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Introduction

Located along the eastern seaboard and bordering 85 miles of the Atlantic Ocean, Dare County is known as the “land of beginnings”. The nickname reflects Dare County’s historic role in the founding of the New World. Sir Walter Raleigh helped establish the first English speaking settlement in the New World on Roanoke Island in 1587. This settlement later disappeared due to unknown circumstances and even today is the subject of speculation about the fate of the “Lost Colony”.

In 1903, another historic first took place in Dare County, when the Wright Brothers launched the beginning of powered flight from the blowing sands near Kitty Hawk. The 100-year anniversary of this extraordinary feat will be celebrated in 2003.

Today, Dare County is recognized as one of the United States’ top vacation destinations thanks to our abundance of natural resources and historic past.

Dare County’s Land Use Plan

Since 1974, when the North Carolina General Assembly ratified the Coastal Area Management Act (CAMA), each of the local governments in the twenty county coastal region have been developing and updating land use plans. As part of the twenty county coastal region, Dare County has been developing land use plans since 1976. In addition to complying with the CAMA regulation, the land use plan is a tool for use by local officials and citizens as a guide to the future development of unincorporated Dare County. This edition, completed in 2003, seeks to provide a set of policy guidelines to manage growth and development in unincorporated Dare County over the next five years.

The 2002 Plan is divided into five sections. The first section contains demographic and economic information for Dare County and other data that were collected and analyzed as part of the update process. The second section addresses policies. It includes narrative discussions of land use issues, the policies chosen by the County to address these issues, and an implementation strategy or strategies that will be used to carry out the policies. The third section of the LUP describes the land classification designations used in unincorporated Dare County. Land classification maps, developed in conjunction with this update, reflect these designations and are found in Appendix E. Section Four discusses intergovernmental cooperation for this plan. Section Five contains information on public participation activities used during the update process. Finally, several appendices provide supporting data for the update. Collectively, these components combine to create a document that can be used by regulatory agencies, the business community, and individual citizens to determine what can be expected about land use in unincorporated Dare County for the next five years.

While the first section provides vital information and demographics about Dare County and its infrastructure, the policy statements contained in the second section are the essential component of the document. These policy statements reflect the intentions and goals of the Dare County officials concerning our natural resources and their protection, resource production and

management and the County's attitudes toward growth and development of our area. Accompanying these policy statements are implementation strategies that are recommended actions to carry out the stated position of the policies. These policies have been re-stated at the end of this executive summary for quick reference.

Section Three deals with the land classification system and associated maps. Each area of the County is assigned a land classification based on patterns of development and available infrastructure and/or utility services. The basis for these land classifications is provided by the CAMA legislation with some adjustment offered by Dare County in the form of sub-classes.

Although, this executive summary provides a general overview of Dare County's land use policies, users are referred to Section Two for a more detailed discussion of the issues and the selected policy statements. The land classification section and map should be consulted by individuals applying for CAMA major permits.

Future of Dare

Since the adoption of the Coastal Area Management Act in 1974, the first Dare County Land Use Plan in 1976, and all subsequent versions have featured several reoccurring themes. These themes include natural resource preservation; a focus on residential development as the preferred principal land use; commercial development that reflects the historic architectural patterns found in Dare County and the recognition of tourism's role in the economy of Dare County.

As Dare County and its incorporated municipalities evolved over the period from 1976 to 2003, the need for additional school facilities to meet the requirements of its growing student base has emerged as a priority issue. Transportation has also emerged as a priority issue as seasonal populations have exceeded 200,000 creating an urban-like atmosphere during the peak periods. Greater expenditures on public safety such as law enforcement, emergency medical and fire prevention are also needed during the months of seasonal population increases. These issues combine to present Dare County with the unique challenge of facilitating the needs of its seasonal populations while maintaining a high quality of life for its permanent residents. The policies of this latest version of the land use plan reflect an effort by the Dare County Board of Commissioners, the Dare County Planning Board, its Planning staff, and the citizens and non-residents property owners of Dare County to address this challenge.

Goals and Objectives

The following have been identified as goals and objectives of the update. These items have been written based on public input throughout the process and identified by Dare County as the direction which our community should move over the course of the next 5-10 planning period. General statements of the vision for Dare County are followed by more specific goals for resource protection, resource production and management, and growth and development.

General Vision Statements

1. Manage the growth and development in a manner that preserves the historical, cultural, and natural resources that make Dare County a desirable place to live and visit.
2. Unincorporated Dare County should retain the rural characteristics typical of the entire County before the incorporated municipalities experienced urban style growth. It is the goal of Dare County to shape the growth of the remaining villages in unincorporated Dare County in such a manner that they retain this rural character and avoid the need for urban-type services like central wastewater collection and treatment. It is the desire of Dare County that its unincorporated places would remain a disbursed collection of villages distinctly different from the melded urbanization typical of the incorporated towns along the oceanfront.
3. Use existing patterns of village communities as “nodes” of activity and living space in a manner that relates to the vast publicly owned lands and historical landmarks.

Resource Protection

1. Facilitate development at a rate that ensures sustainability of our important natural resources especially ocean and estuarine water quality.

Resource Production and Management

1. Direct development to fit the natural conditions and landscape rather than modify the natural conditions and landscape to accommodate development.
2. Resource production goals are minimal with 80% of the County’s land publicly owned and tourism as the economic base of Dare County. Our resource production goals center on maintaining water quality to ensure the viability of commercial fisheries, recreational fishing and boating. These activities coupled with boat building interact with tourism to serve as the foundation of the Dare County economy.

Growth and development

1. Maintain our coastal village atmosphere with an emphasis on residential development and small locally owned commercial establishments.
2. The preferred pattern of residential development is detached low density homes that are compatible in size and scale with existing patterns of development.
3. Expand options for housing to meet the diverse needs of the year-round and seasonal employees.
4. Commercial development should reflect the traditional “coastal village” architecture found throughout the Outer Banks.
5. Develop the foundation for an alternative means of transportation that connects the various population nodes for pedestrians and bicycles and provides a means of movement other than traditional reliance on automobiles.
6. Use land use planning and zoning techniques to abate the tendency of rapid growth communities to lose their “sense of place” or be homogenized by growth. Such techniques should include size limitations on bulk commercial structures, limited dwelling density and

placement of multifamily structures, architectural standards to reflect traditional coastal building design, lighting and landscaping standards to minimize visual blight and light pollution and standards for the display of outdoor advertising and signage.

Noteworthy Changes

1. Planning Jurisdiction -- Since the 1994 update of the LUP, the planning jurisdiction of unincorporated Dare County has been impacted by two changes. In May 2002, the village of Duck became the sixth municipal area of Dare County. As an incorporated town, Duck will now be responsible for its own land use ordinances.

In October 2000, the community of Martins Point reverted back to the planning jurisdiction of Dare County having previously been designated as an extraterritorial zoning jurisdiction (ETJ) of the Town of Southern Shores. Martins Point is a platted subdivision with land uses restricted to single-family residential structures and associated accessory uses. A small portion of the commercial area of the Martins Point Subdivision that fronts along US 158 remains under ETJ designation of Southern Shores.

2. Off-Road Vehicles -- The 2003 Plan recognizes the long-standing tradition of beach driving in Dare County and includes policy language that opposes efforts to impose additional restrictions on beach driving activities. The 1994 policy recognized the need to properly balance the use of off-road vehicles. The current policy clearly states the County's support of beach driving.
3. Wetland Mitigation -- The 2003 policy on wetland mitigation supports the use of mitigation for public purpose projects. It also reserves the right to approve private sector projects that propose mitigation and addresses an identified substantial public need on a case by case basis. The 1994 policy supported wetland mitigation for public purpose projects only after all other means of avoiding or minimizing wetland losses had been exhausted. The strict language of the 1994 policy has caused problems with some public purpose projects, such as the new Virginia Dare Bridge. The 2003 policy will provide more flexibility and not preclude projects that may be beneficial to Dare County and its citizens.
4. Water Quality -- The 2003 LUP continues to recognize the importance of water quality, both surface and groundwater, to Dare County and its key role in the natural and economic development of our area. A new policy that encourages the need for basin-wide water quality efforts in the inland portions of North Carolina has been added to the 2003 update.
5. Beach Nourishment -- Shoreline stabilization and management is a pervasive theme in the long-term planning for the barrier island portions of Dare County. For the past decade, Dare County has been the sponsor of a lengthy study that resulted in congressional authorization of an extensive shoreline protection project using federal, state, and local funds. If authorized an appropriation, this beach nourishment project will address shoreline stabilization issues for the incorporated towns of Nags Head, Kill Devil Hills, and portions of Kitty Hawk. A similar study sponsored by the NC Department of Transportation is

evaluating options for addressing shoreline movement and erosion on Hatteras Island particularly as it pertains to NC 12. One endangered structure that was the subject of considerable debate has been successfully resolved for at least the next decade. In 2000, the Cape Hatteras Lighthouse was relocated approximately 2,900 linear feet inland to ensure its safety from storms and erosion.

6. Residential Development -- The 1987 version of the Dare County Land Use Plan, the policy for community growth patterns stated that single-family detached residential development was the preferred type of development. This policy was repeated in the 1994 update and has been reaffirmed in this most recent update. The market in Dare County has adjusted to this stated preference and resulted in the construction of hundreds of residential structures that are designed and constructed solely for use as weekly seasonal rentals units. The most recent trend has been toward large rental homes that are often incompatible with the scale of existing residential structures thereby creating concerns about adequate parking and impacts on infrastructure. As a result, in August 2002 the Dare County Board of Commissioners adopted standards for the Zoning Ordinance that link the lot size to the number of permitted bedrooms and wastewater capacity. The LUP narrative discussion on residential structures recognizes the diverse needs of the seasonal and year-round population that has contributed to a shortage of moderate priced residences for year-round residents and seasonal workers.

Overview of Policies

This Land Use Plan provides 74 policies in 39 categories. A reference to the specific policy numbers follows the category name. The overview is intended to convey an understanding of the approach Dare County has taken to development of these policies. However, to fully grasp the decisions and issues that lead to these policy statements, readers are strongly advised to read the narratives in Section 2 of this Land Use Plan.

1. **Wetlands (Policies 1, 2, 3)** - Generally, Dare County relies on federal and state regulatory programs for protection of wetlands. Wetland mitigation is acceptable for public purpose projects, but a private sector project that meets a public need could be approved.
2. **Ocean Shoreline (Policy 4)** - Dare County primarily relies on CAMA regulations for protection of the ocean shoreline and ocean hazard areas. It also meets the requirements to participate in the National Flood Insurance Program
3. **Estuarine Waters / Shoreline (Policies 5, 6, 7)** - Dare County relies on CAMA designation of Areas of Environmental Concern (AECs) and the CAMA permit program to manage estuarine shoreline development. In addition, the County supports the use of estuarine bulkheads, but will encourage the use of methods such as offshore breakwaters, slopes, rip-rap and voluntary setbacks greater than 30 feet where such methods are good alternatives.

4. **Public Trust Areas (Policies 8, 9)** - Dare County supports the public's right to access and use public trust areas and waters and will develop local management strategies to manage the use of these areas by competing recreational users as needed.
5. **Public Water Supply AECs (Policy 10)** - Development in any public water supply AEC will be managed to protect the long-term viability of the groundwater resources in accordance with CAMA standards for public water wellfield AECs and the special provisions of SED-1 zoning for the Buxton Woods maritime forest. .
6. **Groundwater Resources (Policy 11)** – The protection of groundwater is identified as a high priority in Dare County. Dare County will continue efforts to provide central water to all parts of unincorporated Dare County. The County anticipates development of a permitting program for private wells used for drinking water
7. **Surface Water Quality (Policies 12, 13)**- The protection of surface water quality is a high priority of Dare County and is reflected in the policies on surface water quality. Dare County supports efforts by local, state and federal agencies to preserve, protect and improve surface water quality; it also encourages the management of water quality using a basin-wide approach that includes inland areas beyond the reach of CAMA regulations.
8. **Shoreline Access (Policy 14)**- Dare County supports North Carolina's shoreline access policies and recognizes the importance of shoreline access for our local tourist economy. Thus, it will continue to seek opportunities to expand access and to acquire federal funding for beach nourishment in order to maintain sandy beaches in public ownership.
9. **Channel Maintenance (Policies 15, 16)** - Dare County plans to maintain all existing navigable channels and will continue to seek authorization and federal funding for jetties to stabilize Oregon Inlet. The County will secure CAMA permits for non-federal projects where they are needed.
10. **Beach Nourishment (Policy 17)** - As noted under "Shoreline Access" above, Dare County believes in public access to the shoreline. Thus it supports the beach nourishment approach to maintaining the ocean beaches of Dare County and to protecting route NC 12 where it is vulnerable to ocean over-wash. Dare County will continue to be the non-federal sponsor of the Dare Beaches Hurricane Protection Plan.
11. **Development Impacts on Resources (Policy 18)** - All development proposals will be designed and constructed to minimize detrimental impacts on surface water quality, groundwater quality, and air quality. Structures should also be designed to fit the natural topographic conditions and vegetation versus modifications to natural conditions to accommodate structures.
12. **Mineral Resources (Policy 19)** - Dare County will evaluate the need for local regulations for those mining activities that are not subject to permit authorization by the State of North Carolina.

13. **Fisheries Resources (Policies 20, 21, 22, 23, 24, 25)** - Dare County will continue to support efforts to restore and protect the coastal ecosystems that are essential to productive commercial and recreational fisheries. This includes designated primary nursery areas and other areas that serve as habitat for our fisheries. The County will rely on the state and federal agencies which have the authority to manage these resources and will implement and enforce CAMA 30-foot buffer rules and other setbacks to protect surface water quality needed for productive fisheries.
14. **Maritime Forests (Policy 25)**- Dare County provides special protection to the Buxton Woods maritime forest through limitations on development in a local SED-1 zoning ordinance. Currently, there are no plans for protection of other maritime forest remnants on Roanoke Island or in Colington except for modest development limitations provided by Dare County Zoning ordinances in those areas.
15. **Commercial Forestry (Policy 26)**- Dare County supports commercial forestry projects that are done in accordance with the standards and recommendations of the U. S. Forest Service and the best management practice program of the State of North Carolina.
16. **Productive Agricultural Lands (Policies 27, 28)**- Dare County supports crop agriculture on certain portions of Mainland Dare County, advocates voluntary use of the State of North Carolina's best management practices for farm management, and opposes wholesale or industrial livestock operations anywhere in the County.
17. **Archaeological/Historic Resources (Policy 29)**- Dare County supports the protection of structures, lands and artifacts that have been identified by the NC Department of Cultural Resources as archeologically or historically significant. If possible, the County will undertake a comprehensive inventory of resources not already in public ownership for use in planning for their possible future protection.
18. **Wildlife Resources (Policy 30)** - Extensive wildlife preserve areas are located in Dare County and managed by federal and state agencies. Dare County advocates public access to these areas for managed wildlife harvesting and observation.
19. **Topographic Conditions (Policies 31, 32)**- Because much of Dare County is susceptible to flooding during hurricanes and other serious storms, the County supports the administration and enforcement of all applicable floodplain management regulations and the National Flood Insurance Program. In addition, Dare County will rely on CAMA standards and regulations for development in CAMA designated AECs.
20. **Stormwater Management (Policies 33, 34)** - Dare County recognizes that stormwater runoff needs to be managed to protect the quality of public trust waters and to address public health and safety issues associated with ponding of stormwater on roadways and in ditches. The County will develop a stormwater management ordinance to address projects that are not subject to State regulation. It will also consider regulations address the use of fill material on lots to alter the natural ground elevation.

- 21. Marinas (Policy 35)** - Dare County supports the development of marinas to provide boating access to the area's water bodies, insofar as marina development complies with all state and federal guidelines and is consistent with the land use classifications established in this document.
- 22. Floating Structures (Policy 36)**- Dare County opposes mooring of floating homes or other floating structures anywhere in the public trust waters surrounding the County and is contemplating local regulations to enable a prohibition of them.
- 23. Land Disturbing/Tree Removal Activities (Policy 37)** - Dare County relies on the best management practices of the NC Forest Service for tree removal and the Dare County Zoning Ordinance for sand dune protection. The County will consider regulations to address the use of fill material on lots to alter the natural ground elevation.
- 24. Manmade Hazards (Policies 38, 39)**- The primary manmade hazards in Dare County are the Dare County Regional Airport and the federally owned bombing range on Mainland Dare County. Dare County does not support expansion of the regional airport except to address safety issues. It would consider expansion of the bombing range after weighing the importance to the Nations' defense against the impact on local communities and the Dare County economy.
- 25. Beach Driving/Off-road Vehicles (Policy 40)** - Dare County supports access to the beaches of Hatteras Island by four-wheel drive vehicle. Dare County does not support efforts to prohibit driving on federally managed areas and will continue to monitor activities that may result in additional closing or restrictions.
- 26. Federal and State Support (Policy 41)** - In general, Dare County will review new or expanded Federal and State regulatory programs on a case by case basis to determine their benefits and impacts on the County and its economy. The County reserves the right to support, oppose, review and comment on all such proposed programs. Dare County advocates that well advertised informational meetings and public hearings should be conducted before the adoption of any new or expanded regulatory programs that impact the County.
- 27. Wastewater (Policies 42,43,44,45)** - Dare County advocates the use of on-site septic tank-drainfield systems as the primary method of wastewater treatment where natural soil conditions permit their use in unincorporated Dare County. Non-traditional methods of wastewater treatment, including package treatment plants, may be allowed in areas where natural soil conditions do not support traditional septic systems. However, the use of these alternative systems will not be used solely to accommodate larger structures or higher dwelling density, nor will these systems be permitted to have excess capacity, unless the area proposed for development is specifically zoned for such uses or capacity. Similarly, if central wastewater treatment is needed to remedy water quality problems created by outdated septic systems, the introduction of such a system will not be used to change minimum lot size standards. Dare County plans to create a wastewater treatment commission to address

wastewater treatment issues and monitor impacts of various wastewater systems on our ground and surface waters.

- 28. Transportation (Policies 46,47,48,49)** - Dare County advocates intergovernmental cooperation with its municipalities and neighboring counties to study and address the County's transportation needs. It will also continue to work with NC DOT and the Task Force on NC 12 for Hatteras Island to develop and support long-term strategies for stabilization of the corridor, including a replacement for Bonner bridge, elevation of portions of NC 12 and beach nourishment. Dare County will not assume responsibility for maintenance of private roads; the county advocates that all future private roads be built to state standards, if at all possible. The County also will investigate an assessment program for maintenance and repair of private roads.
- 29. Solid Waste (Policy 50)** - Dare County participates in a regional solid waste authority and operates voluntary recycling efforts.
- 30. Community Growth Patterns (Policies 51, 52, 53, 54)** - In order to protect the unique rural characteristics of the villages in unincorporated Dare County, use-specific zoning maps will be developed for those areas, which are currently not zoned or minimally zoned. Private developers will also be encouraged to incorporate features in their designs that harmonize with the village where the development will be located. The County will provide public services, such as central water, to meet needs, but not to promote development in these areas. If needed, the County reserves the right to acquire additional private property to meet public needs. Finally, the County will contract with a planning consultant for an updated Carrying Capacity Study for Dare County. This will enable the County to better assess the impacts of future growth and resources necessary to manage it.
- 31. Residential Development (Policies 55, 56)** - Detached single family homes are the preferred type of housing in year round residential areas of unincorporated Dare County. Dare County recognizes the diverse housing need of the community and will work with the private sector to expand the housing opportunities for year-round residents. Regional efforts to address the housing needs will be evaluated on a case by case basis. Possible amendments to the Zoning Ordinance to delete the use of "single family" will be considered to recognize the varying patterns of residential development, to address the use of residential structures for home occupations, and to provide more stringent nuisance regulations.
- 32. Commercial Development (Policies 57, 58, 59)** - Dare County encourages the development of locally owned businesses in unincorporated Dare County. The County will address locations for commercial development as it pursues continued zoning of the unincorporated area. It will also encourage large franchise operations to moderate their building plans to reflect the character of the villages where they plan to locate.
- 33. Redevelopment (Policy 60)** - When areas of Dare County are redeveloped, new development must meet current standards. The County will encourage the re-use of historical structures versus destruction since these structures provide links to our past.

- 34. Industrial Development (Policies 61, 62)** - Dare County encourages industrial development if it is environmentally compatible with the challenges associated with maintaining high quality surface and ground waters. It especially supports the traditional commercial fishing, boat building and construction industries. Locations for industrial development will be identified during the zoning process for the rest of unincorporated Dare County.
- 35. Energy Facilities (Policy 63)** - Dare County is opposed to development of any aspect of the petrochemical industry within its jurisdictional lands or waters. This includes both off-shore and on-shore facilities and activities associated with the exploration for or production of petrochemical products of any kind. Dare County does support research and development of non-fossil fuel alternatives for energy production.
- 36. Tourism (Policies 64, 65, 66)** - Tourism is vitally important to the economy of Dare County. The County invites visitors to enjoy the natural beauty of the area, its cultural resources and the recreational opportunities afforded by the pristine environment. Dare County's success as a tourist destination has placed increasing demands on the County's infrastructure. Dare County will use tourist-generated revenues to address the needs and impacts of our seasonal tourist population.
- 37. Bikeways/Walkways/Greenways (Policy 67)** - Dare County supports the continued development and construction of sidewalks, bike paths, greenways and other similar pathways as the means for safe enjoyment of the natural and cultural resources of the area. The County also recognizes their value as alternative transportation routes.
- 38. Storm Hazard Mitigation, Evacuation, and Post-Disaster Recovery (Policies 68, 69,70,71,72,73)** - Dare County is especially vulnerable to hurricanes, tropical storms and other serious weather events because of its location next to the Atlantic Ocean. Thus, the County has developed and is committed to maintaining processes and procedures that recognize the need to deal with the aftermath of such disasters. These processes and procedures include: zoning regulations and construction standards which mitigate the effects of major storm events; a full time emergency management department and emergency operations centers; policies and procedures for recovery and reconstruction after a major disaster; restoration of highway and utility infrastructure as the highest priority, followed by businesses and homes that serve the year round population of the County; and, use of whatever authority is necessary to provide for an orderly recovery while also mitigating against similar future disasters.
- 39. Public Participation (Policy 74)** - Dare County supports active public participation by its citizens in all County planning activities, including its land use planning process, ongoing zoning activities, long range planning initiatives and the County Planning Board. The County will actively seek such participation through education, workshops, releases of information to the news media, surveys and public hearings.

SECTION 1 – Data Collection and Analysis

Information Base

The Coastal Area Management Act guidelines for land use plans require an analysis of existing conditions and future trends be completed before policy statements are established. The intent of this requirement is to ensure that policies reflect current conditions and issues facing the County. Key components of the analysis may be broken into four categories:

1. Current conditions including demographic information, existing land use, and current plans and regulations.
2. Land suitability including physical limitations on development, fragile areas, and areas with resource potential.
3. Community facility and service constraints including water, sewer, transportation, police, fire, schools, solid waste, and parks and recreation.
4. Anticipated demand including demographic projections, future land use needs, and community facility needs.

Collectively, these elements summarize past and present conditions while providing an essential reference tool for estimating future conditions.

Current Conditions

Demographics

a) Population

Dare County is located in a remote portion of northeastern North Carolina. For many years, just getting to Dare County was a challenge due to its lack of adequate roads and bridges. However during the mid 1900s, Dare County was slowly developing as a destination for sportsman and naturalists and was not known as a retirement community or a resort area. Better roads and bridges were constructed that allowed more access to Dare County, but still it remained a relatively unknown area. Land prices were cheap and subdivisions were developed by real estate speculators in the 1960s and 1970s that have remained vacant for many years. However, Dare County has experienced tremendous growth since 1970 with average annual growth rates of 6.7% in the 1970s decade and 5.5% in the 1980s decades. Growth has continued throughout the 90s decade although the average annual growth rate has slowed to 2.8%. Figures from the 2000 US Census indicate the permanent population for Dare County has doubled since the 1980 census count. The following tables demonstrate the changing demographic characteristics of Dare County.

Table 1 – Population Figures for Dare County

Population in Dare County		Absolute Increase 1990-2000	
1900	4,757		
1910	4,841	1900-1910	
1920	5,115	1910-1920	274
1930	5,202	1920-1930	87
1940	6,041	1930-1940	839
1950	5,405	1940-1950	(636)
1960	5,935	1950-1960	530
1970	6,995	1960-1970	1,060
1980	13,377	1970-1980	6,382
1990	22,746	1980-1990	9,369
2000	29,967	1990-2000	7,221

Table 2 – Average Annual Growth Rates

1950-1960	1.0%
1960-1970	1.7%
1970-1980	6.7%
1980-1990	5.5%
1190-2000	2.8%

Average annual growth rates are derived using the compound interest formula. These figures were calculated using Microsoft Excel.

The US Census defines a household to include all of the people who occupy a housing unit. In Dare County, the number of households in 2000 increased by 36% from the 1990 census, or an annual growth of 3.6% per year. For the same period, the number of households in North Carolina increased by 24% or an annual growth rate of 2.4% per year. The average household size for Dare County is smaller than the average for the State of North Carolina. One possible factor for this smaller size may be the number of retired persons residing in Dare County.

Table 3- Households

	1990		2000	
	Total # of Households	Average Household Size	Total # of Households	Average Household Size
Dare County	9,349	2.41	12,690	2.34
North Carolina	2,517,026	2.54	3,132,013	2.49

The age breakdown analysis for Dare County indicates that a larger percentage of the County's population is over 65 years of age compared to the figures for the entire State. The median age for Dare County listed in the US Census is 40.4 years, an increase over the 1990 median age of 35.2. These figures reflect the number of retired individuals in the Dare community. The

median age for the State in 1990 was 33.2 and the 2000 census figures show a slight increase in the median age to 35.3. The following table depicts a more detailed breakdown.

Table 4 – Age Breakdown –2000

	Under 5		5-17		18-64		65+	
	#	%	#	%	#	%	#	%
Dare	1,547	5.2	4,864	16.2	19,432	64.8	4,124	13.8
NC	539,509	6.7	1,424,538	17.7	5,116,248	63.6	969,048	12.0

The racial composition of Dare County is predominantly white and the percentage for the County is much higher than the percentage of whites found in North Carolina.

Table 5 – Racial Composition 2000

	White		Black or African American		Other	
	#	%	#	%	#	%
Dare	28,393	94.7	797	2.7	777	2.6
NC	5,804,656	72.1	1,737,545	21.6	507,112	6.3

According to the 2000 Census, there are 26,671 housing units in Dare County, with 52.4% listed as vacant. This large percentage of vacant housing units reflects the abundance of housing units that are offered for short-term occupancy in Dare County. Over 50% of the vacant housing units in Dare County are categorized as seasonal or recreational use. Year-round residents in Dare County occupied 47.6% of these units compared to the 88.9% of year-round occupancy found in the remainder of North Carolina.

Table 6 – Housing Units and Occupancy

	Dare County		North Carolina	
	Housing Units	Percent	Housing Units	Percent
TOTAL	26,671	100.0	3,523,944	100.0
Occupied	12,690	47.6	3,132,013	88.9
Owner Occupied	9,460	35.5	2,172,355	61.6
Renter Occupied	3,230	12.2	959,658	27.2
Vacant	13,981	52.4	391,931	11.1
For Rent	277	1.0	92,893	2.6
For Sale Only	117	0.4	44,007	1.2
Rented or Sold	70	0.3	26,523	0.8
Seasonal/Recreational Rental or Use	13,355	50.1	134,870	3.8
For Migrant Workers	5	0.0	1,890	0.1
Other Vacant	157	0.6	91,748	2.6

b) Economy

Dare County’s per capita and median family incomes are close to the figures for North Carolina as a whole. Dare County trails the State on the per capita income figures, however the median family incomes for Dare County are almost equal to the State figures.

Table 7 – Income Estimates

	Per Capita Income/1999	Median Family Income/2000
Dare County	\$24,566	\$50,300
NC	\$27,194	\$50,200

The majority of jobs in Dare County are in some way related to the tourism industry, with retail trade and services the largest employment sectors in the County. These industries combine for a total 56.6%. In North Carolina, the same sectors represent 41.5% of the State’s job base. The boat building industry represents the limited number of manufacturing jobs (3.9%) compared to 21.3% for the State. Construction and real estate services employ many County residents as well as the public sector jobs offered by the local, State and Federal governments. There is also a small sector of the population employed in the commercial fishing industry.

Table 8 – Labor Force Estimates

Sector	2000	% of DC	% of NC
Agriculture	159	0.8	1.4
Construction	1,362	6.6	5.8
Finan/Ins./Real Estate	2,548	12.4	4.7
Government	2,447	11.9	15.7
Manufacturing	658	3.2	21.3
Services	4,379	21.4	23.5
Wholesale Trade	464	2.3	5.0
Retail Trade	8,059	39.3	18.0
Trans/Comm/ Utilities	413	2.0	4.6
TOTAL	20,489	100.0	100.0

Demographic information obtained from NC State Data Center, 2000 US Census Data and NC Dept of Commerce

c) Impact of Seasonal Population

As the seasonal population descends upon Dare County every year, the demand for public services and the impact on public facilities increases at a proportional rate. The year-round population of Dare County, according to the 2000 Census is 29,967. The seasonal population

peak is approximately 200,000. Public services and facilities must be designed to accommodate peak period demand, and then operate according to the demand level during non-peak periods.

The traditional peak population period is during the summer months or generally between Memorial Day and Labor Day. However, the non-peak periods have grown increasingly popular as well, extending the tourist season or “shoulder season” from Easter weekend in the spring to Thanksgiving weekend in the fall. Also, the property owners of the resort homes offered for short-term rentals often use their property for their personal vacations during these spring and fall months. During the winter months, Dare County reverts to its static population base, with reserve capacity for almost every public service. However, even during these winter months, Dare County is subject to occasional bursts in population due to three-day weekend holidays in January and February.

The major impact of the seasonal population is on the service delivery and infrastructure support. Water and other utility systems must be designed to meet the capacity needs of the peak demands but most of the time, operate at much less than peak demands. The most overstressed of the local infrastructure are the transportation improvements, particularly on rainy days that result in heavy traffic flows and in certain areas, like Duck or Manteo, result in traffic back-ups on the highways. The increased traffic affects the response times and travel times of the emergency medical services in addition to their services being impacted by the increase on the number of emergency calls due to the population surge. Law enforcement officials also face challenges similar to those of the emergency medical personnel.

There also are impacts on the quality of life of the permanent population in that the peak population increases frustrate efforts to complete one’s daily activities such as grocery shopping and commutes to work sites. As the peak populations continue to increase with each passing season, there is a growing sentiment of being overwhelmed by the number of visitors. However, most everyone realizes the importance of the tourism industry in Dare County and accepts the increased demands placed on the local service and transportation infrastructure. This frustration is countered with the revenues that Dare County receives from the tourist population in the forms of the occupancy tax, a prepared meals tax, and a retail sales tax. Many residents also recognize the benefits of having “clean” industry such as tourism versus more manufacturing or industrial economies.

Table 9 -- Services Impacted by the Population Surge

1. Water Production and Distribution
2. Transportation Infrastructure
3. Solid Waste Management
4. Emergency Medical and Air Ambulance
5. Law Enforcement and Detention
6. Electrical Services
7. Animal Control
8. Parks and Recreation Areas

Community Land Use Analysis

Analyzing the existing land uses throughout the community serves a number of functions. The primary function is to provide an overview of development patterns and a basis for determining growth trends over time. The analysis or survey identifies what development has occurred, where the development has occurred, and what kind of development has occurred. The survey also shows the relationship between different kinds of land use and their compatibility with the surrounding properties.

Current land use information is fundamental to the preparation of the land use plan. Not only is the survey helpful in preparing policies for the plan, but it is also useful in identifying water and sewer expansion areas or needed changes to zoning maps or ordinances. Data provided by the existing land use survey is helpful to both the public and private sectors. For the public sector, the need for new schools or recreation areas may be identified during the land use survey, while the private sector might use the information in decision-making processes about development plans or real estate purchases.

The analysis area for the land use survey corresponds to the planning jurisdiction of Dare County, which includes the unincorporated areas of Martins Point, Colington, the Hatteras Island villages of Rodanthe, Waves, Salvo, Avon, Buxton, Frisco, and Hatteras, the Mainland villages of Manns Harbor, East Lake and Stumpy Point, and Roanoke Island including Wanchese. Not included in the study area are the incorporated towns of Kitty Hawk, Southern Shores, Kill Devil Hills, Nags Head, and Manteo. The towns prepare Land use plans for these areas separately. Duck became the sixth municipality in Dare County on May 2002 but will continue to use the Dare County Land Use Plan until the Town can adopt its own land use plan. Therefore, the individual analysis includes Duck.

The Planning staff completed an analysis of each village using existing tax records. A narrative description for each village is included below. Appendix C at the end of the update includes property use tables for each village taken from the Dare County tax records illustrating the existing uses of the total parcels for each village and color-coded maps prepared by the Dare County Information Technology Department.

a) Individual Village Analysis

DUCK – In November 2001, the registered voters of Duck voted to incorporate their village into Dare County's sixth municipality. On May 1, 2002, Duck officially became a Town. A contract for planning and building inspector services was signed by the County and the Town of Duck to continue to provide these services for an additional 12 months. The Town of Duck will use the Dare County Land Use Plan until they are able to adopt their own Plan sometime in 2003.

Duck is the northernmost portion of Dare County and lies between the Southern Shores municipal boundary and the Currituck County line. Access to Duck is via NC 12, also known as

Duck Road. The primary land use is residential structures that are generally not the principal residences of the owners. These vacation homes are often made available for short-term rental during the summer months. In addition, there are several multi-family developments scattered throughout the village. A federal research pier operated by the Army Corps of Engineers is located in the middle of the village. Commercial development is limited to a portion of land adjacent to and along NC 12. This “village commercial” district has established a special sense of identity for the village due to the limited scope of permitted uses. Only those retail and service related businesses that are necessary for the daily needs of the immediate village are permitted in this VC district. The scope of uses in Duck prevents the introduction of destination-type attractions and has discouraged the carnival-like atmosphere typical of many other coastal resort areas. Vacant land in Duck is limited to undeveloped lots in previously recorded subdivisions. In 1999, the largest remaining undeveloped tract, known as the Gard tract, was approved as a 131-lot subdivision called Four Seasons. Although there are a couple of isolated tracts of 2-3 acres of undeveloped land, the land use pattern for Duck village is now established pending any redevelopment proposals that may be forthcoming in the next decade.

The most influential change in the development trends has been the increase in the size of residential structures versus the existing residential development that had been a more traditional 3-bedroom, 2-bath “cottage”. As of the millennium, this concept has evolved into multiple bedrooms, multi bathroom up-scale structures with individual pools. These structures are largely marketed as rental resorts for short-term rental. The proliferation of this style of occupancy has generated issues pertaining to off-street parking, wastewater treatment capabilities, and general overcrowding.

In terms of commercial development, ordinance amendments have been adopted for the VC district in Duck to address the proportionality of commercial structures to the land use patterns of a village setting. The amendments limit per building floor area and establish lighting and aesthetic standards for the district.

As was the case in 1994, traffic congestion and vehicle movement continues to be a critical issue during the peak summer season months. Although a popular bicycle trail has provided an alternative means for those who chose to use it, the automobile remains the principal means of transportation in Duck. The primary transportation route is the two-lane NC 12 that also facilitates all traffic destined further north into the beaches of Currituck County. It is anticipated that traffic congestion will continue to be a problem. The much-discussed Mid-County Currituck Bridge continues to be the only hopeful alternative for alleviating much of the congestion associated with travel to points further north. Unfortunately, it appears that the Mid-County Bridge is at least 8-10 years away from completion. The widening of the existing roadway represents the only other congestion relief alternative but is widely opposed as incompatible with the village setting of Duck.

MARTINS POINT – Martin’s Point Subdivision is located adjacent to the Town of Southern Shores with commercial development along the frontage of US 158 and the majority of the subdivision is platted as residential lots. A manned guard gate limits access to the residential section. For years, the development of Martins Point was under the extraterritorial zoning jurisdiction of Southern Shores, however, the residential portions of the subdivision reverted

back to the County's jurisdiction in October 2000. The commercial areas remain under the ETJ of Southern Shores.

KDH OUTSIDE/COLINGTON – The KDH Outside tax district includes the area locally known as Baum Bay and is located adjacent to the Kill Devil Hills municipal boundary and continues to the first bridge along Colington Road. The development patterns for Baum Bay and Colington can be distinguished by the variation of land uses found throughout the islands. This variation in land use is the result of decades of unregulated land use. However, in 1997, a zoning map was adopted for all of Colington and the Baum Bay area. The largest subdivision in the area, Colington Harbour was zoned in 1985. Both areas continue to be a largely year-round community with a mix of single-family residences, mobile homes and a handful of commercial uses. The presence of rich estuarine shorelines prompted the Colington area to be a fishing village with an emphasis on crabbing prior to the discovery of the Outer Banks as a tourist resort. Commercial fishing and crabbing continues to be an important source of income for many Colingtonians and a source of recreational pleasure for visitors. Commercial fishing and traditional land uses played an important role in the development of a zoning map to facilitate these uses but limit the commercial growth potential of Colington.

The development of the First Flight Schools complex nearby serves as an additional attraction to many families moving to the area.

Access to the area is along SR 1217, a winding two-lane road with limited right-of-way width. This heavily traveled secondary road represents a major challenge to transportation planners in NCDOT 1st district. Plans for a 400-unit community on land that adjoins the Baum Bay Harbor Subdivision and the construction of a high school on the Baum tract adjacent to the existing First Flight Middle and Elementary schools will further impact traffic on Colington Road.

RODANTHE – Traveling south from Oregon Inlet on NC 12, Rodanthe is the first Hatteras Island village after the Pea Island Wildlife Refuge. Similar to the other areas of unincorporated Dare County, Rodanthe lacks any defined pattern of development other than that which is found along NC 12, the only major transportation route in the village. Another cluster of commercial development surrounds the Hatteras Island Fishing Pier. Elsewhere, residential lots and structures of various sizes and ages can be found throughout the village.

In 1997, the County constructed a reverse osmosis plant for the Rodanthe Waves Salvo area. The development potential for the village has been enhanced by this central water supply but continues to be limited by poorly drained soils. The availability of a central water supply has contributed to the quality of life in Rodanthe by eliminating the need for private wells for potable water. In the past, private wells had been inundated by ocean over wash, saltwater intrusion, and encroachment by multiple drainfield/septic tank systems.

The Rodanthe village areas continues to be one of the last frontiers in unincorporated Dare County in terms of the residents continued resistance to land use controls. However, as the land use almost everywhere else in Dare County comes under zoning ordinances, the introduction of unpopular or incompatible uses and/or structures has prompted some civic leaders to rethink the need for zoning.

There are two principal transportation issues in Rodanthe. The first is largely a result of the absence of subdivision regulations decades ago that has left the village with a multitude of private roads in poor condition. Secondly, the principal route, NC 12, is at times unreliable due to ocean overwash and a regulatory/environmental dilemma that has stymied transportation planners at NCDOT. However, a multi-agency task force has been working for several years in an effort to develop both short-term and long-term alternatives for the management and maintenance of NC 12.

WAVES – The village of Waves is predominantly detached residential structures with some commercial development. Like, Rodanthe, free market forces have established themselves along NC 12. In addition, a number of large travel trailer parks and campgrounds are located in Waves. The village has also benefited from the construction of the reverse osmosis plant but development is still limited by soil characteristics that are poorly drained.

SALVO – Salvo is bordered by the village of Waves on the north end and the Cape Hatteras National Seashore on the south end. The development of Salvo is similar to Rodanthe and Waves with both residential and commercial structures located along NC 12. The commercial development is focused mainly on providing services to the seasonal population. The construction of the reverse osmosis plant has removed the reliance on private wells for the Salvo residents but development is still limited by the poorly drained soils found throughout Hatteras Island. Salvo will continue to develop in the established patterns with a mix of permanent homes and businesses along NC 12 and seasonal residents along the immediate ocean and estuarine shorelines.

AVON – Avon village can be separated into two distinct areas within its boundaries. The first is the residential development and businesses established to serve the seasonal visitors and the other, the year-round population located within the old village of Kinnakeet. Along the NC 12 corridor, the majority of land is already developed with mostly residential structures offered for resort rentals or platted as residential lots. The commercial establishments along NC 12 cater mainly to the seasonal population's needs but also provide services to the year-round populations as evidenced by the island only franchise grocery store and newly developed medical center. Inside the village, neighborhoods are residences of the year-round population of Avon, with a mixture of single-family homes and mobile homes. The influence of commercial fishing is evident within the old village, particularly along the harborfront. Avon is a blend of the old and the new with the soundside village composed of extended families and the new areas developing as a resort accommodations and service community

BUXTON – Buxton is a growing commercial and institutional mid-point of Hatteras Island. The existing Cape Hatteras School is located in Buxton and a new elementary school is under construction also. Buxton is comprised of mostly year-round residents and serves as a commercial hub for the entire island. The County constructed a multi-use recreational facility known as the Fessenden Center in Buxton in the mid 1990s that is widely used for recreational sports and other community gatherings. The Group Cape Hatteras Coast Guard base located in Buxton lends to the strong sense of community of the village. The Buxton Woods maritime forest influences a good portion of the residential development occurring in Buxton.

Development in the Buxton Woods forest must comply with the County's special zoning regulations established to preserve the maritime forest setting. Buxton will continue to serve as the commercial and institutional center of Hatteras Island with a mix of single-family homes and modest residential development serving the year-round residents of the area.

FRISCO – Similar to Buxton, development in Frisco is influenced by the maritime forest known as Buxton Woods. Several older subdivisions on the soundside of Frisco are beginning to develop with seasonal and year-round homes. Minimal zoning regulations of the S-1 district that permits all uses is established outside the areas zoned SED-1 for the maritime forest. In 1998, efforts to adopt more restrictive zoning were unsuccessful due to the lack of a community consensus of desired land use patterns along the vacant road frontage on NC 12. As a result, commercial development has continued to dominate the NC 12 road corridor. This pattern of development is expected to continue in Frisco due to the restrictive nature SED-1 zoning of Buxton Woods and the lack of use-specific guidelines of the S-1 zoning.

HATTERAS – Hatteras village is the southern most village of Hatteras Island and serves as an entry point for Dare County as a result of the location of the Hatteras-Ocracoke ferry landing at the village/County boundary. The influence of commercial and sport fishing is evident in Hatteras village and many year-round residents make their homes in Hatteras. Large seasonal resort homes line the oceanfront of Hatteras village. Commercial development is centered along NC 12 that runs through the village. A commercial hub has also developed around the ferry landing as part of the Hatteras Landing planned unit development approved by Dare County in the early 1990s. Hatteras has done well in retaining its coastal village character while accommodating growth directed to the seasonal population.

ROANOKE ISLAND (outside Manteo) – This area of Dare County is predominantly made up of a year-round population. A mixture of single-family residential structures and mobile homes are located in the area. This section of Dare County is the oldest and most traditional setting for year-round residency. The location of central sewer lines along the portion of US 64 that stretches from the southern Manteo town boundary to the Pirates Cove development has influenced the commercial development of Roanoke Island. Commercial developments have been constructed along this section of US 64 that fall under the planning jurisdiction of Dare County but are connected to the central sewer service of the Town of Manteo. The availability of central sewer from Manteo and the construction of a new bridge from the Mainland to the US 64/NC 345 intersection will continue to influence this area of Roanoke Island. The construction of a new County courthouse and visitors bureau near the new bridge landing will result in a new center of activity away from the traditional downtown area of Manteo. One of the unique features of the area is the overlay corridor district that runs from the Umstead Bridge to Baum Bridge that establishes architectural and vegetation protection provisions along the frontage of US 64. Roanoke Island is also home to the Dare County regional airport and several cultural facilities, including the North Carolina Aquarium and Fort-Raleigh-Elizabethan Gardens complex.

SKYCO – the Skyco area is located south of the Washington Baum Bridge on Roanoke Island along NC 345 and north of large wetlands areas that separate Skyco from the village of

Wanchese. The area is predominately single family residences along NC 345 and Skyco Road and Toler Road. There are scattered commercial uses in the Skyco area that front on NC 345 including storage warehouses and an automobile repair shop.

WANCHESE – Located at the southern end of Roanoke Island, Wanchese is best described as a coastal fishing community with land development supporting this industry. A large portion of the community has been developed as the Wanchese Seafood Industrial Park by the State. In recent years, this facility has finally begun to develop some established businesses, but has yet to reach its full potential due to the uncertainty of the dynamic and unreliable conditions of Oregon Inlet, which is the only ocean inlet for northern Dare County. Wanchese is also home to several boat manufacturing firms. Other commercial development is devoted to the immediate community needs. The population is almost entirely year-round residents of extended families. Residential development is a mixture of single-family homes and mobile homes. The area is unzoned. Wanchese is a year-round community with strong ties to the commercial fishing and boating industries.

MANNS HARBOR– Manns Harbor is located on the Mainland of Dare County. Rural in nature, Manns Harbor is comprised mostly of year-round residents with limited commercial development. However, the landing of the new Roanoke Sound Bridge is located at the US 64 intersection in Manns Harbor and it is anticipated that this will greatly influence the community over the next several years. Although Manns Harbor is currently unzoned, there has been considerable interest in a possible zoning map as a result of the residents recognizing possible changes associated with the new bridge landing. Existing development patterns reflect a somewhat disorganized mix of residential uses, service-related businesses and even some light manufacturing (boat building). Manns Harbor is the largest of the Mainland villages.

MASHOES – The small village of Mashoes is located off US 64 from Manns Harbor. It is a small community with a handful of year-round residents and no commercial land uses. The area is unzoned and relies on private wells and individual on-site septic systems for wastewater treatment.

EAST LAKE – The majority of the Mainland area is under the jurisdiction of the Federal government as either the Alligator River Wildlife Refuge or the US Navy/Air Force bombing range. There is little development in East Lake except for the residential uses for the area's handful of permanent residents. Most homes are located along US 64. Dare County's heritage as a rural area and sportsman paradise remains evident in East Lake. Like Manns Harbor, this area is unzoned.

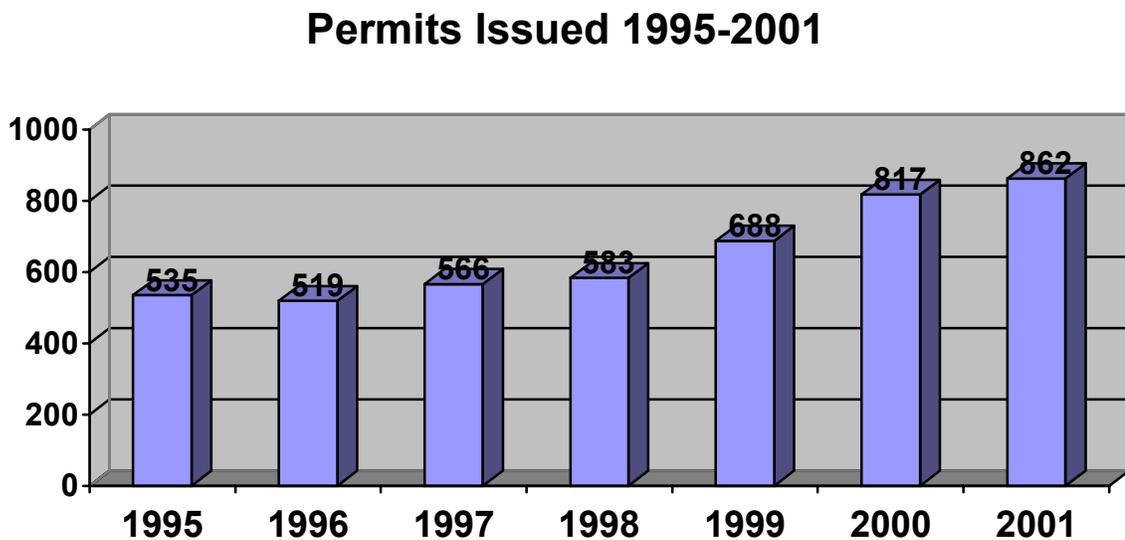
STUMPY POINT – Located off US 264, Stumpy Point is somewhat isolated from the other areas of Dare County with a majority of the property owned by permanent residents. The influence of commercial fishing is evident in Stumpy Point due to its proximity to the Pamlico Sound. The poor soils and low elevations have limited development in Stumpy Point despite being a waterfront community. A central water system solely for Stumpy Point is being constructed by the County to provide more suitable potable water for the residents, who currently use private wells with an undesirable water quality. Stumpy Point is also unzoned and the residents have not indicated any dissatisfaction with this state.

b) Overall Community Analysis

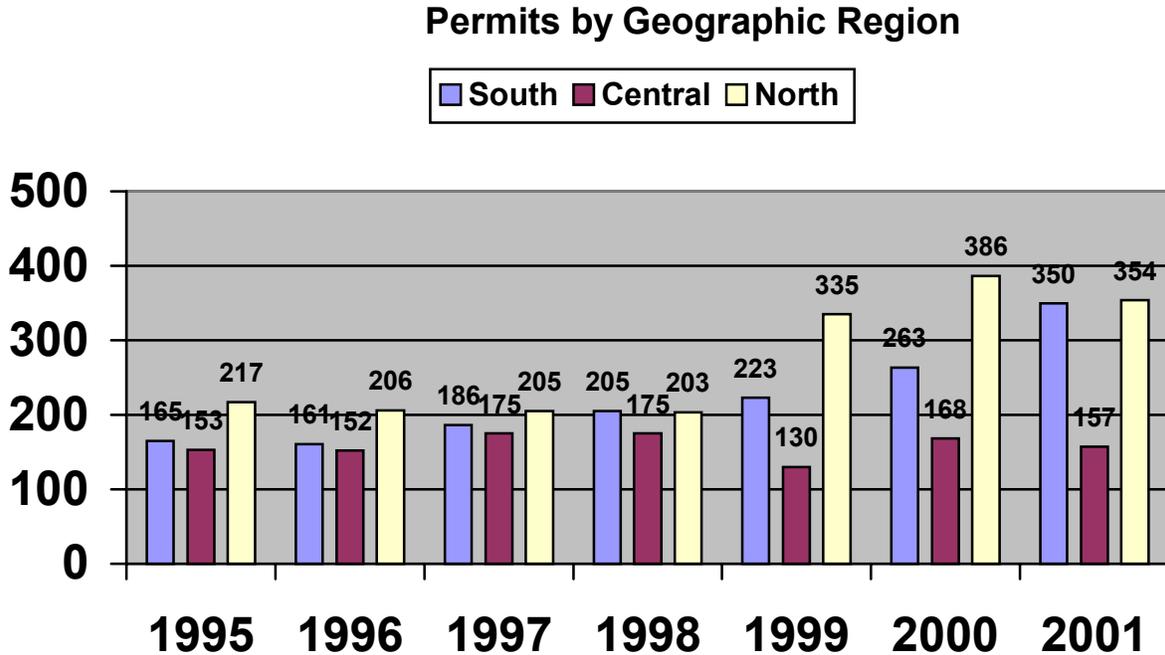
Over the last decade, Dare County has continued to grow as many of the subdivision lots that were recorded in the previous decades were developed, as either permanent single-family homes or into seasonal resort rentals or investment homes. Subdivision of land has slowed since the 1980s with mostly smaller subdivisions taking place over the last several years. The construction and real estate industry has enjoyed a robust period of growth during the late 1990s and early part of 2000. One factor of the construction industry that is of particular interest is the increasingly popularity of pools as an amenity of seasonal rental homes. The pool construction industry has experienced phenomenal growth since the early 1990s with most new homes planned as rentals being constructed with a pool. Many of the existing rental homes have been forced to retrofit their sites with pools to compete with the newer structures.

The graphs and tables included below depict information on the issuance of building permits and subdivisions in unincorporated Dare County. Although there were increases almost every year between 1995 and 2000, there was a considerable jump in the number of permits from 1999 to 2000. The second graph depicts the number of permits issued by each of the building inspection offices. The south office is for Hatteras Island, the central office is for permits on Roanoke Island and the Mainland, and the north office is for permits in Duck and Colington. Reviewing these graphs it is evident that the Hatteras Island office has realized a steady increase in the number of permits issued since 1995, with the numbers for the Roanoke Island office fluctuating within this same period. However, the north beach office figures depict a substantial increase from 1998 to 1999 and 2000.

Graph 1- Building Permits Issues for Unincorporated Dare County 1995-2001

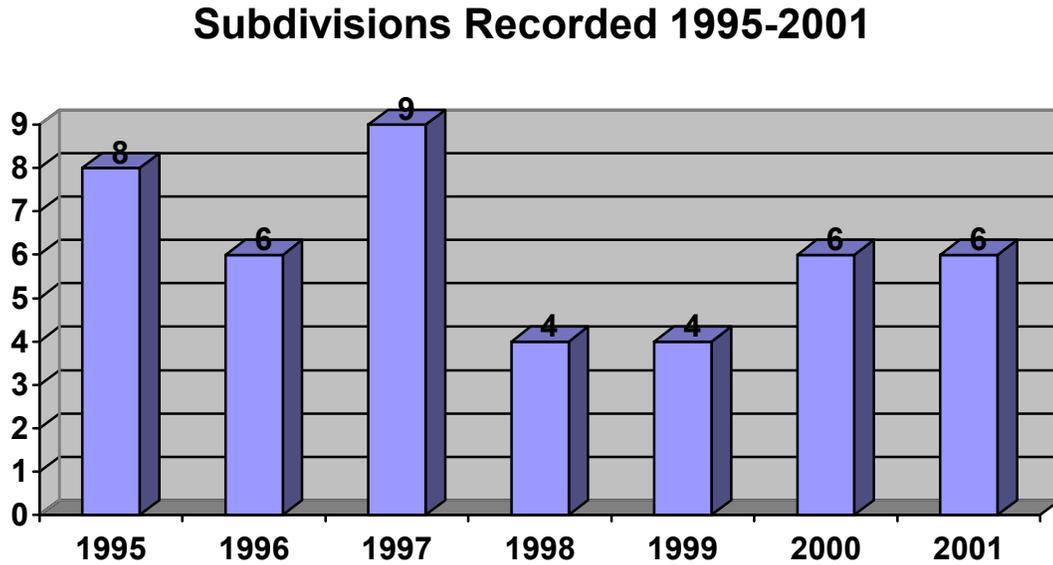


Graph 2- Building Permits Issued According to Geographic Location of Unincorporated Dare County 1995-2001

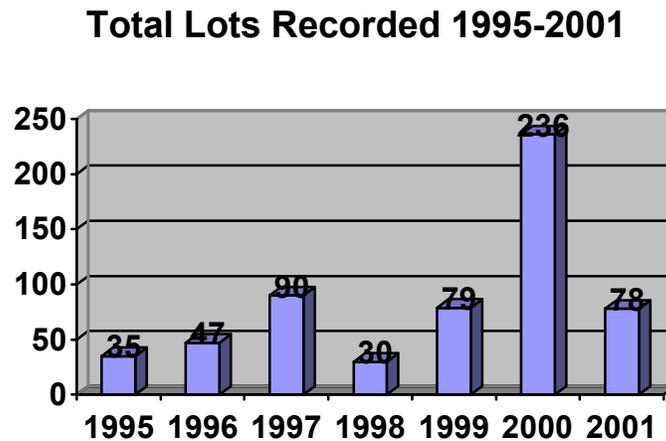


The next graphs depict subdivision information over the period of 1995-2001. There is no discernible trend as the numbers fluctuate from year to year except for the year 2000 during which over 200 subdivisions lots were recorded. For the year 2000, three phases of the Kinnakeet Shores Soundside Subdivision in Avon were recorded. These plats were granted preliminary approval in the mid 1990s under a phasing agreement with Dare County but were not recorded until 2001. Also, the largest remaining undeveloped tract in Duck was recorded in 2000 accounting for the majority of lots recorded throughout the unincorporated area.

Graph 3 – Subdivisions Recorded for Unincorporated Dare County 1995-2001



Graph 4- Total Subdivision Lots Recorded 1995-2001



c) Significant Land Use Compatibility Issues

Before the expansive growth periods of the past three decades, land use in Dare County was a mix of dispersed home sites and essential-need service establishments. During the growth period, market forces directed the establishment of a variety of land uses into the existing setting. As a result of this “mixing” of land uses, compatibility issues have developed. Further contributing to the compatibility issue is a lack of zoning controls or formalized zoning maps for some areas of unincorporated Dare County. This lack of zoning has often resulted in incompatible land uses located adjacent to one another or in incompatible architecture style in

close proximity to existing structures. A recent trend among the developed areas is a pattern of new and larger residential structures that do not match the scale of existing development.

Another compatibility issue concerns the development of land along the County's major transportation routes, NC 12, US 158 and US 64. Movement of traffic along these routes has been drastically impeded by commercial land use accessed from these roads and a series of traffic signals, particularly during peak summer months.

All of the compatibility issues in Dare County are compounded by the extraordinary amount of land held in public ownership. These publicly owned properties include the Alligator River National Wildlife Refuge, the Fort Raleigh complex, the Cape Hatteras National Seashore, the Pea Island Wildlife Refuge, the US Air Force/Navy bombing ranges, and the Buxton Woods Coastal Preserve. Over 80% of the total land area of unincorporated Dare County is in public ownership. There is a great deal of pressure to use and develop the remaining 20% of the privately owned land. In addition, the privately owned lands are further limited by a number of State and Federal regulatory programs.

d) Issues Associated With Unanticipated Development

Protection of Dare County's abundant natural resources is a priority issue in Dare County. This is particularly true along the estuarine shoreline where stormwater runoff threatens water quality and aquatic life. Pressure for increased development will continue but must be balanced by the need to protect our natural resources.

Land that is suitable for development is becoming harder to find and more costly to develop due to regulatory and topographical constraints. The robust market of the past several years has been able to absorb the extra costs of developing marginal lots and still make a satisfactory profit. As such, attempts to circumvent land use regulations are becoming more frequent.

Another issue is the ability of local government to keep pace with the latest construction trends. Quick responses to undesirable construction practices are generally not possible since local governments must adhere to strict notification procedures established by North Carolina General Statutes before adopting new land use regulations.

An equally important, but less quantifiable issue is the potential loss of identity as a result of unanticipated development. Often, residents of a community feel their "sense of place" is threatened by changing developing patterns or the market adjusting to increases in the permanent population.

Plans, Policies, and Regulations

There are several important Federal, State and local documents and regulations that are used to manage growth in Dare County. The following is a list of these plans, policies, and regulations:

a) Local Plans, Policies, and Regulations

1. 1994 Dare County Land Use Plan – This plan continued the goal of the 1987 Land Use Plan to zone the portions of unincorporated Dare County that lack development standards. Progress toward this goal has been on-going since the adoption of the 1994 LUP. Growth has been continuing at a fast pace since the 1994 LUP and policies in that Plan have provided some direction during this period of high growth.
2. Dare County Zoning Ordinance – This document is used within the zoned portions of unincorporated Dare County, including Colington, Roanoke Island and Hatteras Island. Since the 1994 LUP, the County has amended the Zoning Ordinance several times to establish standards for lighting and gross floor area limitations in Duck village; a detailed set of standards for the location and construction of communications towers; zoning standards for Martins Point Subdivision; and a text amendment for bed and breakfast homes in the RS-1 district; established a new Commercial Services CS district in conjunction with the Colington zoning map and parking standards for residential structures with 4 or more bedrooms. The Dare County Planning Department is responsible for the enforcement of the Zoning Ordinance.
3. Dare County Subdivision Ordinance – All of unincorporated Dare County, including the unzoned portions, are covered by this ordinance. Subdivision plats are reviewed by the Planning Board and approved by the Board of Commissioners with staff assistance from the Planning Department.
4. Dare County Mobile Home Park and Travel Trailer Park Ordinance – This document provides standards used to guide the development of mobile homes parks and travel trailer parks.
5. Dare County Nuisance Ordinance – This ordinance was adopted in 1992 and gives the Planning Director the authority to declare certain structures or properties as public nuisances. Since its adoption, the ordinance has been used to help with the clean up of oceanfront structures destroyed or damaged by erosion, remnants portions of burned structures, and used to address potential collapse hazards associated with sand mining activities in Colington Harbour Subdivision.
6. Dare County Health Department – This local agency is responsible for the issuance of septic permits and well placement. The staff also submits general comments on all proposed subdivisions and projects reviewed by the Planning Board. Their jurisdiction is Countywide, including the municipalities.
7. Dare County Regional Water Service Plan – This plan is prepared and updated on an annual basis by the staff of the Dare County Water Department. The plan provides usage rates for the past year, anticipated demand for the upcoming year, and infrastructure needs.

b) State Plans, Policies, and Regulations

1. Department of Environment and Natural Resources — Division of Coastal Management/Coastal Area Management Act of 1974 – This state regulatory program is responsible for the development of the twenty coastal counties within North Carolina. All proposed development within the CAMA Areas of Environmental Concern (AECs) must be reviewed and approved under these standards. The adoption of 30-foot buffer regulations

along all estuarine water bodies in 2000 by the State has had significant impact on development in Dare County.

