

North Carolina - Coastal Zone Management Program



HOLLY RIDGE



TOWN OF HOLLY RIDGE

1988

COASTAL ZONE
INFORMATION CENTER

LAND USE PLAN

HD
211
.H6
H6
1989

STEPHENSON & ASSOCIATES
greenville, nc



Property of CSC Library

1988 HOLLY RIDGE LAND USE PLAN

U. S. DEPARTMENT OF COMMERCE NOAA
COASTAL SERVICES CENTER
2234 SOUTH HOBSON AVENUE
CHARLESTON, SC 29405-2413

Prepared for the Town of Holly Ridge

With assistance provided by

Stephenson and Associates
A subsidiary of Aquasystems, Inc.
Environmental Research, Planning and Management Consultants
Greenville, North Carolina

Adopted by the Holly Ridge Town Board on April 25, 1989

Certification by the North Carolina Coastal Resources Commission
on May 26, 1989

505 1997

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

FD 211. H6 H6 1989
20151018

1988 HOLLY RIDGE LAND USE PLAN

HOLLY RIDGE TOWN COUNCIL

Herman G. Alberti, Mayor
Joseph L. Edwards, Mayor Pro Tem
Murray Fisher
W.L. Sholar
Gregory L. Hines
Kenneth W. Williams

HOLLY RIDGE ZONING BOARD

Mary Piner, Chairman
Elmer Padgett
James Pate
Richard Royal
David Guthrie
Charles Duncan

HOLLY RIDGE TOWN ADMINISTRATION

Billy Joe Farmer, Manager
Jo Ann Odum, Finance Officer
Brenda Padgett, Zoning Administrator

TECHNICAL ASSISTANCE

Dr. Richard A. Stephenson, AICP, Planner-in-Charge
Bruce C. Payne, Planning Associate
Richard E. Hall, Planning Associate
Thomas H. Chaney, Planning Associate
Hardee R. Cox, Chief Cartographer
Stacy Ann Stephenson, Cartographic Assistant
Mary Ann Stephenson, Secretary
Stephenson & Associates, Greenville, North Carolina

CONTENTS

	page
I. Introduction	1
II. Data Collection and Analysis	3
A) Regional Setting	3
B) Population	4
C) Economy	4
D) Population and Economic Trends	8
1) Population Projections	11
E) Income	11
F) Summary	12
III. Existing Conditions	13
A) Existing Land Use	13
B) Constraints: Land Suitability	15
1) Hazard Areas	15
2) Soil Limitations	15
3) Sources of Water Supply	15
4) Slope	16
5) Fragile Areas	16
6) Resources Potential	16
C) Constraints: Capacity of Community Facilities	
1) Water System	16
2) Wastewater System	16
3) Schools	17
4) Roads	17
5) Fire and Rescue	17
6) Recreation	17
7) Medical Services	17
8) Solid Waste	18
9) Police	18
10) Summary	18
IV. Current Plans, Policies and Regulations	19
A) Prior Land Use Plans	19
B) Building Code	19
C) Subdivision Regulations	19
D) Zoning Ordinance	19
E) Current Policies and their Status on Implementation	19
Resource Protection Policies	19
Resource Production and Management Policies	21
Economic and Community Development Policies	22
V. Holly Ridge Issues, Policies and Implementation	25
A) Resource Protection Issues, Policies and	

Implementation	25
1) Soils	25
2) Groundwater Protection	26
3) Great Sandy Run Pocosin Protection	26
4) Storm Water Runoff Quality	27
5) The Preservation of Camp Davis	27
6) Sand Quarrying	27
7) Effectiveness of the Sewage Treatment Plant	28
8) Preserving Forested Areas	28
B) Resource Production Issues, Policies and Implementation	28
1) Great Sandy Run Pocosin	28
2) Recreation	29
3) Farmland	29
4) Residential and Commercial Growth	29
C) Economic and Community Development Issues, Policies and Implementation	30
1) Town Growth	30
2) Commercial Growth	30
3) Industrial Growth	30
4) Town Appearance	31
5) Commitment to State and Federal Programs	31
6) Energy Facility Siting	31
7) The Expansion of Camp LeJeune	32
8) Providing Services for Development	32
9) Attracting People to Locate in Holly Ridge	32
10) Annexation	33
11) Housing Mix	33
D) Public Participation Issues, Policies and Implementation	33
E) Hazard Mitigation Issue, Policy and Implementation	34
1) Hazard Mitigation	34
VI The Land Use Plan	35
A) Land Classification	35
1) Developed Land Use	35
2) Transition Land Use	35
3) Community Land Use	35
4) Rural Land Use	35
5) Conservation Land Use	37
B) Spatial Arrangement of Land Uses	37
1) Developed Areas	37
2) Transition Areas	37
3) Community Areas	37
4) Rural Areas	37
5) Conservations Areas	38
C) Relationship of Policies and Land Use Categories	38
1) Resources Protection Policies as Related to Land Use	38

2) Resources Production Policies as Related to Land Use	38
3) Economic Development as Related to Land Use	38
Summary of Resources Protection Policies	39
Summary of Resource Production and Management Policies	40
Summary of Economic and Community Development Policies	41
VII. Conclusion	42
Organization and Management for the Land Use Plan	42
Summary	43
VIII. Amending the Plan	44
Appendix A - Storm Hazard Planning and Mitigation	45
Appendix B - State and Federal Development Regulating Agencies	55

List of Figures

Figure 1 - Holly Ridge Population Curve	5
Figure 2 - Holly Ridge Population Breakdown	6
Figure 3 - Holly Ridge Employed Persons by Class of Worker	7
Figure 4 - Holly Ridge Household Income in 1979	9
Figure 5 - Holly Ridge Employed Persons by Industry	10
Figure 6 - Holly Ridge Existing Land Use	14
Figure 7 - Holly Ridge Land Classification	36

List of Tables

Table 1 - Acreage of Land Uses in Holly Ridge	13
Table 2 - Land Uses in the Town's E.T.J.	15
Table 3 - Summary of Resources Protection Policies	39
Table 4 - Summary of Resources Production Policies	40
Table 5 - Summary of Economic and Community Development Policies	41

HOLLY RIDGE LAND USE PLAN

I) INTRODUCTION

Planning is the process of bringing the future into the present, so that we can do something about it now. This is not an easy process for most people because it is difficult to visualize the future. Also, we are uneasy about what the future may hold. At the same time, we know that by setting goals, we can be more efficient and effective as individuals, and in our community we can make it a better place in which to live, work and enjoy. We know that by planning now, our town will be more pleasant and enjoyable in the future. We can see that through proper planning, we can control our own community rather than having someone else do it for us. The consequences are simple, for it was written long ago that if we do not envision, we will certainly fail. This land use plan is the beginning of the envisioning process.

Land use planning is at the very core of the town planning process. All other phases of town planning and management are performed to service the projected land use pattern outlined in the land use plan. The existing land use pattern of Holly Ridge is the result of many years of interreaction between the human and natural resources in the town and the surrounding area. The land use plan can help keep the desired character of the Town of Holly Ridge, and at the same time guide growth and change in an acceptable manner, if allowed to do so. It is intended that this plan serve as a tool for growth to meet the needs of the people, both now and into the 21st century.

Land use planning is based on many factors including topography, drainage, soils, existing uses of land, availability of town services, roads, population projections, trends in economic development, and future land use needs. The coordination of all these factors is what planning, in general, is all about. Planning is essential to avoid the chaos typical of other coastal areas experiencing faster growth. But land use planning is not an end in itself. Although the plan allows for changes in the future, it must be implemented to receive the benefits from its adoption. All too often, the town board does not allow the planning process to function to its fullest extent. The town board needs to consult with the town planning board on every town issue presented in the land use plan. The planning board must respond to the needs of the town board by providing information and recommendations related to their requests. Then, the town board will be able to make sound decisions, all of which affect the future of Holly Ridge.

The land use plan is a requirement under the auspices of the North Carolina Coastal Area Management Act (NCAC, 1974, as amended), and this document is in accordance with the land use planning guidelines (Subchapter 7B, Chapter 15). Notwithstanding the requirement by the State of North Carolina to accomplish a land use plan update every five years, the Holly Ridge Land Use Plan of 1988 is a document stating how

the citizens intend to achieve success as a community far into the future. Further, the document is a commitment to achieve the goals set forth as part of the comprehensive planning and growth management processes. Its success is directly related to citizen involvement in community affairs and how well the town's leadership responds to the tasks ahead.

II) DATA COLLECTION AND ANALYSIS

A) Regional Setting

Holly Ridge is located on a relict sand ridge which represents a period when sea level was much higher than it is today. The average elevation of the town is sixty-six feet above mean sea level with the sea level slowly increasing at an increasing rate. By sitting on a high sand ridge the town is relatively well drained with Kings Creek and Cypress Branch flowing toward Topsail Sound about two miles to the southeast. However, the north side of the town is fairly flat and standing water can occur with prolonged rainfall. Originally Holly Ridge enjoyed a mixed oak and pine forest in addition to holly trees from which part of the town's name is derived. Because of the forest resources the town became important as a wood stop on the railroad about 1890. The town gained added importance in 1941 when it became the site of Camp Davis which opened in April of 1941 as an anti-aircraft training base. The town grew rapidly to accommodate the base, but in October 1944 the base closed as the war was waning. During the summer of 1945 the base reopened as a convalescent hospital and redistribution center. During the war Camp Davis had as many as 60,000 troops. The closing of the base prompted the town to readjust in the post war years. It wasn't until after the hurricanes of the 1950's that more people living farther inland began to look to the beaches for relaxation and recreation. With the town located at the crossroads of U.S. 17 and N.C. 50, and where N.C. 50 terminates on Topsail Island, there was a small resurgence of economic activity. In general, Holly Ridge as a site, is safe from storm waters, a pleasant environment with trees and good drainage, and enjoys a small town atmosphere.

The situation or the relative location of Holly Ridge is one of a crossroads community. Holly Ridge is located about 20 miles southwest of Jacksonville and about 30 miles northeast of Wilmington. The Coastal Highway, U.S. 17, is its major transportation corridor. With the proximity of these two cities, Holly Ridge could enjoy the benefits of providing housing in a small, pleasant community near a major port and industrial complex. With N.C. 50 bringing people from Goldsboro, Kinston and Raleigh to Topsail Island, Holly Ridge could also become more important commercially by providing more goods and services to its local residents and the beach dwellers. With the completion of I-40 from the west, Holly Ridge will be about twenty-five miles from another major transportation artery.

At the present time Holly Ridge has the function of being a brief stop for people going to and from the beach. The completion of the high bridge on N.C. 210 has lessened the number of people using N.C. 50 through Holly Ridge. However, the traffic on U.S. 17 has not decreased its intensity. Holly Ridge also has the function of providing a nice place to live for those who desire a small town environment in which to have a family or to enjoy retirement. In either case Holly Ridge needs to plan for its future in order to maintain or increase its vitality. Holly Ridge needs to better serve its small, local market area and expand

its share of the surrounding market. At the present time the market area which has half or more of the people trading in Holly Ridge reaches only two miles toward Wilmington and only a mile toward Jacksonville and Surf City. Holly Ridge could increase its market area by providing additional retail activity for the beach residents since it would be safer for retail stores to be located away from, but nearby the beach.

B) Population

The Town of Holly Ridge waned in population from World War II until 1970. Since 1970 the town has had a modest population increase (see Figure 1). The projection shows a continuous, but slow growth. The 1980 population of 489 persons has increased to slightly more than 500 persons in 1987. Stump Sound Township, which contains Holly Ridge, grew the second fastest of the five townships in the county between 1970 and 1980. Most of this growth was attributed to the Sneads Ferry area according to the Onslow County 1986 Land Use Plan. White Oak Township grew the fastest. The City of Jacksonville and Camp Lejeune are nearby and account for most of its growth as it does for the entire county.

