SECTION I. INTRODUCTION

This Fiscal Year 2003/2004 - 2004/2005 Core CAMA Land Use Plan is prepared in accordance with the requirements of the North Carolina Coastal Area Management Act (CAMA). Specifically, this document complies with Subchapter 7B, "CAMA Land Use Planning Requirements," of the North Carolina Administrative Code, as amended, August 1, 2002.

The 7B guidelines provide that each of the twenty coastal counties and municipalities within those counties prepare and adopt a Core CAMA Land Use Plan that meets the planning requirements adopted by the Coastal Resources Commission (CRC). If a county chooses not to prepare a plan, the guidelines specify that the CRC will prepare and adopt a CAMA Land Use Plan for that county and municipalities in the county which choose not to prepare their own plan. Municipalities not preparing their own plan will be included in the plan for the county in which the municipality is located.

In general, 7B requires that a plan include analysis of existing and emerging conditions, a plan for the future including specific land use/development goals/policies, and tools for managing development. The management tools must specify the actions which the Town of Newport will take to ensure implementation of this plan. **Please refer to Section VI.B., Policies and Implementing Actions, page 120. This section specifically states actions which will be taken by the Town of Newport Planning Board and Town Council to accomplish implementation of this plan.**

The Town of Newport has discussed its extraterritorial jurisdiction (ETJ) boundary and currently has no plans for expansion of the ETJ. In addition, the town accepts the ETJ as the planning boundary for this plan. The town is aware that in the future if land is annexed into the Town that is not within the town's Coastal Resources Commission Certified Planning Boundary, such property will be subject to county rather than town policy. However, no annexations beyond the ETJ are anticipated in the next five to ten years. Infrastructure construction beyond the existing ETJ is not anticipated. This plan will be updated/revised in five to seven years. Expansion of the plan area may be considered at that time.

At the beginning of the preparation of this document, the Town of Newport adopted a Citizen Participation Plan which is intended to ensure that all interested citizens have an opportunity to participate in the development of this plan through both oral and written comments. A copy of the Citizen Participation Plan is included as Appendix I.

Following adoption of the plan by the Newport Town Council, it was submitted to the CRC for certification. Certification of the plan was achieved on _____, 2005.

SECTION II. HISTORY

The Town of Newport was granted a charter from the State of North Carolina January 30, 1866, but its history begins almost 150 years before that. The river, called Newport, which rises in the Lake Pocosin and empties into Beaufort Inlet, was the highway over which early settlers traveled to the "rich upland country." But the country was mainly pine forest, not the cleared land where farmers grow brightleaf tobacco today.

Around a landing at the upper part of the river, the Town of Newport sprang up. There, barges unloaded products landed at the port, Beaufort, and took on lumber and naval stores to be shipped from Beaufort to other colonial ports or to the West Indies.

Near the Newport River landing, where a road from Harlowe connected with a road to Cedar Point, a general store was established by a man named Bell – one of three Bell brothers, Ross, Jasper, and George, who held early land grants in what is now western Carteret County. Naturally, this point came to be known as Bell's Corners. In the early part of the 18th Century, the settlement was also called Shepardsville, supposedly a connection with a man by the name of Shepard, who was also a large landowner.

The name Newport is said to have come from two sources. One, that it was called "the new port," to distinguish it from the "old port" at Beaufort; and two, that the place was so called by Quakers who came here from Rhode Island and named it for their native Newport in that New England state. The Quakers arrived between 1720 and 1733. However, if they did call the settlement Newport, it was not an established name, for the first post office in the community was called "Shepardsville" and was so designated on June 27, 1859. That was more than a hundred years after the Quakers had left the county, migrating westward, seeking territory in which there was no slavery.

According to records in the Library of Congress, the post office name was not officially changed to Newport until March 29, 1866. That the name, Newport, preceded the coming of the Quakers and perhaps even the founding of the "old port" at Beaufort town, is borne out by land grants of 1700 which describe land in what is now western Carteret County as bordering on "Newport Sound."

Forebears of the present Town residents engaged in lumbering and production of naval stores, rosin, turpentine, and tar, all from the abundant pine. There were sawmills and grist mills. W.S. Bell is said to have been the first mill owner to change from the sluggish water wheel for power to the new-fangled steam engine. As forests were cleared and cotton came on the scene, he operated a cotton gin in connection with his mill on the river.

Through the American Revolution and into the mid-19th Century, Newport remained as little more than a crossroads town. Then the train came in 1858, a year after the first lots were sold in a new little town to the east, called by John M. Morehead, its founder, "The City of Morehead." The train passed through Newport carrying in the summer time passengers from the west, bound for the coast where they could enjoy the salt air. In addition to carrying them back home again, it transported products of the sea to the inland cities of North Carolina.

During the Civil War, both Confederate and Federal troops lived in barracks north of Newport. The barracks were built by their first occupants, the Confederates, who during the winter of the war, moved to town to live in crudely constructed log huts. The men were of the Seventh North Carolina Regiment and were ordered to New Bern in March 1862 to defend that town against invading Yanks. The Victorious invaders then moved southward into Newport. A small group of Confederates who remained at the barracks fought a retreating action, firing Newport's railroad trestle and wooden highway bridge, in the hope of holding off the Yankees. The trestle burned but an advance force of Union men saved the highway bridge.

The history of public schooling in Newport does not quite span a hundred years. Although effort was made to teach the three R's in little one or two-room schools, the Peabody Education Fund was the financial aid that had been lacking. Prior to 1870, two small schools were located in the vicinity. The Union Point School was in the Deep Creek section where the present road branches just north of the Canal Bridge. The Vanolia School was at the junction of the Nine-Foot and Roberts Roads. Built by Richard and Randolph Roberts, it was used by Yankees as field headquarters during the civil war.

Although the river gave the town a reason for existing in the early days, the river plays hardly any role today in transportation. Mainly fishing skiffs and small trawlers traverse it, but no major docks line its shore. The river is broad, shallow, and meandering.

A road eventually connected Onslow County to Newport. It crossed the White Oak River at Stella. Even by the end of the 18th Century, most roads in Carteret County were little better than trails. For 92 years after the arrival of the railroad, passengers could ride the train from Goldsboro, through Newport, to Morehead City. The passenger service was discontinued March 31, 1950.

On January 12, 1932, town residents voted to sell their electrical system to Tidewater Power Company for $4,950. One hundred ten voters registered. Eleven didn't vote. All of the others were in favor of the sale.

In 1949, the town bought a water system that had formerly been used by the Marine Corps at nearby Bogue Field. Over the next few years it was gradually installed. In 1958, voters authorized borrowing $120,000 to complete installation of a new water tank and water lines to

all areas in the town limits. In July 1961, voters authorized borrowing $15,000 to extend to annexed areas the water system and another $20,000 to build the town hall and fire station. Extension of the water lines was completed in mid-1962 and plans were immediately laid to get federal assistance to install a town sewage system and make more improvements to the water system.

The first church in Newport was the Primitive Baptist Church, built in 1783, and still existing in the form of two congregations. The original church burned during the War Between the States and later the federal government paid damages amounting to $170.

With foresight, town officials in 1955 set aside town-owned land that would serve as desirable locations for industry. Located on 12 acres of that property was Conner Industries, manufacturer of mobile homes. Construction of the plant was started in May 1964 and mobile homes were rolling out by September. The business observed its first anniversary in the fall of 1965 with plans for expansion under way. Conner Industries went out of business in 1989. However, a new industry, Veneer Technologies, Inc., resides at the present location.

Newport and its immediate vicinity has well over three thousand (3,346) inhabitants. It is the first established town in western Carteret County. While much of the town's impetus may come indirectly from the nearby Cherry Point Marine Corps Air Station, native Newporters have a vision and inner drive that defy anyone's calling them residents of "a sleepy southern town".

SECTION III. REGIONAL SETTING

Newport is located within Carteret County, which is situated in the tidewater region of North Carolina. Carteret County is bordered on the East by the Pamlico Sound, Bogue Sound, Core Sound and Atlantic Ocean to the South and East, on the Northeast by the Neuse River, on the west by Craven County, on the Northwest by Jones County, and on the southwest by Onslow County. The county is primarily comprised of flat and poorly drained areas that feed into a complex estuarine system.

Newport is located along the Newport River with Highway 70 running north to south through town. Newport is just 10 miles to the northwest of the State Port of Morehead City. The County seat of Carteret County is Beaufort, which is located 13.5 miles to the southeast along Highway 70. The beach communities of Emerald Isle, Pine Knoll Shores, and Atlantic Beach can be accessed through Newport along Highway 70 and Highway 24. See Map 1 for the regional location of the Town of Newport.

MAP 1 - REGIONAL LOCATION

SECTION IV. TOWN OF NEWPORT CONCERNS AND ASPIRATIONS

A. KEY ISSUES/DOMINANT GROWTH-RELATED ISSUES

On August 27, 2003, the Town of Newport conducted a publicly advertised meeting for the purpose of identifying key issues confronting the town. Approximately thirty (30) people attended the meeting. The following provides a prioritized listing of the issues which were identified:

RANK	ISSUE	SCORE
1	Clearing Newport River	30
2	Pedestrian Access to Newport Middle School plus Bike Path	26
3	Develop Old Highway 70	21
4	Expansion Wastewater Treatment Plant	20
5	Maintain Newport's Identity (Don't Over Develop)	19*
6	Reroute Commercial Traffic Out of Residential Areas	19*
7	Address Issue Ditch/Erosion in Town	12*
8	Development Parks and Ballfields	12*
9	Improve Availability of Infrastructure Residential Areas	11*
10	Pedestrian Crossing Highway 70	11*
11	Need Light to Medium Industry	11*
12	Locate Third School by Newport Middle School	11*
13	Support Development Highway 70 Corridor	11*
14	Protection Existing Residential Areas	10*
15	Protection Environmental Concerns	10*
16	Clean Ponds at White Sands	5
17	Protection Transportation Concerns	1

*Indicates a tie score.

In addition, the Town of Newport Planning Board believes that there is inadequate parking in the Central Business District.

Surveys were mailed out to 317 absentee property owners. A total of 59 completed questionnaires were received. See Appendix II for a comparison of these results and the in-town results as well as the tabulation of additional questions from the absentee survey.

B. TOWN OF NEWPORT COMMUNITY VISION

This vision statement is an expression of the community character that the Town of Newport would like to maintain and develop over the next ten years. Newport desires to achieve balanced growth, with a focus on maintaining the quiet, rural, and residential nature of the community. In the past, residents of Newport have strived to create a safe, healthy, and secure place for people of all age groups and ethnic backgrounds. The town will seek to maintain this character while maintaining a consistent population growth rate. This growth will be managed in a way that will enrich the lives of its citizens, as well as attract new citizens. The town will refrain from aggressive annexation, and will maintain a conservative annexation policy that will respond to responsible requests for the provision of municipal services. The town's primary efforts will be focused on improving the quality of existing services, while seeking opportunities to expand services such as recreation, law enforcement, and infrastructure. Newport will continue its economic development efforts through the promotion of commercial development along the Highway 70 and Old Highway 70 corridors, as well as the recruitment of light to medium industry. Growth will be directly linked to sustaining/expanding the Cherry Point Marine Corps Air Station. Specifically, Newport will strive to accomplish the following:

- *Clearing of the Newport River.*
- *Pedestrian access to Newport Middle School (including a bike path).*
- *Redevelop Old Highway 70.*
- *Expansion of wastewater treatment plant.*
- *Maintain Newport's identity (do not overdevelop).*
- *Reroute commercial traffic out of residential areas.*
- *Sustain/expand the Cherry Point Marine Corps Air Station.*

SECTION V. ANALYSIS OF EXISTING AND EMERGING CONDITIONS

A. POPULATION, HOUSING, AND ECONOMY

1. Newport Permanent Population

a. Carteret County and Newport Population Change 1970-2000

The growth that the Town of Newport experienced during the period from 1970 to 2000 (92.85%) has continued over the last ten to twelve years. Newport increased in population by 33.00% from 1990 to 2000. This rapid growth has occurred throughout Carteret County, but a majority of the population growth has been focused in and around the beach communities. Despite these rapid increases in population, the town has maintained its small town atmosphere and has continued to provide a high quality of service to its citizens. Table 1 provides a comprehensive breakdown of population growth throughout Carteret County since 1970. It should be noted that the town does not have any significant seasonal population. Data is provided for each township and the municipalities located within each township (see Map 2 for the location of all township boundaries within the county). The township boundaries provided on this map do not have any jurisdictional significance, but are simply utilized in planning efforts and as demographic regions. Carteret County overall has grown at a rate of 87.98% since 1970, and has increased in population by 13.00% since the 1990 Census. Map 3 provides a thematic representation of population growth by county throughout North Carolina.

Table 1
Town of Newport and Carteret County, NC
Summary of Year-Round Population Growth by Township and Municipality, 1970-2000

Township	Municipality or Area	Year Round Population				Percentage Change			
		1970	1980	1990	2000	'70-'80	'80-'90	'90-'00	Overall '70-'00
1) Atlantic	Total Township	814	810	805	817	-0.49%	-0.62%	1.49%	0.37%
2) Beaufort	Beaufort	3,368	3,826	3,808	3,771	13.60%	-0.47%	-0.97%	11.975
	Unincorporated Areas	2,779	3,166	4,205	3,894	13.93%	32.82%	-7.40%	40.12%
	Total Township	6,147	6,992	8,013	7,665	13.75%	14.60%	-4.34%	24.69%
3) Cedar Island	Total Township	290	333	385	324	14.83%	15.62%	-15.84%	11.72%
4) Davis	Total Township	456	492	535	412	7.89%	8.74%	-22.99%	-9.65%
5) Harkers Island	Total Township	1,639	1,910	2,237	1,525	16.53%	17.12%	-31.83%	-6.96%
6) Harlowe	Total Township	762	956	1,190	1,272	25.46%	24.48%	6.89%	66.93%
7) Marshallberg	Total Township	525	580	646	535	10.48%	11.38%	-18.27%	0.57%
8) Merrimon	Total Township	330	426	542	657	29.09%	27.23%	21.22%	99.09%
9) Morehead	Atlantic Beach	300	941	1,938	1,781	213.67%	105.95%	-8.10%	493.67%
	Indian Beach	0	54	153	95	N/A	183.33%	-37.91%	N/A
	Morehead City	5,233	4,359	6,046	7,691	-16.70%	38.70%	27.21%	46.97%
	Pine Knoll Shores	0	646	1,360	1,524	N/A	110.53%	12.06%	N/A
	Unincorporated Areas	6,396	9,803	10,985	12,657	53.27%	12.06%	15.22%	97.89%
	Total Township	11,929	15,803	20,482	23,748	32.48%	29.61%	15.95%	99.08%
10) Newport	**Newport**	**1,735**	**1,883**	**2,516**	**3,346**	**8.53%**	**33.62%**	**33.00%**	**92.85%**
	Unincorporated Areas	2,191	3,586	4,817	4,977	63.67%	34.33%	3.32%	127.16%
	Total Township	3,926	5,469	7,333	8,323	39.30%	34.08%	13.54%	112.07%
11) Sea Level	Total Township	347	540	773	461	55.62%	43.15%	-40.36%	32.85%
12) Smyrna	Total Township	517	637	782	679	23.21%	22.76%	-13.17%	31.33%
13) Stacy	Total Township	257	322	401	206	25.29%	24.53%	-48.63%	-19.84%
14) Straits	Total Township	1,166	1,520	1,948	2,686	30.36%	28.16%	37.89%	130.36%
15) White Oak	Cape Carteret	616	944	1,008	1,214	53.25%	6.78%	20.44%	97.08%
	Emerald Isle	122	865	2,434	3,488	609.02%	181.39%	43.30%	2,759.02%
	Cedar Point	0	0	628	929	N/A	N/A	47.93%	N/A
	Unincorporated Areas	1,758	2,493	2,413	4,442	41.81%	-3.21%	84.09%	152.67%
	Total Township	2,496	4,302	6,483	10,073	72.36%	50.70%	55.38%	303.57%
Total Municipalities		11,374	13,518	19,891	23,839	18.85%	47.14%	19.85%	109.59%
Total Unincorporated Areas		20,229	27,574	32,664	35,544	36.31%	18.45%	8.81%	75.71%
Total County		31,603	41,092	52,555	59,383	30.03%	27.90%	13.00%	87.98%

Sources: N.C. State Data Center; extrapolation of data for unincorporated areas by Holland Consulting Planners, Inc.

MAP 2 - TOWNSHIP MAP

MAP 3 - POPULATION GROWTH

b. Population Profile

Table 2 and Graph 1 provide a summary of the Town of Newport and Carteret County populations by racial composition from 1970 to 2000. Over the last thirty years, the Caucasian population as a percentage of the total population within Newport has declined, while the African-American population has grown. This demographic shift is representative of most eastern North Carolina counties and municipalities; however, Carteret County overall has experienced a slight increase in its Caucasian population and a decrease in its African-American population. From 1970 to 2000, the Caucasian population as a percentage of Newport's total population decreased from 90.0% to 80.1% (-9.9%). By comparison, Carteret County's Caucasian population as a percentage of the county's total population increased from 88.4% to 90.0% (+1.6%). From 1970 to 2000, Newport's African-American population as a percentage of total population increased slightly from 9.8% to 14.2% (+4.4%), while the County overall experienced a slight decline in its African-American population (-4.0%). Table 2 also indicates that Newport's male/female population is fairly even with 51.8% male and 48.2% female.

Table 2
Town of Newport and Carteret County
Racial Composition, 1970-2000

	Newport		Carteret County	
	Total	Percentage	Total	Percentage
1970 Population*	**1,735**	**100.0%**	**31,603**	**100.0%**
Caucasian	1,561	90.0%	27,946	88.4%
African-American	170	9.8%	3,517	11.1%
Other	4	0.2%	140	0.4%
1980 Population*	**1,883**	**100.0%**	**41,092**	**100.0%**
Caucasian	1,667	88.5%	36,955	89.9%
African-American	194	10.3%	3,857	9.4%
Other	22	1.2%	280	0.7%
1990 Population**	**2,516**	**100.0%**	**52,555**	**100.0%**
Caucasian	2,089	83.0%	47,445	90.3%
African-American	334	13.3%	4,385	8.3%
Asian or Pacific Islander	41	1.6%	293	0.6%
American Indian, Eskimo, Aleut	18	0.7%	269	0.5%
Other	34	1.4%	164	0.3%

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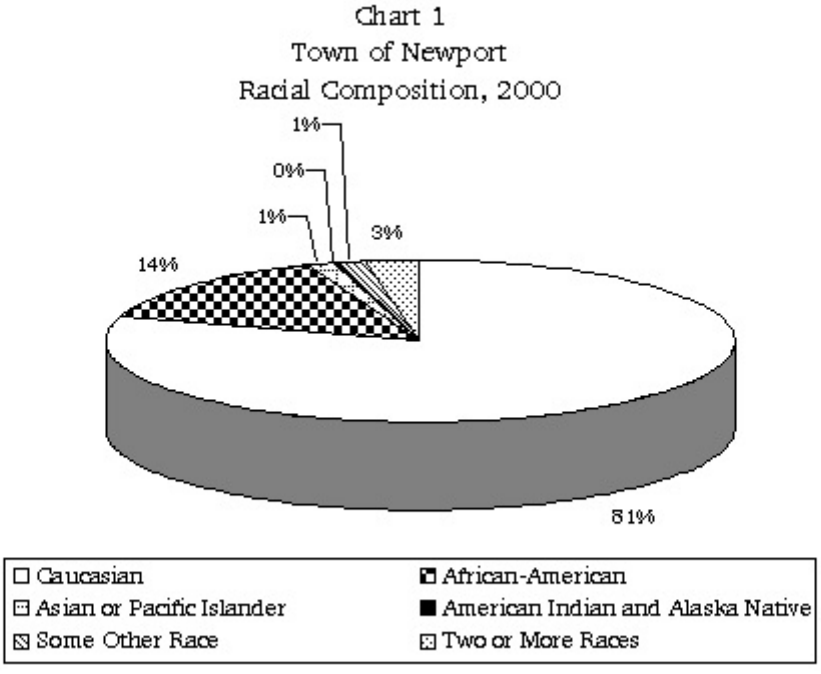
Table 2 (continued)

	Newport		Carteret County	
	Total	Percentage	Total	Percentage
2000 Population* **	**3,346**	**100.0%**	**59,383**	**100.0%**
Caucasian	2,679	80.1%	53,443	90.0%
African-American	475	14.2%	4,191	7.1%
Asian or Pacific Islander	46	1.4%	282	0.5%
American Indian and Alaska Native	10	0.3%	341	0.6%
Some Other Race	42	1.3%	392	0.7%
Two or More Races	94	2.8%	734	1.2%
Hispanic or Latino (of any race)****	204	N/A	929	N/A
Male	1,732	51.8%	29,041	48.9%
Female	1,614	48.2%	30,342	51.1%

*Racial breakdown available for the 1970 and 1980 Census.
**Racial breakdown available for the 1990 Census.
***Racial breakdown available for the 2000 Census.
****In the 2000 Census, the Hispanic race was not considered an ethnic group. However, this is the number of individuals who reported being of Hispanic origin.
Source: 2000 US Census.