2. Department of Environment and Natural Resources – Division of Land Resources – This State agency is responsible for issuing erosion and sedimentation permits, mining permits, etc.
3. Department of Environment and Natural Resources – Division of Water Quality – This agency is responsible for statewide regulatory programs in groundwater and surface water protection, including the issuance of stormwater management permits and water quality monitoring programs.
4. Department of Environment and Natural Resources – Division of Environmental Health – This agency is comprised of five sections: Environmental Health Services, Public Water Supply, On-Site Wastewater, Public Health, and Pest Management. This agency oversees the regulation of on-site wastewater treatment, enforcement of public water supply rules, safe harvesting of shellfish and sanitation of shellfish processing establishments, and the public health of public pools.
5. Department of Cultural Resources – Division of Archives and History – The responsibilities of this agency include the identification and protection of historical and archaeologically significant lands and structures.
6. Department of Insurance – This department has supervision and regulatory authority over the State building codes that are used and enforced by the Dare County Building Inspectors and Fire Marshal.
7. Department of Transportation – Thoroughfare Improvement Plan – This plan outlines proposed highway infrastructure improvements. The plan is updated on an annual basis through hearings conducted by the Transportation Board.

c) Federal Plans, Policies, and Regulations

1. Army Corps of Engineers – The Corps has regulatory jurisdiction over wetlands, dredging projects, and beach nourishment, etc.
2. Federal Emergency Management Agency – This Federal agency is responsible for the enforcement of floodplain management regulations. A local Floodplain Administrator is on staff with Dare County to ensure that all construction within the County is built to comply with the flood elevation standards. FEMA also sponsors a Community Rating System that involves a series of incentives for local governments to promote proper construction techniques and public education of floodplain regulations in exchange for community-wide discounts on flood insurance rates. Dare County participates in the CRS program and currently qualifies for a 15% discount on flood rates in unincorporated Dare County.
3. Department of Interior – The National Park Service and the US Fish and Wildlife Service both own large amounts of land in Dare County. Their management plans and policies greatly influence activities of the local government and Dare County citizens, particularly on Hatteras Island and the Mainland.

d) Enforcement of Plans, Policies, and Regulations

Dare County employs a full-time Planning Department that is responsible for the implementation and enforcement of all local regulatory programs pertaining to land use. Enforcement is

achieved through a review process that requires the submission of development plans and/or subdivision plats to the Planning Board for a recommendation. The Board of Commissioners has the final approval authority and the staff personnel monitor to ensure compliance.

New construction is regulated by a local permit process that includes review by a zoning enforcement officer, a local CAMA permit officer, and the County's floodplain administrator before the issuance of a local building permit. All new construction must meet the standards of the NC State building codes.

The authorization and installation of on-site septic tank/drainfield wastewater treatment systems is regulated by the Dare County Health Department. A staff of professional sanitarians certified by the North Carolina Division of Environmental Health oversees this permit program.

The Dare County Planning Department also enforces the Dare County Mobile Home Park and Travel Trailer Park Ordinance. The review procedures for this ordinance are similar to the subdivision review process.

The Nuisance Ordinance is enforced by the Planning Department with the Planning Director authorized to declare public nuisances and identify remedial measures.

Dare County relies on the NC Division of Water Quality for standards for stormwater management and the Division of Land Resources for enforcement of standards for sedimentation and erosion control.

The U. S. Army Corps of Engineers is the responsible agency for the protection, management and identification of wetlands.

e) Evaluation of Existing Land Use Plan

Since 1994, the policies of the Dare County Land Use Plan have played important role in several land use issues that have dominated public policy debates in unincorporated Dare County.

The underlying theme of the 1994 LUP, as expressed in a resolution included with the Plan, was to maintain the "coastal village atmosphere" of unincorporated Dare County. Most illustrative of the effort to prevent the loss of a sense of place has been the conflict between market forces seeking to deliver national retail franchise businesses to Dare County's evolving population base and the desire of citizens and local merchants to preclude the introduction of these uncharacteristic retailers and their large floor area structures. The result of this debate was the adoption of an ordinance to limit floor area ratio in the Village Commercial zoning district in Duck. In addition, as of 2001, the Dare County Board of Commissioners had established a moratorium on all large commercial structures greater than 20,000 square feet. The purpose of the moratorium was to provide staff time to develop ordinances and standards to help insure that buildings in unincorporated Dare County did not overpower the landscape or represent future eyesores once abandoned or vacated. In March 2002, the Board adopted a gross floor limitation of 20,000 square feet for retail structures in all commercial and industrial zoning districts.

Perhaps, more controversial than the conflict with big box retailers was an effort by the Dare County Board of Commissioners to use its land use plan to prevent the relocation of the Cape Hatteras Lighthouse. Attempts by the Board of Commissioners to include language in the LUP stating the County's preference that a shoreline stabilization technique be used instead of relocation met resistance from the NC Coastal Resources Commission. The matter was eventually resolved and the Lighthouse was relocated.

The LUP's policy on wastewater treatment played a decisive role in a decision to preclude the construction and operation of a central wastewater treatment plant in conjunction with the development of a 65-acre parcel in Duck. Developers had proposed to use such a facility and the Planning Board and staff determined doing so would be contrary to County policy. The subdivision was eventually approved but the proposed central wastewater treatment system was eliminated. Although the developer argued that the controlled treatment of wastewater was preferable, the County maintained its position that privately owned wastewater treatment plants have a poor maintenance track record and are often only used to bolster lot coverage or development density.

The 1994 Plan also recognized competition for the use of public trust waters that are so important to the tourist economy of Dare County. As the use of personal watercraft, privately owned and rented, continued to create controversy, the County Commissioners sought legislative authorization from the NC General Assembly to regulate activities in the County's public trust waters. A bill providing Dare County regulatory powers over the public trust waters was ratified in May 2001. It is anticipated that a plan for zoning the waters will be developed in the period between 2002 and 2004.

As has been the case since the early 1980's, the County continues its efforts to extend detailed zoning maps throughout the unincorporated areas. Given the unpredictable nature of the political climate, this long-term goal will continue to be a challenge in the coming years.

An analysis of the 1994 policies and the associated implementation strategies is included as Appendix A of this update.

LAND SUITABILITY

Physical Characteristics

Dare County is located along the coastal plain of North Carolina and is best noted for its lengthy strands of barrier island beaches. The County's boundaries encompass approximately 800 square miles of which 390 square miles are land area and the remaining 410 square miles are covered by water. Dare County geographically divides itself into a mainland area, a northern and southern stretch of islands, and historic Roanoke Island. These land masses are surrounded by water bodies that include the Atlantic Ocean to the east and to the west include the Pamlico Sound, the Albemarle Sound, the Roanoke Sound, the Croatan Sound, the Currituck Sound and the Alligator River.

a) Natural Hazard Areas

Due to the proximity of Dare County to the Atlantic Ocean, three kinds of natural hazard areas have been designated as Areas of Environmental Concern (AECs) by the NC Coastal Resources Commission. All three fall into the general category of Ocean Hazard Areas:

1. Inlet Hazard Areas that are lands adjoining Oregon and Hatteras Inlets for variable distances as determined by the Coastal Resources Commission.
2. Ocean Erodible Areas, which overlaying the frontal dune include the distance landward from the first line of stable natural vegetation along the entire oceanfront.
3. High Hazard Flood Areas are areas subject to high velocity waters during a 100-year storm event. These are identified as V zones on the National Flood Insurance rate maps.

Also much of Dare County is located adjacent to the Pamlico, Albemarle, Roanoke, Croatan, or Currituck Sounds and their tributaries. Similar to those portions of Dare County exposed to the Atlantic Ocean, these soundside areas are susceptible to flooding during hurricanes or other weather events where extended periods of gusty winds push the estuarine waters up their banks. In the early 1990's weather patterns made soundside flooding a dominant issue. In the latter half of the decade, ocean overwash from tropical storms, hurricane, and nor'easters changed the focus and directed attention to the issue of beach erosion and the vulnerability of NC 12 on Hatteras Island to these conditions.

b) Manmade Hazard Areas

The only manmade hazards identified in Dare County are those associated with civilian and military aircraft operations. The civilian aircraft operations in Dare County are the Dare County Regional Airport located on Roanoke Island, First Flight Airstrip location in Kill Devil Hills, and the Billy Mitchell Airstrip located on Hatteras Island. The US Air Force and US Navy operate bombing and artillery ranges with air space restrictions on the Mainland portion of Dare County near Stumpy Point.

Land within the three civilian airport facilities approach zones is subject to hazardous conditions associated with aircraft take-offs and landings. Land development near these civilian facilities must be carefully evaluated to ensure that it does not interfere with the safe operation of the facilities.

A new issue arose in the late 1990's as mosquito-borne diseases created fears about both animal and human infection. It was noted that many coastal communities, in an effort to address stormwater retention, had turned to on-site retention basins as a means of preventing runoff. Unfortunately, and not considered at the time, these ponds can serve as breeding grounds for mosquitoes and thus the need to consider other means of addressing stormwater management.

c) Soil Characteristics

Soil characteristics and their ability or inability to accommodate on-site septic systems play an important part in the land development of Dare County. On the Mainland portion of Dare

County, ground elevations are from 3 to 7 feet above mean sea level and soil conditions are predominantly poorly drained with thin organic loam to silt loam surface layers. Along much of the Outer Banks portion of the County, the soils are generally well to moderately well drained sand. On Roanoke Island, soils range from loamy sand surfaces with sandy clay loamy subsoils to silty clay loam surfaces.

In addition to these broad differences between the three main geographic land masses, soil types can vary significantly within relatively small areas. The Dare County Soil Survey can provide more specific information on the soil types found in Dare County. This document is available from the Dare County Agricultural Extension Office or the Dare County Soil and Water Conservation Service office.

Throughout Dare County, existing natural soils conditions have been altered by drainage improvements and the introduction of soils from external origins. One trend in land development is to place large amounts of fill material on undeveloped lots to bring the ground elevation to the base flood level. This practice creates problems for the adjoining properties due to the changes in the natural topography.

Wetland soils are also a factor in land development in Dare County. The Clean Water Act delegates the protection of wetland areas to the U.S. Army Corps of Engineers. The Corps manages wetland activities under a permit process. However, the definition of what constitutes a “wetland soil” is subject to interpretation. The criteria used by the Corps staff have changed over the years and as such the amount of land identified as wetlands in Dare County changes with the criteria.

The high degree of variability in soil types, combined with a generally high, seasonally fluctuating water table, makes large scale land use planning difficult. The Soil and Water Conservation Service in Dare County has divided the entire County into four general categories for septic tank suitability: suitable, marginal, unsuitable, and questionable. The next table contains a summary of the soil types found in Dare County and their suitability according to the SWC classification.

Table 10 – Classification for Soil Types for Septic Tank Suitability

Soil Type	Depth to Water Table	Suitability Designation
Duneland	6.0'	Suitable
Fripp Fine Sand	6.0'	Suitable
Newhan Fine Sand	6.0'	Suitable
Newham Complexes	Varies	Suitable
Pactolus-Wakula-Wagram-Associates	NA	Suitable
Corolla Fine Sand	1.5' to 3.0'	Marginal
Corolla Fine Sand	1.5' to 3.0'	Marginal
Beach Foredune Association	0 to 3.0' foredunes 6.0'	Unsuitable
Corolla Duckston Complex		Unsuitable
Hobonny Soils	0 to 2.0'	Unsuitable
Duckston Fine Sands	1.0' to 2.0'	Unsuitable
Duckston Fine Sands, Forested	1.0' to 2.0'	Unsuitable

Carteret Soils, High	1.0' to 3.0'	Unsuitable
Conaby Soils	0 to 1.0'	Unsuitable
Currituck Soils	0 to 3.0'	Unsuitable
Wasada-Bladen Association	NA	Unsuitable
Capers Association	NA	Unsuitable
Dredge Spoil	3.0'	Questionable
Madeland	0 to 2.0'	Questionable

Prior to construction, all of these factors and an individual site analysis performed by the Dare County Health Department are completed to determine the suitability of a site for development. The Health Department's analysis includes the necessary amount of fill material needed to meet the State on-site septic regulations. As the amount of suitable land in Dare County that is available for development diminishes, the use of fill material and alternative engineered septic systems for land with unsuitable, marginal or questionable soils will become more prevalent.

d) Vegetation and Elevated Dunes

Vegetation types vary throughout the County from the wooded wetlands of the mainland to the relic maritime forests of the barrier islands. Wetland vegetation is abundant and diverse. Coastal wetlands occur throughout the estuarine shorelines and "404" or freshwater wetlands are located in most of the geographic areas of Dare County. The northern and southern beaches include vegetative sand hills that occasionally reach elevations of 50 feet or more above mean seal level. Most notable of these areas are the dune system facing Roanoke Sound on the northeast section of Roanoke Island, the Jockey's Ridge live dune system in Nags Head, the maritime forests areas found in Buxton Woods, Nags Head Woods and Kitty Hawk Woods, a small area of inland dunes south of Frisco and some portion of Colington Harbour Subdivision, and the frontal dune system along the County's ocean shoreline.

e) Water Supply

Dare County is dependent upon several different sources of raw water, but all are entirely or partially dependent on groundwater. Underlying the County is a system of layers that contain three aquifers. The first layer contains a shallow aquifer that ranges in depth from 50 feet on Roanoke Island to its maximum thickness of 100 feet at Kitty Hawk. This aquifer is recharged by precipitation and is used by a small number of people on Roanoke Island, the northern beaches of Dare County and Hatteras Island as a source of water for private wells. The land surface for recharge of this upper aquifer is Roanoke Island. Additionally, this aquifer is hydraulically linked to the second aquifer and some recharge occurs from the upper aquifer to the next aquifer below.

The second aquifer serves as the primary source of potable water for the County. Its depth varies from 100 feet on Roanoke Island to 45 feet of depth in Nags Head. The depth to the surface of this primary aquifer ranges from approximately 100 feet on Roanoke Island to 200 feet along the northern beaches of the County. This aquifer receives recharge from the Mainland portion of Dare County and Roanoke Island and may be affected by leakage for the upper aquifer. The estimated total annual recharge capacity to the primary aquifer is 19,439 million gallons, which

might produce a yield from 100,000 to 150,000 gallons per day. This figure may be not reached because the exact recharge of the primary aquifer depends on many factors including annual rainfall.

The third or lowest aquifer is considered an abundant source of water and is used by the County's RO plants in Kill Devil Hills and Rodanthe on Hatteras Island. The water quality is unsuitable for direct potable usage because its chloride concentrations exceed the maximum allowable levels of chlorides. In addition, recharge to this aquifer is suspected to be from further inland in Mainland North Carolina. Since it is surrounded by clay layers that do not allow for infiltration once water has been withdrawn, it is considered safe from surface contamination.

The Fresh Pond is a 2.7-acre lake located halfway between the Atlantic Ocean and Roanoke Sound and is divided by the municipal boundaries of the Towns of Nags Head and Kill Devil Hills. The water in the Fresh Pond comes from rainfall as well as some flow from the upper or first layer of the groundwater aquifer system underlying Dare County. The yield from the Fresh Pond is estimated at a safe, sustainable level of 900,000 gpd in a years' time. For emergency purposes, a withdrawal of 1.5 million gpd is possible for a short duration, the maximum being four days. This area is a designated Area of Environmental Concern under the CAMA guidelines due to its water supply status.

Water on Hatteras Island comes from either private wells or the County's 1.0 million gpd Reverse Osmosis (RO) plant in the village of Rodanthe for Rodanthe, Waves, and Salvo. In the four villages of Avon, Buxton, Frisco, and Hatteras, water is supplied by the central RO/Anion Exchange water system managed by the County Water Department.

The Southern Hatteras fresh water treatment (Anion Exchange) draws its raw water from an aquifer system that lies underneath Hatteras Island. This system consists of two aquifers; the first is a water table aquifer extending from the land surface to the first confining beds. The second aquifer, a semi-confined aquifer, is below and between these confining beds. The fresh groundwater fluctuates in size, as it is a lens-shaped mass that floats on heavier saltwater and is subject to seasonal and tidal variations. The aquifer system is recharged by rainfall and the estimated annual recharge is 2.178 billion gallons based on an average annual rainfall of 50 inches.

The southern Hatteras Island RO treatment draws its raw water from the third or chloride ridden lower aquifer. The RO process is excellent for removal of chlorides and other salts (>90%) from the source water. The brackish water is abundant, and is considered a relatively untouched source of raw water for RO desalination for the future of Hatteras Island.

Fragile Areas

The unique physical setting of Dare County includes a number of features that could be damaged or destroyed by incompatible development activity. These features include coastal wetlands, ocean and sound beaches, all surrounding water bodies, unique geological formations, and other areas susceptible to man's intrusion.

Many of these unique features have been offered regulatory protection as Areas of Environmental Concern (AECs) under the Coastal Area Management Act. The AECs are discussed in detail in Section Two. Although not a designated AEC, Buxton Woods forest is one

of Dare County's most unique physical setting. A special zoning district with land clearing restrictions was adopted for the Buxton Woods forest in 1988 by Dare County. The Federal and/or State governments have purchased some other special areas and their development potential has been limited to conservation. These publicly-owned lands include the Cape Hatteras National Seashore, the Pea Island Wildlife Refuge, the Alligator River Wildlife Refuge, Fort Raleigh complex and the Buxton Woods Coastal Reserve. The Division of Coastal Management also uses a wetland functional assessment model called the North Carolina Coastal Region Evaluation of Wetland Significance. This is a watershed-based wetlands functional assessment model that uses geographic information systems (GIS) software and data to assess the level of water quality, wildlife habitat, and hydrologic functions of individual wetlands. The primary objective of the NCCREWS wetland assessment is to provide users with information about the relative ecological importance of wetlands for use in planning and overall management of wetlands. Local governments can use this model as a planning tool to define suitable classes or types of development or conservation practices for each wetland type to protect the integrity of the ecosystems and coastal landscape.

In addition, to the Areas of Environmental Concern (AECs), there are other areas or lands that may be deemed as unsuitable for development or least suitable for development. Some of the remaining vacant or undeveloped lands may contain soils that are deemed unsuitable to support septic systems for wastewater treatment and therefore have remained in their undeveloped state.

Throughout the LUP, a high emphasis is placed on surface water quality and ground water quality. In addition, the relationship between high quality and functional wetlands has been acknowledged in continued viability of our fisheries and other natural resources. Development in areas that may be contrary to the protection of these natural resources and water quality should be evaluated, avoided, or carefully reviewed to insure no unacceptable decline in the natural resource or water quality will occur as a result of development.

Finally, Dare County's status as the origin of the first English settlement provides a past rich with history. Archaeological and historical sites can be found throughout Dare County. The vast majority of these sites have been inventoried and purchased for preservation, including the Fort Raleigh site on Roanoke Island and the Wright Brothers Memorial site in Kill Devil Hills.

Areas with Wildlife and Mineral Resources

Areas with wildlife and mineral resources include: productive and unique agricultural lands, potentially valuable mineral sites, publicly owned forests, parks, fish and gamelands, and other non-intensive outdoor recreation lands and privately-owned wildlife sanctuaries.

Many of these areas are owned and operated by Federal agencies. The mineral extraction potential on Federal lands designated as wildlife resource areas or national parks is strictly regulated by the US Department of the Interior. Similar protection is extended to wildlife resources on lands owned by the U.S. Fish and Wildlife Service.

The remaining privately owned portions of Dare County that have mineral resources include the Mainland communities of East Lake, Manns Harbor, Mashoes, and Stumpy Point. While there

have been past discussions of major agricultural development and possible peat mining, to date these possibilities have not been pursued.

The final category of areas with resource potential are the numerous locations for potential mining of sand, clay and marl. Mining activities that involve more than one acre of land are regulated by the State of North Carolina. Activities on land less than one acre in size are not subject to any regulation at the State or local level. However, in 2001, Dare County did establish inland sand dunes standards that preclude dune alterations or disturbances unless associated with building activities or approved by the County.

The State of North Carolina classifies certain farmlands as “prime” farm areas that are suitable for farming but are also able to support other lands uses because of the suitable soils contained in these areas. Over the past several years, areas that are considered as “prime” farmland have been developed as subdivisions resulting in the loss of some of North Carolina’s most valuable farmland. There is approximately 5,500 acres of “prime” farmland located on the Mainland of Dare County. However, over 75% of the area is included in the Alligator River National Wildlife Refuge and the likelihood of development is minimal due to this Federal ownership.

Community Facilities and Services

Over the past several decades, unincorporated Dare County has undergone a transition from sparsely developed and populated villages to a seasonal resort area featuring a mix of commercial and residential development. The demand for infrastructure improvements and public services has increased significantly during this transition period. A discussion of each of these items as follows:

Water

The major water supply system for all of Dare County, including the municipalities, is the Dare County Regional Water Supply System (DRWSS). The remaining areas of unincorporated Dare County not supplied water from either of these two agencies rely on private wells for potable water.

The provision of drinking water for the public water supply systems on the northern beaches of Dare County is accomplished by producing water at the Skyco Ion Exchange water plant on Roanoke Island, the reverse osmosis desalination water treatment facility in Kill Devil Hills, and the Nags Head managed Fresh Pond surface water facility in Nags Head.

The DRWSS was formed to succeed the Dare Beaches Water Authority as a vehicle to develop an adequate water supply for the overall northern beaches of the County. The DRWSS is not to be confused with the Dare County Water System, which provides and maintains the water supply system for the Towns of Southern Shores and Kitty Hawk. The village of Duck, Colington Island, and some portions of Roanoke Island are also served by the Dare County Water System.

Concerns about financing, and the need for an authority to finance through issuance of revenue bonds, led the North Carolina Local Government Commission to recommend that Dare County

be the political entity responsible for development of an adequate water supply for the Dare beaches. The County's involvement began in the early 1970s and led to the development of a groundwater supply on the southern end of Roanoke Island to supplement the only plant in operation at that time, the Fresh Pond surface water treatment plant.

Water delivery by the DRWSS to the municipalities began with the first gallons going to the Town of Manteo on June 20, 1980. Shortly after, in August of 1980, water service to the Towns of Kill Devil Hills and Nags Head began. Service to the customers in unincorporated areas of Roanoke Island began a couple of days later with service to the Towns of Southern Shores and Kitty Hawk and the village of Duck coming on-line later in November and December of 1980. The initial installation of meters for water service was approximately 1,000 meters. By September 2001, a total of 19,147 metered service connections were being served through the main master meters that deliver water to the Towns from the DRWSS, and a total of 23,681 throughout Dare County.

The average annual daily water use for the DRWSS in 2000 was 4.408 MGD. The maximum monthly average water use for the year 2001 was 8.090 MGD in July with 7.376 MGD for an average day in August 2000. The minimum's day usage occurs every year during the winter months. The lowest consumer usage month was recorded in February when the average gallonage totaled only 2.974 MGD. The year's lowest consumer usage day was January 19th when the entire distribution system used no more than 1.891 million gallons. This creates a maximum to minimum water usage ratio of almost 5:1. During peak days in the summer months of 2001, the demand reached as high as 9.035 MGD. Table 11 shows the average monthly water use in MGD for each month.

Table 11 – Average Monthly Water Use in MGD for 2000

January	2.956
February	2.793
March	3.069
April	3.671
May	4.757
June	6.268
July	7.439
August	6.873
September	4.727
October	4.039
November	3.373
December	2.845

There are 4 major water users who purchase water from the DRWSS and in turn distribute and maintain their own water systems. Their average daily use is listed in the next table.

Table 12 – Four Major Wholesale Purchasers for 2000

<u>Name of User</u>	<u>Avg. MGD</u>
Dare County	1.843
Kill Devil Hills	1.164
Nags Head	1.030
Manteo	0.198

All groundwater delivered by the DRWSS is produced at either the Skyco plant or the Reverse Osmosis desalination plant in Kill Devil Hills. Nags Head manages the production of water at its Fresh Pond surface water treatment facility, which also supplies water for delivery by the DRWSS.

The Skyco plant is located on the southern half of Roanoke Island. It is supplied by a series of 10 permanent wells drilled down to between 170 and 220 feet below the surface into the upper Yorktowne aquifer, pulling water at various screened intervals between 120 and 220 feet. The combined 12-hour yield of all wells is 2.722 MGD and the production capacity exceeds 5.0 MGD. The plant was built in 1979 to supply additional water to the then only sources of drinking water for the County’s public water supply systems; the Fresh Pond water treatment plants operated by both the Towns of Kill Devil Hills and Nags Head.

The North RO plant is located in Kill Devil Hills on a tract of land known as the Baum tract. It is presently supplied water by a series of 8 wells drilled down to 425 feet below the surface on the same tract of land as the plant. Two additional wells were installed for added supply in December 1994. The North RO plant is supplied raw water from a different and unconnected portion of the Yorktowne aquifer that supplies the Skyco plant. The combined 12-hour yield of all wells is 3.600 MGD and production capacity is 3.0 MGD.

The NRO plant was brought on-line in August 1989 to supply additional water when customer demand approached the upper limits of the production capabilities of the Skyco plant and the Nags Head Fresh Pond plant. Once the Skyco plant came on-line, there was little need for the Kill Devil Hills treatment of Fresh Pond water to continue and the plant was dismantled shortly thereafter.

The Fresh Pond surface water treatment facility is located at the western municipal boundaries of the Town limits separating Kill Devil Hills and Nags Head. This pond is utilized most often during the peak tourist season in the summer and is the only large surface source of fresh water on the Outer Banks.

Built in 1964 as the first source of fresh water supply to the original water supply systems of Kill Devil Hills and Nags Head, this plant can produce almost 1.5 MGD over a short period of time. Estimates of a long-term, sustained yield of 900,000 gallons per day can be achieved without causing an unacceptable drain on the pond. There is an estimated 106.2 million gallons of water in this pond when full.

Total sustained present maximum production capacity of the three treatment plants supplying water to the DRWSS is 8.9 MGD.

Throughout Dare County, tourism plays a major part in the future in determining water customer demand. The following table lists future population and water demand projections until the year 2020.

Table 13 – Future Population and Water Demand

Year	County Population	Year-round System Population	% Of County Population	Avg. MGD Day Total	Peak MGD
1990	22,746			2.469	6.319
1997		7,764	31.46		9.032
2000	29,967	8,464	26.11	2.694	9.855
2010	37,269	10,538	25.01	3.407	12.463
2020	44,061	12,600	24.30	4.174	15.269

Best estimates point to the fact that an expansion in the production capabilities of the DRWSS will need to be started well in advance of the anticipated increases in demand prior to the year 2010.

Present production and an additional 18.805 million gallons in storage throughout Dare County’s northern beaches and Roanoke Island should be sufficient to handle the peak anticipated demand and fire flow protection until the turn of the century. But, once again, these figures are based on best calculated, estimated customer demand figures as anticipated in 1997, and should be reviewed and re-evaluated annually.

Based on the present views of the withdrawals of water from the wellfield on Roanoke Island, expansions in the production capabilities of the DRWSS will most likely be accomplished with new wells on the beach and not at the Skyco plant.

The reverse osmosis plant in Kill Devil Hills was built with three RO units installed and room for the installation of five additional 1.0 MGD reverse osmosis skids for a total plant production capacity of 8.0 MGD when fully expanded. The installation of two wells per each additional RO unit installed will be necessary. The anticipated site of these wells is to the south of the present location of the RO plant. As stated earlier, the expansion of the wellfield and the production of water must occur prior to customer peak demand reaching 9.855 MGD around the year 2000.

Water for the unincorporated areas of Roanoke Island not serviced by the DRWSS rely on private wells for potable water, as does the mainland areas of Dare County.

On Hatteras Island, the villages of Avon, Buxton, Frisco, and Hatteras are serviced by the Dare County Water Department. Hatteras Island’s economy depends on tourism and this accounts for wide fluctuations in population during the winter and summer months.

The combination RO/AE water treatment plant processes water drawn from 19 shallow wells, located in the Buxton Woods surficial aquifer. Four brackish wells in the Mid-Yorktowne aquifer supply water for RO treatment. The total average recharge on the surficial aquifer is approximately 7.5 MGD and the average daily withdrawal is .698 MGD.

The following table illustrates the distributed amounts for each month during 2000. The minimum water use month was March, with 0.438 MGD. The maximum water use month was July at 1.098 MGD, with the peak day on July 4th at 1.223 MGD.

Table 14- Average Distribution MGD

January	0.491
February	0.518
March	0.438
April	0.601
May	0.732
June	0.974
July	1.098
August	0.987
September	0.702
October	0.704
November	0.590
December	0.445

The other Hatteras Island villages of Rodanthe, Waves, and Salvo rely on private wells and the County's 1.0 MGD RO Plant for potable water. The private well water in these villages, while safe for drinking, is of poor quality.

The following table illustrates the distributed amounts for each month during the year 2000. The minimum water use month was January with 63 thousand gallons used per day. The maximum water use month was July, with a daily water use of 0.367 MGD. This is also during the peak tourist season and the peak was July 6th 2000 with a usage of 0.468 MGD.

Table 15 – 2000 Monthly Distributions

January	0.063 mgd
February	0.049 mgd
March	0.075 mgd
April	0.141 mgd
May	0.168 mgd
June	0.301 mgd
July	0.367 mgd
August	0.327 mgd
September	0.199 mgd
October	0.158 mgd
November	0.128 mgd
December	0.076 mgd

The Stumpy Point water system project, when completed around the beginning of the year 2003, will provide the County's first public water supply on the Mainland from two brackish water wells drilled to 170-190 feet deep located within the plant site. The reverse osmosis (RO) process will desalt the water using a RO unit that can produce 64,000 gallons per day (gpd). The

average water system usage is calculated to be approximately 15,000 gpd with a peak summer day usage of 36,350 gallons. The RO unit will store processed water in a 10,000-gallon tank on the ground level adjacent to the plant. This water will then be pumped 145 feet up into the 75,000 gallon elevated tank to maintain the system pressure anticipated to be at least 50 pounds per square inch throughout the system.

Source: Bob Oreskovich, Dare County Utilities Director

As noted throughout the information provided by the Dare County Utilities Director, the future capacity of the water infrastructure over the next 10 year period is carefully monitored and re-evaluated each year.

Wastewater

Publicly owned wastewater treatment in Dare County is only available from the Town of Manteo, which operates a central wastewater treatment plant. The capacity of this plant is 600,000 gpd with current demand usage at approximately 200,000 gpd. The Town does offer excess wastewater capacity to projects within the unincorporated areas of Roanoke Island that are adjacent to its service boundaries. It is recognized that these projects that choose to use the central wastewater treatment from Manteo will eventually be annexed by the Town. There is little prospect for other publicly owned central wastewater treatment plants due to environmental constraints with surface water discharge and a lack of suitable soils for land application.

There are several privately owned and operated central wastewater treatment plants in Dare County. The two are located within the County's unincorporated boundaries. The Baycliff Subdivision in Colington features a small package treatment plant for this residential subdivision. The Kinnakeet Shores Soundside Subdivision is also serviced by a central package treatment plant. The soundside residential phases of this division and the commercial complex known as the Hatteras Island Plaza are connected to this treatment plant. There are other privately owned plants located within the municipalities of the County.

On-site septic tank and drainfield systems serve as the predominant method of wastewater treatment in Dare County. In situations where the intensity of land use or soil limitations preclude the use of a traditional septic system, alternative engineered methods of wastewater treatment have been used. These include low-pressure systems and peat systems. These systems have become more popular in the past several months, but their maintenance record remains unknown since the use of the systems is relatively new in North Carolina.

Transportation

The island geography of Dare County greatly influences the transportation infrastructure. Bridges are a key component of this infrastructure and serve as entryways to Dare County, except on the southern end of Hatteras Island, which is accessed by ferry service from Ocracoke Island. Most travel within the County occurs on two arterial routes, NC 12 and US 158. US 158 runs north-south from Southern Shores to the Whalebone area of Nags Head. NC 12 runs north-south from the Dare/Currituck line north of Duck to the southern end of the County in

Hatteras Island. Movements on and off the outer islands to the west are confined to US 64/264 through the Mainland and on US 158 along the Currituck Sound Bridge. Ferry service from Hatteras village also serves as an alternative egress from Hatteras Island.

Traffic flows within the County vary according to the roadway section, season, and day of the week. Typical of a resort area, the roadway system in Dare County experiences sizable variations in traffic demands. The following table illustrates average daily traffic counts provided by NCDOT for several key locations in Dare County.

Table 16 – Average Daily Traffic Count for 2000

Approximate Location of Counter	ADT for 2000
NC 12 Between Duck and Sanderling	12,000
US 158 --Wal-Mart Shopping Center	28,000
US 158 – Kitty Hawk/ south of Duck exchange	30,000
US 158 - Colington Road Intersection	34,000
US 158 – Nags Head/Whalebone Junction	22,000
NC 12 – Southern Shores	18,000
NC 12 – Ocean Bay Blvd. Intersection	9,000
NC 12 – Nags Head/Jennette’s Pier	7,700
NC 12 – south of entrance to Pea Island	7,800
NC 12 – Avon	7,800
NC 12 – Buxton	6,200
US 64 – Nags Head Causeway/Pond Island	20,000
US 64 – East Lake/ Alligator River Bridge	2,900
US 64/264 Intersection	3,600
US 64 – Causeway west of Pirate Coves	17,000
US 64 – Roanoke Island/COA entrance	15,000
NC 345 – Just south of Midway Intersection	5,600

The island geography of Dare County also makes bridges an essential component of expedited traffic movement. This factor is critical in determining time necessary to evacuate the County during a hurricane event. The time will vary based on the time of the year and the seasonal population. During the peak periods, it could take as long as 27 hours to evacuate and during off-season periods, it is estimated to take between 13 and 18 hours.

Since the mid 1990s, there have been several large transportation construction projects completed including,

- Construction of a second parallel bridge spanning Currituck Sound
- Widening of the Nags Head-Manteo Causeway to 4 lanes
- Various 4-lane improvements to Route 158 in Currituck County and Dare County
- A high-rise replacement of the drawbridge across Roanoke Sound.

A new bridge from Manns Harbor to the intersection of US 64 and NC 345 on Roanoke Island is currently under construction and is slated for completion in late 2002. A new visitors center will be constructed at the landing of this bridge site.

Other projects included in the State's Transportation Improvement program over the next ten-years include:

- Construction of a flyover at the intersection of US 64/NC 345 on Roanoke Island for traffic heading to the northern beaches and Hatteras Island.
- Replacement of the Bonner Bridge at Oregon Inlet
- Continued widening of US 64 to four lanes through East Lake and Manns Harbor

Perhaps the most important transportation issue in Dare County is the protection of NC 12 on the northern beaches and Hatteras Island. Ocean overwash and erosion have endangered portions of NC 12 in Kitty Hawk and along Hatteras Island. The NC Department of Transportation has made the stabilization of the threatened portions of NC 12 a priority project. A task force was appointed in the late 1990s to study NC 12 and several improvements, including relocation of several portions of NC 12 on Hatteras Island, have been completed as the result of this task force's work.

The safety of US 158 and the seasonal traffic increases were a high priority of the persons attending the public participation workshops held at the beginning of the update process.

Bicycle/walkways along many of the major transportation routes in the County have been constructed over the last seven years and these alternate transportation routes are popular among residents and visitors to the area. Plans for similar improvements, including widening of NC 12 in Kill Devil Hills and Kitty Hawk are underway.

Dare County has limited capacity of other modes of transportation. Air transportation is limited to the Dare County Regional Airport on Roanoke Island, the First Flight Airport in Kill Devil Hills, and the Billy Mitchell Airstrip on Hatteras Island. At present, there are no scheduled passenger services by a regional carrier. Past attempts to establish a commuter service to the Norfolk Airport have failed due to lack of passengers. A proposal to extend the runways at the Dare County Regional Airport has been reviewed by the Airport Authority. However, there is local opposition to this proposal and environmental constraints as well. In addition to serving the civil aviations needs of Dare County, these three airports have served as important staging centers for aviation-related activities during hurricanes and other storm events.

Dare County is not served by any bus or railroad operations however there are a number of taxi services available for hire.

In order for Dare County to successfully address its transportation needs a greater emphasis on intergovernmental coordination will need to be developed. The roads in unincorporated Dare County are maintained by NCDOT, as is the highway system.

As the traffic congestion problem continues to grow there will be a greater need to look into dependable public transportation and alternative means of movement such as water taxis and perhaps more ferries. It appears that a regional approach will also be necessary if Dare County is to ever achieve the goal of scheduled commuter airline service.

As of the date of this plan, there are insufficient funds at the State level to accommodate all of the demands generated by automobile traffic, particularly during the peak population periods. The County will continue to work with its delegation in the General Assembly and the N.C. Department of Transportation to secure additional transportation improvements to insure safe movement of people and automobiles.

Law Enforcement

Law enforcement in Dare County is administered at various levels of government ranging from Federal enforcement agencies to municipal police departments.

The National Park Service has personnel who patrol the south beaches of Dare County that are included in the Cape Hatteras National Seashore. The State Highway Patrol has officers stationed in Dare County with Countywide jurisdiction but focus mainly on the unincorporated Dare County.

In 2001, the Sheriff's Department employed 53 deputies plus the Sheriff and administrative staff. The Department has offices located on Roanoke Island, Hatteras Island and in Kill Devil Hills. The Sheriff's Department is also responsible for staffing and managing the Dare County Detention Center located on Roanoke Island. The jail has a total capacity of 122 inmates with room for 110 male inmates and 12 female inmates. The jail employs approximately 48 detention officers. The Communications Department is also under the supervision of the Sheriff.

The municipalities in Dare County operate their own police departments. These departments provide mutual aid to other law enforcements agencies when necessary.

Fire Protection

Fire protection is provided throughout the 860 plus square miles of Dare County by 350 volunteer and career firefighters in 16 individual fire districts that support 18 fire stations. The Towns of Southern Shores, Kitty Hawk, Kill Devil Hills, Nags Head and Manteo make up the five municipal fire districts with the Town of Duck being the sixth starting in May 2002.

The unincorporated fire districts of Dare County are Martins Point, Colington, Manns Harbor, Stumpy Point, Hatteras, Frisco, Buxton, Avon, Salvo, Rodanthe-Waves, and Roanoke Island. These departments are funded through a fire district tax that is collected by the Dare County and distributed under a fire protection contract.

Wild land fire suppression is provided in a joint effort by US Fish and Wildlife, US Park Service, and the NC Department of Forestry, by contractual agreement, also protects lands of the US Navy and Air Force bombing ranges.

The Dare County Fire Marshal acts as the liaison between the Dare County Board of Commissioners and its fire districts and is also responsible for the enforcement of the NC State Fire Code, does fire investigations, and cause and origin determinations. This office maintains a

county- wide fire data reporting system and is active in the area of fire prevention, designing programs in education that are geared toward all of our County citizens.

Public Schools

The education system in Dare County is directed by an elected seven-member Board of Education. A superintendent in charge of the administrative duties of the school system is appointed by the Board of Education. Funding for the school system is a combination of State funds and local funds allocated by the Dare County Board of Education.

The school system consists of nine facilities located throughout Dare County. Specifics for the schools are detailed below:

Table 17 - School Enrollment

<i>School</i>	Grades	Capacity	<i>Enrollment</i> Sept 2001
Kitty Hawk Elementary	K-5	696	701
Manteo Elementary	K-5	672	530
First Flight Elementary	K-5	528	599
Cape Hatteras Elementary	K-5	288	293
Manteo Middle	6-8	396	350
First Flight Middle	6-8	650	702
Cape Hatteras Secondary	6-12	553	366
Manteo High	9-12	720	1,133
Dare County Alternative	9-12	40	20
TOTAL			4,694

Table 18 -- Ten Year Student Population Projections

K-5	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Hatteras Island	292	291	302	304	319	324	329	334	340	346
North Beaches	1311	1307	1332	1398	1426	1489	1555	1623	1695	1770
R.Island/Mainland	546	545	539	537	535	537	538	539	541	542
Total	2149	2143	2173	2239	2350	2350	2422	2496	2576	2658

Hatteras Island -- based on 2.10% annual increase using 3-year kindergarten average class size population

Northern Outer Banks -- based on 4.41% annual increase using 3-year kindergarten average class size population

Roanoke Island/Mainland -- based on .46% annual increase using 3-year kindergarten average class size population

6-8	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Hatteras Island	160	150	150	156	144	153	152	165	167	170
North Beaches	737	791	774	740	739	737	777	775	809	844
R.Island/Mainland	329	324	304	290	292	285	282	280	281	281
Total	1226	1265	1228	1186	1175	1175	1211	1220	1257	1295

9-12	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Hatteras Island	209	224	227	227	221	201	211	205	204	214
North Beaches	782	808	877	910	950	970	921	943	925	935

R.Island/Mainland	392	396	415	421	415	411	391	380	377	371
Total	1383	1428	1519	1558	1586	1582	1523	1528	1506	1520

K-12 Totals	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Hatteras Island	661	665	679	687	684	678	692	704	711	730
North Beaches	2830	2906	2983	3048	3115	3196	3253	3341	3429	3549
R.Island/Mainland	1267	1265	1258	1248	1242	1233	1211	1199	1199	1194
Total	4758	4836	4920	4983	5041	5107	5156	5244	5339	5473

Table 19- Ten-Year School Facilities Plan

10-Year Facilities Plan (Escalated to project start)

	New Construction	Renovation Program	Interim Requirements	Directed Maintenance	Staff and Support Equipment	TOTAL
Estimated Cost	48,286,459	26,204,753	5,977,240	4,464,878	1,506,338	86,439,668
2001	1,000,000	50,000	2,000,543	859,294	157,300	4,067,137
2002	12,316,423	1,210,569	1,166,152	369,192	164,182	15,226,518
2003	19,513,240	2,553,272	1,043,245	342,200	168,395	23,620,352
2004	11,835,128	2,603,555	473,929	320,000	175,173	15,407,785
2005	3,047,483	4,860,950	208,309	383,200	182,099	8,682,041
2006	574,185	6,683,754	200,734	412,800	190,410	8,061,883
2007	0	2,500,000	478,045	442,200	129,323	3,549,568
2008	0	4,862,879	20,000	384,246	132,866	5,399,991
2009	0	879,774	386,283	436,200	138,272	1,840,529
2010	0	0	0	515,546	68,318	583,864
TOTALS	48,286,459	26,204,753	5,977,240	4,464,878	1,506,338	86,439,668

New Construction

This plan provides for:

1. A high school on the Baum tract (core capacity 1,200), \$30,000,000. Project completed by 2004.
2. An elementary school in Nags Head (core capacity 750), \$15,099,791. Project completed by 2004.
3. Eight new classrooms at First Flight Middle School, \$1,528,778. Project completed by 2005.
4. New bathrooms at Kitty Hawk Elementary School, \$320,514. Project completed by 2006.
5. Gym toilets, locker rooms, and structural bracing at Cape Hatteras Secondary School, \$1,337,376. Project completed by 2006.

Renovations

This plan provides for the following projects:

- * Manteo Elementary School -- Upgrade/replace existing building mechanical systems, roofing at core building, carpeting, windows, kitchen equipment, HVAC, toilets, fire alarm/security system, and revise traffic flow. Cost: \$\$4,398,856. Work is scheduled to start this year and be completed by January 2003.
- * Manteo Middle School -- Upgrade/replace existing building mechanical systems, roofing, tiling, windows, plumbing systems, lighting systems, power service, fire alarm/security system, and expand the cafeteria. Cost: \$6,194,959. Work is scheduled to start August of 2003 and be completed by January 2006.
- * Cape Hatteras Secondary School -- Upgrade/improve/replace existing building mechanical systems, electrical systems, roofing, and plumbing. Cost: \$6,699,745. Work is scheduled to start March 2005 and be completed by September 2007.
- * Manteo High School -- Upgrade existing building mechanical systems, fire alarm, site electrical service, interior lighting, windows, doors, storm water drainage, bathroom fixtures, walkways, entry canopy, painting, and repair of ceilings. Cost: \$5,551,879. Work is scheduled to begin July 2006 and be completed by August 2008.
- Kitty Hawk Elementary School -- Upgrade/replace HVAC and window systems, carpeting, tiling, plumbing fixtures, and various interior improvements. Cost: \$3,190,774. Work is scheduled to begin September 2007 and be completed by August 2009.

Projects Schedule

Construction (includes planning and design)

Project	Timeline
North Beach High School	April 2001-April 2004
Nags Head Elementary School	April 2002-July 2004
First Flight Middle School	January 2004-July 2005
Cape Hatteras Secondary	May 2004-May 2006
Kitty Hawk Elementary	March 2005-August 2006

Renovations (includes planning and design)

Project	Timeline
Manteo Elementary School	April 2001-January 2003

Manteo Middle School	August 2003-January 2006
Cape Hatteras Secondary	March 2005-September 2007
Manteo High School	July 2006-August 2008
Kitty Hawk Elementary School	September 2007-August 2009

Interim Requirements

Interim requirements are specific building maintenance items that are required prior to renovation. Since renovation efforts cannot be carried out at every building immediately or simultaneously, certain areas must be addressed in order that students and staff are provided a suitable educational facility. Total cost of interim requirements is \$5,977,240 and includes the following projects:

- * Manteo High School - Replacement of major equipment and HVAC components to modernize/bring school up to accepted standards. Cost: \$1,040,476.
- * Manteo Middle School - Replacement of major equipment and HVAC components to modernize/bring school up to accepted standards. Cost: \$449,777.
- * Manteo Elementary School - Replacement of HVAC components to modernize/bring school up to accepted standards. Cost: \$74,607.
- * Kitty Hawk Elementary School - Upgrade/replacement of kitchen equipment and septic system to modernize/bring school up to accepted standards. Refurbish exterior metalwork and revise traffic flow. Cost: \$651,407.
- * Cape Hatteras Secondary School - Upgrade/replace/replenish/repair kitchen equipment, HVAC components, gymnasium, and roof to modernize/bring school up to accepted standards. Cost: \$669,048.
- * First Flight Schools - Replacement of HVAC chiller system, gym refinish, site drainage work, and metalwork/painting to modernize/bring school up to accepted standards. Cost: \$1,294,387.
- * Transportation garage - Installation/repair of existing facilities/equipment. Cost: \$437,361.
- * Maintenance and Construction Management - Installation/repair of existing facilities/equipment. Cost: \$150,682.
- * Modular Units - Installation and subsequent removal of modular classrooms district wide. Includes addition of six units at FFES, three units at FFMS, and two units at MHS. Cost: \$843,000.

The future needs of the Dare County school system is the responsibility of the Dare County Board of Education and these needs are outlined in the information detailed above from their 10-year facilities plan. This plan is intended to address the school system needs over the next 10-year planning period in terms maintenance of existing facilities and proposed new construction.

Parks and Recreation

The abundance of natural resources in Dare County provide many opportunities for recreational activities. For years, the County did not appropriate funds for construction of recreational facilities. However, with the continued increase in the permanent population the need to address the lack of facilities was identified and several capital projects have been completed since 1994. A full-time Dare County Parks and Recreation Department is staffed and responsible for overseeing the recreational needs of the County residents. Some of the projects have been joint public-private ventures such as the youth center in Kill Devil Hills near the First Flight Schools. Other facilities constructed by Dare County include Walker Field in Wanchese and a recreational field in Stumpy Point.

In total, the Parks and Recreation Department operates 51 public recreation facilities. This includes 11 ball fields, 5 basketball courts, 5 neighborhood centers, 4 community centers with gymnasiums, 7 picnic areas, 10 playgrounds, 1 soccer field, 5 tennis courts, 2 volleyball courts, and a ¼ mile leisure trail. Dare County currently owns 6 special purpose facilities that are spread throughout the County and offer a variety of special recreational opportunities such as boat ramps, swimming areas, and community centers.

Within Dare County, there are additional recreation amenities that are utilized by the County but owned by others. These include 29 recreation facilities ranging from ball fields to leisure trails. The shared use of school facilities also greatly increases the recreational resources available to County residents. The Recreation Department works closely with the Board of Education in utilizing these school facilities for after-hours use.

Programmed activities offered by the Parks and Recreation Department include adult aerobics, youth basketball, arts and crafts, soccer, gymnastics and cultural trips. The most popular are youth basketball, baseball/softball, and youth soccer. Softball and basketball are the most popular adult activities. During 1999, approximately 7,400 residents participated in 47 County-sponsored recreation programs.

A comprehensive parks and recreation master plan was developed by Dare County in May 2001 that provides more detailed information on the projected recreational and cultural needs of the residents of Dare County. Copies of this plan are available from the Dare County Parks and Recreation Department. This plan includes information on the adequacy of the County's parks and recreation system over the next 10-year planning period.

Solid Waste

Solid waste collection from both residential and commercial properties in Dare County is handled by local governments. Dare County contracts with Kitty Hawk and Southern Shores

for solid waste pick-up in these two towns and is also responsible for pick up in the unincorporated areas. The Towns of Kill Devil Hills, Nags Head and Manteo provide their own solid waste pick-up.

Dare County owns and operates transfer stations in Buxton and Manteo. In 1994, the County entered a regional solid waste authority and all solid waste from Dare County is transported to Bertie County, NC. This regional landfill has a contractual obligation to provide for an additional ten years of solid waste capacity according to the Dare County Public Works Department, anticipated renewal potential for an additional 50-year period of routine solid waste. It is anticipated that this will be adequate to address the routine solid waste needs of Dare County during this 10-year period. Measures to address debris from future storm events or hurricanes may impact this capacity.

ANTICIPATED DEMAND

Demographic Projections

One goal of the Dare County Land Use Plan is to project population growth and then devise a strategy for addressing the impacts population changes may have on the County. As the population changes, so does the demand for a broad range of services and facilities provided by the local government.

For many years, population growth in Dare County was modest. However, this changed beginning in the 1970s and since then Dare County has consistently experienced exceptional growth and has ranked as one of the fastest growing areas in North Carolina and the southeastern portion of the United States. The following table illustrates the population changes since 1970.

Table 20 Population 1970- 2000

Population in Dare County	
1970	6,995
1980	13,377
1990	22,746
2000	29,967

In 1985, Dare County contracted with a private consulting firm to develop a management plan for the time period of 1985 to 2000. This plan addressed a wide range of issues from population growth to school construction needs and the environmental constraints of the County's poorly drained soils. The 1985 Carrying Capacity Study was most effective in providing direction to the local officials in projected populations, issues of concern and needed infrastructure improvements from 1986-2000. Much of this information aggregated in that plan is now outdated, particularly the population projections. One goal of the County is to update this document to serve the coming decade. The State Data Center provides population projections through the year 2020. These figures project a continued increase in permanent population with a year-round population in 2010 listed as 37,112 persons and a total in 2020 of 44,061. The following table depicts the population projections from the State Data Center

Table 21 -- Population Projections for Dare County

YEAR	PROJECTION
July 2005	33,505
July 2010	37,269
July 2015	40,594
July 2020	44,061

One of the most difficult statistics to generate reliably is the seasonal peak population of Dare County. The difficulty is centered on the summer months when beautiful weather can result in thousands of spontaneous visitors in addition to the planned vacationers. These guests may choose from a variety of accommodations that include hotels, motels, campgrounds, rental cottages, and the unannounced visit to a friend's house. A new trend in resort accommodations in Dare County is the construction of multiple bedrooms large structures that resemble single-family homes but are built to be occupied by multiple parties on a short-term rental basis. These structures often include generous amenity packages including spas and pools.

Best estimates of the summer seasonal population are approximately 200,000. This number assumes full occupancy of every available mode of occupancy listed above. Given the dynamic nature of tourism, an exact figure is almost impossible to calculate. For purposes of planning for many capital needs and service demands, Dare County must use the peak population figures because at any given time, the peak population or some variant thereof will generate a related demand for services.

It is anticipated that the year-round and seasonal populations for Dare County will continue to increase over the next five years. This growth will occur in both the unincorporated areas of the County and the municipal areas. Although there remains more undeveloped land in the unincorporated areas, the suitability of the soils, the availability of utility services and location of shopping and other service businesses will result in smaller increases in population growth in the unincorporated areas versus the municipal areas that feature the infrastructure and services desired by most residents relocating to the area.

Future Land Use Needs

Future land use needs in unincorporated Dare County will center around development in existing residential subdivisions and a limited amount of commercial development, mostly focused on the seasonal population. However, as the permanent population of Dare County continues to grow the focus of the commercial development will shift to meeting the needs of the year-round population as well.

The capacity of the remaining undeveloped land in Dare County to accommodate new development will be limited by the availability of soils that can support septic tank systems. As previously stated, there are no publicly owned central wastewater treatment plants in unincorporated Dare County and no such system is planned. Alternative engineered wastewater systems, such as peat systems and low-pressure pipe systems, are being used more extensively than before but these systems are more costly and their maintenance record is undetermined at

this point. Most development will continue to function with traditional septic tank nitrification fields, thus the amount of suitable lands available in Dare County for development serves as a natural growth inhibitor.

Current zoning ordinances limit minimum lot sizes for new subdivisions to 15,000 square feet for central water or 20,000 square feet for private well use. The maximum dwelling density allowed under the current zoning codes is 10 units per acre. Dare County does not provide dwelling density increases for the provision of central wastewater and it is unlikely that minimum lot sizes will be decreased. These regulations will influence the future land development patterns. However, it should be mentioned that the residual capacity of the central wastewater treatment plan for the Town of Manteo will impact the section of Roanoke Island that is within the service district of this treatment plant. Annexation requests and line extension requests may result in increased development and dwelling densities in this area of unincorporated Dare County.

As discussed throughout this Plan, residential development is the preferred land use. Although, commercial usage is generally considered the “highest and best” use for commercially zoned property, this is not always the case in Dare County, where the seasonal accommodations market results in the development of commercially zoned land with residential structures offered for short-term occupancy.

As the year-round population continues to grow, public infrastructure projects such as schools, recreation facilities, transportation improvements and other public needs will compete for the remaining undeveloped land.

All of these factors are compounded by the large amount of publicly owned land in Dare County. Over 80% of the land in Dare County is under federal, state or otherwise protected ownership that precludes its development. This extraordinary amount of public ownership increases development pressures on the remaining privately owned parcels. Balancing the needs for services and goods of our residents and visitors on this limited amount of privately owned land is a major influence on the future land use of Dare County.

The Planning staff completed an analysis of the tax files in an effort to determine the number of vacant individual parcels and vacant platted subdivision lots in unincorporated Dare County. The individual parcels vary in size and it was not evident from the tax records the size of the individual parcels. It should be understood that these parcels may possibly be subdivided into smaller tracts if the minimum lot size requirements can be met. The following table details the results of this analysis. This table is for the unincorporated portions of Dare County and does not include information on the individual municipalities. Appendix C includes detailed tables for each tax district in unincorporated Dare County.

Table 22—Vacant Land Analysis (January 2002)

EXISTING LAND USE	NUMBER
Vacant Land	
Individual Parcels	2162
Subdivision Lots	3738
Property Owners Association	180
Religious	6
Non-profit	5
Washouts	29
Utilities	3
Federal	31
State	59
Dare County	95
Other Municipalities	3
TOTAL	6,311

Although as much as 80% of the land area of Dare County is publicly owned and not likely to be available for development, the remaining privately owned lands are still sufficient to accommodate the growth anticipated over the next ten years. It is anticipated that redevelopment of existing residential and even commercial structures will be an important element in that growth pattern. The re-development will offer a more intense use of the site versus the smaller structures lost to demolition. In addition, new technologies for on-site wastewater disposal will provide for a greater level of use than the traditional septic tank systems typical of the previous decades.

The areas most suitable for future development will be those already developed and suitable for re-development and with elevations and soil types suitable for on-site wastewater disposal systems. Areas least suitable for development include those with poorly drained soils, those already in public ownership, and those portions of lots already recorded that have new regulatory constraints such as limitations on development activities adjacent to estuarine water bodies.

Throughout this document there are references to the desire of Dare County to reserve the right to examine issues on a ‘case-by-case’ basis. When the reader encounters this language it should be assumed it is added to a particular issue or policy for emphasis. This occurs out of the County’s reservation about the “one size fits all” tendency of State and Federal regulatory agencies and Dare County’s unique characteristics versus the other coastal communities in North Carolina. It is for this reason that Dare County often finds that what may be wise in some areas in terms of regulatory policy is contrary to the best interest of the citizens of Dare County.

There are many existing State and federal regulatory programs for resource protection that apply in Dare County. In some instances, such as fisheries management or wetland protection, there are no local regulatory programs and Dare County relies on these State and federal programs in the absence of local programs. However, the absence of local regulations should not be interpreted as a lack of concern about resource protection. The absence of local regulation may be due to the inability of the local elected officials to develop a consensus about regulatory

standards or may be a desire to avoid regulatory duplication in a matter where other agencies already exercise regulatory jurisdiction.

The Dare County Land Use Plan is established to provide policies and implementation strategies for resource protection, resource production and management and growth and development. The elected officials, advisory boards and planning staff should use these policies and implementation strategies in considered rezoning proposals, development and re-development proposals, and ordinance enactments and amendments. Although measures are taken to avoid conflicts between the LUP and County ordinances, in instances when they do occur, the ordinance will take precedence since the LUP is a non-binding policy document. The resolution of such conflicts may be accomplished through an ordinance amendment or a change of the LUP policy as may be appropriate on a case by case basis.

Throughout this document there are references to the desire of Dare County to reserve the right to examine issues on a ‘case-by-case’ basis. When the reader encounters this language it should be assumed it is added to a particular issue or policy for emphasis. This occurs out of the County’s reservation about the “one size fits all” tendency of State and Federal regulatory agencies and Dare County’s unique characteristics versus the other costal communities in North Carolina. It is for this reason that Dare County often finds that what may be wise in some areas in terms of regulatory policy is contrary to the best interest of the citizens of Dare County.

There are many existing State and federal regulatory programs for resource protection that apply in Dare County. In some instances, such as fisheries management or wetland protection, there are no local regulatory programs and Dare County relies on these State and federal programs in the absence of local programs. However, the absence of local regulations should not be interpreted as a lack of concern about resource protection. The absence of local regulation may be due to the inability of the local elected officials to develop a consensus about regulatory standards or may be a desire to avoid regulatory duplication in a matter where other agencies already exercise regulatory jurisdiction.

The Dare County Land Use Plan is established to provide policies and implementation strategies for resource protection, resource production and management and growth and development. The elected officials, advisory boards and planning staff should use these policies and implementation strategies in considering rezoning proposals, development and re-development proposals, and ordinance enactments and amendments. Although measures are taken to avoid conflicts between the LUP and County ordinances, in instances when they do occur, the ordinance will take precedence since the LUP is a non-binding policy document. The resolution of such conflicts may be accomplished through an ordinance amendment or a change of the LUP policy as may be appropriate on a case by case basis.

WETLANDS

Coastal wetlands are defined as any salt marsh or other marsh subject to regular or occasional flooding by tides, including wind tides, whether or not the tide waters reach the marshland areas through natural or artificial sources, providing this shall not include hurricanes or other storm tides.

In Dare County, the estuarine shoreline is generally covered by coastal marsh grass. The position of these wetlands, often between usable high ground and deeper navigable waters, has placed considerable pressure on these environmentally significant areas.

In addition to coastal wetlands, there are areas known as freshwater marshes or freshwater wetlands that are subject to the regulatory provisions of Section 404 of the Clean Water Act, hence these areas are often referred to as 404 wetlands. The US. Army Corps of Engineers has been delegated the regulatory responsibility of managing these 404 wetland areas and interpreting the rules that apply to freshwater wetlands. Over the years, the federal definition of what constitutes a freshwater wetlands has changed depending on federal policy guidelines, but generally a freshwater wetland can be described as soils that are hydric, that sustain plant life that depends on periodic flooding, or are areas that are frequented by migratory birds. One of the

Corps' programs used to manage freshwater wetlands is known as the Nationwide permit program. Nationwide permits are available for fill activities that involve small areas or "pockets" of freshwater wetlands. Discussion by the Planning Board indicated continued support of the existing federal regulatory program administered by the Corps and the nationwide permit program. However, concern was noted about the rigid interpretations and delineations of wetlands pockets that sometimes preclude otherwise acceptable development projects.

Another aspect of wetlands management is the concept of mitigation. Mitigation involves the creation of, or dedication of wetlands sites, to compensate for the loss of wetlands as a result of development activities. In simple terms, mitigation can be thought of as a trade-off of wetlands at one site for the alteration or loss of wetlands in another area. Generally, the topic of mitigation is categorized as public purpose projects (those projects undertaken by the public sector) and mitigation in conjunction with private development projects. The Planning Board discussed this issue extensively during the update process. There was a consensus of support for wetland mitigation for public sector projects among the Planning Board and among respondents to the land use plan questionnaire. For private sector projects that may propose wetland mitigation, the Planning Board felt that private projects should be reviewed on an individual basis and judgments based on any benefits the project may provide to the community.

Development within any coastal wetland AEC should be constructed according to any applicable local, State or Federal regulations.

Policy #1

Dare County advocates the use of existing (2002) State and Federal regulatory programs for protecting and preserving coastal wetland areas of environmental concern. Dare County reserves the right to review, comment, advocate, or oppose any proposed regulations or programs that may affect the regulation of coastal wetland areas of environmental concern.