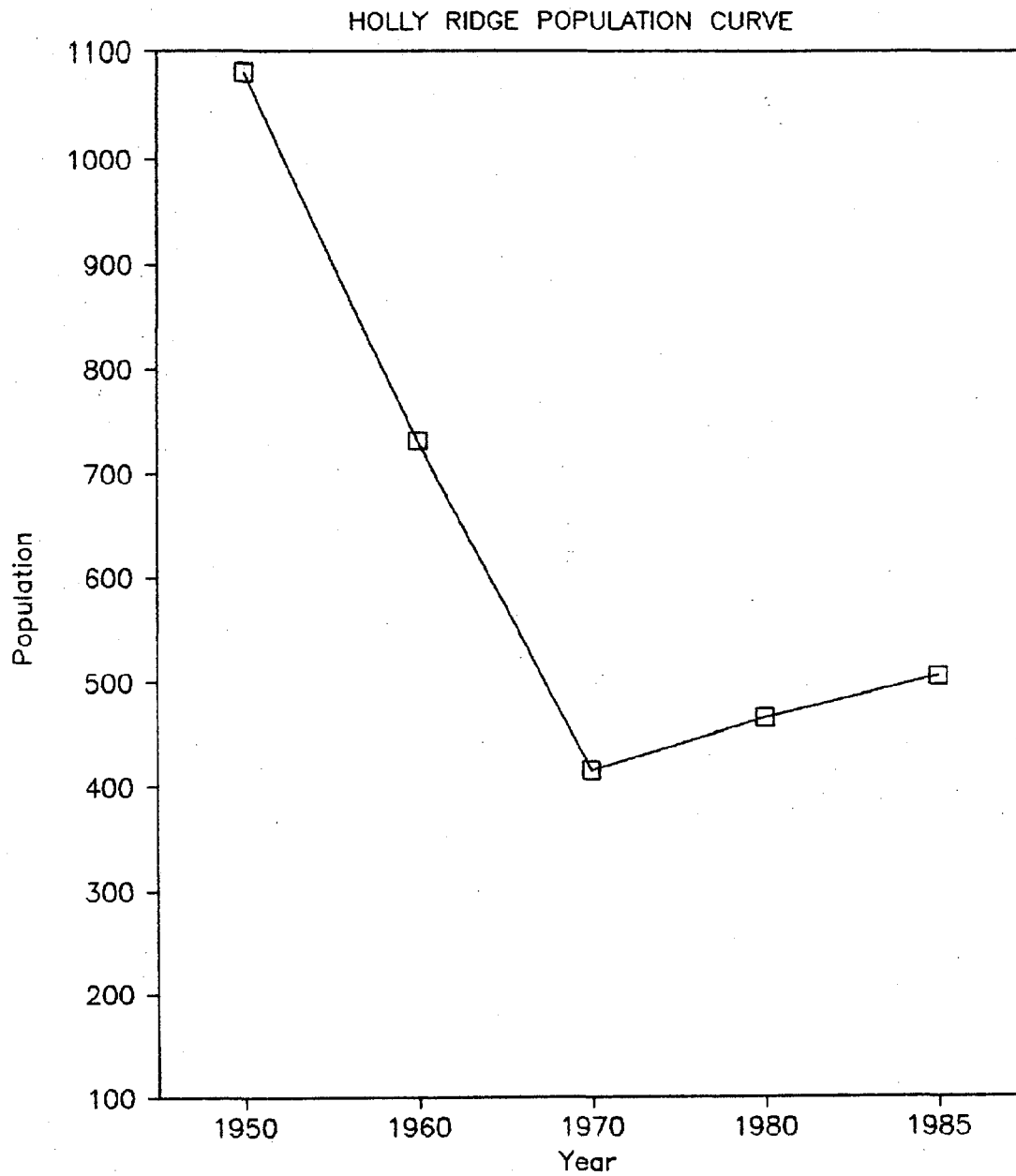
The growth of Holly Ridge in the immediate future will be dependent upon a modest natural increase of its present residents, the in-migration of new residents and those added due to annexation by the town in the future. The question is whether or not there will be an in-migration later on. If there is to be an in-migration there needs to be an effort in the community to prepare for it. Camp Lejeune may be expanding into the town by 1991. The part of the camp that is to be in the town is expected to be a buffer zone, but this expansion will most likely put development pressure on the town. The expansion could create an in-migration of population or because of potential environmental impact could push people out.

The population distribution shows that the town presently has a small natural increase (see Figure 2). There should be some concern with respect to the age groups of 20-24, 25-29 and 30-34 year as these groups are less than they should be. It appears that Holly Ridge is losing its young people to college and jobs elsewhere after graduating from high school. Also, with fewer females than males in these groups the population distribution shows a potential for a decrease in families. This is a common occurrence in many small towns throughout the nation. But what can Holly Ridge do to change the out-migration of young people? One way is to make the town more attractive for the young people to seek Holly Ridge as a home. This commonly means that a viable economy must be in place.

C) Economy

The economy of Holly Ridge has progressed greatly since the old railroad wood stop days of the 1890's. In 1980 there were 181 workers residing in Holly Ridge. Of the total there were 132 who were private wage, self-employed or salary workers (Figure 3). The remaining workers

FIGURE 1



Source: U.S. Census &
N.C. Office of State
Budget & Management

FIGURE 2

HOLLY RIDGE POPULATION BREAKDOWN
PERSONS BY SEX AND AGE

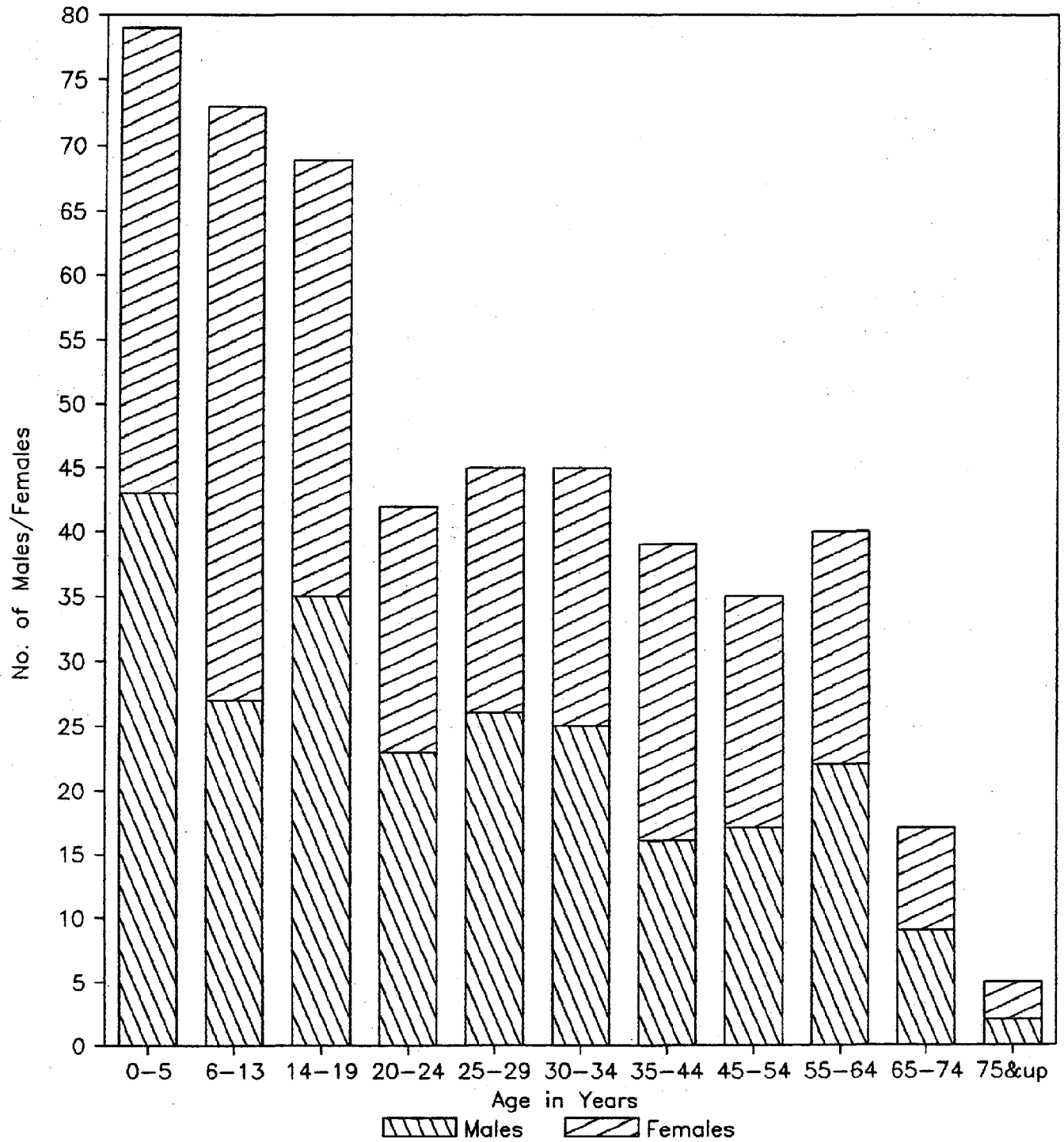
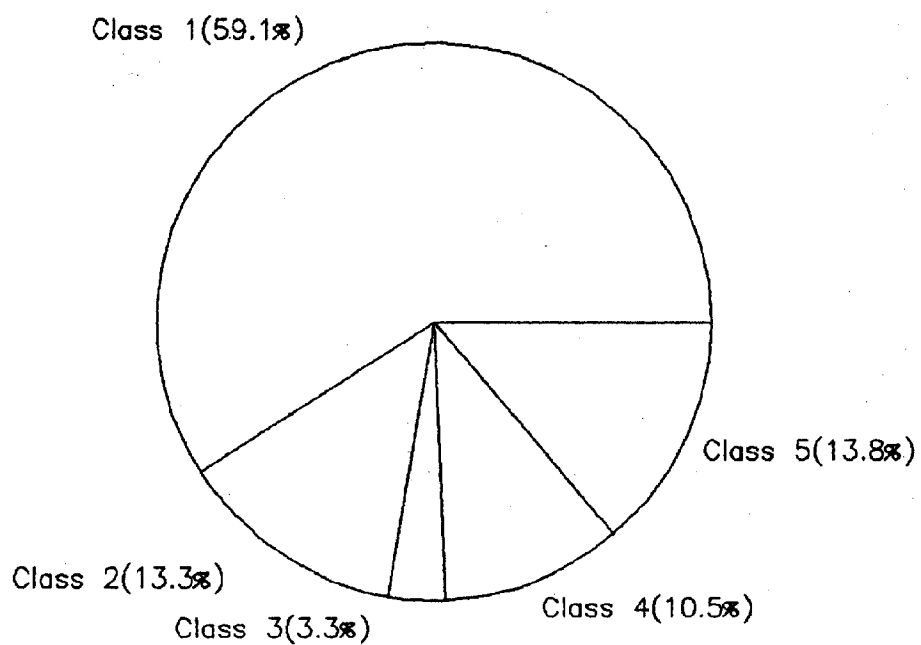


FIGURE 3

HOLLY RIDGE EMPLOYED PERSONS
16 YEARS & OVER BY CLASS OF WORKER



<u>WORKER CLASS</u>	<u>No. of WORKERS</u>
1) Private Wage & Salary Worker	107
2) Federal Government Worker	24
3) State Government Worker	6
4) Local Government Worker	19
5) Self-Employed Worker	<u>25</u>
Total Workers	181

Source: 1980 Census of
Housing & Population

wage, self-employed or salary workers (Figure 3). The remaining workers were either local, state or federal government workers. This shows an acceptable balance as long as there is not an increase in government workers as related to the private sector employment. Unfortunately, the income levels are much lower than they should, or could, be. For example, 44% of the 159 households had incomes less than \$9,999 in 1979 (see Figure 4).

There are two small industries in the town. Holly Ridge Foods presently employs approximately 95 persons and Thorn Apple Valley, a meat processing plant, now employs more than 500 persons. By comparing this employment of almost 600 persons in these two industries with the employed persons in Figure 5, it shows that a large percentage of people working in Holly Ridge apparently live outside the town. The primary reasons for this are believed to be insufficient housing and commercial activity in the town. This is a problem the town must deal with in order to accomodate growth, particularly for those age groups that are in the process of developing families. Most of the economic activity in the town takes the form of marginal retail establishments along the main highways. If it was not for the large number of vehicles using these highways, especially U.S. 17, the town itself probably could not support all the retail activities. With the growth of the nearby beach communities, the highway retail establishments could be benefiting from the tourist trade if properly marketed.

If and when Camp LeJeune expands toward the town it could greatly affect the local economy. Holly Ridge must keep in close contact with Camp Lejeune officials so proper plans for the area are made. Construction is to begin sometime in the early 1990's.

The economic future of Holly Ridge, like its population growth, is dependent upon the leadership of the town to improve housing, commerce and attractiveness. This means better opportunities for the people of Holly Ridge and the surrounding area.