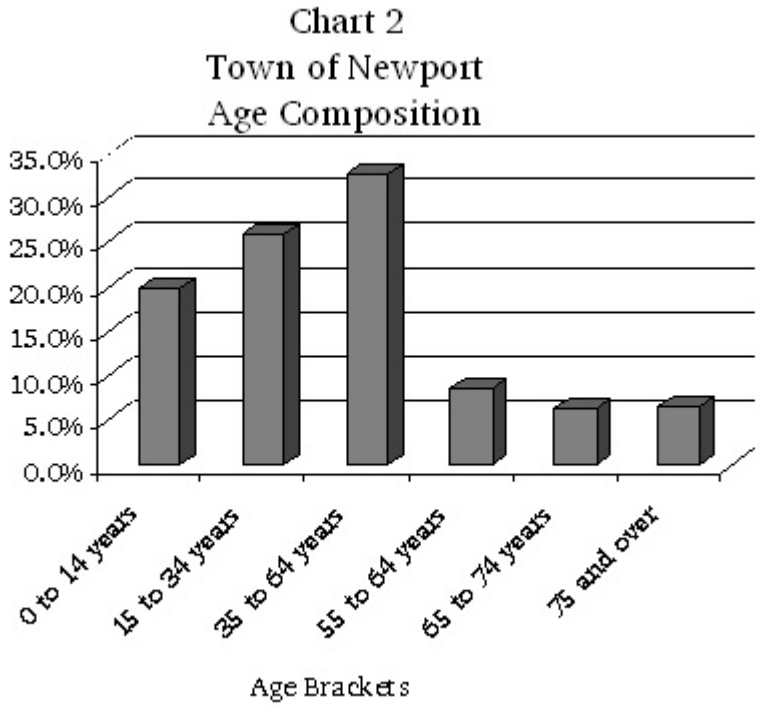
c. Age Composition

Table 3 and Graph 2 provide a summary of Newport and Carteret County's age distribution for 1990 and 2000. From 1990 to 2000, the town has experienced a slight increase in its elderly population. The elderly population increased from 9.1% to 13.2% (+4.0%). Newport also experienced minor increases in its school age (+5.6%) as well as working age populations (+9.8%). These increases can be attributed to both the aging existing population, as well in-migration experienced during the period from 1990 to 2000. Carteret County overall has seen comparable increases in each of these age categories. The median age of the population within Newport is 37.4. This is younger than the Carteret County median age which is 42.3 according to the 2000 US Census. The largest age group represented in Newport is between the ages of 35 and 54. This represents a shift in the overall population of the town since the largest age bracket in 1990 was 15 to 34.

Table 3
Town of Newport and Carteret County
Age Composition, 1990-2000

	Newport				Carteret County			
	1990 Total	1990 % of Total	2000 Total	2000 % of Total	1990 Total	1990 % of Total	2000 Total	2000 % of Total
0 to 14 years	516	20.5%	661	19.8%	9,870	18.8%	9,937	16.7%
15 to 34 years	972	38.6%	863	25.8%	15,632	29.7%	12,990	21.9%
35 to 54 years	591	23.5%	1,091	32.6%	13,745	26.2%	18,691	31.5%
55 to 64 years	189	7.5%	292	8.7%	5,794	11.0%	7,538	12.7%
65 to 74 years	162	6.4%	213	6.4%	4,850	9.2%	5,993	10.1%
75 and over	86	3.4%	226	6.8%	2,664	5.1%	4,234	7.1%
Total Population	2,516	100.0%	3,346	100.0%	52,555	100.0%	59,383	100.0%
Median Age	N/A*	--	37.4	--	N/A*	--	42.3	--
School Age Population (5-17)	335	13.3%	633	18.9%	7,244	13.8%	9,384	15.8%
Working Age Population (16-64)	1,396	55.5%	2,185	65.3%	31,309	59.6%	38,501	64.8%
Elderly Population (65+)	229	9.1%	440	13.2%	7,095	13.5%	10,182	17.1%

*Median age was not calculated for the 1990 Census.
Source: US Census Bureau.



d. Educational Attainment

Newport compares favorably with North Carolina overall for those individuals having graduated from high school and those having received at least some partial college education or Associates Degree. Table 4 provides a summary of the town's 2000 educational attainment compared to North Carolina overall, based on persons 25 years or older. The town lags behind the state in the percent of its population which has received a Bachelor's degree or Graduate/Professional degrees.

Table 4
Town of Newport and North Carolina
Educational Attainment, 2000

	Newport		**North Carolina**	
	Total	% of Total	Total	% of Total
Less than 9th grade	155	7.0%	413,495	7.8%
Ninth to Twelfth grade, no diploma	385	17.3%	741,229	14.0%
High School graduate	740	33.2%	1,502,978	28.4%
Some college, no Degree	608	27.3%	1,080,504	20.5%
Associate Degree	135	6.1%	358,075	6.8%
Bachelor's Degree	118	5.3%	808,070	15.3%
Graduate/Professional Degree	87	3.9%	378,643	7.2%
Total Population 25 years and over*	2,228	100.0%	5,282,994	100.0%

Source: US Census Bureau.

e. Population Summary

The following provides a summary of the significant demographic factors:

- From 1970 to 2000, the Town of Newport experienced a population increase of 92.85%, an overall increase of 1,611 individuals.
- Since 1990, the town has seen a significant population increase (33.00%) growing from a population of 2,516 to 3,346.
- The town has experienced net in-migration.
- From 1970 to 1990, Newport's minority population has increased.
- The town's male/female population is almost evenly divided.
- The largest age bracket within Newport has shifted from the 15 to 34 bracket to the 35 to 54 bracket.
- Through high school graduation and some college education, Newport ranks ahead of the state in educational attainment. However, for Associates, Bachelor's, and Professional degree attainment, the town ranks behind the state.

2. Housing

a. Housing Occupancy and Tenure

According to the 2000 Census, the Town of Newport contains a total of 1,257 dwelling units, an increase of 337 over the 1990 Census. Approximately 7.8% of these units are vacant, which is significantly lower than the vacancy rate for Carteret County overall (38.6%). Out of the 92.2% of the units that are occupied, 67.7% are owner-occupied and 24.5% are rental properties. The percentage of owner-occupied housing in Newport is significantly higher than Carteret County overall (45.6%). Table 5 provides a summary of housing occupancy and tenure.

Table 5
Town of Newport, Carteret County, and North Carolina
Housing Occupancy and Tenure, 1990 and 2000

	Town of Newport				Carteret County	North Carolina
	1990		2000		2000	2000
	Total	% of Total Housing Units	Total	% of Total Housing Units	% of Total Housing Units	% of Total Housing Units
Total Housing Units	920	100.0%	1,257	100.0%	N/A	N/A
Vacant:	64	7.0%	119	9.5%	38.6%	11.1%
For Rent	27	2.9%	34	28.6%	5.0%	2.7%
For Sale Only	14	1.5%	20	16.8%	1.6%	1.5%
Rented or Sold, Not Occupied	8	0.9%	28	23.5%	0.6%	0.9%
For Seasonal, Not Occupied						
For Seasonal, Recreational or Occasional Use	4	0.4%	0	0.0%	29.3%	4.2%
For Migrant Workers	0	0.0%	0	0.0%	0.0%	0.0%
Other Vacant	11	1.2%	37	31.1%	2.0%	1.8%
Occupied:	856	93.0%	1,138	90.5%	61.4%	88.9%
Owner-Occupied*	609	66.2%	811	71.3%	45.6%	61.6%
Renter-Occupied*	247	26.8%	327	28.7%	15.8%	27.2%
Mean Monthly Housing Cost:						
With a Mortgage	$883				$1,086	$1,121
Without a Mortgage	$273				$ 297	$ 282

*Indicates a breakdown of occupied household types.
Source: US Census Bureau.

b. Structure Age

Table 6 indicates that in 2000 the median age of housing structures in Newport was 1976. Roughly 38.5% of the housing within Newport was built prior to 1970. Due to the increasing population as a result of in-migration, a majority of the housing in Newport has been established over the last thirty years. Since 1970, there have been 773 new housing units built in Newport comprising 61.5% of the town's housing stock. Since 1990, 17.2% of the town's housing units have been constructed.

Table 6
Town of Newport
Housing Structure, 2000

Year	Number of Structures Built	% of Total
1999 to March, 2000	21	1.7%
1995 to 1998	132	10.5%
1990 to 1994	63	5.0%
1980 to 1989	327	26.0%
1970 to 1979	230	18.3%
1960 to 1969	239	19.0%
1940 to 1959	188	15.0%
1939 or earlier	57	4.5%
Total Structures	1,257	100.0%
Median Year Structure Built	1976	

Source: US Census Bureau.

c. Housing Conditions

Table 7 provides a summary of existing household size, as well as the percentage of units lacking general household needs. The statistics in this table provide a good summary of the condition of the overall housing stock in Newport.

Homes in Newport on average are slightly larger than those throughout Carteret County overall. The percentage of homes in Newport with 3+ bedrooms is 72.5%, compared to 62.6% for Carteret County. The percentage of homes lacking complete kitchen facilities is slightly higher than the county, while the percentage of homes lacking complete plumbing is also slightly higher than the county. Nearly every dwelling unit within Newport has a working telephone (97.5%), compared to just 59.6% for Carteret County.

Table 7
Town of Newport, Carteret County, and North Carolina
Summary of Housing Conditions

	Newport	Carteret County	North Carolina
Average Rooms Per Unit	5.4	5.2	5.5
Percent with no bedroom	0.3%	0.5%	1.1%
Percent with 3+ bedrooms	72.5%	62.6%	60.8%
Percent lacking complete kitchen facilities	1.1%	0.4%	1.1%
Percent lacking complete plumbing	1.7%	0.5%	1.1%
Percent occupied with telephones	97.5%	59.6%	86.2%

Source: US Census Bureau.

d. Single and Multi-Family Units

Table 8 provides the number of single-family housing units versus multi-family units and the number of mobile homes for both Newport and Carteret County overall. Newport has a substantially greater amount of single-unit detached housing (74.6%) than Carteret County (55.7%), while the percentage of multi-family housing is lower than the county. The percentage of housing in Newport comprised of mobile homes is 13.8%, compared to 25.7% for the county.

Table 8
Town of Newport and Carteret County
Units in Structure and Mobile Home Count, 2000

	Town of Newport		Carteret County
Units in Structure	Total	% of Total	% of Total
1-unit, detached	938	74.6%	55.7%
1-unit, attached	23	1.8%	4.5%
2 units	54	4.3%	3.7%
3 or 4 units	48	3.8%	2.9%
5 to 9 units	6	0.5%	2.5%
10 to 19 units	7	0.6%	1.1%
20 units or more	0	0.0%	3.9%
Mobile home	174	13.8%	25.7%
Boat, RV, van, etc.	7	0.6%	0.0%
Total	1,257	100.0%	100.0%

Source: US Census Bureau.

e. Housing Summary

- According to the 2000 US Census, the Town of Newport contains a total of 1,257 housing units, of which approximately 7.8% are vacant. Out of the 92.2% occupied units, 67.7% are owner-occupied and 24.5% are rental properties.

- The median age of all residential structures in the county is 27 years, while approximately 61.5% of all structures within Newport have been constructed since 1970.

- The percentage of homes in Newport with 3+ bedrooms is 72.5%, compared to 62.6% for Carteret County and 60.8% for the state overall.

- Newport has a substantially greater amount of single unit detached housing (74.6%) than Carteret County overall (55.7%)

- The percentage of residential structures within Newport comprised of mobile homes is much lower than that of Carteret County.

3. Employment and Economy

a. Introduction

The Town of Newport's economy is based around retail business. The town enjoys the luxury of being located along a major thoroughfare leading to one of the states more popular tourist destinations. Table 9 provides a summary of economic indicators for the Town of Newport and Carteret County. Due to the lack of available data, the figures provided in the table below are from several different years. The per capita income for Newport is significantly lower than that of Carteret County. The mean income for Newport is also significantly lower than the county, however the unemployment rate for Newport is half that of the County. The poverty rate for Newport is approximately the same as the county, at 10%.

Table 9
Town of Newport and Carteret County
Summary of Economic Indicators

	Year	Newport	Carteret County
Per Capita Income	1999	$14,260	$21,260
Mean Income	1999	$17,924	$25,560
Unemployment Rate	2000	2.3%	4.9%
% of Population in Labor Force	2000	55.4%	47.5%
Poverty Rate	2000	10.0%	10.7%

Source: NC Department of Commerce.

b. Household Income

Household income is an effective way to evaluate the overall wealth of an area. Table 10 provides the number of individuals within varying income brackets, and how these figures compare to state percentages. The Town of Newport's household incomes compare favorably to state percentages. Approximately 30% of Newport's households make less than $25,000 annually compared to 22.3% for the state overall.

Table 10
Town of Newport
Household Income, 2000

	Town of Newport		North Carolina
	Total	% of Total	% of Total
Less than $10,000	55	5.0%	5.9%
$10,000 to $14,999	76	6.9%	4.6%
$15,000 to $24,999	199	18.1%	11.8%
$25,000 to $34,999	183	16.7%	13.1%
$35,000 to $49,999	225	20.5%	18.7%
$50,000 to $74,999	244	22.2%	22.9%
$75,000 to $99,999	86	7.8%	11.1%
$100,000 to $149,999	29	2.6%	7.6%
$150,000 to $199,999	2	0.2%	2.1%
$200,000 or more	0	0.0%	2.2%
Total Families	1,099	100.0%	100.0%
Median Income	$36,629		$39,184

Source: 2000 US Census.

c. Employment By Industry

Table 11 provides a summary of employment by industry in Newport for those persons 16 years and over. The leading employment industries are Education, Health, and Social Services (14.9%); Arts, Entertainment, Recreation, Accommodation, and Food Services (13.3%); and Retail Trade (13%). The industries supporting the least employment are Agriculture, Forestry, Fishing, and Mining (0.8%); and Information Services (1.6%).

Table 11
Town of Newport
Employment By Industry, 2000

Industry	# Employed	% Employed
Agriculture, Forestry, Fishing, and Mining	11	0.8%
Construction	155	11.9%
Manufacturing	105	8.1%
Wholesale Trade	44	3.4%
Retail Trade	169	13.0%
Transportation, Warehousing, and Utilities	81	6.2%
Information	21	1.6%

Table 11 (continued)

Industry	# Employed	% Employed
Finance, Insurance, Real Estate, and Rental and Leasing	52	4.0%
Professional, Scientific, Management, Administrative, and Waste Management Services	90	6.9%
Education, Health, and Social Services	194	14.9%
Arts, Entertainment, Recreation, Accommodation, and Food Services	173	13.3%
Other Services (except Public Administration)	65	5.0%
Public Administration	141	10.8%
Total Persons Employed 16 Years and Over	1,301	100.0%

Source: US Census Bureau.

It should be noted that the agriculture, forestry, fishing, and mining employment data that has been provided is somewhat misleading because the figures reflect insured employment and do not include many seasonal, migratory workers. Although the exact number of individuals employed in these industries is unknown, this sector of industry only employs a small number of individuals in Newport. Beyond these figures, there is no quantitative method to track seasonal employment.

d. Employee Wages By Industry

Table 12 gives an overview of weekly earnings by industry for Carteret County as well as the North Carolina average. This data is provided for Carteret County because the information is not available at the municipal level. According to this information the highest paying industry in the county is the government sector. The lowest paying sector is Retail Trade. Across the board weekly wages within the county are much lower than state averages.

Table 12
Carteret County
Earnings by Industry, 2000

	Average Weekly Earnings	
	Carteret County	**North Carolina**
Agriculture	$381.20	$416.35
Construction	$430.72	$598.43
Finance/Insurance/Real Estate	$437.14	$907.31
Government	$579.53	$622.30
Manufacturing	$412.41	$716.21
Retail Trade	$265.09	$336.64

Table 12 (continued)

	Average Weekly Earnings	
	Carteret County	**North Carolina**
Wholesale Trade	$453.71	$783.87
Service	$390.79	$580.23
Transportation/Communications/Public Utilities	$552.30	$775.01

*Numbers provided are only available at the County level.
Source: NC Department of Commerce.

e. Industries

The Town of Newport is fairly limited in terms of industrial development. The following table lists all industrial employers within the town's jurisdiction.

Table 13
Town of Newport
Industries

Company	Product	Employees	Year Established
Veneer Technologies, Inc.	Export	135	1993
Frank Door Company	Export	25	2000

Source: NC Department of Commerce.

f. Economy Summary

- The unemployment rate for Newport (2.3%) is much lower than that of Carteret County overall (4.9%).
- The poverty rate for Newport is comparable to that of Carteret County.
- Approximately 30% of the households within Newport make less than $25,000 annually.
- The leading employment industries are Education, Health, and Social Services (14.9%); Arts, Entertainment, Recreation, Accommodation, and Food Services (13.3%); and Retail Trade (13%). The industries supporting the least employment are Agriculture, Forestry, Fishing, and Mining (0.8%) and Information Services (1.6%).

- The highest paying industry in the county is the government sector. The lowest paying sector is Retail Trade.

4. Population Projections

Table 14 provides Newport population projections through 2025. These projections were prepared using data provided by the North Carolina Office of State Planning as well as the land demand forecast discussed on page 156. According to these projections, Newport is expected to grow significantly over the next 25 years. This reflects the influx of growth that will occur as more people move to eastern North Carolina for retirement. These retirees will flock to towns such as Newport that are located immediately adjacent to the coast.

Table 14
Town of Newport and Carteret County
Population Projections

	2000	2005	2010	2015	2020	2025	% Change '00-'25
Newport	3,346	4,386*	5,517	7,050	9,206	12,356	269.2%
Carteret County	59,383	61,825	64,928	67,128	69,000	70,406	18.6%

*The 2005 population estimate accounts for the new FA-18 squadron that is being moved to Cherry Point.
**The Town of Newport would like to note the population projections for Carteret County appear to be extremely conservative. Additionally, Newport comprises approximately 22% of the land in Carteret County considered to be highly suitable for development.
Source: NC Office of State Planning and Holland Consulting Planners, Inc.

B. NATURAL SYSTEMS ANALYSIS

1. Mapping and Analysis of Natural Features

a. Topography/Geology

The Town of Newport is located in the lower coastal plain of eastern North Carolina. Newport consists of 18,486 acres, or roughly 28.9 square miles. Overall, Newport is a low-lying area gently sloping towards the coastal areas to the east. The Newport River traverses through the center of town. The Newport River is a shallow body of water which meanders through the town's planning jurisdiction.

b. Climate

Newport is hot and humid in the summer, but is frequently cooled by sea breezes. Winter is cool with occasional, brief cold spells. Rain occurs throughout the year and is fairly heavy at times. Average annual participation is generally adequate for all crops.

In winter, the average temperature is 47 degrees F, and the average daily minimum temperature is 38 degrees. The lowest temperature on record, which occurred on January 13, 1962, is 4 degrees. In summer, the average temperature is 78 degrees and the average daily maximum temperature is 85 degrees. The highest recorded temperature, which occurred on July 26, 1952, is 107 degrees.

The total average annual precipitation is roughly 52.5 inches. Of this, 30 inches, or 57 percent, usually falls in April through September. The growing season for most crops falls within this period. In 2 years out of 10, the rainfall in April through September was less than 25 inches. The heaviest one day rainfall during the period of record was 8.5 inches at Morehead City on June 11, 1966. Thunderstorms occur on about 45 days each year, and most occur in summer.

The average seasonal snowfall is one inch. The deepest snowfall accumulation according to local accounts occurred in 1989 when 19 inches of snow fell in the Newport area.

The average relative humidity in mid-afternoon is about 65 percent. Humidity is higher at night, and the average at dawn is about 80 percent. The sun shines 60 percent of the time in summer and 50 percent in winter. The prevailing wind is from the southwest. Average wind speed is 12 miles per hour in winter and spring.

c. Flood Zones

Based on the updated Flood Insurance Rate Maps (FIRMS), officially adopted July 16, 2003, 19% of Newport's planning jurisdiction is located within a floodplain.* Table 15 provides acreage breakdowns for areas within Newport that are located within a flood hazard area. The figures are totaled as well as broken down between the corporate limits and ETJ. Approximately 2,551 acres, or 13.80%, are located within the AE zone. The AE zone is defined as an area of 100-year flood, where base flood elevations and flood hazard factors have been determined. Approximately 622 acres, or 3.37%, are located within the AEFW zone that is also referred to as the Floodway. The AEFW zone is defined as the land immediately adjacent to the bank of a water course. Approximately 332 acres, or 1.80%, are located in the Shaded X zone. The Shaded X zone is defined as the area located within the 500-year flood boundary.