Policy #2

Dare County supports the use of mitigation for the loss of wetland areas for public purpose projects. Private development projects that proposed wetland mitigation may be supported by Dare County if such projects will serve an identified public need and/or policy of the land use plan. For both public and private mitigation projects, up to 25% of the mitigation should take place on site or in Dare County.

Policy #3

Dare County supports the U.S. Army Corps of Engineers nationwide permit program as administered in 2002. This support is based on the current scope of permitting limits on the nationwide program and not on any changes that may result in a different policy.

Implementation Strategies:

1. Implementation and enforcement of CAMA use standards for coastal wetland AECs as identified under 15NCAC7H, Sections .0205 and .0208.
2. The County will continue to administer the CAMA local permit enforcement program and maintain the staff necessary for this work.
3. As may be necessary to facilitate implementation of permit programs for wetland management.

OCEAN SHORELINE

The immediate oceanfront area on any barrier island quickly identifies itself for special management guidelines. Management alternatives include setback standards to address erosion, minimum elevations for first floor construction to allow for ocean overwash, and regulations to prevent unnecessary loss of oceanfront dunes.

The CAMA guidelines establish specific types of ocean hazard areas of environmental concern (AECs) as described below:

1. **Ocean erodible area:** This is the area in which there exists a substantial possibility of excessive erosion and significant shoreline fluctuation. The seaward boundary of this area is the mean low water line. The landward extent of this area can generally be described as 60 times the average annual erosion rate for the particular location, plus the distance that the shoreline is likely to erode as a result of a 100-year storm. For specific language concerning these distances, the reader should consult the CAMA AEC standards, Section .0304.
2. **High Hazard Flood Area:** This is the area subject to high velocity waters (including but not limited to, hurricane wave wash), and a storm having a 1% chance of being equaled or exceeded in any given year, as identified as zones V1-30 on the flood insurance rate maps of the Federal Insurance Administration. In Dare County, virtually all of the ocean shoreline along the Outer Banks is included in a high hazard flood area AEC. Fortunately, an extensive system of natural and manmade dunes has been preserved and/or created in the majority of the high hazard flood area zones. As a result, most of the so-called V zones in the unincorporated areas of Dare County are confined to an area oceanward of the dune system.
3. **Inlet Hazard Area:** The inlet hazard areas are natural hazard areas that are especially vulnerable to erosion, flooding, and other adverse effects of sand, wind, and water because of their proximity to dynamic ocean inlets. The inlet hazard area AEC extends landward from the mean low water line to a distance sufficient to encompass that area in which the inlet, will, based on statistical analysis, migrate and shall consider such factors as previous inlet territory, structurally weak areas near the inlet (such as an unusually narrow barrier island, an unusually long channel feeding the inlet, or an overwash area), and external influences such as jetties and channelizations. These areas are identified on inlet hazard area maps approved by the Coastal Resources Commission.

Development within these ocean hazards areas should be constructed according to any applicable local, State or Federal regulations to minimize the hazards to structures located within these designated AECs.

Policy #4

Oceanfront shoreline development should continue to be managed to protect and preserve the natural and recreational resources along the oceanfront. Dare County reserves the right to review, comment, advocate, or oppose any proposed regulations or programs that may affect the regulation of ocean hazards areas of environmental concern.

Implementation Strategies:

1. Implementation and enforcement of the CAMA use standards for ocean hazard areas as contained in 15NCAC7H, Sections .0306 through .0310.
2. Implementation and enforcement of the National Flood Insurance Program's base flood elevation standards, including the standards for those areas where wind driven waves create potential for damage by velocity also known as V-zones.

ESTUARINE WATERS/SHORELINE

Estuarine waters can be defined as semi-enclosed coastal water bodies having free connection to the open sea and within which seawater is measurably diluted with fresh water drained from the adjacent land. In Dare County, estuarine waters include the Albemarle, Croatan, Currituck, Pamlico and Roanoke Sounds.

Estuarine shorelines; although characterized as dry land, are considered a component of the estuarine system because of the close association with the adjacent estuarine waters. Estuarine shorelines are those non-ocean shorelines that occur along the estuary. In North Carolina and Dare County, estuarine shorelines are generally non-ocean shorelines along estuaries, sounds bays and brackish waters extending waterward from mean high water or normal water level for a distance of 75 feet landward.

Two issues related to estuarine shoreline development that were discussed as part of the update process were the use of estuarine bulkheads and the designation of estuarine buffers. Estuarine bulkheads have been used for decades in Dare County as a means of shoreline protection and are an accepted feature. There was strong support among the Planning Board for the continued use of estuarine bulkheads. This is also supported by the results of the land use plan questionnaire.

In August 2000, the Coastal Resources Commission established a 30-foot buffer along estuarine shorelines. Only water-dependant uses, as defined by the CAMA regulations, may be located within this 30-foot buffer area. These buffer regulations were established to protect surface water quality by minimizing impervious coverage along the shoreline and thereby minimizing runoff. The 30-buffer rules have been amended to allow fences, landscaping and some open decking, however, some property owners have expressed the opinion that the rules are still too stiff and do not allow traditional structures and uses, such as crab shedders and net houses.

There are a number of natural and manmade islands in the estuarine waters that are accessible only by boat and that are basically undeveloped. These islands may be attractive to certain parties seeking an isolated setting for day trips.

Development along the estuarine shoreline should be constructed according to any applicable local, State or Federal regulations to minimize the hazards to structures located within these designated AECs. Development proposals along the estuarine shoreline should be evaluated for effects on surface water quality and groundwater quality and efforts to minimize any negative impact on water quality should be considered as part of the review and approval process.

Policy #5

Estuarine shoreline development should continue to be managed to protect and preserve the natural resources of the estuarine waters and the estuarine shoreline. The appropriate tools for this is the existing CAMA permit program and the Areas of Environmental Concerns (AECs) designated under the CAMA program. Dare County reserves the right to review, comment, advocate, or oppose any proposed regulations or programs that may affect the regulation of estuarine waters and/or the estuarine shoreline.

Policy #6

Dare County supports the installation and maintenance of estuarine bulkheads. Offshore breakwaters, slopes, rip-rap, and voluntary setbacks in excess of CAMA 30-foot buffer rules should be promoted as additional methods for estuarine shoreline management in lieu of estuarine bulkheads along estuarine shorelines where these less invasive techniques would be equally effective in abating a shoreline erosion problem

Policy #7

Development of estuarine systems islands that are only accessible by boat shall be carefully managed. Low intensity uses such as open space, recreation, and detached single family residential development shall be the preferred uses of these islands.

Implementation Strategies:

1. Implementation and enforcement of the CAMA use standards for estuarine shoreline AECs as stated in 15NCAC7H, Section .0209
2. Refer property owners to the Elizabeth City regional office for assistance with bulkhead permits.
3. Oppose efforts to eliminate or prioritize the use of estuarine bulkheads.

PUBLIC TRUST AREAS

Public trust areas are all waters of the Atlantic Ocean and the lands thereunder from the mean high water mark to the seaward limit of State jurisdiction; all natural bodies of water subject to measurable lunar tides and lands thereunder to the mean high water mark; all navigable natural water bodies of water and lands thereunder to the mean high water level or mean water level, as the case may be, except privately owned lakes, to which the public has no right of access; all water in artificially created bodies of water containing significant public fishing resources or other public resources which are accessible to the public by navigation from bodies of water in which the public has rights of navigation; and all waters in artificially created bodies of water in which the public has acquired rights by a prescription, custom, dedication, or any other means. These public trust areas are classified as Areas of Environmental Concern in the CAMA regulations. Proposed development in these AECs are subject to permit review and approval by

the Division of Coastal Management. In Dare County, public trust waters include the Atlantic Ocean, Albemarle, Croatan, Pamlico, Currituck, and Roanoke Sounds, and over more than 40 bays, lakes, creeks, ponds, canals, and inlets. Canals may be determined to be public trust waters based on their jurisdiction to other waterways and their navigability as determined by the Division of Coastal Management.

In 2001, Dare County was authorized by HB 726 enacted by the North Carolina General Assembly to regulate the surrounding ocean and estuarine waters of our jurisdiction. This legislation provides Dare County with the authority to “zone” the surrounding waters and to address the use of personal watercraft, swimming, littering, and surfing and other issues that may arise as the demand for access to public trust waters continues to increase. Discussion among the Planning Board indicated support for regulation of personal watercraft and consideration of a limit on the number of rental agencies as the proper response to personal watercraft as opposed to banning their use, which would be difficult and costly to enforce.

Development proposals that encroach or limit the public’s use of these trust areas should be evaluated carefully.

Policy #8

Dare County supports the preservation and protection of the public’s right to access and use of the public trust areas and waters.

Policy#9

Dare County advocates a local level management program to address the competition among recreational users of the public trust waters. Dare County reserves the right to review, comment, advocate, or oppose any proposed Federal or State regulations or programs that affect the public trust waters or public trust areas.

Implementation Strategies:

1. Implementation and enforcement of the CAMA use standards for public trust areas AECs as stated in 15A NCAC 07H, Section .0207.
2. Consideration of Dare County management standards for the use of public trust waters by various competing recreation users.

PUBLIC WATER SUPPLY AECs

Public water supply AECs include small surface water supply watersheds and public water supply wellfields. Small surface watersheds are defined as catchment areas situated entirely within the coastal area that contain a water body classified as A-II by the NC Department of Environment and Natural Resources. This classification recognizes the maximum beneficial use of these water bodies is to serve as public water supply areas.

Public water supply wellfields are defined as areas of well-drained sands that extend downward from the surface into the shallow groundwater table, which supplies the public with drinking water. These surficial wellfields are confined to a readily definable geographic area as identified by the State, with assistance and support from affected local governments.

In Dare County, there are two public water supply AECs. The first is the Fresh Pond located between Kill Devil Hills and Nags Head. The management of this AEC is the responsibility of these two towns and is addressed in their respective land use plans.

The second public water supply AEC is the Cape Hatteras Wellfield located in Buxton Woods on Hatteras Island. The CAMA standards describe this AEC as “the wellfield AEC is bounded to the north, south, east, and west by a line located 1000 feet from the centerline of the wellfield”. In addition to the wellfield AEC established by the State, the County has established a Special Environmental (SED-1) zoning district for the Buxton Woods maritime forest to ensure additional protection of the aquifer located underneath the maritime forest.

Although there are public water supply wells located on Roanoke Island, they have not been declared to be an Area of Environmental Concern (AEC) under CAMA guidelines.

Development within these public water supply areas should be constructed according to any applicable local, State or Federal regulations to minimize the impacts within these designated AECs.

Policy #10

Development in any public water supply AEC should be managed to protect the long-term viability of the groundwater resources.

Implementation Strategies:

1. Continued support for the CAMA use standards for public water supply wellfield AECs as contained in 15NCAC7H, Section .0406.
2. Dare County will continue to implement and enforce the provisions of the SED-1 zoning ordinance for the Buxton Woods maritime forest.
3. Nomination of Skyco public wellfields for designation by the Division of Coastal Management as a Public water Supply Area of Environmental Concern..

GROUNDWATER RESOURCES

Drinking water for residents of unincorporated Dare County is supplied by two means – central water from Dare County or from private wells. Protection of the groundwater resources that supply the public drinking water for Dare County is a high priority for both residents and non-resident property owners in Dare County. Participants at the land use plan workshops indicated concerns about protecting our groundwater resources and respondents to the questionnaire ranked the protection of groundwater resources as a high priority.

In an effort to provide a better quality of drinking water for the residents of unincorporated Dare County, expansion of the central water system has continued to receive funding priority from the elected officials. A reverse osmosis plant for the Rodanthe Waves Salvo area was completed in 1996 offering the residents and property owners of this area the opportunity to replace their private wells that supplied a poor quality of water with a reliable water source. In 1999, the County completed construction of a reverse osmosis plant in Frisco as part of the takeover of the Cape Hatteras Water Association. This plant supplies the four southern villages of Hatteras Island. A central water supply for the village of Stumpy Point on the Mainland is currently

underway. The private wells used by Stumpy Point residents provide a marginal quality of water and the central water system will be a great improvement for this village.

Policy #11

Dare County recognizes groundwater resources as an essential element for the County's drinking water supply. The management of groundwater resources and their protection is a priority issue in Dare County.

Implementation Strategies:

1. To continue efforts to make a central water supply available to all areas of unincorporated Dare County. Coordinate with Water Department (multiple years, Stumpy Point 2003)
2. Review any proposals by private sector withdrawals greater than withdrawals for individual residential private wells.
3. Dare County will consider a permitting program for private wells used as a drinking water supply (2004)
4. Contract with independent planning consultant to update Carrying Capacity Study for Dare County. (2004)

SURFACE WATER QUALITY

As stated earlier, Dare County is surrounded by important bodies of water. Water quality, both surface and groundwater, plays a key role in the natural and economic development of Dare County. Surface water quality is important to fisheries resources, boating, all recreational water sports, and as an indicator of the overall health of the area's ecosystem. The participants in the land use plan survey and workshops identified surface water quality as a high priority.

Over the last few years, there has been an effort to address water quality on a basin-wide approach instead of just regulating the coastal regions. The basin-wide approach recognizes that water quality is an inland issue as well as a coastal issue and should be regulated as such, since a great deal of the water quality degradation actually occurs inland and not solely from development on or near the shorelines.

All surface waters in North Carolina are assigned a primary classification by the NC Division of Water Quality (DWQ). Class SC includes all tidal salt waters protected for secondary recreation such as fishing, boating, and other activities that involve minimal skin contact; aquatic life propagation and survival, and wildlife. Class SB is surface waters that are used for primary recreation, including frequent or organized swimming and all SC uses. Class SA is surface waters that are used for shellfishing or marketing purposes and all SC and SB uses. Stormwater controls are required under CAMA regulations for these three classes of water. Domestic wastewater discharges are not allowed in Class SA waters.

All SA waters are also considered High Quality Waters (HQW) by definition. This is a supplemental classification that is intended to protect water with quality higher than State water quality standards.

Another supplemental classification, Outstanding Resource Waters (ORW), is intended to protect unique and special waters having excellent water quality and being of exceptional state or national ecological or recreational significance.

The State of North Carolina has classified portions of the Alligator River area in Dare County to be Outstanding Resources Waters (ORWs). This area encompasses approximately 575 feet of shoreline along the Alligator River on the Mainland of Dare County. Outstanding Resources Waters are those waters that have exceptional state or national recreational or ecological significance and that have exceptional water quality. A copy of a map illustrating the ORWs located in Dare County is included in Appendix E of this Plan.

Dare County is in the Pasquotank River Basin, which in its entirety consists of 3,697 square miles of low-lying lands and vast open waters including the Albemarle Sound and numerous small watersheds that drain into the Albemarle, Currituck, Croatan, Roanoke and Pamlico Sounds. A management plan for the Pasquotank River Basin was approved by the NC Environmental Management Commission in September 1997 and is used as a guide by the NC Division of Water Quality in carrying out its duties and responsibilities.

The basin is broken down into several sub-basins and the details the overall acres of Class SA waters in each sub basins and the amount of this acreage that is considered impaired by DWQ. The following table details this information as provided in the Pasquotank River Basin Plan:

Table 23 – Class SA Waters in Dare County

Subbasin	Class SA Waters	Impaired SA Waters
03-01-51(includes the Alligator River, Croatan Sound and a portion of the Albemarle Sound watershed)	54,750 acres	1,959 acres
03-01-55 (includes northeastern Pamlico Sound)	320, 132 acres	1,361 acres
03-01-56 (includes Roanoke Sound and small portions of the Albemarle and Currituck Sounds)	20,487 acres	1,712 acres

Policy #12

Dare County supports efforts by local, state, and federal agencies to preserve, protect and improve water quality. These efforts include the designation of Outstanding Resource Waters and shellfish water classification criteria established by the State of North Carolina.

Policy #13

Dare County encourages the management of surface water quality on basin-wide approach recognizing the importance of water quality in other inland regions influence and impact the water quality of the coastal regions.

Implementation Strategies:

1. Continue local water quality monitoring program.
2. Support State legislation for basin-wide water quality regulations, as exemplified by HB 1858 introduced in the NC House in 2000, which proposed that counties upstream from the coastal area develop and implement water quality management plans.

SHORELINE ACCESS

Access to the ocean and estuarine shorelines by the public is a key attraction of the Dare County coastline. The demand for access opportunities continues to grow as the seasonal and permanent populations continue to grow. Access to the County's shorelines is a vital component of our tourist economy. Access opportunities vary according to location. The Cape Hatteras National Seashore features 45 miles of undeveloped ocean and estuarine shorelines set aside for the express purpose of the public's enjoyment. Throughout the municipal areas of Dare County, there are numerous access facilities that provide convenient parking for vehicles, dune overwalks, and at the larger sites, restrooms with outdoor showers. Opportunities for public access in unincorporated Dare County are less common due to the presence of private streets that exclude public access and parking by anyone who is not a property owner on the private street. The following table illustrates the miles of oceanfront in Dare County and how that shoreline is divided by governing jurisdiction.

Table 24 -- Oceanfront Shoreline by Jurisdiction

Federal Government	45.0 miles
Kill Devil Hills	4.5 miles
Kitty Hawk	3.5 miles
Nags Head	12.0 miles
Southern Shores	4.5 miles
Duck	6.0 miles
Unincorporated Dare County	9.5 miles
TOTAL	85.0 miles

Policy #14

Dare County supports North Carolina's shoreline access policies as stated in 15A NCAC 7M, Section .0303. Dare County recognizes shoreline access to both ocean and estuarine shorelines as a key component in the local tourist economy. (See also policy #8 – public trust areas).

Implementation Strategies:

1. Continue to evaluate opportunities for additional access facilities and grant funding programs to provide money for their construction.
2. Continue to pursue federal Shoreline Protection Plan for beach nourishment to provide sandy beaches and public ownership.

CHANNEL MAINTENANCE

Throughout Dare County, there are a number of channels and waterways that are essential to the safe movement of commercial and recreational boating traffic. Some of these waterways are officially unnamed and others, such as Oregon Inlet, are well known. In order to ensure that these passages remain navigable, dredging activities to removing shoaling must be completed. Given the importance of these channels, the County advocates the continued maintenance.

The County's most important waterway for both commercial and recreational boats is Oregon Inlet. Since 1970, Dare County has consistently advocated the construction of jetties to stabilize Oregon Inlet and provide for safe and reliable passageway through this inlet.

Policy #15

Dare County advocates the maintenance of all existing navigable channels and will work to secure permit authorization for those non-federal projects that require CAMA permit authorization.

Policy #16

Dare County advocates and supports the permit authorization and federal funding necessary to construct jetties to stabilize Oregon Inlet.

Implementation Strategy:

1. Continued funding for Oregon Inlet and Waterways Commission and staff to provide support for the on-going efforts to secure jetty permit authorization.

BEACH NOURISHMENT

With almost 100 miles of coastline along the Atlantic Ocean on two barrier islands separated by a dynamic inlet, Dare County is both blessed and challenged by these important natural features.

The lengthy shoreline attracts hundreds of thousands of tourists each year that come to enjoy the waters of the Atlantic and the sandy beaches along the water's edge. A vibrant infrastructure has grown along the water's edge as well; hotels and rental cottages top the list of structures that line the privately owned property just behind the public trust portions of the oceanfront. As the summer season approaches, these hotels and rental homes are filled with seasonal guests who generously stimulate the local economy with over \$1 billion in retail sales alone.

The water's edge also presents a challenge, however, as much of the tourist industry's infrastructure is located on each of the County's two barrier islands (Bodie Island and Hatteras Island). Under natural conditions barrier island migrate with the flow of sand along the seaboard and over hundreds of years tend to "retreat" or rollover and move in an inland direction. When this process occurs along a developed shoreline it eventually collides with private property or public infrastructure and comes to be described as "beach erosion." During weather related events like hurricanes or winter storms, the beach erosion can be quick and severe and threaten or destroy improved oceanfront properties by undermining the foundations of structures along the shoreline.

There are a number of theoretical alternatives that can be applied as management tools to address this dilemma. One alternative advocated by some in academia is to allow this natural process to occur and give up the infrastructure at the water's edge. Other coastal communities have attempted to tame the natural forces by using engineered wave energy refraction structures like seawalls and bulkheads to stabilize the shoreline. Although these structures can be successful in establishing a stable shoreline they often result in the loss of the natural sand supply and rob the

shoreline of sandy beaches except at periods of low tide. Another alternative is to replace sand lost due to natural processes or storm tides by borrowing material from another location and placing it along the shoreline. This alternative is known as “beach nourishment.”

Given the importance of the improved private property and public infrastructure on the barrier islands to Dare County’s primary industry (tourism), neither retreat or armoring of the shoreline represent attractive or even feasible alternatives. As a result, Dare County has selected beach nourishment as its preferred alternative for managing the conflict between the natural tendency of barrier island shorelines to move and the tendency of people and economies to seek permanence and prosperity along the shore.

Policy #17

Beach nourishment is the preferred shoreline management alternative along the ocean beaches of Dare County.

Implementation Strategies:

1. Continue to serve as the non-federal sponsor of the Dare Beaches Hurricane Protection Plan.
2. Use the Dare County Beach Nourishment Committee to advise the County Commissioners on policy issues related ocean shoreline management.
3. Coordinate with NCDOT and the appropriate federal agencies on matters relating to shoreline movement and its impacts on NC 12.

DEVELOPMENT IMPACTS ON RESOURCES

The protection of the natural resources of Dare County is a priority. The continued viability of the resources of the area is important to tourism and the commercial and sporting fishing industries. Protecting these resources protects the livelihoods of our residents that rely on tourism and fishing industries. Impacts from residential, commercial and industrial development should be analyzed for any potential benefits to the County’s residents and visitors and any potential negative results that may affect the resources discussed on pages 76-81. The policies for each of these resources should be consulted in reviewing any residential, commercial, and/or industrial development and re-development proposals in addition to the applicable zoning regulations.

Policy #18

Development projects shall be designed and constructed to minimize detrimental impacts on surface water quality, groundwater quality and air quality. Structures should be designed to fit the natural topographic conditions and vegetation versus modifications to natural conditions to accommodate structures.

Implementation Strategies

1. Consider tree removal and vegetation protection standards for commercial sites.
2. Encourage property owners to design residential sites limit impacts on the natural topography and vegetation.

MINERAL RESOURCES

Mineral production activities are limited in Dare County. Currently, Dare County relies on the NC Division of Land Resources to manage all mining activities that exceed 1 acre. Smaller sand mining projects have generated some concern about the need for local standards to address those activities under the State threshold. As a result, the Dare County Board of Commissioners adopted sloping/dune alternation standards for the zoned portions of unincorporated Dare County in late 2001.

Policy #19

Dare County advocates local level management of those mining activities that are not subject to permit authorization by the State of North Carolina.

Implementation Strategies:

1. Enforcement of dune standards contained in Dare County Zoning Ordinance
2. Dare County will evaluate the need for local level regulations to address mining activities that are exempt from State-level permitting. (2004)

FISHERIES RESOURCES

Fisheries resources play an important role in the economy of Dare County. Commercial fishing, both shore-based and from vessels, has been a source of livelihood for generations in Dare County. Recreational fishing is also a key component of our tourist economy. The important role of fishing, both recreational and commercial, highlights the need for water quality management programs in the ocean and estuarine waters of Dare County. The need for basin-wide water quality programs was also discussed in earlier sections of the Land Use Plan.

There are three areas in Dare County that are designated by the State of North Carolina as Primary Nursery Areas (PNAs). Primary nursery areas 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. In Dare County, these areas are Doughs Creek, Scarborough Creek, and Broad Creek, which are located on the east side of Roanoke Island. Since commercial and recreational fishing plays such an important role in the Dare County economy, the longevity and vitality of the primary nursery areas is important to Dare County. The map below, provided by the NC Division of Marine Fisheries, illustrates the primary nursery areas discussed in this paragraph.

In addition to primary nursery areas as designated by the Division of Marine Fisheries, there are many other locations that serve as important habitats for fish, crabs, shrimp, and other species. While these areas are not granted any special regulatory status like the primary nursery area designation, these areas deserve recognition for their importance to the area resources. As previously stated, water quality is a high priority for Dare County and the protection of our water quality is directly linked to the continued productivity of our area's water bodies for commercial and recreational fishing. This priority extends to protecting those areas designated as SA waters or High Quality Waters (HQW)

From time to time, issues concerning competition for marine resources between commercial fishermen and recreational fisherman arise. Discussions at the policy workshops indicate that these concerns are best managed by the state and federal agencies with regulatory responsibility of fisheries resources.

Aquaculture or fish farming is a form of fisheries resources, although the practice is not as widespread in the United States and North Carolina as in other countries. Advocates of aquaculture have requested the inclusion of a policy in the Land Use Plan.

Policy #20

The continued productivity of commercial and recreational fisheries shall be fostered through restoration and protection of the unique coastal ecosystems upon which they depend. (See policy 12 and 13- surface water quality)

Policy #21

Dare County supports measures to protect and preserve designated primary nursery areas. Dare County also recognizes the importance of all areas in our surrounding waters that serve as habitats for the area's abundant fisheries resources. (See policy 12 and 13- surface water quality)

Policy #22

State and federal agencies with the authority to manage fisheries resources should be the responsible parties for the resolution of conflicts involving fisheries resources in Dare County. However, Dare County reserves the right to review, comment, advocate, or oppose any proposed regulations or programs that may affect the fisheries resources or management.

Policy #23

Dare County supports the development of the aquaculture industry as a source of fishery production as long as the proposed fishery or fish species does not negatively impact native or indigenous fish species.

Policy #24

Dare County recognizes the traditional practices of commercial fishing in Dare County and supports the use of traditional shellfish and other fish harvesting methods including trawling.

Implementation Strategies:

1. Support efforts for basin-wide water quality regulations. As such programs are developed, Dare County will become engaged in the process using resolutions and other techniques to demonstrate our support of basin wide water quality efforts.
2. Continued implementation of CAMA 30-foot buffer rules, CAMA AEC regulations, and other local zoning setbacks.

MARITIME FORESTS

According to information provided by the NC Division of Coastal Management, "maritime forests are those woodlands which have developed under the influence of salt spray. These woodlands are in the final stage of plant succession on stable barrier islands, i.e. those areas that are no longer under the direct influence of seawater flooding or migrating dunes. Those trees

and shrubs closest to the ocean, which have the most salt spray influence, are sculpted by the spray and are very low nearer the ocean with increasing height away from the ocean.”

On Hatteras Island, the Buxton Woods forest has been identified as an example of one of the most unique maritime forests in North Carolina. Recognizing the value of this unique area, a Special Environmental zoning district (SED-1) has been established that accommodates a minimal level of development with land clearing and wetland buffer standards.

In addition to the voluminous acreage of the Buxton Woods maritime forest complex, there are also smaller remnant maritime forest areas in Colington and the north end of Roanoke Island.

Policy #25

Dare County advocates a combination of limited development guided by the local SED-1 zoning ordinance and a program of public acquisition to manage the Buxton Woods maritime forest.

Implementation Strategies:

1. Continued enforcement of SED-1 zoning district.
2. Support of funding sources, like the Clean Water Trust Fund, for acquisition of lands in Buxton Woods and other maritime forest settings.
3. Consideration of other measures on vegetation protection incentives for the maritime forest areas on Colington and Roanoke Island.

COMMERCIAL FORESTRY

Commercial forestry has only a minimal role in the economy of Dare County. On occasion, some sites are harvested for timber rights, but there are no large-scale commercial forestry activities in Dare County.

Policy #26

Commercial forestry activities shall be supported by Dare County, so long as activities are done in accordance with the standards and recommendations of the U.S. Forest Service. The County also advocates the voluntary participation in the State of North Carolina’s best management practice program for forestry management.

Implementation Strategy:

No strategy necessary at this time due to minimal amount of commercial forestry activities in Dare County at this time.

PRODUCTIVE AGRICULTURAL LANDS

There has not been a great deal of agricultural activity in Dare County in the recent past. The Mainland portions have some limited farming and livestock farming has been limited as well. The majority of the lands on the Mainland that would support agricultural practices have been donated to or acquired by the Federal government to form the Alligator River National Wildlife Refuge.

Policy #27

Dare County supports the use of certain portions of the Mainland area for crop agriculture. The County also advocates voluntary participation in the State of North Carolina's best management practices program for farm management.

Policy #28

Wholesale or industrial livestock operations are opposed.

Implementation Strategy:

1. Monitor and advocate State-sponsored legislative efforts that address the location and permitting of wholesale livestock operations.

ARCHAEOLOGICAL/HISTORIC RESOURCES

Certain tracts of land and certain structures in Dare County have been identified as important cultural, historical, or archaeological resources. A number of these sites and structures are currently listed in the National Register of Historic Places and the majority of them are in public ownership for the purpose of preservation.

Policy #29

The Dare County Board of Commissioners supports the protection of structures, lands, and artifacts that have been identified by the NC Department of Cultural Resources, Division of Archives and History, as archaeologically or historically significant. On a case-by-case basis individual protection/management strategies should be implemented to ensure archaeological and/or historical resources are not destroyed.

Implementation Strategy:

1. Seek funding from the State of North Carolina to undertake a comprehensive inventory of those historic architect and landscape, not already in public ownership, to be used as a planning tool to identify any historic, cultural, and/or archeological resources.

WILDLIFE RESOURCES

Although noted for its fisheries resources, Dare County also has a significant base of wildlife resources. This is particularly true on the mainland where sportsmen enjoy a variety of species include bear, deer, foxes, and wild fowl.

Policy #30

Dare County supports the maintenance of preserve areas for wildlife habitat and access to the public to these areas for managed wildlife harvesting and observation.

Implementation Strategy:

1. Work with appropriate federal agencies to allow the continued access to federal property in Dare County for hunting, fishing and other similar activities.

TOPOGRAPHIC CONDITIONS

The topographic conditions of Dare County serve as a natural limitation on development and land use. The lack of natural ground elevation to preclude flooding from adjacent water bodies is a factor in every development project. To the east, the barrier islands of Dare County are bordered by the Atlantic Ocean and subject to overwash due to hurricanes and/or other storm events. To the west, the barrier islands are bordered by the Albemarle and Pamlico Sounds and their related tributary waters. The estuarine shoreline is subject to flooding from hurricanes and other storm events. Roanoke Island, Colington and the Mainland are also subject to soundside flooding during severe weather events.

Dare County participates in the National Flood Insurance Program (NFIP) and enforces all applicable state and federal guidelines for construction in flood prone areas. The County participates in the Community Rating System program sponsored by FEMA. The CRS program awards participation points for certain public awareness and mitigation activities about flood hazards and construction techniques for flood prone areas. These points are credited in the form of flood insurance rate discounts for residents in the specific jurisdiction. In October 2001, Dare County was awarded a 15% discount for flood insurance premiums in unincorporated Dare County.

The elevation of structures to meet the base flood standards established by the Federal Emergency Management Agency is one construction technique that is used to compensate for the lack of natural ground elevations. Another construction technique that has gained in popularity is the use of borrow material or fill soil to modify the natural ground elevation to a height equal or greater than the base flood elevation. In most locations, this involves trucking and dumping sand to elevate a construction site to the applicable base flood height. This practice also has resulted in conflict with adjoining property owners in existing subdivisions due to the impact the fill has on established drainage patterns. Debate on the advantages and disadvantages of this alternative technique continues. Should the practice of using fill continue to grow in popularity, the supply and location of borrow sites could become an additional issue for Dare County.

Policy #31

Dare County supports as minimum standards, the administration and enforcement of all applicable floodplain management regulations and the National Flood Insurance Program.

Implementation Strategy

1. Continue to participate in the Community Rating System and implementation and enforcement of the Dare County Flood Ordinance.

Policy #32

Dare County believes that there is insufficient, reliable data to quantify the rate of sea level rise. The phenomenon needs additional study. Until a more reliable and conclusive database has been established, Dare County will continue to rely of CAMA standards for development in CAMA designated “areas of environmental concern” or AECs.

STORMWATER MANAGEMENT

Stormwater runoff is the rain that runs off streets, rooftops, parking lots, lawns, and other land surfaces. As communities develop, more impervious surfaces are created and less rainfall can soak into the ground. Stormwater runoff and its management is of particular concern in Dare County due to its proximity to sensitive water bodies. The protection of water quality has been identified in the update as a high priority, this includes protecting adjacent surface waters from stormwater runoff particular Class SA waters.

Ponding of stormwater is also a concern. The lack of natural ground elevations and poorly drained soils also contribute to the County's stormwater problems. Large ponds of stormwater that do not adequately drain can create hazardous driving conditions on roadways and serve as natural breeding grounds for disease-carrying mosquitoes. Drainage ditches that were installed decades ago have not been maintained and have in some cases been filled by adjoining property owners. This lack of ditch maintenance is a source of drainage problems and standing stormwater. The continued reliance on retention basins for stormwater management should also be evaluated since these areas serve as mosquito breeding grounds.

A stormwater plan for unincorporated Dare County was developed in 2001. This plan discusses stormwater in general, current federal and state regulations on stormwater runoff, and specific stormwater problems areas in unincorporated Dare County with suggested solutions for the identified areas. A draft stormwater ordinance for Dare County was also developed as part of this plan. Currently, Dare County has no local standards for stormwater runoff but relies on State guidelines for projects that exceed one-acre in scope.

Another issue that has been identified is the practice of placing large amounts of fill material on sites to raise the natural ground elevation before construction. This practice often results in stormwater runoff onto the surrounding properties that are lower in elevation or onto adjacent streets. On larger sites, this practice may not create problems for adjoining sites, but on smaller lots that were platted in the 1960s and 1970s, drastic variations in elevations due to the use of fill material creates stormwater problems on neighboring properties and rights-of-way. The Planning Board discussed this issue extensively but no consensus could be reached on the appropriate standards to regulate this practice, although all agreed that the matter did need to be addressed.

Respondents to the land use plan survey indicated strong support for the establishment of a full-time County program for stormwater management and drainage ditch maintenance. However, the use of public funds to address drainage problems on private property did not receive support. Attendees at the public participation workshops also expressed concerns about stormwater management.

Policy #33

Stormwater runoff should be managed to the greatest degree possible to protect the water quality of the public trust waters surrounding Dare County, particularly Class SA waters.

Policy #34

Dare County recognizes the public health issues associated with mosquitoes and standing areas of water and the public safety issue for motorists presented by stormwater ponding on roadways.

Implementation Strategies

1. Consideration of stormwater management ordinance to address those projects that are not subject to State stormwater regulations with an emphasis on addressing stormwater runoff on sites that are adjacent to Class SA waters.
2. Recommendation of a full-time stormwater/ditch maintenance program. (coordinate with Public Works Department and NC Department of Transportation.
3. The Dare County Planning Board shall continue to address drainage issues associated with proposed new subdivisions.
4. Draft amendments to the Dare County Zoning Ordinance to address the use of fill material on vacant sites to alter the existing natural ground elevations and drainage as the need arises. (2204/2005)

MARINAS

Boating access to the area's water bodies is a major element of the Outer Banks vacation experience for our many visitors and is also essential to the residents who make their livings as commercial fishermen and charter boat captains. Recreational boating and sport fishing are important components of our tourist economy. However, this high demand for boating access must be balanced with our desire to maintain high water quality levels. Development of any new marina is subject to extensive federal and state review and consistency determinations.

The CAMA regulations define marinas as any publicly or privately owned dock, basin, or wet boat storage facility constructed to accommodate more than 10 boats and providing any of the following services: permanent or transient docking spaces, dry storage, fueling facilities, haulout facilities and repair services. All marinas require a CAMA major permit.

Policy #35

Dare County supports the development of marinas to provide boating access to the area's water bodies. Marina development should comply with all State and federal guidelines concerning location and design. The County encourages the dry stack option of boat storage.

Implementation Strategy

1. Dare County will rely on local land use plan consistency review process used by State and Federal agencies to implement this policy since all proposed marinas require a CAMA major permit.
2. Examine the Dare County Zoning Ordinance and shorelines to ensure the proper location or exclusion of marinas and marina development.

FLOATING STRUCTURES

In some coastal communities, floating homes and other structures are allowed on a permanent or semi-permanent basis. The topic of floating structures was discussed by the Planning Board at their policy workshop, with several concerns being noted. The main concerns were sewage

disposal, water quality impacts, aesthetics and the infringement of others to access and enjoy the public trust waters of our area. In most instances, floating structures must rely on shore-based sewage disposal such as dumping stations at marinas. Respondents to the land use plan survey expressed opposition to the presence of floating structures.

Policy #36

Dare County is strongly opposed to the mooring of floating homes and other floating structures, as defined in 15A NCAC 7M0602, anywhere in Dare County and its surrounding waters.

Implementation Strategy

1. Consideration of local regulations to prohibit the location of floating homes and structures in the surrounding public trust waters of Dare County. (2004)

LAND DISTURBING/TREE REMOVAL ACTIVITIES

Dare County has no tree removal or other land disturbing regulations that apply to private property except for the SED-1 zoning standards that apply to the Buxton Woods maritime forest. The Planning Department often receives complaints about land clearing and other land disturbing activities. However, public sentiment, as expressed on the land use plan survey, does not support the adoption of local land clearing or tree removal standards. Land disturbance in designated Areas of Environmental Concern (AECs) does require permit authorization or exemption letters from the NC Division of Coastal Management. The cutting of trees is not considered land disturbance under the CAMA standards although, the removal of stumps and root systems would require authorization from Coastal Management.

There are two land disturbing issues that demand attention. One is the removal of soil material on a scale of less than 1 acre. This level of activity is not subject to the State's mining regulations but often prompts concern, particularly when conducted in residential areas. In November 2001, Dare County adopted standards to address sloping and collapse hazards for soil removal activities on dunes and ridges not regulated by CAMA.

The second land disturbing activity involves the placement of borrow material on construction sites to facilitate drainfield systems or to elevate the site to base flood elevation. A lucrative real estate and development economy has made the cost of moving large amounts of fill economically feasible. The wisdom of this practice remains subject to debate with no consensus among Planning Board members during their discussions on this issue. General agreement is that if stormwater can be adequately managed, then fill practices are more acceptable. However, it is recognized that as development continues to increase, then the need to address the use of fill by the local government will also increase. The ramifications are considered a matter to be resolved between adjoining property owners by civil actions or other methods of arbitration.

Policy #37

Dare County advocates best management practices of the NC Forest Service for tree removal and land clearing on private property.

Implementation Strategies:

1. Enforcement of sand dune protection standards in the Dare County Zoning Ordinance.
2. Draft amendments to the Dare County Zoning Ordinance to address the use of fill material on vacant sites to alter the existing natural ground elevations and drainage as the need arises.

MANMADE HAZARDS

Dare County's primary manmade hazards are the three airports including the Dare County Regional Airport on Roanoke Island, the Billy Mitchell Airstrip in Frisco and the First Flight Airstrip in Kill Devil Hills/Colington. The US Air Force/Navy bombing range on the Mainland is also recognized as a manmade hazard due to the military training activities conducted at this site. For years, the Dare County Airport Authority that oversees activities at the Dare County Regional Airport has discussed plans for an expansion of the infrastructure at the airport to accommodate commuter jet service. This expansion plan was strongly opposed by the residents of Roanoke Island during the 1994 Land Use Plan update process. Public sentiment remains strongly against this proposal therefore the 1994 policy has been restated in this update.

The issue of expansion of the existing bombing ranges on the Mainland of Dare County was identified at the Planning Board workshops. The Planning Board agreed that such federal proposals should be evaluated on a case-by-case basis.

Policy #38

Due to potential land use conflicts and hazardous conditions. Dare County does not support the expansion of the Dare County Regional Airport at its current location.

Policy #39

Proposals to expand the area of the existing bombing ranges on the Dare County mainland should be reviewed on a case-by-case basis with support or opposition offered depending on the terms of the proposal and its potential impacts on the local community and the importance to our Nations' national defense.

BEACH DRIVING/OFF-ROAD VEHICLES

Beach driving and off-road vehicle use is a long-standing tradition in Dare County. Before the installation of NC 12 on Hatteras Island, the residents drove on the beach on a daily basis for travel to other villages and to the northern beaches. With the installation of NC 12, driving on the beach was no longer a daily necessity, but remains an integral part of the tourist/fishing economy of Hatteras Island. Access ramps are provided along the Cape Hatteras National Seashore to accommodate four-wheel drive access to the Hatteras Island beaches. The National Park Service does impose restrictions on the driving areas to protect turtle nesting areas and other endangered/threatened species areas. Recently, there has been some concern that beach driving on the Cape Hatteras Seashore would be prohibited by the U.S Department of Interior. There is strong opposition to this proposal. During the Planning Board discussions, the Board members felt that there were ample Federal regulations in place to control four-wheel drive access to the federal lands in Dare County and that no more restrictions are needed.

Beach driving in other areas of the County is regulated by the individual municipalities with oceanfront jurisdictions.

Policy #40

The County recognizes the importance of four-wheel drive vehicle access to the beaches of Hatteras Island that are under the management authority of the federal government. Efforts to prohibit beach driving on these federally-managed areas are not supported. Proposals to impose additional driving restrictions will be reviewed on a case by case basis with support or opposition offered depending on the proposal and its potential negative impacts on the local tourist economy.

Implementation Strategy

1. The County will continue to monitor actions of the U.S Department of Interior to further restrict beach driving and/or initiate other management programs that will impact or prohibit beach driving access along Hatteras Island. These monitoring activities may include participation at public hearings and workshops or correspondence with our congressional delegation and other federal officials.

FEDERAL AND STATE SUPPORT

As previously stated throughout this plan, over 80% of the land in Dare County is held in public ownership. Of the remaining land in private ownership, there are several federal and state regulatory programs that directly impact or limit the use of this private land. Throughout the history of Dare County, the relationship with the federal and state agencies present in Dare County has ranged from cooperative to confrontational depending on the issue at hand. It is often felt that not enough local input is sought by Federal and State agencies before they adopt regulations or restrictions that impact Dare County.

Policy #41

Additional Federal or State regulatory programs or expansion of existing programs will be reviewed on a case by case basis. Dare County reserves the right to support, oppose, review, or comment on additional regulations that may impact Dare County and its economy. Local Public Hearings by federal or state agencies should be extensively advertised and conducted in Dare County before any new regulations are adopted or existing programs are expanded.

Implementation Strategy:

1. Monitor federal and state proposals and participate as needed.

WASTEWATER

Throughout the unincorporated portions of Dare County, on-site individual septic tank/nitrification field systems are the primary method of wastewater treatment. The suitability of soils for use as drainfields limits the scope of development. Over the past several years, alternative methods of wastewater treatment have been developed to compensate for the natural limitations of the soils found in Dare County. This will continue to be the case as the limited amount of land available for development in Dare County is used. The topics of septic systems

and central wastewater treatment systems were discussed at the public participation workshops with some attendees expressing the opinion that central wastewater treatment was the only way to gain some control over the location of development as well as reduce pollution from malfunctioning septic systems. Others felt that central wastewater treatment only increases the pressure to reduce the minimum lot size standard and the likelihood of more intense development. The Planning Board discussed the merits of central wastewater treatment versus traditional septic systems at length during their policy workshops. The long-term maintenance of privately owned package treatment plants was sited as a major concern by the Planning Board members. In many instances, package treatment plants proposed as part of a construction project are intentionally permitted and designed with excess capacity. The potential sale of this excess wastewater capacity for off-site development was also listed as a drawback of central treatment facilities. The Board agreed that central wastewater treatment plants should not be completely shunned and that there might be some instances where package treatment plants are feasible alternatives to traditional on-site septic systems. However, the Board stressed that the availability of central wastewater should not be a catalyst for increased levels of development or a reduction in the minimum lot size. The Board also discussed alternative methods of wastewater treatment such as the “peat” systems and expressed concern about the unknown maintenance since these are relatively new systems that are being used. It was noted that these peat systems are approved systems by the NC Department of Health and therefore could not be precluded from use at the local level without special legislative authorization from the General Assembly.

Any desire to transition unincorporated Dare County to a central collection and treatment for wastewater will be dependant upon a suitable means of discharge. In the past most publicly owned systems have discharged treated wastewater into a receiving water body. In Dare County, the surrounding waters are the Atlantic Ocean and the estuarine waters of the various sounds, neither of which represent ideal discharge locations. In the absence of a water body for receiving discharge, land application is necessary. However, suitable and available land for such purpose is limited and would be extremely expensive.

The use of off-site wastewater treatment and collection systems to accommodate development on parcels that are unsuitable for on-site wastewater systems is a concern. Projects that propose to locate off-site wastewater systems on other tracts that are currently dedicated to other uses has been identified by the Planning Board as questionable and the approval of these systems seen as unwise.

Dare County has initiated efforts to obtain grant funding for a feasibility study of central wastewater treatment in the village of Stumpy Point. The majority of the existing septic systems in Stumpy Point are acknowledged as detriments to water quality due to their direct outfall to Stumpy Point Bay. The poor soil conditions of the area also contribute to the unsuitability of septic tank use. To address these issues, the need for some type of centralized wastewater treatment is being investigated.

The Land Classification Map that accompanies this update should be referenced in the review of rezoning requests, ordinance development and other land use decisions to ensure consistency with these policies on wastewater treatment systems. Land not classified for uses that require

urban-style wastewater treatment should not be used for development that demands such services.

Policy #42

The current minimum lot size standards shall not be reduced regardless of the availability of central wastewater treatment or the availability of a combination of central wastewater treatment and a central water supply.

Policy #43

Dare County advocates the use of on-site septic tank/drainfield systems as the primary method of wastewater treatment in unincorporated Dare County. Non-traditional methods of wastewater treatment should be used only when natural soil conditions dictate their use and not solely to accommodate larger structures or a greater dwelling density.

Policy #44

Package treatment plants may be considered only when natural conditions prohibit the use of septic systems, as remedial efforts to correct existing failing septic improvements, or if required by ordinance and should be constructed to serve a specific development without excess capacity for off-site wastewater treatment connections.

Policy #45

Maintenance of privately owned package treatment plants should be supervised by the NC Utilities Commission or other public agencies.

Implementation Strategies

1. The creation of a wastewater treatment authority or commission to address wastewater treatment issues including the maintenance of traditional septic/drainfield systems, package treatment plants, non-traditional methods of wastewater treatment, such as the peat systems, and the monitoring of existing septic tank and nitrification fields. (2004-2006)
2. Continue to pursue opportunities to address wastewater issues in unincorporated Dare County including construction of a publicly-owned package treatment plant or publicly-owned small centralized treatment plant as a remedial measure to replace existing outdated septic systems that threaten estuarine water quality due to their location in poorly drained soils or to facilitate a publicly-financed or publicly-endorsed housing developments.

TRANSPORTATION

Traffic and transportation infrastructure is an issue of great concern to the residents of Dare County as evidenced by the comments received at the public participation workshops. Due to the linear geography of Dare County and its limited number of transportation routes, our residents and visitors are greatly impacted by the seasonal traffic demands on our infrastructure. The danger of the center turning lane of Highway 158 was mentioned at all of the public participation workshops. The seasonal demands placed on US 158 currently exceed its design capacity with no easy solutions for its expansion due to the limited width of the northern beaches and displacement issues associated with the existing development along US 158. One hopeful alternative is a thoroughfare plan that is currently under consideration by NCDOT. Although

this plan will only address traffic on US 158 in the municipal portions of Dare County, it nevertheless impacts all of Dare County and its residents.

Public transportation systems and entry tolls are often cited as possible solutions to our traffic congestion problems. The issue of entry tolls to fund transportation improvements did not receive support on the land use plan survey. Residents and property owners indicated support for a public transportation system but past efforts to operate public bus routes have not been successful. The Planning Board expressed the need for an intergovernmental approach to all aspects of transportation planning.

Regarding NC 12 on Hatteras Island, including Bonner Bridge, the Planning Board stressed the importance of this highway and the need to ensure its continued existence. The importance of NC 12 to the residents of Hatteras Island and to the tourist economy of Dare County cannot be overemphasized. The County has worked with the NC Department of Transportation and its Task Force on NC 12 to identify short-term and long-term options to protect NC 12. Emergency ferry landings have been constructed at Rodanthe and Stumpy Point in case road/bridge access to Hatteras Island is disrupted. Continued attention to protection of NC 12 is a high priority of the citizens and elected officials of Dare County.

Private streets are allowed under the Dare County Subdivision Ordinance but must be constructed to the standards of the NC Department of Transportation. Under North Carolina law, county governments do not have legislative authority for street maintenance. Subdivision streets are either State-maintained or private roads that are the maintenance responsibility of the property owners of the subdivision. While support for the construction of private roads in newly developed subdivisions was expressed by the Planning Board, it was emphasized that private roads should continue to be constructed to the same standards as State-maintained roads. In addition, for every private road recorded as a part of the subdivision approval process, the recordation of homeowner association documents clarifying maintenance of the private road is required.

Policy #46

Dare County recognizes the vital importance of NC 12 to Hatteras Island and the need to protect this transportation route, including Bonner Bridge. Recommendations by the NC Department of Transportation on NC 12, including beach nourishment, the replacement of Bonner Bridge, elevated sections of the highway, or other options that may be identified, will receive the highest level of consideration from Dare County.

Policy #47

Dare County encourages intergovernmental cooperation with the municipalities and its surrounding counties to study of the transportation needs of Dare County and our region.

Policy #48

Dare County shall not be responsible for the cost of maintaining or repairs to privately owned streets. Experimental programs sponsored by the State to maintain private roads shall be supported.

Policy #49

Whenever possible, local roads should be designed to interconnect to result in alternative transportation routes subordinate to the principal and well-known highway system

Implementation Strategies

1. Continue to require all subdivisions that feature private roads to bear a disclaimer stamp on the final plat indicating that Dare County shall never be responsible for the road maintenance. Restrictive covenants shall also contain language concerning the road maintenance responsibility.
2. Work with our State legislative delegation to secure authorization for a NC Department of Transportation private road maintenance and repair assessment program.

SOLID WASTE

Dare County participates in a regional solid waste authority with its surrounding counties. Garbage is trucked to Bertie County, North Carolina. This method of solid waste disposal was chosen based on the high costs associated with the construction of a new landfill on the Mainland of Dare County. Dare County continues to operate a voluntary recycling program. The need for additional large item pick-ups and hazardous materials pick-ups was identified during the Planning Board policy workshops

Policy #50

Dare County advocates participation in a regional solid waste authority and continued operation of voluntary recycling efforts. Additional programs for hazardous materials disposal and large item pick-ups are encouraged.

Implementation Strategy:

1. Develop a public information campaign using public information office brochures and local governmental access channel to circulate information about hazardous waste collections and large item pick-up schedules. (2003)

COMMUNITY GROWTH PATTERNS

One common theme that is expressed by the residents and property owners of Dare County is the desire to maintain the coastal village atmosphere that is found throughout the area. This desire is often stated at hearings or workshops where development projects or issues are discussed. However, market forces and the limited amount of privately owned land available for development in Dare County often conflict with the attempt to maintain this coastal village atmosphere.

Use-specific zoning with an emphasis on residential zoning districts has been one technique used by Dare County officials to manage the growth and development of our area. Since the early 1990's, zoning maps for the villages of Hatteras, Avon, Buxton and Colington have been adopted. County efforts to establish zoning maps for the other villages of Dare County were supported on the land use plan survey and these efforts will continue.

The construction of the new bridge from Mainland Dare County to the intersection of US 64 and NC 345 on Roanoke Island will have tremendous influence on the growth patterns of these two landing areas. Currently Manns Harbor is unzoned but the need for land use regulations to address the impacts of the bridge on the village has been identified. On Roanoke Island, the presence of the new bridge landing and the availability of central sewer from the Town of Manteo are influencing the land use patterns for this area. A new Dare County Courthouse and Dare County Visitors Center is planned for the general vicinity of the new bridge landing. This area of Roanoke Island will continue to be the focus of development pressure due to the central wastewater service lines located along the US 64 right-of-way.

In other areas of unincorporated Dare County, free-market forces continue to fuel the County's development without the need to provide any type of economic stimulators for growth. However, in early 2002, the Dare County Board of Commissioners adopted a gross floor limitation of 20,000 square feet for retail structures in all commercial and industrial zoned areas of unincorporated Dare County. This limitation will impact the growth patterns of unincorporated Dare County and the type and scale of the development that choose to locate in our community.

The land use plan survey respondents indicated support for acquisition of additional lands for projects. However, over 80% of the land in Dare County is currently held in public ownership with most dedicated to preservation purposes. Additional acquisitions should be weighed carefully and balanced with the need for other land demands. Members of the Planning Board expressed concerns about the impacts to the tax base once lands are removed from private ownership.

Policy #51

Dare County values its coastal village atmosphere and will continue to work toward the development of use-specific zoning maps for those areas currently unzoned.

Policy #52 -

Private sector development is encouraged to acknowledge Dare County's coastal village qualities and incorporate these traits in their development plans and building designs.

Policy #53

Public services shall be provided to meet the needs of, but not to serve as an incentive to growth and development.

Policy #54

Dare County reserves the right to review additional acquisitions of private property for public ownership on a case-by-case basis.

Implementation Strategies

1. Continue work to develop use-specific zoning maps for those portions of unincorporated Dare County that are unzoned or have minimal S-1 zoning. (2002-2005)
2. Work with the Town of Manteo to coordinate regulation of development on Roanoke Island where the County's unincorporated boundary joins the Town's boundary.

4. Contract with independent planning consultant to update Carrying Capacity Study for Dare County. (2004)
5. Draft for Dare County Board of Commissioners consideration a set of building design, landscaping, and parking standards for commercial uses as overlay districts along NC 12 on Hatteras Island and other areas of unincorporated Dare County.

RESIDENTIAL DEVELOPMENT

Public opinion supports residential development as the preferred type of land development in Dare County with an emphasis on single family detached structures. The market has adjusted to this preference and as a result, residential structures are being developed to accommodate our year-round population as well as to provide rental accommodations for our seasonal visitors. This is one factor that distinguishes Dare County from other resort areas. Our rental accommodations take the form of residential structures that are rented on a daily or weekly basis versus other areas that offer a larger array of motels, inns, and condominiums. This regulatory philosophy advocating “single family” zoning has created a housing stock that doesn’t function as traditional detached residential structures found in other non-resort areas. The use of the term “single family” seems inappropriate since the rental market provides large multi-bedroom houses that accommodate numerous persons and extended families with associated amenities such as pools and spas. Residents attending the public participation workshops expressed concerns about the lack of on-site parking, excessive noise, over-occupancy of the rental structures. Although residential development is the stated preference of land use, the mode of occupancy of the housing units is different from the traditional concept of “single family” homes and should be recognized in our land use standards. It was the feeling of the Planning Board that “single family” was a term that would create the idea that the neighborhood did not contain weekly rentals or structures occupied contrary to a traditional nuclear family residence.

There has been some community interest on Hatteras Island to amend the Zoning Ordinance to decrease the dwelling density standards of the existing zoning districts that permit multi-family dwellings. Currently, some of the districts permit ten units per acre that is viewed by many to be excessive. The need to amend the dwelling densities standards to lower the maximum number of units per acre has been identified.

Another aspect of residential development that was discussed by the Planning Board was home occupations. While the Board agreed that a policy statement on home occupations was not necessary, the need for a better definition of what constitutes an acceptable “home occupation” was identified. This issue is often the source of many complaints received by the Dare County Planning Department.

Respondents to the land use plan survey and public workshops attendees both expressed the need for more attention to unsightly structures and conditions in unincorporated Dare County. Currently, the Dare County Nuisance Ordinance is used for the removal of collapsed structures, the remnants of burned structures, or other similar situations that are threats to public health instead of merely unsightly properties.

Over the past two years, there has been renewed efforts to focus attention on the lack of housing that is dedicated or constructed strictly for year-round residents in the community and for the seasonal employees brought to the area by local businesses during the summer months. It is

difficult for many residents of the Outer Banks with low to median incomes to find adequate housing that fits their economic status. As a result, many residents find themselves allocating over 50% of their incomes for housing. Many business owners are unable to employ enough workers to adequately service their customers because the majority of rental housing is intended for short-term resort accommodations or for year-round occupancy. Several factors contribute to this problem: the limited amount of land available in Dare County, the high cost of living of the region, or the higher profit margins offered by construction of luxury second or rental homes. The predominant development of single family structures versus the construction of multifamily structures also contributes to the problem. The stated policy of single family residential development has contributed to the absence of multifamily structure construction, which could be used to address the issue of moderately priced housing units.

These housing constraints influence the quality of life of many Dare County residents—those who cannot find adequate housing with their salary range or the business owner that cannot recruit enough summer employees because there is a shortage of seasonal housing accommodations. Some private sector employers purchase or construct residential structures for the sole purpose of providing housing for their summer employees. The location of employee housing in year-round neighborhoods generates some complaints from neighbors whose lifestyles are incompatible with those of the mostly college-aged seasonal employees.

There are no simple solutions but most people agree that a regional approach from both the private sector and public sector is needed to address the matter. Intergovernmental cooperation will be imperative to identify possible solutions to providing a housing inventory that meets the diverse housing needs of the community. Partnerships between local governments and the private sector may be necessary to address the year-round housing needs for median income residents of Dare County. Opportunities to expand the housing inventory for year-round residents should be considered by the private sector and supported by the public sector.

Residential development in designated Areas of Environmental Concern require permit review by the Division of Coastal Management. Depending on the extent of the proposed development, CAMA permits or exemptions letters may be needed.

Policy #55

Detached residential structures shall be the preferred land use in unincorporated Dare County. Although the expanding market for seasonal accommodations as structures that resemble traditional domiciles has resulted in a shortage of year-round housing, it is agreed that the policy advocating residential structures as the preferred land use shall continue.

Policy #56

Dare County recognizes the diverse housing needs of the community. Private sector development projects intended to expand housing opportunities for year-round residents are encouraged. Partnerships between the private sector and the public sector will be reviewed on a case-by-case basis when appropriate. Regional efforts to address the housing needs of the Outer Banks will also be reviewed on a case-by-case basis.

Implementation Strategies

1. Amend the Dare County Zoning Ordinance to delete the term “single family” residential houses and replace with “detached individual residential housing units” in recognition of the possibility that neighborhoods may contain seasonal rentals or that structures in the neighborhood may be occupied by unrelated individuals. (2003)
2. Adopt standards that address unsightly structures and conditions that are more flexible than the current Nuisance Ordinance, which is designed to address public safety and welfare issues rather than eyesores. (2004)
3. Amend Zoning Ordinance to better define an acceptable level of home occupations (2004)
4. Consider revisions to Zoning Ordinance to lower the number of permitted dwelling densities for multifamily structures. (2003)
5. Consideration of an intergovernmental task force on housing issues. (2003)

COMMERCIAL DEVELOPMENT

With residential detached housing acknowledged to be the preferred land use, the introduction of new commercial development is sometimes opposed, particularly when introduced on land bordered by existing residential development. In addition, as the year-round and seasonal population of Dare County has increased, the market for national retail franchises has prompted organized opposition to these larger commercial projects. There is a strong public sentiment, as expressed in the land use plan survey and recent land use decisions in Dare County, that national chain retailers diminish local village character. Balancing the preservation of local village character and commercial development will continue to present challenges to the local Dare governments. Land use planning techniques such as architectural design standards, landscaping standards and gross floor area limitations can be used to address those aspects of commercial development that the public views as contrary to our local character. To address these concerns, Dare County amended the Zoning Ordinance in March 2002 to establish a 20,000 square foot floor area limitation for retail structures. Additional amendments to address building design and re-use standards remain under consideration.

Policy #57

Dare County will address opportunities for commercial development by adopting zoning maps for those portions of unincorporated Dare County currently unzoned or with minimal S-1 zoning regulations.

Policy #58

Dare County encourages the continued existence and development of locally owned businesses in unincorporated Dare County.

Policy #59

Large franchise operations proposing to locate in unincorporated Dare County are encouraged to individualize their establishments to reflect Dare County’s coastal village character and not rely solely on corporate building designs, color designs or manner of construction.

Implementation Strategies

1. Adopt zoning amendments to include building design standards, landscaping, lighting and sign control standards. (2003)
2. Continue zoning initiatives with focus on detached residential development with limited commercial areas. (2003-2005)

RE-DEVELOPMENT

Market forces in Dare County continue to direct re-development patterns in Dare County. Old structures or buildings of little value are being destroyed or moved to accommodate new development. Local government initiatives to encourage re-development are not needed in Dare County, as is often the case in other areas.

Over the past several months, numerous older oceanfront motels on the Outer Banks have been demolished and replaced with residential structures intended for seasonal rentals. The demolition of the hotels has created concerns about the economic impact of displacing this type of overnight accommodations and that the trend will eventually result in a lack of hotels and motels along the oceanfront.

As the redevelopment trend, such as the hotel issue discussed above continues, historical uses and/or structures are likely to be displaced or destroyed. Many of these historical structures provide an important link to the County's history and coastal village atmosphere. Whenever financially feasible, the re-use of these structures should be considered prior to any decision to abandon or destroy them.

Re-development is often an issue after a natural disaster or accident. In these instances, redevelopment will be authorized but only under the terms of contemporary development regulations and building codes.

Policy #60

Redeveloped areas and structures shall conform to current development standards.