D) Population and Economic Trends

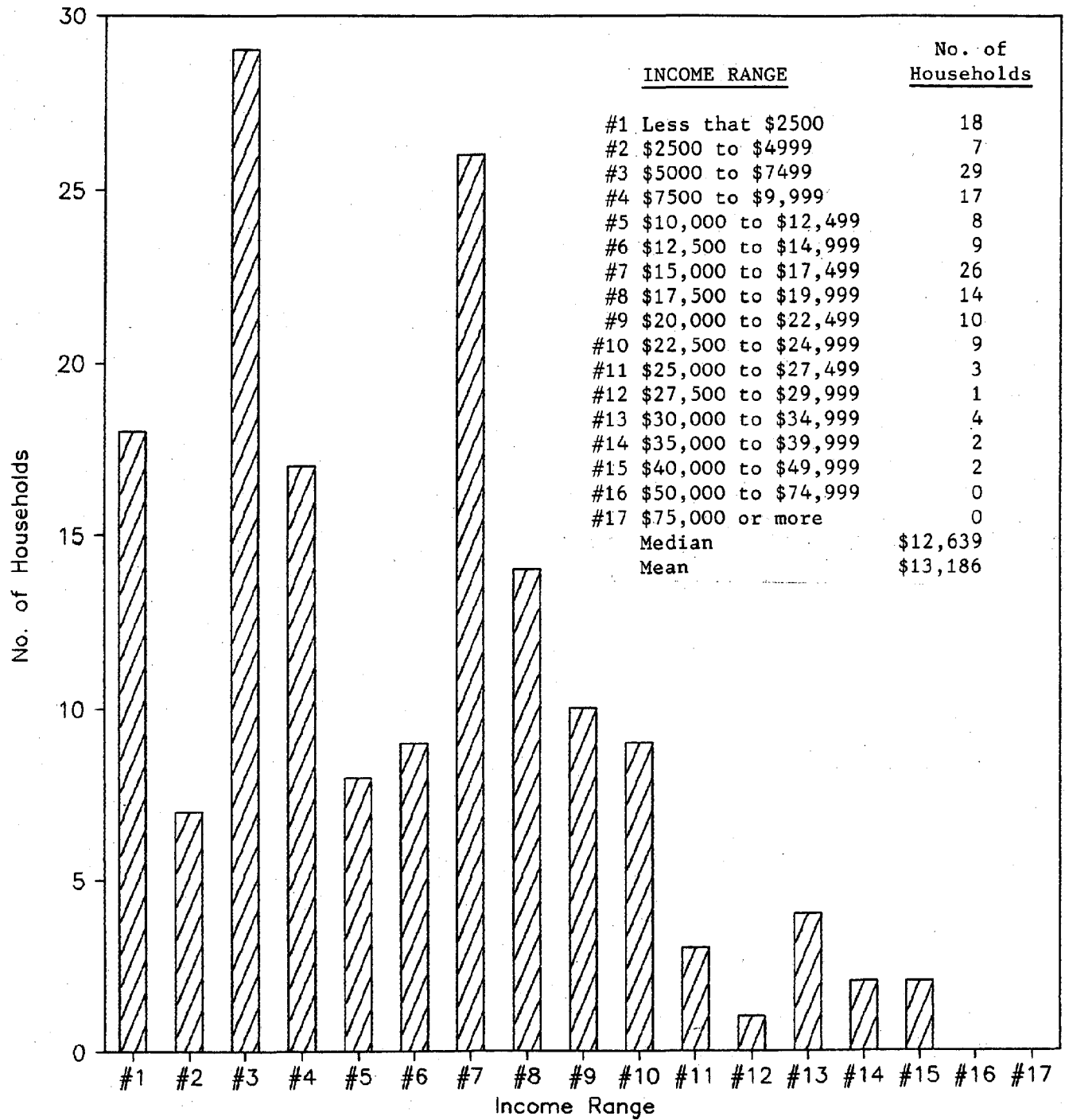
The population of Holly Ridge in the future is expected to increase slowly. This is advantageous since it will allow the community to make periodic adjustments to accomodate the population increase with few, if any, problems. Holly Ridge has sufficient space to grow. Population increases will likely respond to economic activities in the surrounding area as well as in Holly Ridge itself. There must be a reason for people to live in Holly Ridge. If the town has a forward looking economy, opportunities for a livelihood, and a well kept appearance, the town will surely increase in population. Thus, the population and economy can increase or decrease depending on the willingness, or the lack of it, by the town leaders and the citizens to make a commitment.

The local economic base and employment picture is dependent upon manufacturing employers in the town and surrounding area. Also, it is

FIGURE 4

HOLLY RIDGE HOUSEHOLD

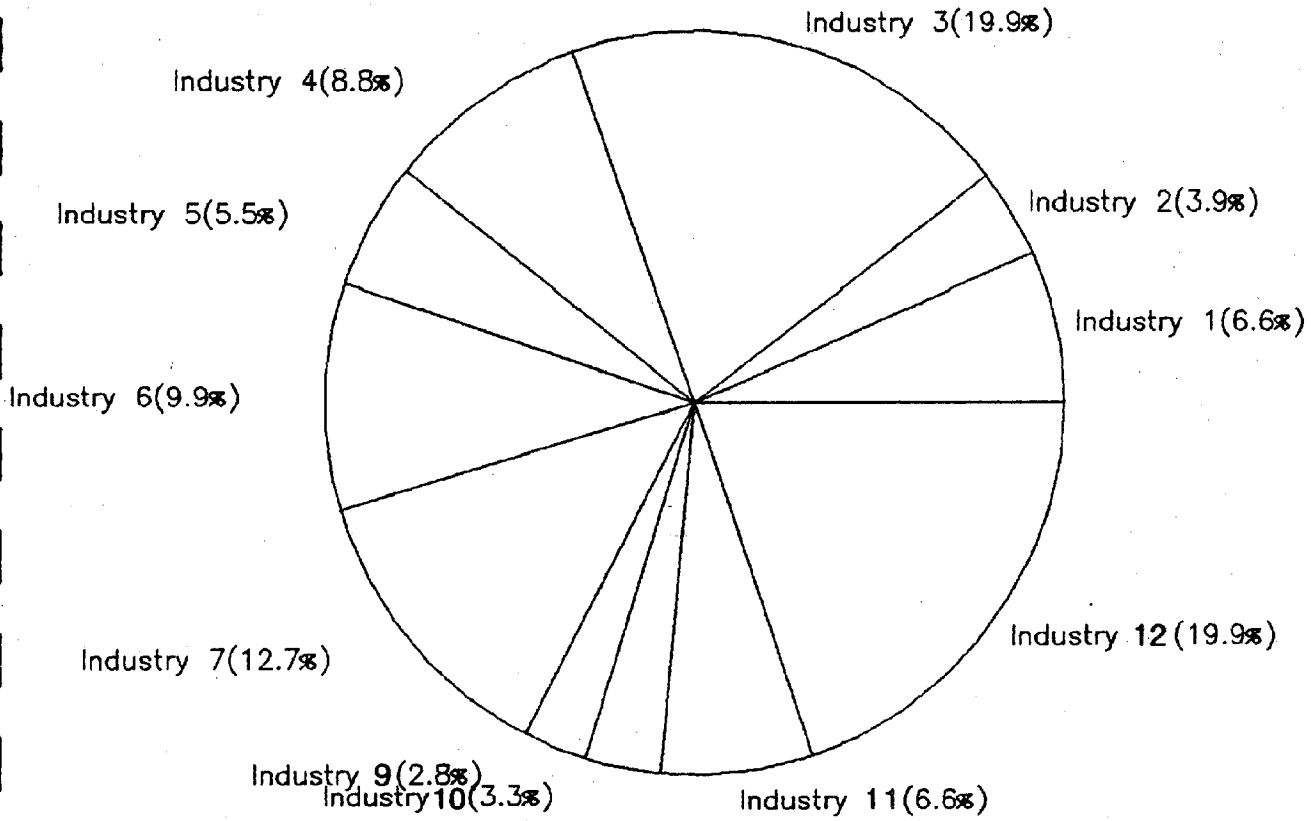
INCOME IN 1979



Source: 1980 Census of
Housing & Population

FIGURE 5

HOLLY RIDGE EMPLOYED PERSONS
16 YEARS & OVER BY INDUSTRY



<u>INDUSTRY</u>	<u>No. of WORKERS</u>
1) Agriculture, Forestry, Fisheries, & Mining	12
2) Construction	7
3) Manufacturing	36
4) Transportation	16
5) Communication, Other Public Utilities	10
6) Wholesale Trade	18
7) Retail Trade	23
8) Finance, Insurance, & Real Estate	0
9) Business and Repair Services	5
10) Personal, Entertainment, & Recreation Services	6
11) Professional and Related Services	12
12) Public Administration	36
Total Workers	181

Ridge. If this is done, it will allow a diversity of employment to occur which will also improve the wage and salary structure in the community. Then, perhaps, the town will be more attractive for the youthful age groups to return or remain in town.

E) Population Projections

There are many different ways to project populations. In this land use plan the linear and exponential methods are used. A projection is made from each method and then averaged.

A linear projection gives the same result as if the population history for a given area was graphed and the line connecting the dots on the graph was continued at the same slope as a straight line.

"Thomas Malthus, an English scholar whom everyone talks about and few have read, claimed that population tends to grow at a geometric rate. It compounds, like interest on money. The exponential curve portrays this idea, growth at a constant rate or percentage, which means that with each unit of time, the absolute addition to population gets bigger and bigger and bigger." (Donald A. Krueckenberg and Arthur L. Silvers, 1974, URBAN PLANNING ANALYSIS: METHODS AND MODELS, New York, NY, p. 262.) This projection will give a higher estimate than a straight line.

By averaging the two projections a mean can be achieved that is a fair estimate. It is difficult to forecast exactly what a population is going to be in the future. The projections are as follows:

LINEAR ESTIMATE FOR THE YEAR 2000; 521

EXPONENTIAL ESTIMATE FOR THE YEAR 2000; 583

AVERAGE ESTIMATE FOR THE YEAR 2000; 552

The population for Holly Ridge in the year 2000 is estimated to be 552. This represents a 19% growth rate between 1980 and the year 2000. Since Holly Ridge has an unusual population history, the projections were derived from the growth between 1970 and 1980 (see Figure 1). The town's estimated population can vary considerably. For example, the planned expansion of Camp Lejeune and the annexation of surrounding areas will cause the population to vary from the estimate in this plan.

F) Income

The town's income is somewhat diverse, and rather low. According to the 1980 census the median income was \$12,639 per year and 31% of the town's population was below the poverty level. It is not likely these values have changed since 1980. The census showed the largest number of people to have an income between \$5,000 to \$7,499. The second largest was \$15,000 to \$17,499 and the third largest less than \$2,500 (see Figure 4). This shows a wide range of income. The \$5,000 to \$7,499 income

range is the second lowest monetarily and largest in number, and one of major concern.

The tax base is expected to change with the expansion of Camp LeJeune and any annexation. In the case of Camp LeJeune the land will be in public ownership and this does not necessarily contribute to the tax base. Also, if noise pollution from the base becomes excessive it can also have a negative effect on the town. A positive effect could be increased demand for housing and trade. Also, this land use plan will help the town directly by stating policies related to residential, commercial, and industrial development.

G) Summary

The Town of Holly Ridge shows a population and economic situation shared with many small towns across the nation. A population that is relatively static or slightly increasing, and the continuing dilemma of low income for far too many families. Holly Ridge is more fortunate than many towns, in that the town unemployment rate is considered to be much lower than the average for the state which was 6.4% in 1981. Holly Ridge has the potential to vastly improve its economic situation.

III) EXISTING CONDITIONS

A) Existing Land Use

Holly Ridge has not had any significant changes in its land use during the past five years. Adjacent to the town toward the beach there has been some residential development (see Figure 6).

The land uses are mixed within the town and some of the industrial uses cause some compatability problems. Because of mixing and scattering different land uses there are no well defined functional areas which is typical of small towns and hamlets. For example, old storage buildings are adjacent to residences. Further, the town has an older business area with mixed uses and some dilapidated structures along with newer development surrounding the older section. Finally, there are a few structures remaining from Camp Davis that are scattered throughout the town. In the future, zoning districts should be established that will allow the town to become more structured.

There is a need for additional housing in the town. At the present time there is vacant land available for residential development. At the present time, if one wanted to move into Holly Ridge it would be difficult in finding a suitable house or even a mobile home. People desiring to live in the area may not choose Holly Ridge as a place to live because of the lack of housing. More housing must be constructed in order to attract more people. Based on the population estimates the town will demand certain types and amounts of land uses in the future. Table 1 and 2 indicates this additional demand.

Recent town growth has been scattered strip development along US 17 and NC 50 which can develop into a major problem. Other than the highways and the downtown, development is somewhat sparse. The town has a large amount of vacant land to accommodate future growth. Future development should be more orderly since the town has adopted a zoning ordinance in addition to mobile home regulations in 1985 and subdivision regulations in 1987. Demand for future land uses will be moderate.

TABLE 1
ACREAGE OF LAND USES IN HOLLY RIDGE

Land Use	Present Acreage	% of Total	Future Demand
Residential	62.4	12.9	11.9
Open Space	277.3	57.2	N/A
Commercial	9.2	1.9	1.8
Industrial	16.5	3.4	3.1
Institutional	7.4	1.5	1.4
Vacant	20.2	4.2	N/A
Roads and RR	90.0	18.6	17.1
	-----		-----
total	484.8		35.3

HOLLY RIDGE EXISTING LAND USE

- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- INSTITUTIONAL
- AGRICULTURAL, FORESTS, OPEN SPACE

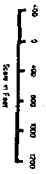


Figure 6

The preparation of this document was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds administered by the North Carolina Department of Natural Resources, which is administered by the National Oceanic and Atmospheric Administration.

TABLE 2
LAND USES IN THE TOWN'S E.T.J.

Land Use	Present Acreage	% of Total	Future Demand
Residential	64.2	1.6	3.2
Open Space	3675.5	93.5	N/A
Commercial	44.0	1.1	2.3
Institutional	22.0	0.5	1.1
Roads and RR	126.6	3.2	6.6
	-----		----
total	3932.3		13.2

B) Constraints: Land Suitability

1) Hazard Areas

At an elevation of about sixty feet Holly Ridge is not considered to be in a hazard area. Hazards such as flooding, earthquakes, snow and ice storms are rare. However, high winds, drought and tornados are possible. Erosion along drainageways and creeks are common during intense rainfall. Man-induced hazardous waste dumping may have occurred during the war, but the location of Camp Davis dump sites have not been investigated.

2) Soil Limitations

Most of the town's soils are poorly drained fine sands. The Leon soil series occupies a majority of the town's acreage. This is a poorly drained soil with a seasonal high water table within one foot of the surface. The soil has severe limitations for septic tank absorption fields and dwellings because of poor filtration and excessive wetness respectively. A severe limitation means that development activity will require moderate to major special planning, good design, and careful management to overcome the limitation. Other soils in the town have developmental limitations as well such as the Muckalee Loan soil series. For example, there are some very wet soils along the streams and along some deeply incised streams where the soils are very susceptible to erosion.

It is fortunate that the town has wastewater and drinking water facilities, so these soil limitations are not much of a constraint to growth. Development outside of the town is affected much more by soil limitations since public wastewater and drinking water systems are not available. The town could expand their utilities to these areas.