*NOTE: All maps contained in this plan are based on the most recent flood maps.

Table 15
Town of Newport
Flood Hazard Areas

	Town and ETJ		Town Limits		ETJ	
Flood Zones	Acres	% of Total	Acres	% of Total	Acres	% of Total
AE	2,550.56	13.80%	438.59	9.84%	2,111.97	15.06%
AEFW	622.24	3.36%	174.98	3.93%	447.26	3.19%
SHADED X	332.47	1.80%	54.34	1.22%	278.13	1.98%
Acreage in Flood Zone	3,505.27	18.96%	667.91	14.99%	2,837.36	20.23%
Total Acreage	18,485.56		4,457.41		14,028.15	

Source: Holland Consulting Planners, Inc., and Federal Emergency Management Agency.

Map 4 represents the location of all flood hazard areas within the Town of Newport. The flood hazard areas within Newport's planning jurisdiction are located primarily within the ETJ. The flood zones are derived from the Newport River and its tributaries. The only flood hazard areas located within the corporate limits are directly along the Newport River channel in the center of town.

To provide a sense of how existing development could be potentially affected during a flooding event, Table 16 provides land use acreages for properties located within the 100-year floodplain as well as the floodway. This table provides acres, total count of parcels, and the percentage of total Newport acreage for Newport's planning jurisdiction. According to this table, a significant number of residential properties will be affected by a 100-year storm. Approximately 277 residential properties comprising 726 acres will be impacted by a flooding event of this magnitude. These properties have a total estimated structure value of $12,004,452. The total structure value of all properties that will potentially be affected by a 100-year storm is $15,289,470 (659 parcels, 3192 acres).

The Town of Newport is under the jurisdiction of the 2003 Carteret County Hazard Mitigation Plan (see Appendix III for the plan's policies). In addition, the reader should refer to the following implementing actions contained in this plan: I-16, I-24, I-47, I-49, I-55, and I-77.

MAP 4 - FLOOD HAZARD AREAS

Table 16
Town of Newport
Land Use Acreage in the 100-Year Floodplain

Land Use	Total Parcels	Acreage	% of Total Newport Acreage
Agricultural	33	226.9	1.2%
Commercial	15	54.8	0.3%
Multi-family	9	60.8	0.3%
Office & Institutional	13	76.3	0.4%
Residential	277	725.8	3.9%
Recreation/Open Space	5	157.0	0.8%
Vacant	307	1,890.0	10.0%
Total	659	3,191.6	16.9%

Source: Holland Consulting Planners, Inc., and Federal Emergency Management Agency.

Storm surge creates a flooding hazard, and is associated primarily with hurricane events. Maps 5 and 6 show the general areas that will be affected by slow moving as well as fast moving hurricanes.

While a fair amount of Newport's planning jurisdiction lies within one of three floodplain designations, a much greater threat is posed by storm surge. An average of 10% of Newport's jurisdiction will be inundated by a Category 1 or 2 hurricane, 18% by a Category 3 storm, and 45.2% by a Category 4 or 5 storm. Table 17 provides a complete summary of the total acreage affected by storm category, according to both the fast and slow moving hurricane models.

Table 17
Town of Newport
Storm Surge

	Fast Moving		Slow Moving	
	Acres	% of Total	Acres	% of Total
Category 1 and 2	1,475.9	7.98%	2,229.6	12.06%
Category 3	2,520.1	13.63%	4,213.1	22.79%
Category 4 and 5	9,044.1	48.93%	7,657.8	41.43%

Source: Federal Emergency Management Agency.

MAP 5 - SLOW MOVING STORM SURGE

MAP 6 - FAST MOVING STORM SURGE

The Saffir-Simpson Hurricane Scale is a rating system based on hurricane intensity. Within each category is a description of wind speed, storm surge, and estimated damages. Examples of each category are noted.

Category One Hurricane: Winds 74-95 mph. Storm surge generally 4-5 feet above normal. No significant damage to permanent structures. Damage limited to unanchored mobile homes, shrubbery, and trees. Some damage to poorly constructed areas. Limited coastal road flooding and minor pier damage may occur. Hurricanes Allison and Noel of 1995 were Category One hurricanes at peak intensity.

Category Two Hurricane: Winds 96-110 mph. Storm surge generally 6-8 feet above normal. Some roofing material, door, and window damage to buildings. Considerable damage to shrubbery and trees. Some trees blown down. Considerable damage to mobile homes, poorly constructed signs, and piers. Coastal and low-lying escape routes flood 2-4 hours before the arrival of the hurricane center. Small craft in unprotected anchorages break moorings. Hurricane Bertha of 1996 was a Category Two hurricane when it hit the North Carolina coast.

Category Three Hurricane: Winds 111-130 mph. Storm surge generally 9-12 feet above normal. Some structural damage to small residences and utility buildings with a minor amount of curtainwall failures. Foliage blown off trees. Large trees blown down. Mobile homes and poorly constructed signs are destroyed. Flooding near the coast destroys smaller structures, with larger structures damaged by floating debris. Terrain lower than five feet above mean sea level may be flooded eight miles inland. Evacuation of low-lying residences within several blocks of the shoreline may be required. Hurricane Fran of 1996 was a Category Three hurricane.

Category Four Hurricane: Winds 131-155 mph. Storm surge generally 13-18 feet above normal. More extensive curtainwall failures with some complete roof structure failures on small residences. Shrubs, trees, and all signs are blown down. Complete destruction of mobile homes. Extensive damage to doors and windows. Low-lying escape routes may be covered by rising water 3-5 hours before the arrival of the hurricane center. Major damage to the lower floors of structures near the shore. Terrain lower than ten feet above sea level may be flooded, requiring the massive evacuation of residential areas as far inland as six miles. Hurricanes Opal and Hugo were Category Four hurricanes at peak intensity when they struck the Florida and South Carolina coasts, respectively. Both storms eventually passed over the western part of North Carolina. At this time, wind speeds had dropped to tropical storm force winds.

Category Five Hurricane: Winds greater than 155 mph. Storm surge generally greater than 18 feet. Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown down. All shrubs, trees, and signs blown down. Complete destruction of mobile homes. Severe and extensive window and door damage. Low-lying escape routes are cut by rising water 3-5 hours before the arrival of the hurricane center. Major damage to lower floors of all structures located less than 15 feet above sea level and within 500 yards of the shoreline. Massive evacuation of residential areas on low ground within 5-10 miles of the shoreline may be required. Hurricane Gilbert of 1988 was a Category Five hurricane at peak intensity and is the strongest Atlantic tropical cyclone of record. Gilbert passed over Jamaica, the Yucatan Peninsula, and Northern Mexico.

The following provides a brief history of hurricane activity over the last ten years:

- September 14 to 16, 1999 - Hurricane Floyd. This hurricane caused the largest peace time evacuation in the nation's history. It also caused massive record flooding in eastern North Carolina.

- September 4 to 5, 1999 - Hurricane Dennis. The remnants of Hurricane Dennis ended a drought in the middle part of the state. Carteret and Ocracoke Island displayed the heaviest rainfall estimates on the Doppler Radar.

- August 28, 1998 - Hurricane Bonnie. The most damaging winds were contained in the precursor bands where localized downbursts produced significant damage, especially along the coast of Carteret County which appeared to sustain the most damage from the storm.

- September 4 to 6, 1996 - Hurricane Fran. Hurricane Fran caused extensive damage throughout North Carolina. In Carteret County, Emerald Isle reported 67 homes destroyed and 409 with major damaged from Hurricane Fran.

- August 29 to 31, 1996 - Hurricane Edouard. Hurricane Edouard passed within 250 miles of Cape Hatteras on its northward journey. High swells and heavy surf affected the coastline.

- July 12 to 13, 1996 - Hurricane Bertha. Hurricane Bertha caused severe damage to property, utilities, and roads. Heaviest damage was in Topsail Beach and all of Onslow County up the coast to Emerald Isle in Carteret County.

- August 15 to 17, 1985 - Hurricane Felix. Hurricane Felix came within 200 miles of Cape Hatteras, stalled for several hours, and then drifted north and east away from the coast.

- November 17 to 18, 1994 - Hurricane Gordon. Hurricane Gordon remained offshore, but caused significant flooding and strong winds along the central and northern Carolina coast.

d. Manmade Hazards

There are currently no manmade hazards located within Newport's planning jurisdiction. The Atlantic and East Carolina Railway runs through Newport, but does not currently serve any customers within the corporate limits or ETJ. There are several businesses and industries that utilize minimal amounts of hazardous materials. The Environmental Protection Agency (EPA) requires all facilities with chemicals on the EPA's list of Extremely Hazardous Substances present in a quantity equal to or in excess of their established threshold planning quantity or a 500 pound threshold (whichever is less), as well as any hazardous chemicals present on-site in a quantity equal to or greater than 10,000 pounds be reported annually in what is titled a Tier II report. There are currently no facilities in Newport that must meet this requirement. As noted earlier, Newport has developed a wellhead protection plan to address potential problems that could result from the use of these materials. This ordinance is discussed in further detail under the review of existing plans and ordinances.

It should be noted that although the Atlantic and East Carolina Railway does not service any businesses or industry within Newport, the railway does transport cargo through Newport from the NC State Port in Morehead City. Although it is not possible to identify specific materials that are transported through Newport, it is known that Cherry Point Marine Corps Air Station utilizes this stretch of railway as well as industries throughout North Carolina.

e. Soils

A detailed soil survey was issued for all of Carteret County in September of 1978. That report, Soil Survey of Carteret County, North Carolina, identifies 27 soil series located within Newport's planning jurisdiction. The soil series are presented on Map 7, and their characteristics are summarized in Table 18.

It is significant that eighteen (18) of the soil series in Newport are Hydric Soils. A hydric soil is a soil which is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part (anaerobic is defined as a situation in which molecular oxygen is absent from the environment). These soils may meet the definition of 404 wetland areas if found in combination with certain 404 vegetation and require permitting by the U.S. Army Corps of Engineers' Wilmington office prior to any disturbance. Within Newport's planning jurisdiction, 98% of the soils have severe limitations for use as septic tank absorption fields. The impact of this is reflected on Map 23, Land Suitability Analysis (page 88).

MAP 7 - SOILS

Table 18
Town of Newport
Soil Characteristics

Map Symbol	Description	Acres	% of Total	Depth to Seasonal High Water Table (ft)	Flooding Frequency (Surface)	Streets & Roads	Septic Tank Absorption Fields
AaA	Altavista loamy fine sand, 0 to 2 percent slopes	6.51	0.04%	1.5 to 2.5 feet	None	Moderate: wetness	Severe: wetness
Ag*	Augusta loamy fine sand	88.25	0.48%	1.0 to 2.0 feet	None	Moderate: low strength, wetness	Severe: wetness
Ap*	Arapahoe fine sandy loam	35.15	0.19%	0 to 1.0 feet	Rare	Severe: wetness	Severe: wetness, poor filter
AuB	Autryville loamy fine sand, 0 to 6 percent slopes	151.89	0.82%	>5.0 feet	None	Slight	Slight
ByB*	Baymeade fine sand, 1 to 6 percent slopes	782.28	0.35%	4.0 to 5.0 feet	None	Slight	Severe: poor filter
CnB	Conetoe loamy fine sand, 0 to 5 percent slopes	10.35	0.06%	>6.0 feet	None	Slight	Slight
CrB	Craven loam, 1 to 4 percent slopes	153.18	0.83%	2.0 to 3.0 feet	None	Severe: low strength	Severe: wetness, percs slowly
CT*	Croatan muck	63.82	0.35%	0.5 to 1.0 feet	Rare	Severe: ponding	Severe: ponding, percs slowly
DO*	Dorovan muck, frequently flooded	409.56	2.22%	0.5 to 1.0 feet	Frequent	Severe: ponding, flooding	Severe: flooding, ponding
GoA	Goldsboro loamy fine sand, 0 to 2 percent slopes	1,300.28	7.03%	2.0 to 3.0 feet	None	Moderate: wetness	Severe: wetness
HB*	Hobucken muck, frequently flooded	469.65	2.54%	0 to 1.0 foot	Frequent	Severe: ponding, flooding	Severe: flooding, ponding
KuB*	Kureb sand, 0 to 6 percent slopes	570.24	3.08%	>6.0 feet	None	Slight	Severe: poor filter
Ln*	Leon sand	2,701.86	14.62%	0 to 1.0 feet	None	Severe: wetness	Severe: wetness, poor filter

Table 18 (continued)

Map Symbol	Description	Acres	% of Total	Depth to Seasonal High Water Table (ft)	Flooding Frequency (Surface)	Streets & Roads	Septic Tank Absorption Fields
Ly*	Lynchburg fine sandy loam	1,001.93	5.42%	1.0 to 1.5 feet	None	Severe: wetness	Severe: wetness
MA*	Masontown mucky loam, frequently flooded	357.90	1.94%	0.5 to 1.0 foot	Frequent	Severe: ponding, flooding	Severe: flooding, ponding, poor filter
Mn*	Mandarin sand	1,575.62	8.52%	1.5 to 3.5 feet	None	Moderate: wetness	Severe: wetness, poor filter
Mu*	Murville mucky sand	2,700.63	14.61%	1 foot	None	Severe: ponding	Severe: ponding, poor filter
NoA	Norfolk loamy fine sand, 0 to 2 percent slopes	48.08	0.26%	4.0 to 6.0 feet	None	Slight	Moderate: wetness
NoB	Norfolk loamy fine sand, 2 to 6 percent slopes	204.55	1.11%	4.0 to 6.0 feet	None	Slight	Moderate: wetness
On	Onslow loamy sand	325.07	1.76%	1.5 to 3.0 feet	None	Moderate: wetness	Severe: wetness
Pa*	Pantego fine sandy loam	932.31	5.04%	0 to 1.0 foot	None	Severe: wetness	Severe: wetness
Ra*	Rains fine sandy loam	1,490.91	8.07%	0 to 1.0 foot	None	Severe: wetness	Severe: wetness
Ro*	Roanoke loam	13.90	0.08%	0 to 1.0 foot	None	Severe: low strength, wetness	Severe: wetness, percs slowly
Se*	Seabrook fine sand	66.29	0.36%	2.0 to 4.0 feet	None	Moderate: wetness	Severe: wetness, poor filter
Tm*	Tomotley fine sandy loam	57.67	0.31%	0 to 1.0 foot	None	Severe: wetness	Severe: wetness
To*	Torhunta mucky fine sandy loam	2,955.39	15.99%	0 to 1.0 foot	None	Severe: wetness	Severe: wetness
WaB	Wando fine sand, 0 to 6 percent slopes	12.77	0.07%	>5.0 feet	None	Slight	Severe: poor filter
TOTAL		18,486.01	100.0%				

*Hydric soils due to saturation for a significant period during the growing season.
Source: Soil Survey of Carteret County, North Carolina.

f. Water Supply

Groundwater water is plentiful throughout Carteret County as well as Newport. It is near the surface in most places, particularly during the winter and early spring. Thousands of feet of sedimentary deposits underlie the area. The upper part of these deposits contains aquifers that supply water for domestic use. The surficial aquifer ranges from near the surface to a maximum depth of about 75 feet. The water is generally hard but is low in iron.

g. Fragile Areas

In coastal North Carolina, fragile areas are considered to include coastal wetlands, ocean beaches and shorelines, estuarine waters and shorelines, public trust areas, complex natural areas, areas sustaining permanent species, unique geological formations, registered natural landmarks, swamps, prime wildlife habitats, areas of excessive slope, areas of excessive erosion, scenic points, archaeological sites, historical sites, and 404 wetlands. While not identified as fragile areas in the 15A NCAC 7H use standards, maritime forest and outstanding resource waters (ORWs) should also be considered fragile areas. The only fragile areas of note within the Town of Newport's jurisdiction are: several Significant Natural Heritage Areas, several defined protected lands, 404 Wetlands, and locally designated historical landmarks. Other fragile areas are not discussed in the context of this plan due to the fact that they are not applicable to Newport's jurisdiction.

i. Significant Natural Heritage Areas/Protected Lands

Significant Natural Heritage Areas/Protected Lands are generally recognized to be of educational, scientific, or cultural value because of the natural features of the particular site. Features in these areas serve to distinguish them from the vast majority of the landscape. These areas include complex natural areas, areas that sustain remnant species, pocosins, wooded swamps, prime wildlife habitats, or registered natural landmarks.

The North Carolina Natural Heritage Program of the Division of Parks and Recreation works to identify and facilitate protection of the most ecologically significant natural areas remaining in the state. Natural areas may be identified because they provide a important habitat for rare species or because they contain outstanding examples of the rich natural diversity of this state. Maps 8 and 9 depict the Significant Natural Heritage Areas and Protected Lands located within Newport and its ETJ. Table 19 presents acreage summaries for these areas.

MAP 8 - SIGNIFICANT NATURAL HERITAGE AREAS

MAP 9 - PROTECTED LANDS

Table 19
Town of Newport
Significant Natural Heritage Areas and Protected Lands

	Acres	% of Total
Significant Natural Heritage Areas	**3,628.90**	**19.63%**
Hibbs Road Pine Ridges	3,077.73	16.65%
Masontown Pocosin	36.79	0.20%
Nine Mile Road/Roberts Road Limesink Ponds	435.47	2.36%
Union Point Pocosin	0.18	0.00%
Walkers Millpond and Black Creek	78.73	0.43%
Protected Land	**5,021.96**	**27.17%**
Croatan	4,759.36	25.75%
ENR - Newport Public Boating Access Area	0.64	0.003%
Newport Community Park	8.14	0.04%
Walkers Millpond	253.82	1.37%

Source: North Carolina Natural Heritage Program.

ii. Wetlands Defined by Section 404 of the Clean Water Act

404 wetlands are areas covered by water or that have waterlogged soils for long periods during the growing season. Plants growing in wetlands are capable of living in soils lacking oxygen for at least part of the growing season. 404 wetlands include, but are not limited to, bottomlands, forests, swamps, pocosins, pine savannahs, bogs, marshes, wet meadows, and coastal wetlands.

Map 10 provides the location of all wetlands located within Newport's jurisdiction. Table 20 provides a summary of acreages for all wetlands displayed on Map 10.

Table 20
Town of Newport
404 Wetlands

Wetland Name	Acres	% of Total
Bottomland Hardwood	253.89	1.37%
Cleared Bottomland Hardwood	17.46	0.09%
Cleared Depressional Swamp Forest	0.39	0.00%
Cleared Hardwood Flat	13.45	0.07%

Table 20 (continued)

Wetland Name	Acres	% of Total
Cleared Headwater Swamp	4.09	0.02%
Cleared Pine Flat	23.01	0.12%
Cleared Pocosin	0.11	0.001%
Cutover Bottomland Hardwood	29.27	0.16%
Cutover Depressional Swamp Forest	2.35	0.01%
Cutover Hardwood Flat	91.06	0.49%
Cutover Headwater Swamp	5.31	0.03%
Cutover Pine Flat	40.94	0.22%
Cutover Pocosin	31.92	0.17%
Depressional Swamp Forest	27.95	0.15%
Drained Bottomland Hardwood	72.59	0.39%
Drained Hardwood Flat	4.18	0.02%
Drained Pine Flat	104.15	0.56%
Drained Pocosin	8.16	0.04%
Estuarine Shrub/Scrub	11.40	0.06%
Freshwater Marsh	15.49	0.08%
Hardwood Flat	948.40	5.13%
Headwater Swamp	90.80	0.49%
Human Impacted	0.20	0.00%
Managed Pineland	2,343.25	12.68%
Pine Flat	1,816.09	9.82%
Pocosin	2,039.00	11.03%
Riverine Swamp Forest	1,555.18	8.41%
Salt/Brackish Marsh	284.94	1.54%
Total	9,835.02	53.20%

Source: North Carolina GIA.

Section 404 of the Clean Water Act requires that anyone interested in depositing dredged or fill material into "waters of the United States" including wetlands, must apply for and receive a permit for such activities. The Wilmington office of the US Army Corps of Engineers has regulatory authority in Newport's planning jurisdiction. The specific locations of wetland areas must be determined by an on-site analysis in the event of a permit application. It should be noted that in some Areas of Environmental Concern, both the US Army Corps of Engineers and the regulatory requirements of the Coastal Area Management

MAP 10 - WETLANDS

Act may have overlapping jurisdiction. Simultaneous to the preparation of this plan, amendments to the federal definition of wetlands were being considered. These changes could reduce the areas afforded protection under the wetlands legislation.