Implementation Strategies

1. The County shall enforce the NC State Building Codes for coastal construction and the Dare County Flood Ordinance in the event of reconstruction.
2. Whenever feasible, non-conforming structures destroyed by an act of nature or an accident will be rebuilt to comply with applicable zoning codes.
3. The re-use and rehabilitation of historic structures is encouraged as a means of preserving Dare County's coastal village environment.

INDUSTRIAL DEVELOPMENT

The land in Dare County is generally not suitable for traditional industrial development due to the presence of wetland soils, sensitive adjacent water bodies, and air quality standards associated with the national parks and refuges located in Dare County. Over the decades, tourism has emerged as the leading industry in Dare County. Commercial fishing and boat building continue to be factors in the local economy. The construction and real estate industries

are also major employment sectors in Dare County due to the robust growth we have experienced over the last several years.

A common theme expressed at the public participation workshops was the need for economic diversification to reduce the County's dependence on tourism. This opinion is based on the potential of hurricanes devastating our tax base and thus our tourism base and the need for higher-paying jobs so that our young people can return to the area after college for more year-round jobs offered by an expanded economy.

The concept of dedicating County-owned land on the Mainland for future development as an industrial park or site for public-private partnerships has been identified.

Policy #61

Industrial development that is environmentally suited to Dare County and its surrounding water bodies is encouraged. Dare County also supports the traditional industries of commercial fishing, boat building, and construction.

Policy # 62

Opportunities to diversify and expand Dare County's local tourist economy should be investigated.

Implementation Strategies

1. Proposals for industrial development in zoned areas will be reviewed for compatibility under the provisions of the Dare County Zoning Ordinance. For unzoned areas and those areas currently zoned S-1, use-specific zoning maps will be established and the designation of industrial zoned areas thoroughly evaluated based on geographic proximity to water bodies and other sensitive natural areas.
2. Update the Zoning Ordinance to evaluate the scope of uses allowed in the I-1 zoned areas of unincorporated Dare County.
3. Investigate the need for a County-owned industrial park on the Mainland of Dare County.

ENERGY FACILITIES

Over the past decade, the topic of offshore natural gas and oil exploration has been raised several times. Different corporations have sought permits to explore for natural gas and oil off North Carolina's coast. Each time, circumstances have resulted in the failure to obtain the necessary permits. Public sentiment has been strongly opposed to these proposals. The 1994 policy continues to accurately represent public opinion in Dare County and is re-stated in this Plan.

Policy #63

Dare County is opposed to the development of any petro-chemical energy facility or related improvements within its jurisdictional lands and/or waters. This includes all structures, operations, and activities associated with petro-chemical energy facility development such as, but not limited to on-shore support bases for offshore exploration activities, staging areas, transmission and/or production pipelines, pipeline storage yards, and other similar structures activities, and improvements related to petro-chemical energy facility development, exploration,

or production. Dare County supports research and development of non-fossil fuel alternatives for energy production.

Implementation Strategies

1. Any major energy facility proposed to be located in Dare County shall make a full disclosure of all costs and benefits associated with the project. This disclosure shall be in the form of an environmental impact statement independent of and not funded by any petro-chemical company or the Mineral Management Service.
2. In the event an energy facility is proposed for Dare County, the County will support the policy statements and administrative regulations referenced in 15NCAC7M, Section .0400 entitled “coastal energy policies.”

TOURISM

Tourism is the number one industry in Dare County and creates a large number of local jobs and generates a great deal of revenue for Dare County and the State of North Carolina. Tourism is viewed as a relatively “clean” industry from an environmental perspective and is compatible with the abundant sensitive natural resources of the County. These abundant natural resources will continue to be a drawing card for tourists and tourism will continue to be the leading economy in Dare County.

While the residents of Dare County recognize the importance of tourism to our economy, there is a growing cognizance of the quality of life issues related to our seasonal population surge. The need to balance quality of life issues for year-round residents is gaining significance as a by-product of the dominating influence of tourism on Dare County. Ensuring a positive vacation experience for our visitors is also an important link to the quality of life issues. Our seasonal population influx challenges the County’s transportation infrastructure and frustrates the year-round residents as they go about their daily lives and the seasonal visitors as they attempt to shop, eat and sightsee. A lack of affordable housing for seasonal employees and the private sector’s inability to provide an adequate workforce to accommodate our seasonal visitors are also cited as negative consequences of our tourist economy.

Policy #64

Dare County recognizes the vital importance of tourism to our local economy and supports efforts to maintain our status as a desirable place to visit and vacation. Dare County also recognizes the need to address the infrastructure and service demands of our seasonal populations. The use of tourist-generated revenues, such as occupancy taxes, to address the year-round and seasonal population needs is encouraged.

Policy #65

Dare County supports the concept of combining natural resources and tourism to promote the area’s ecological values, known as “eco-tourism”.

Policy #66

The quality of life of Dare County residents should be carefully balanced with the growing tourist-based economy of the Outer Banks. Maintaining a good quality of life for our permanent population and ensuring a safe and enjoyable vacation experience should be a goal of all local, state, and federal agencies responsible for the promotion of tourism in Dare County and North Carolina.

Implementation Strategy:

1. Use revenues generated by tourism to fund quality of life related projects such as sidewalks, bikepaths, streetscape and landscaping improvements and open space acquisitions

BIKEWAYS/WALKWAYS/GREENWAYS

Over the past decade, numerous bikeways/greenways have been constructed throughout Dare County and are very popular with both the year-round residents and visitors to the Outer Banks. The bikeways serve as alternative transportation routes and represent an opportunity to enjoy the outdoors. The continued construction of these greenways was encouraged at all of the public participation workshops and during the Planning Board policy workshop.

The Planning Board also discussed the need for crosswalks along US 158 to provide safe settings for pedestrian movement across this thoroughfare. The need for further investigation of elevated crosswalks at major tourist destinations such as Jockey's Ridge and the Wright Brothers Monument was identified.

Policy #67

Dare County supports the development and construction of sidewalks, bike paths, greenways, and other walking/jogging trails to provide a safe setting for these types of outdoor recreation and as alternative transportation routes.

Implementation Strategies:

1. Continue to work with participating agencies to pursue opportunities for construction of additional walkways/bike paths throughout all of unincorporated Dare County, including interconnection of the Roanoke Voyages multi-use path into Wanchese
2. Request revenues through local funding or grants to provide an areawide greenway plan (2004)

Storm Hazard Mitigation, Evacuation, and Post-Disaster Reconstruction and Recovery

The unique configuration of Dare County's barrier islands makes these areas particularly susceptible to hurricanes and other storm events. In addition, much of the lands in Dare County lack sufficient elevation to preclude floodwaters associated with storm tides.

The purpose of this section of the LUP is to describe the County's policies on managing development to mitigate flood and storm damage, evacuation concerns, and reconstruction

strategies for use after a storm event or natural disaster has occurred. Each of these topics are discussed below:

Storm Hazard Mitigation

Storm hazard mitigation involves activities, policies, and practices that help to reduce the likelihood that property damage will be catastrophic in the event of a strike by a hurricane. The key mitigation technique practiced in Dare County is the enforcement of base flood elevation standards designed to allow rising floodwaters to flow freely under elevated structures. In addition, Dare County enforces the wind load requirements established in the NC State building codes for hurricane prone areas.

A storm surge map prepared according to CAMA guidelines, has been included as part of this LUP. This map illustrates in shaded colors those portions of Dare County subject and not subject to storm surge inundation (flooding) during a FEMA category 1 or 2 storm. In the event of a stronger category storm, flooding would be more extensive. The most obvious point illustrated by this map is that there are few areas of Dare County that feature enough natural ground elevation to preclude some degree of flooding during a minimal storm. A few elevated areas may offer protection from floodwaters, but they are more vulnerable to wind damage during the more intense storms.

Projections of storm surge impact vary based on the intensity of the storm, its forward speed, the cycle of lunar tides at the time of landfall, and the directional track of the storm as it makes landfall. Under worse cases scenarios, much of Dare County could be flooded by storm tides and/or wind-driven waves. Only those areas with natural elevations that exceed 20-30 feet above sea level can be excluded from the threat. These areas include certain elevated sections on the north end of Roanoke Island, a narrow strip of Duck and Southern Shores, a very small portion of Colington, and the wooded maritime forest areas of Kitty Hawk, Nags Head, Kill Devil Hills, and Buxton.

The vulnerability of the barrier island setting leaves much of Dare County subject to extensive property loss in the event of a category 3, 4, or 5 hurricane. The table below illustrates the value of improvements that are at risk:

Table 25 – Assessed Values by Tax Districts Including Exempts --January 2002

District	# of Parcels	Land Value	Improvement Value	Total Value
Avon	2012	251,355,200	155,990,300	407,345,500
Buxton	1177	122,970,600	89,888,200	212,858,800
Colington	2672	68,505,200	139,860,200	208,365,400
Duck	2891	299,713,400	426,279,100	725,992,500
East Lake	162	25,063,100	2,463,100	27,526,200
Frisco	1602	171,523,900	87,941,800	259,465,700
Hatteras	1206	134,054,200	94,356,300	228,410,500

KDH Outside	182	6,059,600	16,960,900	23,020,500
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District	# of Parcels	Land Value	Improvement Value	Total Value
Kill Devil Hills	7194	264,302,800	555,343,300	819,646,100
Kitty Hawk	3694	149,655,000	308,755,800	458,410,800
Manns Harbor	441	15,900,700	16,019,400	31,920,100
Manteo (out)	2726	105,022,000	164,945,000	269,967,100
Manteo (town)	1517	76,918,200	192,748,700	269,666,900
Martins Point	380	27,751,600	51,868,400	79,620,000
Mashoes	53	780,100	387,500	1,167,600
Nags Head	5515	371,584,800	565,768,500	937,353,300
Rodanthe	768	166,895,800	42,674,700	209,570,500
Salvo	785	50,602,700	46,387,500	96,990,200
Southern Shores	2980	210,638,700	309,704,100	520,342,800
Stumpy Point	236	5,912,100	5,939,100	11,851,200
Wanchese	1049	25,455,500	43,938,700	69,394,200
Waves	460	29,157,400	34,032,600	63,190,000

Source: Dare County Tax Appraisal

Evacuation

In 1992, the Dare County Emergency Management Control Group was established to administer the Dare County Emergency Operation Plan that outlines evacuation procedures in the event Dare County is evacuated due to the threat of hurricanes or other storm events. The Control Group is comprised of the mayors of the municipalities in Dare County, the Superintendent of the National Park Service, the Dare County Sheriff and the Chairman(or his appointee) of the Dare County Board of Commissioners. The representative of the County Board serves as the Chairman of the Control Group. The Control Group is assisted by a number of representatives of essential services that will be in demand before, during and after a natural disaster. This group is known as the Support Group and the Dare County Manager serves as the Support Operations Officer.

Due to the unique island geography of Dare County, emergency operations centers have been established in Manteo and Buxton in order to ensure that operations can continue even if communications are lost.

Whenever the National Weather Service issues advisories concerning weather systems, the Emergency Management staff monitors the situation and acts according to the Dare County Emergency Operations Plan. As the likelihood of a strike to the Dare County coast increases, various response procedures are implemented. Based on information received from the National Weather Service and the State Emergency Management Office, the evacuation will be fully implemented if necessary and the emergency powers of the Control Group will be exercised.

The following table depicts information from 2000 Hurricane evacuation study regarding the amount of time needed to evacuate Dare County depending on a storm intensity

Table 26- Projected Evacuation Times

Dare County	cat1	2	3	4	5
US 158 only	16Hrs	22Hrs	22Hrs	22Hrs	30Hrs
US 64 only	16	22	24	24	32
158/64 combo	14	16	16	16	18

calculated for high density population

Post-Disaster Reconstruction and Recovery

After a natural disaster, Dare County will initiate a set of pre-determined, coordinated activities to guide the County through post-disaster reconstruction and recovery from the natural events. A reconstruction and recovery plan will be implemented that includes financial assistance information, economic recovery information, and prioritized schedule for the repair and reconstruction of replacement of infrastructure improvements and service facilities.

Re-entry Procedures

Until a comprehensive post-disaster recovery plan has been adopted by the Dare County Board of Commissioners, the following steps represent an outline for re-entry after a storm event or other natural disaster:

1. During an emergency, the various response plans developed by the Dare County Emergency Management staff and used by the Emergency Control Group will be implemented.
2. Once the situation has been stabilized and dangerous or unhealthy conditions have abated, the re-entry and recovery elements of the disaster response shall begin.
3. Re-entry after an evacuation will be authorized by the Dare County Control Group based on the following priorities:
 - a) Personnel necessary to restore key facilities and provide relief for emergency management staff that did not evacuate.
 - b) Supply vehicles, delivery services necessary to replace essential commodities lost due to the disaster.
 - c) Residents of Dare County that display a “resident” re-entry sticker or Dare County driver’s license, whichever is applicable. There may be a limited re-entry based on conditions in any particular portion of the County.
 - d) Non-resident property owners will be authorized re-entry when all essential services have been restored.
 - e) All other persons seeking to enter Dare County will be authorized re-entry when the prioritized re-entry procedures have been completed.

Reconstruction

Reconstruction strategies will vary based on the degree of damage. Listed below is a table of damage classifications that will be used by Dare County officials.

Destroyed: more than 80% of value to repair, unusable, uninhabitable

Major damage: more than 30% of value of structure, uninhabitable

Minor damage: 30% or less of the value of a structure, uninhabitable

Habitable: Damage amounting to 15% or less of value of structure

In the event of a tropical storm or a weak category 1 hurricane, structural damage will probably be limited to broken glass, minor roof damage, trees uprooted, and signs and canopies blown down. It is also anticipated that there will be ocean overwash and soundside flooding that may damage ground floor enclosures or pre-FIRM structures. None of this will be considered substantial enough to trigger post-disaster reconstruction procedures and repair work will be authorized through the routine building permit process.

However, should a strong category 2 or 3 hurricane make landfall in Dare County, then the post-disaster reconstruction strategies will be more complicated and will vary depending on the level of damage. Under this scenario, the potential for major damage or destruction and major flooding increases significantly. Structures that are classified as destroyed will be required to conform with all applicable Federal, State, and local codes if reconstructed. Structures classified as having sustained major damage will have to be upgraded so that all repair work conforms with applicable Federal, State or local codes. Damage classified as minor, similar to that described in the previous paragraph will be authorized for repair by normal permit procedures or a general permit declared by the Board of Commissioners.

The final reconstruction scenario is a response to a catastrophic natural disaster such as the landfall of a hurricane 4 or 5 in Dare County. Widespread destruction and the loss of the entire infrastructure, including critical roads and bridges, are possible. The reconstruction strategy for this scenario will be lengthy. The top priority, once damage assessment is complete, will be the restoration or replacement of essential access routes, utility services, and medical and emergency management facilities. Once the essential infrastructure has been restored, the reconstruction of all subordinate structures will be authorized in phases based on their intended use and purpose. Essential commercial and primary residential structures will be the next priority for reconstruction. Non-essential commercial and secondary residential structures will be authorized once the higher priorities have been processed.

In each case, the reconstruction of public and private structures will be evaluated in an effort to mitigate any features that contributed to damage or loss during the disaster. All reconstruction will be reviewed for compliance with applicable Federal, State, or local regulations. This review will include members of the Planning and Building Department and may be augmented by a recovery task force designated by the Dare County Board of Commissioners.

The following table presents the various recovery and re-entry stages and the actions that will occur under each scenario:

Table 27 --- Recovery and Re-entry Stages

- RS-5 Catastrophic damage has rendered transportation routes impassable; destroyed or severely damaged essential communication and utility production or distribution systems; and created dangerous debris or unsanitary conditions countywide. A state of emergency and/or martial law remains in effect for an indefinite period of time. Re-entry is limited to emergency response and damage assessment personnel; equipment, vehicles, vessels, and aircraft at manned entry stations to the County.
- RS-4 Major to intermediate damage has impacted transportation routes, communication systems, utility production and/or distribution systems and created dangerous debris or unsanitary conditions county-wide. A state of emergency is in effect for approximately 10 days. Re-entry is limited to emergency response and damage assessment personnel, equipment, vehicles, vessels, and aircraft. Entry stations are operational.
- RS-3 Intermediate to minor damage has impacted portions of transportation routes, communication systems, utility production and/or distribution systems and created dangerous debris or unsanitary conditions in certain portions of the County. Re-entry will be limited to emergency response and damage assessment personnel, equipment, vehicles, and vessels in those portions of the County where the damage has occurred. In those areas where dangerous or unsanitary conditions are not present or have abated, re-entry will be authorized for individuals with “resident” re-entry permits or service vehicles with temporary entry permits. A state of emergency is in effect for damaged areas and will be discontinued in areas where dangerous or unsanitary conditions are no longer present. Check points are used for those areas that remain closed for unlimited re-entry because of dangerous or unsanitary conditions.
- RS-2 Minor damage or flooding has temporarily discontinued access to certain areas or resulted in isolated disruptions of utility services. Re-entry will be authorized for all vehicles displaying a Dare County re-entry permit and all service and supply vehicles. There will be no restrictions on vessels or aircraft.
- RS-1 All transportation routes are fully operational and all utility systems are on line. Unlimited re-entry will be declared in 12 hours.
- RS-C unlimited re-entry is declared at daylight of the first day following condition RS-1. All control points are dismantled and the Emergency Operations Center is deactivated.

It should also be noted that repairs and reconstruction for damaged or destroyed structures located in designated Areas of Environmental Concern must comply with 15A NCAC 07J Sections .0210 and .0211. Under these sections of the CAMA codes, some structures determined to be “destroyed” may not be replaced unless in full compliance with current CAMA regulations.

Policy #68

Dare County shall use construction standards and zoning regulations to mitigate the effects of high winds, storm surge, flooding, wave action, and erosion.

Implementation Strategy:

1. Dare County will continue to enforce all applicable Federal, State, and local regulations relating to construction in storm hazard areas.

Policy #69

Dare County is committed to maintaining a full-time emergency management department and emergency operation centers and places a high a priority on hurricane preparedness and response.

Policy #70

The Dare County Board of Commissioners shall be ultimately responsible for supervising the implementation of various policies and procedures regarding reconstruction and recovery after a natural disaster.

Policy #71

Recovery priority shall be directed to restoring or repairing infrastructure improvements such as transportation routes, utilities and medical and emergency management facilities. Once the infrastructure has been restored, recovery priorities shall then be directed at essential commercial and primary residential structures.

Policy #72

In the event of extensive hurricane damage to publicly-owned utilities or other improvements requiring replacement or reconstruction, alternative locations that will mitigate the potential for similar repetitive losses will be examined and implemented wherever feasible and practicable.

Policy #73

In the event of a damaging hurricane or other disastrous event, the Dare County Board of Commissioners may declare a moratorium on all building permits and/or rezoning requests pending an evaluation of the damage and any reconstruction strategies that may serve to mitigate future damage or repetitive losses.

Public Participation

As part of the update process, a Public Participation Plan was developed and adopted by the Dare County Board of Commissioners. The goal of the Plan was to identify strategies to provide the citizens of Dare County numerous opportunities to participate in the update process by providing input at workshops and review of the draft plan. A copy of the Public Participation Plan as adopted by the Board of Commissioners is included as Section Five of this update. Appendix B includes other public participation information such as the land use public opinion survey and the workshop results.

In addition to public participation during the LUP process, public participation and comment is encouraged by Dare County at the Board of Commissioners meetings. A Public Comment period is included at every Board of Commissioner meeting and citizens may speak on any matter they wish to discuss. In addition, the Board meetings are taped and televised twice weekly on a local access channel for viewing by interested parties. The County's Public Relations Office also updates the local access channel, as needed with information about County and municipal government activities. This access channel is provided as part of the franchise agreement with the local cable provider.

The Planning Board maintains a mailing list of individuals and businesses and copies of their monthly agendas are mailed to these persons.

Information about Board meetings and Hearings is also posted on the County's website at www.co.dare.nc.us.

Policy # 74

Dare County supports the active involvement of all interested persons in its land use planning and policy development activities.

Implementation Strategies

1. The County will continue efforts to inform, educate, and involve the public in planning for the future of the County, primarily through the regular and special meetings of the Dare County Planning Board and Board of Commissioners.
2. The County will encourage continued representation by a broad range of Dare County residents on its Planning Board.
3. Continue to maintain the mailing list for the Planning Board meetings.

Purpose of Land Classification Map

A land classification system has been developed as a tool to assist in the implementation of the policies included in the Dare County Land Use Plan. The delineation of land classifications on a map enables Dare County to specify the areas where certain policies are applicable. The CAMA guidelines suggest a general format for the land classification system, but this format may be modified by local governments to better suit their needs. The designation of land classes helps the County illustrate anticipated growth patterns and conservation areas of natural and cultural resources.

It is important to note, that the land classification map serves a tool to assist with policy implementation and is not a strict regulatory mechanism. However, the land classification map may be referenced by local officials in the review of development proposals such as rezoning petitions, subdivision submissions, and ordinance development/revisions.

Land Classification System

The CAMA guidelines identify seven different land classifications of which six are used on the Dare County land classification map. Dare County has also identified two sub-classes. These classifications are shown on the land classification map and described in narrative form as follows:

Developed- The purpose of this class is to provide for continued intensive development and redevelopment of existing towns, cities, and their urban surroundings.

In Dare County, this classification applies to the incorporated towns of Kill Devil Hills, Kitty Hawk, Nags Head, Manteo, Southern Shores and the newly incorporated town of Duck.

Urban Transition – the purpose of the urban transition class is to provide for future intensive urban development on lands that are suitable and that will be provided with the necessary urban services to support intense urban development. This area is depicted in blue on the land classification map.

There is one area of unincorporated Dare County that fits the characteristics of the urban transition class as defined by the CAMA guidelines.

The portion of unincorporated Dare County that has been classified as urban transition lies between the southern boundary of the Town of Manteo and the annexed Pirates Cove development. The area is served by the Dare County regional water system and the infrastructure for the central wastewater treatment from the Town of Manteo is located along this section of US 64 that runs to Pirates Cove. The Roanoke Island landing of the new Midway Bridge lies within this area and a new Dare County Courthouse is under construction as well, with occupancy scheduled for late 2002. The availability of central wastewater from the Town of Manteo will continue to serve as a major influence on the urbanization of this portion of Roanoke Island. Recognizing this fact, the area has been designated as urban transition on the

land classification map. Portions of this area are zoned as industrial and/or or C-3 commercial which permits land uses that are consistent with an urban type setting. These districts also permit multifamily structures at a dwelling density of ten units per acre.

Limited Transition – The purpose of the Limited Transition class is to provide for development in areas that have some services but are suitable for lower densities than those associated with the Urban Transition class, and are geographically remote from existing towns and municipalities. Single-family residential uses are the preferred pattern of development in each of these areas, with a minimum lots size of 15,000 square feet for new platted lots. Multifamily uses are permitted at densities ranging from 3 units per acre to 10 units per acre in certain zoning districts, however soil suitability general serves as a natural constraint for high density development at more than 3 units per acre. Limited transition areas have been colored yellow on the land classification map.

There are several areas of unincorporated Dare County that qualify as Limited Transition. The areas are moving from undeveloped land to a developed state. The level of development varies from village to village. In each case, certain urban-style services are available but the full range of those services that might be found in an urban setting are not present or planned. This is particularly true concerning central wastewater treatment that is available from privately owned and operated plants, but in a limited capacity. A more detailed discussion of each area follows:

Martins Point -- In October 2000, the Martins Point Subdivision reverted back to the planning jurisdiction of Dare County. Previously, the area had been designated as an extraterritorial zoning area by the Town of Southern Shores. However, this ETJ designation was dissolved and the residential portions of Martins Point are now under the zoning and planning jurisdiction of Dare County. The area is comprised of large residential structures, mostly for year-round residents. Access to the area is limited by a manned guardhouse. Central water is supplied by Dare County and individual on-site septic systems are used for wastewater.

Colington – Limited transition has been applied to a 500-foot area from the right-of-way of SR 1217 or Colington Road from the beginning of the area recognized as Kill Devil Hills outside to the beginning of the Colington Harbour entrance. The application along the road frontage of SR 1217 recognizes the changing patterns of land use along this transportation route. The Kill Devil Hills outside/Colington area is mostly year-round residents with a several businesses located along Colington Road including storage warehouses, a convenience store, two restaurants. The zoning in the area is consistent with the land classification with areas of commercial zoning designated along the length of Colington Road.

Rodanthe-Waves Salvo- Limited Transition has been applied to the entire area of these three Hatteras Island villages to reflect the S-1 zoning that applies in these villages. S-1 permits all uses including multifamily uses. Development along NC 12 continues to support the tourist-oriented economy of Dare County. Central water from Dare County water system is available in this area. It is anticipated that this portion of Hatteras Island will remain in a state of transition until more detailed zoning maps for the villages are established that delineate specific residential and commercial zones.

Avon—Similar to the Colington area, a 500-foot wide designation of limited Transition has been applied to NC 12 throughout Avon. Most of the property along NC 12 is zoned commercially and supports existing commercial development marketed to the tourist-economy of Dare County.

Buxton – An overlay of limited transition has been applied to Buxton village along NC 12 and the Buxton Back Road. This overlay extends 500 feet out from the right-of-way of NC 12 and Buxton Back Road as illustrated on the land classification map. The zoning maps for Buxton establishes commercial and industrial areas in this limited transition classification. Existing development patterns reflects Buxton’s status as the location of the educational facilities on Hatteras Island and is a mix of businesses serving both the year-round population and the tourist population. Central water is available throughout Buxton village from the Dare County central water supply.

Community – The purpose of the community class is to provide for clustered, mixed land uses at low densities to help meet the housing, shopping, employment and other needs in rural areas. Minimum lot size, according to the Dare County Subdivision Ordinance is set at 20,000 square feet for those areas served by private wells and 15,000 for those areas served by central water from the Dare County water systems. (Thayer 46) Central wastewater treatment services are not available except as noted in the individual village discussions and then only to serve specific platted subdivisions where soils conditions precluded the use of traditional on-site septic tank drainfield systems. The areas designated as Community appear in pink. This classification has been applied to numerous areas of unincorporated Dare County as detailed below:

This classification has been applied to numerous areas of unincorporated Dare County as detailed below:

The Community land classification is used for the Mainland villages of Stumpy Point, Manns Harbor, Mashoes, and East Lake. The villages are largely in character but do feature some commercial development that focuses on the needs of the immediate area. Although the village of Manns Harbor does not feature any urban style services, it can be expected that the village will be impacted by the construction of the new Midway Bridge and the intersection near the bridge landing will become a focus for more intensive commercial development. The vast federally owned Alligator River Wildlife Refuge and the Navy bombing range limit the growth potential of the Mainland. All three of the villages rely on private wells and on-site septic tank systems.

Kill Devil Hills Outside/Colington – The remaining areas of Colington not included in the Limited Transition applied along Colington Road have been classified as Community. This includes Baum Bay Harbour Subdivision, WatersEdge Subdivision, Colington Harbour Subdivision, Colingwood Subdivision, Cliffs of Colington Subdivision and Swan View Shores Subdivision. Traditionally, this area has been a village-oriented community with a history of commercial fishing. The residential development is primarily year-round residents with a mixture of long-term rentals. The area is served by the Dare County regional water system but is dependant on septic tanks for wastewater treatment. However, the existing Baycliff development approved in the late 1980s is served by a small privately owned package treatment plant. The zoning maps for Colington is consistent with this Community classification with

mostly residential districts applied to the platted subdivisions listed above. There are currently no areas zoned for multifamily development in the areas assigned the Community classification in Kill Devil Hills Outside/Colington.

Avon/Buxton -- The areas outside of the Limited Transition overlay in Avon and Buxton villages have also been classified as Community. This recognizes the mostly residential nature of the remaining portions of these villages. There are a handful of existing commercial businesses in the “village proper” area of Avon that reflects its history as a commercial fishing village. The areas in Avon and Buxton that have been designated Community are zoned with a residential classification that is consistent with the Community classification. Central water is available in all of the seven villages from the Dare County regional water system. Except for the soundside portion of the Kinnakeet Shores Subdivision in Avon that is served by a private package treatment plant, on-site septic systems are used for wastewater treatment. Multi-family development is limited by the zoning maps designations.

Community Neighborhood --This is a sub-class of the Community classification. The community neighborhood class applies to the area generally known as “Skyco” on Roanoke Island and depicted in the color turquoise on the Land Classification Map. The purpose of this sub-classification is to identify an area where the predominant land use is low-density residential dwellings. Urban style utility services such as central water, central wastewater collection and treatment, and package wastewater treatment plants are not compatible with this classification and are not encouraged in areas designated “Community Neighborhood.”

The goal of this classification is to preserve existing low density residential neighborhoods and to prevent the introduction of incompatible land uses such as sand mining, other land disturbing activities that alter natural vegetation or drainage patterns, and multi-family dwellings with a density greater than two units per acre.

Community Village -- This is a sub-class of the Community classification. The community village class applies to the area generally known as the village of Wanchese located on the south end of Roanoke Island and Hatteras village on Hatteras Island. It is depicted in the color orange on the Land Classification Map. The purpose of this sub-classification is to identify an area where a mixture of low-density residential dwellings combined with various commercial services and small retail businesses to create a village environment. Water related land uses and facilities are also characteristic of this class, such as boat building, fishing, and fish processing, and crabbing.

The goal of this classification is to preserve the unique mix of land uses that characterize a non-urbanized coastal village and to prevent the introduction of urban influences or development that changes or overwhelms the patterns of existing land use in a manner that destroys the “village” environment. In order to maintain the village setting, central wastewater collection and treatment is not deemed compatible with this land classification except if located within the confines of the Wanchese Seafood Industrial Park, for facilities and operations internal to the Seafood Industrial Park. Central water *is* considered compatible with this district as a means of insuring a water supply to the village that is not vulnerable to fluctuations in the shallow water table and the introduction of pollution from on-site septic systems. Land disturbing activities that

alter or remove vast amounts of vegetation, alter natural drainage patterns, or which divert storm water to surface waters are considered incompatible with this land classification.

Community Residential -- This is a sub-class of the Community classification. The “community residential” classification applies to the area of Roanoke Island generally known as the “north end” or the unincorporated land north of the Town of Manteo and depicted in the color purple on the Land Classification Map. The purpose of this classification is identify an area where low density residential dwellings, small businesses, governmental services, educational services and passive recreational activities occur in the midst of a number of important natural, cultural, and historic resources.

The goal of this classification is to preserve the natural, cultural, and historic resources present on the north end of Roanoke Island and to weave into this setting a mix of compatible low density residential structures and service uses. Central water is considered consistent with this classification as a means of insuring a water supply for uses compatible with and not detrimental to existing natural, cultural, and historic resources. Central wastewater is not considered compatible or necessary for land uses found in this classification. Land disturbing activities that alter or destroy existing natural vegetation, drainage, topography, and sand hills are not considered compatible and are discouraged. Prescriptive vegetation removal and best management practices of the NC Forest Service are encouraged where development is authorized in this classification.

Rural – The rural class is to provide for agriculture, forestry, mineral extraction, and other allied uses traditionally associated with an agrarian region. Other land uses, due to their noxious or hazardous nature and negative impacts on adjacent uses may also be appropriate here is sited in a manner that minimizes their negative effect on surrounding land uses or natural resources.

In unincorporated Dare County, this classification can be applied to the remaining lands on the Mainland that are not publicly owned or included in the Community land class.

Conservation -- The purpose of the Conservation Classification is to provide for the effective long-term management and protection of significant, limited, or irreplaceable areas. Management is needed due to the natural, cultural, recreational, scenic, or natural productive values of such lands from local, regional, and national perspectives. This classification includes all CAMA AEC’s, such as but not limited to, coastal wetlands and all federal and state owned lands except the bombing ranges on the Mainland. Areas classified “Conservation” are depicted in the color green on the Land Classification Map.

Development is not encouraged in lands classified “Conservation” and when authorized should be limited to residential development and traditional accessory uses permitted in CAMA AEC’s such as but not limited to piers, docks, and crab-shedders. No urban-style services are considered compatible with the Conservation classification of land use. Land disturbing activities should not occur in the Conservation classification unless in conjunction with an authorized development. Authorized development should include provisions and conditions that minimize impacts to any and all natural, cultural, historic, and scenic values of the areas authorized for development .

Limited Conservation – this is a sub-class of the Conservation class. The purpose of this sub-class is to provide for the management and long-term viability of essentially undisturbed land that is compatible with a limited range of uses under a specified set of guidelines. Land placed in the Limited Conservation sub-class includes maritime forests. Limited Conservation areas appear in shaded green on the land classification map.

All privately owned land in Buxton Woods maritime forest has been designated as Limited Conservation. Also, the area that is included in the SED-1 buffer zone is classified as Limited Conservation.

Development in the Limited Conservation class should be limited to single-family residential structures and service-oriented commercial uses.

In areas classified Limited Conservation and zoned as Special Environmental District or included in the SED-1 buffer zone as described in the Dare County Zoning Ordinance, development shall be consistent with the standards of the SED-1 district. Lots sizes in the SED-1 zoning district are restricted to 40,000 square feet. Land clearing and mining activities are restricted by the County ordinance within the SED-1 zoning district. Land clearing is restricted within the SED-1 buffer zone also.

Interpreting the Land Classification Map

The land classification map included with this LUP provides a general description of the location of each of the land classifications established in this section. This map should not be used for site-specific interpretive purposes since its scale precludes detailed use. AEC areas have not been illustrated due to the scale of the map.

In addition, at the time of review, the Dare County Board of Commissioners indicated the desire to clarify a long running dispute between various parties concerning the site of the Globe Fish Company docks. It is the position of the Board of Commissioners that this site is a natural deep water port and has been in use for shipping and harbor activities since before the Civil War. Commercial shipping activities at this site pre-date all regulatory agencies and/or land planning documents in Dare County, and this site continues to hold potential for commercial shipping, aquaculture, aquaculture related research facilities, and loading, and barge docking use. Given the historical background, it is the Board's opinion that the best use class, transition, should be applied to this tract despite the presence of indicators that might otherwise lead to the placement of this tract in a more restrictive land use class.

Intergovernmental Coordination and Implementation

Dare County has six municipalities within its jurisdiction and each local government is responsible for its own land use planning guidelines and zoning regulations. Although different Boards and individuals are responsible for the administration of these standards, efforts to coordinate our individual land use policies and goals for future land is important. During the update process, the Planning staff reviewed the most recent versions of the Towns' land use plans for consistency of policies. (Duck was not incorporated until May 1, 2002 and no LUP for this town was available) In most instances the County policies for growth and the Towns policies were consistent and in some instances it was not possible for a consistent policy due to the difference between the various levels of government and their respective levels of responsibility. However, there were some inconsistency with the municipal policies, for example, the Town of Manteo has a central wastewater treatment system and does not allow the installation of on-site septic systems. This is inconsistent with the County's policies on wastewater treatment that prefer on-site septic systems.

Draft copies of the LUP were circulated to various State, Federal and local agencies in Dare County for their comments. In addition, a policy analysis workshop was conducted with representatives of these organizations invited to attend and participate in the workshop. A listing of the agencies that received a copy of the draft LUP is below:

National Park Service
US Fish and Wildlife Service
Soil and Water Conservation Service
NC Division of Coastal Management
US Army Corps of Engineers – Regulatory Branch Wilmington District
NC Department of Transportation – First District Engineers Office
Dare County Health Department
Dare County Emergency Management Department
Town of Manteo
Town of Nags Head
Town of Kill Devil Hills
Town of Kitty Hawk
Town of Southern Shores
Town of Duck

From the beginning of the update process, the Dare County Planning Board and staff set out to ensure that the citizens and property owners in Dare County would have a role. In order to involve both residents and non-resident property owners, a Public Participation Plan was developed and adopted by the Board of Commissioners at the beginning of the process. The Plan is included below. Although the actual implementation varied somewhat from the prescribed Plan, public participation played a vital role in the update and frequent opportunities for public input were offered.

The use of the Dare County website and the local government access channel provided new forms of contact for residents and property owners. Notice of the workshops on the draft version of the update was run on the local access channel and copies of the draft plan were available for viewing and downloading from the County website.

Dare County Public Participation Plan

Public participation is an integral component of the land use plan update process. Public comments and identification of pertinent issues are the basis for the policies drafted and adopted by Dare County. This Public Participation Plan outlines the opportunities for public involvement in the LUP update process as identified during the initial stages of the update process in August 2000. Since this document was the first section of the LUP update to be drafted and adopted, some of the dates and locations for meetings and hearings are tentative.

The Dare County Planning Board will serve as the steering committee for the update process. The Planning Board will have an active role throughout the preparation of the LUP. The most important function of the Planning Board will be to encourage public participation and use this public input as the foundation for policy development. All Planning Board meetings will be open to the public and will be designed to gather public input in a meaningful and constructive fashion.

The following is a summary of the key meetings and opportunities that will be provided for public input throughout the LUP update process.

Future of Dare Week – Issue identification for Dare County will consist of a series of “listening sessions” or public meetings held at different geographic areas of Dare County. All three meetings will be clustered in a single week (Future of Dare Week) to maximize public involvement and media coverage. The Planning Board will host each of these meetings. Notices of these meetings will be advertised in the local newspapers, including *The Coastland Times* and *The Virginian Pilot*. Public service announcements will also be sent to the local radio stations. These hearings have been scheduled for the first week in October (October 2-5)

Northern Beaches – Kitty Hawk Town Hall, Kitty Hawk NC – October 3, 2000
Hatteras Island -- Fessenden Center Buxton NC – October 4, 2000
R. Island/Mainland – Dare County Annex, Manteo, NC – October 5, 2000

Questionnaire – An essential tool used for public input will be a questionnaire specifically designed for the update process. The results of this questionnaire, when combined with other sources of public input, will provide the foundation for discussion and policy development by the Planning Board members. This questionnaire will be available on the County’s website for instant response and completion. Press releases about the website questionnaire will be sent to local media and civic and professional groups. Postcard notification of the Internet survey will be mailed to the non-resident property owners in unincorporated Dare County. Copies of the questionnaire will be inserted into an edition of *The Coastland Times* to solicit comments from persons residing in Dare County. Copies of the survey will also be available at all of the County’s Planning offices, the three libraries in the County, and other appropriate public offices. The survey results will be compiled and analyzed by the Planning staff with assistance from the County’s Information Technology Department. The results will be presented to the Planning Board and Board of Commissioners and will be made available to the local media and general public. The Planning Board and planning staff will study the results and use the conclusions in the development of the growth policies. The tentative timeframe for these activities call for the release of the questionnaire in early October with the survey results available for presentation to the Board of Commissioners in late November.

Work Session #1 -- With the results of the public input, the Planning Board and Planning staff will prepare a draft set of growth policies. Policies on issues identified by the CAMA guidelines, as well as other important issues of local concern will be drafted and reviewed by the Planning Board in an all-day work session(s). This all-day session will allow review of the entire range of issues and discussion on their rank of importance and their relationship to other issues. At the same time, this session will allow for policy modification, deletion, or additions. The Land Classification Map will also be discussed during this work session. A preliminary map will be prepared and used for mark-up purposes. This will allow the Planning Board members to see proposed changes during the workshop. Based on the information gained in this work session, growth policies will be drafted and a preliminary land classification map will be prepared. This workshop is tentatively scheduled for early January 2001.

Work Session #2 – A second all-day workshop for the Planning Board and Planning staff will be held to discuss the implementation strategies needed to accompany the draft policies. Unlike previous LUPs, this section of the plan will be developed separately to allow for annual updates on the implementation strategies without the entire LUP being altered. If possible, the narratives for the policy sections will also be discussed during this work session. If time does not allow, then a third work session will be scheduled. Second workshop is proposed for mid February 2001.

Following completion of these work sessions, a draft set of policies, draft land classification map, and draft implementation strategies will be prepared in accordance with the Planning Board directives and comments.

Presentation of Draft Plan to Planning Board – A complete draft plan including the demographic data sections will be presented to the Planning Board for their review and comments. Tentative schedule: late March 2001

Public Review of Draft LUP – An open meeting (or meetings if needed) will be held for public comment and review of the update. Policy analysis worksheets will be provided for the public and a draft version of the land classification map will also be available for review. This information will also be posted on the Dare County webpage. Tentative schedule April 2001
Location: TBA

Work Session #3 – In this work session, the Planning Board will consider the comments received at the public review of the draft LUP and evaluate revisions based on these comments. Necessary revisions will be made to the draft document based on the Planning Board's instructions. Following this last round of revisions, the draft document should be in a format ready for a recommendation by the Planning Board and forwarding of the document to the Board of Commissioners. Tentative schedule: May 2001

Presentation of the Draft LUP to the County Commissioners -- Following the Planning Board's recommendation of the draft LUP, the document will be presented to the Dare County Board of Commissioners for consideration. This presentation does not constitute official adoption of the plan, which can only occur following a formal public hearing in accordance with CAMA requirements. It is anticipated that a date for the public hearing on the draft document will be scheduled at this time. Tentative schedule: July 2001

Adoption of the Plan – the Dare County Board of Commissioners are required under the CAMA guidelines to conduct a formal public hearing on the draft LUP. This hearing must be duly advertised in a newspaper of general circulation and available for public review at locations throughout the County. Efforts to provide a copy of the draft page on the Dare County web page will be made. Following the close of the public hearing, the Board of Commissioners may chose to adopt the plan or make additional revisions based on comments received at the hearing. Once satisfied with the document, the Board can officially adopt the LUP and forward the same to the NC Coastal Resources Commission for certification. Tentative schedule: September 2001

ANALYSIS OF 1994 LUP POLICIES AND IMPLEMENTATION STRATEGIES

POLICY	IMPLEMENTATION STRATEGY	RESPONSE
<p>Policy 2.1.1 (a) Dare County supports the administration and enforcement of Title 10, Chapter 10, Subchapter 10-A, Section .1900 of the laws and rules for sanitary sewage collection, treatment, and disposal. In doing so, it is the County's intent to protect existing groundwater resources, the natural conditions of estuarine waters, and the public health, safety, and general welfare.</p>	<p>The County will continue to enforce minimum State standards for septic tank and nitrification field systems through the Dare County Board of Health and staff sanitarians.</p>	<p>Fully implemented, the County continues to enforce the minimum State standards and regulations for septic systems through the Dare County Health Board and departmental staff.</p>
<p>POLICY 2.1.1 (b) Dare County supports, as minimum standards, the administration and enforcement of all applicable floodplain management regulations, and the National Flood Insurance Program.</p>	<p>The County will continue to enforce the Federal Emergency Management Agency guidelines for construction in special flood hazard zones and N.C. Building Code specifications for coastal construction.</p>	<p>Fully implemented, the County maintains a full-time employee responsible for the administration and enforcement of FEMA codes.</p>
<p>POLICY 2.1.1. (c) Dare County believes that there is insufficient, reliable data to quantify the rate of sea level rise. The phenomenon needs additional study. Until a more reliable and conclusive database has been established, Dare County will continue to rely on AEC standards to rely on AEC standards for development limitations.</p>	<p>No implementation strategy included in Plan</p>	<p>No response</p>
<p>Policy 2.1.2 (a) Dare County advocates the use of existing State and Federal regulatory programs as adequate measures for protecting and preserving coastal wetland areas of environmental concern.</p>	<ol style="list-style-type: none"> 1. Implementation and enforcement of CAMA use standards for coastal wetland AECs as identified under 15NCAC7H, Sections .0205 and .0208. 2. The County will continue to administer the CAMA local permit enforcement program and maintain the staff local permit officer. 	<p>Fully implemented, the County maintains a full-time employee who serves as a local permit officer for the administration of the CAMA regulations.</p>

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<p>POLICY 2.1.2 (b) Estuarine shoreline development should continue to be managed to protect and preserve the natural resources of the estuarine waters. In addition, development located in estuarine waters shall be water-dependant, related to development on the estuarine shoreline, or an accessory use to a structure located on the estuarine shoreline.</p>	<ol style="list-style-type: none"> 1. Implementation and enforcement of CAMA use standards for estuarine waters as contained in 15NCAC7H, Sections .0206 and .0208. 2. The County will continue its initiative to establish zoning maps for all unzoned portions of unincorporated Dare County in an effort to reduce the potential for incompatible development adjacent to estuarine waters. 	<ol style="list-style-type: none"> 1. Fully implemented, the County maintains a full-time employee who serves as a local permit officer for the administration of the CAMA regulations. 2. The County continues are efforts to adopt use-specific zoning maps for the unzoned portions of the County. In 1997, a use-specific map for Colington was adopted. In 1998 efforts to adopt a use-specific map for Frisco were unsuccessful due to lack of consensus among property owners in Frisco.
<p>POLICY 2.1.2 (c-1) Dare County supports the preservation and protection of the public’s right to access and use the public trust areas and waters.</p>	<p>Dare County supports the CAMA use standards for public trust areas as contained in 15NCAC7H, Sections .0207 and .0208.</p>	<p>The County continues to support CAMA regulations that govern public trust waters.</p>
<p>POLICY 2.1.2 (c-2) Dare County advocates a management program at the State or Federal level to address the competition among recreational users of public trust waters. However, dare county reserves the right to review, comment, advocate or oppose any proposed regulations or programs that may affect the public trust waters.</p>	<ol style="list-style-type: none"> 1. The County will encourage State and Federal agencies that traditionally address only resource management to expand their scope of operations to include conflict resolution among the various users of public trust waters. 2. Dare County supports the CAMA use standards for public trust areas as contained in 15NCAC7H, Sections .0207 and .0208. 3. The Dare County Waterways Commission has been established in an effort to provide for maintenance of existing waterways and harbors and to provide for additional access to public trust waters. 	<ol style="list-style-type: none"> 1. No response 2. The County continues to support CAMA regulations that govern public trust waters. 3. Staff assistance to the Oregon Inlet Waterways Commission is also provided on dredging and other waterways projects.
<p>POLICY 2.1.2 (d-1) Estuarine shoreline development should continue to be managed to protect and preserve the natural resources along the estuarine shoreline.</p>	<p>Implementation and enforcement of the CAMA use standards for estuarine shoreline AECs as stated in 15NCAC7H, Section .0209. □</p>	<p>Fully implemented, the County maintains a full-time employee who serves as a local permit officer for the administration of the CAMA regulations.</p>
<p>POLICY 2.1.2 (d-2) Dare County supports the installation and maintenance of estuarine bulkheads properly aligned and permitted by the U.S. Army Corps of Engineers and the Division of Coastal Management. Whenever possible, offshore estuarine breakwaters may be considered as an alternative to bulkhead construction.</p>	<p>Dare County will continue to implement the bulkhead permit standards of the Coastal Area Management Act.</p>	<p>Fully implemented, the County maintains a full-time employee who serves as a local permit officer for the administration of the CAMA regulations.</p>

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<p>POLICY 2.1.2 (e) Oceanfront shoreline development should continue to be managed to protect and preserve the natural resources along the oceanfront.</p>	<p>1. Implementation and enforcement of the CAMA use standards for ocean hazard areas as contained in 15NCAC7H, Sections .0306 through .0310. □2. Implementation and enforcement of the National Flood Insurance Program's base flood elevation standards, including the standards for those areas where wind driven waves create potential for damage by velocity also known as V-zones.</p>	<p>1. Fully implemented, the County maintains a full-time employee who serves as a local permit officer for the administration of the CAMA regulations. 2. Fully implemented, the County maintains a full-time employee responsible for the administration and enforcement of FEMA codes.</p>
<p>POLICY 2.1.2 (f) Development in any public water supply AEC should be managed to protect the long-term viability of the groundwater resources.</p>	<p>1. Dare County supports the CAMA use standards for public water supply wellfield AECs as contained in 15NCAC7H, Section .0406. □2. Dare County will continue to implement and enforce the provisions of the SED-1 zoning ordinance for the Buxton Woods maritime forest.</p>	<p>1. Fully implemented, the County maintains a full-time employee who serves as a local permit officer for the administration of the CAMA regulations. 2. Fully implemented, the County continues to enforce the SED-1 standards.</p>
<p>POLICY 2.1.2 (g) Dare County advocates the management of fragile coastal, natural, and cultural resource areas as defined in 15NCAC7H, Section .0500. When such areas are of local significance, Dare County supports the use of local zoning ordinances as the appropriate management tool.</p>	<p>No implementation strategy included in the Plan</p>	<p>No response</p>
<p>POLICY 2.1.2 (h-1) Dare County supports the Coastal Resources Commission's policy to mitigate losses of coastal resources for those projects shown to be in the public interest As defined by the standards in 15NCAC7M.0700 et. seq. and only after all other means of avoiding or minimizing such losses have been exhausted.</p>	<p>In instances when improvements to publicly-owned or managed facilities conflict with freshwater wetland protection programs, an alternatives analysis should be conducted in an effort to avoid wetland loss or alteration. For projects that involve County-owned facilities or land, Dare County will conduct an alternatives analysis for these projects. However, should the analysis determine that there is no practicable alternative; a mitigation permit proposal shall be implemented. Mitigation activities and improvements designed as compensation for wetland loss occurring in Dare County shall be located, whenever possible, in Dare County and in proximity to the loss.</p>	<p>Implemented as needed</p>
<p>POLICY 2.1.2 (h-2) Dare County supports the U.S. Army Corps of Engineers Nationwide permit program.</p>	<p>1. As may be necessary to facilitate implementation of permit programs for wetland management. □</p>	<p>Implemented as needed for permit applications</p>

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<p>POLICY 2.1.2 (i) Dare County advocates a combination of limited development guided by the local SED-1 zoning ordinance and a program of public acquisition to manage the Buxton Woods maritime forest.</p>	<p>1. Continue implementation and enforcement of the SED-1 zoning ordinance. □ 2. Support the North Carolina Buxton Woods Coastal Preserve program. □</p>	<p>1. Fully implemented, the County continues to enforce the SED-1 standards.</p>
<p>POLICY 2.1.3 (a) The Dare County Board of Commissioners supports the protection of structures, lands, and artifacts that have been identified by the NC Department of Cultural Resources, Division of Archives and History, as archaeologically or historically significant. On a case-by-case basis, individual protection/management strategies should be implemented to ensure archaeological and/or historical resources are not destroyed.</p>	<p>Support public acquisition of significant historical, cultural, or archaeological lands or structures at fair market value. The Board may offer resolutions of support, negotiate land exchanges, or provide tax incentives for acquisition initiatives.</p>	<p>Implemented as needed on a case-by-case basis.</p>
<p>POLICY 2.1.3 (b) The development of Dare County's airports and the surrounding areas shall be carefully reviewed to minimize potential land use conflicts and hazardous conditions. Dare County does not support the expansion of the Dare County Regional Airport at its current location.</p>	<p>No implementation strategy included in Plan</p>	<p>No response</p>
<p>POLICY 2.1.4 Dare County recognizes groundwater resources as an essential element for drinking water supply. The management of groundwater resources and their protection is a priority issue in Dare County.</p>	<p>1. The approval of development proposals, such as new subdivisions and other large water consuming projects, will be linked to the availability of drinking water. 2. A program for permitting and monitoring private wells used as a drinking water supply in unincorporated Dare County will be developed and implemented by 1995.</p>	<p>1. Comments from the Dare County Water Department are solicited as part of subdivision and site plan review. 2. No implemented</p>
<p>POLICY 2.1.5 (a) Dare County supports efforts by local, state, and federal agencies to preserve water quality under existing natural conditions and to improve water quality where a decline has been identified. These efforts include the designation of outstanding resource waters and shellfish water classification criteria established by the North Carolina Division of Environmental Management.</p>	<p>1. In an effort to address water quality issues and receive recommendations by affected parties, the Dare County Board of Commissioners has appointed a Clean Water Advisory Committee. 2. Monitor the meetings and work of the North Carolina Environmental Management Commission. 3. Support the objectives of the Comprehensive Conservation Management Plan of the Albemarle Pamlico Estuarine Study.</p>	<p>1. The Clean Water Advisory Committee was disbanded after the County established and staffed a full-time water monitoring program. The monitoring staff works closely with the State water quality monitoring program and samples numerous sites on a regular basis in Dare County.</p>

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<p>POLICY 2.1.5(b) Stormwater runoff should be managed to the greatest possible degree to protect the quality of water in all water bodies surrounding Dare County.</p>	<ol style="list-style-type: none"> 1. The development and implementation of a comprehensive stormwater management plan for unincorporated Dare County by 1996. 2. Continue to incorporate comments and recommendation from the Dare County Soil and Water Conservation Board and staff into the development review process of the Planning Board. 	<ol style="list-style-type: none"> 1. Plan completed in April 2001. 2. The SWC staff receives Planning Board packets for review on a monthly basis.
<p>POLICY 2.1.5 (c) Dare County supports the development of marinas to provide for boating access to the area's water bodies. Marina development is encouraged in upland basins and in waters NOT open for shellfish harvesting and should comply with all State and federal regulations concerning location and design. The County encourages the dry stack option of boat storage.</p>	<ol style="list-style-type: none"> 1. Dare County will rely on the local LUP consistency review process used by State and Federal agencies to implement this policy since almost all proposed marinas will require a CAMA major permit. 	<p>Implemented as needed</p>
<p>POLICY 2.1.5 (d) Dare County is opposed to the mooring of floating homes and floating structures anywhere in Dare County or its surrounding waters.</p>	<ol style="list-style-type: none"> 1. Dare County will consider a zoning map for surface waters should it become necessary to further address the issue of floating homes and structures. 2. Dare County will rely on the local LUP consistency review process used by State and Federal agencies to implement this policy. 	<ol style="list-style-type: none"> 1. Not implemented 2. Implemented as needed.
<p>POLICY 2.1.6 Development of sound and estuarine system islands shall be carefully managed. Low intensity uses such as open space, recreation, and low density residential development shall be the preferred uses of these islands.</p>	<p>Dare County will use zoning, subdivision review, and building permit procedures to manage the development of sound and estuarine system islands.</p>	<p>Implemented as needed</p>
<p>POLICY 2.1.7 The County advocates a program of public information on best management practices for tree removal and land clearing on private property. □</p>	<p>Develop a brochure that can be distributed by building inspectors and displayed at County offices to inform property owners about best management practices on tree removal and land clearing. Target date: Fiscal year 1994 -95.</p>	<p>Not implemented. An application for CAMA funds to assist with the development of this brochure was not chosen for funding.</p>
<p>POLICY 2.2.1 Dare County supports the use of certain portions of the Mainland area of the County for agriculture. The County also advocates voluntary participation in the State of North Carolina's best management practice program for farm management.</p>	<p>No implementation strategy included in Plan</p>	<p>No response</p>

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<p>POLICY 2.2.2 Commercial forestry activities shall be supported by Dare County, so long as such activities are done in accordance with the standards and recommendations of the U.S. Forest Service. The County also advocates the voluntary participation in the State of North Carolina's best management practice program for forestry management.</p>	<p>No implementation strategy included in Plan</p>	<p>No response</p>
<p>POLICY 2.2.3 Dare County advocates local level management of those mining activities that are not subject to permit authorization by the State of North Carolina.</p>	<p>1. Draft and submit for Board of Commissioners' approval, an ordinance to manage mining activities proposed in unincorporated Dare County which are not subject to review and approval by the N.C. Division of Land Resources. Target date: FY 95-96. 2. Continue to review mining permit applications submitted to the N.C. Division of Land Resources and to submit comments concerning such applications.</p>	<p>1. Not implemented 2. The County continues to review mining applications as needed.</p>
<p>POLICY 2.2.4-a The continued productivity of commercial and recreational fisheries shall be fostered through restoration and protection of the unique coastal ecosystems upon which they depend.</p>	<p>In an effort to address water quality issues and receive recommendations by affected parties, the Dare County Board of Commissioners has appointed a Clean Water Advisory Committee.</p>	<p>The Clean Water Advisory Committee was disbanded after the County established and staffed a full-time water monitoring program. The monitoring staff works closely with the State water quality monitoring program and samples numerous sites on a regular basis in Dare County.</p>
<p>POLICY 2.2.4-b Dare County supports measures to protect and preserve designated primary nursery areas.</p>	<p>In an effort to address water quality issues and receive recommendations by affected parties, the Dare County Board of Commissioners has appointed a Clean Water Advisory Committee.</p>	<p>The Clean Water Advisory Committee was disbanded after the County established and staffed a full-time water monitoring program. The monitoring staff works closely with the State water quality monitoring program and samples numerous sites on a regular basis in Dare County.</p>
<p>POLICY 2.2.4-c State and Federal agencies with the authority to manage fisheries resources should be the responsible parties for the resolution of conflicts involving fisheries resources in Dare County. However, Dare County reserves the right to review, comment, advocate or oppose any proposed regulation or programs that may affect the fisheries resources or management.</p>	<p>No implementation strategy included in Plan</p>	<p>No response</p>
<p>POLICY 2.2.4-d Dare County supports the development of the aquaculture industry as an alternative source of fishery production.</p>	<p>No implementation strategy included in Plan</p>	<p>No response</p>

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<p>POLICY 2.2.5 (a) Efforts to properly balance and control the use of off-road vehicles along the County's beaches, dune areas, and estuarine shorelines shall continue to receive support from County government.</p>	<p>The County's ordinance governing ORV use on Dare County beaches will be maintained for enforcement as necessary.</p>	<p>The County continues to enforce the ORV ordinance as needed.</p>
<p>POLICY 2.2.6 Dare County supports the maintenance of several preserve areas for wildlife habitat and access by the public to these areas for managed wildlife harvesting and observation.</p>	<p>No implementation strategy included in Plan</p>	<p>No response</p>
<p>POLICY 2.3.1 (a) Dare County recognizes groundwater resources as an essential element of the drinking water supply. The management of groundwater resources and their protection is a priority issue in Dare County.</p>	<p>1. The approval of development proposals, such as subdivisions and other large water consuming projects, will be linked to the availability of drinking water.</p>	<p>Fully implemented. The availability of potable water is discussed during subdivision review and other site plan reviews.</p>
<p>POLICY 2.3.1 (a) Dare County recognizes groundwater resources as an essential element of the drinking water supply. The management of groundwater resources and their protection is a priority issue in Dare County.</p>	<p>The approval of development proposals, such as subdivisions and other large water consuming projects, will be linked to the availability of drinking water.</p>	<p>Fully implemented. The availability of potable water is discussed during subdivision review and other site plan reviews.</p>
<p>POLICY 2.3.1 (b-1) Dare County advocates the use of on-site septic Tank-drainfield systems as the primary method of wastewater treatment.</p>	<p>Dare County will continue to enforce the minimum State standards for septic tank and nitrification field systems through the Dare County Board of Health and staff sanitarians.</p>	<p>Fully implemented. Dare County maintains a full-time staff of sanitarians responsible for enforcing State regulations on septic systems and other wastewater systems.</p>
<p>POLICY 2.3.1 (b-2) Dare County will authorize the use of package treatment plants as an alternative to septic tanks only when soil conditions preclude the use of septic tanks and/or if a reduction in the risk of environmental damage is achieved.</p>	<p>Dare County will evaluate proposals for package treatment plants based on comments received from the Dare County Health Director during the review process. □</p>	<p>Fully implemented</p>
<p>Policy 2.3.1 (b-3) The current minimum lot size standards shall not be reduced regardless of the availability of central wastewater treatment or the availability of a combination of central wastewater treatment and central water supply.</p>	<p>The County will continue to enforce the minimum lot size standard of 20,000 square feet of soils classified as suitable for septic tanks for new subdivision lots that will feature on-site septic tank systems and private wells as a source of drinking water. The minimum lot size standard of 15,000 square feet of soils classified as suitable for septic tanks for new subdivision lots will be enforced when the lots will be served by on-site septic tank systems and a central water supply.</p>	<p>Fully implemented. Lot size minimums are strictly enforced for new subdivision lots.</p>

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<p>POLICY 2.3.1 (c) Dare County supports efforts to upgrade electrical service to those portions of unincorporated Dare County served by electric membership cooperatives to increase the reliability and quality of the power supply.</p>	<p>No implementation strategy included in Plan</p>	<p>No response</p>
<p>POLICY 2.3.1 (d-1) Dare County advocates a dual system of a local solid waste management site and participation in a regional solid waste management authority.</p>	<p>Enter into and continue to participate in a regional solid waste authority. This was implemented prior to the completion of the LUP update with a regional solid waste authority being established in mid 1993.</p>	<p>Fully implemented. Dare County remains a partner in a regional solid waste authority.</p>
<p>POLICY 2.3.1 (d-2) Dare County will consider a mandatory recycling program to include roadside pick-up.</p>	<p>Dare County will conduct a study of the issue of mandatory roadside recycling by 1996.</p>	<p>Recycling efforts in Dare County continue on a volunteer basis.</p>
<p>POLICY 2.3.2 -Dare County shall strive to maintain its coastal village atmosphere by using land use planning techniques to guide private sector market forces in the direction of minimal commercialization with single-family homes as the preferred type of development.</p>	<p>Continue the initiative started in 1987 to establish zoning maps for all unincorporated portions of Dare County, where feasible.</p>	<p>A zoning map for Colington was adopted in 1997. Efforts to establish a use specific map for Frisco were defeated when a consensus among property owners could not be reached.</p>
<p>POLICY 2.3.2-b Public services shall be provided to meet the needs of, but not to serve as an incentive to, growth and development.</p>	<ol style="list-style-type: none"> 1. Dare County shall continue to lobby the North Carolina Department of Transportation for necessary improvements to transportation facilities, especially those serving as evacuation routes from the Outer Banks. 2. Dare County will continue to seek additional revenues from sources other than ad valorem real estate taxes to provide for those capital expenditures identified in Section One 	<ol style="list-style-type: none"> 1. Dare County submits comments at annual TIP hearings in conjunction with the other 5 local governments in Dare County.
<p>POLICY 2.3.2-c Dare County does not advocate unlimited public acquisition of additional privately owned lands but reserves the right to review and support or oppose each acquisition proposal on a case-by-case basis.</p>	<p>No implementation strategy included in Plan</p>	<p>No response</p>
<p>POLICY 2.3.3-a Single-family housing shall be encouraged as the preferred land use in unincorporated Dare County. The desired density for any proposed multi-family structure is 5 units or less per acre.</p>	<ol style="list-style-type: none"> 1. Continue the initiative to establish zoning maps for unzoned portions of unincorporated Dare County. 2. Continue to enforce the Zoning and Subdivision Ordinances already adopted by the Board of Commissioners. 	<p>A zoning map for Colington was adopted in 1997. Efforts to establish a use specific map for Frisco were defeated when a consensus among property owners could not be reached.</p>