One must keep in mind that soil properties are site specific and there can be several different soils on one plot of land. An on-site inspection is needed to determine the limitations at each location. For more detailed soil information the Soil Conservation Service in Jacksonville should be contacted.

3) Sources of Water Supply

The Holly Ridge drinking water is presently supplied by the county's system which is obtained from wells. The town's wells are presently inoperable, but there are plans to reactivate the wells in the near future, and use the county water system in emergency situations only.

4) Slope

The lay of the land should not be a constraint to development in the town. The town is generally flat, although excessive erosion is occurring along streams which is caused by rapid runoff during heavy rains. This will increase with development and poor storm water management practices if not rectified through sediment control and proper storm drainage controls.

5) Fragile Areas

The town has no Areas of Environmental Concern. The only areas that can be considered fragile are the stream areas and remains of old Camp Davis as a historic site. The streams show considerable down cutting and should be protected. Most of Camp Davis except foundations of some of the buildings, is gone. The North Carolina Department of Cultural Resources stated that there were no known structures of historical or architectural importance located within the planning area. There are a few old buildings remaining from Camp Davis still standing in the town but these are dilapidated except for the Camp Davis Restaurant.

Outside the town toward the north is an upland swamp or pocosin which is a fragile wildlife habitat. This area should be protected.

6) Resources Potential

Holly Ridge is a small urban area with most of its resources potential in the surrounding unincoorporated areas of the county. The main resource near the town is the Great Sandy Run Pocosin which is approximately 63 square miles and has the potential of a protected wildlife habitat and for peat mining. This area is being considered for the expansion of Camp LeJeune.

C) Constraints: Capacity of Community Facilities

1) Water System

The town presently purchases its water from the county. The county's system operates at an average of 81% capacity during its twelve hour pumping day. During peak periods the system must operate more than twelve hours per day to satisfy the demand.

Holly Ridge is planning to put its water system back into operation. If this were to happen the town would use the county system as a back-up system in case of an emergency.

2) Wastewater System

The town's wastewater system is fairly new but because the old storm water system is mixing with the present system, it fills up to or over its capacity. The town has corrected this problem by decreasing its flow.

In an area that has poor soils for septic tanks it is very important that the town have a good wastewater system. It is also important that the town continuously monitor the capacity of its wastewater treatment plant as annexation takes place.

3) Schools

The children in Holly Ridge attend Dixon Elementary and Dixon High School. These schools are substantially above capacity, as are most of the schools in the county. This is a problem that is being taken care of through the passage of a county bond issue for school expansion.

4) Roads

Two primary highways intersect in Holly Ridge. U.S. 17 is the main coastal thoroughfare in the eastern part of the state. Holly Ridge is one of only a few towns on U.S. 17 between Jacksonville and Wilmington. The highway design is adequate to handle additional traffic and the route is being expanded in town to provide parking.

N.C. 50 is an important southeast to northwest thoroughfare in the area. This highway is one of two routes to Topsail Island which is a growing beach resort. The design capacity of this highway is sufficient so there are no plans for expansion. The other route is N.C. 210 which tends to divert some of the beach traffic around Holly Ridge.

Half of the town's roads are rights-of-way, unimproved, unpaved, or in disrepair. This is an issue that the town must quickly address.

5) Fire and Rescue

The town has an excellent volunteer fire and rescue service. The service is more than adequate to handle fire and rescue emergencies in the foreseeable future.

6) Recreation

The town has a small outdoor recreational area. It has a ball field and a small playground. An indoor recreation center to be built by a group of citizens that would be located near the town is in the planning stage.

7) Medical Services

There is a small public clinic in the town and a hospital in Jacksonville. This hospital is the only facility in the county with twenty-four hour emergency service and it is between twenty to thirty minutes from Holly Ridge.

8) Solid Waste

The town has a contract with a private firm to handle its refuse collection and disposal. The refuse is collected twice a week and taken to the county landfill. The landfill will approach capacity in the next few years but there is a large tract of land nearby that the county plans to use.

9) Police

There are presently two full time policemen and one part time officer making up the town's police force at the present time.

10) Summary

Holly Ridge presently has several problems which need to be solved. Several problems are at other governmental levels. The immediate local problems that need to be dealt with are; streets and roads, reactivation of the town well, improving storm water runoff, maintaining an adequate wastewater treatment system, housing, and commercial development.

IV) CURRENT PLANS, POLICIES AND REGULATIONS

This section contains a summary of the conditions, plans and policies related to land use planning in the Town of Holly Ridge. All the items included in this section contribute to the overall town planning process.

A) Prior Land Use Plans

The town utilizes the 1981 CAMA Land Use Plan for land use information and policies. Once the 1988 land use plan is adopted, all aspects of it will supercede the 1981 Plan.

B) Building Codes

The town has a building code and it is enforced by the building inspector.

C) Subdivision Regulations

The town adopted subdivision regulations in May of 1987

D) Zoning Ordinance

The town has a zoning ordinance and it is working on extending the jurisdiction of zoning into the extraterritorial area.

E) Current Policies and their Status on Implementation

The policies presented in the 1981 CAMA Land Use Plan are indicated below as well as their present status on implementation.

Resource Protection Policies:

1) a) Policy: "There are no AEC's within the jurisdiction of the Town of Holly Ridge. The town is, however located near the coast and receives a great deal of through traffic as a direct result. Protection and management of estuarine AECs is important to Holly Ridge for this reason and because the town believes these areas to be important to all citizens.

The policy of Holly Ridge is to support the coastal management program especially in regards to Areas of Environmental Concern. The town will implement this policy through its continued support and involvement in the program. Responsibility for action shall rest with the Mayor and Town Board."

b) Status on implementation: This is an on going process.

2) a) Policy: "Only two alternatives were considered by the town as reasonable. First was to take an inactive role in railroad actions and transports through town. The second was to support the railroad but only to the extent railroad actions and policies are supportive of environmentally safe operations. The town does not consider current traffic levels to create a hazard by dividing the town.

The second policy was selected as most appropriate for the town of Holly Ridge. The railroad is a very important asset to the town and the town will continue to support the railroad provided all applicable health and safety regulations are complied with. The town does not necessarily oppose transport of any material through Holly Ridge provided the above condition has been adequately satisfied.

The Mayor and Town Board shall be the persons responsible for implementing this policy."

b) Status on implementation: This is an unchanging and on going process, but the railroad tracks have been removed.

3) a) Policy: "The policy of the town is to support the programs of the State and U.S. Soil Conservation Service insuring adequate soil conditions to the extent possible for future development in Holly Ridge.

Appropriate uses are those which do not conflict with this policy by creating a hazard to the soils of Holly Ridge. No alternatives to this policy were considered.

Implementation and enforcement of this policy shall be the responsibility of the town building inspector and the Onslow County Health Department."

b) Status on implementation: The town's zoning ordinance and the county's septic tank regulations help to implement this policy. The town needs to improve its storm sewer system and to enforce the subdivision regulations in order to implement this policy. Subdivision regulations were adopted in May of 1987.

4) a) Policy: "The town policy is to insure the availability of fresh useable water from the aquifers providing the town's water supply. No alternatives to this policy were considered. Appropriate uses are those which would not endanger the town's water supply either from pollution or over use."

b) Status on implementation: There is no known pollution or over use of the groundwater. The town is taking steps to get its own water system back into operation so it will not have to purchase water from the county.

5) a) Policy: "The town policy is to support the preservation of the pocosin (The Great Sandy Run Pocosin) in its natural state within the limited use of forestry. No alternatives to this policy were considered."

b) Status on implementation: This is an on going process. The town must be more vocal on this policy since Camp Lejeune might expand into the pocosin.

6) a) Policy: "The town policy shall be to protect and preserve all structures identified by the N.C. Division of Archives and History and any other structures subsequently identified, and to protect and preserve existing or potential archeological sites as identified by the Division or Holly Ridge. No policy alternatives were considered.

Appropriate uses are those which in the opinion of, the Division Of Archives and History and/or the Town of Holly Ridge, will not endanger, destroy, or remove the historic value of the structure or site."

b) Status on implementation: Since there are no sites or structures in the town listed on the National Register, this policy is an on going one. The town continues to try to get some sort of historic site declared for Camp Davis.

Resource Production and Management Policies:

1) a) Policy: "The town policy shall be to continue to support recreation but not through a financial contribution. The Mayor and Board of Commissioners shall be responsible for implementing this policy. Natural resource protection will be the responsibility of the various agencies and local governments controlling these areas. The Onslow County Recreation Department should be consulted for more information concerning specific recreation policies and programs in the area."

b) Status on implementation: The town is in the process of developing an outdoor recreation area. There is also a group of concerned citizens from surrounding communities that has formed a group called Coastal Recreations, Inc. This group is attempting to construct an indoor recreation facility for the area. They already have received some donated land and are seeking funds for the facility. This should help to serve the indoor recreation needs of the area.

2) a) Policy: "As a policy the town supports the preservation of forestry lands and endorses the use of forestry management practices which will not substantially harm the natural environment. A slight exception or variation of this policy is the town policy to support land clearing provided the future use of the land will either improve the overall housing conditions, housing availability, or overall economic conditions of Holly Ridge. The town considers appropriate uses to be proven forestry, management practices which universally accepted or those uses proven to meet the policy exception.

Alternatives to this policy considered were; (1) establish land use controls to prohibit development with forest lands; (2) permit unrestricted development or use through a no control policy; or (3) encourage development only where the overall housing or economic conditions of the town can be shown to directly benefit. The town believes the third alternative to be the most appropriate and insure the least interference with the private property rights and the needs of the town to grow.

The policy objective will be implemented and enforced by the Town Planning Board using the existing town ordinances and Land Classification Map."

b) Status on implementation: Since there has been little development in the town since the last plan, it is difficult to determine if this policy has been implemented. This policy is also on going.

Economic and Community Development Policies

1) a) Policy: "Holly Ridge supports and is actively seeking light industrial development. The most desired industry is the relatively small employer providing approximately 25 to 100 high wage skilled positions. Ideally this type of industry would be clean, without fumes, noise, or other pollution causing by product. Heavy industry employing large numbers of people with the accompanying environmental problems is not desired. The objective of industrial development is based on the desire of Holly Ridge to first provide jobs for County citizens and second to provide employment opportunities for new residents creating town growth. High wage jobs are required to: 1) decrease the out migration of young residents; 2) improve income levels within the area; and 3) reduce the high percentage of substandard housing in Holly Ridge. These problems are discussed in greater detail in the Description of Present Conditions section of this plan. The only major employer located in the Holly Ridge immediate area is Carolina Meat Processors. Major employers in Jacksonville and Wilmington are too distant to create growth in Holly Ridge under normal circumstances.

The town feels to accomplish this objective through the use of various state and federal industrial location programs and the Onslow County Industrial Development Commission."

b) Status on implementation: The town has not implemented this policy. Holly Ridge needs to take a more active role in marketing itself.

2) a) Policy: "The first priority for providing public services in Holly Ridge is with in the town limits. Currently only the fire and rescue services provide assistance to areas outside of town limits. Services normally provided town residents include:

- 1) Police Protection
- 2) Fire Protection
- 3) Water and Sewer Service
- 4) Emergency Medical Service
- 5) Garbage Collection

With exception of water and sewer these services can easily be extended to serve new residents or industry. Sewer service cannot be increased or extended unless and until facilities proposed in the Holly Ridge 201 Facilities Plan are constructed. To date the project has not received funding from the U.S. Environmental Protection Agency."

b) Status on implementation: The town obtained funding from the EPA

and FmHA for a sewage treatment plant and are planning to place the water system back into operation. Sewer and water services are provided to some people outside of the town limits along Route 50 toward Surf City.

3) a) Policy: "Holly Ridge supports low to medium density urban growth within the town limits. The town believes any growth should improve on and change the dilapidated appearance of Holly Ridge. The town believes in existing patterns of residential and commercial development. The pattern of mixed land uses which now exist throughout the town will not be supported in future development however."

b) Status on implementation: The town adopted a zoning ordinance in 1985. Subdivision regulations were adopted in 1987. There has been little growth in the town since the 1981 Land Use Plan so it is difficult to see how well this policy has been carried out. However, there appears to be major problems with the zoning ordinance and its zoning districts.

4) a) Policy: "Major areas and many structures in Holly Ridge are in need of redevelopment. The Town has not been financially able to undertake any redevelopment at its own expense. Attempts at obtaining federal redevelopment funds have not been successful. As policy the town will continue to seek outside funding assistance and will encourage and assist private redevelopment activities where possible."

b) Status on implementation: This has not been done.

5) a) Policy: "Holly Ridge is generally supportive of state and federal programs including erosion control, public water access, highway improvements, and construction, port facilities, dredging, military facilities, etc. There are no federal or state programs at present which create either overriding interest or concerns in Holly Ridge. Areas where state and/or federal programs assistance has or may be requested are:

- 1) EPA 201 Facilities Planning
- 2) Four Laning of US 17
- 3) HUD Community Development Block Grant Program
- 4) Restoration and Preservation of Camp Davis
- 5) Improvement of Railroad

The Town is willing to commit resources to these projects if funds are available. Holly Ridge reserves the right to review and comment and to support or oppose other projects individually. The Town is an active member of the Neuse River Council of Governments and reviews all state and federal projects included under the A-95 Project Notification and Review System. All official comments are directed through the Town Clerk's Office."

b) Status on implementation: The town obtained an EPA 201 Facilities Planning Grant to construct a new sewage treatment plant. US 17 is now a five lane highway and is being improved. The town has not received any assistance on items 3, 4, and 5 above.