In 1989, the NC Environmental Management Commission (EMC) passed a rule directing the Division of Water Quality to review wetland fill using a review sequence of avoidance, minimization, and mitigation of wetland fill. After extensive public review, the EMC passed rules, effective October 1, 1996, to restructure the 401 Water Quality Certification Program. These rules are not a new regulatory program since DWQ has issued approvals for wetland fill since the mid-1980s. The rules consider wetland values – whether or not the wetland is providing significant uses or whether the activity would remove or degrade uses. The rules also specify mitigation ratios, locations, and types to make the mitigation process more predictable and certain for the regulated community. The table below provides the total number of wetland fill activities for subbasin 03-05-03, within the White Oak River Basin.

Table 21
Wetland Fill Activities

Subbasin	1995	1996	1997	1998	1999
03-05-03	6.96	8.95	30.37	2.76	37.98

*Incidence are reported in acres
Source: NC Division of Water Quality White Oak Basinwide Water Quality Plan.

h. Areas of Resource Potential

i. Regionally Significant Parks

Aside from the Newport Community Park which is listed under the protected lands for the Town of Newport, the Croatan National Forest is the only other significant natural area. Although this is not a park, it is a national forest and therefore falls under this discussion. The Croatan National Forest's 161,000 acres of land offer an exciting variety of opportunities. The Croatan's wide diversity of ecosystems ranges from freshwater pocosins to longleaf pine savannahs to salt marshes. With such an array of habitats, it is no surprise that the Croatan is home to a variety of wildlife: waterfowl, wading birds, deer, bears, snakes, and alligators. The US Forest Service manages the forest for many uses – recreation, water quality, timber, fish and wildlife habitat, and wilderness. Conserving the Croatan's resources while making them available for people to enjoy is the Forest Service's challenge.

ii. Marinas and Mooring Fields

Marinas are defined as any publicly- or privately-owned dock, basin, or wet boat storage facility constructed to accommodate more than ten boats and providing any of the following services: permanent or transient docking spaces, dry storage, fueling facilities, haulout facilities, and repair service. Excluded from this definition are boat ramp facilities allowing access only. Based on this definition, there are currently no marinas located within Newport's planning jurisdiction, nor are there any mooring fields.

iii. Floating Homes

A floating home or structure is any structure, not a boat, supported by means of floatation and designed to be used without a permanent foundation which is used for human habitation or commerce. A structure is considered a floating home or structure if it is inhabited or used for commercial purposes for more than 30 days in any one location. A boat may be deemed a floating structure if its means of propulsion have been removed or rendered inoperative and it contains at least 200 square feet of living area. There are no floating homes located within Newport's planning jurisdiction.

iv. Aquaculture

Aquaculture is currently not an issue in the Town of Newport's planning jurisdiction.

v. Channel Maintenance and Interstate Waterways

Proper maintenance of water courses can become a problem due to the potential for flooding in the event of a disaster. The Newport River channel has never been dredged, and over time has become silted in. Dredging of the river channel was identified by citizens of Newport as a top priority in the issues identification workshop held in August 2003. The dredging of the Newport River is an issue that will be discussed in further detail in the plan.

vi. Marine Resources (Water Quality)

The North Carolina Division of Water Quality assigns water quality classifications to all named waters of the State of North Carolina. The classifications are based upon the existing or contemplated best usage of the various streams and segments of streams within a basin, as determined through

studies, evaluations, and comments received at public hearings. The state water classification system is summarized as follows:

Table 22
NC Division of Water Quality Water Body Classifications

PRIMARY FRESHWATER AND SALTWATER CLASSIFICATIONS*	
CLASS	BEST USES
C and SC	Aquatic life propagation/protection and secondary recreation
B and SB	Primary recreation and Class C uses
SA	Waters classified for commercial shellfish harvesting
WS	*Water Supply watershed.* There are five WS classes ranging from WS-I through WS-V. WS classifications are assigned to watersheds based on land use characteristics of the area. Each water supply classification has a set of management strategies to protect the surface water supply. WS-I provides the highest level of protection and WS-V provides the least protection. A Critical Area (CA) designation is also listed for watershed areas within a half-mile and draining to the water supply intake or reservoir where an intake is located.
SUPPLEMENTAL CLASSIFICATIONS	
CLASS	BEST USES
Sw	*Swamp Waters:* Recognizes waters that will naturally be more acidic (have lower pH values) and have lower levels of dissolved oxygen.
Tr	*Trout Waters*: Provides protection to freshwaters for natural trout propagation and survival of stocked trout.
HQW	*High Quality Waters*: Waters possessing special qualities including excellent water quality, Native or Special Native Trout Waters, Critical habitat areas, or WS-I and WS-II water supplies.
ORW	*Outstanding Resource Waters*: Unique and special surface waters that are unimpacted by pollution and have some outstanding resource values.
NSW	*Nutrient Sensitive Waters*: Areas with water quality problems associated with excessive plant growth resulting from nutrient enrichment.

* Primary classifications beginning with an "S" are assigned to saltwaters.
Source: NC Department of Environment and Natural Resources.

Water quality varies slightly within Newport's planning jurisdiction. Table 23 provides a listing of all waterbodies within the Town that are classified by the NC Division of Water Quality along with their assigned classification. Map 11 identifies the location of these waterbodies. The Newport River and Sandy Branch are currently listed as High Quality Waters by the NCDWQ. However, the waters of the Newport River within Newport's planning jurisdiction are not rated because of the existence of swamp waters. Water conditions frequently changing makes it difficult to classify waters of the Newport River upstream from Little Creek Swamp.

MAP 11 - LOCATION OF HYDROLOGY

Table 23
Town of Newport
Waterbodies

Name of Stream	Description	Current Classification	Date	Basin	Stream Index #
Sandy Branch	From source to Hannah Branch	SA, HQW	06/01/56	White Oak	20-36-7-1-1-1
Shoe Branch	From source to Newport River	C	06/01/56	White Oak	21-6
Cedar Swamp Creek	From source to Newport River	C	06/01/56	White Oak	21-7
Deep Creek	From source to Newport River	C	09/01/74	White Oak	21-11
Hull Swamp	From source to Newport River	C	06/01/56	White Oak	21-15
Black Creek (Mill Pond)	From source to Newport River	C	06/01/56	White Oak	21-16
Newport River	From Little Creek Swamp to Atlantic Ocean with exception of Morehead City Harbor restricted area	SA, HQW	06/01/56	White Oak	21-17

Source: NC Division of Water Quality.

2. Environmental Composite Map

The environmental composite map (Map 12) is a requirement under the new CAMA Land Use Planning guidelines. This map is intended to work in conjunction with the Land Suitability Maps discussed earlier in this plan and should be utilized for future land use map impact analysis (see Future Land Use Map, page 152). The Environmental Composite Map breaks down land masses within the county into three different categories based on natural features and environmental conditions. The categories utilized are as follows:

Class I – Land that contains only minimal hazards and limitations that can be addressed by commonly accepted land planning and development practices. Class I land will generally support the more intensive types of land uses and development.

Class II – Land that has hazards and limitations for development that can be addressed by restrictions on land uses, special site planning, or the provision of public services, such as water and sewer. Land in this class will generally support only the less intensive uses, such as low density residential, without significant investment in services.

MAP 12 - ENVIRONMENTAL COMPOSITE MAP

Class III – Land that has serious hazards and limitations. Land in this class will generally support very low intensity uses, such as conservation and open space.

The Environmental Composite Model was prepared in a similar fashion to the Land Suitability Map. An overlay analysis was performed, breaking the county into **one acre cells** utilizing only map layers determined to be environmental factors. The layers used, and their assigned classes, are outlined in Table 24.

Table 24
Town of Newport
Environmental Composite Map Layers
(Subject to Change)

Layer		Class I	Class II	Class III
Coastal Wetlands				✓
Exceptional or Substantial Non-Coastal Wetlands				✓
Beneficial Non-Coastal Wetlands			✓	
Estuarine Waters				✓
Soils with Slight or Moderate Septic Limitations*		✓		
Soils with Severe Septic Limitations				✓
Flood Zones			✓	
Storm Surge Areas			✓	
HQW/ORW Watersheds			✓	
Water Supply Watersheds			✓	
Significant Natural Heritage Areas			✓	
Protected Lands				✓

*Class 1 lands are not a factor within Newport due to the presence of a central sewer system.

For a given cell, the computed value of the cell will be determined by the highest class theme that contains the cell. For example, if a cell is in a coastal wetland (Class III) and in a storm surge area (Class II) and intersects a soil with a slight or moderate septic limitation (Class I), the cell value will be Class III. In other words, if a cell does not meet the criteria for Class III, but qualifies as Class II, it has Class II for a value. If a cell does not qualify for either Class III or Class II, then it is Class I by default. This order enables the modeler to leave out themes that are not associated with Classes II or III to simplify the model (yielding the same results).

The resulting Environmental Composite Map is similar to the Land Suitability Map in that Class III areas are consistent with the Least Suitable category and the Class I areas are related to the Most Suitable areas. The primary difference is the absence of infrastructure in the Environmental Composite Map that heightens the emphasis on environmental sensitivity and relative land conservation value. The Future Land Use Map reflects the Class I, II, and III criteria.

Table 25 provides a summary of the land use acreages by class for the town as a whole as well as by subbasin.

Table 25
Town of Newport
Land Use Acreage by Class

	Town of Newport
Class I	2,590.2
Class II	5,108.8
Class III	11,055.8
TOTAL	18,754.8

Source: Holland Consulting Planners, Inc.

3. Environmental Conditions (Water Quality, Natural Hazards, and Natural Resources)

The White Oak River Basinwide Water Quality Plan was adopted by the Division of Water Quality in 1997 and updated in November of 2001. The following are the goals of DWQ's basinwide program:

- Identify water quality problems and restore full use to impaired waters;
- Identify and protect high value resource waters;
- Protect unimpaired waters while allowing for reasonable economic growth;
- Develop appropriate management strategies to protect and restore water quality;
- Assure equitable distribution of waste assimilative capacity for dischargers; and
- Improve public awareness and involvement in the management of the state's surface waters.

As existing and future land uses are considered within Newport, these goals should be kept in mind.

Within the White Oak River Basin, Newport is located entirely within subbasin 03-05-03. The White Oak River Basin and subbasin boundaries are shown on Map 13. It should be noted that there are currently no outstanding resource waters or high quality waters located within Newport's planning jurisdiction.

The following provides a summary of existing conditions in the White Oak River Basin and subbasin 03-05-03 along with the DWQ recommendations from the 2002 Basinwide Plan:

a. White Oak River Basin

The White Oak River Basin lies entirely within the southern coastal plain. The basin includes four separate river systems: the New River and its tributaries in the southwestern section; the White Oak River and its tributaries; the Newport River and its tributaries; and the North River in the eastern section. The basin also includes Bogue and Core Sounds. The Newport River bisects Newport's planning jurisdiction.

White Oak River Basin Statistics

Total area: 1,264 sq. miles
Stream Miles: 446
Estuarine Acres: 130,009
Atlantic Coastline: 91 miles
No. of Counties: 4
No. of Municipalities: 16
No. of Subbasins: 5
Population (1990): 146,240*
Estimated Pop. (2015): 188,403*
% Increase (1998-2015): 26%
Pop. Density (1990): 141 persons/sq. mi.

*Based on % of county land area estimated to be within the basin.

The White Oak River Basin encompasses all or portions of four counties and sixteen municipalities. Table 26 provides a listing of these municipalities, along with an identification of the regional planning jurisdiction (Council of Governments), and an estimation of what percentage of the county area is within the river basin.

Table 26
Local Governments and Planning Units within the White Oak River Basin

County	% of County in Basin**	Region	Municipalities
Carteret	49%	Region P Neuse River Council of Governments New Bern	Atlantic Beach Beaufort Bogue Cape Carteret Cedar Point Emerald Isle Indian Beach Morehead City Newport Peletier Pine Knoll Shores
Craven	4%	Region P	None

Table 26 (continued)

County	% of County in Basin**	Region	Municipalities
Jones	19%	Region P	Maysville
Onslow	77%	Region P	Jacksonville North Topsail Beach* Richlands Swansboro

*Located in more than one major river basin.
**Estimated by Center for Geographic Information and Analysis.
NOTE: Counties are not included as part of a river basin if only a trace amount of the county (<2%) is located in that basin unless there is a municipality.
Source: White Oak River Basinwide Water Quality Plan.

Most federal government agencies, including the US Geological Survey (USGS) and the US Natural Resources Conservation Service (NRCS), use a system of defining watersheds that is different from that used by the Division of Water Quality (DWQ) and many other state agencies in North Carolina. Under the federal system, the White Oak River Basin is made up of two hydrologic areas referred to as hydrologic units. One of these units includes the entire White Oak basin, except the New River watershed area, which is assigned to the other unit. Each hydrologic unit is defined by an 8-digit number. DWQ has a two-tiered system in which the state is subdivided into 17 river basins with each basin further subdivided into subbasins. Table 27 compares the two systems. The White Oak River Basin is subdivided by DWQ into five subbasins.

Table 27
Hydrologic Subdivisions in the White Oak River Basin

Watershed Name and Major Tributaries	USGS 8-digit Hydrologic Units	DWQ Subbasin 6-digit Codes
New River	03030001	03-05-02
Bogue-Core Sounds	03020106	03-05-01
White Oak River		03-05-01
Newport River		03-05-03
North River		03-05-04
Jarrett Bay and Nelson Bay		03-05-04
Core Sound and Back Sound		03-05-05

MAP 13 - WHITE OAK RIVER BASIN

b. Subbasin 03-05-03

The Newport River watershed (subbasin 03-05-03) is located just east of the White Oak River. It flows into the eastern end of Bogue Sound before entering the Atlantic Ocean near Morehead City. The Newport River watershed begins in Craven County and flows through Newport. There are 18 stream miles, 34,723 estuarine acres, and 25 miles of Atlantic coastline. With the exception of Newport, most of the development in this subbasin is along the coast, including Morehead City, Beaufort, Atlantic Beach, and Bogue Banks. Land use in this subbasin is predominantly forested. The highest population densities are in the Beaufort and Morehead City areas along the waterfront.

Table 28
Subbasin 03-05-03 Description

Land and Water	
Total area:	228 mi^2
Land area:	168 mi^2
Water area:	60 mi^2
Population Statistics	
1990 Est. pop.:	11,404 people
Pop. density:	68 persons/mi^2
Land Cover	
Forest/Wetland:	59.0%
Surface Water:	26.0%
Urban:	4.0%
Cultivated Crop:	6.5%
Pasture/Managed Herbaceous:	1.0%
Water Area	
Stream Miles:	18
Estuarine Acres:	34,723
Coastal Miles:	25
Shellfish Harvest Acres:	34,146

There are indications of nutrient inputs in the upper Newport River. There are also elevated fecal coliform bacteria levels after rainfall events. The tributaries to the Newport River are characteristic swamp streams. Water quality in the estuarine waters of this subbasin is generally good. Most of the waters in this subbasin are estuarine, with the Newport River being the only major freshwater source. There are 34,146 acres of estuarine water classified for shellfish harvesting; 11,368 of these acres are outstanding resource waters (ORW).

The Town of Newport operates the only National Pollutant Discharge Elimination System (NPDES) permit facility in the mainland portion of subbasin 03-05-03. In addition, there are no intensive livestock operations located within Newport's planning jurisdiction.

2002 Recommendations: Continued development, road building, wetland ditching and draining, and poor de-snagging practices have the potential to cause degradation of aquatic habitats and water quality in the upper Newport River as well as increase the potential for eutrophication problems in the Newport River estuary. These land uses should implement best management practices to reduce water quality impacts.

Because bacteriological water quality no longer meets approved area criteria, the Division of Environmental Health (DEH) is reclassifying areas along the north shore of Bogue Sound to conditionally approved-open. These areas are currently rated as fully supporting the shellfish harvesting use support category. During the next basinwide assessment, these areas may be rated partially supporting if temporary closures continue to increase in frequency.

There have been beach closures on Bogue Banks and Atlantic Beach because of storm water pumping. The affected areas are pursuing options other than pumping storm water onto beaches and into shellfish harvesting waters. DEH and DWQ will continue to monitor this situation and pursue a resolution that does not involve potential contamination of surface waters with storm water.

c. Registered Animal Operations/Population Densities within White Oak River Basin

The following table provides a summary of registered animal operations within White Oak River subbasin 03-05-03. It should be noted that the only registered animal operations within this subbasin consist of swine production. Only one of the facilities is located near Newport, northeast of the town's planning jurisdiction (see Map 14 on page 61).

Table 29
Registered Animal Operations

	Swine*		
Subbasin	No. of Facilities	No. of Animals	Total Steady State Live Weight**
03-05-03	2	3,375	542,655

*There are no other registered animal operations located within subbasin 03-05-03.
**Steady State Live Weight (SSLW) is the result, in pounds, after a conversion factor has been applied to the number (head count)of swine, cattle, or poultry on a farm. The conversion factors, which come from the Natural Resource Conservation Service (NRCS) guidelines, vary depending on the type of animals on the farm and the type of operation (for example, there are five types of hog farms). Since the amount of waste produced varies by the size of the animal, SSLW is the best way to compare the sizes of the farms.

Source: NC Division of Water Quality White Oak Basinwide Water Quality Management Plan.

Table 30 provides population densities and land area summaries for the White Oak River Basin. In using these data, it should be noted that some of the population figures are estimates because the census block group boundaries do not generally coincide with subbasin boundaries. The census data are collected within boundaries such as counties and municipalities. By contrast, the subbasin lines are drawn along natural drainage divides separating watersheds. Therefore, where a census block group straddles a subbasin line, the percentage of the population that is located in the subbasin is estimated, assuming that population density is evenly distributed throughout a census block group. This is not always the case; however, the level of error associated with this method is not expected to be significant for the purposes of this document. It is also important to note that the census block groups change every ten years so comparisons between years must be considered approximate. Subbasin 03-05-03 is overestimated, as there are very few residents in this subbasin.

Table 30
Population Densities (1970, 1980, 1990) and Land Area Summaries

	Population (Number of Persons)			Population Density (Persons/Sq. Mile)			Land and Water Areas			
							Total Land & Water		Water Area	Land Area
Subbasin	1970	1980	1990	1970	1980	1990	(Acres)	(Sq. Miles)	(Sq. Miles)	(Sq. Miles)
03-05-01	27,748	30,640	39,388	86	95	122	224,923	351	29	322
03-05-02	58,060	63,497	84,359	138	152	201	295,882	462	43	419
03-05-03	6,858	8,917	11,404	41	53	68	146,026	228	60	168
03-05-04	5,120	6,657	8,514	50	65	83	108,875	170	67	103
03-05-05*	1,549	2,014	2,575	0	0	0	33,063	52	44	8
Totals	99,335	111,725	146,240	96	107	141	808,769	1,263	207	1,040

*Subbasin 03-05-05 is mostly National Seashore and very sparsely populated; therefore, density data is not considered to be representative of actual density in this subbasin.
Source: NC Division of Water Quality White Oak Basinwide Water Quality Plan.

d. Growth Trends

Basinwide, the percentage increase in population from 1970 to 1980 was 30.0%, and 27.9% from 1980 to 1990. These growth rates exceed state averages over the same periods (1970 to 1980, 23.3% and 1980 to 1990, 11.2%). The projected population figures indicate that the entire subbasin will continue to see growth at significant rates. This growth can be attributed to two primary influences, Cherry Point expansion and the influx of retirees over the next ten to twenty years.

C. ANALYSIS OF LAND USE AND DEVELOPMENT

1. Introduction

The Division of Coastal Management Land Use Plan Guidelines (15A NCAC 7B.0207) require that existing land uses and water uses be mapped. The land and water use maps should be utilized as working documents and serve as a basis for the development of the future land use map. Specifically, this plan should address the following (note: some of these issues/requirements are addressed in other sections of this plan in greater detail):

- Significant land use compatibility problems;
- Significant water use compatibility problems including those identified in any water supply plan and those identified in the applicable Division of Environmental Management basinwide plan;
- Significant problems that have resulted from unplanned development and that have implications for future land use, water use, or water quality;
- An identification of areas experiencing or likely to experience changes in predominant land uses, including agricultural and forestry land being converted to other uses and previously undeveloped shoreline areas where development is now occurring;
- Significant water quality conditions and the connection between land use and water quality.

2. Land Use in Relation to Water Quality

a. Introduction

This section will analyze how land use in Newport's planning jurisdiction relates to water quality. This section has been compiled with information provided by the North Carolina Division of Water Quality (DWQ). Under the Basinwide Management Program, the DWQ completes Basinwide Water Quality Plans.

Basinwide water quality planning is a non-regulatory, watershed-based approach to restoring and protecting the quality of North Carolina's surface waters. Preparation of a basinwide water quality plan is a five-year process, which is divided into three phases. While these plans are prepared by the DWQ, their implementation and the protection of water quality entails the coordinated efforts of many agencies, local

governments, and stakeholder groups in the state. The first cycle of plans was completed in 1998, but each plan is updated at five-year intervals.