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<p>POLICY 2.3.3-b Dare County shall not be responsible for the cost of maintaining or repairs to privately owned streets.</p>	<p>Continue to require all subdivisions which feature private roads to bear a disclaimer stamp on the final plat indicating that Dare County shall never be required to maintain the roads. Restrictive covenants shall also contain language concerning the road maintenance responsibility.</p>	<p>Fully implemented. All subdivisions recorded with private roads must include disclaimers and covenants language declaring road maintenance responsibility for property owners.</p>
<p>POLICY 2.3.4 ☐ Dare County does not advocate the use of zoning incentives, such as density increases, permit fee waivers and review fast-tracking, as a means of stimulating affordable housing construction. Private sector initiatives for affordable housing will be reviewed on a case-by-case basis.</p>	<p>No implementation strategy included in Plan</p>	<p>No response</p>
<p>POLICY 2.3.5 Dare County will address opportunities for commercial development by adopting zoning maps for unzoned portions of unincorporated Dare County and allow free market forces to meet the demand for goods and services in those areas zoned for commercial land uses.</p>	<p>Continue the initiative to establish zoning maps in such a manner where commercial zoning is secondary to residential zoning.</p>	<p>A zoning map for Colington was adopted in 1997. Efforts to establish a use specific map for Frisco were defeated when a consensus among property owners could not be reached.</p>
<p>POLICY 2.3.6 Redeveloped areas and structures shall conform to current, more restrictive development standards.</p>	<ol style="list-style-type: none"> 1. The County shall enforce the North Carolina State Building Codes for coastal construction and the Dare County Floodplain Ordinance in the event of reconstruction. 2. Whenever feasible, non-conforming structures destroyed by an act of nature or an accident will be rebuilt to comply with applicable zoning codes. 	<ol style="list-style-type: none"> 1. Fully implemented. Dare County continues to enforce all applicable State building codes for coastal construction and maintains a full-time floodplain administrator.
<p>POLICY 2.3.7 Industrial development which has excessive noise, odor, or other harmful pollution, shall be discouraged from locating in Dare County, unless such adverse impacts can be clearly overcome through effective mitigation. Industrial sites shall be located on land which is environmentally suitable and has unique locative advantages for industry.</p>	<p>As the development of zoning maps for unzoned parts of unincorporated Dare County continues, those areas that are compatible with industrial development will be considered for industrial zoning. Proposals for industrial development in zoned areas will be reviewed for compatibility under the provisions of the Dare County Zoning Ordinance.</p>	<p>Implemented as needed.</p>

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<p>POLICY 2.3.8 Dare County is opposed to the development of any petro-chemical energy facility or related improvements within its jurisdictional lands and/or waters. This includes all structures, operations, and activities associated with petro-chemical energy facility development, such as, but not limited to, on-shore support bases for offshore exploration activities, staging areas, transmission and/or production pipelines, pipeline storage yards, and other similar structures, activities, and improvements related to petro-chemical energy facility development, exploration, or production. Dare County supports research and development of non-fossil fuel alternatives for energy production.</p>	<ol style="list-style-type: none"> 1. Any major energy facility to be located in Dare County shall make a full disclosure of all costs and benefits associated with the project. This disclosure shall be in the form of an environmental impact statement independent of and not funded by any petro-chemical company or the Minerals Management Service. 2. In the event that an energy facility is proposed for Dare County, the County will support the policy statements and administrative regulations referenced in 15NCAC7M, Section .0400 entitled "Coastal Energy Policies". 	<p>Fully implemented. Dare County continues to monitor efforts for offshore drilling.</p>
<p>POLICY 2.3.9-a Dare County supports the promotion of the Outer Banks as a tourist destination and the development of season-extending promotions during the non-peak periods of the calendar year.</p>	<p>The County will continue to support the efforts of the Dare County tourist Bureau to promote the Outer Banks as a resort area.</p>	<p>Fully implemented</p>
<p>POLICY 2.3.9-b Dare County supports the concept of combining natural resources and tourism to promote the area's ecological values, also known as "eco-tourism".</p>	<p>No implementation strategy included in Plan</p>	<p>No response</p>
<p>POLICY 2.3.10 Dare County supports North Carolina's shoreline access policies as stated in 15NCAC7H, Section .0300. Dare County recognizes shoreline access to both ocean and estuarine shorelines as a key component in the local tourist economy.</p>	<ol style="list-style-type: none"> 1. Dare County will seek funding under the CAMA shoreline access program to develop a shoreline access master plan for the unincorporated portions of Dare County. This plan shall include both ocean and estuarine shorelines. Target date -- FY 1994-1995. 2. Dare County will continue to work with other State and Federal agencies to fund and construct access facilities on State and Federal properties. 3. Shoreline access planning and implementation activities will be coordinated with the Oregon Inlet and Waterways Commission. 	<ol style="list-style-type: none"> 1. This action has not been completed. 2. The County continues efforts to improve shoreline access opportunities. 3. Dare County maintains the OIWC.
<p>POLICY 2.3.11-a Dare County advocates routine maintenance of all existing navigable channels and will work to secure permit authorization whenever necessary.</p>	<p>No implementation strategy included in Plan</p>	<p>Dare County pursues dredging funds and projects as needed through work of the OIWC and Army Corps.</p>
<p>POLICY 2.3.11-b Dare County advocates and supports the permit authorization and Federal funding necessary to construct twin jetties to</p>	<p>Dare County shall continue the funding of the Oregon Inlet and Waterways Commission and staff to provide support for the on-going efforts to secure</p>	<p>Dare County continues its effort to secure funding for the Oregon Inlet jetties.</p>

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<p>stabilize Oregon Inlet.</p>	<p>jetty permit authorization and funding.</p>	
<p>POLICY 2.3.12 Beach nourishment is Dare County's preferred shoreline management alternative</p>	<p>1. Continue to participate in the feasibility study being conducted by the U.S. Army Corps of Engineers for a beach nourishment project for the northern beaches of Dare County. Funding of the feasibility study should be a cost-share among the local governments in Dare County involved in the project and should not include local property tax funds. 2. Investigate funding alternatives for the construction of a beach fill project upon completion of the feasibility study. Funding alternatives to be considered include occupancy tax revenues, prepared.</p>	<p>1. The Feasibility Study for the Dare Beaches hurricane Protection Plan is nearing completion and the County is working for authorization of the project by Congress. 2. Dare County and the beach towns have established a Dare County Beach Nourishment Committee to assist with this activity.</p>
<p>POLICY 2.3.13 Dare County supports the development of sidewalks, bike paths, greenways, and walking/jogging trails to provide a safe setting for these types of outdoor recreation in unincorporated Dare County</p>	<p>The County will continue to lobby the North Carolina Department of Transportation for bicycle and pedestrian improvements to be included in the Transportation Improvement Plan. The County will also coordinate this effort with the Dare County Department of Parks and Recreation and the National Park Service.</p>	<p>Partially implemented. Numerous bicycle paths have been constructed in Dare County over the past several years on Hatteras Island, Nags Head, Kill Devil Hills, Duck and Roanoke Island. Efforts for additional bicycle improvements continue on Hatteras Island and in Kitty Hawk.</p>
<p>POLICY 2.3.14-a Dare County supports those Federal and State programs that provide funds for the implementation of land planning, environmental protection, and/or economic development. Dare County does not support those Federal or State programs that involve legislative mandates to local governments without financial support. In addition, programs that are funded should direct funds to the local government with minimal administrative guidelines.</p>	<p>No implementation strategy included in Plan</p>	<p>No response</p>
<p>POLICY 2.3.14-b State and federally funded water and highway transportation projects shall receive the highest level of support, in light of their potential impact on the public safety and economic health of the area.</p>	<p>1. The County encourages the development and implementation of a long-term plan for the protection and maintenance of N.C. 12 on Hatteras Island. □2. The County will continue to support the proposal to construct a new bridge from Manns Harbor to the intersection of N.C. 345 and U.S. 64/264 on Roanoke Island.</p>	<p>Fully implemented. A task force for the study of NC 12 has been established and meets on a regular basis. A new bridge from Manns Harbor to the Midway intersection is under construction and should be completed within five years.</p>
<p>POLICY 2.4.1-a Dare County's policy on coastal storm hazards is to use construction standards and zoning regulations to mitigate the effects of high winds, storm surge, flooding, wave action, and erosion.</p>	<p>Dare County will continue to enforce all applicable Federal, State, and local regulations relating to construction in storm hazard areas.</p>	<p>Fully implemented.</p>

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<p>POLICY 2.4.1-b Dare County does not advocate the use of County funds to acquire parcels located in hazard areas or rendered unbuildable by storms or other events.</p>	<p>No implementation strategy included in Plan</p>	<p>No response</p>
<p>POLICY 2.4.2 Dare County is committed to maintaining a full-time emergency management department and emergency operations centers and places a high priority on hurricane preparedness and response.</p>	<p>An annual evacuation exercise will be conducted and in the event the Dare County Evacuation Plan must be implemented, decisions will be based on the pre-determined sequence established in the plan.</p>	<p>Fully implemented. The Dare County Control Group meets as needed during storm events and a full-time emergency management staff is maintained by Dare County for storm preparation and mitigation administration.</p>
<p>POLICY 2.4.3 (a) The Dare County Board of Commissioners shall be ultimately responsible for supervising the implementation of various policies and procedures regarding reconstruction and recovery after a natural disaster.</p>	<p>No implementation strategy included in Plan</p>	<p>No response</p>
<p>POLICY 2.4.3 (b) Recovery priority shall be directed to recovery and priority to restoring or repairing infrastructure improvements such as transportation routes, utilities, and medical and emergency management facilities. Once the infrastructure has been restored, recovery priorities shall then be directed at essential commercial and primary residential structures.</p>	<p>No implementation strategy included in Plan</p>	<p>No response</p>
<p>POLICY 2.4.3 (c) In the event of extensive hurricane damage to publicly-owned utilities or other improvements requiring replacement requiring reconstruction, alternative locations that will mitigate the potential for similar repetitive losses will be examined and implemented whenever feasible and practicable.</p>	<p>No implementation strategy included in Plan</p>	<p>No response</p>
<p>POLICY 2.4.3 (d) In the event of a damaging hurricane or other disastrous event, the Dare County Board of Commissioners may declare a moratorium on all building permits and/or rezoning requests pending an evaluation of the damage and any reconstruction strategies that may serve to mitigate future damage or repetitive losses.</p>	<p>No implementation strategy included in Plan</p>	<p>No response</p>

APPENDIX B-1 SURVEY REPORT

Public participation is an essential element of the update process for the Dare County Land Use Plan. In October 2000, the Dare County Board of Commissioners adopted a public participation plan in conjunction with the Land Use Plan update process. This plan outlines the various opportunities that will be available throughout the update process for the citizenry of Dare County to provide input on land use issues affecting Dare County.

One of the unique characteristics of Dare County is the high number of non-resident property owners. In an effort to reach these non-residents, a mail-out questionnaire was developed. This questionnaire was mailed to all property owners, both resident non-resident property owners, in unincorporated Dare County (13,035) and 12,000 copies of the survey were inserted in the two locals newspapers, *The Outer Banks Sentinel* and *The Coastland Times*. The survey was also available on the Dare County website. A total of 4,079 completed questionnaires were returned to the County for a 16% response rate. The newspaper inserts were used in addition to the property owner mail out to allow residents in the municipalities an opportunity to participate in the questionnaire process.

Of these 4,079 responses, 52% or 2,118 surveys were completed by full time residents of Dare County and non-resident property owners completed 48% or 1,941 responses. Of the full-time residents who responded to the survey, 98% were property owners versus renters. Responses from residents in the five municipalities in Dare County accounted for 22.4% of the total number of responses we received. Among the non-resident property owners in unincorporated Dare County, 47.1% of the responses were from Hatteras Island property owners, with 30.2% from Duck and 7.9% from Colington. Among full-time Dare County residents, the largest responding community was Hatteras Island with a 22.1% response rate, with Roanoke Island at 16.2% and Colington at 15.2% respectively. A complete breakdown of responses according to geographic areas of Dare County is included in Charts 2 and 3.

All local governments in the twenty-county coastal region are required under the North Carolina Coastal Area Management Act (CAMA) to adopt and update land use plans. The CAMA guidelines identify certain issues that must be addressed in the land use plan with policy statements. The questions on the County's survey focused primarily on the policy issues but also probed other important local matters. The results of the survey will be combined with the results of other public participation activities and used by the Dare County Planning Board and Board of Commissioners in the development of policy statements for the land use plan update, scheduled for completion in late 2001, or early 2002.

This report contains a detailed analysis of the survey results. A Likert Scale (strongly agree, agree, no opinion, disagree, strongly disagree) was the response format used for each of the questions. All of the completed responses were entered into a computer program by the Planning staff. The staff in the Dare County Information Technology Department then totaled the results and the total number of responses to each question were tabulated and sorted according to resident or non-resident status. A response of “no opinion” was indicated when no response was chosen by the respondent. This aggregation of data allows the policy makers to compare how residents and non-residents each respond to certain issues.

ISSUE ANALYSIS

The first two questions discussed the use of bulkheads along the estuarine (sound) shoreline and the use of vegetative buffers along estuarine shorelines. While a large majority of the respondents (74.1%) agreed or strongly agreed that estuarine vegetative buffers should be supported, 53.9% of the respondents disagreed or strongly disagreed with the discontinuance of the use of bulkheads along the estuarine shoreline. The responses were nearly identical among both residents and non-residents. Nine percent (9%) of the total responses indicated “no opinion” on the bulkhead question with a smaller percentage of 5.8% offering no opinion on the use of vegetative buffers.

Concerning the increase of oceanfront setbacks, a great majority of the responses (81%) strongly agreed or agreed with this concept. Within this majority, the largest number of respondents indicated strong agreement with the need for increased oceanfront setbacks, with slightly more residents favoring an increase of oceanfront setbacks.

Question #4 concerned County regulation of land clearing and tree removal on private property. The prevailing opinion (64.7%) was disagreement with this type of governmental regulation, with 689 residents reporting strong disagreement with the concept. Among those in support of tree clearing regulations, a larger percentage (57.4) was of non-residents. In a similar question, respondents were asked about the regulation of the placement of fill on lots. There was overall support (53.6%) for this question among residents and non-residents versus 41.3% of respondents not supportive of the regulation of fill. Among the majority opinion, non-residents were more supportive than full-time residents of the County. A small percentage (3.1 and 5.0 respectively) indicated no opinion or did not respond to these two questions.

Three questions on the survey dealt with the use of personal watercraft (jets skis) on the waters of Dare County, ranging from an outright ban of the watercraft, to simple regulation, to limiting the number of businesses offering watercrafts for rent. All three regulatory methods received support, with regulation of personal watercraft receiving a strong support (78%) from those persons responding to the questionnaire versus 50.5% in support of a ban and 71.3% in support of limiting the number of businesses that offer jet ski rentals. Among the responses, more non-resident property owners favored the three choices of regulation than residents of Dare County. Overall, Dare County residents

were supportive of the regulation of jet skis and the limiting of the rental businesses with a slight majority disagreeing with a total ban of their use in our waters. No opinions accounted for 6% or less of the responses on each question.

Question 9 addressed surface water quality as a high priority. An overwhelming 96.4% of the respondents strongly agreed (59.0%) or agreed (37.4%) with this statement. Support was evident from both of the response groups. The no opinion responses accounted for less than 2% of the total count.

The focus of question 10 was the regulation of competing recreational uses in public waters. A large majority (71.3%) of the respondents were supportive of this concept. The votes were spread evenly among residents and non-residents.

Similar to question 9, the ranking of groundwater as a high priority was the focus of question 11. Again, both residents and non-residents demonstrated overwhelming support (96.5%) of groundwater protection as a high priority in Dare County.

The topic of wetland replacement or wetland mitigation was addressed in two questions. The questions differentiated between wetland loss being acceptable for public purpose projects and private development projects. 49.3% of the respondents supported wetland mitigation if associated with public purpose projects versus 46.8% who disagreed with this practice. However, the survey respondents were not supportive (60.6%) of wetland loss associated with private purpose development.

Two questions on the survey concerned marina development in Dare County in waters that are open for shellfish harvesting and waters that are closed to shellfish harvesting. A strong consensus (82.7%) was evident from the responses that marina development should not be in or near waters open to shellfish harvesting. The non-residents (1671) outnumbered the residents (1465) in this consensus. There was no solid conclusion from the responses on the second question about marina development in waters closed for shellfish harvesting. Of the responses, 44.2% strongly agreed or agreed and 42.8% disagreed or strongly disagreed. No opinions accounted for 12.9% of the responses, with 444 residents offering no opinion.

In a related matter, question 16 concerned a prohibition on floating homes in Dare County. Out of 3,727 responses, 73.9% supported a prohibition on floating homes, with the strongly agreed choice generating the most response.

Question 17 posed the question that the competition for marine resources (fish) between commercial and recreational fisherman should be regulated and managed. While there was a large majority who strongly agreed or agreed with this concept (74%), this support was generally from non-resident property owners.

A strong consensus (71.7%) of the respondents agreed that all unzoned portions of the County should be zoned. Among the supporters, the non-resident property owners outnumbered the residents in support of zoning. Among the 21.7% who disagreed with zoning, full-time residents (499) outnumbered the non-resident responses (295). No opinions accounted for 6.7% of the responses with 242 residents selecting “no opinion” as a response.

What type of development should be prevalent in Dare County was the focus of question 19. Over 85% of the responses favored single family homes as the prevalent type of structures in Dare County, with 1,014 non-residents voicing strong support versus 728 residents offering strong support. Among the 474 persons that disagreed, the large majority (64.8%) were residents of Dare County. The next question concerned the allowance of multi-family residential housing, with an emphasis on low-density. The majority of the persons responding supported low-density multi-family housing with 24.1% indicating strongly agreement and 31.4% in agreement combining for a 55.5% majority. Although the consensus was in support of multi-family housing, it is important to note the support was based on the multi-family development being limited to low-density projects.

Next the respondents were asked if the County should provide zoning incentives to encourage private contractors to construct affordable housing. A weak majority (54.1%) agreed that such incentives should be provided with 1,364 of this majority agreeing with the concept versus only 602 who “strongly agreed” with incentives for affordable housing. This support was mainly from residents and not non-resident property owners. This trend was also evident in the 39.7% who disagreed with the question. The full-time residents of Dare County are more sympathetic to the issue of affordable housing and the lack of such housing in Dare County than the non-residents that responded to the survey.

Question 22 focused on the operation of single-family homes that are rented on a short-term basis and whether these types of structures should be considered as “commercial” activity with different parking and solid waste standards. No consensus could be established from the responses. The categories of strongly agreed or agreed garnered 44.9% of the total responses and the categories of disagreed and strongly disagreed received 49.5% of the total vote with 5.7% choosing no opinion as their response. However, there was a trend evident among the type of respondents. Non-residents clearly did not favor the treatment of single-family homes offered for short-term rentals as commercial activity. Almost 35% of non-residents either disagreed or strongly disagreed with this concept versus 15% of residents who disagreed with this concept. This trend can be attributed to the fact that a large number of the non-resident property owners offer their properties for rent on a short-term basis.

Parking lot/street vendors and their operations were examined in question 23. Of the 3,698 responses, 64.2% did not support the allowance of parking lot vendors. Among this percentage, the responses were evenly spread among the answer options of disagree and strongly disagree. No opinions accounted for 7.5% of the responses.

More flexibility in the standards for home occupations/home offices was explored in the next question. There was considerable support (57.1%) of more flexible home occupation zoning regulations with 28.8% of the respondents opposed to expanded standards. There was large number of “no opinions” offered (14.1%). Residents were slightly more supportive of this topic than their non-resident peers. The results of this question indicate weak support for zoning regulations that are more favorable for home occupations than the zoning current standards.

The next two questions dealt with a public transportation system in Dare County. The first question asked if such a system should be developed in Dare County. 59.1% of the respondents supported a public transportation system with 33.0% opposed. Of the majority, 1123 residents were supportive with 886 of non-residents offering a positive response to the question. The second question asked if public funds should be used to supplement a private transportation system. In contrast to the first question, the majority, (63.7%) did not support public funds used to augment a private transportation system. So while many indicated support for a public transportation system, the respondents felt such a system should be operated solely by private funds.

Three questions addressed the issue of beach driving or the use of 4-wheel drive vehicles on public beaches. The questions asked whether such practices should be prohibited, by permit only or entirely without restrictions. Regarding the prohibition of beach driving, 64.5% of the respondents disagreed or strongly disagreed, with the strongly disagree choice receiving the most votes. The margin of majority dropped in the second question with 50.6% opposing a permit system and 45.5% in support of a permit system. The third question resulted in a large margin of response (78.4%) expressly opposed to beach driving with no restrictions, with the strongly agreed response category receiving the largest number of responses (1057). Using the responses of these three questions, it appears that most people feel that beach driving should be allowed to continue with some restrictions or permit program.

Less than one percentage point separated the total responses on the question that asked if Dare County should adopt zoning regulations to *inhibit* national chain retail stores. 47.6% of the responses were supportive of inhibiting national chain stores with 46.9% opposed to zoning regulations designed to inhibit national chain retailers. No opinions accounted for 5.4% of the responses. Non-residents were more supportive than full-time residents. Among those opposed to such zoning inhibitors, residents (972) outnumbered the non-resident vote (811). In a related question, persons were asked if national chain retailers diminished local village character. A discernible majority, 68.5% agreed with a higher number selecting “strongly agree” (1464) particularly non-resident property owners. So while most respondents agreed that national chain retail stores diminish local character, there was no clear majority in support of zoning regulations to inhibit their presence in Dare County.

Question 32 asked whether building construction should be regulated by an annual limit or cap. The majority of the respondents (57.7%) supported an annual limit with non-resident property owners representing 1,193 of the favorable votes and full-time residents representing 937 votes of this majority. In the same fashion, more full-time residents disagreed with an annual limit on permits than their non-resident counterparts.

Do large multi-bedroom rental structures contribute to the traffic problems? An overwhelming number of residents and non-resident property owners (81.2%) indicated that these types of residential structures do negatively impact our traffic problems. Of this majority, 1,632 indicated strong agreement. The results were evenly spread between both sets of respondents.

The next question focused on transportation again, and whether Dare County should initiate a transportation improvement program independent from the State of North Carolina. The results were mixed, with no clear consensus. 45.8% supported a separate transportation program and 39.6% opposed a separate system. No opinions represented 14.7% of the total votes. This large no opinion percentage explains the lack of a 50%+ majority.

Item 35 posed the question that Dare County should initiate a fee for multiple vehicles at rental cottages. 61.3% of the responses were opposed to this concept, with the largest opposition coming from the non-resident property owners. Of those in support of the fee, 30.8% were full-time residents of Dare County.

Regarding the charging of entry fees to Dare County, 72.5% of 3,843 responses were opposed to entry fees. Non-residents outnumbered residents in opposition to this by a vote of 1,578 to 1,211. The opposition from non-resident property owners was expected since similar questions on past land use plan surveys generated the same responses from this group.

The issue of seasonal peak populations and quality of life in Dare County were explored in question 37. When asked if seasonal populations have improved the quality of life in Dare County, 50.7% disagreed (1016) or strongly disagreed (812) with this statement. Among this percentage, residents outnumbered the non-resident property owners who felt that seasonal populations have not improved our quality of life. 44.1% of respondents strongly agreed (394) or agreed (1195) that our seasonal populations have improved our quality of life. Those not sighting an opinion represented 5.1%.

Question 38 offered five choices of possible funding for shoreline stabilization. Respondents were not limited to one choice but could select as many of the options as they felt were viable funding methods. The five options were occupancy tax, special district tax, user fees, federal/state funding or property tax. Out of 8,115 responses federal/state funding received 38.9% of the vote with occupancy tax ranking second with 21.9% and user fees ranked third with 19.8% of the vote. Special district tax and property tax both received 9.7% of the total responses. In breaking down the options,

residents preferred federal/state funding and occupancy tax as the top two funding options for shoreline stabilization with user fees, special district taxes and property taxes ranked respectively. Among non-residents, the ranking was federal /state funding, user fees, occupancy taxes, property taxes, and special district taxes.

Item 39 explored the issue of federal agencies, such as the National Park Service and the US Fish and Wildlife, and their relationship with Dare County citizens. When asked if these federal agencies facilitate the needs of our residents, an overall majority of 67.5% agreed with this statement. Most of the disagreement (22.6%) with the statement was from full-time residents of Dare County. This may be explained by the fact that full-time residents have day-to-day interaction, and sometimes conflicts, with federal agencies due to the dominant federal presence in Dare County.

Question 40 asked whether lot sizes should be decreased to allow for greater density. This question received the largest percentage consensus (94.9%) majority with 1,051 respondents disagreeing with the issue and 2,739 respondents indicating strong disagreement.

The issue of sea level rise was explored in the next question. When asked if the sea level is rising to a degree that public response is necessary, 49.5% agreed that a public response was needed, 38.1% disagreed, and 12.4% indicated no opinion on this matter. The responses were spread evenly among both residents and non-residents.

The need for additional programs for more shoreline access was examined with 53.1% opposed to the topic and 40.2% indicating a need for more shoreline access. A greater number of residents felt the County needed more shoreline access programs and a greater number of non-residents were opposed to additional shoreline access. One possible explanation for this difference is that a high percentage of the immediate shoreline, especially the oceanfront is owned by non-resident property owners. Full-time County residents must compete with the seasonal visitors for shoreline access opportunities and therefore may be more supportive of additional access facilities.

A similar topic, the acquisition of additional lands for future public purpose projects, was the topic of the next question. 65.3% of the respondents were supportive and 27.0% disagreed with this question. There was no discernible difference among residents and non-resident responses.

Item 44 examined the compatibility of outdoor amusements such as go-carts and miniature golf with the family resort goals of Dare County. A weak majority (56.4%) of the responses strongly agreed or agreed with this issue. 37.0% selected disagree or strongly disagree. Among those disagreeing with the issue, the majority were non-resident property owners. These results were somewhat of a surprise since it has been the County's experience that these types of land uses generate controversy and localized opposition.

In response to the creation of an industrial park on the mainland for commercial storage activities, 57.5% were supportive of this concept, with most selecting the agree option. The no opinion option represented 15.1% of the responses.

A large majority (64.4%) of the survey respondents indicated that existing regulations and enforcement activities regarding unsightly structures and conditions are inadequate. Of the 3,328 responses, 1,207 residents felt the current measures were inadequate and 938 non-residents felt the measure were inadequate. A total percentage of 26.8% indicated that current measures are adequate, with an equal vote between both groups of respondents.

Question 47 offered four alternatives for implementation of shoreline management: abandon shoreline (do nothing), beach nourishment, seawalls, groins and similar structures, and relocate inland. A total of 3,825 responses were received with a clear consensus (62.1%) or 2,375 votes, indicating beach nourishment as the preferred response. Abandon shoreline or do nothing received the second highest vote with 22.6% or 866 votes. Seawalls, groins and similar structures ranked third with 344 votes or 9.0% of the total. The relocate inland selection received the least number of votes at 240 or 6.3% of the total responses. Beach nourishment was the first choice among both residents and non-resident property owners.

The last two questions on the survey concerned stormwater ponding and drainage. The first question asked if public funds should be spent to address stormwater ponding and drainage problems on private property. The second question asked if Dare County should establish a full-time stormwater management and ditch maintenance program. In response to the first question a slight majority 57.6% disagreed or strongly disagreed with the expenditure of public funds to address drainage problems on private property. 36.7% were supportive of public funds being used to address problems on private property with most selecting the agree choice. 5.7% indicated no opinion. A much larger percentage (84.7%) was supportive of a full-time County stormwater and ditch maintenance program. Of this majority 1,033 respondents selected strongly agree and 2,179 selected the agree option. Among those opposed to a full-time County program (10.7%) 282 selected disagree and 126 indicated a strong disagreement. So while a strong consensus supported the establishment of a full-time County program, most felt the program should not address problems on private property.

SUMMARY: As stated earlier these survey results will be used with the results of other public participation activities, including a series of public participation workshops held in October 2000, to draft policies for an updated version of the Land Use Plan. While it is important to note that the results of this mail-out questionnaire are not a scientifically selected random sample or “poll”, the results can be helpful in the identification of issues that are likely to be divisive and those on which there appears to be a consensus. The survey information will serve as a reliable indication of public sentiment and represent a valuable research component. The results of the questionnaire, the public participation workshops and the common-sense discretion of the Planning Board will all weigh heavily in the development of policies for the Dare County Land Use Plan.

Questions 1-49 except for 38 and 47	Strongly Agree		Agree		No Opinion		Disagree		Strongly Disagree	
	#	%	#	%	#	%	#	%	#	%
The installation of bulkheads along the estuarine shoreline should be	560	16.6	689	20.4	303	9.0	1006	29.8	813	24.1
TOTAL			1249	37.0	303	9.0			1819	53.9
State regulations mandating vegetative buffers along the estuarine shoreline should be supported.	1290	33.2	1589	40.9	225	5.8	294	7.6	225	5.8
TOTAL			2879	74.1	225	5.8			519	13.4
Oceanfront setbacks for development should be increased.	1575	43.1	1387	37.9	147	4.0	312	8.5	236	6.5
TOTAL			2962	81.0	147	4.0			548	15.0
Dare County should regulate land clearing and tree removal on your private property	451	11.6	805	20.7	119	3.1	1232	31.7	1282	33.0
TOTAL			1256	32.3	119	3.1			2514	64.7
Dare County should adopt rules regulating the placement of fill on lots.	625	16.6	1392	37.0	188	5.0	902	24.0	652	17.3
TOTAL			2017	53.6	188	5.0			1554	41.3
Dare County should BAN the use of personal watercraft (jet skis) in the waters of unincorporated Dare County.	1269	33.2	661	17.3	228	6.0	1103	28.9	557	14.6
TOTAL			1930	50.5	228	6.0			1660	43.5
Dare County should REGULATE the use of personal watercraft (jet skis) in the waters of unincorporated Dare County.	1494	38.9	1501	39.1	193	5.0	339	8.8	316	8.2
TOTAL			2995	78.0	193	5.0			655	17.0
Dare County should limit the number of personal watercraft (jet skis) in the waters of unincorporated Dare County.	1523	39.9	1198	31.4	227	5.9	572	15.0	298	7.8
TOTAL			2721	71.3	227	5.9			870	22.8
Surface water quality should be a high priority.	2325	59.0	1473	37.4	74	1.9	47	1.2	23	.6
TOTAL			3798	96.4	74	1.9			70	1.8
Competing recreational uses in public waters should be regulated.	936	24.6	1773	46.7	260	6.8	578	15.2	253	21.9
TOTAL			2709	71.3	260	6.8			831	21.9
Protection of groundwater should be a high priority.	2455	61.4	1402	35.1	72	1.8	51	1.3	17	.4
TOTAL			3857	96.5	72	1.8			68	1.7

Wetland loss due to PUBLIC purpose projects is acceptable if replaced by manmade wetlands	412	10.7	1482	38.6	145	3.8	905	23.6	891	23.2
TOTAL			1894	49.3	145	3.8			1796	46.8
Wetland loss due to PRIVATE purpose projects is acceptable if replaced by manmade wetlands	337	8.7	1075	27.6	120	3.1	1016	26.1	1342	34.5
TOTAL			1412	36.3	120	3.1			2358	60.6
Marina development in or near waters OPEN TO shellfish fishing should be discouraged.	1427	37.6	1709	45.1	209	5.5	324	8.5	122	3.2
TOTAL			3136	82.7	209	5.5			446	11.7
Marina development in or near waters NOT OPEN TO shellfish fishing should be discouraged.	630	18.1	906	26.1	449	12.9	1222	35.2	265	7.6
TOTAL			1536	44.2	449	12.9			1487	42.8

Questions 1-49 except for 38 and 47	Strongly Agree		Agree		No Opinion		Disagree		Strongly Disagree	
	#	%	#	%	#	%	#	%	#	%
Floating structures/homes should be prohibited	1544	41.4	1210	32.5	313	8.4	487	13.1	173	7.6
TOTAL			2754	73.9	313	8.4			660	17.7
The competition for marine resources (fish) between commercial and recreational fisherman should be managed and regulated.	1083	28.5	1731	45.5	194	5.1	491	12.9	303	8.0
TOTAL			2814	74.0	194	5.1			794	20.9
All unzoned portions of Dare County should be zoned.	1119	30.4	1520	41.3	245	6.7	467	12.7	327	8.9
TOTAL			2639	71.7	245	6.7			794	21.6
Single family structures should be the prevalent type of land use in Dare County	1742	44.7	1530	39.2	154	3.9	394	10.1	80	2.1
TOTAL			3272	83.9	154	3.9			474	12.2
Only low-density multi-family housing should be allowed in Dare County	921	24.1	1199	31.4	209	5.5	878	23.0	608	15.9
TOTAL			2120	55.5	209	5.5			1486	38.9
The County should provide zoning incentives to encourage private contractors to build affordable housing.	602	6.6	1364	37.5	228	6.3	846	23.3	597	16.4
TOTAL			1966	54.1	228	6.3			1443	39.7

Single-family homes that are rented on a short-term basis should be considered as commercial activity with different standards for parking and trash pick-up applied to these uses.	689	18.2	1012	26.9	217	5.7	1022	27.0	852	22.5
TOTAL			1701	44.9	217	5.7			1874	49.5
Current zoning regulations should be amended to allow parking lot/street vendors to operate during the summer season.	202	5.5	842	22.8	278	7.5	1191	32.2	1185	32.0
TOTAL			1044	28.3	278	7.5			2376	64.2
Home occupations/home offices should be expanded to allow standards that are more flexible	405	12.2	1496	44.9	470	14.1	633	19.0	325	9.8
TOTAL			1901	57.1	470	14.1			958	28.8
A reliable, regularly scheduled public transportation system should be developed in Dare County.	700	19.6	1409	39.5	283	7.9	727	20.4	451	12.6
TOTAL			2109	59.1	283	7.9			1178	33.0
Public funding should be used to supplement a private transportation system.	240	6.6	831	22.7	259	7.1	1348	36.9	980	26.8
TOTAL			1071	29.3	259	7.1			2328	63.7
Beach driving should be PROHIBITED .	804	20.7	516	13.3	128	3.3	1114	28.7	1390	35.8
TOTAL			1320	34.0	128	3.3			2504	64.5
Beach driving should be BY PERMIT ONLY .	642	16.6	1119	28.9	153	4.0	929	24.0	1029	26.6
TOTAL			1761	45.5	153	4.0			1958	50.6
Beach driving should be WITHOUT ANY RESTRICTIONS .	483	12.1	303	7.6	72	1.8	1184	29.8	1934	48.6
TOTAL			786	19.7	72	1.8			3118	78.4
Dare County should adopt zoning regulations designed to inhibit national chain retail stores.	942	24.8	867	22.8	207	5.4	1144	30.1	639	16.8
TOTAL			1809	47.6	207	5.4			1783	46.9

Questions 1-49 except for 38 and 47	Strongly Agree		Agree		No Opinion		Disagree		Strongly Disagree	
	#	%	#	%	#	%	#	%	#	%
National chain retail stores diminish local village character.	1464	37.5	1210	31.0	158	4.0	800	20.5	272	7.0
TOTAL			2674	68.5	158	4.0	1072	27.5		

Building permit construction should be regulated by an annual permit limit	923	25.0	1207	32.7	315	8.5	863	23.4	379	10.3
TOTAL		2130	57.7	315	8.5				1242	33.7
Large multi-bedroom rental structures contribute to the traffic problems in Dare County.	1632	42.5	1486	38.7	118	3.1	449	11.7	157	4.1
TOTAL			3118	81.2	118	3.1			606	15.8
Dare County should initiate a transportation improvement program independent of the State-funded program.	360	10.7	1177	35.1	493	14.7	926	27.6	402	12.0
TOTAL			1537	45.8	493	14.7			1328	39.6
Dare County should initiate a fee for multiple vehicles at rental cottages.	491	12.9	683	17.9	298	7.8	1419	37.2	919	24.1
TOTAL			1174	30.8	298	7.8			2338	61.3
Entry tolls should be collected and used to fund transportation improvements.	294	7.7	565	14.7	195	5.1	1416	36.8	1373	35.7
TOTAL			859	22.4	195	5.1			2789	72.5
Seasonal peak populations have improved the quality of life in Dare County.	394	10.9	1195	33.2	185	5.1	1016	28.2	812	22.5
TOTAL			1589	44.1	185	5.1			1828	50.7
Federal agencies, such as the National Park Service and US Fish and Wildlife Service facilitate the needs of the residents and visitors of Dare County.	565	16.1	1805	51.4	349	9.9	506	14.4	288	8.2
TOTAL			2370	67.5	349	9.9			794	22.6
Lot sizes should be decreased to allow for greater density of development.	72	1.8	74	1.9	59	1.5	1051	26.3	2739	68.6
TOTAL			146	3.7	59	1.5			3790	94.9
The sea level is rising to a degree that public response is necessary.	558	16.3	1137	33.2	425	12.4	937	27.3	372	10.8
TOTAL			1695	49.5	425	12.4			1309	38.1
Additional programs to provide more shoreline access should be initiated	354	9.4	1159	30.8	252	6.7	1326	35.2	675	17.9
TOTAL			1513	40.2	252	6.7			2001	53.1
Acquisition of additional lands for future public purpose projects should be supported.	630	17.1	1776	48.2	285	7.7	658	17.9	337	9.1
TOTAL			2406	65.3	285	7.7			995	27.0
Outdoor recreational facilities (go-carts, miniature golf, etc.) are compatible with the family resort goals of Dare County.	233	6.2	1897	50.2	253	6.7	762	20.2	635	16.8
TOTAL			2130	56.4	253	6.7			1397	37.0

The creation of an industrial park on the Mainland of Dare County for commercial storage activities should be considered.	328	9.8	1601	47.7	508	15.1	507	15.1	415	12.4
TOTAL			1929	57.5	508	15.1			922	27.5
Existing regulations and enforcement activities regarding unsightly structures and/or conditions are adequate.	126	3.8	767	23.0	290	8.7	1319	39.6	826	24.8
TOTAL			893	26.8	290	8.7			2145	64.4

Questions 1-49 except for 38 and 47	Strongly Agree		Agree		No Opinion		Disagree		Strongly Disagree	
	#	%	#	%	#	%	#	%	#	%
Public funds should be spent to address stormwater ponding and drainage problems on private property.	320	8.7	1031	28.0	212	5.7	1401	38.0	724	19.6
TOTAL	1351	36.7	212	5.7	2125	57.6				
Dare County should establish a full-time program for stormwater management and ditch maintenance.	1033	27.2	2179	57.5	171	4.5	282	7.4	126	3.3
TOTAL	3212	84.7	171	4.5	408	10.7				

Question 38	Occupancy Tax		Special District Tax		User Fees		Federal/State Funding		Property Tax		TOTAL
Which of the following options should be used to fund shoreline stabilization	#	%	#	%	#	%	#	%	#	%	
Total	1780	21.9	791	9.7	1604	19.8	3156	38.9	784	9.7	8115

Question 47	Abandon Shoreline		Beach Nourishment		Seawalls, groins, and similar structures		Relocate inland		TOTAL
The barrier island communities of Dare County should implement which of the following:	#	%	#	%	#	%	#	%	
Total	866	22.6	2375	62.1	344	9.0	240	6.3	3825

NON-RESIDENT/ RESIDENT RESPONSE ANALYSIS

Questions 1-49 except for 38 and 47	Strongly Agree		Agree		No Opinion		Disagree		Strongly Disagree	
	R	NR	R	NR	R	NR	R	NR	R	NR
The installation of bulkheads along the estuarine shoreline should be discontinued.	288	272	308	381	297	6	549	457	499	314
Total				1249		303				813
State regulations mandating vegetative buffers along the estuarine shoreline should be supported.	635	655	753	836	224	1	181	113	148	77
Total				2879		225				519
Oceanfront setbacks for development should be increased.	849	726	656	731	144	3	155	157	137	99
Total				2962		147				548
Dare County should regulate land clearing and tree removal on your private property	223	228	312	493	117	2	600	632	689	593
Total				1256		119				2514
Dare County should adopt rules regulating the placement of fill on lots.	317	308	586	806	184	4	483	419	371	281
Total				2017		188				1554
Dare County should BAN the use of personal watercraft (jet skis) in the waters of unincorporated Dare County	540	729	285	376	225	3	580	523	311	246
Total				1930		228				1660
Dare County should REGULATE the use of personal watercraft (jet skis) in the waters of unincorporated Dare County.	672	822	719	782	189	4	186	153	175	141
Total				2995		193				655
Dare County should limit the number of personal watercraft (jet skis) in the waters of unincorporated Dare County.	668	855	594	604	223	4	286	286	170	128
Total				2721		227				298
Surface water quality should be a high priority	1144	1181	689	784	70	4	27	20	11	12
Total				3798		74				70
Competing recreational uses in public waters should be regulated.	418	518	808	965	255	5	331	247	129	124
Total				2709		260				831
Protection of groundwater should be a high priority.	1176	1279	658	744	68	4	31	20	8	9
Total				3857		72				68
Wetland loss due to PUBLIC purpose projects is acceptable if replaced by manmade wetlands	217	195	703	779	143	2	418	487	460	431
Total				1894		145				1796
Wetland loss due to PRIVATE purpose projects is acceptable if replaced by manmade wetlands	167	170	507	568	116	4	477	539	674	668
Total				1412		120				2358

Marina development in or near waters OPEN TO shellfish fishing should be discouraged.	670	757	795	914	205	4	196	128	75	47
Total				3136		209				446
Marina development in or near waters NOT OPEN TO shellfish fishing should be discouraged.	293	337	406	500	444	5	648	574	150	115
Total				1536		449				1487
Floating structures/homes should be prohibited	656	888	560	650	311	2	306	181	108	65
Total				2754		313				660
The competition for marine resources (fish) between commercial and recreational fisherman should be managed and regulated.	471	612	807	924	192	2	272	219	199	104
Total				2814		194				794
All unzoned portions of Dare County should be zoned.	513	606	687	833	242	3	267	200	232	95
Total				2639		245				794

Questions 1-49 except for 38 and 47		Strongly Agree		Agree		No Opinion		Disagree		Strongly Disagree	
		R	NR	R	NR	R	NR	R	NR	R	NR
Single family structures should be the prevalent type of land use in Dare County	Total	728	1014	755	775	151	3	254	140	53	27
		3272				154		474			
Only low density multi-family housing should be allowed in Dare County	Total	399	522	627	572	206	3	437	441	272	336
		2120				209		1486			
The County should provide zoning incentives to encourage private contractors to build affordable housing	Total	400	202	768	596	222	6	340	506	211	386
		1966				228		1443			
Single family homes that are rented on a short-term basis should be considered as commercial activity with different standards for parking and trash pick-up applied to these uses.	Total	531	158	636	376	214	3	358	664	202	650
		1701				215		1874			
Current zoning regulations should be amended to allow parking lot/street vendors to operate during the summer season.	Total	137	65	493	349	274	4	544	647	493	692
		1044				278		2376			
Home occupations/home offices should be expanded to allow standards that are more flexible	Total	241	164	782	714	462	8	321	312	135	190
		1901				470		958			
A reliable, regularly scheduled public transportation system should be developed in Dare County.	Total	455	245	768	641	274	9	284	443	160	291
		2109				283		1178			
Public funding should be used to supplement a private transportation system.	Total	149	91	461	370	253	6	648	700	430	550
		1071				259		2328			
Beach driving should be PROHIBITED .	Total	298	506	238	278	126	2	577	537	702	688
		1320				128		2504			
Beach driving should be BY PERMIT ONLY .	Total	307	335	579	540	150	3	433	496	472	557
		1761				153		1958			
Beach driving should be WITHOUT ANY RESTRICTIONS .	Total	234	249	145	158	70	2	615	569	877	1057
		786				72		3118			
Dare County should adopt zoning regulations designed to inhibit national chain retail stores.	Total	355	587	410	457	204	3	592	552	380	259
		1809				207		1783			
National chain retail stores diminish local village character.	Total	545	919	587	623	154	4	486	314	169	103
		2674				158		1072			
Building construction should be regulated by an annual permit limit.		386	537	551	656	310	5	464	399	230	149

	Total			2130	315					1242	
Large multi-bedroom rental structures contribute to the traffic problems in Dare County.		866	766	664	822	113	5	221	228	77	80
	Total			3118	118						606
Dare County should initiate a transportation improvement program independent of the State-funded program.		192	168	611	566	485	8	450	476	203	199
	Total			1537	493						1328
Dare County should initiate a fee for multiple vehicles at rental cottages.		342	149	430	253	293	5	614	805	262	657
	Total			1174	298						2338
Entry tolls should be collected and used to fund transportation improvements.		211	83	327	238	192	3	668	748	543	830
	Total			859	195						2789

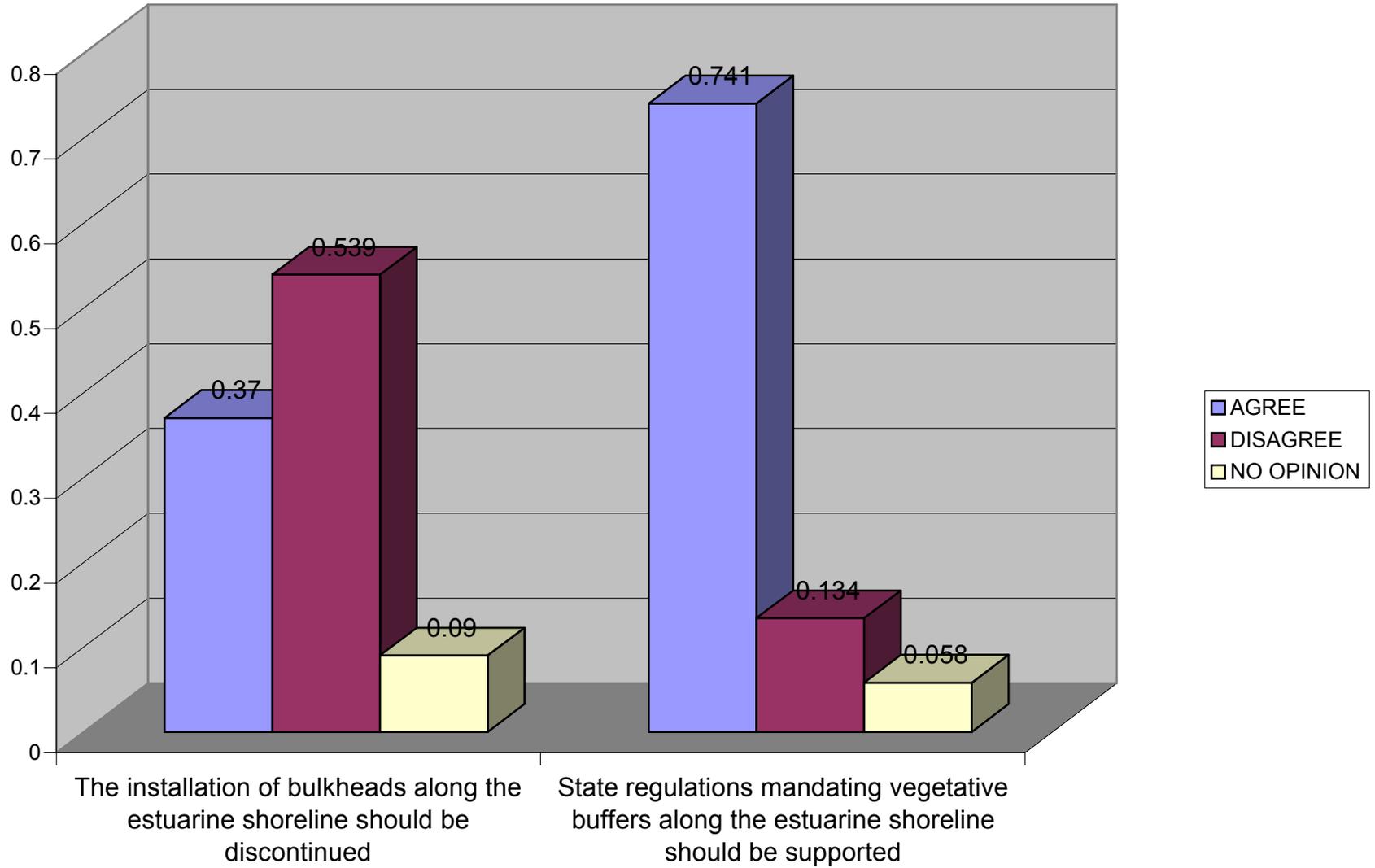
Questions 1-49 except for 38 and 47	Strongly Agree		Agree		No Opinion		Disagree		Strongly Disagree		
	R	NR	R	NR	R	NR	R	NR	R	NR	
Seasonal peak populations have improved the quality of life in Dare County.		161	233	557	638	181	4	524	492	518	294
	Total			1589	185						1828
Federal agencies, such as the National Park Service and US Fish and Wildlife Service facilitate the needs of the residents and visitors of Dare County.		254	311	840	965	345	4	302	204	200	88
	Total			2370	349						794
Lot sizes should be decreased to allow for greater density of development.		36	36	51	23	57	2	503	548	1294	1445
	Total			146	59						3790
The sea level is rising to a degree that public response is necessary.		292	266	582	555	419	6	464	473	184	188
	Total			1695	425						1309
Additional programs to provide more shoreline access should be initiated		214	140	628	531	248	4	596	730	255	420
	Total			1513	252						2001
Acquisition of additional lands for future public purpose projects should be supported.		336	294	870	906	281	4	303	355	151	186
	Total			2406	285						995
Outdoor recreational facilities (go-carts, miniature golf, etc.) are compatible with the family resort goals of Dare County.		123	110	1003	894	247	6	331	431	237	398
	Total			2130	253						1397
The creation of an industrial park on the Mainland of Dare County for commercial storage activities should be considered.		207	121	802	799	499	9	249	258	184	231
	Total			1929	508						922
Existing regulations and enforcement activities regarding unsightly structures and/or conditions are adequate.		69	57	381	386	284	6	698	621	509	317
	Total			893	290						2145

Public funds should be spent to address stormwater ponding and drainage problems on private property.	187	133	505	526	208	4	673	728	368	356
Total			1351	212						
Dare County should establish a full-time program for stormwater management and ditch maintenance.	578	455	985	1194	166	5	143	139	69	57
Total			3212	171						

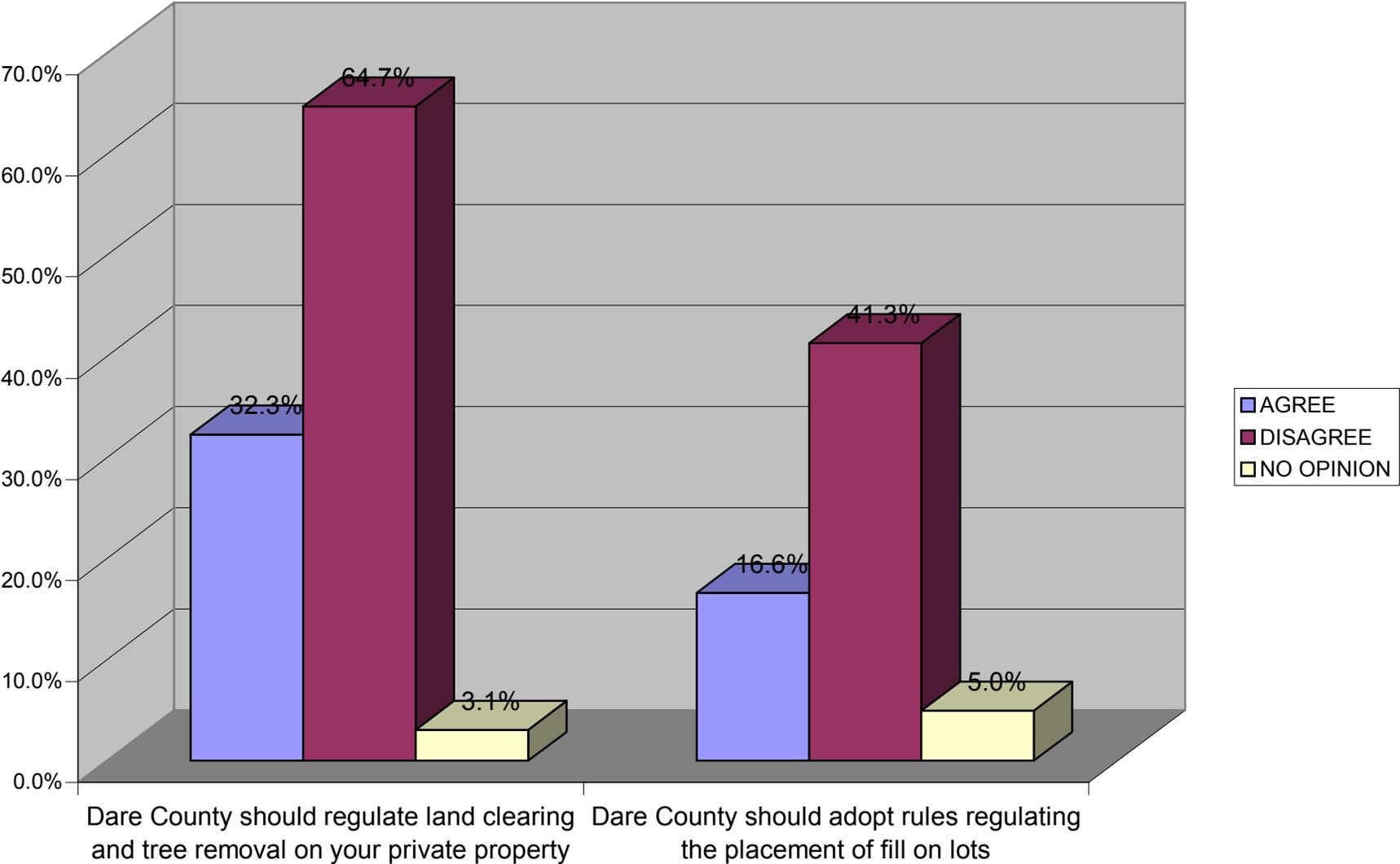
Question 38	Occupancy Tax		Special District Tax		User Fees		Federal/State Funding		Property Tax		
	R	NR	R	NR	R	NR	R	NR	R	NR	
Which of the following options should be used to fund shoreline stabilization	R	1040	740	437	354	814	790	1425	1731	245	539
Total	1780		791		1604		3156		784		8115

Question 47	Abandon Shoreline		Beach Nourishment		Seawalls, groins, and similar structures		Relocate inland		
	R	NR	R	NR	R	NR	R	NR	
The barrier island communities of Dare County should implement which of the following:	R	440	426	1057	1318	172	172	154	86
Total	866		2375		344		240		3825