6) a) Policy: "Holly Ridge generally supports both Channel Maintenance and Beach Nourishment projects provided the benefits gained can be proven to be greater than the resulting cost whether financial or to the environment. There are no beaches or waterways in the Holly Ridge Planning Area, however.

The Town supports the Corps of Engineers' program to maintain and improve the Intercoastal Waterway as an avenue of commercial and recreational traffic. Given the economic importance of the waterway, there is no real alternative to this position. Holly Ridge is interested since a great deal of traffic through the Town is directly related to the resources of the coast."

b) Status on implementation: This is an on going process.

7) a) Policy: "Holly Ridge has no specific policy on energy facility siting or development at this time. Generally the Town would be supportive of such a facility locating in the area. Holly Ridge would not support the locating of a facility which could not provide reasonably adequate assurances for the future safety of citizens and/or natural resources of the area. The Town, for this reason, reserves the right to comment, support, or oppose any proposed facility on an individual basis."

b) Status on implementation: This is an on going process.

8) a) Policy: "Holly Ridge does not receive substantial economic benefit from tourism. Tourism because of the town's location is a potential untapped resource. The policy of the town is to support any efforts to increase the benefits of tourism to Holly Ridge.

Beach and Waterfront access are not issues in Holly Ridge since no beach or waterfront of any type is within the town's jurisdiction, although one of two access routes to Topsail Island is through Holly Ridge."

b) Status on implementation: The town has not taken enough action to market tourists for the town on their way to the beach or along U.S. 17.

V. HOLLY RIDGE ISSUES, POLICIES, AND IMPLEMENTATION

The land use issues of Holly Ridge can be resolved through strategies or policies. This provides a basic approach and a guide for solving land use issues before they materialize or become unsolvable. At the center of policy formulation is the town planning effort. The reasoning here is that the town planning board has the necessary resources to be the major source of data and information which is essential in determining issues and policies. Further, it is equally important to solicit public views on issues and related policies. The planning process allows this to occur most effectively.

The formulation of policies, herein, is based on an open process of consultation, negotiation and compromise. The policies set forth in this plan are a result of this formulation process. There are twenty-five issues each directly related to a single policy in the five land use policy categories. An overall policy was articulated for each which represents a myriad of policy alternatives. Consequently, each issue has a related policy and a way to implement it. In a word, an issue is resolved by a policy through an implementative process. This procedure is an improvement over having several policies for a single issue, and a hodge-podge of implementation mechanisms. Here in this plan, a single issue, with a single policy, and related implementation tasks are used.

To successfully accomplish this land use plan we must decide on a course or courses of action. Through the policy statements, which indicate how we intend to solve the land use issues, we reveal our prudence and wisdom in the planning and management processes of implementation. The land use policies are divided into five categories: 1) resource protection, 2) resource production, 3) economic development, 4) public participation and 5) hazard mitigation.

There are a number of policies that are to be addressed according to the CAMA Land Use Planning Guidelines (Subchapter 7B of the North Carolina Administrative Code). Since Holly Ridge does not have any Areas of Environmental Concern (AEC's) and it is located on high land which is a safe distance away from the ocean, there are some policy areas that do not apply to the town. The policy areas that are not issues in Holly Ridge are; AEC's, flood prone areas, wetlands, existing historic areas, manmade hazards, use of package treatment plants, marine and floating home development, industrial impacts of fragile areas, development of sound and estuarine system islands, commercial and recreational fisheries, off-road vehicles, assistance to channel maintenance and beach nourishment projects, and coastal and estuarine water beach access.

A) RESOURCE PROTECTION ISSUES, POLICIES, AND IMPLEMENTATION

1) Soils

a) Issue: Soils are very important in land planning. Most of the soils in the town have limitations in providing a good filter for septic tank absorption fields. This is not a problem where sewer and water

services are located. These services may be required in nearby areas that have problem soils. Many of the area's soils also have engineering limitations, such as for large buildings.

b) Policy: It is the town's policy to use suitable soils as a basis for guiding land development.

c) Implementation:

- i) Consult the Onslow County Soil Survey when devising plans for development.
- ii) Discourage development where soils are unsuitable through the town zoning ordinance and subdivision regulations.
- iii) To extend public water and sewer services to existing developed areas where poor soil conditions exist.
- iv) Study the feasibility of controlling erosion.

2) Groundwater Protection

a) Issue: The town recognizes the need to protect the groundwater since it is the only source of its water supply. Groundwater can be contaminated by the leaching of toxicants from the land surface, land fills, buried gasoline and oil tanks, dry cleaners, malfunctioning septic systems, and by many other means. Once a groundwater system is contaminated it is almost impossible to correct.

b) Policy: Although there are no known problems with the groundwater, the town wishes to preserve and protect all groundwater resources.

c) Implementation:

- i) The town will require abandoned gasoline and oil tanks to be removed, and/or pumped dry and filled with sand.
- ii) The town will continue to work on correcting the seepage problem with the storm and sanitary sewage system.
- iii) Public sewer and water services will be provided to nearby areas where soils have septic tank limitations.
- iv) The North Carolina Division of Land Resources will be supported in their protection of water quality.
- v) The Division of Environmental Management will be supported in the regulation of effluents.
- vi) The town supports the state and county health departments in their efforts to protect water supplies and effluents.
- vii) The location of any future landfill or toxic waste dump is discouraged by the town.

3) Great Sandy Run Pocosin Protection

a) Issue: The Great Sandy Run Pocosin is a valuable recreation and natural resource for the area.

b) Policy: The development of this area, especially by Camp LeJeune, is opposed by the town.

c) Implementation:

- i) The town will support the state or county declaring this area a state or county conservation area.

4) Storm Water Runoff Quality

a) Issue: The quality of storm water runoff in general and that associated with agricultural, residential, and industrial development is an important concern in the town. Many factors can affect the quality of storm water such as; heavy metals from automobile exhaust washing off the roads, sediments from erosion and runoff, nutrients from fertilizers, toxic chemicals from pesticides, and malfunctioning septic systems.

b) Policy: The town's policy is to improve the quality of storm water runoff.

c) Implementation:

- i) Support of the N.C. Sedimentation Control Act.
- ii) Support of the county's Soil and Water Conservation District.
- iii) Require drainage plans in the subdivision ordinance.
- iv) Support other county, state, and federal programs that regulate activities that could possibly affect storm water runoff.
- v) Study the feasibility for improving storm drainage.

5) The Preservation of Camp Davis

a) Issue: During World War II Camp Davis was a large army base that housed approximately 60,000 troops. There is very little remaining of the camp. Camp Davis is an important part of the area's history and there should be some way of remembering it and/or learning about it.

b) Policy: It is the town's policy to have Camp Davis listed on the National Register as a historic site, preserve this area as such, and possibly construct a small museum.

c) Implementation:

- i) Work with the N.C. Division of Archives and History to have Camp Davis declared as a historic site and to seek funding for such a project.
- ii) Coordinate commercial development with a Camp Davis historical museum.

6) Sand Quarrying

a) Issue: There are areas in and around the town that have potential for sandquarrying. The town is concerned about the environmental impact of such an activity.

b) Policy: The town will not allow these activities where it has the authority.

c) Implementation:

- i) In the update of the town's zoning ordinance this activity should be prohibited.

7) Effectiveness of the Sewage Treatment Plant

a) Issue: The town is concerned about the effectiveness of its sewage treatment plant. Storm water is mixing with the sewage and placing a stress on the sewage system that was to accommodate the town for some time.

b) Policy: It is the policy of the town to improve the sewage treatment system.

c) Implementation:

i) To support the testing of the town's effluents from its sewage treatment plant.

ii) Steps will be taken by the town to correct the problem of the storm water and sewage mixing.

iii) The town will develop a plan to improve the wastewater treatment system.

8) Preserving Forested Areas

a) Issue: It is important for the town to have some areas that are forested. Although the town would like more development, it also recognizes that forested areas are useful for buffer zones, parks, and groundwater recharge.

b) Policy: It will be the policy of the town to retain some of its land as forested areas.

c) Implementation:

i) The town will require a specified amount of open space in its subdivision regulations, part of which can be forested.

ii) When the zoning ordinance is updated some areas should be zoned for low density residential development, this will allow for forested areas.

iii) When the town budget allows, the town should purchase tracts of forested land for additional open space.

iv) All commercial and industrial zones that abut residential zones should be buffered.

B) RESOURCE PRODUCTION ISSUES, POLICIES, AND IMPLEMENTATION

1) Great Sandy Run Pocosin

a) Issue: The town recognizes the importance of Great Sandy Run Pocosin as a valuable natural resource and recreation area. It was noted as a Prime Wildlife Habitat in the "1986 Onslow County Land Use Plan". Although this area is outside of the town, but partly in its ETJ, it is a concern.

b) Policy: It is the town's policy to prevent any activities that might change Great Sandy Run's natural habitat.

c) Implementation:

- i) To publicly condemn the plan for Camp LeJeune to expand in that area.
- ii) To support any county, state, or federal plans to make the area a conservation reserve.
- iii) To support the N.C. Wildlife Resources Commission.

2) Recreation

a) Issue: Holly Ridge recognizes the importance of recreation in the community and will continue to work on its program.

b) Policy: It is the town's policy to have a good recreation program.

c) Implementation:

- i) To support and coordinate with all recreation programs.
- ii) To establish a town recreation commission for the purpose of overseeing town programs, to coordinate with the county recreation department, and to oversee any other recreation matters in the town.
- iii) To support a community recreation facility in combination with other towns in the area.

3) Farmland

a) Issue: There is little farmland in the area. However, there is a need to protect and reserve the existing agricultural land uses.

b) Policy: The town's policy will be to preserve farmland in the town's jurisdiction.

c) Implementation:

- i) To zone areas in the ETJ for agricultural uses.
- ii) To discourage development on prime farmland.
- iii) To utilize the Onslow County Soil Survey, the Soil Conservation Service, and the Agricultural Extension Office to help employ the best management practices.

4) Residential and Commercial Growth

a) Issue: The town realizes that need for residential and commercial growth. This growth must proceed in an orderly, attractive, and controlled manner.

b) Policy: It is the town's policy to see that growth occurs in a controlled and orderly manner.

c) Implementation

- i) To update the zoning ordinance.
- ii) To enforce the town's subdivision regulations.
- iii) To provide proper drainage.
- iv) To support the Sedimentation Control Act.
- v) To utilize the Onslow County Soil Survey and the Soil Conservation Service as development occurs.

C) ECONOMIC AND COMMUNITY DEVELOPMENT ISSUES, POLICIES AND IMPLEMENTATION

1) Town Growth

a) Issue: The town is primarily a residential community. It would like to continue as such.

b) Policy: It will be the town's policy to grow primarily as a residential community.

c) Implementation:

i) The town will zone most of its land area as residential as it updates its zoning ordinance.

ii) To provide services conducive to residential development.

iii) Not to zone too much land for industrial development and to separate it from residential areas.

iv) To adopt building and housing codes to insure better homes.

v) To provide more affordable housing in the form of single family houses, duplexes, and multifamily units.

2) Commercial Growth

a) Issue: The town could improve its commercial growth in the proper areas. It would look favorably on a small shopping area that not only contains convenience type stores, but also some clothing, speciality shops, and grocery stores.

b) Policy: The town will attempt to make itself attractive for commercial growth.

c) Implementation:

i) To provide adequate land zoned for a commercial center.

ii) To actively market companies to locate in the town.

iii) To establish a commercial district.

3) Industrial Growth

a) Issue: The town desires industry, but not those that would be offensive to the community.

b) Policy: The town's policy will be to attract industries to locate in the area that will not adversely affect any of its citizens or their land.

c) Implementation:

i) To market the town to industries planning on locating in the area.

ii) To zone land for industry away from residential areas and to have buffers between different land uses.

iii) To have adequate sewer and water facilities to handle industrial growth.

4) Town Appearance

a) Issue: The town recognizes that its grounds and buildings need to be improved.

b) Policy: It will be the policy of the town to upgrade its appearance and to keep the town pleasant for its citizens and visitors.

c) Implementation:

i) To reduce strip development impact on highways 17 and 50.

ii) To redevelop the downtown area.

iii) To apply for a block grant for the purpose of upgrading the town.

iv) To require industries to provide a buffer that separates themselves from adjacent land uses.

v) To demolish and remove dilapidated and abandoned structures.

vi) To activate the beautification committee.

5) Commitment to State and Federal Programs

a) Issue: The town is committed to state and federal programs including erosion control, public access, highway improvements, and military facilities.

b) Policy: It is the policy of the town to support these federal programs with the exception of the expansion of Camp Lejeune in the Great Sandy Run Pocosin.

c) Implementation:

i) The town will work and coordinate with all organizations when applicable.

6) Energy Facility Siting

a) Issue: Energy facility siting in or near the town.

b) Policy: It is the town's policy not to allow the siting of a large energy facility in the area.

c) Implementation:

i) The town will prohibit the siting of a large energy facility in its jurisdiction through zoning.

7) The Expansion of Camp LeJeune

a) Issue: The expansion of Camp LeJeune into the town and in the Great Sandy Run Pocosin would place tremendous development pressure on the town. It would also eliminate a prime natural resource.

b) Policy: The town's policy is to protest the expansion of Camp LeJeune in the Great Sandy Run Pocosin and into the Town.

c) Implementation:

i) To discuss with the Navy Department, the town's concerns of the expansion being so close, and try to reach a compromise.