It should be noted that the results of the monitoring efforts are not intended to provide precise conclusions about pollutant budgets for specific watersheds. Since the assessment methodology is geared toward general conclusions, it is important not to manipulate the data to support policy decisions beyond the accuracy of the data.

Two primary methods of water quality testing were performed in Newport's planning jurisdiction. The details of this methodology are described below so that the information on the results of this testing can be better understood. The methods utilized were Benthic Macroinvertebrate Monitoring, Ambient Monitoring System, and Fish Tissue Analysis. DWQ also observes water bodies for the existence of algal blooms, which are an indication of poor water quality.

Benthic macroinvertebrates are organisms, primarily aquatic insect larvae, which live in and on the bottoms of rivers and streams. The use of macroinvertebrate data has proven to be a reliable water quality monitoring tool because most macroinvertebrates are immobile and sensitive to subtle changes in water quality. Benthic communities also respond to, and show the effects of, a wide array of potential pollutant mixtures.

The Ambient Monitoring System (AMS) is a network of stream, lake, and estuarine (saltwater) water quality monitoring stations (about 420 statewide) strategically located for the collection of physical and chemical water quality data (or parameters). Water quality parameters are arranged by freshwater or saltwater water body classification and corresponding water quality standards. Under this arrangement, waters are assigned minimum monthly parameters with additional parameters assigned to waters with classifications such as trout waters and water supplies.

Since fish spend their entire lives in the aquatic environment, they incorporate chemicals from this environment into their body tissues. Therefore, by analyzing fish tissue, determinations about what chemicals are in the water can be made. Contamination of aquatic resources, including freshwater, estuarine, and marine fish and shellfish species has been documented for heavy metals, pesticides, and other complex organic compounds. Once these contaminants reach surface waters, they may be available for bioaccumulation either directly or through aquatic food webs and may accumulate in fish and shellfish tissues. Therefore, results from fish tissue monitoring can serve as an important indicator of contamination of sediments and surface water. Fish tissue analysis results are also used as indicators for human health concerns, fish and wildlife health concerns, and the presence and concentrations of various chemicals in the ecosystem.

In evaluating fish tissue analysis results, several different types of criteria are used. Human health concerns related to fish consumption are screened by comparing results with federal Food and Drug Administration (FDA) *action levels* and US Environmental Protection Agency (EPA) recommended *screening values* for contaminants.

b. Subbasin 03-05-03

This subbasin lies in the center of Carteret County, extending from the Croatan National Forest to Beaufort and Beaufort Inlet. Most of this subbasin is estuarine, with the Newport River as the only major source of freshwater. With the exception of Newport, most of the development in this subbasin is along the coast: Morehead City, Beaufort, Atlantic Beach, and Bogue Banks. There are four significant dischargers in this subbasin. The Newport WWTP (0.5 MGD) discharges to the Newport River. Map 14 provides the locations of the Ambient, Benthic, and Fish Tissue sampling stations located within Newport's planning jurisdiction.

The Newport River drainage has five AMS sites, three on the Newport River (Newport, Newport Marshes, and Morehead City Harbor) and two in Bogue Sound (Salter Path and Emerald Isle). Four of these sites are on the Intracoastal Waterway. The Newport site had four (14.3%) excursions below the dissolved oxygen criterion, five (31.3%) excursions above the fecal criterion, four (23.5%) excursions above the iron action level, four (14.3%) excursions below the pH criterion, and one (3.4%) excursion above the zinc action level. While these individual excursions are not violations of the fecal coliform standard, they serve as a useful screening tool for further investigation. This site is downstream from the Newport WWTP and some of the excursions recorded may be from the effects from this plant.

The Newport River at Newport has intermittent low dissolved oxygen and pH values. These low values were probably the result of high concentrations of organic matter being drawn out of flooded swamps following periods of high water. This also may or may not be the source of periodic elevated fecal coliform counts. Additional water quality data is included in Section V(B).

In order to minimize the impact of land use on water quality, the following should be implemented with Newport's planning jurisdiction.

- Implement agricultural and forestry Best Management Practices.
- Establish vegetative buffers along shorelines.
- Eliminate direct storm water discharge into waterbodies.
- Improve storm water and sediment control.

MAP 14 - WATER QUALITY IN RELATION TO LAND USE

3. Existing Land Use

The existing land use in the Town of Newport was mapped by a windshield survey conducted by Holland Consulting Planners, Inc., with assistance from the Town of Newport, throughout the month of August 2003. The existing land use is depicted on Map 15.

Table 31 provides approximate land use acreage summaries for the entire Newport planning jurisdiction, as well as the corporate limits and ETJ. Newport includes a total of 18,486 acres. Roughly half the land within Newport's planning jurisdiction remains vacant (47.2%). This percentage is misleading, however, due to the fact that nearly all (44%) of the vacant land is located within the town's ETJ. Within the corporate limits of Newport, the predominant land use is Recreation/Open Space (63.5%), and the next most significant land uses are vacant land (14.6%) and residential property (13.3%).

Table 31
Town of Newport and ETJ
Land Use Acreages

	Town Limits		ETJ		Total	
Land Use	Acres	% of Total	Acres	% of Total	Acres	% of Total
Agricultural	0.9	0.02%	1,617.5	11.4%	1,618.4	8.8%
Commercial	107.1	2.5%	253.4	1.8%	360.4	1.9%
Industrial	34.7	0.8	0.0	0.0%	34.7	0.2%
Office & Institutional	223.0	5.2%	13.9	0.1%	237.0	1.3%
High Density Res	36.1	0.8%	166.8	1.2%	202.8	1.1%
Medium Density Res	97.1	2.3%	17.8	0.1%	115.0	0.6%
Low Density Res	439.0	10.2%	2,253.6	15.9%	2,692.6	14.6%
Recreation/Open Space	2,727.6	63.5%	1,765.9	12.4%	4,493.4	24.3%
Vacant	627.6	14.6%	8,103.5	57.1%	8,731.1	47.2%
Total	4,293.2	100.0%	14,192.4	100.0%	18,485.6	100.0%

Source: Holland Consulting Planners, Inc./Newport Windshield Survey, August 2003.

It should be noted that all of the land determined to be Recreation/Open Space is made up entirely of Croatan National Forest Lands. The Croatan National Forest offers a variety of recreation activities, including hiking, fishing, camping, swimming, biking, and boating. To compensate for the effect that this large area has on the acreage data, Table 32 has been added, and the national forest land has been removed from the acreage figures within the corporate limits.

MAP 15 - EXISTING LAND USE

Table 32
Newport Corporate Limits Minus Undevelopable Land
Land Use Acreage

Land Use	Acres	% of Total
Agricultural	0.9	0.06%
Commercial	107.1	6.8%
Industrial	34.7	2.2%
Office & Institutional	223.0	14.2%
High Density Res	36.1	2.3%
Medium Density Res	97.1	6.2%
Low Density Res	439.0	28.0%
Vacant	627.6	40.1%
Total	1,565.6	100.0%

Source: Holland Consulting Planners, Inc./Newport Windshield Survey, August 2003.

a. Corporate Limits Land Use

As noted, a unique situation exists within the corporate limits of Newport. The town annexed a large portion of the Croatan National Forest adjacent to the southwestern boundary of the town's previous corporate limit line. The new corporate limit line was established under a North Carolina House Bill, and was a neutrally agreed upon boundary between Newport and Morehead City, located just to the south. By annexing this large portion of undevelopable land, the land use acreages within the corporate limits are significantly skewed. The term undevelopable is used here because it is not anticipated that this land will be available for development within the planning period. In order to compensate for this, Table 32 was added to provide a better representation of what actually exists on the ground.

According to this modified acreage table, the two most predominant land uses within the corporate limits are vacant land (38.65%) and residential properties (38.24%). A majority of the vacant properties reflected in these figures are large properties located adjacent to farmland within the town's ETJ. Overall, the most significant developed land use is residential properties. The large number of residences within Newport is reflective of the type of development that will continue to take place in and around town. Newport supports a large number of citizens who use the town as a bedroom community. A majority of these families are military personnel stationed at Cherry Point, located to the north along Highway 70. Newport also continues to support a growing number of retirees. Roughly 22% of the population is age 55 or older according to the 2000 Census.

Commercial development within the corporate limits is located primarily along the Highway 70 corridor. Development along this corridor is expected to increase during the planning period. It is anticipated that eventually the property fronting Highway 70 within the Town of Newport will be developed.

b. ETJ Land Use

A majority of the land within Newport's ETJ remains vacant (57.99%). The vacant properties are mainly made up of large tracts, and either are wooded or lie adjacent to farmland. Residential properties make up the second largest land use category in the ETJ (16.21%). There are several large subdivisions within the ETJ, and there are plans for several more in the near future. Due to the dense residential development within the corporate limits of Newport, a majority of subdivision development is expected to take place within the ETJ. The ETJ also contains 1,681 acres (11.98%) of recreation/open space. As with the land within the corporate limits, this acreage is also made up of Croatan National Forest Land. Several pieces of this property have the potential for development, but immediate development of this land is not anticipated.

4. Locally Designated Historic Sites

The Town of Newport is not home to any structures or places listed by the NC Department of Cultural Resources, Division of Archives and History or the National Register of Historic Places. The town has, however, designated several structures and sites as having local historical significance. The sites are depicted on Map 16, and Table 33 provides the name and location of each site.

Table 33
Town of Newport
Locally Designated Historically Significant Places

Historic Site	Location
The Potato House	123 Chatham Street
Old High School Gymnasium	219 Chatham Street
One Room School House (Old African American School)	153 Howard Boulevard
Newport River Primitive Baptist Church	901 Church Street
Newport River Primitive Baptist Cemetery	Chatham Street
Cedar Grove Cemetery	Mann Street
Old Newport Community Cemetery	Vine Lane
A Dozen Pre-Civil War Homes	Scattered throughout the corporate limits of Newport

Source: Town of Newport.

MAP 16 - HISTORIC SITES

D. ANALYSIS OF EXISTING COMMUNITY FACILITIES/SERVICES

Map 17 provides a listing and location of all facilities owned and operated by the Town of Newport, as well as the state and federal government, located within the planning jurisdiction of Newport.

1. Transportation

One major route runs through the center of Newport's corporate limits and ETJ – NC Highway 70 traverses through town running north-south. This thoroughfare is a four-lane road which provides access to the beach communities of Bogue Banks, as well as the towns of Beaufort and Morehead City, from New Bern to the north. The remaining roads within the jurisdiction are considered by NCDOT to be collector and local access streets.

According to the North Carolina Department of Transportation, there are approximately 103 miles of roadway located within the Town of Newport's planning jurisdiction. Based on NCDOT's average daily traffic counts (ADT), the most traveled stretch of road is the Highway 70 corridor which runs through the center of town. This stretch of highway has an ADT of 21,000. See Map 18 for a listing of all recorded 2003 ADTs.

LOS is a method of characterizing the relationship of travel demand to roadway capacity used by transportation planners. Six distinct levels-of-service are possible, with letter designations ranging from LOS A, which represents the best operating conditions, to LOS F, which represents the worst operating conditions. LOS D indicates "practical capacity" of a roadway, or the capacity at which the public begins to express dissatisfaction. Appendix IV provides a graphic representation of various roadway levels of service.

According to NCDOT, a majority of the minor thoroughfares and local access streets throughout Newport's planning jurisdiction operate at LOS A to LOS B. The US 70 corridor which traverses through the center of town operates at LOS C and, during peak summer months, LOS D to LOS E. At this time, traffic congestion along all corridors throughout the town's corporate limits and ETJ is not an issue. Level of service will continue to be monitored as growth occurs to ensure that LOS levels remain acceptable.

MAP 17 - MUNICIPAL/STATE/FEDERAL BUILDINGS

MAP 18 - ADTC

2. Health Care

Citizens of Newport have access to a wide variety of local physicians, as well as regional care facilities. Within Newport, there are two family practice facilities, a dermatologist, and a dentist office. The nearest urgent care facility is Carteret County General Hospital. The hospital has 117 beds with an average of 87 inpatients each day and performs over 410 surgeries each month. In addition, over 4,000 outpatient tests or treatments are provided each month. Services provided by the hospital include:

- Cancer care center
- Outpatient clinics for neurology and blood transfusions
- Nuclear medicine
- CT Scanning
- Mobile lithotrypsy
- Laser surgery
- Laparoscopic surgery
- Maternity facilities
- Urgent and Emergency Care
- Extended Care Facilities
- Home Health

For services not provided at Carteret County General Hospital, citizens of Newport also have regional access to both Craven County Regional Medical Center, located in New Bern, and University Health Systems of Eastern North Carolina located in Pitt County. The Pitt County facility is located approximately 70 miles from Newport, and provides service to 29 counties throughout Eastern North Carolina. University Health Systems includes Pitt County Memorial Hospital in Greenville, NC, community hospitals, physician practices, home health, and other independently operated health services. University Health Systems is affiliated with the Brody School of Medicine at East Carolina University.

3. Law Enforcement

The Town of Newport Police Department is located at 255 Howard Boulevard. The department currently employs nine officers; six of the officers are full-time and three are reserve officers. There are seven response vehicles available for use by the department. The department receives its response calls through the Carteret County Emergency Response Center; however, Newport does maintain its own Records Management System. This system provides the department with information that can be utilized to identify high crime areas and repeat offenders.

4. Fire/Rescue Services

The Town of Newport Fire Department has an Insurance Services Office (ISO) rating of 6 within town and 9 outside of the corporate limits. The ratings are on a scale of 1 to 9, with 1 being the best rating. The insurance industry uses these ratings to determine homeowners' insurance rates.

The department employs eight full-time and 42 volunteer personnel. Four of the full-time employees are paramedics and the remaining four are firemen. There are also four volunteer paramedics and four EMTIs or intermediate paramedics. Calls for the department are dispatched through the Carteret County Communications Center. The Newport Fire Department receives an average of four fire response calls and 60 EMS calls per month. Last year, they received roughly 800 calls in total.

Major equipment includes the following:

Year	Model	Pump Capacity	Tank Capacity
2001	Hammer	1,250 gpm	1,000 gallons
1988	Ford Emergency 1	1,000 gpm	1,000 gallons
1987	Seagrave	1,000 gpm	1,000 gallons
1974	Ford	750 gpm	1,000 gallons
1968	Military Weapons Carrier	200 gpm	300 gallons
1979	White (portable pump)	300 gpm	1,250 gallons
1978	Dodge Support Vehicle	n/a	n/a
1990	GMC Jimmy (Chief's vehicle)	n/a	n/a
1990 (2)	EMS Units	n/a	n/a

The department also has the equipment required to fill their air bottles at the station. In addition to this system, the town has a portable cascade system which can be used to fill air bottles at the scene of a fire.

5. Administration

The Town of Newport utilizes a mayor-council-administrator form of government. The Town currently has 36 full-time employees and six part-time employees. The following provides a summary of governmental organizations and employees.

Administrative Staff	7
Fire/Rescue	12
Police Department	11
Street/Building Department	5
Water/Sewer Department	7

6. Water System

The Town of Newport water treatment plant is a well system with an iron removal filter system, water softening, addition of chlorine for disinfection, a corrosion control inhibitor compound, and sodium fluoride addition. The system currently services roughly 1,310 connections within the corporate limits and portions of the ETJ. The water system was updated in 2000 to increase the overall capacity and efficiency of the system. The project included replacing the existing 100,000-gallon water tank with a 500,000-gallon tank. With the upgrades, the capacity of the water system was increased over 50%. The town currently pumps roughly 350,000 gallons per day (gpd), but with the upgraded system capacity, this was increased to 900,000 gpd. The water system is currently interconnected with Morehead City for assistance in the case of emergencies. The town plans on establishing a similar agreement with the West Carteret Water Company in the near future. The Town of Newport municipal water system is shown on Map 19.

Newport currently operates three wells. The following table provides pertinent data regarding the wells.

Table 34
Town of Newport
Water Wells

Well	Status	Yield	Depth	Casing/Depth Screened Interval	Casing Diameter
2	Permanent	190 gpm	122'	105' - 122'	8"
3	Permanent	600 gpm	123'	94' - 123'	8"
4	Permanent	450 gpm	162'	65' - 162'	10"

Source: Town of Newport.

The Town of Newport has established a Wellhead Protection Plan to ensure that potential contaminants will not reach the wells listed above. As a part of the program, it has identified vulnerable areas around its wells called "Wellhead Protection Areas." Chemicals and other pollutants spilled or dumped in these areas can be drawn into the wells, possibly contaminating the community's drinking water supply. Residents and businesses in these areas must be very careful with chemicals and other potential pollutants. Many things done in daily life can pollute surface and groundwaters. Sources of groundwater pollution include: (1) used oil, paint thinner, gasoline and other chemicals poured on the ground; (2) leaking storage tanks (aboveground and underground); (3) overuse of pesticides and fertilizers on lawns, golf courses, and agricultural fields; (4) chemical spills at businesses, farms, and along highways; (5) illegal dumps and poorly managed landfills; (6) failing septic tanks; (7) leaking sewer lines; (8) improperly abandoned wells; and (9) unlined waste pits, ponds, and lagoons. The Wellhead Protection Plan allows the town to take charge of protecting the quality of the town's water supply and to mitigate any potential contamination. Map 24 provides an overview of the town's Wellhead Protection Overlay zoning district.

MAP 19 - MUNICIPAL WATER SYSTEM

North Carolina General Statute 143-355(I) requires all local units of government that provide, or plan to provide public water supply service, prepare a local water supply plan and to update that plan at least every five years. A local water supply plan is an assessment of a water system's current and future water needs and its ability to meet those needs. The following tables provide a summary of water use information included in the Town of Newport's most recent local water supply plan. The plan was submitted to the NC Division of Water Resources in April, 2000. The Division of Water Resources is still reviewing the reports, therefore the plan is still in draft form.

Table 35
Town of Newport
Water Usage Information

Total Water Use for 2002 including all purchased water:	129.754 million gallons (MG)
Average Annual Daily Water Use in 2002:	0.355 million gallons per day (MGD)

2002 Average Annual Daily Water Use by Type in Million Gallons Per Day (MGD):

Type of Use	Number	Average Use (MGD)
Residential	1,206	0.217
Commercial	88	0.064
Industrial	0	0.000
Institutional	6	0.189
System Process water	---	0.010
Subtotal	---	0.480
Average Annual Daily Water Use	---	0.355
Unaccounted-for Water	---	-0.125
Percent Unaccounted-for Water	---	-35%

Source: Town of Newport Local Water Supply Plan.

Table 36
Town of Newport
Average Daily Water Use by Month in MGD

Month	Average Daily Use	Month	Average Daily Use
January	0.349	July	0.391
February	0.331	August	0.367
March	0.346	September	0.341
April	0.362	October	0.352
May	0.382	November	0.332
June	0.399	December	0.311

Source: Town of Newport Local Water Supply Plan.

7. Sewer System

Newport operates an oxidation ditch wastewater treatment plant. The plant has an average flow of roughly 400,000 gallons per day. The plant currently services approximately 1,200 customers. A majority of these customers reside within the corporate limits; however, the town does provide some service to individuals in the ETJ. Discharge from the treatment plant is emptied into the Newport River. The Town of Newport municipal sewer system is shown on Map 20.

The town is currently operating under an active National Pollutant Discharge Elimination System (NPDES) permit. A permit renewal was received in January of 2004 to expand the permitted flow from 500,000 gpd to 750,000 gpd.

8. Solid Waste

Newport currently provides curbside solid waste removal to all residences. The town currently provides solid waste removal for a limited number of businesses. Solid waste removal services have been contracted out to Waste Industries. Curbside pickup is performed once a week and the waste is delivered to the Craven County Landfill. Recyclables are picked up by Waste Industries once every two weeks. Newport does provide yard waste removal once per week; the Public Works Department provides this service.

The total solid waste tonnage generated by Newport for FY 2002 was 1,182.66 tons. The town also generated 52.31 tons of recyclables. The following table provides a breakdown of the recycled goods.

Table 37
Town of Newport
Recycled Goods

Recyclable Goods	Tonnage
Mixed Glass	15.71
Mixed Plastic	3.64
Steel Cans	4.68
Mixed Paper (MPW)	22.02
BLEND	6.26
Total	52.31

Source: Town of Newport Solid Waste Management Plan.

MAP 20 - MUNICIPAL SEWER SYSTEM

9. Schools

The Carteret County School System oversees all public schools providing service to Newport citizens. There are two private schools located within Newport's planning jurisdiction: Gramercy Christian School and Grace Christian School. Both of these facilities support kindergarten through twelfth grade. Table 38 provides a summary of the schools that fall within Newport's school district. The Carteret County school districts are shown on Map 21.

