County continues to grow, new residences will move into the Courthouse area, and a commensurate number of new businesses will likely follow. Residential development densities should be medium to high depending upon available services.	The policy emphasis of this plan is for area to emerge as the principal com- central area of the mainland and is the Service Area. Further, as the area of community center, the reciprocal nee- will feed off each other, adding even is the case with the Courthouse area encourage quality development and space in conjunction with development
	Small businesses serving the needs of a rural area (general store, farm supply, hardware, etc.) should be encouraged to locate at road intersections. Residential development density equal to or less than one unit per three acres is to be encouraged in the Shawboro/Crawford area and it has therefore been identified as a mix Conservation and Rural Areas on the Future Land Use Map. Private access subdivisions, which allow up to five one-acre lots to occur anywhere without review or input from the Planning Board or Farmland Preservation Board, are to be especially discouraged here.	sewer is proposed or existing, additional services are available and the character of the surrounding areas supports it, higher density ranging from 3-4 units per acre could be	Residential development densities si depending upon available services. wastewater is proposed and other C development density should be limite However in areas where central sew additional services are available and surrounding areas supports it, highe units per acre could be considered th zones.
WASTEWATER/WATER INFRASTRUCTURE	Will continue to be served by individual on-site water and wastewater.	County water in full service and limited service areas. If sewage treatment collection systems are built, whether publicly or privately, all such systems should be designed so as to allow them to be tied together into a single system at some point in the future.	County water in full service and limit treatment collection systems are buil privately, all such systems should be to be tied together into a single syste
		As development comes on-line, level of service is likely to decrease. Emphasis on interconnectivity among local roads as well as pedesrian circulation. Consider requiring traffic impact studies as part of the development review process to address level of service impacts.	Once the proposed Mid-County Brid, likely that this area will become a ma area for the Corolla and Carova area means that the area is apt to see a la built for workers commuting to const the Outer Banks.
SCHOOLS (Using national averages for school age student generation, one can expect .4243 elementary students, .084 middle school students and .1568 high school students per household). It is essential to remember that all of these students will not be entering the school system at one time.			
RECREATION (using a standard of 15 acres per 1,000 residents)			

for the Barco/Coinjock/Airport mmunity center serving the therefore included as a Full comes into its own as a distinct eeds of homes and businesses an more growth to the area. As ea, care should be taken to d the preservation of open nent approvals.
should be medium to high a. In areas where on-site County services are limited, ited to 1-2 units per acre. wer is proposed or existing, and the character of the the density ranging from 3-4 through the use of overlay
ited service areas. If sewage uilt, whether publicly or be designed so as to allow them tem at some point in the future.
idge is completed, it is quite najor new mainland service
eas of Currituck County. This large number of residences struction and service jobs on