8) Providing Services for Development

a) Issue: The town desires residential, commercial, and some industrial growth. It recognizes that it must provide the proper services to accommodate this growth.

b) Policy: The town's policy is to provide services to development as needed.

c) Implementation:

i) To continue to work on repairing the problem with the storm water mixing with the sewage.

ii) To get the town's water system back into operation.

iii) To have areas zoned for the different types of development so they will not conflict with each other.

9) Attracting People to Locate in Holly Ridge

a) Issue: The town is quite close to Surf City and Topsail Beach whose primary income comes from those seeking rest, relaxation, and recreation. One of the three routes to these areas passes through the town. The town does not receive too much benefit from its location.

b) Policy: The town's policy is to promote the town for retirees, tourists, and people that would work at the industries and businesses establishments located in the town.

c) Implementation:

i) To create a town promotion committee.

ii) To use routes 17 and 50 as corridors to the town and make them attractive to visitors.

iii) To encourage business activities that would be attractive for development as a residential community.

iv) To work on a small museum that features Camp Davis.

10) Annexation

a) Issue: Although there has not been a large amount of growth in the town over the past few years, there has been growth outside the town limits.

b) Policy: It is the policy of the town to have controlled growth and annex areas when and where appropriate.

c) Implementation:

- i) To expand the town limits and extraterritorial jurisdiction.
- ii) To apply the town's ordinances to the area.
- iii) To conduct an annexation study.

1) Housing Mix

a) Issue: With the high cost of housing, many people are resorting to modular or mobile units and multi-family units in which to live. This creates a high demand for this type of housing which the supply will try to match.

b) Policy: The town does not discourage any type of sound housing as long as it is compatible to the area.

c) Implementation:

- i) To have areas properly zoned for modular, mobile, and multi-family units.
- ii) To require adequate space for parking and recreation.
- iii) To allow for aesthetically pleasing housing.

D) PUBLIC PARTICIPATION ISSUES, POLICIES AND IMPLEMENTATION

There is a need to increase citizen participation in the Town of Holly Ridge. The public meetings that were held in the formulation of this plan were not well attended. These meetings were usually held in conjunction with the regularly scheduled planning board meeting on the second Monday of each month.

In order to have a successful land use planning process and a progressive, orderly government, citizen participation is required. It is common knowledge that there is a direct relationship between successful planning and government and citizen participation. In other words, as citizen participation increases, good governmental practices increases also. The planning process and how it is related to government practices is considered to be less than adequate at the present time.

In the planning process, citizen involvement is mandatory. Historically, citizens have been a part of planning and development. Not only are government officials and agencies ineffective without citizen participation, but the planning process would tend to malfunction as well. Usually, citizens desire to participate if an immediate problem needs to be solved. At other times they become involved only if officials or agencies are not doing what they think they should. Citizen involvement is a valuable part of the decision making process at all levels of government. The reason being that citizen participation: 1) influences government decisions, 2) maintains stability in society, 3) supports and advises officials, 4) guards the public interest, and 5) reduces alienation between the people and the government.

Citizens have a direct concern and should be involved in the following planning processes: 1) assessing community values, 2) determining issues and policies, 3) choosing alternative plans, 4) approving or modifying plans, and 5) feedback after plans have been effectuated. The citizen's role is as equally important as the public official's role. It should not be thought of as just another time-wasting, unnecessary burden. The citizen's importance is found in the success of improving the well-being of all the citizens.

Citizen involvement may occur in different ways. All citizens should generally be involved in: 1) informational, neighborhood or community planning meetings, 2) public hearings, 3) attitude surveys, 4) referendums, and 5) voting. Other types of involvement will depend on the citizen's interests, but all citizens should be involved in at least one of the following: 1) a task force which has been assigned a specific problem to be solved, 2) a citizen advisory committee, 3) county, community or neighborhood planning commissions or boards, 4) elected citizen representatives on a public policy-making body, 5) workshops for the purpose of learning how to solve problems, 6) citizen training for the purpose of gaining knowledge about government operations, and 7) volunteer services. There are many ways that citizens can become involved in their communities. Hopefully, the citizens of Holly Ridge will recognize this need and respond to it in a positive manner. It is the policy of Holly Ridge to hold to these statements regarding citizen involvement in governmental affairs, particularly the planning process. To implement this policy, the town will distribute a public participation questionnaire to its citizens.

E) HAZARD MITIGATION ISSUE, POLICY AND IMPLEMENTATION

1) Hazard Mitigation

a) Issue: Holly Ridge has only two major areas which require mitigation action: 1) small streams, and 2) poorly drained uplands. These areas, on the average, can reach high levels every year, and flood isolated areas.

b) Policy: It is the policy of Holly Ridge to mitigate hazards by adopting the following measures in the next five years:

c) Implementation:

- i) To include in the zoning ordinance, a conservation zone.
- ii) Adhere to the county redevelopment policy as related to storms.

VI. THE LAND USE PLAN

The information for this update has been collected and analyzed, the issues have been listed and studied, the policies have been formulated, and the implementation for the policies have been stated. The final task of this update is to devise a land use plan. At this point, the future is brought to the present by assigning different land uses to certain areas. This distribution of the land uses reflect population distribution, economic trends, existing land use, soils and other natural resources, community services, storm hazards, and other town plans (see Figure 7).

A) Land Classification

The land use plan uses a land classification system recommended in the Land Use Planning Guidelines (Subchapter 7B) which is part of the State's administrative code. The land use categories are: 1) developed, 2) transition, 3) community, 4) rural, and 5) conservation.

1) Developed Land Use-

Developed areas provide for continued intensive development. These areas have been and continue to be developed for urban areas including: 1) residential, 2) commercial, 3) industrial, and 4) institutional. Usually, these uses are served by streets, water, sewer, police and fire protection.

2) Transition Land Use-

Transition areas provide for future intensive development. These areas are considered appropriate for urban growth in the future and should be scheduled for the necessary urban services as development occurs. These areas should not be developed until most of the land in developed areas has been urbanized.

3) Community Land Use-

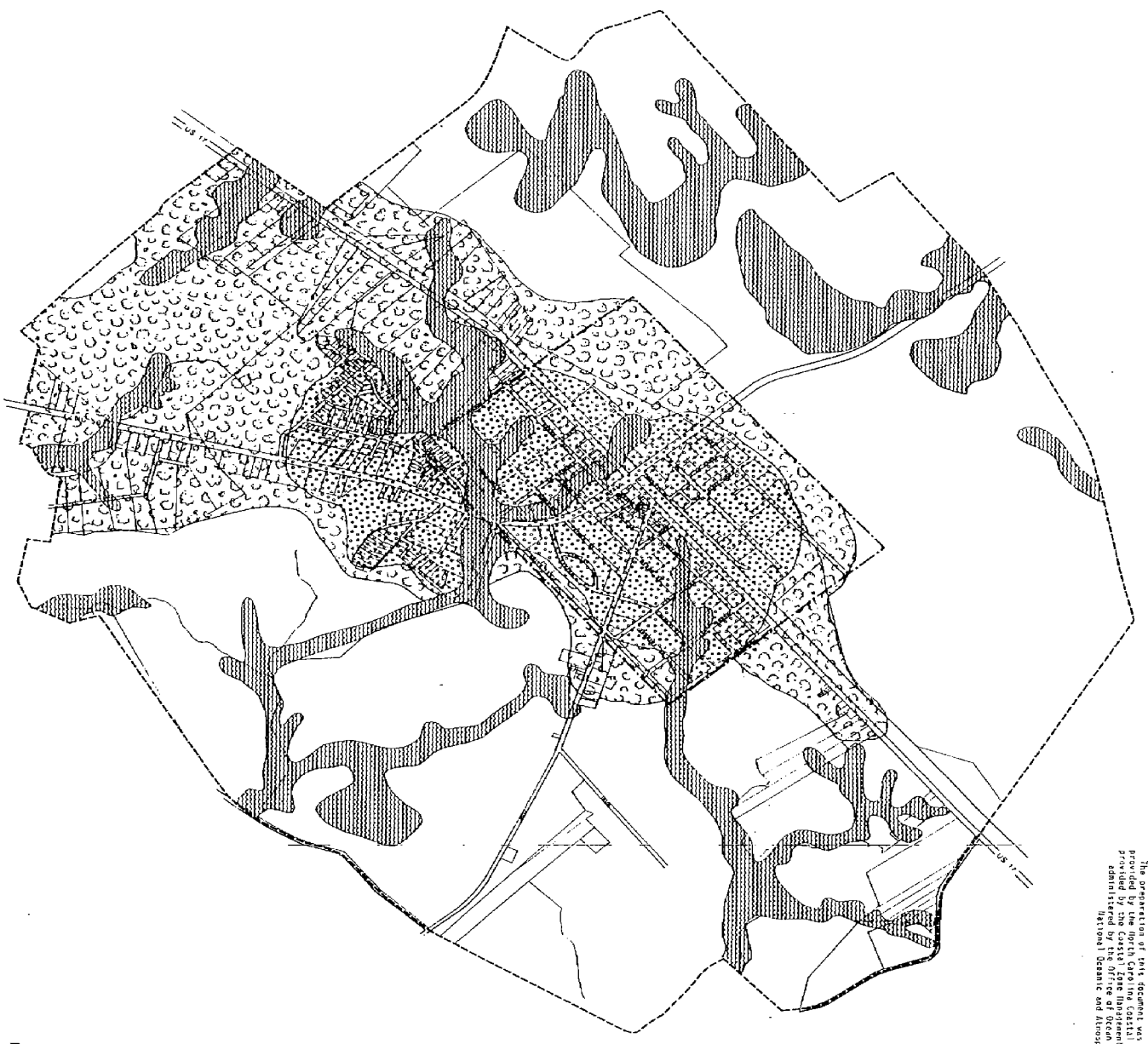
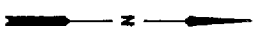
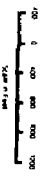
Community areas provide for clustered development in rural areas. These areas allow for additional housing, shopping and public services. They are considered to be crossroad communities and tend to serve the immediate community and nearby rural areas. This category is not appropriate or used in this plan.

4) Rural Land Use-

Rural areas provide for agriculture, woodlands, mining or quarrying, and low density residential uses. These areas allow for the usual rural land uses which include farming, forests, farmsteads, passive recreation, processing of farm and forest products, farm and forest services, schools, churches, community centers scattered non-farm residences and

HOLLY RIDGE LAND CLASSIFICATION

- DEVELOPED
- TRANSITIONAL
- CONSERVATION
- RURAL



The preparation of this document was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the U.S. Department of Commerce, Office of Coastal Management, administered by the U.S. Environmental Protection Agency, which is authorized by the National Oceanic and Atmospheric Administration.

Figure 7

general stores.

5) Conservation Land Use-

Conservation areas provide for the management or the protection of AEC's, unique, fragile or hazardous areas. While agriculture and forestry may occur in certain situations such as floodplains and pocosins, they are to be managed so that the impact on the environment is minimal.

B) Spatial Arrangement of Land Uses

The land use plan shows how land use in the Town of Holly Ridge will be spatially distributed in the next five to ten years. It is the intent of the plan to maintain the small town character of Holly Ridge while allowing for industrial and commercial land uses to occur in and near the town.

1) Developed Areas-

The developed areas in the land use plan correspond to the existing incorporated town and where urban spillover has occurred. Developed areas include residential, commercial, and industrial parcels. All of the areas have land available for additional development. However, past growth rates show little promise for substantial development. Still, these developed areas have the more desirable land for commerce and industry. The developed areas have the urban services expected for growth. But, the town must plan to solidify their infrastructure and to fill in the available developable land.

2) Transition Areas-

The transition areas in the land use plan are bordering the developed areas of the town. These areas have land available for development to occur. The transition areas along the highways leading into Holly Ridge are expected to be sufficient to handle increased commercial growth. Along the railroad and in the vacant areas there is sufficient land for increased industrial growth. The land away from the highways and railroad will be suitable for increased residential development.

3) Community Areas-

The community land use category is not appropriate for the Holly Ridge area and is omitted from the land use plan.

4) Rural Areas-

The rural areas correspond to the existing rural land uses, which are usually located between the poorly drained soils and on the most productive upland soils. There is a tendency to change rural land uses in favor of urban development. This has been kept to a minimum level in the plan.

5) Conservation Areas-

The conservation areas are the town's poorly drained areas and along its small streams. These areas are located mainly in its ETJ area, although some are in the town. Some areas may have fragile or critical habitats. Further, these areas could be hazardous because of periodic flooding.

Conservation areas are set aside because of their natural characteristics and their long lasting contribution to the citizens of the community. These areas can be considered greenways or buffer areas which allow a separation of land uses without conflict between them. Consequently, they are to be protected or managed so that they will remain essentially unaltered for generations to come.

C) Relationship of Policies and Land use Categories

There are twenty three policies which have been generated in the land use plan, which deal with resources protection, resources production, and town and economic development as they are related to the land use categories.

1) Resource Protection as related to land use-

The policies related to resource protection are formulated to aid in managing and conserving our natural heritage. By protecting water resources and farmland the town assures improved water quality in the environment and the best possible management of the prime farmland.

2) Resources Production Policies as Related to Land Use-

The policies related to resources production are formulated to aid in improving water quality of the water courses in the town. Water draining the land, no matter what its use, is commonly of poor quality. By improving storm runoff, water and sewer lines, and improving legislation, resources production will improve with respect to fishing, farming and forestry.