Table 38
Town of Newport
Schools

School	Enrollment	Capacity	Staff	Recreational Facilities
Newport Elementary School Grades K-5	807	1,056*	111	Multi-purpose room, playground facilities, nature trail
Newport Middle School Grades 6-8	495	600	58	Gym, Athletic Fields
West Carteret High School Grades 9-12	1,198	1,480**	134	Gym, Athletic Fields, Track

*Includes nine modular units; **Includes five modular units.
Source: Carteret County Board of Education.

Higher education is offered for Newport citizens through Carteret Community College, located in Morehead City. The school offers more than 100 courses, and students can pursue programs leading to a certificate, diploma, or associate degree. East Carolina University is a major four-year university, and is part of the University of North Carolina system. The university is located in Greenville, North Carolina, roughly 70 miles from Newport.

10. Recreation

The Town of Newport does not currently have a parks and recreation department or any personnel overseeing recreational facilities or programs. There have been discussions of adding this position in an effort to better serve citizens. The Town of Newport maintains three parks. The Newport Community Park, located on Howard Boulevard, next to the town library, offers a ball field, picnic area, and play apparatus. The Newport Minipark, although quite small, adds to the aesthetic appearance of downtown. This park is well maintained and contains a variety of shrubs and flowers. Babe Ruth Field, located on Orange Street next to the State Prison, is primarily used for little league baseball games and provides additional open space. There are several youth programs offered within Newport, but volunteers oversee all programs. The following list provides a summary of all youth sports activities offered within Newport.

- Babe Ruth Baseball, Age 13+ – Newport
- Babe Ruth Baseball, Age 13+ – County
- Little League Baseball, Age 6-12 – Newport
- Youth Basketball, Age 7-18 – Newport
- Youth Basketball, Age 7-18 – County
- Pop Warner Football, Age 7-15 – Newport
- Youth Soccer, Age Under 14 – Newport
- Seashore Youth Soccer, Age 4+ – Newport
- Youth Softball, Age Under 18 – Newport
- T-Ball, Age 4-6 – Newport

MAP 21 – CARTERET COUNTY SCHOOL DISTRICTS

11. Electric Service

A majority of the residences and businesses within the Town of Newport's planning jurisdiction receive electric service from Progress Energy. A small number of residences in the ETJ receive their electric service from the Carteret-Craven Energy Cooperative.

12. Telephone Service

Sprint provides telephone service to all businesses and residences in the Town of Newport.

13. Internet Service

Time Warner Cable currently provides Roadrunner broadband cable internet service to Newport. Starfish Internet provides wireless broadband internet service, dial-up internet service, and Digital Subscriber Line (DSL) service by utilizing Sprint telephone cable.

14. Cable Service

Time Warner Cable currently provides cable service to all households within Newport's planning jurisdiction.

15. Cell Phone Service

Cell phone service is provided by all the major cell phone service providers including, but not limited, to: Sprint, US Cellular, Cingular, and SunCom.

16. Paging Service

Pager service is provided by Sprint and AnswerQuik Paging Service.

17. Amateur Radio Repeater Networks

Amateur radio service is provided by the following:

145.45 MHZ	Repeater
146.805 MHZ	IRLP (VOIP) Worldwide Link
440 MHZ	Repeater
10 Meter	Repeater

18. Storm Water Management

a. Introduction

Storm water discharges are generated by runoff from land and impervious areas such as paved streets, parking lots, and building rooftops during rainfall and snow events. They often contain pollutants in quantities that can adversely affect water quality and create flooding problems. When roads, parking lots, sidewalks, homes, and offices replace the natural and permeable landscape, rainfall that would once soak into vegetated ground is now available for storm water runoff. As surfaces become more and more impermeable, water simply moves across them. These impermeable surfaces connect to form a storm water super highway. One of the effects of this water super highway is that more and more storm water reaches streams because there is less opportunity for it to infiltrate the ground. Peak flows also increase, transporting runoff from large areas rapidly. Velocities in streams increase causing more erosion potential, and lastly, base flow is lower during dry weather because of a lack of infiltration. Using a traditional analysis, such as the Natural Resource Conservation Service (NRCS) storm water model, TR 55, or the United States Corps of Engineers' (USCE) many versions of HEC, it can be shown that peak flows alone can increase by as much as four times from pre-post development conditions. Flooding is the result of this urbanization.

b. Erosion and Sedimentation

Erosion and sedimentation have long been recognized as water quality concerns. The North Carolina legislature passed laws to curb sedimentation in 1973; however, sedimentation remains the number one pollutant in NC waters. In the 1990s, the focus of the Piedmont and Eastern NC watersheds turned towards excess nutrients in surface waters. The excess was due to extensive farming operations in the area. Fertilizers contain nutrients for plants to grow, but if excess fertilizer is inadvertently applied to pavement, these nutrients enter the waters during runoff periods causing harm to water quality. Even proper amounts of applied fertilizer can allow nutrients to enter streams in other ways, such as atmospheric deposition, wildlife and pet waste, and septic system malfunctions.

There are numerous ways to reduce pollutant loading. Proper application of fertilizer and proper maintenance of septic systems can reduce loading. Structural devices can also help curb this problem. These structural devices, known as Best Management Practices (BMPs), can be constructed to treat runoff, thereby reducing the amount of pollutant that enters the waterways. These BMPs include wet ponds, storm water wetlands, infiltration trenches, wells, sand filters, bioretention rain gardens, rubble spreaders, riparian buffers, and reinforcing grassy swells.

c. EPA Regulations

The Environmental Protection Agency (EPA) has begun implementation of Phase II of the Storm Water Management Plan. These policies apply to municipalities with populations greater than 10,000 and with densities of 1,000 per square mile. For municipalities that meet these parameters, submittal of a storm water management plan is required. Phase II regulations also apply to entities designated under the 1990 census as a Small MS4 (Small Municipal Separate Storm Sewer System). MS4's are defined as a publicly-owned conveyance or system of conveyances designed or used for collecting and conveying storm water. MS4's are not combined with sewer and are not part of a publicly-owned treatment facility. Municipally-owned MS4's can include counties, towns, airports, federal properties, hospitals, schools, etc. Small community MS4's are regulated if they discharge into impaired or sensitive US waters. In addition, counties classified as a Tier 4 or Tier 5 county are regulated. At this time, the Town of Newport is not required to meet the new EPA Phase II Storm Water Management Program regulations.

Newport will be required to submit a stormwater management permit application under the next phase of the NPDES program. At this time, it is unclear when this will be implemented. Additionally, the White Oak River Basinwide Management Plan will be updated in 2006. It is possible that this update will involve stormwater management requirements for named communities within Carteret County. At this time it is not possible to determine how this update will directly impact Newport.

The Town of Newport has decided to take a proactive approach to dealing with the potential requirements of the NPDES Phase II program. The town will move forward with establishing a comprehensive stormwater management program that will address all of the program's defined criteria. Establishing a stormwater management program involves laying out a plan for how the town will deal with stormwater pollution. This plan is broken down into six components referred to as minimum control measures. Newport will have to establish specific actions and goals that address each of these measures. The following provides a summary of the six minimum control measures:

- Public Education and Outreach
- Public Participation/Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post-Construction Runoff Control
- Pollution Prevention/Good Housekeeping

The EPA has developed guidelines for implementing the Phase II Storm Water Management Program. The storm water pollution problem has two main components:

the increased volume and rate of runoff from impervious surfaces and the concentration of pollutants in the runoff. Both components are directly related to new developmental and urbanizing areas. Both components also cause changes in the hydrology and water quality that result in a variety of problems, such as habitat modification, increased flooding, decreased aquatic biological diversity, and increased sedimentation and erosion. Effective management of storm water runoff offers a multitude of possible benefits. Benefits include protection of wetlands and aquatic eco-systems, improved quality of receding water bodies, conservation of water resources, protection of public health through flood control, and improved operation and hydraulic characteristics of streams receiving runoff; all of which can cause higher peak flow rates that increase frequency and duration of bank full and sub-bank full flows. Increased occurrences in downstream flooding can also be reduced by lowering base flood levels, such as with traditional flood control methods that rely on the detention of the peak flows. They are generally not targeted to the reduction of flooding and in many cases have exacerbated the problems associated with changes in hydrology and hydraulics. The EPA recommends an approach that integrates control of storm water peak flows and the protection of natural channels to sustain physical and chemical properties of aquatic life.

The EPA has outlined six (6) steps for the development of BMP's for a storm water management plan. The six steps are as follows:

(1) Public Education and Outreach on Storm Water Impacts
(2) Public Involvement and Participation
(3) Elicit Discharge Detection and Elimination
(4) Construction Site and Storm Water Runoff Control
(5) Post-Construction Storm Water Management, and New Development or Redevelopment
(6) Pollution Prevention and Good Housekeeping for Municipal Operations

d. Construction Activities

Storm water runoff from construction activities can have a significant impact on water quality, contributing sediment and other pollutants exposed at construction sites. The NPDES Storm Water Program requires operators of both large and small construction sites to obtain authorization to discharge storm water under a NPDES construction storm water permit. In 1990, the Phase I Storm Water Management Program regulations addressed large construction operations that disturbed five (5) or more acres of land. The NPDES program also addresses small construction activities – those that disturb less than five (5) acres of land – which were included in the Phase II final rule. Construction activities that disturb over one (1) acre of land are required to develop and implement

a storm water pollution prevention plan specifically designed for the construction site. The development implementations of the plan follow the basic phases listed below:

(1) Site Planning and Design Development Phase
(2) Assessment Phase
(3) Control Selection/Design Phase
(4) Certification/Verification/Approval Phase
(5) Implementation/Construction Phase
(6) Final Stabilization/Termination Phase

e. North Carolina Shoreline Buffering

In August of 2000, the State of North Carolina developed a thirty (30) foot buffering rule for all new development in the twenty coastal counties governed by the Coastal Area Management Act (CAMA). This rule applies to all navigable waters, excluding the ocean, which has previously established setback requirements. The development of this buffer does not restrict the construction of water dependent structures, such as docks and boat ramps. The benefits of the buffering include the following:

(1) Flood Control – by reducing the velocity and providing a collection area for storm water runoff and precipitation. Buffers encourage water infiltration into the ground, rather than flooding low-lying areas.
(2) Groundwater Recharge – buffers are also beneficial to recharging the ground water supply and promoting ground water flow.
(3) Soil Erosion Prevention – vegetated buffers stabilize the soil and reduce sedimentation.
(4) Conservation of Coastal Riparian Wildlife Habitats – these natural areas provide breeding, nesting, and habitat, and protect wildlife from predication. Vegetated buffers help increase the diversity of wildlife while providing site for foraging and corridors for dispersal.

f. Town of Newport Storm Water Management

The Town of Newport experiences occasional flooding and runoff from heavy rains. Although heavy rainfall can cause flooding in the Newport River, Deep, and Little Deep Creeks, major problems normally only occur during nor'easters. These nor'easters can create a storm surge from the Atlantic Ocean which propagates up the Newport River. In addition, the swamps and other low-lying areas in Newport's planning jurisdiction impede storm water runoff.

Management of storm water runoff is an important issue in the Town of Newport. There is a direct connection between land use, storm water runoff, and water quality. Improvement of water quality in the Newport River and adjoining tributaries is important to both the tourist and fishing industries in the county. Urban development, industrial, and agricultural runoff are all contributors to water pollution. There is no single culprit. The primary impact on storm water runoff in Newport results from residential construction and agricultural uses.

As urban development continues in Newport's planning jurisdiction, so will the construction of impervious and semi-permeable surfaces, and the potential for surficial water contamination will continue to increase. The areas of potential storm water flooding are depicted on Map 22.

E. LAND SUITABILITY ANALYSIS (LSA)

A thorough analysis of all impediments to development, as well as existing community facilities, has been completed in the preceding sections. All of these variables factor into suitability for development for a specific piece of property. In order to assess what effect the various man-made and environmental constraints will have on development throughout the Town of Newport, an overlay analysis was performed. This overlay analysis is a GIS-based process geared toward evaluating the suitability of land for development. The procedure is very similar to the practice developed by Ian McHarg, in which geospatial data layers are referenced to each other in an effort to determine what portions of a land mass appear to be the most favorable sites for a specific land use.

The land suitability analysis methodology involves the application of criteria to the landscape to assess where land is most and least suitable for development of structures and infrastructure. A computer application is not essential for this analysis, but greatly simplifies the process and improves accuracy. There are eight key steps to completing the overlay analysis:

1. Define criteria for the analysis – the criteria utilized for the LSA were based on CAMA guidelines, and modified according to available GIS data sets. The criteria for land suitability are listed in Table 39, and were given a rating of high, medium, low, and least suitable for each one-acre portion of land analyzed.

2. Define data needed – the GIS data used for the LSA was compiled from several sources. A majority of the data was provided through the North Carolina Center for Geographic Information & Analysis, although some of the data used was compiled form the Town of Newport's GIS database. All of the data used in this process are listed on pages 86 and 87 (in bold).

MAP 22 - AREAS OF POTENTIAL STORM WATER CONCERN

3. Determine what GIS analysis operations should be performed – this step involved determining what GIS operations would be required to effectively execute the overlay analysis.

4. Prepare the data – all of the datasets defined in step 2 are prepared to be run through the model.

5. Create a model – this step involved the actual construction of the LSA computer model.

6. Run the model – the GIS data is run through the developed LSA model.

7. Analyze results – the LSA map as depicted in Map 23 is the output of the model, and the results of the model must be analyzed to determine if the model needs to be revised.

8. Refine model as needed – modifications are made to the model, and then the process starts again from step 6 until satisfactory results are reached.

All of these steps have been completed and the end product is displayed on Map 23, Town of Newport Land Suitability Map. Prior to producing the map, data was compiled and each data layer in conjunction with criteria was assigned a weight. The criteria utilized in the LSA are listed below, along with the GIS data set associated with each criterion (the bold type indicates which GIS layer is a function of each criterion, see Appendix V for further detail):

- Land within **Beneficial Non-Coastal Wetlands** have low suitability
- Land within **Storm Surge Areas** have low suitability
- Land within **Severe Septic Limitations** (based on soils data) have low suitability; moderate limitations have medium suitability; slight limitations have high development suitability
- Land within 100-year **Flood Zones** have low development suitability
- Land within **HQW/ORW Watersheds** have low suitability
- Land within **Water Supply Watersheds** have low suitability
- Land within 500 feet of a **Significant Natural Heritage Area** have low suitability
- Land within 500 feet of a **Hazardous Substance Disposal Site** have low suitability
- Land within 500 feet of an **NPDES Site** have low suitability
- Land within 500 feet of a **Wastewater Treatment Plant** have low suitability
- Land within 500 feet of a **Municipal Sewage Discharge Point** have low suitability

- Land within 500 feet of a **Land Application Site** have low suitability
- Land within a half-mile of **Primary Roads** have high suitability; within a half-mile to a mile have medium suitability; areas greater than one mile outside of primary roads have low suitability
- Land within a half-mile of **Developed Land** have high suitability; areas within a half-mile to a mile have medium suitability; areas further than one mile away from developed land have low suitability
- Land within a quarter-mile of **Water Pipes** have high suitability; areas within a quarter-mile to a half-mile of water pipes have medium suitability; areas further than a half-mile away from water pipes have low suitability
- Land within a quarter-mile of **Sewer Pipes** have high suitability; areas within a quarter-mile to a half-mile of sewer pipes have medium suitability; areas further that a half-mile away from water pipes have low suitability
- Land within **Coastal Wetlands** are LEAST suitable
- Land within **Exceptional and Substantial Non-Coastal Wetlands** are LEAST suitable
- Land within **Protected Lands** are LEAST suitable
- Land within **Estuarine Waters** are LEAST suitable

MAP 23 - LAND SUITABILITY MAP

The following table further defines the criteria used in the LSA. This table displays a tabular account of what determines whether a specific portion of property has a high or low suitability rating based on the criterion listed above.

Table 39
Land Suitability Analysis
Criteria Table

	Criteria and Rating			
Layer Name	Least Suitable	Low Suitability	Medium Suitability	High Suitability
	0	-2	1	+2
Coastal Wetlands	Inside	--	Outside	--
Exceptional & Substantial Non-Coastal Wetlands	Inside	--	Outside	--
Estuarine Waters	Inside	--	Outside	--
Protected Lands	Inside	--	Outside	--
Storm Surge Areas	--	Inside	--	Outside
Soils (Septic Limitations)	--	Severe	Moderate	Slight
Flood Zones	--	Inside	--	Outside
HQW/ORW Watersheds	--	Inside	--	Outside
Natural Heritage Areas	--	<500'	--	>500'
Hazardous Substance Disposal Sites	--	<500'	--	>500'
NPDES Sites	--	<500'	--	>500'
Wastewater Treatment Plants	--	<500'	--	>500'
Discharge Points	--	<500'	--	>500'
Land Application Sites	--	<500'	--	>500'
Developed Land (extracted from the Town of Newport existing land use survey)	--	>1 mi	.5 - 1 mi	<.5 mi
Roads	--	>1 mi	.5 - 1 mi	<.5 mi
Water Pipes (Town of Newport)	--	>.5 mi	.25 - .5 mi	<.25 mi
Sewer Pipes (Town of Newport)	--	>.5 mi	.25 - .5 mi	<.25 mi

*Data layers that are slated as exclusion have a suitability of 0 or 1, meaning that if a specific one-acre piece of property falls within one of these areas, it is automatically considered least suitable for development.

Source: NCGIA and CAMA.

The town was divided into one-acre squares of land to conduct the analysis. Each of these one-acre squares of land was given a score based on how that respective piece of property related to each of the criteria listed above. The scores for each layer were added together to determine a suitability rating for that one-acre square of property.

The overall process utilized Arcview GIS software with the Spatial Analyst extension along with a variety of data layers as listed above including: several layers provided by the North Carolina Center for Geographic Information and Analysis (NCGIA), water and sewer data obtained through the Newport Planning and Inspections Office, and existing land use data discussed earlier in this plan. The analysis takes into consideration a number of factors, including natural systems constraints, compatibility with existing land uses and development patterns, existing land use policies, and the availability of community facilities. The end product of this analysis is a land suitability map which depicts underutilized land that is suited or not suited for development (see Map 23). This map can be used as a foundation for the discussion and formation of town-wide land use policy.

Overall, land in Newport is fairly suitable for development according to the LSA. Tables 40, 41, and 42 provide a summary of land suitability acreage based on the results of the overlay analysis. The majority of the land within the town determined to have a high suitability rating is located centrally within Newport's corporate limits, as well as along portions of Highway 70. A large percentage of the land cover within Newport's planning jurisdiction is comprised of wetlands and federally owned property. Thus, large portions of Newport's jurisdiction are automatically considered unsuitable for development regardless of how these areas relate to the rest of the factors in consideration.

Table 40
Newport Corporate Limits LSA Acreage

Suitability	Acreage	% of Total
Least Suitable	1,340	29.4%
Low Suitability	1,212	26.6%
Medium Suitability	1,134	24.9%
High Suitability	871	19.1%
Total	4,557	100.0%

Source: Holland Consulting Planners (December, 2003); North Carolina Center for Geographic Information and Analysis.

Table 41
Newport ETJ LSA Acreage

Suitability	Acreage	% of Total
Least Suitable	7,341	52.3%
Low Suitability	2,716	19.4%
Medium Suitability	2,691	19.2%
High Suitability	1,280	9.1%
Total	14,028	100.0%

Source: Holland Consulting Planners (December, 2003); North Carolina Center for Geographic Information and Analysis.

Table 42
Newport Total LSA Acreage

Suitability	Acreage	% of Total
Least Suitable	8,629	46.7%
Low Suitability	3,909	21.1%
Medium Suitability	3,806	20.6%
High Suitability	2,142	11.6%
Total	18,486	100.0%

Source: Holland Consulting Planners (December, 2003); North Carolina Center for Geographic Information and Analysis.

F. CURRENT PLANS, POLICIES, AND REGULATIONS

The Town of Newport currently operates under the authority of a council-mayor-manager form of government. The Newport Town Council is made up of five (5) members. The town employs a full-time zoning administrator/building inspector who oversees all development-related issues within the planning jurisdiction. The Town also has an active eight (8) member planning board that reviews and comments on all proposed developments, and a five (5) member Board of Adjustment to review all variances and special use permits.

The following provides a summary of the Town's land use-related codes and ordinances:

1. Town of Newport Zoning Ordinance

The current Town of Newport Zoning Ordinance was adopted October 7, 1997. This comprehensive zoning ordinance is a total revision of the zoning ordinance dated April 1970,

as amended January 1979, and is based on the Land Use Plan. It contains the criteria for use of all land within the Town of Newport and its extraterritorial jurisdiction along with requirements for land use, setback, different type uses, special requirements, etc. The town currently employs a full-time zoning administrator.