APPENDIX H - Infrastructure Analysis			
Table A-4 Projection for Maximum Density			
Buildout			
LAND CLASSIFICATION	Intersection of Proposed Mid-County Bridge and US Highway 158	Aydlett and Waterlily/Churches Island	Grandy
APPROXIMATE LEVEL OF INTENSITY AND DENSITY	It is expected that wetlands will block commercial development from occurring at locations removed from the US 158 corridor. For these reasons the area is identified on the Future Land	and Churches Island to remain as low-density residential areas at 1 unit per acre. The area is a mix of Limited Service and Rural classifications on the Future Land Use Map. Generally, no centralized sewer services should be provided to these areas that would induce more intensive development; residences will continue to rely upon individual septic systems. While services that satisfy direct public health, safety and general welfare needs, such as fire protection, law enforcement, and emergency medical services are to be welcomed, no commercial development should be permitted in	The policy emphasis of this plan is to allow Grandy to further evolve as a community center in its own right and it is identified as a Full Service area on the Future Land Use Plan. Residential development densities should be medium to high depending upon available services. In areas where on-site wastewater is proposed and other County services are limited, developmen density should be limited to 1-2 units per acre. However in areas where central sewer is proposed or existing, additional services are available and the character of the surrounding areas supports it, higher density ranging from 3-4 units per acre could be considered through the use of overlay zones. Clustered housing developments, with open space required by ordinance, is encouraged. Given the existing development pattern and availability of services, much of the Grandy area is planned as Full Service. However, it should be noted that three (3) of the land use classifications are included in Grandy and the surrounding area.
			There are existing environmentally sensitive areas that cannot support higher density development and are therefore classified as Conservation Areas. In addition, it is not the County's intention to develop all of Grandy intensely but rather create specific service centers and to provide a buffer of Limited Service Areas at lower density development between Full Service Areas and those within the Conservation classification.
WASTEWATER/WATER INFRASTRUCTURE	County water in full service and limited service areas. If sewage treatment collection systems are built, whether publicly or privately, all such systems should be designed so as to allow them to be tied together into a single system at some point in the future.	Generally, no centralized sewer services should be provided to these areas that would induce more intensive development; residences will continue to rely upon individual septic systems.	If sewage treatment collection systems are built, whether publicly or privately, all such systems should be designed so as to allow them to be tied together into a single system at some point in the future.
TRANSPORTATION	The policy emphasis of this plan is for there to be no access from the bridge road into the Aydlett community, thereby protecting the community from unwanted commercial development. Rather, commercial development spawned by the bridge should be clustered just off US 158 north and south of the new intersection with the bridge road.	As development comes on-line, level of service is likely to decrease. Emphasis on interconnectivity among local roads as well as pedesrian circulation. Consider requiring traffic impact studies as part of the development review process to address level of service impacts. Aydeltt Road likely to emerge as a major collector.	As development comes on-line, level of service is likely to decrease. Emphasis on interconnectivity among local roads as well as pedesrian circulation. Consider requiring traffic impact studies as part of the development review process to address level of service impacts.
SCHOOLS (Using national averages for school age student generation, one can expect .4243 elementary students, .084 middle school students and .1568 high school students per household). It is essential to remember that all of these students will not be entering the school system at one time.			
RECREATION (using a standard of 15 acres per 1,000 residents)			

APPENDIX H - Infrastructure Analysis			1	
Table A-4 Projection for Maximum Density				
Buildout				
LAND CLASSIFICATION	Jarvisburg	Point Harbor	Corolla	Carova
APPROXIMATE LEVEL OF INTENSITY AND DENSITY	The policy emphasis of this plan is to allow the Jarvisburg area to accommodate quality residential development at low densities while preserving the rural landscape between such developments. Similar to the Grandy area, but at a lower overall density, new residential development should be encouraged to locate in compact, village like clusters, preferably near existing, non-agricultural activities and services. An example might be a new compact, walkable neighborhood of homes built near an existing or proposed church, school or compatibly designed general store. Residential development density can be higher than the truly expansive Shawboro/Crawford rural area, but still much less that the densities to be found in Grandy to the north or Point Harbor to the south. The area is encompassed both the Conservation and Limited Service classifications and an average density of 1 unit per acre is contemplated.	The policy emphasis of this plan is to allow the Point Harbor area to continue to evolve as a full service community, but with better attention to the planning needed to protect residential areas and the natural features that make the area so attractive. Policies and actions contained in the land use plan should work to: (1) preserve and enhance the roadside appearance of land uses along US 158, (2) place stricter controls over mining to assure that such operations do not adversely impact nearby areas, (3) cluster retail and other service businesses in carefully planned clusters, rather than encourage ordinary strip centers along the highway, (4) Require vegetated buffers around non-residential uses to protect existing and planned neighborhoods (5) Require vegetated buffers along shorelines to preserve public access and open space at the waters edge and to protect water quality in the sound (6) and coordinate with NCDOT for the strategic placement of traffic signals along US 158 in the Southern portion of the Mainland.	The policy emphasis of this plan is to allow for predominantly medium density residential development (2 to 3 units per acre) with minimal commercial development arranged in clusters. An overall density of no more than 3 units per acre should also apply to PUDs, the prevailing development form in the Corolla area. PUDs should also have a mandated 30% permanent open space requirement. Strip commercial development is to be avoided for both aesthetic as well as traffic moving considerations. Development and redevelopment should be capable of being supported by the area's infrastructure and services—particularly drinking water, sewage treatment, road capacity, parking areas, and required fire suppression capabilities. Development standards should recognize that massive residential structures, whether built as a "single family" structure or partitioned into multi-family condominiums, can be equally intense in terms of the number of occupants, number of cars, water consumed, traffic generated, etc.	The policy emphasis of this plan is to allow for very low to medium density (1 unit per 3 acres) residential development without infrastructure or service investments that could stimulate growth and development. In terms of infrastructure, this means that no centralized water and sewer services, public or private, will be approved and no hard surface roads will be allowed. Further, only services that protect the health, safety, and welfare (i.e. law enforcement, fire and rescue.) will be authorized. Commercial and other convenience services shall not be allowed. Est. Seasonal Population - 40,000
		Housing in the Point Harbor area should continue to reflect a range of housing types and prices with emphasis on single-family site-built homes. The majority of the area is included in the Limited Service and Conservation classifications which support densities ranging from 1 unit per 3 acres to 1 unit per acre. However, portions of the area currently evolving as full service community centers have been identified for Full Service contemplating development densities ranging from 1-1.5 units per acre where on-site wastewater is proposed and other County services are limited. Where central sewer is proposed or existing, additional services are available and the character of the surrounding areas supports it, density may be increased to 3-4 units per acre through the use of overlay zones. As with the Moyock and Grandy areas the Limited Service Area will act as a transition or buffer between the Conservation and Full Service Areas.	health and safety. Est. Seasonal Population - 50,000	
WASTEWATER/WATER INFRASTRUCTURE	Will continue to be served by individual on-site water and wastewater.	County water in full service and limited service areas. If sewage treatment collection systems are built, whether publicly or privately, all such systems should be designed so as to allow them to be tied together into a single system at some point in the future.	Will continue to be served by a combination of community and County water as well as community wastewater systems. The existing water plant can produce 2 mgd but is capable of being expanded for future growth. As development in Corolla continues such expansion will likely be warranted.	
TRANSPORTATION		As development comes on-line, level of service is likely to decrease. Emphasis on interconnectivity among local roads as well as pedesrian circulation. Consider requiring traffic impact studies as part of the development review process to address level of service impacts.	Level of service will continue to be a concern. Improvements to Route 12 in Dare and Currituck Counties will be imperative. The Mid-County Bridge will also be a priority. Continued emphasis on pedestrian circulation.	Will continue to be served by a system of unpaved roads. Maintenance of the roads will continue to be a concern as they are not within the public domain.
SCHOOLS (Using national averages for school age student generation, one can expect .4243 elementary students, .084 middle school students and .1568 high school students per household). It is essential to remember that all of these students will not be entering the school system at one time.				
RECREATION (using a standard of 15 acres per 1,000 residents)				