3) Economic Development as Related to Land Use-

The policies related to economic development are formulated to aid in improving the social and economic well being of the town and its citizens. The policies set forth should revitalize the town. For the Town of Holly Ridge this is a formidable task, but well worthwhile.

TABLE 3
SUMMARY OF RESOURCES PROTECTION POLICIES

Land Use Categories-

D=Developed
T=Transition
R=Rural
C=Conservation

D	T	R	C	Policies
x	x	x	x	1) It is the town's policy to use suitable soils as a basis for guiding land development.
x	x			2) Although there are no known problems with the groundwater presently, the town wishes to preserve and protect all groundwater resources.
		x	x	3) The development of this area (The Great Sandy Run Pocosin), especially by Camp LeJeune is opposed by the town.
x	x			4) The town's policy is to improve the quality of storm water runoff.
x	x			5) It is the town's policy to get Camp Davis listed on the National Register as a historic site, preserve this area as such, and possibly construct a small museum.
x	x	x	x	6) The town will not allow these (sand quarrying) activities in any areas where it has authority.
x	x			7) It is the policy of the town to improve the operation of the sewage treatment system.
x	x	x	x	8) It will be the policy of the town to retain some of its land as forested areas.

TABLE 4

SUMMARY OF RESOURCE PRODUCTION AND MANAGEMENT POLICIES

Land Use Categories-

D=Developed
 T=Transition
 R=Rural
 C=Conservation

D	T	R	C	Policies
			x	1) It is the town's policy to prevent any activities that might change Great Sandy Run's natural state.
x	x	x	x	2) It is the town's policy to have a good recreation program.
		x		3) The town's policy will be to preserve farmland in its jurisdiction.
x	x			4) It is the town's policy to see that growth occurs in a controlled and orderly manner.

TABLE 5

SUMMARY OF ECONOMIC AND COMMUNITY DEVELOPMENT POLICIES

Land Use Categories-

D=Developed
 T=Transition
 R=Rural
 C=Conservation

D	T	R	C	Policies
x	x	x		1) It will be the town's policy to grow primarily as a residential community.
x	x			2) The town will attempt to make itself attractive for commercial growth.
x	x			3) The town's policy will be to attract industries to locate in the area that will not adversely affect any of its citizens or their land.
x	x			4) It will be the policy of the town to upgrade its appearance and to keep the town pleasant to look at.
x	x	x	x	5) It is the policy of the town to support these federal programs with the exception of the expansion of Camp LeJeune in the Great Sandy Run Pocosin.
x	x	x	x	6) It is the town's policy not to allow the siting of a large energy facility in the area.
x	x	x	x	7) The town's policy is to protest the expansion of Camp LeJeune into it, and in the Great Sandy Run Pocosin.
x	x			8) The town's policy will be to provide services to development as needed.
x	x	x	x	9) The town's policy is to attract people to Holly Ridge and its jurisdiction.
x	x	x	x	10) It is the policy of the town to have controlled growth and annex areas when and where appropriate.
x	x	x		11) The town does not discourage any type of sound housing as long as it is compatible to the area.

VII. CONCLUSION

Organization and Management for the Land Use Plan

The successful completion of the land use plan does not occur with its adoption. The land use plan is merely the continuation of the planning process. Its success can only be measured years from now, not today or next month. Thus, a plan to manage the planning program is essential for the planning process to continue.

In order to effectuate the plan a considerable amount of work is required. Further, it will require energetic leadership and a substantial amount of citizen participation. A list of the committees, task forces and legislative and civic groups are indicated below according to the policy categories. Each of these groups must be in place if they do not already exist. The Town Planning Board is considered to be the coordinating group at the center of this planning effort.

Protection - Town Planning Board
Town Council
N.C. Division of Land Resources
N.C. Division of Environmental Management
N.C. Division of Health Services
N.C. Division of Air and Water Resources
N.C. Division of Archives and History
N.C. Wildlife Resources Commission
N.C. Legislature
Onslow County Health Department
Onslow County Soil and Water Conservation Dist.
Onslow County Historical Society
Onslow County Emergency Management Office
Holly Ridge Camp Davis Committee
U.S. Forest Service
U.S. Department of Defense/U.S. Navy
U.S. Congress

Production - Town Planning Board
Town Council
Onslow County Recreation Department
Onslow County Soil and Water Conservation Dist.
N.C. Wildlife Resources Commission
N.C. Legislature
U.S. Soil Conservation Service
U.S. Department of Defense/U.S. Navy
U.S. Congress

Development - Town Planning Board
Town Council
Holly Ridge Development Committee
Holly Ridge Camp Davis Committee
Holly Ridge Beautification Committee

U.S. Department of Defense/U.S. Navy
U.S. Congress

The involvement by the foregoing groups, particularly the planning board, will create a movement toward an ongoing revitalization effort, planning process and growth management agenda in Holly Ridge. It must be realized that the involvement must be well organized. Further, numerous plans and documents will be needed to aid in achieving a fully operational planning and revitalization effort by the town.

Summary

To fully realize the importance of the land use plan and the planning process will take years. This means leadership by the planning board and participation by the citizens of Holly Ridge must be continuous, as Town Boards come and go. It also means the willingness and commitment to achieve or work for the common good in an organized manner. In five years an assessment of how successful the Town of Holly Ridge has been will be made. It is hopeful that the citizens of the Town of Holly Ridge will be better off then than now.

VIII. AMENDING THE PLAN

Special and changing circumstances may sometime require a change in the land use plan. A certain policy or land classification may need an amendment to suit a peculiar situation within the Town of Holly Ridge or its extraterritorial jurisdiction. The land use plan may be amended as a whole by a single solution or in parts by successive resolutions. The successive solutions may address geographical sections, county divisions, or functional units of subjective matter. To change all or some part of the land use plan, the amendment process must be in accordance with a series of procedures. These include a local public hearing, a notice to the Coastal Resources Commission (CRC), and approval by the CRC.

A) Public Hearing

The land use plan may be amended only after a properly held public hearing. Notice of this hearing must appear at least 30 days prior to the date of the hearing and must list the date, time, place, and proposed action. This should be available for viewing at a particular office in the town hall and must appear at least once in the local newspaper. Copies of the proposed amendment should be made available at the time of the public hearing.

B) Notice to the Coastal Resources Commission

The local government proposing a land use plan amendment shall provide information to the executive secretary of the CRC. This information should include a notice of the public hearing, a copy of the proposed amendment, and the reasons for the amendment. This should be delivered to the executive secretary or his designee no less than 30 days prior to the public hearing.

C) Adoption Procedures

After the hearing, the locally approved amendments should be delivered to the executive secretary of the CRC in the form that they will appear in the land use plan. The CRC will review the changes at the first regular scheduled meeting held after the executive secretary has received notification of the amendment. After review of the changes, the CRC shall approve, disapprove, or conditionally approve the land use plan amendments. Should the amendments be disapproved, the CRC will provide an explanation of the reasons for its disapproval and offer suggestions as to how the amendment might be changed so approval could be granted. Final amendments to the text or maps shall be incorporated in context in the land use plan and shall be dated to indicate the date the amendment became final. The amended land use plan shall be maintained as required by G.S. 113A-110(g).

APPENDIX A

STORM HAZARD PLANNING AND MITIGATION

A) Introduction

All land use updates are required to mitigate and plan for storm hazards. Storm hazards are far more serious than commonly perceived, but previous storms are very vivid in the minds of many older coastal residents. In order to effectively plan for storm hazards and their periodic reoccurrence, a comprehensive approach is necessary. This involves combined efforts of the local planning board, the fire/rescue, law enforcement and the Onslow County Emergency Management Coordinator in the Emergency Operation Center.

There are numerous natural hazards but, due to many factors, only a few are likely to occur in Holly Ridge. Of particular concern for Holly Ridge is the potential for high winds such as hurricanes and tornados, and heavy rains bringing flooding of lowlying areas. Although Holly Ridge is located inland from coastal waters, flooding of small streams and poorly drained areas is not an unlikely phenomenon. In order to effectively plan for storm hazards and their periodic reoccurrence, a comprehensive approach is necessary. This involves the combined efforts of the local planning board and the Emergency Management Coordinator in the Emergency Operating Center of Onslow County.

There are typically four parts of a comprehensive emergency management plan. The four parts are defined as:

- 1) Mitigation - the activities which actually eliminate or reduce the probability or occurrence of a disaster caused by a hazardous event. It also includes land use planning and other long-term activities which reduce the effects of hazardous events.

- 2) Preparedness - the activities that are necessary when mitigation measures have not, or cannot, prevent disasters caused by a hazardous event. This involves the emergency management team to assist in saving lives and property and to enhance response operations.

- 3) Response - these activities follow an emergency or disaster. Of primary concern is emergency assistance to casualties. Also, the emergency management team seeks to reduce secondary damage and to speed recovery operations.

- 4) Recovery - these activities involve short and long term operations. In the short term, the emergency management team attempts to restore all systems to normal operation. This includes vital life supporting systems. In the long term, recovery involves return to life at normal or improved levels. This step should involve the local planning process.

In general, mitigation and long-term recovery require the town planning process, while preparedness, response and short-term recovery

fall within the responsibility of the Emergency Management Coordinator. Coordination between emergency management and the town planning officials is mandatory for a successful mitigation of hazards.

The Division of Coastal Management encourages local governments to focus on three phases of hazards planning. These include storm hazard mitigation, post-disaster recovery and evacuation plans. In storm hazard mitigation, it is recommended that an inventory of hazardous areas be completed. The intent of this inventory is to put into perspective the level of existing development within the hazardous areas. It is designed to inform local officials of what proportion of the population, housing, and county tax base may be subject to damage in the event of a disaster. Policies should be formulated to deal with redevelopment in the hazardous areas.

A post-disaster reconstruction plan is designed to operationalize clean-up procedures after the storm. This involves the immediate clean-up and plans for long-term redevelopment. A recovery task force should be established to schedule priorities for redevelopment. Repair and reconstruction guidelines should be established. This phase of the plan requires coordination of the local government and emergency management officials.

The local government is required to evaluate the adequacy of evacuation routes used in emergency situations. The routes should be critically assessed for their efficient use. If the required evacuation time exceeds the standard warning time as provided by the National Weather Service, officials should consider adopting policies which would improve the adequacy of the routes. This step may involve coordination with the Division of Emergency Management and the Department of Transportation.

B) Hazard Mitigation

The first step of hazard mitigation is to identify the frequency and magnitude of hazards in the town. The second step is to conduct a vulnerability analysis. Both of these steps have been accomplished by Onslow County. The third step includes general and specific measures for minimizing damage that is likely to occur. The general measures include, but are not limited to the following:

- 1) building code
- 2) zoning ordinance
- 3) tax incentive/disincentive
- 4) land use management
- 5) safety code
- 6) preventative health care
- 7) public education
- 8) building use regulations,
- 9) resource allocations, and
- 10) other rules and regulations

Most of the general measures involve adoption, compliance and enforcement by the the town. The role of the town board is leadership in the adoption process and coordination among the participating agencies. The planning board is also involved in the compliance and enforcement of the measures. The speciifc measures include, but are not limited to, the following:

1) Flood Measures

- a) Stream channelization
- b) Construction and protection of farm ponds, retention basins and reservoirs
- c) Reforestation and preventing deforestation
- d) Land conservation techniques such as contour plowing, grass waterways, plow/plant cultivation and cover crop plantation, and
- e) Flood-proof buildings

2) High Winds

- a) Roof anchors
- b) Window size and thickness codes
- c) Mobile home tiedowns
- d) Windbreaks
- e) Forest and farm management, and
- f) Real estate disclosure laws

3) Erosion

- a) Wetlands protection
- b) Swamp forest protection
- c) Construction and protection of breakwaters and levees,
- d) Public information programs

and

4) Preventative Health

- a) School innoculation
- b) Rodent/insect eradication
- c) Water purification
- d) Sanitary waste disposal
- e) Health codes/laws/inspections, and
- f) Public health education

Several of the specific measures are currently in operation in the county. Others are functioning, but need improvement. The county may

choose to incorporate the other measures into their current regulations.

Storm hazard mitigation requires coordination of many agencies for successful operation. A comprehensive effort is necessary to fully realize a mitigation plan and its relation to the overall emergency and county planning processes.

1) Identification of Hazard Areas

As mentioned before Holly Ridge does not have all of the hazards that many coastal areas have. This is due to the fact that the town is located on a ridge that is elevated above the nearby coastal areas and there are no large water bodies or major streams in the town. The two hazards that are most likely to affect the town are high winds and heavy rains, consequently a map showing these kinds of hazards would be inconsequential.

2) Risk of Damage in Hazard Areas

The level of damage to life and property in the town is considered to be relatively small. There is little chance of flooding in the town because of the topography. High winds and heavy rains from a hurricane could cause damage but the town is somewhat protected by being approximately ten miles from the ocean.

3) Estimated Severity of Possible Hazard Damage

The potential level of damage to life and property in the town is considered relatively small. The town would receive some wind damage from hurricanes powerful enough to be rated above a Force 3 on the Saffir/Simpson Hurricane Scale. These storms would have wind speeds in excess of 130 MPH.

It is likely that some roads could become flooded where they bridge streams or where culverts are located. It is also likely that the basements of the houses and businesses could be flooded. Generally, there are very few structures, if any, in Holly Ridge that would be flooded.

4) Anticipated Development in Hazard Areas

The town does not have any hazard areas and cannot be mapped.