Map 24 and Table 43 Provide the location and acreage figures of all zoning districts within Newport's planning jurisdiction. The two largest zoning districts within Newport's planning jurisdiction are R-20 and R-20A. These two districts account for 83.4% of Newport's total jurisdiction. Overall, Newport is zoned residential (92.8%), and the majority of commercial zoning is centered on the intersection of Highway 70 and Howard Boulevard.

Table 43
Town of Newport - Zoning

Districts	Acres	% of Total
Residential	**17,149**	**92.8%**
R-10	237	1.3%
R-15	1,266	6.8%
R-15-CU	10	0.1%
R-15D	16	0.1%
R-20	8,235	44.5%
R-20A	7,197	38.9%
R-20MH	18	0.1%
R-8	48	0.3%
RO	122	0.7%
Commercial	**944**	**5.1%**
CD	42	0.2%
CH	901	4.9%
NB-1	1	0.0%
Industrial	**333**	**1.8%**
IW	202	1.1%
LI	124	0.7%
LI-CU	7	0.0%
PUD	**60**	**0.3%**
Total	18,486	100.0%
WPOD*	1,077	

*The Wellhead Protection Overlay District serves as an overlay district, all property owners must comply with underlying districts.
Source: Holland Consulting Planners, Inc./Town of Newport.

MAP 24 - ZONING MAP

2. Town of Newport Subdivision Regulations

The current Town of Newport Subdivision Regulations was adopted on November 4, 1998. The current regulations are a total revision of the Subdivision Ordinance dated April 6, 1972, as amended, and is also based on the current land use plan. The regulations contain the criteria for the subdivision of all land within the Town of Newport and its extraterritorial jurisdiction.

3. Town of Newport Wellhead Protection Ordinance

The Town of Newport developed a Wellhead Protection Program to protect its water supply from contamination. The town has identified vulnerable areas around its wells called Wellhead Protection Areas. These areas are monitored and considered high risk for potential hazardous waste being introduced into the water supply. The Wellhead Protection Overlay District is depicted on Map 24.

4. NC State Building Code

The Town of Newport utilizes the North Carolina State Building Code to oversee the erection of all structures within its planning jurisdiction. The town employs a full-time building inspector to oversee the inspections process.

The minimum use standards, provisions, and requirements for safe and stable design, methods of construction, and usage of materials in buildings and structures erected, enlarged, altered, repaired, moved, converted to other uses, or demolished, and the equipment, maintenance, use, and occupancy of all buildings and structures in the town and its extraterritorial jurisdiction, are regulated in accordance with the terms of the North Carolina State Building Code.

5. Minimum Housing Standards and Nuisance Abatement

Minimum Housing Standards and Nuisance Abatement procedures have not changed since the adoption of the 1996 Land Use Plan. The town provides regulatory authority for enforcement of the town's building code. As stated in the 1996 Plan, the ordinance includes the following finding and purpose:

(a) Pursuant to G.S. § 160A-441, it is hereby declared that dwellings exist in the town and within its extraterritorial jurisdiction which are unfit for human habitation due to dilapidation; defects increasing the hazards of fire, accidents, and other calamities; lack of ventilation, light, and sanitary facilities; and other conditions rendering such dwellings unsafe or unsanitary, dangerous and

detrimental to the health, safety, and morals, and otherwise inimical to the welfare of the residents of the town and extraterritorial area.

(b) In order to protect the health, safety, and welfare of the residents of the town and extraterritorial area as authorized by G.S. § 160A-412 et seq., it is the purpose of this article to establish minimum standards of fitness for the initial and continued occupancy of all buildings used for human habitation within the town and its extraterritorial area.

The Town of Newport Code also provides regulatory authority for enforcement of the town's Health; Noise; and Junked, Wrecked, and Abandoned Property Ordinances. The regulations and specifications contained in these ordinances can be found in Chapter 11 of the Newport Code.

6. Flood Damage Prevention Ordinance (National Flood Insurance Program)

The Town of Newport has been a standard member of the National Flood Insurance Program (NFIP) since 1998. Prior to their standard membership, the town participated in the emergency phase of the program. The NFIP has recently completed updated floodplain maps. The new maps were adopted on July 16, 2003. The floodplain maps will be discussed further in the Natural Systems Analysis Constraints section of the plan.

In accordance with regulations under the NFIP, Newport has an updated Flood Damage Prevention Ordinance. The current ordinance is an update of the 1988 ordinance, and was adopted on July 15, 2003. The purpose of the new ordinance is as follows:

(1) Restrict or prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increase in erosion, flood heights or velocities;

(2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

(3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;

(4) Control filling, grading, dredging, and all other development which may increase erosion or flood damage; and,

(5) Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

7. Hazard Mitigation Plan

The Town of Newport originally adopted a Hazard Mitigation Plan (HMP) in 1984. This plan was then updated in 1993. The town currently falls under the jurisdiction of the Carteret County HMP Plan, which was adopted in 2003. This plan was developed and adopted in response to new federal and state legislation. This legislation, the Disaster Management Act 2000 (Federal) and NC Senate Bill 300 (State), makes it mandatory that each jurisdiction must adopt a current Hazard Mitigation Plan in accordance with new guidelines in order to receive Public Assistance and HMGP funding in the event of a disaster. Under these new guidelines, local municipalities have the option to be included under the umbrella of a county plan, but the town must be thoroughly represented in the scope and adoption of the report.

8. Transportation Improvement Program (TIP)

The TIP Unit of the North Carolina Department of Transportation develops the Transportation Improvement Program (TIP). The TIP contains funding information and schedules for various transportation divisions including: highways, aviation, enhancements, public transportation, rail, bicycle and pedestrians, and the Governor's Highway Safety Program. The scope of the current program is through FY10. Under the current program, there are two projects located within the Town of Newport's ETJ. Bridge #26 located along SR 1154, which crosses the Newport River, is scheduled to be replaced. Work on this project is scheduled to begin in FY04. Project R-3437 proposes to construct a connector from US 70 to NC 101. Although unfunded, this project is identified in the state's TIP and can be allocated funding during a future TIP cycle.

9. Review of the 1996 Town of Newport CAMA Land Use Plan

In 1996, Newport completed its current CAMA land use plan update. The Coastal Resources Commission certified this document on July 25, 1997. The current plan addresses a variety of issues, with a focus on transportation, community development, economic development, and hazard mitigation. This document has served as the town's primary land use management guide since its adoption by the Newport Board of Commissioners on June 3, 1997.

The 1996 Town of Newport CAMA Land Use Plan included 97 specific policy statements, and a detailed summary of the town's storm hazard mitigation procedures, post-disaster recovery operations, and evacuation plans. Of the 97 policy statements, 85 have either been accomplished or are in progress, and are listed below. There are two policy statements from the 1996 plan which have been partially implemented and ten that have not been carried out. These are also listed below, and those actions that have not been completed will be revised and addressed in the policy action section of this plan. This list (pages 97 to 109) is a verbatim reproduction of the text from the 1996 Town of Newport Land Use Plan; **there are duplications in the text**. Some of these statements are inconsistent with current circumstances and requirements. However, they were not changed in order to accurately reflect the contents of the 1996 plan.

ACCOMPLISHED

1. Enforce, through the development and zoning permit process, all current regulations of the N.C. State Building Code and the N.C. Division of Health Services relating to building construction and septic tank installation/replacement in areas with soils restrictions.

2. Coordinate all development activity with appropriate Carteret County and state regulatory personnel, and in particular with the Carteret County Sanitarian when septic tank permits are required.

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

4. Support the development of central water and sewer systems in all areas of the town's planning jurisdiction.

5. Newport will continue to coordinate all development within the special flood hazard area with the town's Inspections Department, North Carolina Division of Coastal Management, FEMA, and the U.S. Corps of Engineers.

6. Newport will continue to enforce its existing zoning and flood damage prevention ordinances and follow the storm hazard mitigation plan contained herein.

7. Newport's policy is to conserve its surficial groundwater resources by supporting CAMA and N.C. Division of Water Quality storm water run-off regulations, and by coordinating local development activities involving chemical storage or underground storage tank installation/abandonment with Carteret County Emergency Management personnel and the Groundwater Section of the North Carolina Division of Water Quality. The Town of Newport Building Inspections Department will coordinate building inspections with state and federal regulations governing underground storage tanks and will endeavor to advise building permit applicants of those regulations.

8. Newport will support the technical requirements and state program approval for underground storage tanks (40 CFR, Parts 280 and 281), and any subsequent state regulations concerning underground storage tanks adopted during the planning period.

9. With the exception of fuel storage tanks used for retail and wholesale sales, Newport opposes the bulk storage of fuel or other manmade hazardous materials within any areas not zoned for industrial usage. The town's zoning ordinance will be revised to support this policy.

10. The Town of Newport opposes the disposal of any toxic wastes, as defined by the U.S. Environmental Protection Agency's Listing of Hazardous Substances and Priority Pollutants (developed pursuant to the Clean Water Act of 1977) within its planning jurisdiction.

11. Newport recognizes the value of water quality maintenance to the protection of fragile areas and to the provision of clean water for recreational purposes. The town will support existing state regulations relating to storm water runoff resulting from development (Storm water Disposal Policy 15 NCAC 2H.001-.1003) through enforcement of the town's subdivision ordinance.

12. Newport supports control of agricultural runoff through implementation of U.S. Soil Conservation Service "Best Management Practices" program.

13. Newport shall coordinate all housing code enforcement/redevelopment projects with the N.C. Division of Archives and History, to ensure that any significant architectural details or buildings are identified and preserved.

14. Newport will coordinate all county public works projects with the N.C. Division of Archives and History, to ensure the identification and preservation of significant archaeological sites.

15. Industrial development which can comply with the use standards specified by 15A NCAC 7H, the Town of Newport zoning ordinance, and federal regulations may be located within conservation classified areas. Newport aggressively encourages the development of industry. The town does not want any policies contained within this plan to prohibit industrial development which meets all applicable state and federal regulations.

16. The Town of Newport, in cooperation with Carteret County, will continue to support an active industrial recruitment program, seeking low pollution, light manufacturing industries and those which do not require large commitments of water and/or sewer. The town will discourage any agricultural or industrial development which requires large groundwater yields for operation.

17. Newport supports requirement of a specific contingency plan specifying how ongoing private operation and maintenance of the plant will be provided, and detailing provisions for assumption of the plant into a public system should the private operation fail or management of the system not meet the conditions of the state permit (see policy 4).

18. Any request for the approval of a private package treatment facility must be accompanied by environmental assessments or, if required, environmental impact statements and documentation of assurances that all applicable state and federal health requirements will be satisfied. Prior to the preparation of an Environmental Impact Statement (EIS), a report will be prepared which examines the possibilities for wastewater disposal alternatives. This report will follow the prescribed format outlined in the Division of Water Quality's Guidance for Evaluation of Wastewater Disposal Alternatives: Proposed Discharge. When an EIS is determined necessary, it will be prepared in accordance with 15 NCAC 1D.0201.

19. All development and subsequent construction of wastewater facilities shall be consistent with the regulations set forth by the Newport zoning and subdivision ordinances in conjunction with the adopted land use plan.

20. Newport allows the discharge of package treatment plant effluent into 404 wetland areas.

21. Because of shallow water depth, marina and floating home development has not been an issue within Newport's planning jurisdiction. However, the town would oppose the location of floating structures within its jurisdiction.

22. Newport supports the construction of bulkheads as long as they fulfill the use standards set forth in 15A NCAC 7H.

23. The Town of Newport will continuously monitor the effects of sea level rise and update the land use plan policies as necessary to protect the town's public and private properties from rising water levels.

24. The Town of Newport will support bulkheading on the mainland to protect its shoreline areas from intruding water resulting from rising sea level.

25. Newport supports addressing the following issues in the development of the White Oak Basinwide Management Plan:

Long-term Growth Management

-- Wastewater management (non-discharge, regionalization, ocean outfall).
-- Urban storm water runoff/water quality.
-- Role of local land use planning.

Shellfish Water Closures

-- Increases in number of acres closed.
-- Examine link between growth and closures.
-- Opportunities for restoration and prevention.

Animal Operation Waste Management

-- Between 1990-1991, swine population located in the White Oak River Basin more than doubled.

Nutrients/Toxic Dinoflagellate

-- Reduction in nitrogen and phosphorous levels.

26. The Town of Newport will undertake a review of all local land use regulation ordinances to determine if revisions should be undertaken to respond to specific water quality management problems.

27. Newport will implement policies which support resource production and management. All policies will meet or exceed 15A NCAC 7H minimum use standards. Resource production should not be allowed to adversely affect Newport's conservation areas.

28. Subject to available funds, the Town of Newport supports a comprehensive recreational program to provide a broad range of recreational facilities for its citizens and will work cooperatively with Carteret County to provide a year-round recreation program.

29. The town will seek donations of land, bargain sales, or grant funds in order to obtain sites suitable for development as recreational facilities.

30. The Town of Newport supports the development of aquaculture and mariculture facilities.

31. The town supports existing policies and/or regulations directed at the management of off-road vehicles on public land. The existing policies are dictated by the National Forestry and Wildlife Commission, and as stated, the town fully complies with and supports these policies. The town does not have policies directed at regulating off-road vehicles.

32. Newport supports a regional multi-county approach to solid waste management.

33. Newport favors the siting of recycling centers, transfer stations, and solid waste collection sites within all land classifications except those within the conservation category when the facility(ies) is(are) consistent with the Town of Newport zoning ordinance.

34. Newport supports federal protection and management guidelines directed at preservation of the Croatan National Forest.

35. The town supports promotion of public awareness of forestry Best Management Practices in the area, while encouraging the private forestry industry to implement such practices to the benefit of their natural resource production activities.

36. Newport supports and encourages use of the U.S. Soil Conservation Service "Best Management Practices" program.

37. The Town of Newport supports the use standards for public trust areas as specified in 15A NCAC 7H.0207.

38. Newport reserves the right to comment on the individual policies and requirements of the North Carolina Division of Marine Fisheries.

39. The town will support enforcement of current state, federal, and local regulations to improve water quality.

40. Residential, commercial, and industrial development which is consistent with local zoning and meets applicable state and federal regulations will be allowed in conservation areas.

41. Newport opposes the construction of any signs, expect public regulatory signs, in public trust areas.

42. Newport desires to expand its economic base. A reasonable policy of annexation will be maintained. Newport will support growth and development at the densities specified in the land classification definitions. In guiding development, the following locational guidelines will be supported:

    -- Encourage renovation of commercial areas downtown and along Chatham Street.

    -- Encourage location of new commercial/retail uses in vacant commercial buildings downtown.

    -- Encourage new residential, commercial, and recreational development to take the form of infill in the downtown area as prescribed by the subdivision and zoning ordinances.

-- Continue to support and fund development of affordable housing in the Newport area.

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

-- Continue to ensure enforcement of housing construction and maintenance codes. Explore alternatives to demolition of substandard housing.

-- The town emphasizes the importance of locating new economic development in and around the existing urban area where public infrastructure and systems can be reasonably extended.

-- Continue to support growth and development of the Cherry Point Marine Corps Air Station.

43. The town will allow the installation of private wells for irrigation only through the NCDEM permit process.

44. The town will extend water services beyond its extraterritorial area if an adequate demand for service exists.

45. The Town of Newport supports the construction of lines to and through conservation areas to serve development which meets all applicable state and federal regulations.

46. Newport is aware that inappropriate land uses near well fields increase the possibility of well contamination. Land uses near groundwater sources are regulated by the North Carolina Division of Water Quality through NCAC Subchapters 2L and 2C.

47. The Town of Newport supports all efforts to secure available state and federal funding for the construction and/or expansion of public and private water systems.

48. Newport will support the development of central sewer service throughout its incorporated area and its unincorporated planning jurisdiction.

49. Newport supports the discharge of effluent into 404 wetland areas.

50. The town supports all efforts to secure available state and federal funding for the construction and/or expansion of public and private sewer systems.

51. The town will rehabilitate older sections of wastewater collection lines as needed.

52. The town will support treatment of waste in either a centralized Carteret County sewage treatment system or a regional, four county treatment system. In the absence of a County or Four County Regional treatment plant/system, the Town of Newport will continue development of its own waste treatment system and treatment plant. The town will also investigate and support other cost effective options which may be available such as: contracting with another municipality for the treatment of a portion of its sewage and/or contracting with the Cherry Point Marine Corps Air Station for the treatment of a portion of its sewage.

53. Newport supports Carteret County's participation in a regional multi-county approach to solid waste management. This includes disposal of waste in the Tri-County Regional Landfill.

54. The town will support efforts to educate people and businesses on waste reduction and recycling. The town vigorously supports recycling by all users of the Tri-County Landfill and supports setting up practical collection methods and education efforts to achieve a high degree of county-wide recycling.

55. Newport will cooperate with the NCDOT, the North Carolina Division of Water Quality, and other state agencies in mitigating the impact of storm water runoff on all conservation classified areas. The town will support the Division of Water Quality storm water runoff retention permitting process through its zoning permit system by verifying compliance prior to issuance of a zoning permit.

56. The town will attempt to apply for grant funds, and utilize Powell Bill funds, to improve storm water drainage systems associated with existing rights-of-way.

57. There are no electric generating plants located in Newport's planning jurisdiction. The town will consider the need for establishing energy facilities on a case-by-case basis, judging the need for development against all identified possible adverse impacts.

58. All redevelopment efforts will be coordinated with the Town of Newport Planning Department and Planning Board.

59. Promote funding for downtown revitalization and implementation in an effort to attract new development to the central business district.

60. The town will be pro-active in pursuing state and federal assistance and other methods of funding to be utilized for revitalization and other improvements as deemed appropriate.

61. The Storm Hazard Mitigation, Post-Disaster Recovery, and Evacuation Plan provides policies for responding to hurricanes or other natural disasters. Those policies address reconstruction needs. The town will allow the reconstruction of any structures demolished by natural disaster when the reconstruction complies with all applicable local, state, and federal regulations.

62. Newport supports the state's shoreline access policies as set forth in NCAC Chapter 15A, Subchapter 7M. The town will conform to CAMA and other state and federal environmental regulations affecting the development of estuarine access areas. The town will consider development of a detailed shoreline access plan during the five-year planning period.

63. Support low to moderate income housing.

64. Review the town's zoning and subdivision ordinances regarding possible impediments to the construction of affordable housing. Items to be considered may include, but not be limited to: planned unit developments, zero lot lines, cluster housing, increased density, revised subdivision design standards, and reduced yard setback requirements.

65. Strict enforcement of the town's minimum housing code.

66. Pursue state and federal funding of projects to improve and increase moderate income housing.

67. Support state and federal programs which assist with housing rehabilitation.

68. When economically feasible, the Town of Newport will extend water and sewer lines to serve new residential developments.

69. Newport desires to achieve responsible industrial development which will not adversely affect the natural environment or the quality of established residential areas. Large vacant areas exist within the town's planning jurisdiction which have the potential for industrial development.

70. Industrial sites should be accessible to municipal/central water and sewer services.

71. Industries which are noxious by reason of the emission of smoke, odor, dust, glare, noise, and vibrations, and those which deal primarily in hazardous products such as explosives, should not be located in Newport.

72. Industrial development and/or industrial zoning should not infringe on established residential development.

73. Newport is generally receptive to state and federal programs, particularly those which provide improvements to the town. The town will continue to fully support such programs, especially the North Carolina Department of Transportation road and bridge improvement programs, which are very important to the Town of Newport.

74. Examples of other state and federal programs that are important to and supported by Newport include: dredging and channel maintenance by the U.S. Army Corps of Engineers; federal and state projects which provide efficient and safe boat access for sport fishing; public beach and coastal waterfront access grant funds; and community development block grants, housing for the elderly, moderate income housing, housing rehabilitation, and North Carolina Housing Finance Agency housing improvement programs.

75. Newport continues to support state and federal efforts to maintain channels for navigation. The town also supports the private maintenance of channels providing that such action is in accordance with all local, state, and federal environmental regulations.

76. Newport will support North Carolina Department of Transportation projects to improve access to the town and Carteret County.

77. Newport will continue to support the activities of the North Carolina Division of Travel and Tourism; specifically, the monitoring of tourism-related industry, efforts to promote tourism-related commercial activity, and efforts to enhance and provide shoreline resources.

78. All uses which are allowed in a zoning district must be considered. A decision to rezone or not to rezone a parcel or parcels of property cannot be based on consideration of only one use or a partial list of the uses allowed within a zoning district.

79. Zoning decisions will not be based on aesthetic considerations.

80. Requests for zoning changes will not be approved if the requested change will result in spot zoning. Spot zoning is a form of discriminatory zoning whose sole purpose is to serve the private interests of one or more landowners instead of furthering the welfare of the entire community as part of an overall zoning plan. Although changing the zoning classification of any parcel of land to permit a more intensive use could possibly constitute spot zoning, the test lies in its relationship to the existing zoning pattern and guidelines of the local comprehensive plan. Spot zoning is based on the arbitrary and

inappropriate nature of a rezoning change rather than, as is commonly believed, in the size of the area being rezoned.