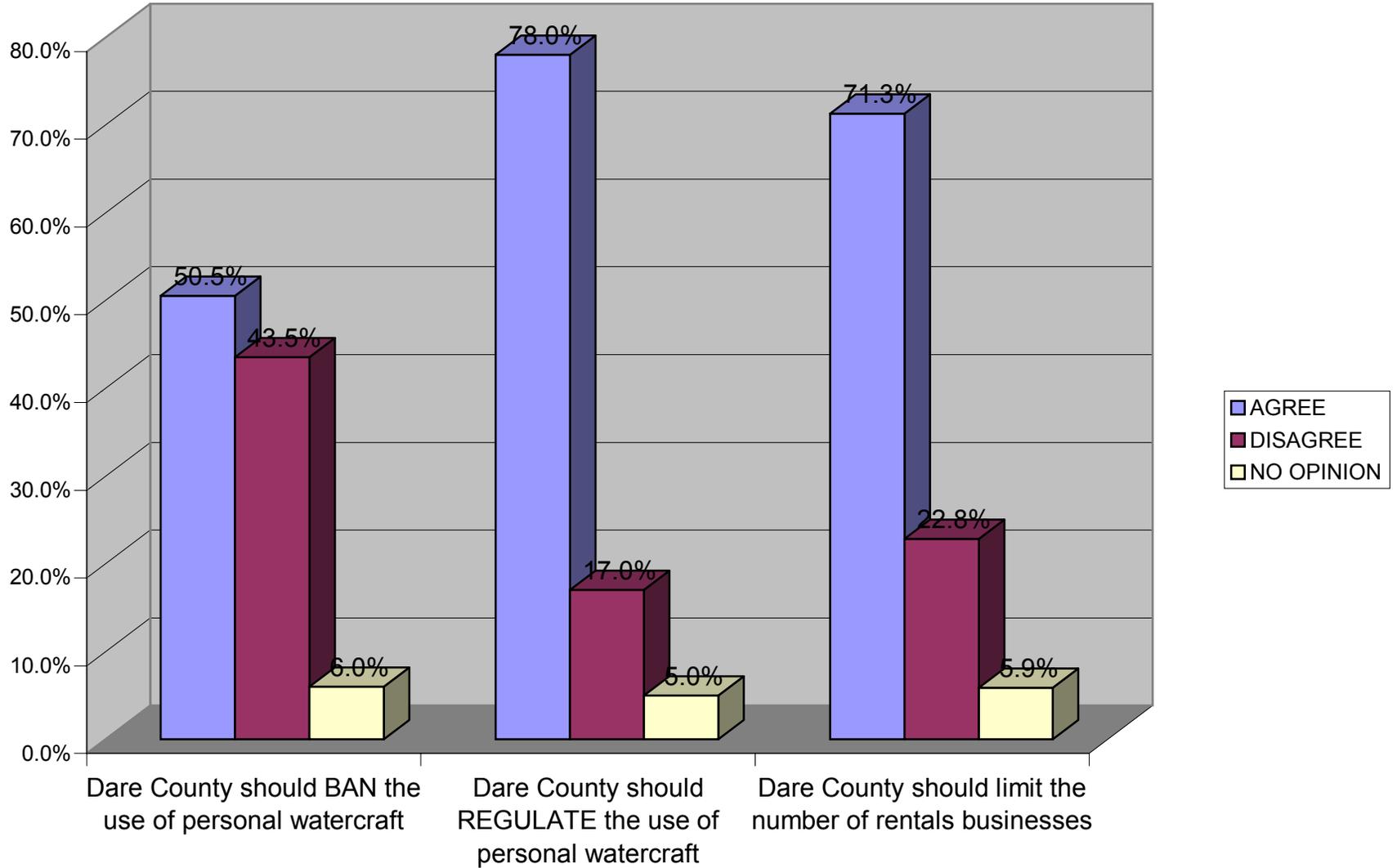
Estuarine Shoreline Management



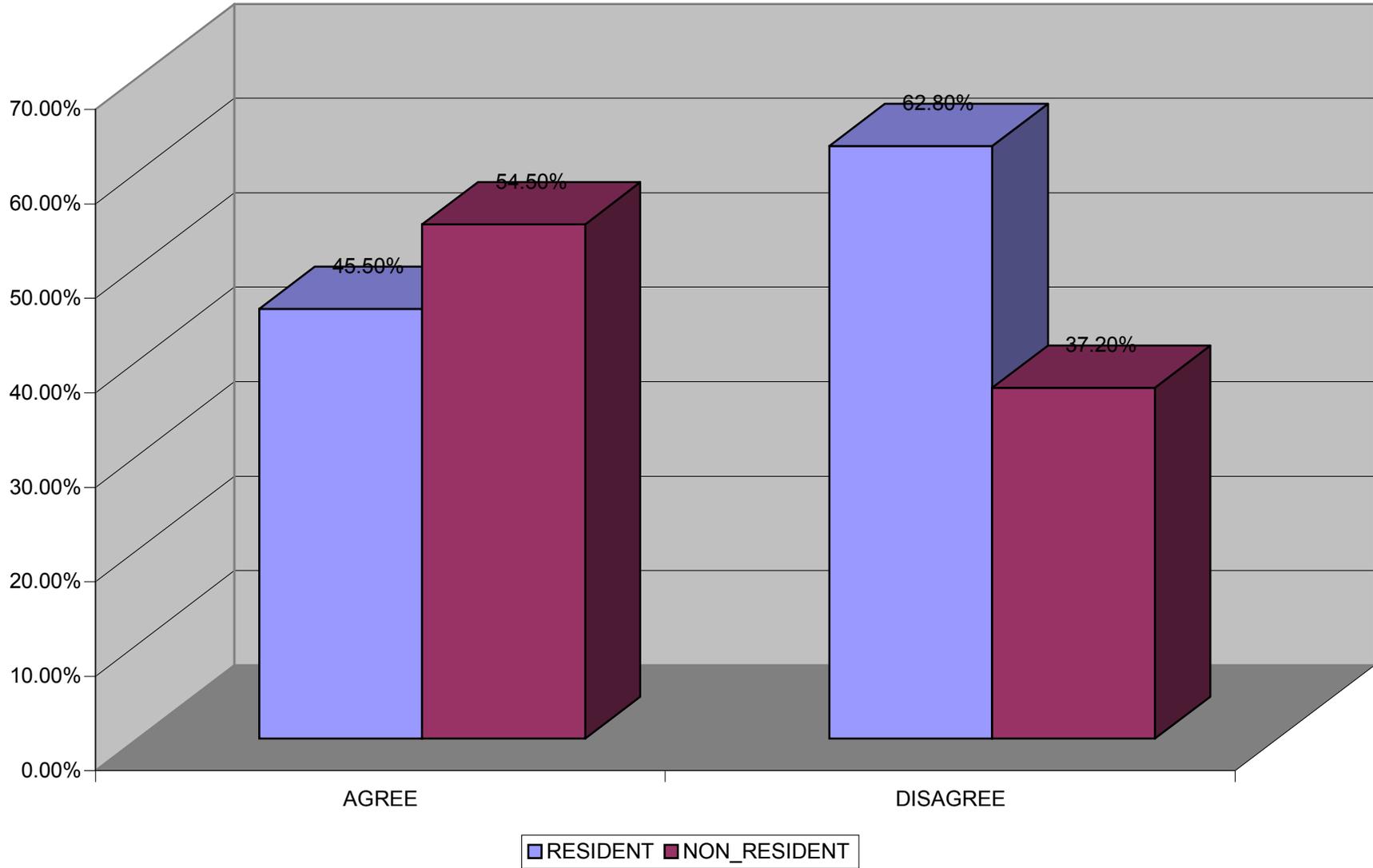
Land Disturbing Activities



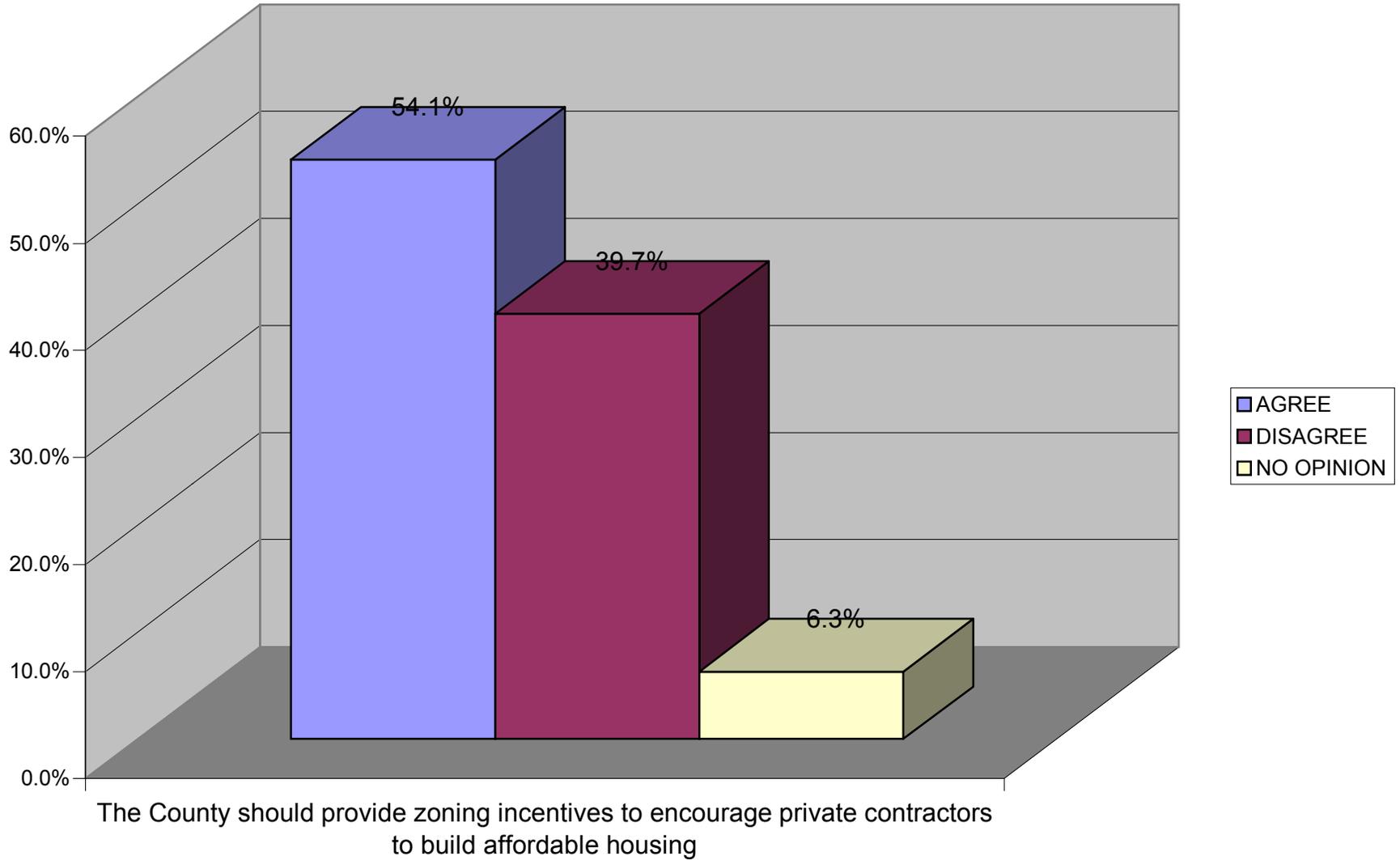
Personal Watercraft (Jet Skis)



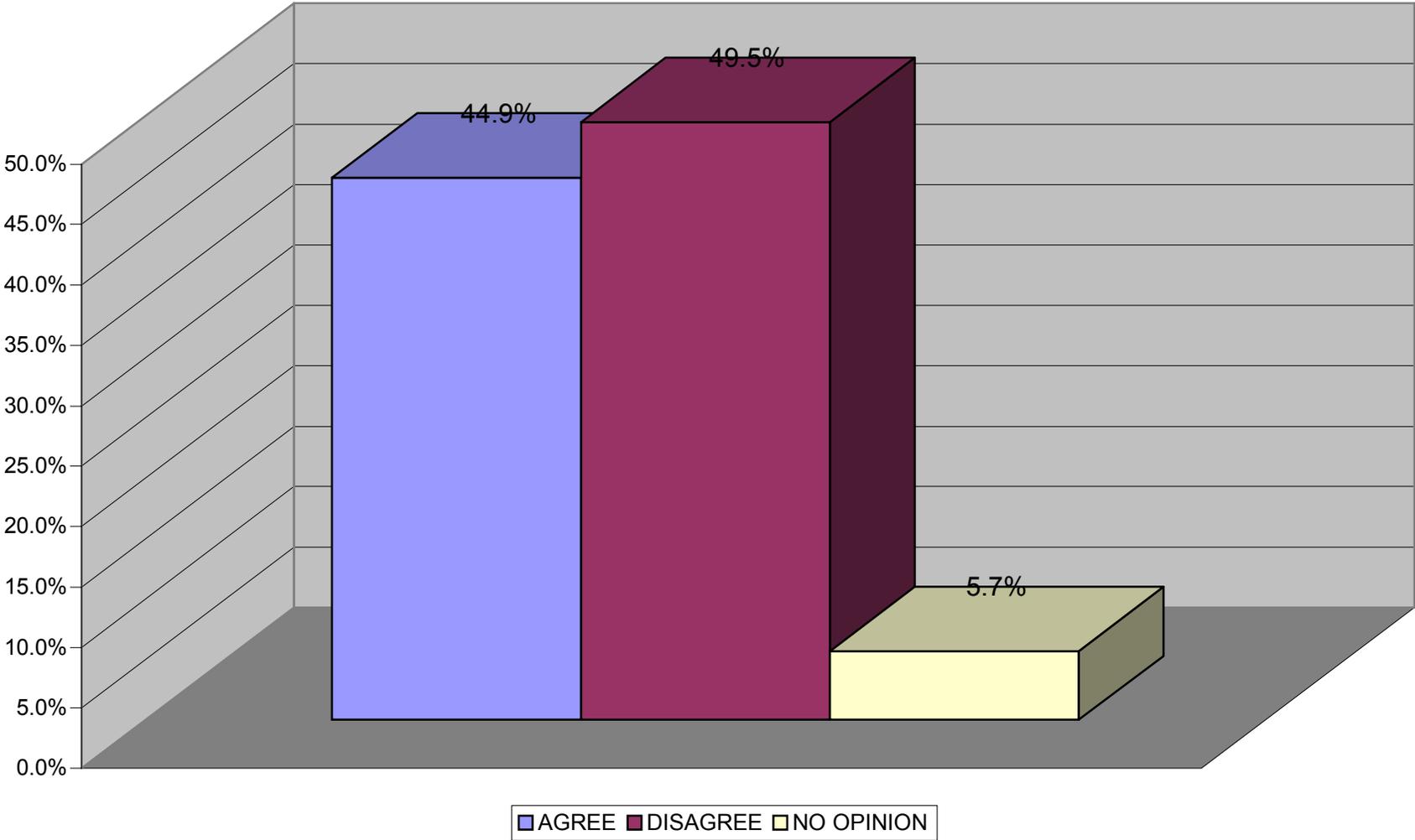
All unzoned portions of Dare County should be zoned.



AFFORDABLE HOUSING



Single-family homes that are rented on a short-term basis should be considered as commercial activity with different standards for parking and trash pick-up applied to these uses.



Introduction

This report presents a summary of the issues identified, ranked and discussed during three public input meetings held from October 3-5 in Kitty Hawk (Northern Beaches), Buxton (Hatteras Island) and Manteo (Roanoke Island/The Mainland), respectively. The report may be used to suggest the principal areas in need of research and policy development during the preparation of the Dare County Land Use Plan.

How the Issues Were Identified

Shortly after each meeting was convened, the following question was presented on a flip chart for consideration by the citizens in attendance:

What are some important growth and development issues facing Dare County and your local area?

After two or three minutes of quiet brainstorming, a “prompt sheet” was then shown on the flip chart suggesting several potential categories of concern for the group to consider. In view of the issues typically addressed in a land use plan, the prompt sheet suggested the following categories:

- land use
- housing
- environmental issues
- economic development
- parks and open space
- community appearance
 - storm hazards
- roads/ transportation
- historic preservation
 - shoreline access
 - water/sewer
- drainage/stormwater

Participants first recorded their issues on 3 x 5 cards. These concerns were then transferred to flip chart sheets in one or two small groups. After all the issues were listed on flip charts, participants were invited to choose their top priority issues (from among all items) by a simple voting process using “sticky back” dots. The following pages contain a list of the issues that were identified during the three special public input meetings. All issues have been typed up just as they were recorded on the flip charts. For the purpose of follow-up discussion, all issues have been sorted into categories and arranged by location of the meeting. The assignment of any one issue to a particular category is a judgment call and is subject to other equally valid viewpoints. Similar issues have not been combined so as to preserve the original content of each issue and to show the number of times that the same issue came up. The individual issues within each category have been arranged in order of the number of priority votes received. The results of the process are printed beginning on the next page.

Structure of This Report

This report is presented in three sections as follows:

Section 1. Summary Ranking of Growth and Development Categories

Section 2. The Top 25 Growth and Development Issues

Common Themes and Objectives for the Dare County Land Use Plan

Section 3. Detailed Listing of Growth and Development Issues

Comparisons by Category, Ranking, and Location of Meeting

Section 1

Summary Ranking of Growth and Development Categories

The table below presents a summary of some 39 growth and development categories derived from public comments received during “Future of Dare Week”, October 3-5, 2000. The three meetings were held in Kitty Hawk (Northern Beaches), Buxton (Hatteras Island), and Manteo (Roanoke Island and Mainland Dare County). Expanded descriptions of the issues making up the top 25 categories listed in this table are presented in the pages immediately following.

Rank Order	Total of Priority Votes from all Three Meetings	<i>Growth and Development Issue Identified</i>
1	39	Water Quality, Sewage Disposal, and Stormwater Management
2	35	Water Supply and Sewage Treatment
3	28	Economic Diversification
4	24	Schools and Education
5	22	Traffic Congestion
6	21	U.S. 158 Bypass
7	20	Growth Generally
8	20	Midway Bridge (Roanoke Is)
9	18	Affordable Housing
10	17	Biking and Walking Paths
11	17	Intergovernmental Cooperation
12	17	Road Corridor Appearances, Generally
13	14	Solid Waste Management/Recycling
14	14	Underground Utilities
15	13	NC 12, Function
16	12	NC 12, Appearance
17	12	Shoreline Erosion, Stabilization and Renourishment
18	11	Mass Transit
19	10	Channel Maintenance
20	9	Bonner Bridge
21	9	Large Rental Homes
22	8	Beach and Sound Access
23	7	Open Space and Greenways
24	7	Parks and Recreation
25	6	Wetland Conservation
26	5	Beach Driving
27	5	Emergency Management
28	5	Mid-County Bridge
29	4	Code Enforcement
30	4	Mosquito Control
31	3	Light Pollution
32	2	Communications Technology
33	2	Competing Use of Waterways
34	2	Parking in Manteo
35	1	Architectural Planning
36	1	Borrow Pits
37	1	Historic Preservation
38	1	Offshore Drilling
39	0	Clearcutting of Trees
---	5	Miscellaneous

Section 2

The Top 25 Growth Issues

Common Themes and Objectives for the Dare County Land Use Plan

The following common themes and objectives were derived from public input received during “Future of Dare Week”, October 3, 4, and 5, 2000.

1. Water Quality, Sewage Disposal, and Stormwater Management

Maintaining and protecting water quality, particularly in the sounds, is perhaps the single greatest growth issue facing Dare County. Measures to control stormwater runoff from development and agriculture, and pollution from septic tanks or other inadequately treated waste, must be a primary focus of the land use plan.

2. Water Supply and Sewage Treatment

The debate continues regarding the pros and cons of centralized sewage treatment. On one side are those who view centralized sewage treatment as the only way to gain some control over the location of urban development as well as to reduce pollution from poorly functioning septic systems. On the other side are those who believe central sewers would create enormous pressure for higher density development, perhaps changing the "low-profile" landscape of the Outer Banks forever. The Land Use Plan should address this issue and seek to resolve it, if possible. (Note: The divergence of opinions involving centralized sewage treatment does not appear to apply, to nearly the same extent, when discussing centralized water distribution systems.)

3. Economic Diversification

Dare County should look for opportunities to diversify its economic base, and reduce its level of dependence on the tourism dollar. A single devastating storm could wreck the economy and destroy the tax base, setting the area back for years. A more diverse economy would also provide jobs for young people to return home after college and would expand the economy to include more year-round jobs.

4. Schools and Education

Improvements in educational opportunities, particularly at the college-level, are needed and could bring many benefits to Dare County. Young people would not have to leave the area to receive a college education. Training in business management and high technology could bring in new businesses to diversify the local economy. Specialized study in, for example, alternative energy sources could return Dare County to the forefront of innovation, in the tradition of the Wright Brothers. A diverse economy would also be a more year-round economy.

5. Traffic Congestion

Traffic congestion has become the most visible negative consequence of Dare County's continuing popularity as a tourism destination. Some sections of the County's major roadways come to a complete standstill during peak summer visitation periods. As the County's seasonal population has grown, the number of vehicles and vehicle trips on the county's major roadways has grown exponentially. Solutions must be found to address this growing problem. Such solutions must include alternatives other than simply adding another lane on the highway.

6. U.S. 158 Bypass

The U.S. 158 bypass exemplifies the type of roadway conditions that most Dare County residents disdain. This uninterrupted, broad expanse of pavement divides many of the County's northern beach communities in half. A large number of driveways and turning movements, combined with a central turning lane (a.k.a. "chicken lane", "suicide lane") create a traffic environment conducive to accidents. Discussions about widening the roadway to create even more traffic lanes make the U.S. 158 corridor all the more hazardous for pedestrians and bicyclists and would further erode the appearance of the area. Converting the current "suicide lane" into a landscaped central median with controlled turning intersections could do much to improve both the function and appearance of U.S. 158.

7. Growth Generally

There appears to be a growing sentiment, (more noticeable than just five or six years ago) in which people are repeating the question "How much growth is enough?" Underlying this question are concerns that the County's rapid growth is exceeding the available infrastructure (i.e. especially roads, water, and sewer) and causing significant adverse impacts on the natural environment. Questions also arise concerning the fundamental purpose of more growth. Some suggest that the area's citizens should together decide upon a clear vision for the future and then employ the land use plan and other growth management tools to work toward that vision.

8. Midway Bridge

The Midway Bridge from Mann's Harbor to Roanoke Island will introduce a variety of changes to the landscape on both sides of the new bridge. Most public concerns relate to new traffic patterns that will occur as a result of the new bridge, as well as the drainage situations created by the approaches to the bridge. There is a good opportunity to coordinate land use and transportation planning at these important new intersections.

9. Affordable Housing

As the cost of real estate continues to mount, construction costs escalate, and the demand for vacation property bids up rental rates to record levels each year, affordable housing has become increasingly rare on the Outer Banks. The problem is particularly acute for young families looking for their first home, and for seasonal workers in need of temporary housing during peak season months. Innovative development practices, such as allowing apartments above retail stores and restaurants, may be part of the answer.

10. Biking and Walking Paths

The gradual introduction of biking and walking paths on Roanoke Island and in several of the northern beach communities has heightened public awareness as to the desirability and usefulness of such facilities. Area citizens view such paths as a very visible, beneficial amenity for both seasonal visitors and year-round residents alike. The prospect of installing a complete network of biking and walking paths throughout Dare County has near universal support.

11. Intergovernmental Cooperation

The need for improved intergovernmental cooperation cuts across all levels of government and could potentially involve a host of functions. At the local intergovernmental level, examples include the consolidation of law enforcement and fire protection services and greater cooperation between the County and its municipalities concerning land use planning. At the federal-local government interface, Dare County has vital interests related to the management of lands under the jurisdiction of the Park Service, the Fish and Wildlife Service, the U.S. Coast Guard, etc. These interests should be borne out in the land use plan.

12. Road Corridor Appearances, Generally

Residents have observed a discrepancy in community appearance and development standards in the unincorporated County when compared to the municipal areas of Dare County. Concerns may be identified at two levels. The first level relates primarily to code enforcement issues such as junked cars, construction equipment, trash in yards and other eyesores. The second includes broader issues related to development standards controlling signage and the proliferation of chain store strip development along some of the County's most heavily traveled roadways. Will Dare County preserve the uniqueness that is the Outer Banks or will it become "Anywhere USA"?

13. Solid Waste Management/Recycling

Citizens are aware that Dare County has a solid waste management problem heightened, in part, by the lack of suitable disposal sites and by the distances that trash haulers must travel to reach disposal locations outside the County. Greater recycling has the potential to reduce the volume of waste that must be handled. Support for greater recycling may come from seasonal visitors to the area who are already accustomed to recycling programs in their home communities.

14. Underground Utilities

Support for the undergrounding of utilities is based upon both functional and aesthetic objectives. The undergrounding of utilities, including telephone, cable, electricity, and broadband Internet, would make the County less vulnerable to service interruptions during storm events, as well as improving the aesthetic image of the area.

15. Highway NC 12, Function

The functional utility of Highway NC 12 is threatened by two problems. The first problem relates to the increasing traffic congestion and total reliance upon this single artery for all north-south travel on Hatteras Island. Traffic during peak summer season months can slow to a crawl. The second problem relates to the growing vulnerability of the highway to oceanside erosion and washover. The challenges of building on a dynamic barrier island have become more evident as the efforts to save NC 12 are compromised by an unrelenting ocean. County policies should provide clear direction to State and Federal authorities in resolving this issue.

16. Highway NC 12, Appearance

Highway NC 12 has many of the appearance problems noted above under **Road Corridor Appearances, Generally** (#12 above). Foremost among the concerns are signage problems including, particularly, the elimination of off-premises signs and sandwich board signs. Observers noted that billboards and sandwich signs are already prohibited in the County zoning ordinance but there is little enforcement. Potential solutions include a concerted effort at code enforcement of existing standards or the establishment of "special highway corridor zoning" similar to that already in place on Roanoke Island.

17. Shoreline Erosion, Stabilization and Renourishment

Shoreline erosion is an ongoing challenge that threatens both public infrastructure investments, such as roads and utilities, as well as private property, such as oceanfront and soundfront real estate. Beach renourishment is the favored method of addressing shoreline erosion along the oceanfront.

18. Mass Transit

Mass transit has merit in Dare County. The limited number of transportation routes in the County are becoming increasingly congested, particularly during the peak summer season. The linear nature of the county's barrier island communities lends itself especially well to a north-south transit service. Mass transit could provide a transportation alternative to workers, especially if land use and development patterns were designed to support transit stops.

19. Channel Maintenance

Water dependent commerce and recreation are at the foundation of Dare County's economy and way of life. Commercial fishermen and recreational boaters alike rely upon somewhat predictable navigation channels for industry, enjoyment and safety on the water. Can the County take on a more proactive role in seeing that primary navigation channels remain clear and open?

20. Bonner Bridge

Recent discussions about an uncertain future for Bonner Bridge over Oregon Inlet has all Dare County citizens, but particularly Hatteras Island residents, very concerned. The Land Use Plan must take a firm stance in support of this vital transportation link.

21. Large Rental Homes

Many residents are concerned about the impacts that large rental homes are having on the County's infrastructure and services, as well as on other residences in their vicinity. Such impacts include cars parked all over the yard and street, excessive paved areas (to park multiple cars), trash cans overflowing, light pollution from swimming pool lights left on all night, and septic systems unable to keep up with the volume of wastewater generated. Other issues relate to the loss of community character and include the destruction of traditional waterfronts being displaced by expensive rental homes, historic beach cottages being torn down and replaced by "mini hotels" and views to the water being totally blocked by these huge structures. From a regulatory standpoint, there are concerns that such "mini hotels" are subverting the intent of the Dare County zoning ordinance with regard to single-family residential districts.

22. Beach and Sound Access

As the beach and sound waterfronts of Dare County become increasingly developed, opportunities for public access to the water become more scarce. The number of waterfront access sites is simply not increasing at a rate commensurate with the overall population growth of the county. At the same time, water access is fundamental to the attractiveness of Dare County as a place to live and vacation.

23. Open Space and Greenways

Despite the relatively large percentage of the County land area in public ownership, there is, nonetheless, concern for a lack of greenspace, particularly within developed areas. Efforts to procure more greenspace might include cooperative arrangements for the multiple uses of lands held by the federal government, and greater use of cluster zoning.

24. Parks and Recreation

In an area like Dare County, virtually surrounded by nature and the outdoor opportunities made available, it is sometimes easy to overlook traditional park and recreation needs. Ball fields, tennis courts, and other structured recreational facilities are in heavy demand in Dare County. More are needed, particularly in those parts of the County currently underserved.

25. Wetland Conservation

Wetlands contribute to the environmental health of the estuarine ecosystem in a number of important ways. Wetlands absorb and filter stormwater runoff; they help reduce flooding; they provide nursery habitat for estuarine wildlife; and they protect soundside shorelines from wave action and erosion. Their conservation should continue to be an important objective of the Dare County Land Use Plan.

APPENDIX B-2

Section 3

Detailed Listing of Growth and Development Issues Comparisons by Category, Ranking and Location of Meeting

Total Votes from all 3 Meetings	Issues from Northern Beaches Meeting October 3, 2000	Votes	Issues from Hatteras Island Meeting October 4, 2000	Votes	Issues from Roanoke Island/Mainland Meeting, October 5, 2000	Votes
39	Water Quality, Sewage Disposal, and Stormwater Management	12	Water Quality, Sewage Disposal, and Stormwater Management	8	Water Quality, Sewage Disposal, and Stormwater Management	19
	Maintaining water quality in the sounds	4	Protect/increase water quality in sounds working in concert with our neighboring counties. i.e. septic tanks, stormwater runoff, farm runoff, etc.	4	Water quality -- ocean, sounds, groundwater, aquifers -- new methods regarding waste and alternatives to central sewage	5
	Problems with water runoff and drainage - e.g. parking lots to have permeable material rather than asphalt.	4	Would like to see comprehensive stormwater management plan implemented (in process now) -- needed 4 years ago (from last land use plan)	4	Sound water quality	5
	Water quality in sounds -- for humans and fish life -- stormwater runoff, hogs upstream, etc..	4			With new bridge discharging to U.S. 64 going west -- they're creating a major drainage problem -- will drain primarily into three yards	3
					Unlined dump sites in regard to water and ground quality	3
					Stormwater management concerns	2
					Clean out existing ditches	1
					Stormwater management in Manteo -- cleaning out ditches is not enough. Look at new technologies -- other than "dumping water overboard quickly"	0

35	Water Supply and Sewage Treatment	8	Water Supply and Sewage Treatment	1	Water Supply and Sewage Treatment	26
	Septic/sewage disposal -- commercial and domestic -- e.g. Inspect periodically -- there probably Won't be central sewage on the beach side	4	If we continue development as in the past, we need to be looking and water at sewer.	1	Fire protection for unincorporated areas. Extension of waterlines.	7
	Countywide sewer and water	3			Countywide central sewerage	6
	Inspection of existing sewage systems. (Especially close to estuaries)	1			Water quality -- ocean, sounds, groundwater, aquifers -- new methods regarding waste and alternatives to central sewage	5
	All county infrastructure -- e.g. water supply and distribution, sewage treatment, etc.	0			Quality of drinking water. Particularly well water.	4
					Manteo central sewer not expand out into County areas, to prevent sprawl.	2
					Central water throughout County	1
					Sewerage system or solution for Stumpy Point	1

28	Economic Diversification	13	Economic Diversification	2	Economic Diversification	13
	Diversification of economic base (not just tourism)	10	Diversification of County's economy -- more technology -- schooling for technology -- not total reliance on tourism	1	Form an economic development council to allow our young college graduates to come back here (bring in other types of jobs -- white-collar) big insurance company, e.g.	5
	Incubator for new businesses and commerce	2	Set up business incubators as joint venture between local government, Chamber of Commerce, and private sector -- small, affordable spaces for startup businesses.	1	Creating new economic zones for redevelopment	4
	Incentives to small, nonpolluting industry to locate on the mainland	1			Economic development other than tourism.	4
	Attracting a permanent workforce	0			Expansion of year-round jobs	0
	Need for development of higher paying jobs	0				

24	Schools and Education	10	Schools and Education	6	Schools and Education	8
	Educational opportunities above the "14 year level"	6	School -- provide same opportunities to kids on Hatteras as in other areas of the County (e.g. qualified teachers)	5	Dare County to approach North Carolina University system to get real university here -- for business management and high-technology -- would create winter population, would attract jobs/companies too.	4

	Improvement costs of school system.	2	Access to new elementary school -- current access is through a residential area -- more direct access, NC 12 and new power lines.	1	Planning is for the future -- we should be the first small community to support alternative energy in a big way. (Look at what Wright Brothers did) Start a college here for solar, wind power, etc.	4
	Vocational training	1	Local higher education opportunities -- to at least 4 year college-level	0		
	Need a twenty-year plan -- for schools (elementary, college, etc.), senior citizens	1				

22	Traffic Congestion	12	Traffic Congestion	2	Traffic Congestion	8
	Traffic congestion in entire County	6	Traffic, congestion, safety -- need for alternative travel study, mass transit, additional ferry services, etc.	2	Flow of traffic 64/264 through Manns Harbor, Manteo to the beach, especially in summer. New bridge and "bypass" of Manteo may help.	4
	What's the feasibility of alternate north -- south routes to link our communities?	4			Concern for maintenance and minimum standard for old roads	2
	Heavy traffic on Collington Road West-- new development will add to the problem	2			Summer traffic congestion (countywide)	2
					Danger of Collington Road and possible improvements	0

21	U.S. 158 Bypass	12	U.S. 158 Bypass		U.S. 158 Bypass	9
	Elimination of middle turn lane from 158 -- "the chicken lane".	4			Overtaxing our infrastructure -- e.g. U.S.158 going to seven lanes -- (not advocating) the answer shouldn't always be more, bigger and "better". Rethink our ultimate goal.	8
	Widening of 158 -- adding two more lanes -- how many more can we have without just becoming a big parking lot?	2			Middle lane of U.S. 158 -- elimination	1
	Traffic hazards, excessive driveway access -- too many turnings on and off major streets	1				
	No crown on bypass creates hydroplaning problems	1				
	Overhead crosswalks -- over 158	2				

20	Growth Generally	2	Growth Generally	5	Growth Generally	13
	Dealing with growth in reference to quality of life	1	Ask the question: "What's the limit?" (Revisit County and Hatteras Island Carrying Capacity Study)	5	Plan for County's desirable density in 2040, (the right density) and then work it backward. (What we want it to look like, quality of life/language of "tourists" versus	8

					"visitors/guests"	
	How much more growth can the County take? Based on infrastructure, roads, environment, etc.	1	Does anyone on planning board/in planning department know how close Hatteras Island in the County are to build out?	0	At what time do we stop collecting a special tax to bring even more people here? -- when we're already maxing out our infrastructure.	5

20	Midway Bridge (Roanoke Is)		Midway Bridge (Roanoke Is)		Midway Bridge (Roanoke Is)	20
					How to deal with new traffic pattern on Roanoke Island at this end of the bridge.	7
					Flow of traffic 64/264 through Manns Harbor, Manteo to the beach, especially in summer. New bridge and "bypass" of Manteo may help.	4
					Highway 64 West in Manns Harbor -- traffic light to be considered at new bridge where traffic comes off.	3
					With new bridge discharging to U.S. 64 going west -- they're creating a major drainage problem -- will drain primarily into three yards	3
					Structuring of the midway intersection when the new bridge opens	2
					Intersection of the Manns Harbor side of new bridge	1
					Inclusion of corridor from new bridge to Baum Bridge	0
					Concern for "old" 64 corridor	0

18	Affordable Housing	8	Affordable Housing	4	Affordable Housing	6
	Affordable housing	5	Affordable housing for our residents -- workforce -- single-family and multi-family.	4	Affordable housing -- lack of it -- affecting workers for every industry.	3
	Multifamily affordable housing -- especially for the workforce	2			Affordable housing	3
	Affordable housing, single-family -- shortage	1				

17	Biking and Walking Paths	4	Biking and Walking Paths	8	Biking and Walking Paths	5
	County walk/bike path that connects all the communities and takes advantage of existing paths in So. Shores, Manteo, Kitty Hawk, etc.	2	Bike and walk paths -- intra Hatteras Island villages, exclusive of Park Service properties.	4	Equity throughout County with amenities, i.e. bike paths	3
	Overhead crosswalks -- over 158	2	Bike paths -- how to fund, address from	4	Require developers to put sidewalks in	1

			a safety standpoint. E.g. people coming out of driveways.		residential areas.	
	Expansion of bike trails	0			Upgrading of Airport Road and addition of bike paths	1
17	Intergovernmental Cooperation	8	Intergovernmental Cooperation	4	Intergovernmental Cooperation	5
	Regionalization -- consolidation of our municipalities e.g. police department, fire department, etc.	5	Government owns 80 percent of land -- better sharing of land area between local government and federal government	4	More cooperation between the County and municipalities regarding connections of land use plans	3
	Duplication of services	3			Consolidation of services	1
					Better coordination between Dare Co and federal agencies, i.e. Coast Guard, Wildlife, Park Service, etc.	1
17	Road Corridor Appearances, Generally	3	Road Corridor Appearances, Generally		Road Corridor Appearances, Generally	14
	Enforcement of existing regulations: wetlands, signage, things that are supposed to help with our growth issues	3			We don't have any appearance ordinances in the unincorporated area. Need to address appearance at least along the right-of-way (Hope your company comes at night.) (e.g. old cars, construction equip., trash)	7
					We're beginning to lose those qualities that visitors come to see. We're starting to look like everywhere else. (Strip development, chain stores, fast food restaurants, etc.)	4
					Elimination of abandoned cars and other eyesores.	3
14	Solid Waste Management/Recycling	4	Solid Waste Management/Recycling	7	Solid Waste Management/Recycling	3
	Long-range plan on trash disposal is needed.	4	Trash hauling/disposal for whole County, but especially for Hatteras Island.	4	Cost of landfill dumping -- no solution but it's a problem (construction debris going to Currituck instead of going to C&D landfill.)	3
			Expand our recycling program -- centers in every village on Hatteras Island.	3		
14	Underground Utilities	7	Underground Utilities	7	Underground Utilities	
	All weather utilities including phone, cable, and broadband Internet. (Electricity too)	5	Reduction of utility outages	4		
	Hurricane preparedness and mitigation recovery -- underground utilities,	2	Underground or buried electric cables -- in favor of	2		

	especially power. Cooperation between the County and Feds on dune maintenance and sand fencing.				
			Visual impact of aboveground powerlines	1	

13	NC 12, Function	13	NC 12, Function		NC 12, Function
	Make NC 12 an all weather Highway	8			
	Highway 12 access -- so congested now. It's going to get worse, plus erosion problem. How to keep it viable. -- travel time is so long.	3			
	Hurricane preparedness and mitigation recovery -- underground utilities, especially power. Cooperation between the County and Feds on dune maintenance and sand fencing.	2			

12	NC 12, Appearance	12	NC 12, Appearance		NC 12, Appearance
	Control signage on Hatteras Island -- eliminate off premises signs (billboards)	5			
	Enforcement of existing regulations: wetlands, signage, things that are supposed to help with our growth issues	3			
	Corridor zoning for all of Hatteras Island -- e.g. as in Manteo, some controls over major thoroughfares. -- Could work in Hatteras Village, in particular.	3			
	Eliminate sandwich board signs, Highway 12 right-of-way -- they're all over. (As prohibited in County zoning ordinance)	1			
	Some type of land use control along NC 12 -- e.g. junkyards, so much trash -- eyesores and danger -- reasonable restrictions.	0			

12	Shoreline Erosion, Stabilization and Renourishment	7	Shoreline Erosion, Stabilization and Renourishment	5	Shoreline Erosion, Stabilization and Renourishment
	Beach nourishment	4	Beach nourishment -- areas with high erosion should be renourished.	5	
	Shoreline erosion rates, threatened structures and infrastructure	3			
	Stabilization of sound side erosion	0			

	Storms/storm damage. Shifting islands -- what to do about NC 12, houses falling into ocean	0				
--	--	---	--	--	--	--

11	Mass Transit	3	Mass Transit	2	Mass Transit	6
	Public mass transit	3	Traffic, congestion, safety -- need for alternative travel study, mass transit, additional ferry services, etc.	2	Look toward public transportation -- deal with traffic congestion and give workers an alternative (buses, water taxis) land use patterns to support transit. (Perhaps look at Wright Brothers, other major locations as stops)	6
					public transportation (affordable)	0

10	Channel Maintenance	6	Channel Maintenance	4	Channel Maintenance	
	County should look into dredging some channels -- people constantly hitting bottom	4	Oregon Inlet, maintenance and engineering to keep the inlet open, for sand bypass and for use of sand in renourishment	2		
	Maintenance of shipping channels	2	Need to deepen sound navigation channels, especially for commercial use.	2		

9	Bonner Bridge	5	Bonner Bridge	4	Bonner Bridge	
	Undependability of passage on NC 12 on Bonner Bridge and south	2	Oregon Inlet Bridge -- What are we going to do about it?	4		
	Bonner Bridge -- replacement, reconstruction (keep the County linked)	2				
	Bridges: maintenance of and development of new bridges	1				

9	Large Rental Homes	5	Large Rental Homes	4	Large Rental Homes	0
	How to deal with "mini hotels" enormous "single-family" houses for rent	3	Regulation of house size, or regulations associated with "big house" problems -- cars parked all over, trash cans overflowing, too much concrete parking area, etc.. (Rental mini-motels)	3	Define "single family home" in regard to "mini-hotels"	0
	Impact of large rental homes	2	Preservation of historic places and ways of life. E.g. any older home, waterfront "home-tels" are forcing out commercial fishing.	1		
	Ocean and sound side developments blocking views of the water from roadways	0				

8	Beach and Sound Access	2	Beach and Sound Access	4	Beach and Sound Access	2
	Expansion of beach accesses	0	More public accesses to both sound and ocean.	4	Sound access on the east side of Roanoke Island	2
	Expansion of accesses to the sounds	2				

7	Open Space and Greenways	2	<i>Open Space and Greenways</i>	4	Open Space and Greenways	1
	Rapid, unchecked growth versus the need for open/greenspace	2	Government owns 80 percent of land -- better sharing of land area between local government and federal government	4	Cluster zoning to save greenspace, we don't have to have lots so big.	1
	Future opportunities of greenways	0	Smart growth, balancing growth with the need for green and open space.	0		

7	Parks and Recreation	0	Parks and Recreation	3	Parks and Recreation	4
	Common land devoted to the youth of our community -- parks and recreation as in other communities	0	Need greenspace, parks, tennis courts in middle of Hatteras Island (Rodanthe, Waves, Salvo)	3	Parks and recreation areas -- public -- all groups, all over the County.	4
	Creating new recreational areas (ball fields, etc..)	0				

6	Wetland Conservation	3	Wetland Conservation	3	Wetland Conservation	
	Stricter rules on wetland transfers -- (mitigation away from your property as excuse to fill wetlands)	2	Enforcement of existing regulations: wetlands, signage, things that are supposed to help with our growth issues	3		
	Protection of sound side vegetation (weeds and grasses)	1				
	Wetland protection is important for water quality, many other things	0				

5	Beach Driving	5	Beach Driving		Beach Driving	
	Preserve beach driving -- plans at moment could lead to severe restrictions - - need beach driving for Fall economic boost.	5				

5	Emergency Management	1	Emergency Management	2	Emergency Management	2
	Development of better emergency management system	1	Hurricane preparedness and mitigation recovery -- underground utilities, especially power. Cooperation between the County and Feds on dune maintenance and sand fencing.	2	Controlling density in flood prone areas -- e.g. Pirates Cove so dense (in floodplains).	1
					Study of loss of tax base in case of catastrophic event	1

5	Mid-County Bridge	2	Mid-County Bridge	3	Mid-County Bridge	
	Bridges: maintenance of and development of new bridges	1	Mid-County Bridge in Currituck to alleviate traffic problems up there.	3		
	We need big help in Duck -- all those people going up to Currituck-- if they widened NC 12 in Duck, it would destroy the village. (Obvious solution is midcounty bridge)	1				

4	Code Enforcement	3	Code Enforcement		Code Enforcement	1
	Enforcement of existing regulations: wetlands, signage, things that are supposed to help with our growth issues	3			Development of minimum housing standards.	1

4	Mosquito Control	1	Mosquito Control	2	Mosquito Control	1
	Mosquito control -- information, system of control ditches to keep areas drained.	1	In Buxton, mosquito control -- both drainage and spraying.	2	Elimination of mosquitoes and their breed areas.	1

3	Light Pollution	0	Light Pollution	3	Light Pollution	
	Light all night long from private swimming pools of rental houses	0	Lights and light pollution/lighting ordinance for the County. (Security lighting could be shielded, ground lighting of signs could be controlled)	3		

2	Communications Technology	2	ommunications Technology		ommunications Technology	
	Development of a broader band of Internet access	1				
	Telecommunications services quality	1				
	Opportunity to renegotiate cable contract to bring in the latest technology -- the County should drive the contract rather than the contractor	0				

2	Use of Waterways	2	Use of Waterways		Use of Waterways	
	Uses in the waterways -- increasing uses and conflicts -- e.g. kayakers, jet skis, swimmers, fishermen, etc.	2				
2	Parking in Manteo		Parking in Manteo		Parking in Manteo	2
					Improve parking ion Manteo	2
1	Architectural Planning	1	Architectural Planning		Architectural Planning	
	Architectural planning-- put planning in place to control aesthetic appearance of our towns	1				
1	Borrow Pits		Borrow Pits		Borrow Pits	1
					Concern about borrow pits on Roanoke Island -- lowering land elevation.	1
1	Historic Preservation		Historic Preservation	1	Historic Preservation	
			Preservation of historic places and ways of life. E.g. any older home, waterfront "home-tels" are forcing out commercial fishing.	1		
1	Offshore Drilling	1	Offshore Drilling		Offshore Drilling	
	Impact on the county in the event of offshore drilling	1				
0	Clearcutting of Trees		Clearcutting of Trees	0	Clearcutting of Trees	
			No unnecessary clearcutting of properties being developed.	0		
5	Miscellaneous	0	Miscellaneous		Miscellaneous	5
	Lighted rest areas for safety	0			Better use of 800 plus acres of land between Manns Harbor and Stumpy Point.	3
					Future development of Skyco area	2
					Expansion of runway and commercial services at airport	0

Wetlands

Existing policies

Policy 2.1.2 (a) Dare County advocates the use of existing State and Federal regulatory programs as adequate measures for protecting and preserving coastal wetland areas of environmental concern.

Policy 2.1.2 (h-1) Dare County supports the Coastal Resources Commission’s policy to mitigate losses of coastal resources for those projects shown to be in the public interest as defined by the standards in 15NCAC7M.0700 et. Seq. and only after all other means of avoiding or minimizing such losses have been exhausted.

Policy 2.1.2 (h-2) Dare County supports the U.S. Army Corps of Engineers nationwide permit program.

Survey: Wetland loss due to PUBLIC purpose projects is acceptable if replaced by manmade wetlands.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1894	49.3	1796	46.8	145	3.8

Survey: Wetland loss due to PRIVATE purpose projects is acceptable if replaced by manmade wetlands.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1412	36.3	2358	60.6	120	3.1

Alternatives for Consideration

- a. Dare County supports wetland mitigation in order to accommodate public purpose projects.
- b. Dare County does not support wetland mitigation in order to accommodate public purpose projects.
- c. Dare County supports wetland mitigation in order to accommodate public purpose project only when other alternatives have been exhausted.
- d. Dare County supports wetland mitigation in order to accommodate private purpose projects.
- e. Dare County does not support wetland mitigation in order to accommodate private purpose project.
- f. Dare County supports wetland mitigation in order to accommodate private purpose projects only when other alternatives have been exhausted.

Staff Comments: All of the existing policies are adequate and continue to represent the County’s positions on wetland issues. Although the issue of wetland mitigation for public purpose projects did not receive widespread support among the survey respondents, there are some instances where wetland mitigation is unavoidable. The new Midway Bridge is one example of a public purpose project that involves wetland mitigation.

Ocean Shoreline

Existing policy --

Policy 2.1.2 (e) Oceanfront shoreline development should continue to be managed to protect and preserve the natural resources along the oceanfront.

Survey: Oceanfront setbacks for development should be increased.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
2962	81.0	548	15.0	147	4.0

Alternatives for Consideration

- a. An increase in the oceanfront setback should be advocated.
- b. The setback formula should remain unchanged.
- c. A decrease in the oceanfront setback should be advocated.
- d. The setbacks on the oceanfront should be eliminated.
- e. Increase of oceanfront setbacks should be considered during reconstruction and/or a component of a post-disaster reconstruction plan.

Staff Comments: Currently, there is an initiative under study by the Coastal Resources Commission to increase the oceanfront setbacks for large residential structures. Staff is unsure of the logic behind this initiative and questions the wisdom of the CRC's actions compared to the controversy sure to evolve as the initiative proceeds to public hearing. Although the survey results indicate support for an increase in oceanfront setbacks, the current setbacks applied to new construction are adequate. Staff feels the existing policy is adequate, however, it may be helpful to include some language specifically addressing an increase in setbacks in response to the CRC’s initiative.

Estuarine Shoreline

Existing Policies –

2.1.2 (b) Estuarine shoreline development should continue to be managed to protect and preserve the natural resources of the estuarine waters. In addition, development located in estuarine waters shall be water-dependant, related to development on the shoreline, or an accessory use to a structure located on the estuarine shoreline.

2.1.2 (d-1) Estuarine shoreline development should continue to be managed to protect and preserve the natural resources along the estuarine shoreline.

2.1.2 (d-2) Dare County supports the installation and maintenance of estuarine bulkheads aligned and permitted by the US Army Corps of Engineers and the Division of Coastal Management. Whenever possible, offshore estuarine breakwaters may be considered as an alternative to bulkhead construction.

2.1.6 Development of sound and estuarine islands shall be carefully managed. Low intensity uses such as open space, recreation, and low density residential development shall be the preferred uses of these islands.

Survey: The installation of bulkheads along the estuarine shoreline should be discontinued.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1249	37.0	1819	53.9	303	9.0

Alternatives for Consideration

- Continue to support the use of estuarine bulkheads in policy statements.
- Adopt policies that do not support the use of estuarine bulkheads.
- Encourage alternate shoreline protection techniques in addition to estuarine bulkheads
- Encourage alternate shoreline protection techniques in lieu of estuarine bulkheads.

Survey: State regulations mandating vegetative buffers along the estuarine shoreline should be supported.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
2879	74.1	519	13.4	225	5.8

Alternatives for Consideration

- a. Adopt policies that recognize the importance of estuarine buffers but emphasize the need to monitor the program and other possible CRC initiatives regarding estuarine shoreline protection and development.
- b. Adopt policies encouraging the repeal of State-mandated vegetative buffers along the estuarine.

Survey: Dare County should **BAN** the use of personal watercraft (jet skis) in the waters of unincorporated Dare County.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1930	50.5	1660	43.5	228	6.0

Survey: Dare County should **REGULATE** the use of personal watercraft (jet skis) in the waters of unincorporated Dare County.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
2995	78.0	655	17.0	193	5.0

Survey: Dare County should limit the number of personal watercraft (jet skis) rental businesses in unincorporated Dare County.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
2721	71.3	870	22.8	227	5.9

Alternatives for Consideration

- a. Dare County should adopt policies that encourage the outright ban of personal watercraft
- b. Dare County should adopt policies that encourage the regulation of personal watercraft
- c. Dare County should adopt policies that encourage limiting the number of PWC rental businesses in Dare County.

Staff Comments: Policies 2.1.2 (b), 2.1.2 (d-1) and 2.1.6 included above are satisfactory in staff's opinion.

If the Planning Board is inclined to continue support of estuarine bulkheads, then a more strongly worded policy on bulkheads may be needed since there is currently an effort within the Coastal Resources Commission to discourage/oppose the use of estuarine bulkheads. Staff suggests

that a general policy on estuarine shoreline protection measures and acceptable activities may be needed to provide direction for future endeavors by the State/CRC.

Earlier this year, the Dare County Board of Commissioners sought assistance from the General Assembly in the form of a local bill that authorized Dare County to adopt ordinances to regulate and control personal watercraft and other activities in our territorial waters. This legislation was adopted in May and now the County can address the use of PWC as desired. A policy on the preferred methods regarding personal watercraft would be the appropriate first step.

Public Trust Waters

Existing Policies

Policy 2.2.2(c-1) Dare County supports the preservation and protection of the public's right to access and use of the public trust areas and waters.

Policy 2.1.2 (c-2) Dare County advocates a management program at the State or Federal level to address the competition among recreational users of public trust waters. However, Dare County reserves the right to review, comment, advocate, or oppose any proposed regulations or programs that affect the public trust waters.

Survey: Competing recreational uses in public waters should be regulated.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
2709	71.3	870	22.8	227	5.9

Alternatives for Consideration

- a. Competing recreational uses in public waters should be left unregulated.
- b. Competing recreational uses in public waters should be regulated by State and Federal agencies.
- c. Competing recreational uses in public waters should be regulated by Dare County.

Staff Comments: The issue of competition among recreational users of public trust waters does not seem as pronounced as it was during the 1994 update. However, staff still feels that this issue is worthy of a policy statement. Both of the existing policies are adequate, unless the Planning Board's discussion proves otherwise. As previously mentioned in the worksheets on estuarine shoreline, the County has been authorized by the NC General Assembly the right to regulate to regulate our public trust waters, both estuarine and ocean.

Groundwater Resources

Existing Policies:

Policy 2.1.2 (f) Development in any public water supply AEC should be managed to protect the long-term viability of the groundwater resources.

Policy 2.1.4 Dare County recognizes groundwater resources as an essential element for drinking water supply. The management of groundwater resources and their protections is a priority issue in Dare County.

Policy 2.3.1 (a) same as 2.1.4

Survey: Protection of groundwater should be a priority.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
3857	96.5	68	1.7	72	1.8

Alternatives for Consideration

- a. A study and/or groundwater quality monitoring program should be established in Dare County.
- b. Protection of groundwater is not a high priority in Dare County.

Staff Comments: Both of the existing policies on groundwater protection are satisfactory and staff sees no reason for a change. A reference to a groundwater monitoring program may be considered as an implementation strategy for these policies.

Surface Water Quality

Existing Policy –

Policy 2.1.5 (a) Dare County supports efforts by local, state and federal agencies to preserve water quality under existing natural conditions and to improve water quality where a decline has been identified. These efforts include the designation of Outstanding Resources Waters and shellfish water classification criteria established by the North Carolina Division of Environmental Management.

Survey: Surface water quality should be a high priority.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
3798	96.4	70	1.8	74	1.9

Alternatives for Consideration

- a. Additional regulatory efforts to manage stormwater runoff should be adopted.
- b. Point source discharges into receiving waters should be opposed.
- c. Additional State regulations to address water quality issues on a basin wide approach should be encouraged and supported by Dare County.
- d. Surface water quality protection should not be a high priority.

Staff comments: Over the last few years, there has been an effort to address water quality on a basin-wide approach instead of just regulating the coastal regions. The basin-wide approach recognizes that water quality is an inland issue as well as a coastal issue and should be regulated as such, since a lot of water quality degradation actually occurs inland and not solely from development on or near the shoreline. Staff suggests that a new policy recognizing the importance of water quality beyond the 20-county CAMA region be included in the update. During the public workshops held in October 2000, the attendees ranked surface water quality, particularly estuarine water quality as their highest concern.

Shoreline Access

Existing Policy

Policy 2.3.10 Dare County supports North Carolina’s shoreline access policies as stated in 15NCAC7H, Section.0300. Dare County recognizes shoreline access to both ocean and estuarine shorelines as a key component in the local tourist economy.

Survey: Additional programs to provide more shoreline access should be initiated.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1513	40.2	2001	53.1	252	6.7

Alternatives for Consideration

- a. Dare County should support efforts to increase shoreline access opportunities.
- b. Dare County should oppose efforts to increase shoreline access opportunities.

Staff Comments: The general statement of the 1994 policy remains effective in recognizing that shoreline access is essential to Dare County tourist economy. Although, the survey question reflects a slight majority opposed to more shoreline access facilities, this majority is mainly non-

residents, many of whom own oceanfront or soundfront property and think of additional shoreline access opportunities as an intrusion of their privacy.

Channel Maintenance

Existing Policy

Policy 2.3.11 Dare County advocates routine maintenance of all existing navigable channels and will work to secure permit authorization whenever necessary.

Policy 2.3.11-b Dare County advocates and supports the permit authorization and federal funding necessary to construct twin jetties to stabilize Oregon Inlet.

Staff Comments: The survey did not contain any questions pertaining to channel maintenance. Workshop attendees stressed the importance of reliable navigation channels to commercial fisherman and recreational boaters. Recently, the National Park Service has indicated that all dredging work at Oregon Inlet will require their approval as special use permits. Based on this development, the language in included in Policy 2.3.11 may need adjusting to recognize the importance of maintenance dredging.

Beach Nourishment

Existing Policy

Policy 2.3.12 Beach nourishment is Dare County’s preferred shoreline management alternative.

Survey: Which of the following options should be used to fund shoreline stabilization.

Results:

Occupancy Tax		Special District Tax		User Fees		Federal/ State Funding		Property tax	
#	%	#	%	#	%	#	%	#	%
1780	21.9	791	9.7	1604	19.8	3156	38.9	784	9.7

Survey: The barrier island communities of Dare County should implement which of the following:

Results:

Occupancy Tax		Special District Tax		User Fees		Federal/ State Funding		Property tax	
#	%	#	%	#	%	#	%	#	%
1780	21.9	791	9.7	1604	19.8	3156	38.9	784	9.7

Alternatives for Consideration:

1. Use existing policy supporting beach nourishment as the preferred shoreline management alternative.
2. Draft new policy that does not support beach nourishment and discourages further expenditure of funds for construction of a nourishment project on the northern beaches of Dare County.

Staff Comments: For the past decade, Dare County has served as the non-federal sponsor of a detailed study on alternatives for managing erosion along the northern beaches. The Hatteras Island beaches are owned by the federal government with the NC Department of Transportation delegated responsibility for insuring that access to the island is maintained. There appears to be consensus that beach nourishment is the preferred alternative.

Mineral Resources**Existing Policy**

Policy 2.2.3 Dare County advocates local level management of those mining activities that are not subject to permit authorization by the State of North Carolina.

Staff Comments: There was no issue related to mineral production included on the survey. The current policy is acceptable however, a specific policy on beach nourishment (sand) as a mineral resource not subject to traditional mining limitations may be worthy of consideration.

Fisheries Resources**Existing policies**

Policy 2.2.4-a The continued productivity of commercial and recreational fisheries shall be fostered through restoration and protection of the unique coastal ecosystems upon which they depend.

Policy 2.2.4-b Dare County supports measures to protect and preserve designated primary nursery areas.

Policy 2.2.4-c State and federal agencies with the authority to manage fisheries resources should be the responsible parties for the resolution of conflicts involving fisheries resources in Dare County. However, Dare County reserves the right to review, comment, advocate, or oppose any proposed regulations or programs that may affect the fisheries resources or management.

Policy 2.2.4-d Dare County supports the development of the aquaculture industry as an alternative source of fishery production.

Survey: The competition for marine resources (fish) between commercial and recreational fisherman should be managed and regulated.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
2814	74.0	794	20.9	194	5.1

Alternatives for Consideration

- a. Dare County should seek legislative authority from the North Carolina General Assembly to establish regulations to address the competition for marine resources between commercial and recreational fishermen.
- b. Dare County should continue to rely on State and Federal agencies to address the competition for marine resources between commercial and recreational fishermen.
- c. Competition for marina resources between commercial and recreational fishermen should not be regulated at the local level.

Staff Comments: The existing policies are satisfactory in staff’s opinion.

Maritime Forests

Existing Policy

Policy 2.1.2 (i) Dare County advocates a combination of limited development guided by the local SED-1 zoning ordinance and a program of public acquisition to manage the Buxton Woods maritime forest.

Staff Comments: There was no issue related to maritime forests included on the survey. Staff recommends use of the 1994 policy.

Commercial Forestry

Existing Policy

Policy 2.2.2 Commercial forestry activities shall be supported by Dare County so long as such activities are done in accordance with the standards and recommendations of the U.S Forest Service. The County also advocates the voluntary participation in the State of North Carolina’s best management practice program for forestry management.

Staff Comments: There was no issue related to commercial forestry included on the survey. Staff recommends use of the 1994 policy.

Productive Agricultural Lands

Existing Policy

Policy 2.2.1 Dare County supports the use of certain portions of the Mainland area of the County for agriculture. The County also advocates voluntary participation in the State of North Carolina's best management practices program for farm management.

Staff Comments: There was no issue related to agriculture included on the survey. Staff recommends use of the 1994 policy.

Archaeological/Historic Resources

Existing policies

Archaeologically Significant Resources: Policy 2.1.3 (a) The Dare County Board of Commissioners supports the protection of structures, lands, and artifacts that have been identified by the NC Department of Cultural Resources, Division of Archives and History, as archaeologically or historically significant. On a case-by-case basis, individual protection/management strategies should be implemented to ensure archaeological and/or historical resources are not destroyed.

Staff Comments: This issue was not addressed on the survey. Staff feels that Policy 2.1.3 (a) can be used in the updated LUP.

Wildlife Resources

Existing Policy

Policy 2.2.6 Dare County supports the maintenance of several preserve areas for wildlife habitat and access by the public to these areas for managed wildlife harvesting and observation.

Staff Comments: There was no issue related to wildlife resources included on the survey. Staff recommends use of the 1994 policy, with a possible inclusion of language specific to hunting access on the federal lands.

Topographic Conditions:

Existing policies–

2.1.1. (B) Dare County supports as minimum standards, the administration and enforcement of all applicable floodplain management regulations, and the National Flood Insurance Program.

2.1.1(c) Dare County believes that there is insufficient, reliable data to quantify the rate of sea level rise. The phenomenon needs additional study. Until a more reliable and conclusive database has been established, Dare County will continue to rely on CAMA AECs standards for development limitations.

Survey: The sea level is rising to a degree that public response is necessary.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1695	49.5	1309	38.1	425	12.4

Alternatives for Consideration

- Adopt policy in support of the FEMA program, specifically mentioning the importance of the CRS rating system and its impacts on lowering insurance rates.
- Use existing 1994 policy.
- Draft new policy on sea level rise.

Staff Comments: No questions were included on survey questionnaire regarding construction standards in the floodplain. Staff feels policy 2.1.1(b) is satisfactory. The concept of sea level is a difficult topic to address but CAMA guidelines require a policy on sea level rise.

Stormwater Management

Existing Policy

Policy 2.1.5 (b) Stormwater runoff should be managed to the greatest possible degree to protect the quality of water in all water bodies surrounding Dare County.

Survey: Public funds should be spent to address stormwater ponding and drainage problems on private property.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1351	36.7	2125	57.6	2125	5.7

Alternatives for Consideration

- a. Dare County should adopt a policy stating that public funds may be used to address stormwater ponding and drainage problems that exist on private property.
- b. Dare County should adopt a policy that state that public funds should not be used to address stormwater ponding and drainage problems that exist on private property.

Survey: Dare County should establish a full-time program for stormwater management and ditch maintenance.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
3212	84.7	408	10.7	171	4.5

Alternatives for Consideration

- a. Dare County should establish a full-time program to address the County’s stormwater and drainage needs.
- b. Dare County should not establish a full-time program to address the County’s stormwater and drainage needs.

Staff Comments: We are currently in the process of developing a stormwater/drainage plan for unincorporated Dare County. The draft plan has been circulated for comments and hopefully will be adopted by the Board of Commissioners later this spring. The development of a stormwater plan was included as an implementation strategy in the 1994 update. The Planning staff has also requested funds in the upcoming budget cycle to begin addressing some of the problem areas identified in the stormwater plan. While the survey responses indicate strong support for a full-time County stormwater and ditch maintenance program, the respondents also indicated that public funds should not be used to address problems on private property. The issue of stormwater management was also ranked highly at each of the public participation workshops held last year in October.

Marinas

Existing policy

Policy 2.1.5 (c) Dare County supports the development of marinas to provide boating access to the area’s water bodies. Marina development is encouraged in upland basins and in waters not open for shellfish harvesting and should comply with all state and federal regulations concerning location and design. The County encourages the dry stack option of boat storage.

Survey: Marina development in or near waters OPEN TO shellfish fishing should be discouraged.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
3136	82.7	446	11.7	209	5.5

Survey: Marina development in or near waters NOT OPEN To shellfish fishing should be discouraged.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1536	44.2	1487	42.8	449	12.9

Alternatives for Consideration

- a. Dare County should continue to rely on State and Federal regulations for determining the location and development of marinas.
- b. Dare County should adopt a policy opposed to the development and location of marinas in or near waters currently classified as shellfish available (SA).
- c. Dare County should adopt a policy supporting the development and location of marinas in or near waters currently designated as shellfish available (SA).
- d. Dare County should adopt a policy opposed to the development and location of marinas in or near waters currently classified as shellfish closed (SC).
- e. Dare County should adopt a policy supporting the development and location of marinas in or near waters currently designated as shellfish closed (SC).

Staff Comments: Development of marinas require numerous federal and State permits after a lengthy and extensive review by approximately 21 federal and State agencies. The CAMA guidelines require that the County have a policy statement on marina development, including upland basin marina development, and dry stack storage boat facilities. Staff recommends use of the existing policy.

Floating Structures and Homes

Existing Policy

Policy 2.1.5 (d) Dare County is opposed to the mooring of floating homes and floating structures anywhere in Dare County or its surrounding waters.

Survey: Floating structures should be prohibited.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
2754	73.9	660	17.7	313	8.4

Alternatives for Consideration

- a. Dare County should continue to rely on State and Federal regulations for floating structures.
- b. Dare County should adopt a policy opposed to floating structures.
- c. Dare County should adopt a policy supporting floating structures.

Staff Comments: Public sentiment still is strongly opposed to floating structures based on the survey results. The issue of wastewater treatment and water quality seems to be the biggest drawbacks of such structures. Staff recommends the existing policy be used in the update with reference to the need to adopt an ordinance prohibiting floating structures use as an implementation strategy of the policy.