APPENDIX H - Infrastructure Analysis	
Table A-4 Projection for Maximum Density	
Buildout LAND CLASSIFICATION	Knotts Island and Gibbs Woods
APPROXIMATE LEVEL OF INTENSITY AND DENSITY	The policy emphasis of this plan is for developable areas of Knotts Island and Gibbs Woods to remain as low to very low density residential areas. This means predominantly 1 unit per 3 acres. In keeping with the wishes of the majority of residents in these two areas, no services or infrastructure should be provided that would serve as an inducement to more intensive development. Services that satisfy direct public health, safety and general welfare needs, such as fire protection, law enforcement, and emergency medical services should, however, be periodically evaluated and improved as necessary. Estimated Seasonal Population - 8,000
WASTEWATER/WATER INFRASTRUCTURE	Continue use of individual on-site well and septic.
TRANSPORTATION	Will continue to be served by a system of secondary roads with access to Virginia. Emphasis on continued maintenance on the road system. Continued ferry service to the Currituck Mainland.
SCHOOLS (Using national averages for school age student generation, one can expect .4243 elementar students, .084 middle school students and .1568 hig school students per household). It is essential to remember that all of these students will not be entering the school system at one time.	
RECREATION (using a standard of 15 acres per 1,000 residents)	

## Appendix I. MAPS

Map 1.1:	General Reference Map of Currituck County
Map 3.1:	Map of Areas of Environmental Concern
Map 3.2:	Soil Suitability for Septic Tanks Map
Map 3.3:	Water Quality Classes and Sub-Basins Map
Map 3.4:	Flood Hazard Areas Map
Map 3.5:	Fragile Areas Map
Map 3.6:	Environmental Composite Map
Maps 3.7-3.10:	Erosion Rate Maps
Map 4.1:	Existing Land Use Map
Map 5.1:	Water and Sewer Systems Map
Map 5.2:	Transportation Map
Map 6.1:	Land Suitability Analysis Map
Map 11.1:	Future Land Use Map (Land Use Classification Map)