81. Zoning which will result in strip development will be discouraged. Strip development is a melange of development, usually commercial, extending along both sides of a major street. Strip development is often a mixture of auto-oriented enterprises (e.g., gas stations, motels, and food stands), truck-dependent wholesaling and light industrial enterprises along with the once-rural homes and farms that await conversion to commercial use. Strip development may severely reduce traffic-carrying capacity of abutting streets.

82. The concept of uniformity will be supported in all zoning deliberations. Uniformity is a basic premise of zoning which holds that all land in similar circumstances should be zoned alike; any different treatment must be justified by showing different circumstances.

83. Zoning regulations will be made in accordance with the Town of Newport Comprehensive Plan and designed to lessen congestion in the streets; to secure safety from fire, panic, and other dangers; to promote health and the general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; and to facilitate the adequate provision of transportation, water, sewerage, schools, parks, and other public requirements. The regulations shall be made with reasonable consideration, among other things, as to the character of the district and its peculiar suitability for particular uses, and with a view to conserving the value of buildings and encouraging the most appropriate use of land throughout the Town of Newport planning jurisdiction.

84. Specifically, the Planning Board and Board of Commissioners should ask the following questions:

-- Does the town need more land in the zone class requested?
-- Is there other property in the community that might be more appropriate for this use?
-- Is the request in accordance with the town plan?
-- Will the request have a serious impact on traffic circulation, parking space, sewer and water services, and other utilities?
-- Is there a good possibility that the request, as proposed, will result in lessening the enjoyment or use of adjacent properties?
-- Will the request, as proposed, cause serious noise, odors, light, activity, or unusual disturbances?

-- Does the request raise serious legal questions such as spot zoning, hardship, violation of precedents, or need for this type of use?

85. As the initial step in the preparation of this document, Newport prepared and adopted a "Public Participation Plan." The plan outlined the methodology for citizen involvement. Public involvement was to be generated through public information meetings, advertising in local newspapers, establishment of a land use planning advisory committee to work with the Board of Commissioners and Planning Board on the development of the plan.

PARTIALLY COMPLETED

Asterisks (*) denote portion of policy not completed.

1. The Town of Newport supports the following improvements to its water supply system:

-- enlargement of the water treatment plant;
-- rehabilitation of the older sections of water distribution lines;
-- addition of another elevated storage tank;
-- installation of an emergency power system at the water treatment facility; and
-- the possible addition of a fifth well*

2. Newport supports implementation of the following land transportation improvements:

-- SR 1247 is Chatham Street (Old Highway 70). This street needs to be widened, curbed, and guttered.*
-- SR 1183 (Church Street) needs widening with improved drainage.*
-- SR 1124 (Nine Mile Road), SR 1756 (Lake Road, part Craven County), and SR 1154 (Mill Creek Road) all need widening and resurfacing.*
-- Construct driveway connection on Highway 70E approximately 250' from Roberts Road intersection for industrial growth.*
-- Completion and adoption of a Town Thoroughfare Plan.
-- Coordination with NCDOT to ensure that town streets are adequately maintained and upgraded.
-- Extension of Howard Boulevard to Chatham Street.*
-- Extension of Orange Street to East Chatham Street.*
-- Removal of traffic islands and installing turn lanes at the intersection of Nine Foot Road/Howard Boulevard with U.S. 70 Bypass.
-- Careful planning of commercial and industrial development along U.S. 70 Bypass. Strip development connecting directly to U.S. 70 should be avoided and service roads required.
-- Improve pedestrian access and foster pedestrian-friendly environment.

NOT ACCOMPLISHED

1. Newport will support the development of a comprehensive town-wide storm water drainage plan.

2. The Town of Newport will consider revising its zoning and subdivision ordinances to reduce the areas covered during development by impervious surfaces. This will reduce storm water runoff. Changes may include, but not necessarily be limited to:

   -- Stabilized but not paved parking lots.
   -- Paving with "grass stones" (paving blocks which have open areas to allow passage of water).
   -- Strip paving of streets.

3. The town does not support the use of private package sewage treatment plants within the town limits. However, in the ETJ, in special cases where the use of private systems is the only available option, the town may permit the use of private systems only if the associated development meets the following criteria:

   -- The said development is consistent with the town's policies and ordinances.
   -- The system meets or exceeds the state and federal permitting requirements.
   -- The project will have no adverse impacts beyond its boundaries.
   -- The perpetual operation and maintenance of the system is guaranteed without obligation to the town in any way.

4. The Town of Newport will pursue development and adoption of a local ordinance to regulate swine production. The town is also in favor and fully supports adoption of such an ordinance by the county.

5. Newport supports the siting of recycling centers within commercial and industrial zoning classifications.

6. The town will develop a comprehensive master drainage plan.

7. Newport has some concerns over offshore drilling. In the event that oil or gas is discovered, Newport will not oppose drilling operations and onshore support facilities for which an Environmental Impact Statement has been prepared with a finding of no significant impact on the environment. Newport supports and requests full disclosure of development plans, with mitigative measures that will be undertaken to prevent adverse

impacts on the environment, the infrastructure, and the social systems of Newport and Carteret County. The town also requests full disclosure of any adopted plans. Offshore drilling and the development of onshore support facilities may have severe costs for the county and its municipalities as well as advantages. The costs should be borne by the company(ies) which profits from offshore drilling and onshore support facilities.

8. The town may apply for Community Development Block Grant Community Revitalization/Housing Development and North Carolina Housing Finance Agency funds.

9. Apply for Community Development Block Grant Community Revitalization and North Carolina Housing Finance Agency funds.

10. During the planning period, Newport will develop a community services/facilities plan (as a stand-alone document, not as an expansion of this plan), which will define existing deficiencies in police protection, fire protection, local administrative buildings, public recreational facilities, public shoreline access, and public parks. This plan will not address school system needs. The plan will prioritize needs and make specific recommendations concerning financing and budgeting the high priority needs.

G. FUTURE DEMANDS

1. Introduction

The 92.85% growth rate which occurred in Newport from 1970 to 2000 is expected to diminish somewhat. However, growth is expected to continue through 2015 at 72.0% for the 15-year time period. Development in Newport's planning jurisdiction will continue to strain the capacity of the existing transportation system; increase demand for municipal supplied water and wastewater and solid waste disposal; and place increasing demands on school facilities, recreational facilities, police and fire departments, and administrative/regulatory agencies. The basic demand for housing – in particular, affordable housing – will continue to be an important need to be addressed by the town in the coming decade.

The goals, policies, and implementing actions section of this plan must address these demands for future infrastructure needs, balanced by protection of sensitive areas of environmental concern.

2. Housing Trends

From 1980 to 2000, the Town of Newport averaged the addition of 27 dwelling units per year. However, this trend declined slightly during the 1990s to 22 units per year. Construction of dwelling units is expected to continue in Newport's planning jurisdiction.

The average household size for all units decreased slightly from 2.73 persons per household in 1990 to 2.66 persons per household in 2000. For forecast purposes, through 2015 this trend has been continued. The forecast growth of households is provided in Table 44.

Table 44
Town of Newport
Estimated Population Growth and Household Characteristics

	2005	2010	2015
Total Population	4,386	5,018	5,771
# of Households*	1,674	1,944	2,272
Persons per Households	2.62	2.58	2.54

*includes group quarters.
Source: Office of State Planning and Holland Consulting Planners, Inc.

Table 44 indicates that between the years 2005-2015, approximately 598 new dwelling units will need to be constructed to meet the needs of the growing population. This represents a 36% increase in housing units. If the average lot size in Newport is .5 acres, then approximately 399 acres of land will be needed for this new residential construction. A total of approximately 668 acres of vacant land lie within Newport and 8,062 acres in the town's ETJ. Approximately 1,502 acres lie within the 100-year floodplain. Ample land is available to accommodate new residential construction.

3. Commercial Land Use

Commercial land use is expected to expand during the planning period. However, no significant changes in the location/distribution of commercial land use are expected. Commercial area comprises 2.52% of the total land use acreage within the corporate limits and 1.84% of the total land within the town's ETJ. The percentage of commercial land use within the town limits is lower than indicated in the town's 1996 land use plan (3.5%) and higher in the ETJ than in the 1996 land use plan (0.9%). The differences are believed to be the result of improved mapping and not actual changes in land use.

The majority of commercial development is expected to continue downtown, along Chatham Street and along the US 70 Bypass near the intersections of Nine Foot Road and Masontown Road. Eventually the majority of the property fronting on US 70 Bypass is expected to be developed. The need for redevelopment or renovation of commercial areas downtown and along Chatham Street may become necessary for new businesses desiring to locate in Newport as the age of existing commercial structures increases and buildings deteriorate.

4. Industrial Land Use

Industrial land use within Newport's planning jurisdiction is very limited. In August, 2003, only 34.68 acres (0.78%) of the town's corporate area was being utilized for industrial use. There was no industrial usage in the town's ETJ. The Carteret County Economic Development Council has continued aggressive industrial recruitment efforts. In support, Newport should continue to provide sound infrastructure including water, sewer, and electrical service. As industrial development occurs, land use compatibility problems should be avoided.

5. Residential/Commercial/Industrial Land Use Summary

The comparison of residential, commercial, and industrial existing land use compared to existing zoned acreage for these uses indicates more than ample land available for development. The following table provides a comparison.

Table 45
Town of Newport Corporate Limits and ETJ
2003 Residential-Commercial-Industrial Land Use Acreage
Compared to Zoned Acreage

	Actual Land Use Acreage	Zoned Acreage	Percentage of Zoned Acreage
Residential*	3,124.29	17,149.0	18%
Commercial	370.08	944.0	39%
Industrial	34.68	333.0	10%

*Excludes Office and Institutional and PUD zoned areas.
Source: Holland Consulting Planners, Inc.

There is ample zoned undeveloped land to accommodate growth during the planning period (2004 - 2015).

6. Transportation

The 1996 CAMA Land Use Plan identified seven important transportation issues. These continue to be important issues and are identified as follows:

- Coordination with NCDOT to ensure that town streets are adequately maintained and upgraded.
- Extension of Howard Boulevard to Chatham Street.
- Extension of Orange Street to East Chatham Street.
- Extension of SR 1154, intended to connect US 70 to NC 101.

- Careful planning of commercial and industrial development along US 70 Bypass. Strip development should be avoided and service roads required.
- Improve pedestrian access and foster pedestrian-friendly environment.

During the planning period, two bridge projects are expected which are included in the North Carolina Department of Transportation's (NCDOT) Transportation Improvement Program (TIP). These include a new bridge on SR 1154 on the east side of Newport over a branch of the Newport River and a new bridge on SR 1124 over a branch of the Newport River immediately west of Newport's ETJ. The following summarizes both bridge improvements:

Location	ID No.	Description	Total Est. Cost (Thou.)	Prior Yrs Cost (Thou.)	Work Type	Funding Source	Cost Estimates (Thou.)	Schedule (Fiscal Years)
SR 1154	B-3626	Branch Newport River Replace Bridge No. 26	877	102	Right-of-way Construction	 FA*	775	In acquisition FFY04
SR 1124	B-4055	Branch Newport River Replace Bridge No. 22	755	150	Right-of-way Construction	FA FA	55 550	FFY05 FFY06

*Bridge replacement on federal aid system.

Both of these bridge projects will improve the safety of access to the Town of Newport. The projects are delineated on Map 25. The TIP also proposes a Havelock Bypass and a US 70 to NC 101 connector (please note that the NC 101 connector project has not been funded). While the Havelock Bypass is not located within Newport's planning jurisdiction, this project will improve access to the Town of Newport and is anticipated to have an impact on development immediately north of the town. The Town of Newport supports this proposed transportation improvement and will work closely with the NCDOT, as well as the Down East Rural Planning Organization (RPO) to ensure the projects funding. The following summarizes the project:

Location	ID No.	Description	Length (mi)	Total Est. Cost (Thou.)	Prior Yrs Cost (Thou.)	Work Type	Funding Source	Cost Estimates (Thou.)	Schedule (Fiscal Years)
US 70	R-1015*	Havelock Bypass, north of Pine Grove to north of Carteret County line. Four lane divided on new location.	9.0	118228	8828	Design Right-of-way Right-of-way Right-of-way Construction Construction	 NHS* T** NHS T	 2050 2350 59200 45800	In progress Part in acquisition FFY04 SFY04 FFY06 08 SFY06

*National Highway System.
**Highway Trust Fund.

7. Public Land Use

Public land use is not expected to change substantially during the planning period. No significant construction or land acquisition is anticipated. The town will continue to maintain and improve its existing public facilities. In particular, the town will focus on improving the quality of its infrastructure systems which include water and sewer.

MAP 25 - TIP PROJECTS (BRIDGES)

8. Education

At this time, Newport Middle School and West Carteret High School are full but not experiencing overcrowding problems and have no plans for expansion. Newport Elementary School, with approximately 800 students, is at capacity utilizing twelve mobile units. Carteret County plans to build a new Elementary School on property that the county owns, near the Middle School. However, due to budget constraints it is unclear when the school will be built. It is possible that phases of development could be started in three to four years.

9. Recreation

The National Recreation and Parks Association published the Recreation, Parks, and Open Space Standards and Guidelines, 2001 to provide national guidelines which could serve as an expression of reasonableness and adequacy with respect to quality service delivery. Table 46 provides a summary of the national standards for selected recreational facilities and Newport's existing and future demand for new facilities.

Table 46
National Recreation Standards and Demand for Facilities in Newport

	Standard	Existing Facilities*	Existing Facility Demand**	Year 2015 Additional Facility Demand***
Baseball	1 per 10,000 persons	None	No demand	None
League Softball	1 per 4,000 persons	None	No demand	+1
Practice Fields	1 per 3,000 persons	None	1	+1
Youth Baseball Fields	1 per 3,000 persons	1	1	+1
Tennis Courts	1 per 1,000 persons	None	3	+3
Basketball Goals	1 per 500 persons	None	6	+5
Football/Soccer	1 per 6,000 persons	1	No demand	No demand
Swimming	900 square feet per 1,000 persons	None	2,700 SF	+2,430 SF

*This column represents park sites only.
**This column represents the number of additional facilities the town currently needs to serve its existing population.
***This column represents the number of additional facilities the town will need to serve a population of approximately 5,771 in 2015.
Source: National Recreation and Parks Association, 2001.

As indicated in Table 46, according to National Recreation Standards, the town's future demands include increased basketball goals, tennis courts, a youth baseball field, a practice field, a softball field, and a swimming facility. However, it should be noted that these guidelines reflect professional judgement, rather than an assessment of community needs, and no two communities are the same. Furthermore, many communities have found the national guidelines difficult to meet. Therefore, the pursuit of achieving national recreation standards should not take the place of common sense and recognizing the needs of the community. It should also be noted that many communities have taken out basketball courts or are not constructing additional courts because they are often a breeding ground for illegal activity. Finally, Newport is located in an area that is rich in natural outdoor recreational opportunities. Therefore, the National Recreational Guidelines may not be considered the absolute standard.

10. Water System

As the result of improvements which occurred in 2000 (see page 72), the capacity of the Newport water system is adequate through the planning period. In addition, the town intends to execute a water supply agreement with the West Carteret Water Company. The only water supply needs in the planning period will be the extension of water lines as growth occurs.

11. Sewer System

During the planning period, the major sewer system need will be the increase of the town's sewer treatment plant capacity. This will occur as soon as the state issues a permit for plant expansion. The town continues to have a serious problem with sewer line infiltration. As funding permits, the town is repairing sewer lines to reduce infiltration. The sewer system capacity and upgrades are discussed extensively in the future land demand and infrastructure carrying capacity section of this plan (page 160). The estimated cost of these improvements as of FY2006 is approximately $8 million dollars. The improvements will be made at the town's existing wastewater treatment plant location. For funding see policy/implementing actions P.71, I.77 Capital Improvements Plan, and I.78.

12. Solid Waste

The Tri-County Landfill, located in Craven County, serves Carteret, Craven, and Pamlico counties and is expected to serve solid waste disposal needs through 2020. It is not currently experiencing any capacity problems.

The Town of Newport should make every feasible effort to minimize the generation of waste and to recycle materials for which viable markets exist. Any waste generated by Newport that cannot be beneficially reused or recycled must be disposed of at a solid waste management facility permitted by the Division of Waste Management. The nearest facility to the town is the Carteret County Transfer Station, Permit #16-04, located at 801 Hibbs Road in Newport.

13. Police, Fire, and Rescue Services

In estimating the impact of growth, planning standards for public services have been estimated; the following figures are averages, and are intended to help quantify the impacts of growth: Per 1,000 persons in population growth, a town is likely to need two additional police officers, 0.6 vehicles, and 200 square feet of facility space for law enforcement. Likewise, fire protection will involve 1.65 personnel, 0.2 vehicles, and 250 square feet of facility space for every 1,000 persons. Increased demand on emergency medical services amounts to 36.5 calls per 1,000 population, one vehicle, and 4.1 full-time personnel per 30,000 persons.

As previously discussed, Newport is expected to have a net gain of approximately 632 persons by 2010. Based on this assumption, the following provides a summary of additional equipment and staffing required to accommodate growth:

	Police	Fire	Rescue
Vehicles	1	2	0
Square Feet	200	250	–
Police Officers	1	1	0
Calls	–	–	23

Source: Holland Consulting Planners, Inc.

As reflected above, the impact on the town's police, fire, and rescue services from anticipated population growth is moderate. However, as discussed elsewhere in this plan, these estimates do not include population growth resulting from annexation. It is anticipated that the town will pursue the annexation of unincorporated areas. However, it is impossible to estimate the impact from these annexations at this time. Furthermore, when the town decides on areas for annexation, detailed annexation reports will need to be prepared describing how all town services will be extended/provided to the area.

14. Stormwater Management

In an effort to provide a comprehensive solution that will address both water quality and quantity, the town has elected to establish a stormwater management program. This program will consist of four primary components: a stormwater management ordinance, a technical manual, a utility ordinance, and a stormwater management program (this program will target non-point source water quality in a manner consistent with the rules outlined in the EPA's NPDES Phase II Stormwater Regulations).

This strategy is based on proactive management by the Town Council and Administration of Newport. It is likely that the town will soon fall under the jurisdiction of the NPDES Phase II requirements. The town would like to take advantage of this opportunity to initiate implementation of the following program, which will provide a truly comprehensive approach to addressing all aspects of stormwater runoff including: water quality, localized flooding, erosion, elimination of illicit discharges, storm drainage maintenance, street sweeping, storm drain stenciling, etc. There will be a stormwater management citizen's advisory committee (SMC) to oversee and discuss issues regarding the development of these documents and procedures.

The proposed Stormwater Management Program will involve the following tasks:

1) Provide input and background information regarding the following items to the town and SMC:

   - information on how to address each of the components of the program, both regulatory and organizational
   - regulatory options for improving stormwater conveyance and quality
   - financial mechanisms for improving stormwater conveyance and quality (utility options)
   - administrative issues related to implementing and overseeing a stormwater management program

2) Act as the liaison between the SMC, Town Council, and public regarding the issues listed in task 1, as well as through the development of all documents and programs.

3) Work with the SMC and Town Council to identify the most equitable and efficient methodology for establishing a stormwater utility fee.

4) Hold public hearings to obtain input regarding development of the stormwater management ordinance, utility ordinance, and stormwater management program

5) Develop an administrative plan that will outline staffing procedures, stormwater rates, and coordination between the planning/inspections department and the finance department of the town, in an effort to ensure that the new system is implemented and carried out efficiently.

6) Develop a stormwater management ordinance in conformance with North Carolina and Federal Laws for adoption by the Town Council.

7) Develop a technical design manual that will support the policy goals and objectives of the stormwater management ordinance. This manual will specify the design and maintenance of privately and publicly installed stormwater management detention/retention and conveyance devices and will specify best management practices for improvement of stormwater quality.

15. Redevelopment Issues

The Town of Newport's greatest continuing redevelopment issue will be the preservation and renovation of housing for its low-to-moderate income families and individuals. While housing conditions improved during the 1990s, problems still exist. The town will undertake the following in support of residential development:

- Support applications for North Carolina Community Development housing rehabilitation funds.
- Support applications for North Carolina Housing Finance Agency home improvement funds.
- Investigate the development and enforcement of a minimum housing code.

Newport is not subject to major coastal storm damage. Convectional storms and tornadoes pose a greater threat. However, some wind damage could result from the inland movement of a major hurricane. Flooding of the Newport River, Deep, and Little Deep Creeks is also possible in the event of a nor'easter. While storm related damage is not a significant redevelopment issue, the town will support the reconstruction of all storm destroyed structures when reconstruction complies with all current local, state, and federal regulations and the policies contained in this plan.