Tree Removal/ Land Disturbing Activities

Existing Policy:

Policy 2.1.7 The County advocates a program of public information on best management practices for tree removal and land clearing on private property.

Survey: Dare County should regulate land clearing and tree removal on your private property.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1256	32.3	2514	64.7	119	3.1

Survey: Dare County should adopt rules regulating the placement of fill on lots.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
2017	53.6	1554	41.3	188	5.0

Alternatives for Consideration

- a. Land clearing and tree removal regulations should be established in Dare County.
- b. Land clearing and tree removal on private property should remain unregulated in Dare County.
- c. Dare County should adopt standards regulating the placement of fill on lots, exempting fill needed for septic requirements.

d. The placement of fill on lots should remain unregulated.

Staff Comments: Over the past few months, the staff has received numerous calls/complaints about the placement of fill on lots. Most of the complaints have involved situations where adjoining property owners have brought in fill material and raised the natural ground elevation to the base flood elevation. Fill material is almost always required for the installation of septic systems. A new type of septic system, called a peat system, often results in large amounts of fill being placed on a property thus creating problems for adjoining lot owners. While the survey indicated a slight majority in favor of regulations on fill, property owners are clearly opposed to tree removal regulations on private property. Perhaps, a policy on the new peat systems should be considered since the use of these systems requires a great deal of fill material.

Manmade Hazards

Existing Policy:

Manmade Hazards: Policy 2.1.3 (b) The development of Dare County's airports and the surrounding area shall be carefully reviewed to minimize potential land use conflicts and hazardous conditions. Dare County does not support the expansion of the Dare County Regional Airport at its current location.

Staff Comments: There were no questions included on the survey or mentioned at the workshops about manmade hazards. The expansion of the Dare County regional Airport was a major issue during the 1994 LUP update. Staff plans to seek input from the Airport Authority on this issue.

Off-road Vehicles/Beach Driving

Existing Policy

Policy 2.2.5 (a) Efforts to properly balance and control the use of off-road vehicles along the County's beaches, dune areas, and estuarine shorelines shall continue to receive support from County government.

Survey: Beach driving should be **PROHIBITED**.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1320	34.0	2504	64.5	128	3.3

Survey: Beach driving should be **BY PERMIT ONLY**.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1761	45.5	1958	50.6	153	4.0

Survey: Beach driving should be **WITHOUT ANY RESTRICTIONS.**

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
786	19.7	3118	78.4	72	1.8

Alternatives for Consideration

- a. The County of Dare should support efforts by the Federal government to prohibit beach driving on Hatteras Island.
- b. The County of Dare should support a federal permit system of beach driving on Hatteras Island.
- c. The County of Dare should support beach driving with no restrictions on Hatteras Island.
- d. The County of Dare should take no position on this issue.

Staff Comments: For some time now, there has been speculation that the National Park Service intends to limit or prohibit the use of off-road or four-wheel drive vehicles on Hatteras Island. Among the respondents, a majority felt that beach driving should not be completely unrestricted but should not be completely prohibited either. The questions, as presented on the survey, did not specifically mention beach driving on Hatteras Island. Some respondents may have assumed that the questions included beach driving on the municipal beaches and in Duck. Regardless, a policy statement that clearly states the County’s position on this issue is important, as this issue will continue to be debated by the Park Service.

Federal and State Support

Existing Policy

Policy 2.3.14-a Dare County supports those federal and state programs that provide funds for the implementation of land planning, environmental protection, and/or economic development. Dare County does not support those federal or state programs that involve legislative mandates to local governments without financial support. In addition, programs that are funded should direct funds to the local government with minimal administrative guidelines.

Policy 2.3.14-b State and federally water and highway transportation projects shall receive the highest level of support, in light of their potential impact on public safety and their economic health of the area.

Survey: Federal agencies, such as the National Park Service and the US Fish and Wildlife Service facilitate the needs of the residents and visitors of Dare County.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
2370	67.5	794	22.6	349	9.9

Alternatives for Consideration

- a. Dare County should adopt policies recognizing the need for better cooperation between Dare County, its citizens, and its visitors and the Federal agencies responsible for the management of the large amounts of public lands in Dare County.
- b. Dare County does not need a policy on our relationship with the Federal agencies responsible for management of the large amounts of public lands in Dare County.

Staff Comments: Due to the large amount of publicly owned land in Dare County, there is a great deal of interaction between our visitors and residents and the agencies responsible for the management of the public lands. From time to time, the management objectives of the agencies and the citizens' use of the land clash. A policy acknowledging the need for good federal and state cooperation with local government and its citizens is needed in addition to the other 1994 policies.

Wastewater

Existing Policies

Policy 2.3.1 (a) Dare County recognizes groundwater resources as an essential element of the drinking water supply. The management of groundwater resources and their protection is a priority issue in Dare County.

Policy 2.3.1 (b-1) Dare County advocates the use of on-site septic tank-drainfield systems as the primary method of wastewater treatment.

Policy 2.3.1 (b-2) Dare County will authorize the use of package treatment plants as an alternative to septic systems only when soil conditions preclude the use of septic tanks and/or if a reduction in the risk of environmental damage is achieved.

Policy 2.3.1 (b-3) The current minimum lot size standards shall not be reduced regardless of the availability of a central wastewater treatment or the availability of a combination of central wastewater treatment and a central water supply.

Survey: Lot sizes should be decreased to allow for greater density of development.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
146	3.7	3790	94.9	59	1.5

Alternatives for Consideration

- a. Dare County should adopt a policy opposing a decrease in the minimum lot size requirements.
- b. Dare County should adopt a policy supporting a decrease in the minimum lot size requirement.

Staff Comments: The issue of decreasing the minimum lot size requirement was strongly opposed by the survey respondents. As growth continues in Dare County, there are less suitable sites for development and developers are seeking alternative methods of treating wastewater than the traditional gravity-fed septic tank/drainfield systems. The issue of privately-owned package treatment plants and other more innovative methods of wastewater treatment will continue to be submitted for approval as the suitable land left for development is developed. Policies on these issues will be important. During the public participation workshops, there was some debate about the merits of centralized wastewater treatment. Some attendees expressed the opinion that central wastewater treatment was the only way to gain some control over the location of urban development as well as reduce pollution from malfunctioning septic systems. Others believe that central wastewater would create tremendous pressure for higher density development. The 1994 LUP stated that package treatment plants would be supported only in instances where soil conditions preclude the use of septic systems. The Planning Board will need to discuss the issue of central wastewater treatment in depth. It will be important that the updated plan provide a reliable indication of the County’s stance on central wastewater treatment, both publicly and privately owned facilities. The use of the new “peat” septic systems should also be discussed and a possible policy on their use considered.

Transportation

Survey: A reliable, regularly scheduled public transportation system should be developed in Dare County.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
2109	59.1	1178	33.0	283	7.9

Alternatives for Consideration

- a. Dare County should adopt policies that support a public transportation system.
- b. Dare County should adopt policies that oppose a public transportation system.
- c. Dare County should initiate efforts to develop a public transportation system.
- d. Dare County does not need to address this issue with a policy statement.

Survey: Public funding should be used to supplement a private transportation system.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1071	29.3	2328	63.7	259	7.1

Alternatives for Consideration

- a. Dare County should adopt policies supporting the supplement of a private transportation system.
- b. Dare County should adopt policies opposing the supplement of a private transportation system.
- c. Dare County should adopt polices stating that private transportation plans should be reviewed on a case by case basis in terms of funding supplements.

Survey: Entry tolls should be collected and used to fund transportation improvements.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
859	22.4	2789	72.5	195	5.1

Alternatives for Consideration

- a. Dare County should adopt policies endorsing the funding of transportation improvements through the use of entry tolls.
- b. Dare County should adopt policies opposing the funding of transportation improvements through the use of entry tolls.

Survey: Dare County should initiate a transportation improvement program independent of the State-funded program.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1537	45.8	1328	39.6	493	14.7

Alternatives for Consideration

- a. Dare County should initiate a transportation improvement program independent of the State-funded program to address the County's transportation needs that are unfunded by the State Department of Transportation.
- b. Dare County should not initiate an independent transportation improvement program.

Staff Comments: The survey indicated strong opposition to entry tolls for funding of transportation improvements but some support for a public transportation system. There is no doubt that the traffic demands of the seasonal populations impact the quality of life of Dare County residents and the vacation experience for our visitors. In light of the budget shortfalls currently experienced by the State government, policies that at least recognize alternative means of transportation or funding of transportation improvements may not be so far-fetched. Further investigation of mass transit alternatives was also stated at the participation workshops. Traffic congestion was listed as a major concern at the public participation workshops, with this problem seen as a negative consequence of our continuing popularity as a tourist destination. US 158 and the hazardous driving conditions during the summer months was mentioned by numerous citizens. The center turning lane, in particular, was noted as a dangerous feature that should be redesigned for safety purposes and functionality. The protection of NC 12, including Bonner Bridge, was also mentioned, especially at the Hatteras Island workshop. A strongly worded policy on the importance of protecting NC 12 should be included in the Plan.

Other Services

Policy 2.3.1 (c) Dare County supports efforts to upgrade electrical service to those portions of unincorporated Dare County served by electric membership cooperatives to increase the reliability and quality of the power supply.

Policy 2.3.1 (d-1) Dare County advocates a dual system of local solid waste management and participation in a regional solid waste management system.

Policy 2.31 (d-2) Dare County will consider a mandatory recycling program to include roadside pick-up.

Staff Comments: Policies on issues such as solid waste and electrical service are required by CAMA guidelines. Support for underground utility installation was voiced at the public participation workshops. The citizens attending the public participation workshops held in October 2000 expressed the need for more college-based educational facilities in Dare County.

Community Growth Patterns

Existing Policies

Policy 2.3.2-a Dare County shall strive to maintain its coastal village atmosphere by using land use planning techniques to guide private sector market forces in the direction of minimal commercialization with single family homes as the preferred type of development.

Policy 2.3.2-b Public services shall be provided to meet the needs of, but not to serve as an incentive to, growth and development.

Policy 2.3.2-c Dare County does not advocate unlimited public acquisition of additional privately owned lands but reserves the right to review and support or oppose each acquisition proposal on a case-by-case basis.

Survey: All unzoned portions of Dare County should be zoned.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
2639	71.7	794	21.6	245	6.7

Alternatives for Consideration

- a. The County should continue its efforts to zone the remaining unzoned portions of unincorporated Dare County.
- b. The County should continue its efforts to zone the remaining unzoned portions of unincorporated Dare County only if there is support for zoning in the specific community under consideration.
- c. The County should discontinue its efforts to zone the remaining unzoned portions of unincorporated Dare County.

Survey: Acquisition of additional lands for future public projects should be supported.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
2406	65.3	995	27.0	285	7.7

Alternatives for Consideration

- a. Dare County should support the acquisition of land for future public projects.
- b. Dare County should oppose the acquisition of land for future public projects.
- c. Dare County should review acquisition of land for public projects on a case-by-case basis.

Survey: Building permits construction should be regulated by an annual permit limit.

Results

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
2130	57.5	1242	33.7	318	8.5

Alternatives for Consideration

- a. Dare County should establish an annual limit to regulate the number of building permits issued for construction in unincorporated Dare County.
- b. Dare County should not establish an annual limit to regulate the number of building permits issued for construction in unincorporated Dare County.

Staff Comments: There were several survey questions under the topic of “urban growth” that need some discussion. While some of the questions included on the survey may seem too aggressive, it is important that extreme measures, such as a building permit annual cap, be examined. Citizens attending the public workshops expressed concerns about growth and the ability of our infrastructure to support our continued growth.

Since 1990, the County has adopted use-specific zoning maps for Avon, Buxton and Colington. Efforts to zone Frisco were unsuccessful due to the lack of consensus among the village residents concerning the commercial development along NC 12. The continuation of zoning initiatives for the unzoned portions of Dare County should undoubtedly be supported if the communities can demonstrate a community consensus.

The lack of public services, such as central wastewater, has not served as an inhibitor to development as evidenced by this latest cycle of robust growth we have experienced over the past several years.

Almost 80% of our land area in Dare County is currently in public ownership. The acquisition of land for public purpose project is a good idea, but staff feels that each situation should be reviewed on its own merits.

Residential Development

Existing Policies

Policy 2.3.3-a Single family housing shall be encouraged as the preferred land use in unincorporated Dare County. The desired density for any proposed multi-family structures is 5 units or less per acre.

Policy 2.3.3-b Dare County shall not be responsible for the cost of maintaining or repairs to privately owned streets.

Survey: Single family structures should be the prevalent type of land use in Dare County.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
3272	83.9	474	12.2	154	3.9

Alternatives for Consideration

- a. Dare County should encourage the development of single family homes as the prevalent type of land use.
- b. Dare County should oppose the development of single family homes as the prevalent type of land use.

Survey: Only low-density multifamily housing should be allowed in Dare County.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
2120	55.5	1486	38.9	209	5.5

Alternatives for Consideration

- a. Dare County should adopt a policy advocating multi-family dwellings only at low densities. (3-5 units per acre).
- b. Dare County should adopt a policy advocating multi-family dwellings at medium densities. (6-10 units per acre).
- c. Dare County should adopt a policy advocating multi-family dwellings at high densities. (greater than 10 units per acre).

Survey: Single-family homes that are rented on a short-term basis should be considered as commercial activity with different standards for parking and trash pick-up applied to these uses.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1701	44.9	1874	49.5	217	5.7

Alternatives for Consideration

- a. Dare County should adopt a policy supporting the regulation of rental homes as commercial uses with different standards for parking and trash pick-up
- b. Dare County should not adopt a policy supporting the regulation of rental homes as commercial uses with different standards for parking and trash pick-ups.
- c. Dare County should study the impact of rental homes and recommend specific standards for those aspects of rental homes that are need attention.

Survey: Home occupations/home offices should be expanded to allow standards that are more flexible.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1901	57.1	958	28.8	470	14.1

Alternatives for Consideration

- a. Current zoning regulations should be amended to allow more flexibility in the operation of home offices/home businesses.
- b. Current zoning regulations for home occupations are adequate.

Survey: Large multi-bedroom rental structures contribute to the traffic problems in Dare County.

Survey Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
3118	81.2	606	15.8	118	3.1

Alternatives for Consideration

- a. Dare County should adopt a policy advocating limits on large-multi bedroom rental structures due to their impacts on traffic
- b. Dare County does not need a policy on the traffic impacts of large multi-bedroom rental structures.

Survey: Dare County should initiate a fee for multiple vehicles at rental cottages.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1174	30.8	2338	61.3	298	7.8

Alternatives for Consideration

- a. Dare County should investigate different fee schedules for addressing multiple vehicles at rental cottages.
- b. Dare County should investigate different parking standards for rental cottages in lieu of fees.
- c. Dare County should not take no action to address multiple vehicles at rental cottages.

Survey: Existing regulations and enforcement activities regarding unsightly structures and/or conditions are adequate.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
893	26.8	2145	64.4	290	8.7

Alternatives for Consideration

- a. Dare County should consider stronger regulations for the removal of unsightly structures and/or conditions.
- b. The existing regulations for the removal of unsightly structures and/or conditions are adequate.

Staff Comments: The survey results reflect a strong consensus for single family homes as the prevalent type of land use in Dare County with only low density multi-family allowed. As a result of this regulatory philosophy, the rental market has reacted with the construction of large multi-bedroom structures that are considered “single-family” but function in a different capacity than single family homes that are occupied on a year-round basis. There is some movement

toward recognizing the difference between a year-round single family structure and the single family structures offered as rental homes in terms of parking standards and trash pick-up. There is even some resistance from year-round residents to the large single family structures although the structures are being developed under our stated preference for single family residential development. Most of the complaints received by the Planning office concerning large multi-bedroom structures are the lack of sufficient on-site parking that results in parked vehicles along rights-of-way. Many residents expressed these same concerns at the public workshops. Their concerns included cars parked on streets, excessive noise, overloaded septic systems, and mini-motels subverting the intent of single family residential zoning districts. We have also been receiving complaints about the use of rental homes for employee housing in traditional year-round neighborhoods, which concerns the mode of occupancy of the structure. These are all difficult issues that will require considerable attention from the Planning Board.

The issue of home occupations and at what point is the threshold for commercial activity breeched is often debated. No doubt, there are numerous home businesses that exceed the established definition in our zoning code of “home occupation”. The wisdom of a separate policy on home occupations is left to the discretion of the Planning Board.

The survey demonstrated a consensus that the existing standards for unsightly structures/conditions are inadequate. The issue was also mentioned by numerous citizens attending the public workshops held last year. The inclusion of language recognizing the need for more attention and easier to enforce standards should be discussed by the Planning Board

Affordable Housing

Existing Policy

Policy 2.3.4 Dare County does not advocate the use of zoning incentives, such as density increase, permit fee waivers and review fast-tracking, as a means of stimulating affordable housing construction. Private sector initiatives for affordable housing will be reviewed on a case-by-case basis.

Survey: The County should provide zoning incentives to encourage private contractors to build affordable housing.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1966	54.1	1443	39.7	228	6.3

Alternatives for Consideration

- a. Dare County should advocate the use of zoning incentives to encourage private contractors to build affordable housing.
- b. Dare County should not advocate the use of zoning incentives to encourage private contractors to build affordable housing.

Staff Comments: The issue of affordable housing has received considerable interest over the past few weeks because of a seminar sponsored by the Outer Banks Chamber of Commerce focusing on the need for more affordable housing and possible solutions to address this need. The fact remains that there are no easy solutions to this issue due to the limited land supply in Dare County and the resistance to projects marketed as “affordable” from the existing neighborhoods where such projects may be proposed. The survey indicated weak support for the County providing zoning incentives with more residents than non-residents responding favorably to the question. Concerns about the lack of affordable housing, especially for young families, were expressed at the public participation workshops. One suggestion from the workshop was the encouragement of apartments over retail shops. The appropriate response may be a regional approach involving agreements with our surrounding counties. While there have been some efforts in the private sector to provide housing for seasonal employees, opportunities for year-round residents are lacking. It appears that some sort of governmental response will be necessary to facilitate affordable housing development. A policy recognizing the dire need for affordable housing and support for private sector developments should be considered instead of the current 1994 policy.

Commercial Development

Existing Policies

Policy 2.3.5 Dare County will address opportunities for commercial development by adopting zoning maps for unzoned portions of unincorporated Dare County and allow free market forces to meet the demand for goods and services in those areas zoned for commercial areas.

Survey: Dare County should adopt zoning regulations designed to inhibit national chain retail stores.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1809	47.6	1783	46.9	207	5.4

Survey: National chain retail stores diminish local village character.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
2674	68.5	1072	27.5	158	4.0

Alternatives for Consideration

- a. Dare County should adopt zoning regulations designed to inhibit national chain retail stores.
- b. Dare County should not adopt zoning regulations designed to inhibit national chain retail stores.
- c. Dare County should adopt zoning standards for the construction and operation of large retail chain stores while allowing free market forces to dictate the location of these types of retailers.

Survey: Current zoning regulations should be amended to allow parking lot/street vendors to operate during the summer season.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1044	28.3	2376	64.2	278	7.5

Alternatives for Consideration

- a. Dare County should adopt rules prohibiting the operation of itinerant merchants.
- b. Dare County should adopt rules that allow itinerant merchants with specific conditions for their location and operation.

Survey: Outdoor recreational facilities (go-carts, miniature golf, etc.) are compatible with the family resort goals of Dare County.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
2406	65.3	995	27.0	285	7.7

Alternatives for Consideration

- a. Dare County should adopt a policy recognizing that outdoor recreational facilities are compatible with the family resort goals of Dare County.
- b. Dare County should adopt a policy recognizing that outdoor recreational facilities are incompatible with the family resort goals of Dare County.
- c. Dare County does not need a policy on outdoor recreational facilities but should rely on the current zoning regulations to governing their location.

Staff Comments: Outdoor recreation activities, such as go-cart tracks, are often the catalysts for community interest in use-specific zoning regulations even though the respondents to the questionnaire felt that these types of land uses were consistent with the family resort goals of Dare County. There seems to be a shift in public sentiment that local governments need to establish some limitations on development, particularly large commercial structures. However, even though a majority of the survey respondents felt that national retail chains diminish local character, there was no definable consensus on the question that the County should adopt standards to inhibit their presence locally. The continuation of zoning initiatives for the

unzoned portions of Dare County should undoubtedly be supported if the communities can demonstrate a community consensus. Some of our villages that have been zoned for years may be ready for more fine-tuned commercial standards that address building design, landscaping, etc. The survey respondents expressed opposition to parking lot vendors or “itinerant” merchants. Our current regulatory documents provide no guidance on these types of vendors and we do get several requests each year from itinerant merchants desiring to operate in unincorporated Dare County. Some direction from the Planning Board on this issue would be helpful.

Re-development

Existing Policy

Policy 2.3.6 Redeveloped areas and structures shall conform to current, more restrictive development standards.

Staff Comments: The survey did not contain any questions to address redevelopment issues. The existing policy is satisfactory.

Industrial Development

Existing Policy

Policy 2.3.7 Industrial development, which has excessive noise, odor, or other harmful pollution, shall be discouraged from locating in Dare County, unless such adverse impacts can be clearly overcome through effective mitigation. Industrial sites shall be located on land which is environmentally suitable and has unique locative advantages for industry.

Survey: The creation of an industrial park on the Mainland of Dare County for commercial storage activities should be considered.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1929	57.5	922	27.5	508	15.1

Alternatives for Consideration

- a. Dare County should pursue the creation of an industrial park for commercial storage on the Mainland of Dare County.
- b. Dare County should not pursue the creation of an industrial park for commercial storage on the Mainland of Dare County.

Staff Comments:

Energy Facilities

Existing Policy

Policy 2.3.8 Dare County is opposed to the development of any petro-chemical energy facility or related improvements within its jurisdictional lands and/or waters. This includes all structures, operations, and activities associated with petro-chemical energy facility development, such as, but not limited to, on-shore support bases for offshore exploration activities, staging areas, transmission and/or production pipelines, pipeline storage yards and other similar structures, activities, and improvements related to petro-chemical energy facility development, exploration, or production. Dare County supports research and development of non-fossil fuel alternatives for energy production.

Staff Comments: The survey did not contain any questions about oil and/or natural gas exploration. Staff feels the 1994 policy should be used in the updated version.

Tourism

Existing Policy

Policy 2.3.9 Dare County supports the promotion of the Outer Banks as a tourist destination and the development of season-extending promotions during the non-peak periods of the calendar year.

Policy 2.3.9-b Dare County supports the concept of combining natural resources and tourism to promote the area's ecological values, known as "eco-tourism."

Survey: Seasonal peak populations have improved the quality of life in Dare County.

Results:

Favorable		Unfavorable		No Opinion	
#	%	#	%	#	%
1589	44.1	1828	50.7	185	5.1

Alternatives for Consideration

- a. Dare County should adopt policies regarding seasonal populations and their positive impacts on our quality of life.
- b. Dare County should adopt policies regarding seasonal populations and their negative impacts on our quality of life.

Staff Comments: Tourism is the number one industry in Dare County and the number two industry for the State of North Carolina. However with each passing year it becomes more difficult for the year-round residents of Dare County to cope with the impacts, such as traffic and other demands on our infrastructure, that accompany the tourist economy. All of us recognize the vital importance of tourism to the Dare County economy but we must also acknowledge the negative impacts that are associated with our seasonal population increases. There seems to be a backlash of public sentiment that instead of continued mass market advertising of the Outer Banks perhaps our focus needs to be on ensuring a positive vacation experience for the visitors once they get here. A common theme expressed at all three of the public participation workshops was the need for economic diversification to reduce the County's dependence on tourism. This opinion is based on the potential of hurricanes devastating our tax base and thus our tourism base and the need for higher-paying jobs so that our young people can return to the area after college for more year-round jobs offered by an expanded economy.

Bikeways/Walkways/Greenways

Existing Policy

Policy 2.3.13 Dare County supports the development of sidewalks, bike paths, greenways, and walking/jogging trails to provide a safe setting for these types of outdoor recreation in unincorporated Dare County.

Staff Comments: There were no specific questions on the survey addressing greenways/bikeways. However, several attendees of the public participation workshops mentioned the usefulness and popularity of the existing bikeways in the County. Support for continued construction of these amenities was voiced. The existing policy is satisfactory and staff recommends its re-use in the 2001 LUP.

DUCK – January 2002

EXISTING LAND USE	NUMBER
Vacant Land – Private Ownership	
Individual Parcels	22
Subdivision Lots	420
Property Owners Association	96
<i>Sub Total</i>	538
Vacant Land -- Public Ownership	
Federal	
State	
Dare County	
Non-Profit	1
<i>Sub Total</i>	1
Residential Use	
Detached	1952
Mobile Homes	3
Duplexes (2 units)	6
Townhouse	51
Condominiums	202
Timeshare	31
Co-Ownership	66
<i>Sub Total</i>	2,311
Commercial Use	
Retail	9
Restaurant	6
Professional	10
Multi-use	9
Commercial Condominium	7
Private museum, gallery	1
Hotels, motels, cottage courts	2
Recreational	9
<i>Sub Total</i>	53
Other Uses	
Cemeteries	1
Churches/Religious buildings.	2
Utility	2
Property Owners Association	51
Secondary Improvements	6
<i>Sub Total</i>	62
Government Uses	
Federal Buildings	1
Dare County Buildings	2
Sub Total	3
GRAND TOTAL RECORDS	2,968

MARTINS POINT – January 2002

EXISTING LAND USE	NUMBER
Vacant Land – Private Ownership	
Individual Parcels	0
Subdivision Lots	150
Property Owners Association	8
<i>Sub Total</i>	<i>158</i>
Vacant Land -- Public Ownership	
Federal	
State	1
Dare County	
Non-Profit	
<i>Sub Total</i>	<i>1</i>
Residential Use	
Detached	205
Mobile Homes	
Duplexes (2 units)	
Townhouse	
Condominiums	
Timeshare	
<i>Sub Total</i>	<i>205</i>
Commercial Use	
Retail	
Restaurant	
Professional	2
Leasehold (medical office)	3
Horticultural	1
Hotels, motels, cottage courts	
Recreational	
<i>Sub Total</i>	<i>6</i>
Other Uses	
Cemeteries	1
Churches/Religious buildings.	
Utility	
Property Owners Association	3
Secondary Improvements	10
<i>Sub Total</i>	<i>14</i>
Government Uses	
Federal Buildings	
Dare County Buildings	
<i>Sub Total</i>	<i>0</i>
GRAND TOTAL RECORDS	384

KDH OUTSIDE – January 20002

EXISTING LAND USE	NUMBER
Vacant Land – Private Ownership	
Individual Parcels	5
Subdivision Lots	32
Property Owners Association	
<i>Sub Total</i>	<i>37</i>
Vacant Land -- Public Ownership	
Federal	
State	2
Dare County	2
Non-Profit	
<i>Sub Total</i>	<i>4</i>
Residential Use	
Detached	116
Mobile Homes	8
Duplexes (2 units)	
Townhouse	
Condominiums	8
Apartments	44
<i>Sub Total</i>	<i>176</i>
Commercial Use	
Retail	
Restaurant	3
Professional	1
Multi-use	2
Commercial Condominium	
Private museum, gallery	
Hotels, motels, cottage courts	1
Recreational	2
<i>Sub Total</i>	<i>9</i>
Other Uses	
Cemeteries	
Churches/Religious buildings.	1
Utility	
Property Owners Association	
Secondary Improvements	
<i>Sub Total</i>	<i>1</i>
Government Uses	
<i>Sub Total</i>	<i>0</i>
GRAND TOTAL RECORDS	227

COLINGTON – January 2002

EXISTING LAND USE	NUMBER
Vacant Land – Private Ownership	
Individual Parcels	41
Subdivision Lots	924
Property Owners Association	22
<i>Sub Total</i>	<i>987</i>
Vacant Land -- Public Ownership	
Federal	
State	1
Dare County	1
Non-Profit	
<i>Sub Total</i>	<i>2</i>
Residential Use	
Detached	1497
Mobile Homes	145
Duplexes (2 units)	12
Townhouse	0
Leasehold	2
Mobile Home Parks	5
<i>Sub Total</i>	<i>1661</i>
Commercial Use	
Retail	2
Restaurant	1
Professional	2
Multi-use	9
Warehouse	3
Recreational	1
Hotels, motels, cottage courts	
Manufacturing	1
<i>Sub Total</i>	<i>19</i>
Other Uses	
Cemeteries	5
Churches/Religious buildings.	2
Utility	3
Property Owners Association	3
Secondary Improvements	20
<i>Sub Total</i>	<i>33</i>
Government Uses	
Dare County	2
<i>Sub Total</i>	<i>2</i>
GRAND TOTAL RECORDS	2704

RODANTHE -- January 2002

EXISTING LAND USE	NUMBER
Vacant Land – Private Ownership	
Individual Parcels	59
Subdivision Lots	267
Washouts	29
Property Owners Association	9
<i>Sub Total</i>	<i>364</i>
Vacant Land -- Public Ownership	
Federal	3
Dare County	31
Public Utility	1
Non-Profit	2
<i>Sub Total</i>	<i>37</i>
Residential Use	
Detached	293
Mobile Homes	11
Duplexes (2 units)	3
Townhouse	0
Condominiums	27
Timeshare	1
Mobile Home Parks	1
<i>Sub Total</i>	<i>335</i>
Commercial Use	
Retail	7
Restaurant	2
Professional	1
Multi-use	8
Warehouse	1
Vacant Commercial	2
Hotels, motels, cottage courts	3
Recreational	4
<i>Sub Total</i>	<i>28</i>
Other Uses	
Cemeteries	6
Churches/Religious buildings.	1
Non-profit buildings	1
Property Owners Association	3
Secondary Improvements	3
<i>Sub Total</i>	<i>14</i>
Government Uses	
Dare County buildings	7
<i>Sub Total</i>	<i>7</i>
GRAND TOTAL RECORDS	785

SALVO – January 2002

EXISTING LAND USE	NUMBER
Vacant Land – Private Ownership	
Individual Parcels	31
Subdivision Lots	254
Property Owners Association	4
<i>Sub Total</i>	<i>289</i>
Vacant Land -- Public Ownership	
Federal	1
State	0
Dare County	0
Non-Profit	0
<i>Sub Total</i>	<i>1</i>
Residential Use	
Detached	439
Mobile Homes	43
Duplexes (2 units)	0
Mobile Home Park	1
Condominiums	0
Timeshare	0
<i>Sub Total</i>	<i>482</i>
Commercial Use	
Retail	1
Restaurant	2
Professional	3
Multi-use	9
Warehouse	1
Hotels, motels, cottage courts	5
Recreational	2
<i>Sub Total</i>	<i>23</i>
Other Uses	
Cemeteries	1
Churches/Religious buildings.	2
Utility	0
Property Owners Association	0
Secondary Improvements	4
<i>Sub Total</i>	<i>7</i>
Government Uses	
<i>Sub Total</i>	<i>0</i>
GRAND TOTAL RECORDS	802

WAVES – January 2002

EXISTING LAND USE	NUMBER
Vacant Land – Private Ownership	
Individual Parcels	32
Subdivision Lots	171
Property Owners Association	5
<i>Sub Total</i>	<i>208</i>
Vacant Land -- Public Ownership	
Federal	1
State	0
Dare County	0
Non-Profit	0
<i>Sub Total</i>	<i>1</i>
Residential Use	
Detached	221
Mobile Homes	20
Duplexes (2 units)	0
Townhouse	0
Condominiums	0
<i>Sub Total</i>	<i>241</i>
Commercial Use	
Retail	3
Restaurant	2
Professional	4
Multi-use	7
Hotels, motels, cottage courts	3
Recreational	3
<i>Sub Total</i>	<i>22</i>
Other Uses	
Cemeteries	1
Churches/Religious buildings.	0
Utility	3
Property Owners Association	1
Secondary Improvements	2
<i>Sub Total</i>	<i>7</i>
Government Uses	
<i>Sub Total</i>	<i>0</i>
GRAND TOTAL RECORDS	479

AVON – January 2002

EXISTING LAND USE	NUMBER
Vacant Land – Private Ownership	
Individual Parcels	115
Subdivision Lots	454
Property Owners Association	2
<i>Sub Total</i>	<i>571</i>
Vacant Land -- Public Ownership	
Federal	1
State	0
Dare County	2
Non-Profit	0
<i>Sub Total</i>	<i>3</i>
Residential Use	
Detached	1269
Mobile Homes	66
Duplexes (2 units)	13
Mobile Home Parks	3
Condominiums	49
<i>Sub Total</i>	<i>1400</i>
Commercial Use	
Retail	14
Restaurant	5
Professional	8
Multi-use	15
Warehouse	1
Hotels, motels, cottage courts	3
Recreational	2
Wholesale Distributors	5
Horticultural	1
<i>Sub Total</i>	<i>54</i>
Other Uses	
Cemeteries	8
Churches/Religious buildings.	2
Utility	4
Property Owners Association	4
Secondary Improvements	15
<i>Sub Total</i>	<i>33</i>
Government Uses	
Federal	1
Dare County	1
<i>Sub Total</i>	<i>2</i>
GRAND TOTAL RECORDS	2063

BUXTON – January 2002

EXISTING LAND USE	NUMBER
Vacant Land – Private Ownership	
Individual Parcels	184
Subdivision Lots	226
Property Owners Association	5
<i>Sub Total</i>	<i>415</i>
Vacant Land -- Public Ownership	
Federal	1
State	24
Dare County	12
Public Utility	2
<i>Sub Total</i>	<i>44</i>
Residential Use	
Detached	449
Mobile Homes	106
Duplexes (2 units)	25
Mobile Home Park	4
Condominiums	0
Timeshare	2
<i>Sub Total</i>	<i>586</i>
Commercial Use	
Retail	16
Restaurant	8
Professional	6
Multi-use	15
Commercial Condominium	4
Warehouse	1
Hotels, motels, cottage courts	14
Recreational	4
Manufacturing	1
Sales	1
Service	7
Private Schools	1
<i>Sub Total</i>	<i>78</i>
Other Uses	
Cemeteries	16
Churches/Religious buildings.	5
Utility	4
Property Owners Association	2
Non-profit Organizations	3
Secondary Improvements	8
<i>Sub Total</i>	<i>38</i>
Government Uses	
Federal Buildings	4
State Buildings	1
Dare County Buildings	12
<i>Sub Total</i>	<i>17</i>
GRAND TOTAL RECORDS	1173

FRISCO – January 2002

EXISTING LAND USE	NUMBER
Vacant Land – Private Ownership	
Individual Parcels	102
Subdivision Lots	490
Religious	1
Property Owners Association	14
<i>Sub Total</i>	<i>607</i>
Vacant Land -- Public Ownership	
Federal	0
State	12
Dare County	4
Non-Profit	2
<i>Sub Total</i>	<i>18</i>
Residential Use	
Detached	794
Mobile Homes	118
Duplexes (2 units)	0
Mobile Home Park	1
<i>Sub Total</i>	<i>913</i>
Commercial Use	
Retail	2
Restaurant	3
Professional	3
Multi-use	15
Warehouse	3
Private museum	2
Hotels, motels, cottage courts	0
Service	8
Manufacturing	3
Recreational	7
<i>Sub Total</i>	<i>46</i>
Other Uses	
Cemeteries	12
Churches/Religious buildings.	5
Utility	2
Non-profit organizations	1
Secondary Improvements	25
<i>Sub Total</i>	<i>45</i>
Government Uses	
Federal buildings	1
Dare County	4
<i>Sub Total</i>	<i>5</i>
GRAND TOTAL RECORDS	1634

HATTERAS – January 2002

EXISTING LAND USE	NUMBER
Vacant Land – Private Ownership	
Individual Parcels	144
Subdivision Lots	197
Property Owners Association	11
<i>Sub Total</i>	<i>352</i>
Vacant Land -- Public Ownership	
Federal	2
Dare County	2
<i>Sub Total</i>	<i>4</i>
Residential Use	
Detached	603
Mobile Homes	28
Duplexes (2 units)	5
Mobile Home Park	1
Multi	3
Condominium	103
<i>Sub Total</i>	<i>743</i>
Commercial Use	
Retail	5
Restaurant	4
Professional	8
Multi-use	23
Wholesale distributors	2
Vacant commercial building	1
Hotels, motels, cottage courts	8
Service	4
Boatslips	37
Recreational	5
<i>Sub Total</i>	<i>97</i>
Other Uses	
Cemeteries	12
Churches/Religious buildings.	3
Utility	3
Property Owners Associations	10
Non-profit organizations	1
Secondary Improvements	15
<i>Sub Total</i>	<i>44</i>
Government Uses	
Federal buildings	3
State buildings	4
Dare County	5
<i>Sub Total</i>	<i>12</i>
GRAND TOTAL RECORDS	1249

MANTEO OUTSIDE

EXISTING LAND USE	NUMBER
Vacant Land – Private Ownership	
Individual Parcels	700
Subdivision Lots	233
Religious	3
Property Owners Association	28
<i>Sub Total</i>	<i>964</i>
Vacant Land -- Public Ownership	
Federal	9
State	24
Dare County	30
Non-Profit	2
Town of Manteo	2
<i>Sub Total</i>	<i>67</i>
Residential Use	
Detached	1356
Mobile Homes	189
Duplexes (2 units)	5
Condominiums	21
Multi	2
Mobile Home Park	24
<i>Sub Total</i>	<i>1597</i>
Commercial Use	
Retail	12
Restaurant	2
Professional	3
Multi-use	16
Warehouse	3
Wholesale distributors	5
Horticultural	1
Private museum	1
Hotels, motels, cottage courts	1
Service	8
Manufacturing	1
Sales	1
Recreational	1
<i>Sub Total</i>	<i>55</i>
Other Uses	
Cemeteries	13
Aircraft	1
Churches/Religious buildings.	7
Non-profit organizations	7
Secondary Improvements	33
<i>Sub Total</i>	<i>61</i>
Government Uses	
Federal buildings	1
State buildings	5
Dare County	9
Town of Manteo	1
<i>Sub Total</i>	<i>16</i>
GRAND TOTAL RECORDS	2764

WANCHESE – January 2002

EXISTING LAND USE	NUMBER
Vacant Land – Private Ownership	
Individual Parcels	119
Subdivision Lots	194
Religious	1
Property Owners Association	0
<i>Sub Total</i>	<i>313</i>
Vacant Land -- Public Ownership	
Federal	0
State	3
Dare County	12
Town of Nags Head	1
<i>Sub Total</i>	<i>16</i>
Residential Use	
Detached	412
Mobile Homes	186
Duplexes (2 units)	2
Bed and Breakfast	1
Mobile Home Park	7
<i>Sub Total</i>	<i>608</i>
Commercial Use	
Retail	2
Restaurant	0
Professional	4
Vacant Commerical Building	3
Multi-use	20
Warehouse	2
Wholesale distributors	6
Hotels, motels, cottage courts	1
Service	6
Manufacturing	8
Sales	1
Recreational	1
<i>Sub Total</i>	<i>54</i>
Other Uses	
Cemeteries	9
Churches/Religious buildings.	3
Public Utility buildings	3
Secondary Improvements	29
<i>Sub Total</i>	<i>44</i>
Government Uses	
Federal buildings	1
State buildings	1
Dare County	4
<i>Sub Total</i>	<i>6</i>
GRAND TOTAL RECORDS	

MANN'S HARBOR – January 2002

EXISTING LAND USE	NUMBER
Vacant Land – Private Ownership	
Individual Parcels	86
Subdivision Lots	47
Religious	1
Property Owners Association	4
<i>Sub Total</i>	<i>138</i>
Vacant Land -- Public Ownership	
Federal	0
State	3
Dare County	0
<i>Sub Total</i>	<i>3</i>
Residential Use	
Detached	162
Mobile Homes	82
Duplexes (2 units)	4
Mobile Home Park	9
<i>Sub Total</i>	<i>257</i>
Commercial Use	
Retail	4
Professional	1
Multi-use	7
Warehouse	1
Wholesale distributors	1
Horticultural	1
Service	2
Manufacturing	2
<i>Sub Total</i>	<i>19</i>
Other Uses	
Cemeteries	4
Churches/Religious buildings.	4
Secondary Improvements	12
<i>Sub Total</i>	<i>20</i>
Government Uses	
Federal buildings	1
State buildings	2
Dare County	3
<i>Sub Total</i>	<i>6</i>
GRAND TOTAL RECORDS	443

MASHOES – January 2002

EXISTING LAND USE	NUMBER
Vacant Land – Private Ownership	
Individual Parcels	28
Subdivision Lots	11
<i>Sub Total</i>	<i>39</i>
Vacant Land -- Public Ownership	
Federal	
State	
Dare County	
<i>Sub Total</i>	<i>0</i>
Residential Use	
Detached	14
Mobile Homes	4
Duplexes (2 units)	0
Mobile Home Park	0
<i>Sub Total</i>	<i>18</i>
Commercial Use	
Retail	
Restaurant	
Professional	
Multi-use	
Sales	
Recreational	
<i>Sub Total</i>	<i>0</i>
Other Uses	
Cemeteries	1
Churches/Religious buildings.	
Non-profit organizations	
Secondary Improvements	1
<i>Sub Total</i>	<i>2</i>
Government Uses	
Federal buildings	
State buildings	
Dare County	
Town of Manteo	
<i>Sub Total</i>	<i>0</i>
GRAND TOTAL RECORDS	59

EAST LAKE – January 2002

EXISTING LAND USE	NUMBER
Vacant Land – Private Ownership	
Individual Parcels	43
Subdivision Lots	30
<i>Sub Total</i>	<i>73</i>
Vacant Land -- Public Ownership	
Federal	7
State	2
Dare County	2
<i>Sub Total</i>	<i>11</i>
Residential Use	
Detached	35
Mobile Homes	41
Duplexes (2 units)	0
Mobile Home Park	0
<i>Sub Total</i>	<i>76</i>
Commercial Use	
Retail	
Restaurant	
Professional	
Multi-use	1
Sales	
Recreational	
<i>Sub Total</i>	<i>1</i>
Other Uses	
Cemeteries	1
Churches/Religious buildings.	3
Secondary Improvements	3
<i>Sub Total</i>	<i>7</i>
Government Uses	
Federal buildings	4
State buildings	1
Dare County	2
<i>Sub Total</i>	<i>7</i>
GRAND TOTAL RECORDS	

STUMPY POINT – January 2002

EXISTING LAND USE	NUMBER
Vacant Land – Private Ownership	
Individual Parcels	89
Subdivision Lots	0
<i>Sub Total</i>	<i>89</i>
Vacant Land -- Public Ownership	
Federal	5
State	3
Dare County	2
<i>Sub Total</i>	<i>10</i>
Residential Use	
Detached	86
Mobile Homes	24
Duplexes (2 units)	0
Mobile Home Park	0
<i>Sub Total</i>	<i>110</i>
Commercial Use	
Retail	1
Restaurant	
Professional	
Multi-use	5
Wholesale Distributors	3
Vacant Commercial building	1
<i>Sub Total</i>	<i>10</i>
Other Uses	
Cemeteries	1
Churches/Religious buildings.	3
Non-profit organizations	1
Secondary Improvements	7
<i>Sub Total</i>	<i>12</i>
Government Uses	
Federal buildings	0
State buildings	1
Dare County	3
<i>Sub Total</i>	<i>4</i>
GRAND TOTAL RECORDS	235

Vacant and Residential Land Use for All Tax Districts

EXISTING LAND USE	NUMBER
Vacant Land – Private Ownership	
Individual Parcels	2,162
Subdivision Lots	3,738
Property Owners Association	180
Non-profit	5
Church/Religious	6
Washouts	29
<i>Sub Total</i>	<i>6,120</i>
Vacant Land -- Public Ownership	
Federal	31
State	59
Dare County	95
Other Municipalities	3
Public Utilities	3
<i>Sub Total</i>	<i>191</i>
Residential Use	
Detached	9,903
Mobile Homes	1,074
Duplexes (2 units)	75
Multi (3+ units)	5
Townhouse	51
Condominiums	410
Timeshare	34
Co-ownership	66
Apartments	44
Bed and Breakfast	1
Mobile Home Park	56
<i>Sub Total</i>	<i>11,719</i>
TOTAL	18,030

Commercial and Other Land Use Totals for All Districts

EXISTING LAND USE	NUMBER
Commercial Use	
Retail	78
Restaurant	38
Professional	56
Multi-use	161
Hotels, motels, cottage courts	41
Recreational	41
Warehouses	16
Wholesale distributors	24
Service	35
Horticulture	2
Sales	1
Manufacturing	16
Vacant commercial	4
Boatslips	37
Commercial condominiums	11
Private museum	4
<i>Sub Total</i>	<i>565</i>
Other Uses	
Cemeteries	91
Churches	43
Utility	23
Secondary Improvements	198
Non-profit	14
Aircraft	1
<i>Sub Total</i>	<i>370</i>
Government Uses	
Federal Buildings	17
State Buildings	14
Dare County Buildings	51
Other Municipalities	1
<i>Sub Total</i>	<i>83</i>
TOTAL	1,018

WETLANDS

Policy #1

Dare County advocates the use of existing (2002) State and Federal regulatory programs for protecting and preserving coastal wetland areas of environmental of concern. Dare County reserves the right to review, comment, advocate, or oppose any proposed regulations or programs that may affect the regulation of coastal wetland areas of environmental concern.

Policy #2

Dare County supports the use of mitigation for the loss of wetland areas for public purpose projects. Private development projects that proposed wetland mitigation may be supported by Dare County if such projects will serve an identified public need and/or policy of the land use plan. For both public and private mitigation projects, up to 25% of the mitigation should take place on site or in Dare County.

Policy #3

Dare County supports the U.S. Army Corps of Engineers nationwide permit program as administered in 2002. This support is based on the current scope of permitting limits on the nationwide program and not on any changes that may result in a different policy.

Implementation Strategies:

1. Implementation and enforcement of CAMA use standards for coastal wetland AECs as identified under 15NCAC7H, Sections .0205 and.0208.
2. The County will continue to administer the CAMA local permit enforcement program and maintain the staff necessary for this work.
3. As may be necessary to facilitate implementation of permit programs for wetland management.

OCEAN SHORELINE

Policy #4

Oceanfront shoreline development should continue to be managed to protect and preserve the natural and recreational resources along the oceanfront. Dare County reserves the right to review, comment, advocate, or oppose any proposed regulations or programs that may affect the regulation of ocean hazards areas of environmental concern.

Implementation Strategies:

1. Implementation and enforcement of the CAMA use standards for ocean hazard areas as contained in 15NCAC7H, Sections .0306 through .0310.
2. Implementation and enforcement of the National Flood Insurance Program's base flood elevation standards, including the standards for those areas where wind driven waves create potential for damage by velocity also known as V-zones.

ESTUARINE WATERS/SHORELINE

Policy #5

Estuarine shoreline development should continue to be managed to protect and preserve the natural resources of the estuarine waters and the estuarine shoreline. The appropriate tools for this is the existing CAMA permit program and the Areas of Environmental Concerns (AECs) designated under the CAMA program. Dare County reserves the right to review, comment, advocate, or oppose any proposed regulations or programs that may affect the regulation of estuarine waters and/or the estuarine shoreline.

Policy #6

Dare County supports the installation and maintenance of estuarine bulkheads. Offshore breakwaters, slopes, rip-rap, and voluntary setbacks in excess of CAMA 30-foot buffer rules should be promoted as additional methods for estuarine shoreline management in lieu of estuarine bulkheads along estuarine shorelines where these less invasive techniques would be equally effective in abating a shoreline erosion problem

Policy #7

Development of estuarine systems islands that are only accessible by boat shall be carefully managed. Low intensity uses such as open space, recreation, and detached single family residential development shall be the preferred uses of these islands.

Implementation Strategies:

1. Implementation and enforcement of the CAMA use standards for estuarine shoreline AECs as stated in 15NCAC7H, Section .0209
2. Refer property owners to the Elizabeth City regional office for assistance with bulkhead permits.
3. Oppose efforts to eliminate or prioritize the use of estuarine bulkheads.

PUBLIC TRUST AREAS

Policy #8

Dare County supports the preservation and protection of the public's right to access and use of the public trust areas and waters.

Policy#9

Dare County advocates a local level management program to address the competition among recreational users of the public trust waters. Dare County reserves the right to review, comment, advocate, or oppose any proposed Federal or State regulations or programs that affect the public trust waters or public trust areas.

Implementation Strategies:

1. Implementation and enforcement of the CAMA use standards for public trust areas AECs as stated in 15A NCAC 07H, Section .0207.
2. Consideration of Dare County management standards for the use of public trust waters by various competing recreation users.

PUBLIC WATER SUPPLY AECS

Policy #10

Development in any public water supply AEC should be managed to protect the long-term viability of the groundwater resources.

Implementation Strategies:

1. Continued support for the CAMA use standards for public water supply wellfield AECs as contained in 15NCAC7H, Section .0406.
2. Dare County will continue to implement and enforce the provisions of the SED-1 zoning ordinance for the Buxton Woods maritime forest.
3. Nomination of Skyco public wellfields for designation by the Division of Coastal Management as an Area of Environmental Concern.

GROUNDWATER RESOURCES

Policy #11

Dare County recognizes groundwater resources as an essential element for the County's drinking water supply. The management of groundwater resources and their protection is a priority issue in Dare County.

Implementation Strategies:

1. To continue efforts to make a central water supply available to all areas of unincorporated Dare County. Coordinate with Water Department (multiple years, Stumpy Point 2003)
2. Review any proposals by private sector withdrawals greater than withdrawals for individual residential private wells.
3. Dare County will consider a permitting program for private wells used as a drinking water supply (2004)
4. Contract with independent planning consultant to update Carrying Capacity Study for Dare County (2004).

SURFACE WATER QUALITY

Policy #12

Dare County supports efforts by local, state, and federal agencies to preserve, protect and improve water quality. These efforts include the designation of Outstanding Resource Waters and shellfish water classification criteria established by the State of North Carolina.

Policy #13

Dare County encourages the management of surface water quality on basin-wide approach recognizing the importance of water quality in other inland regions influence and impact the water quality of the coastal regions.

Implementation Strategies:

1. Continue local water quality monitoring program.

2. Support State legislation for basin-wide water quality regulations, as exemplified by HB 1858 introduced in the NC House in 2000, which proposed that counties upstream from the coastal area develop and implement water quality management plans.

SHORELINE ACCESS

Policy #14

Dare County supports North Carolina's shoreline access policies as stated in 15A NCAC 7M, Section .0303. Dare County recognizes shoreline access to both ocean and estuarine shorelines as a key component in the local tourist economy. (See also policy #8 – public trust areas).

Implementation Strategies:

1. Continue to evaluate opportunities for additional access facilities and grant funding programs to provide money for their construction.
2. Continue to pursue federal Shoreline Protection Plan for beach nourishment to provide sandy beaches and public ownership.

CHANNEL MAINTENANCE

Policy #15

Dare County advocates the maintenance of all existing navigable channels and will work to secure permit authorization for those non-federal projects that require CAMA permit authorization.

Policy #16

Dare County advocates and supports the permit authorization and federal funding necessary to construct jetties to stabilize Oregon Inlet.

Implementation Strategy:

1. Continued funding for Oregon Inlet and Waterways Commission and staff to provide support for the on-going efforts to secure jetty permit authorization.

BEACH NOURISHMENT

Policy #17

Beach nourishment is the preferred shoreline management alternative along the ocean beaches of Dare County.

Implementation Strategies:

1. Continue to serve as the non-federal sponsor of the Dare Beaches Hurricane Protection Plan.
2. Use the Dare County Beach Nourishment Committee to advise the County Commissioners on policy issues related ocean shoreline management.
3. Coordinate with NCDOT and the appropriate federal agencies on matters relating to shoreline movement and its impacts on NC 12.

DEVELOPMENT IMPACTS ON RESOURCES

Policy #18

Development projects shall be designed and constructed to minimize detrimental impacts on surface water quality, groundwater quality and air quality. Structures should be designed to fit the natural topographic conditions and vegetation versus modifications to natural conditions to accommodate structures.

Implementation Strategies

1. Consider tree removal and vegetation protection standards for commercial sites.
2. Encourage property owners to design residential sites limit impacts on the natural topography and vegetation.

MINERAL RESOURCES

Policy #19

Dare County advocates local level management of those mining activities that are not subject to permit authorization by the State of North Carolina.

Implementation Strategies:

1. Enforcement of dune standards contained in Dare County Zoning Ordinance
2. Dare County will evaluate the need for local level regulations to address mining activities that are exempt from State-level permitting. (2004)

FISHERIES RESOURCES

Policy #20

The continued productivity of commercial and recreational fisheries shall be fostered through restoration and protection of the unique coastal ecosystems upon which they depend. (See policy 12 and 13- surface water quality)

Policy #21

Dare County supports measures to protect and preserve designated primary nursery areas. Dare County also recognizes the importance of all areas in our surrounding waters that serve as habitats for the area's abundant fisheries resources. (See policy 12 and 13- surface water quality)

Policy #22

State and federal agencies with the authority to manage fisheries resources should be the responsible parties for the resolution of conflicts involving fisheries resources in Dare County. However, Dare County reserves the right to review, comment, advocate, or oppose any proposed regulations or programs that may affect the fisheries resources or management.

Policy #23

Dare County supports the development of the aquaculture industry as a source of fishery production as long as the proposed fishery or fish species does not negatively impact native or indigenous fish species.

Policy #24

Dare County recognizes the traditional practices of commercial fishing in Dare County and supports the use of traditional shellfish and other fish harvesting methods including trawling.

Implementation Strategies:

1. Support efforts for basin-wide water quality regulations. As such programs are developed, Dare County will become engaged in the process using resolutions and other techniques to demonstrate our support of basin wide water quality efforts.
2. Continued implementation of CAMA 30-foot buffer rules, CAMA AEC regulations, and other local zoning setbacks.

MARITIME FORESTS

Policy #25

Dare County advocates a combination of limited development guided by the local SED-1 zoning ordinance and a program of public acquisition to manage the Buxton Woods maritime forest.

Implementation Strategies:

1. Continued enforcement of SED-1 zoning district.
2. Support of funding sources, like the Clean Water Trust Fund, for acquisition of lands in Buxton Woods and other maritime forest settings.
3. Consideration of other measures on vegetation protection incentives for the maritime forest areas on Colington and Roanoke Island.

COMMERCIAL FORESTRY

Policy #26

Commercial forestry activities shall be supported by Dare County, so long as activities are done in accordance with the standards and recommendations of the U.S. Forest Service. The County also advocates the voluntary participation in the State of North Carolina's best management practice program for forestry management.

Implementation Strategy:

No strategy necessary at this time due to minimal amount of commercial forestry activities in Dare County at this time.

PRODUCTIVE AGRICULTURAL LANDS

Policy #27

Dare County supports the use of certain portions of the Mainland area for crop agriculture. The County also advocates voluntary participation in the State of North Carolina's best management practices program for farm management.

Policy #28

Wholesale or industrial livestock operations are opposed.

Implementation Strategy:

1. Monitor and advocate State-sponsored legislative efforts that address the location and permitting of wholesale livestock operations.

ARCHAEOLOGICAL/HISTORIC RESOURCES

Policy #29

The Dare County Board of Commissioners supports the protection of structures, lands, and artifacts that have been identified by the NC Department of Cultural Resources, Division of Archives and History, as archaeologically or historically significant. On a case-by-case basis individual protection/management strategies should be implemented to ensure archaeological and/or historical resources are not destroyed.

Implementation Strategy:

1. Seek funding from the State of North Carolina to undertake a comprehensive inventory of those historic architect and landscape, not already in public ownership, to be used as a planning tool to identify any historic, cultural, and/or archeological resources.

WILDLIFE RESOURCES

Policy #30

Dare County supports the maintenance of preserve areas for wildlife habitat and access to the public to these areas for managed wildlife harvesting and observation.

Implementation Strategy:

1. Work with appropriate federal agencies to allow the continued access to federal property in Dare County for hunting, fishing and other similar activities.

TOPOGRAPHIC CONDITIONS

Policy #31

Dare County supports as minimum standards, the administration and enforcement of all applicable floodplain management regulations and the National Flood Insurance Program.

Implementation Strategy

1. Continue to participate in the Community Rating System and implementation and enforcement of the Dare County Flood Ordinance.

Policy #32

Dare County believes that there is insufficient, reliable data to quantify the rate of sea level rise. The phenomenon needs additional study. Until a more reliable and conclusive database has been established, Dare County will continue to rely of CAMA standards for development in CAMA designated “areas of environmental concern” or AECs.

STORMWATER MANAGEMENT

Policy #33

Stormwater runoff should be managed to the greatest degree possible to protect the water quality of the public trust waters surrounding Dare County, particularly Class SA waters.

Policy #34

Dare County recognizes the public health issues associated with mosquitoes and standing areas of water and the public safety issue for motorists presented by stormwater ponding on roadways.

Implementation Strategies

1. Consideration of stormwater management ordinance to address those projects that are not subject to State stormwater regulations with an emphasis on addressing stormwater runoff on sites that are adjacent to Class SA waters. (2003)
2. Recommendation of a full-time stormwater/ditch maintenance program. (coordinate with Public Works Department).
3. The Dare County Planning Board shall continue to discuss drainage issues associated with proposed new subdivisions.
4. Draft amendments to the Dare County Zoning Ordinance to address the use of fill material on vacant sites to alter the existing natural ground elevations and drainage as the need arises.

MARINAS

Policy #35

Dare County supports the development of marinas to provide boating access to the area’s water bodies. Marina development should comply with all State and federal guidelines concerning location and design. The County encourages the dry stack option of boat storage.

Implementation Strategy

1. Dare County will rely on local land use plan consistency review process used by State and Federal agencies to implement this policy since all proposed marinas require a CAMA major permit.
2. Examine the Dare County Zoning Ordinance and shorelines to ensure the proper location or exclusion of marinas and marina development.

FLOATING STRUCTURES

Policy #36

Dare County is strongly opposed to the mooring of floating homes and other floating structures, as defined in 15A NCAC 7M0602, anywhere in Dare County and its surrounding waters.

Implementation Strategy

1. Consideration of local regulations to prohibit the location of floating homes and structures in the surrounding public trust waters of Dare County. (2004)

LAND DISTURBING/TREE REMOVAL ACTIVITIES

Policy #37

Dare County advocates best management practices of the NC Forest Service for tree removal and land clearing on private property.

Implementation Strategies:

1. Enforcement of sand dune protection standards in the Dare County Zoning Ordinance.
2. Draft amendments to the Dare County Zoning Ordinance to address the use of fill material on vacant sites to alter the existing natural ground elevations and drainage as the need arises.

MANMADE HAZARDS

Policy #38

Due to potential land use conflicts and hazardous conditions. Dare County does not support the expansion of the Dare County Regional Airport at its current location.

Policy #39

Proposals to expand the area of the existing bombing ranges on the Dare County mainland should be reviewed on a case-by-case basis with support or opposition offered depending on the terms of the proposal and its potential impacts on the local community and the importance to our Nations' national defense.

BEACH DRIVING/OFF-ROAD VEHICLES

Policy #40

The County recognizes the importance of four-wheel drive vehicle access to the beaches of Hatteras Island that are under the management authority of the federal government. Efforts to prohibit beach driving on these federally-managed areas are not supported. Proposals to impose additional driving restrictions will be reviewed on a case by case basis with support or opposition offered depending on the proposal and its potential negative impacts on the local tourist economy.

Implementation Strategy

1. The County will continue to monitor actions of the U.S Department of Interior to further restrict beach driving and/or initiate other management programs that will impact or prohibit beach driving access along Hatteras Island. These monitoring activities may include participation at public hearings and workshops or correspondence with our congressional delegation and other federal officials.

FEDERAL AND STATE SUPPORT

Policy #41

Additional Federal or State regulatory programs or expansion of existing programs will be reviewed on a case by case basis. Dare County reserves the right to support, oppose, review, or comment on additional regulations that may impact Dare County and its economy. Local Public Hearings by federal or state agencies should be extensively advertised and conducted in Dare County before any new regulations are adopted or existing programs are expanded.

Implementation Strategy:

1. Monitor federal and state proposals and participate as needed.

WASTEWATER

Policy #42

The current minimum lot size standards shall not be reduced regardless of the availability of central wastewater treatment or the availability of a combination of central wastewater treatment and a central water supply.

Policy #43

Dare County advocates the use of on-site septic tank/drainfield systems as the primary method of wastewater treatment in unincorporated Dare County. Non-traditional methods of wastewater treatment should be used only when natural soil conditions dictate their use and not solely to accommodate larger structures or a greater dwelling density.

Policy #44

Package treatment plants may be considered only when natural conditions prohibit the use of septic systems, as remedial efforts to correct existing failing septic improvements, or if required by ordinance and should be constructed to serve a specific development without excess capacity for off-site wastewater treatment connections.

Policy #45

Maintenance of privately owned package treatment plants should be supervised by the NC Utilities Commission or other public agencies.