5) Existing Hazard Mitigation Policies and Regulations

At the present time, the town building code and the existing land use plan contribute to mitigation policies of the town, but the Onslow County Disaster Relief and Assistance Plan is the major document to mitigate hazards. There are also state and federal regulations in effect in the county.

C) Post-Disaster Reconstruction Plan

A post-disaster plan will permit Holly Ridge to deal with the aftermath of storms in an organized and efficient manner. The plan provides the mechanisms, procedures, and policies that will enable the county to learn from its storm experiences and to rebuild in a wise and practical manner.

A post-disaster reconstruction plan encompasses three distinct reconstruction periods:

- a) The emergency period - the reconstruction phase immediately after a storm. The emphasis is on restoring public health and safety, assessing the nature and extent of storm damage, and qualifying for and obtaining whatever federal and state assistance might be available.
- b) The restoration period - the weeks and months following a storm disaster. The emphasis during this period is on restoring community facilities, utilities, and essential business so the town can return to normal activities.
- c) The replacement period - the period during which the community is rebuilt. The period could last from months to years depending on the nature and extent of the damages incurred.

It is important that local officials clearly understand the joint federal-state-local procedures for providing assistance to rebuild after a storm so that local damage assessment and reconstruction efforts are carried out in an efficient manner that qualifies the community for the different types of assistance that are available. The requirements are generally delineated in the Disaster Relief Act of 1974 (P.L. 93-288) which authorizes a wide range of financial and direct assistance to local communities and individuals. The sequence of procedures to be followed after a major storm event is as follows:

- a) Local damage assessment teams survey storm damage within the community.
- b) Damage information is compiled and summarized and the nature and extent of damage is reported to the North Carolina Division of Emergency Management (DEM).
- c) DEM compiles local data and makes recommendations to the Governor concerning state actions.
- d) The Governor may request a Presidential declaration of "emergency" or "major disaster". A Presidential declaration makes a variety of federal resources available to local communities and individuals.
- e) Federal relief assistance provided to a community after an "emergency" has been declared typically ends one month after the initial Presidential declaration. Where a "major disaster" has been declared, federal assistance for "emergency" work typically ends six months after the declaration and federal assistance for "permanent" work ends after 18 months.

Federal disaster assistance programs previously provided aid for communities to rebuild in the same way as existed before the disaster occurred. This policy tended to foster recurring mistakes. However, recent federal policy has started to change the emphasis of disaster assistance programs. Specifically, Executive Order 1108 (Floodplain Management) directs all federal agencies to avoid either directly or indirectly supporting future unwise development in floodplains, and Section 406 of the Disaster Relief Act can require communities, as a prerequisite for federal disaster assistance, to take specific actions to mitigate future flood losses. Holly Ridge has been provided a comprehensive listing of the federal disaster assistance programs that may be available following a major storm.

D) Organization of Local Damage Assessment Team

A local damage assessment team should be in place and include individuals who are qualified to give reliable estimate of the original value of structures, an estimated value of sustained damages and a description of the repairs. The logistics involved in assessing damage to Holly Ridge after a major storm will possibly necessitate the organization of several damage assessment teams. The Holly Ridge Disaster Relief and Assistance Plan is in place and provides the county with such teams.

The Emergency Management Coordinator should immediately undertake a recruitment effort to secure the necessary volunteers and to establish a training program to familiarize the members of the damage assessment team with required damage classification procedures and reporting requirements. It is suggested that Holly Ridge assume the responsibility for developing and implementing a training program for both county damage assessment teams and the town damage assessment team. In establishing the assessment teams, it might be very difficult to fill certain positions, because the services of some individuals will likely be in great demand after a storm disaster. The Emergency Management Coordinator should establish an active "Volunteer File" with standing instructions on where to report following a storm. Damage assessment forms and procedures should be prepared and distributed to volunteers as part of the training program.

E) Damage Assessment Procedures and Requirements

Damage assessment is defined as a rapid means of determining a realistic estimate of the amount of damage caused by a natural or manmade disaster. For a storm disaster, it is expressed in terms of: a) number of structures damaged, b) magnitude of damage by type of structure, c) estimated total dollar loss and f) estimated total dollar loss covered by insurance.

After a major storm event, members of the Damage Assessment Team should report for a briefing from the Emergency Management Coordinator. In Holly Ridge the Emergency Management Coordinator should establish field reconnaissance priorities according to the extent of damage and where landfall occurred. Because of the potentially large job at hand, the limited personnel resources available to conduct the assessments, and the limited time within which the initial assessment must be made, the first phase of the assessment should consist of only an external visual survey of damaged structures. A more detailed second phase assessment can be made after the initial damage reports are filed.

The initial damage assessment should make an estimate of the extent of damage incurred by each structure and identify the cause such as wind, flooding, or wave action of the damage to each structure. This first phase assessment should be made by a "windshield" survey.

Damaged structures should be classified in accordance with the suggested State guidelines as follows:

- a) Destroyed (repairs would cost more than 80 percent of value).
- b) Major (repairs would cost more than thirty percent of the value).
- c) Minor (repairs would cost less than thirty percent of the value, but the structure is currently uninhabitable).
- d) Habitable (some minor damage, with repairs less than fifteen percent of the value).

It will be necessary to thoroughly document each assessment. In many cases, mail boxes and other information typically used to identify specific structures will not be found. Consequently, the damage assessment team must be provided with tax maps, (aerial photographs with property line overlays) other maps and photographic equipment in order to record and document its field observations. Enough information to complete the damage assessment worksheet must be obtained on each damaged structure.

The second phase of the damage assessment operation will be to estimate the value of the damages sustained. This operation should be carried out under the direction and supervision of the Emergency Management Coordinator. This team should be incorporated into the plan. In order to estimate total damage values it will be necessary to have the following information available for use at the Emergency Management Office:

- a) A set of property tax maps (including aerial photographs) identical to those utilized by the damage assessment field team.
- b) County maps delineating areas assigned to each team.
- c) Copies of all county property tax records.

In order to produce the damage value information required, the following methodology is recommended:

- a) The number of businesses and residential structures that have been damaged within Holly Ridge should be summarized by damage

classification category.

b) The value of each damaged structure should be obtained from the marked set of tax maps and multiplied by the following percentages for appropriate damage classification category:

- i) Destroyed - 100%
- ii) Major Damage - 50%
- iii) Minor Damage (uninhabitable) - 25%
- iv) Habitable - 10%

c) The total value of damages for the unincorporated areas of the town should then be summarized.

d) The estimated value loss covered by hazard insurance should then be determined.

e) Damaged assessment reports should be obtained and the data should then be consolidated into the single county damage assessment report which should be forwarded to the appropriate state officials.

f) Damage to public roads and utility systems should be estimated by utilizing current construction costs for facilities by lineal foot.

The damage assessment is intended to be the mechanism for estimating overall property damage in the event of a storm disaster. The procedure recommended above represents an approach for making a relatively quick, realistic damage estimate after a storm. Damage assessment is provided for in the Holly Ridge Damage Relief and Assistance Plan.

F) Organization of Recovery Operations

Damage assessment operations as provided in the county disaster plan are oriented to take place during the emergency period. After the emergency operations to restore public health and safety and the initial damage assessments are completed, the guidelines suggest that a recovery task force to guide restoration and reconstruction activities during a post-emergency phase which could last from weeks to possibly more than a year. The responsibilities of the recovery task force will be:

- 1) Establishing an overall restoration schedule.
- 2) Setting restoration priorities, in advance, by definition.
- 3) Determining requirements for outside assistance and requesting such assistance when beyond local capabilities.
- 4) Keeping the public informed.
- 5) Keeping the appropriate State officials informed using situation and damage reports.
- 6) Assembling and maintaining records of actions taken and expenditures and obligations incurred.
- 7) Proclaiming a local "state of emergency" if warranted.
- 8) Commencing cleanup, debris removal and utility restoration activities which would include coordination of restoration activities undertaken by private utility companies.
- 9) Undertaking repair and restoration of essential public facilities and services in accordance with priorities developed through the situation evaluations.
- 10) Assisting private businesses and individual property owners

in:

- a) obtaining information on the various types of assistance that might be available from federal and state agencies.
- b) in understanding the various assistance programs, and
- c) applying for such assistance. When a major storm does eventually hit Holly Ridge and major damages occur, consideration should be given to establishing an assistance team to carry out the above functions as long as there is a need to do so.

A sequence and schedule for undertaking local reconstruction and restoration activities is presented. The schedule was deliberately left vague because specific reconstruction needs will not be known until after a storm hits and the magnitude of the damage can be assessed.

G) Reconstruction Operations

The Holly Ridge Reconstruction Task Force should be the following individuals:

- 1) Town Manager
- 2) Holly Ridge Town Clerk
- 3) Chief County Tax Appraiser
- 4) County Finance Director
- 5) Town Building Inspector

H) Temporary Development Moratorium

Under certain circumstances, interim development moratoriums can be used in order to give a local government time to assess damages, to make sound decisions and to learn from its storm experiences. Such a moratorium must be temporary and it must be reasonably related to the public health, safety and welfare.

It is not possible to determine prior to a storm whether a temporary development moratorium will be needed. Such a measure should only be used if damage in a particular area is very serious and if redevelopment of the area in the same manner as previously existed would submit the residents of the area to similar public health and safety problems. The town's policy regarding the proclamation of temporary development moratoriums shall be to:

Require the Onslow County Emergency Management Office to assess whether a Temporary Development Moratorium is needed within one week after the damage assessment process is completed. Such an assessment should clearly document why such a moratorium is needed, delineate the specific uses that would be affected by the moratorium, propose a specific schedule of activities and actions that will be taken during the moratorium period, and establish a specific time period during which the

moratorium will be in effect.

I) Adequacy of the Onslow Disaster Relief Plan

The purpose of the Disaster Relief Plan is to prevent or lessen the effect of disasters on the people and property in Holly Ridge. The plan for Onslow County adopted in 1983, of which Holly Ridge is a part, is considered adequate in its intent, scope and composition, in so far as Holly Ridge is concerned.

J) Adequacy of the Onslow County Hurricane Evacuation Plan

The purpose of the evacuation plan for Onslow County is to provide for an orderly and coordinated evacuation to minimize the effects of hurricanes on residents and visitors. The plan's scope, organization, concept of operation, warning and alert system, increased readiness action checklist, evacuation areas, routes and shelter location, reentry procedures, responsibility groups, communications and public information activities, are considered adequate. It must be realized, however, that this is a plan for Onslow County as a whole, and not a specific plan for Holly Ridge. Further, it is a plan for local use and not a plan to shelter an excessive number of visitors or evacuees from other areas.

APPENDIX B

STATE AND FEDERAL DEVELOPMENT REGULATING AGENCIES

I) State Level

A) Department of Natural Resources and Community Development (DNRCD)

-permits to discharge surface waters or operate wastewater treatment plants or oil discharge permits; NPDES permits (G.S. 143-215)

1) Division of Coastal Management

-permits to dredge and/or fill in estuarine waters, tidelands, etc (G.S. 113-229).

-permits to undertake development in Areas of Environmental Concern (G.S. 113A-118).

2) Division of Land Resources

-permits to alter or construct a dam (G.S. 143-215.66).

-permits to mine (G.S. 74-51).

-permits to drill exploratory oil or gas wells (G.S. 113-381).

-permits to conduct geographical exploration (G.S. 113-391)

-sedimentation erosion control plans for any land-disturbing activity over one acre (G.S. 113A-54).

3) Division of Environmental Management

-permits for septic tanks with a capacity over 3,000 gallons/day (G.S. 143-215.3).

-permits for withdrawals of surface or ground waters in capacity use areas (G.S. 143-215.15).

-permits for air pollution abatement facilities and sources (G.S. 143-215.108).

-permits for construction of complex sources; e.g. parking lots, subdivisions, stadiums, etc. (G.S. 143-215.109).

-permits for construction of a well over 100,000 gallons/day (G.S. 87-88).

4) Secretary of NRCD

-permits to construct an oil refinery

B) Department of Administration

- easements to fill where lands are proposed to be raised above the normal high water mark of navigable waters by filling (G.S. 146.6c)

C) Department of Human Resources

- approval to operate a solid waste disposal site or facility (G.S. 130-166.16).

- approval for construction of any public water supply facility that furnishes water to ten or more residences (G.S. 130-160.1).

II) Federal Level

A) U.S. Army Corps of Engineers

- permits that are required under Section 9 and 10 of the Rivers and Harbors Act of 1899; permits to construct in navigable waters.

- permits that are required under Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972

- permits that are required under Section 404 of the Federal Water Pollution Control Act of 1972; permits to undertake dredging and/or filling activities.

B) U.S. Coast Guard

- permits for bridges, causeways, pipelines over navigable waters; required under the General Bridge Act of 1946 and the Rivers and Harbors Act of 1899.

- deep water port permits.

C) Department of the Interior Geological Survey Bureau of Land Management

- permits required for off-shore drilling.

- approvals of OCS pipeline corridor rights-of-way.

D) Nuclear Regulatory Commission

- licenses for siting, construction and operation of nuclear power plants; required under the Atomic Energy Act of 1954 and Title II of the Energy Reorganization Act of 1974.

E) Federal Energy Regulatory Commission

- permits for construction, operation and maintenance of interstate pipelines facilities required under the Natural Gas Act of 1938.

- orders of interconnection of electric transmission facilities under Section 202 (b) of the Federal Power Act.

- permission required for abandonment of natural gas pipeline and associated facilities under Section 7C (b) of the Natural Gas Act of 1938.