Implementation Strategies

1. The creation of a wastewater treatment authority or commission to address wastewater treatment issues including the maintenance of traditional septic/drainfield systems, package

treatment plants, non-traditional methods of wastewater treatment, such as the peat systems, and the monitoring of existing septic tank and nitrification fields. (2004-2006)

2. Continue to pursue opportunities to address wastewater issues in unincorporated Dare County including construction of a publicly-owned package treatment plant or publicly-owned small centralized treatment plant as a remedial measure to replace existing outdated septic systems that threaten estuarine water quality due to their location in poorly drained soils or to facilitate a publicly-financed or publicly-endorsed housing development.

TRANSPORTATION

Policy #46

Dare County recognizes the vital importance of NC 12 to Hatteras Island and the need to protect this transportation route, including Bonner Bridge. Recommendations by the NC Department of Transportation on NC 12, including beach nourishment, the replacement of Bonner Bridge, elevated sections of the highway, or other options that may be identified, will receive the highest level of consideration from Dare County.

Policy #47

Dare County encourages intergovernmental cooperation with the municipalities and its surrounding counties to study of the transportation needs of Dare County and our region.

Policy #48

Dare County shall not be responsible for the cost of maintaining or repairs to privately owned streets. Experimental programs sponsored by the State to maintain private roads shall be supported.

Policy #49

Whenever possible, local roads should be designed to interconnect to result in alternative transportation routes subordinate to the principal and well-known highway system

Implementation Strategies

1. Continue to require all subdivisions that feature private roads to bear a disclaimer stamp on the final plat indicating that Dare County shall never be responsible for the road maintenance. Restrictive covenants shall also contain language concerning the road maintenance responsibility.
2. Work with our State legislative delegation to secure authorization for a NC Department of Transportation private road maintenance and repair assessment program.

SOLID WASTE

Policy #50

Dare County advocates participation in a regional solid waste authority and continued operation of voluntary recycling efforts. Additional programs for hazardous materials disposal and large item pick-ups are encouraged.

Implementation Strategy:

1. Develop a public information campaign using public information office brochures and local governmental access channel to circulate information about hazardous waste collections and large item pick-up schedules. (2003)

COMMUNITY GROWTH PATTERNS

Policy #51

Dare County values its coastal village atmosphere and will continue to work toward the development of use-specific zoning maps for those areas currently unzoned.

Policy #52 -

Private sector development is encouraged to acknowledge Dare County's coastal village qualities and incorporate these traits in their development plans and building designs.

Policy #53

Public services shall be provided to meet the needs of, but not to serve as an incentive to growth and development.

Policy #54

Dare County reserves the right to review additional acquisitions of private property for public ownership on a case-by-case basis.

Implementation Strategies

1. Continue work to develop use-specific zoning maps for those portions of unincorporated Dare County that are unzoned or have minimal S-1 zoning. (2002-2005)
2. Work with the Town of Manteo to coordinate regulation of development on Roanoke Island where the County's unincorporated boundary joins the Town's boundary.
3. Contract with independent planning consultant to update Carrying Capacity Study for Dare County. (2004)
4. Draft for Dare County Board of Commissioners consideration a set of building design, landscaping, and parking standards for commercial uses as overlay districts along NC 12 on Hatteras Island and other areas of unincorporated Dare County.

RESIDENTIAL DEVELOPMENT

Policy #55

Detached residential structures shall be the preferred land use in unincorporated Dare County. Although the expanding market for seasonal accommodations as structures that resemble traditional domiciles has resulted in a shortage of year-round housing, it is agreed that the policy advocating residential structures as the preferred land use shall continue.

Policy #56

Dare County recognizes the diverse housing needs of the community. Private sector development projects intended to expand housing opportunities for year-round residents are encouraged. Partnerships between the private sector and the public sector will be reviewed on a

case-by-case basis when appropriate. Regional efforts to address the housing needs of the Outer Banks will also be reviewed on a case-by-case basis.

Implementation Strategies

1. Amend the Dare County Zoning Ordinance to delete the term “single family” residential houses and replace with “detached individual residential housing units” in recognition of the possibility that neighborhoods may contain seasonal rentals or that structures in the neighborhood may be occupied by unrelated individuals. (2003)
2. Adopt standards that address unsightly structures and conditions that are more flexible than the current Nuisance Ordinance, which is designed to address public safety and welfare issues rather than eyesores. (2004)
3. Amend Zoning Ordinance to better define an acceptable level of home occupations (2004)
4. Consider revisions to Zoning Ordinance to lower the number of permitted dwelling densities for multifamily structures. (2003)
5. Consideration of an intergovernmental task force on housing issues. (2003)

COMMERCIAL DEVELOPMENT

Policy #57

Dare County will address opportunities for commercial development by adopting zoning maps for those portions of unincorporated Dare County currently unzoned or with minimal S-1 zoning regulations.

Policy #58

Dare County encourages the continued existence and development of locally owned businesses in unincorporated Dare County.

Policy #59

Large franchise operations proposing to locate in unincorporated Dare County are encouraged to individualize their establishments to reflect Dare County’s coastal village character and not rely solely on corporate building designs, color designs or manner of construction.

Implementation Strategies

1. Adopt zoning amendments to include building design standards, landscaping, lighting and sign control standards. (2003)
2. Continue zoning initiatives with focus on detached residential development with limited commercial areas. (2002-2005)

RE-DEVELOPMENT

Policy #60

Redeveloped areas and structures shall conform to current development standards.

Implementation Strategies

1. The County shall enforce the NC State Building Codes for coastal construction and the Dare County Flood Ordinance in the event of reconstruction.

2. Whenever feasible, non-conforming structures destroyed by an act of nature or an accident will be rebuilt to comply with applicable zoning codes.
3. The re-use and rehabilitation of historic structures is encouraged as a means of preserving Dare County's coastal village environment.

INDUSTRIAL DEVELOPMENT

Policy #61

Industrial development that is environmentally suited to Dare County and its surrounding water bodies is encouraged. Dare County also supports the traditional industries of commercial fishing, boat building, and construction.

Policy # 62

Opportunities to diversify and expand Dare County's local tourist economy should be investigated. (2002 –2005)

Implementation Strategies

1. Proposals for industrial development in zoned areas will be reviewed for compatibility under the provisions of the Dare County Zoning Ordinance. For unzoned areas and those areas currently zoned S-1, use-specific zoning maps will be established and the designation of industrial zoned areas thoroughly evaluated based on geographic proximity to water bodies and other sensitive natural areas.
2. Update the Zoning Ordinance to evaluate the scope of uses allowed in the I-1 zoned areas of unincorporated Dare County.
3. Investigate the need for a County-owned industrial park on the Mainland of Dare County.

ENERGY FACILITIES

Policy #63

Dare County is opposed to the development of any petro-chemical energy facility or related improvements within its jurisdictional lands and/or waters. This includes all structures, operations, and activities associated with petro-chemical energy facility development such as, but not limited to on-shore support bases for offshore exploration activities, staging areas, transmission and/or production pipelines, pipeline storage yards, and other similar structures activities, and improvements related to petro-chemical energy facility development, exploration, or production. Dare County supports research and development of non-fossil fuel alternatives for energy production.

Implementation Strategies

1. Any major energy facility proposed to be located in Dare County shall make a full disclosure of all costs and benefits associated with the project. This disclosure shall be in the form of an environmental impact statement independent of and not funded by any petro-chemical company or the Mineral Management Service.
2. In the event an energy facility is proposed for Dare County, the County will support the policy statements and administrative regulations referenced in 15NCAC7M, Section .0400 entitled "coastal energy policies."

TOURISM

Policy #64

Dare County recognizes the vital importance of tourism to our local economy and supports efforts to maintain our status as a desirable place to visit and vacation. Dare County also recognizes the need to address the infrastructure and service demands of our seasonal populations. The use of tourist-generated revenues, such as occupancy taxes, to address the year-round and seasonal population needs is encouraged.

Policy #65

Dare County supports the concept of combining natural resources and tourism to promote the area's ecological values, known as "eco-tourism".

Policy #66

The quality of life of Dare County residents should be carefully balanced with the growing tourist-based economy of the Outer Banks. Maintaining a good quality of life for our permanent population and ensuring a safe and enjoyable vacation experience should be a goal of all local, state, and federal agencies responsible for the promotion of tourism in Dare County and North Carolina.

Implementation Strategy:

1. Use revenues generated by tourism to fund quality of life related projects such as sidewalks, bikepaths, streetscape and landscaping improvements and open space acquisitions

BIKEWAYS/WALKWAYS/GREENWAYS

Policy #67

Dare County supports the development and construction of sidewalks, bike paths, greenways, and other walking/jogging trails to provide a safe setting for these types of outdoor recreation and as alternative transportation routes.

Implementation Strategies:

1. Continue to work with participating agencies to pursue opportunities for construction of additional walkways/bike paths throughout all of unincorporated Dare County, including interconnection of the Roanoke Voyages multi-use path into Wanchese
2. Request revenues through local funding or grants to provide an areawide greenway plan (2004)

Storm Hazard Mitigation, Evacuation, Post-Disaster Reconstruction and Recovery

Policy #68

Dare County shall use construction standards and zoning regulations to mitigate the effects of high winds, storm surge, flooding, wave action, and erosion.

Implementation Strategy:

1. Dare County will continue to enforce all applicable Federal, State, and local regulations relating to construction in storm hazard areas.

Policy #69

Dare County is committed to maintaining a full-time emergency management department and emergency operation centers and places a high a priority on hurricane preparedness and response.

Policy #70

The Dare County Board of Commissioners shall be ultimately responsible for supervising the implementation of various policies and procedures regarding reconstruction and recovery after a natural disaster.

Policy #71

Recovery priority shall be directed to restoring or repairing infrastructure improvements such as transportation routes, utilities and medical and emergency management facilities. Once the infrastructure has been restored, recovery priorities shall then be directed at essential commercial and primary residential structures.

Policy #72

In the event of extensive hurricane damage to publicly-owned utilities or other improvements requiring replacement or reconstruction, alternative locations that will mitigate the potential for similar repetitive losses will be examined and implemented wherever feasible and practicable.

Policy #73

In the event of a damaging hurricane or other disastrous event, the Dare County Board of Commissioners may declare a moratorium on all building permits and/or rezoning requests pending an evaluation of the damage and any reconstruction strategies that may serve to mitigate future damage or repetitive losses.

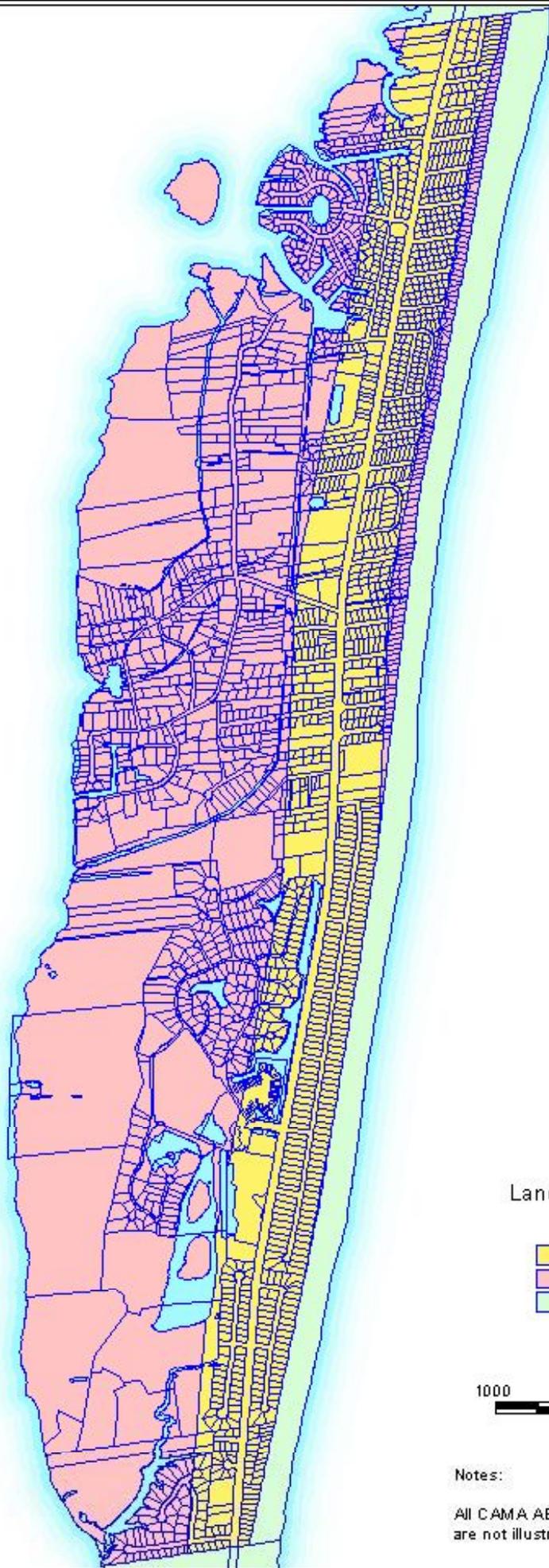
Public Participation

Policy # 74

Dare County supports the active involvement of all interested persons in its land use planning and policy development activities.

Implementation Strategies

1. The County will continue efforts to inform, educate, and involve the public in planning for the future of the County, primarily through the regular and special meetings of the Dare County Planning Board and Board of Commissioners.
2. The County will encourage continued representation by a broad range of Dare County residents on its Planning Board.
3. Continue to maintain the mailing list for the Planning Board meetings.



Avon Land Classification Map

- Limited Transition
- Community
- Conservation

SCALE 1 : 22,000



Notes:

All CAMA AECs are classified "Conservation" but are not illustrated due to the scale of the map.

Buxton

Land Classification Map



-  Limited Conservation
-  Limited Transition
-  Community
-  Conservation

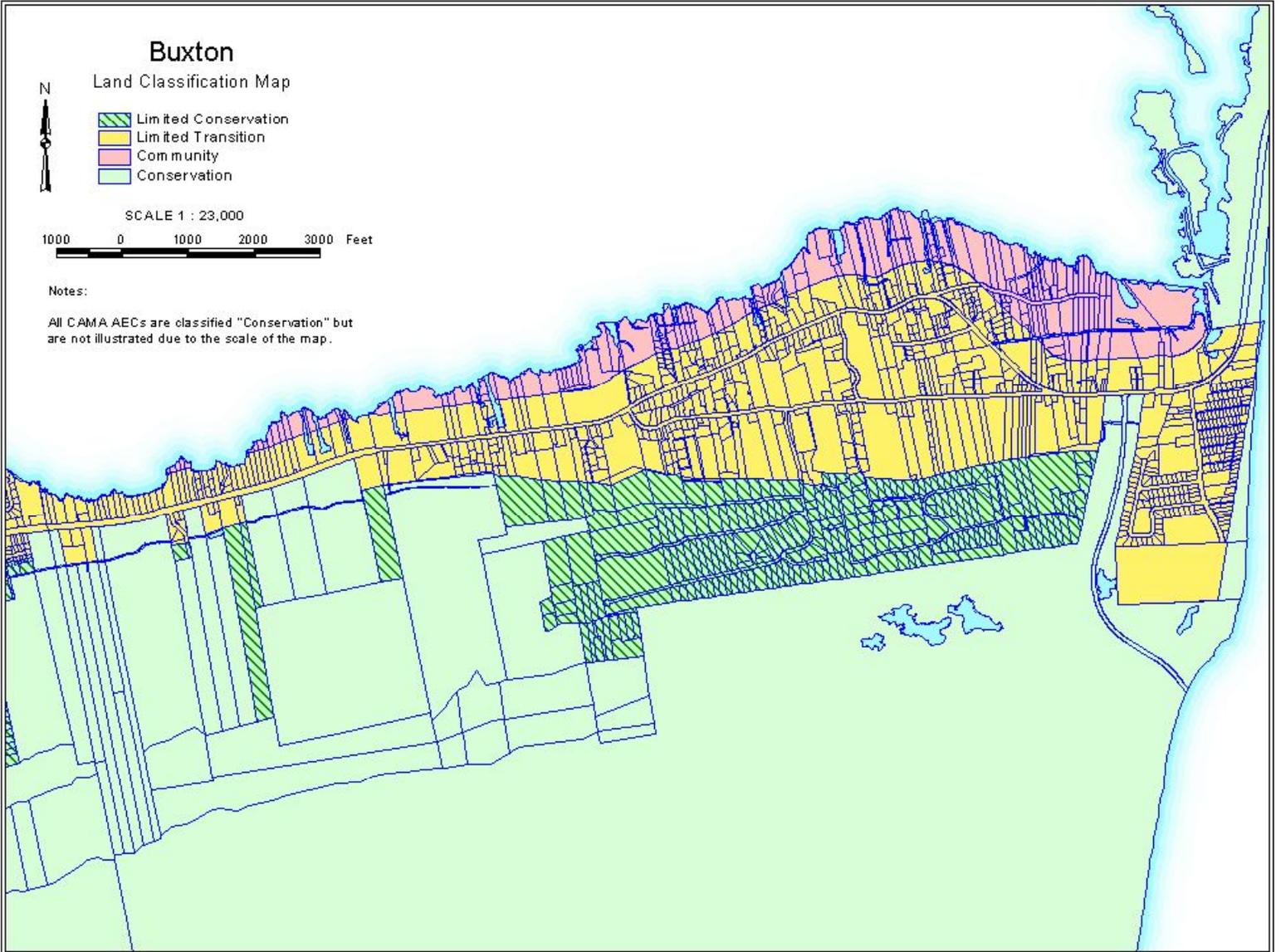
SCALE 1 : 23,000

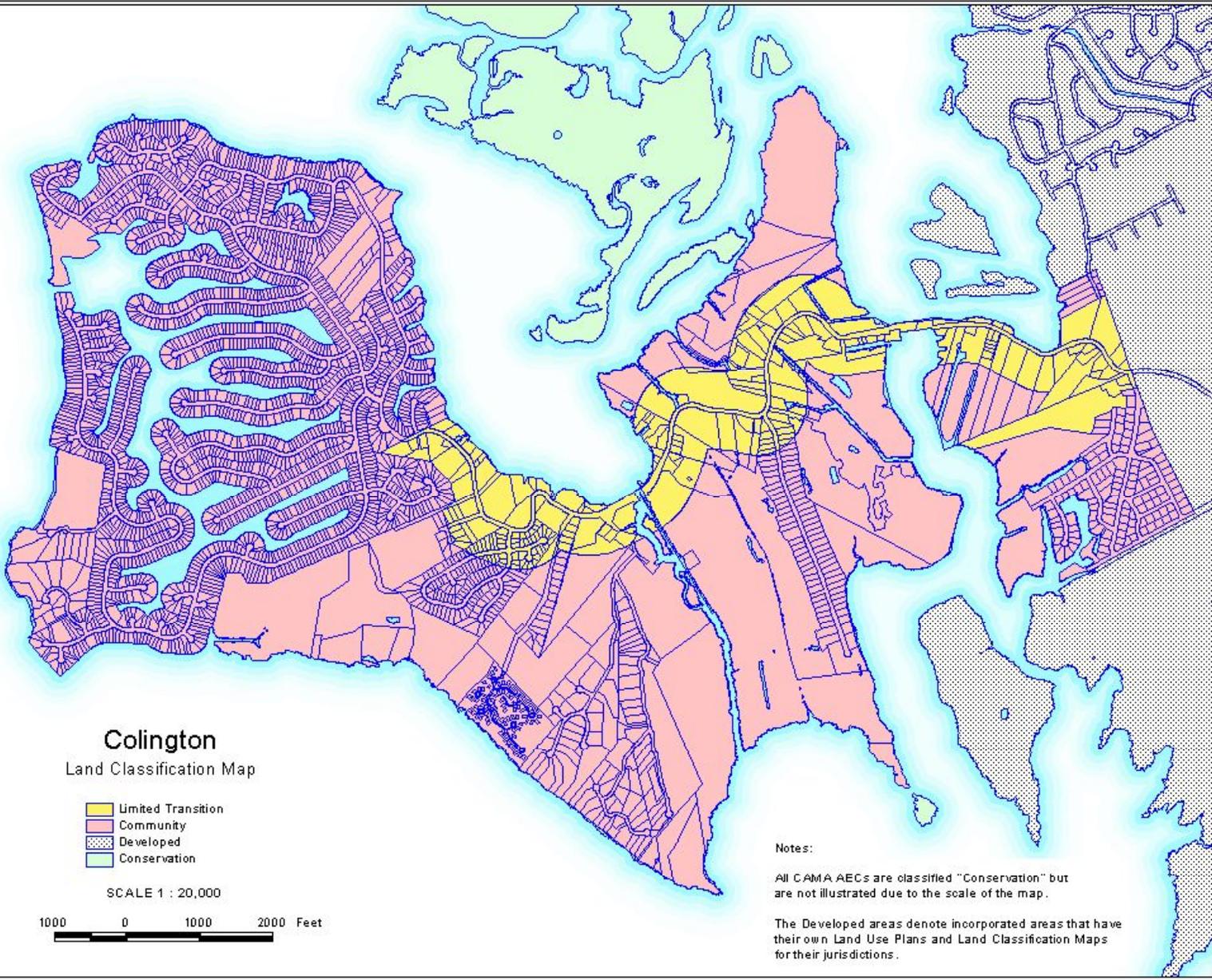
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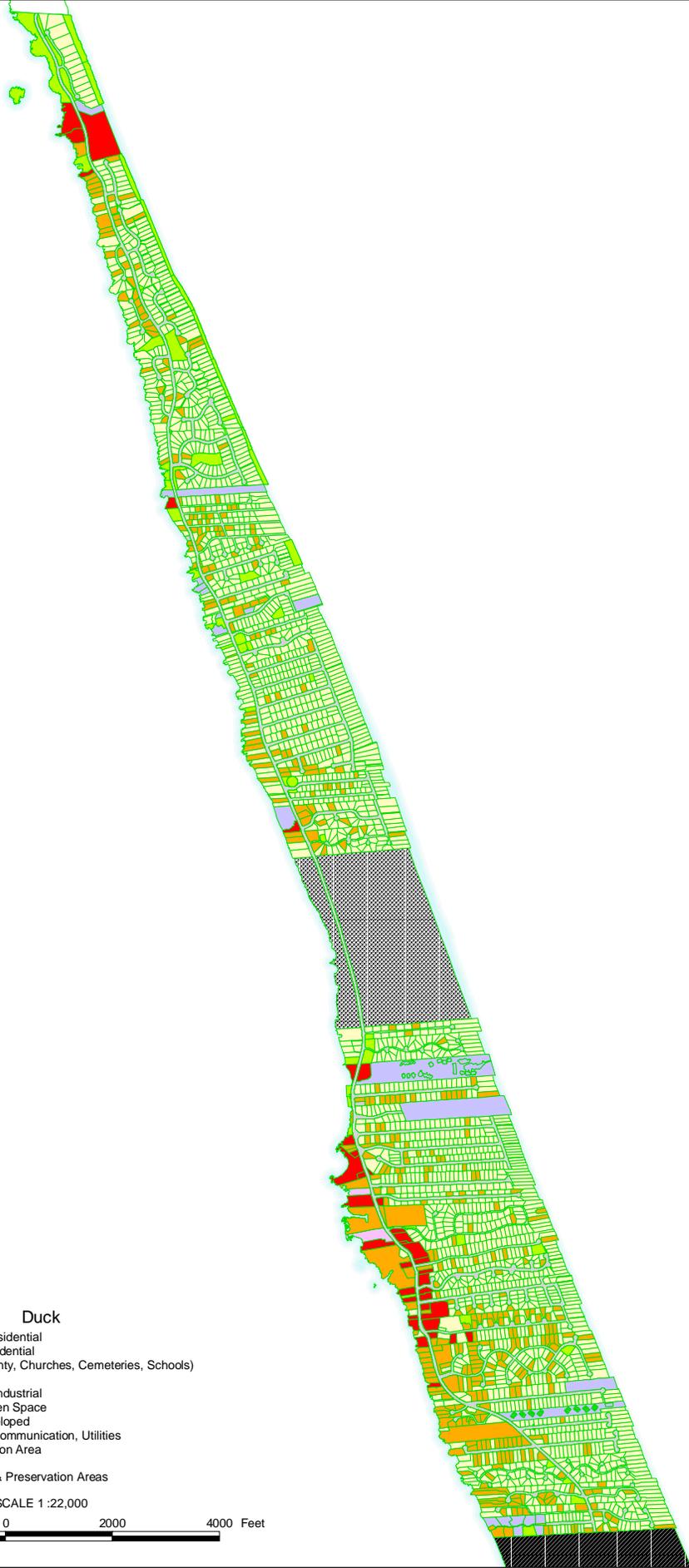


Notes:

All CAMA AECs are classified "Conservation" but are not illustrated due to the scale of the map.







Duck

- Single Family Residential
- Multi-Family Residential
- Institutional (County, Churches, Cemeteries, Schools)
- Commercial
- Warehousing & Industrial
- Recreation & Open Space
- Vacant & Undeveloped
- Transportation, Communication, Utilities
- Military Reservation Area
- Incorporated
- Federal Wildlife & Preservation Areas

SCALE 1 :22,000





Frisco

Land Classification Map

-  Limited Conservation
-  Limited Transition
-  Conservation

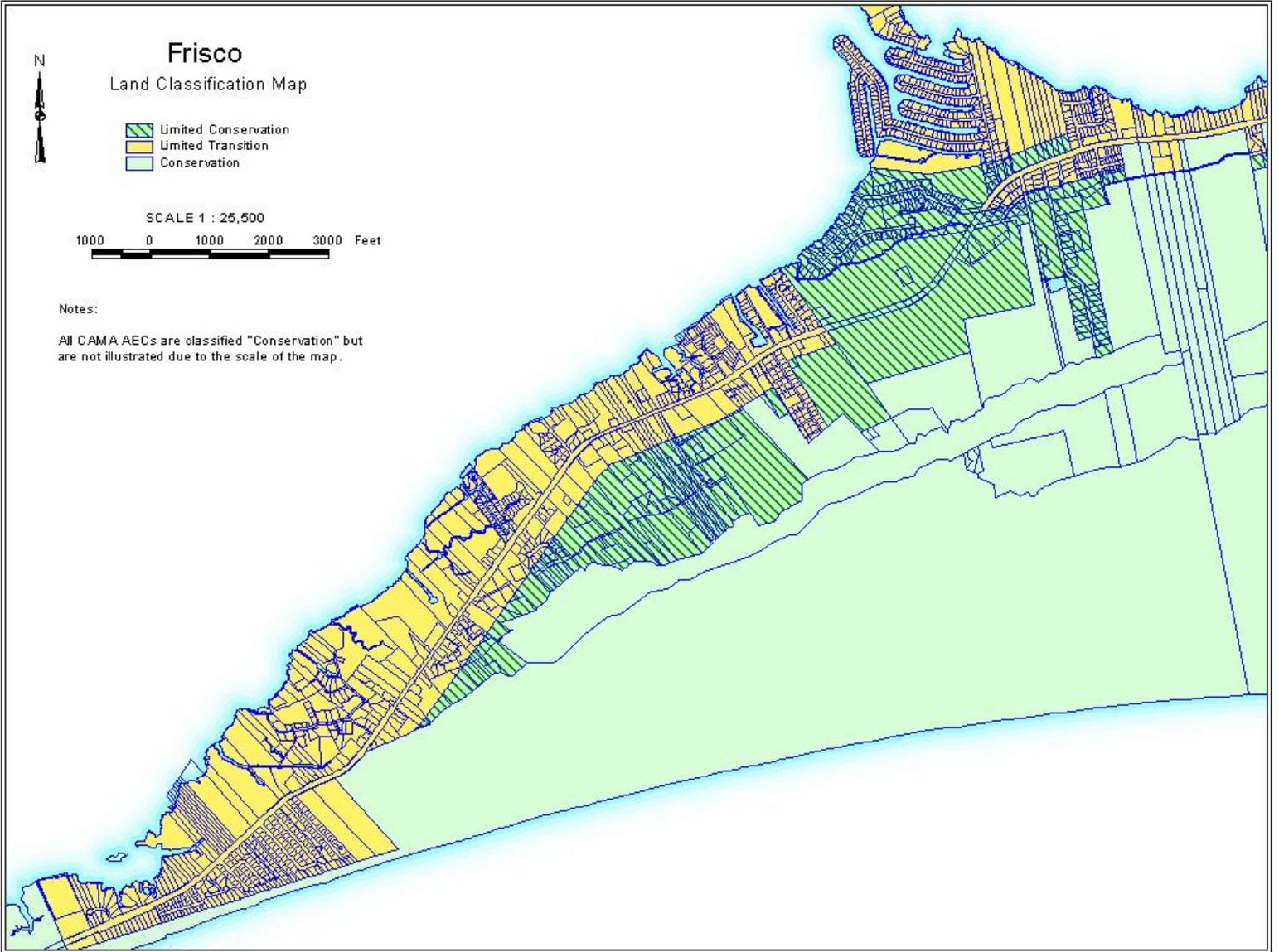
SCALE 1 : 25,500

1000 0 1000 2000 3000 Feet



Notes:

All CAMA AECs are classified "Conservation" but are not illustrated due to the scale of the map.





Hatteras

Land Classification Map

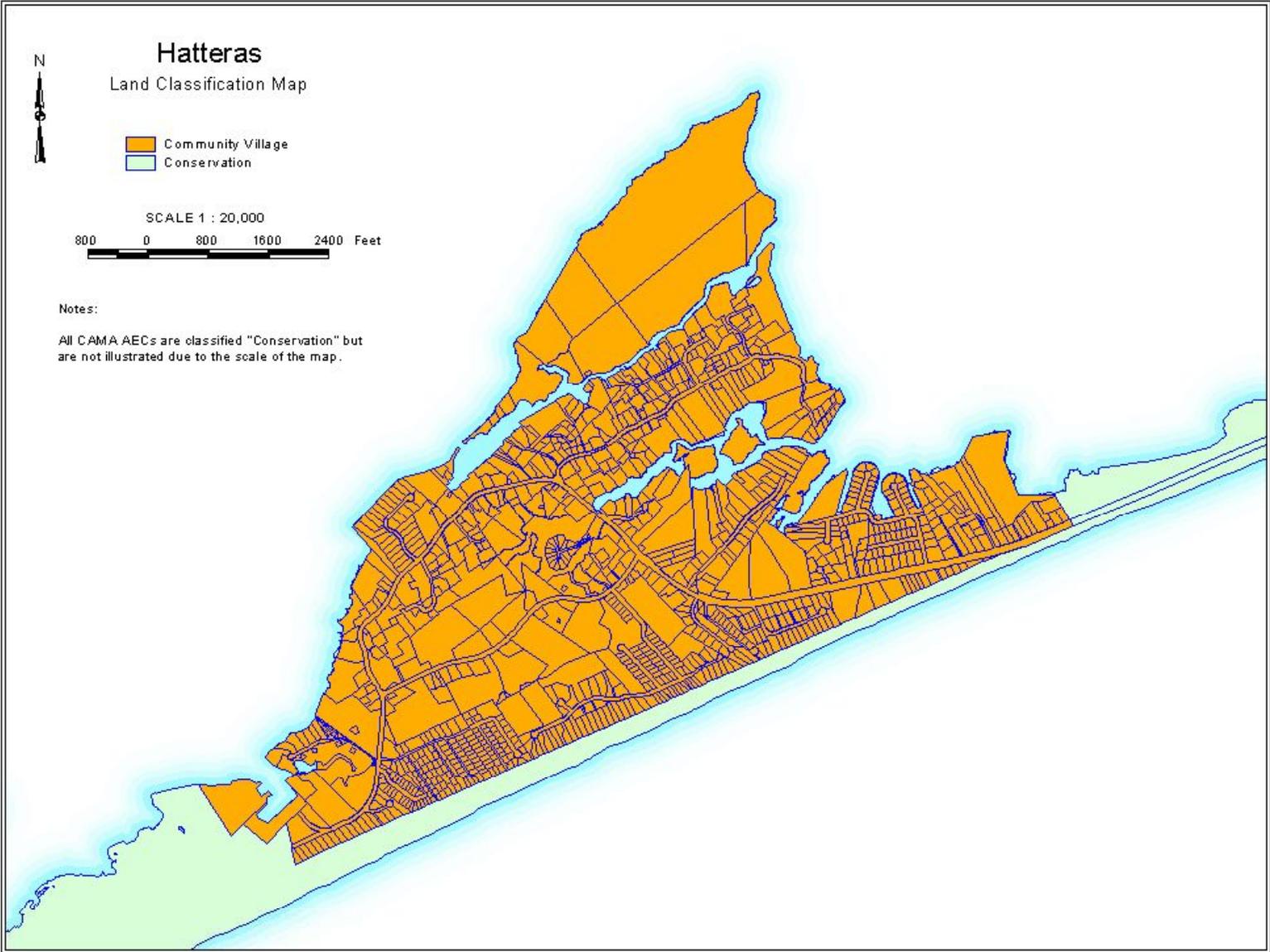
-  Community Village
-  Conservation

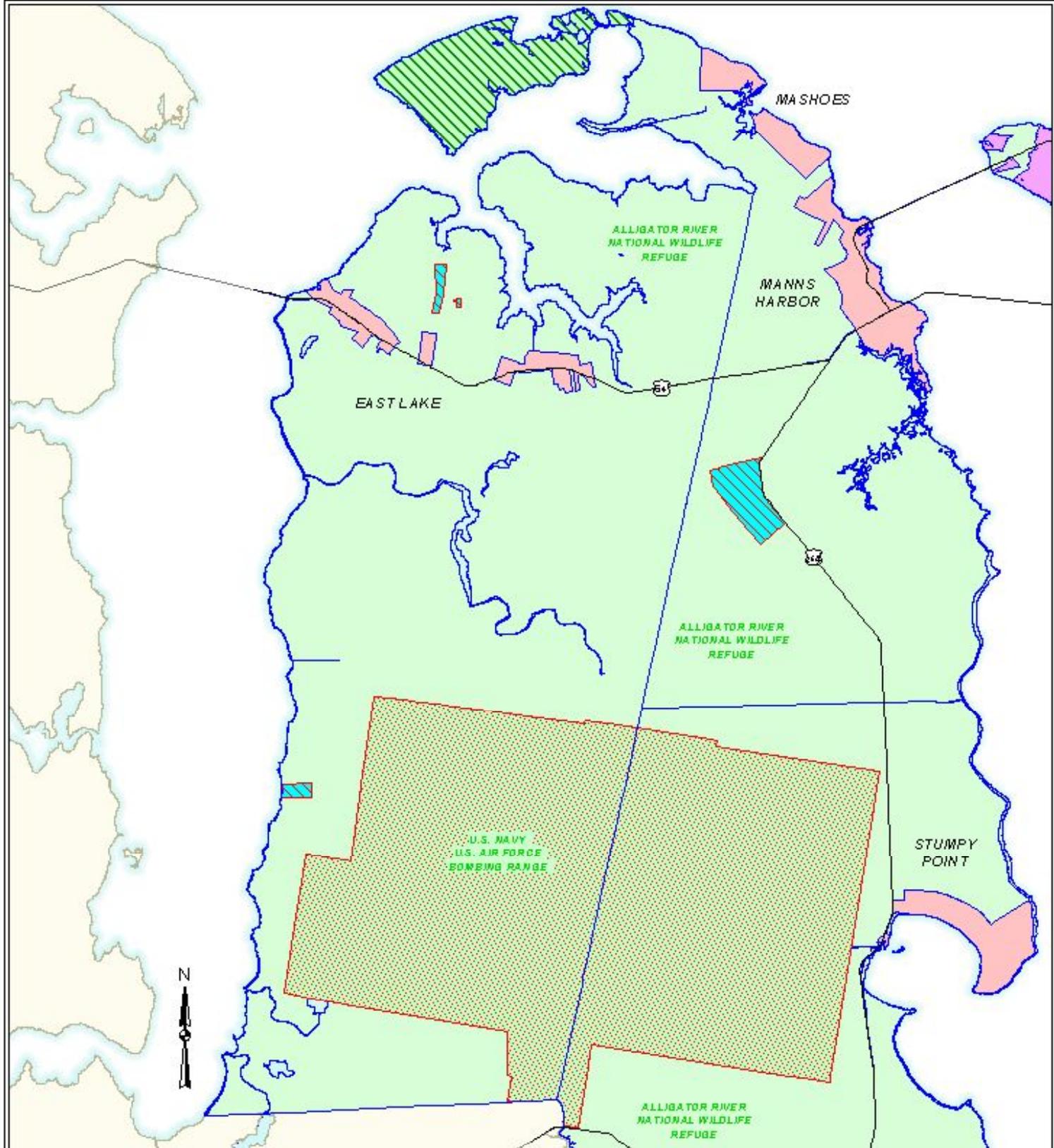
SCALE 1 : 20,000



Notes:

All CAMA AECs are classified "Conservation" but are not illustrated due to the scale of the map.





Dare County Mainland

Land Classification Map

- Limited Conservation
- Community
- Rural
- Other Federally Owned Property
- Conservation

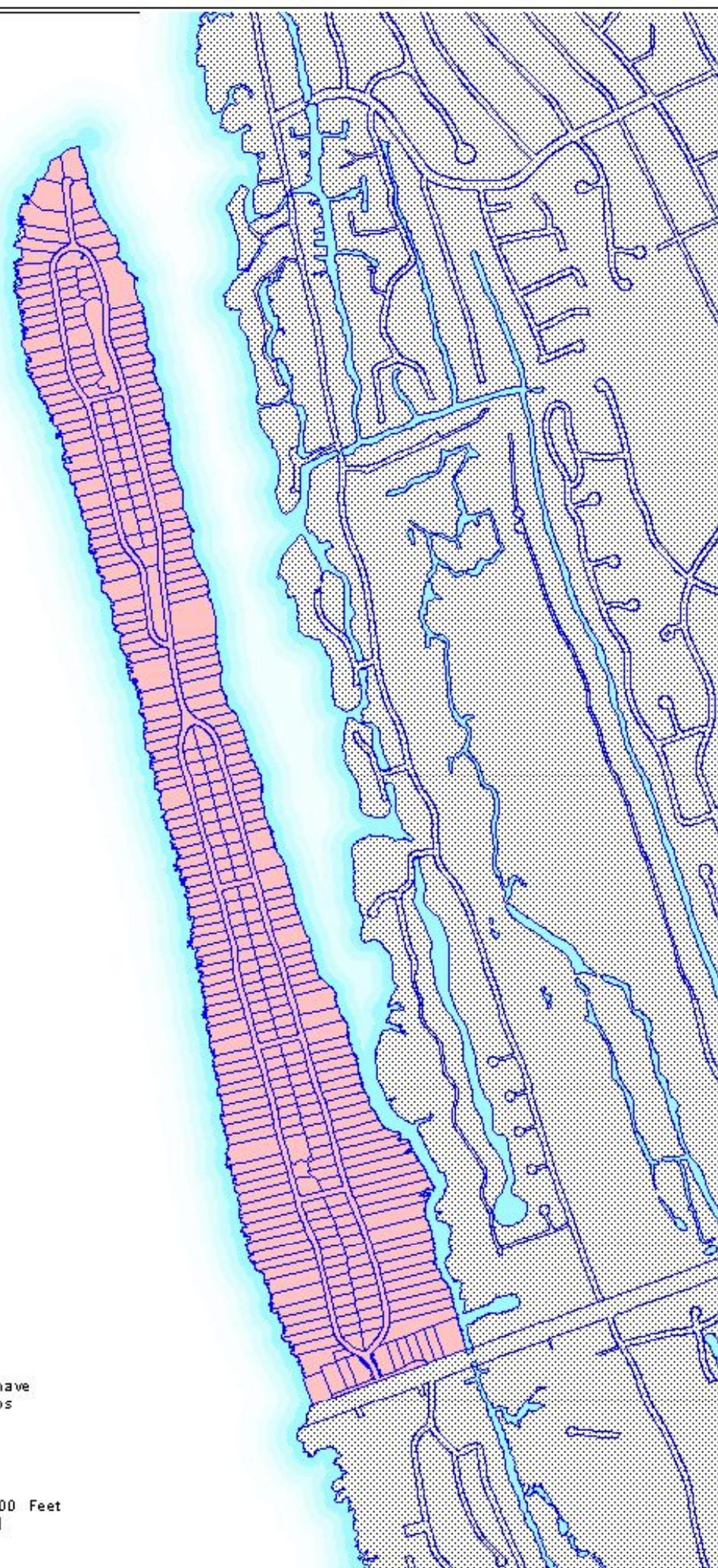
Notes:

All CAMA AECs are classified "Conservation" but are not illustrated due to the scale of the map.

The Developed areas denote incorporated areas that have their own Land Use Plans and Land Classification Maps for their jurisdictions.

SCALE 1 : 180,000

3 0 3 6 Miles



Martins Point Land Classification Map

 Community
 Developed



Notes:

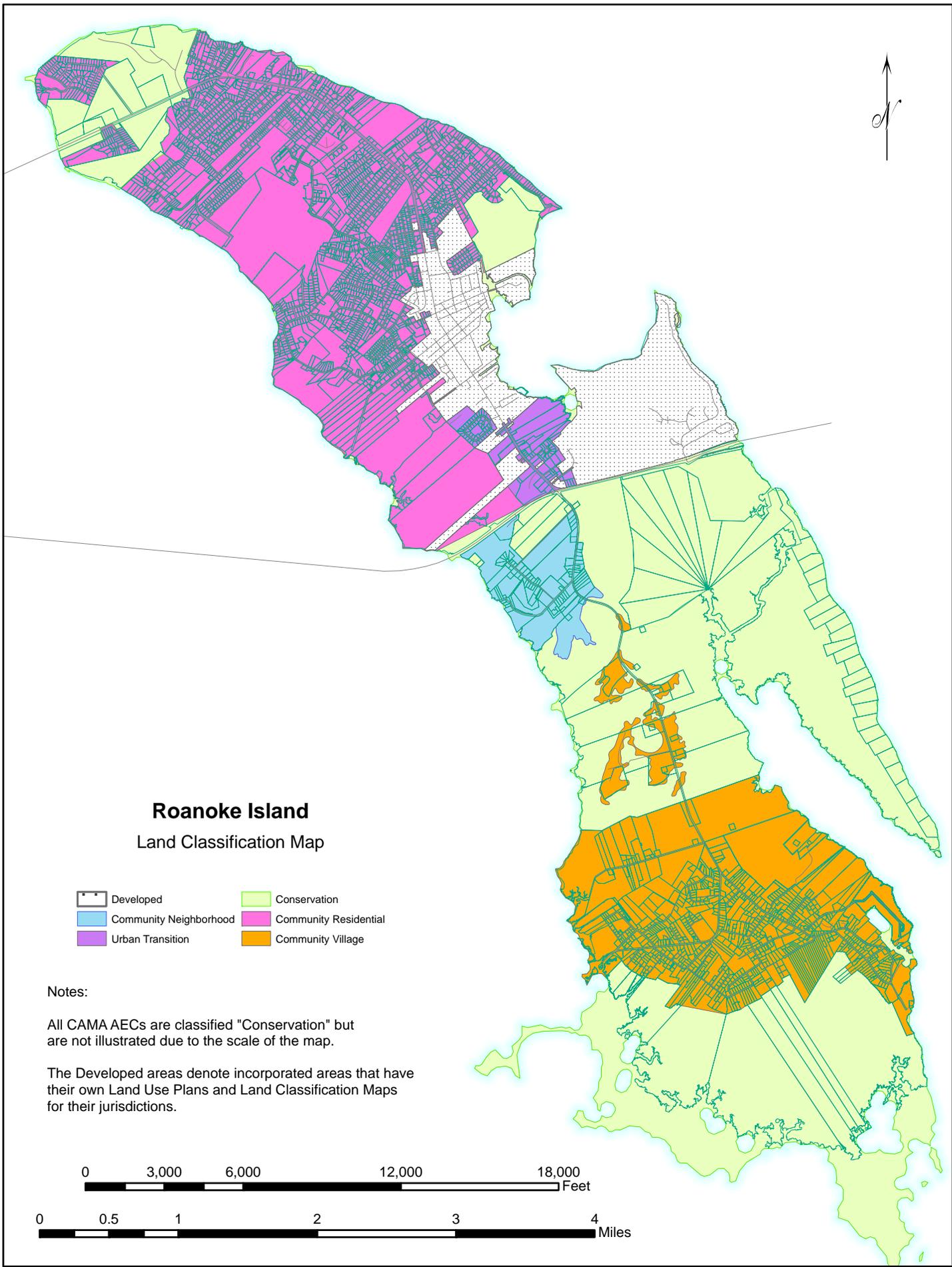
All CAMA AECs are classified "Conservation" but are not illustrated due to the scale of the map.

The Developed areas denote incorporated areas that have their own Land Use Plans and Land Classification Maps for their jurisdictions.

SCALE 1 : 18,000

1000 0 1000 2000 3000 Feet





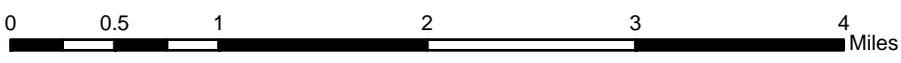
Roanoke Island Land Classification Map

- | | |
|--|---|
|  Developed |  Conservation |
|  Community Neighborhood |  Community Residential |
|  Urban Transition |  Community Village |

Notes:

All CAMA AECs are classified "Conservation" but are not illustrated due to the scale of the map.

The Developed areas denote incorporated areas that have their own Land Use Plans and Land Classification Maps for their jurisdictions.



Rodanthe, Waves, Salvo

Land Classification Map



-  Limited Transition
-  Conservation

SCALE 1 : 32,000

1000 0 1000 2000 3000 Feet



Notes:

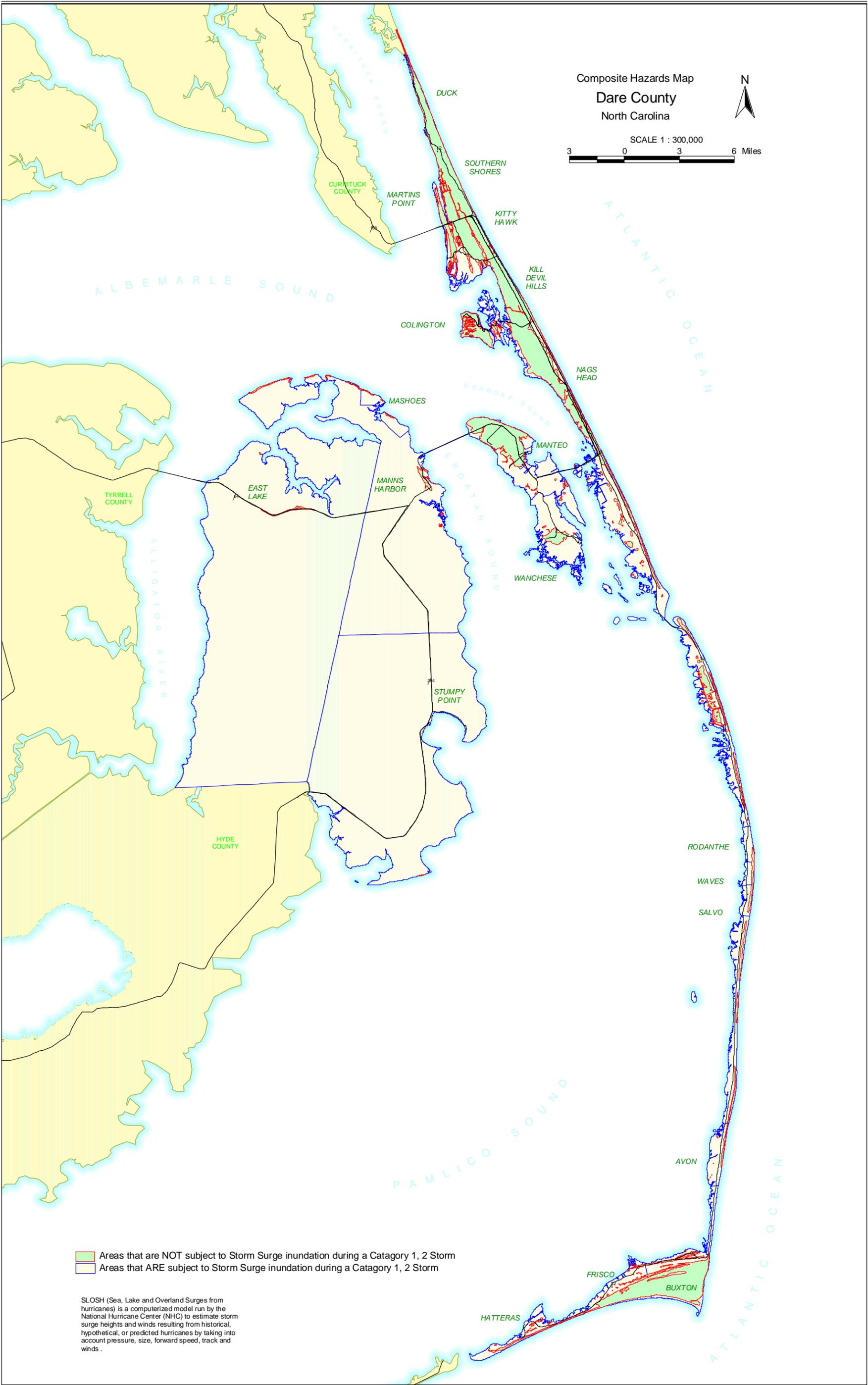
All CAMA AECs are classified "Conservation" but are not illustrated due to the scale of the map.



Composite Hazards Map
Dare County
 North Carolina

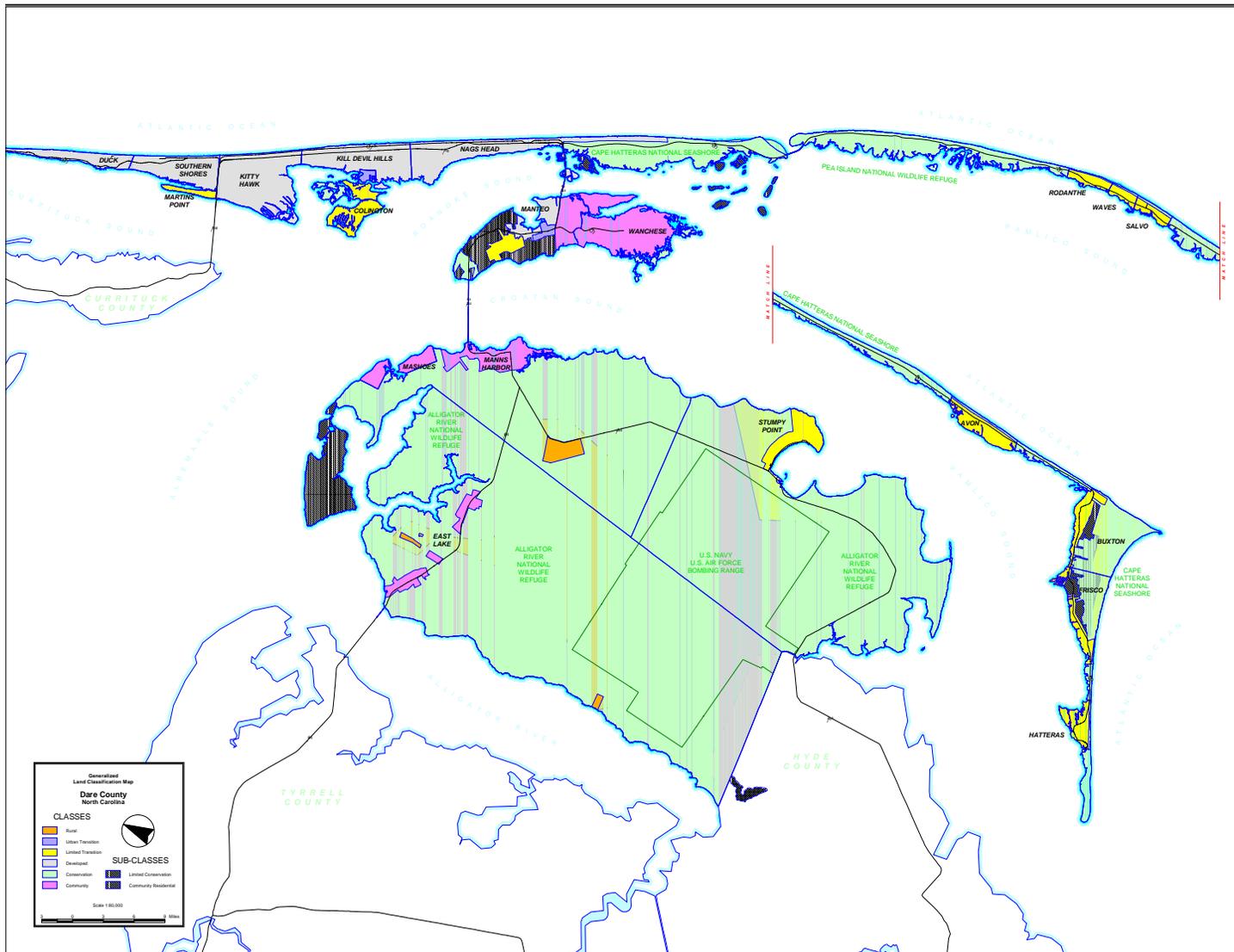


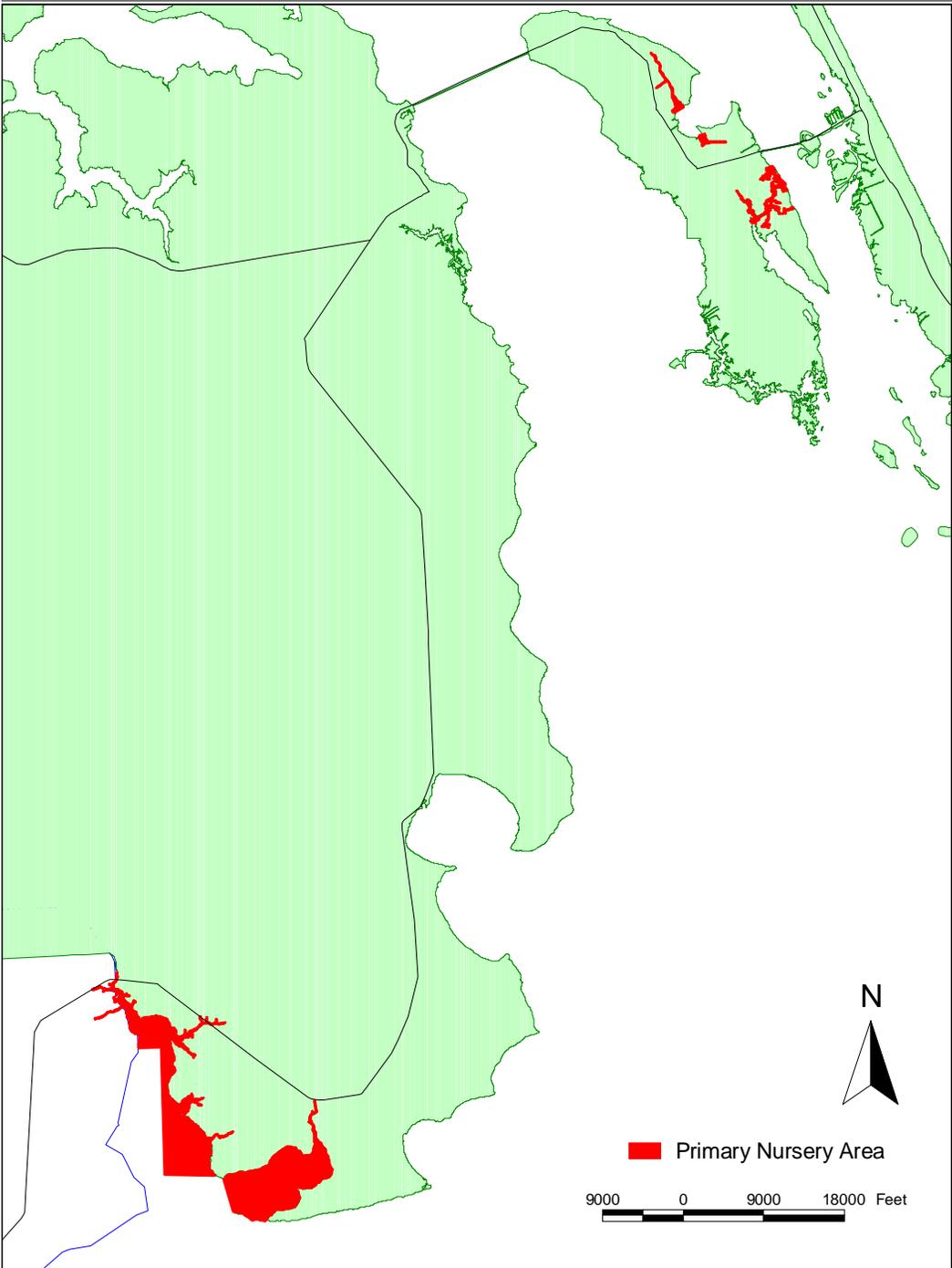
SCALE 1 : 300,000
 3 0 3 6 Miles



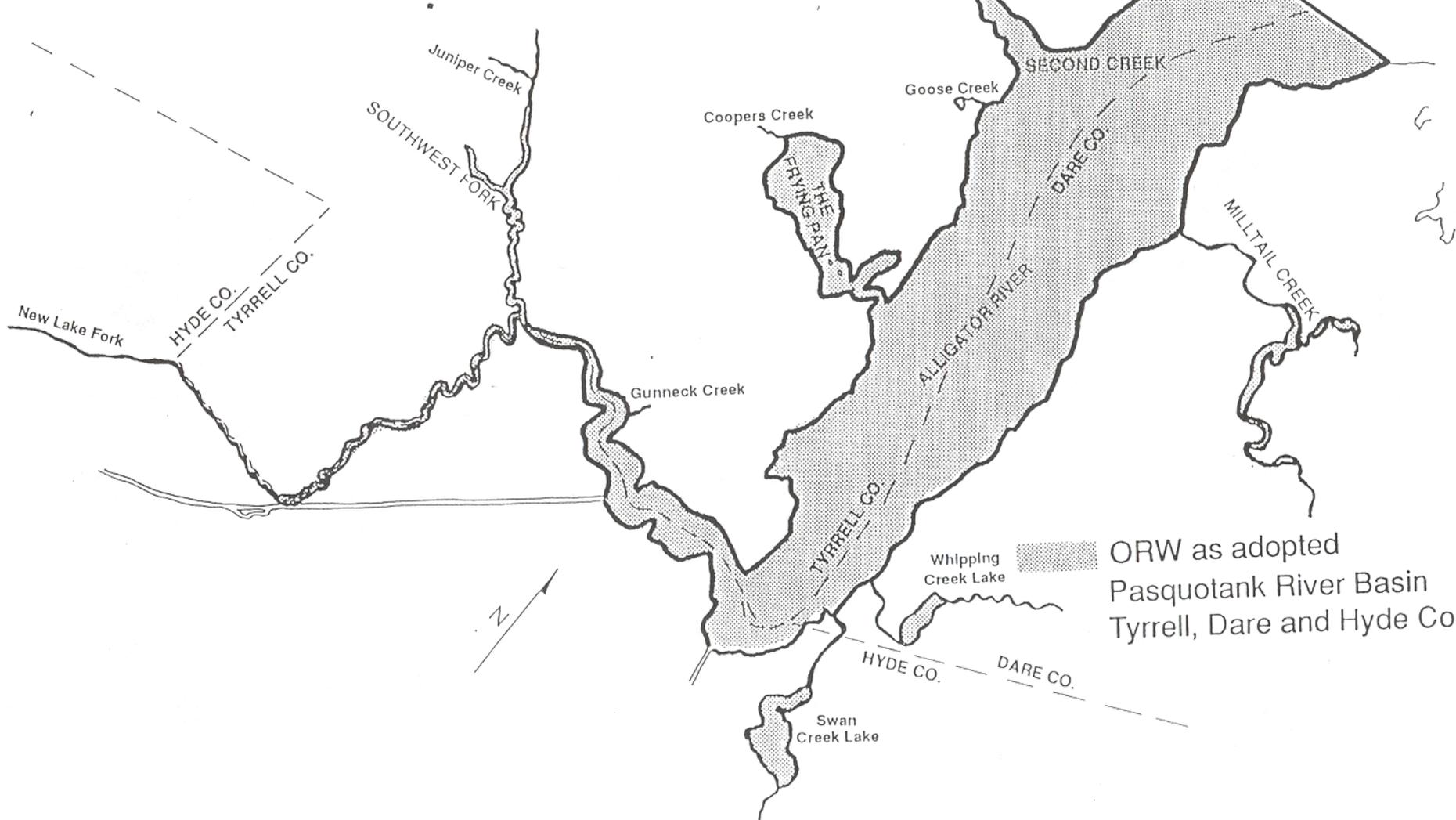
- Areas that are NOT subject to Storm Surge inundation during a Category 1, 2 Storm
- Areas that ARE subject to Storm Surge inundation during a Category 1, 2 Storm

SLOSH (Sea, Lake and Overland Surges from hurricanes) is a computerized model run by the National Hurricane Center (NHC) to estimate storm surge heights and winds resulting from historical, hypothetical, or predicted hurricanes by taking into account pressure, size, forward speed, track and winds.





ALLIGATOR RIVER AREA



ORW as adopted
Pasquotank River Basin
Tyrrell, Dare and Hyde Counties

