

ONSLOW COUNTY LAND USE PLAN

1986 UPDATE

COASTAL ZONE
INFORMATION CENTER

PREPARED BY:

TALBERT, COX & ASSOCIATES, INC.

HD 211. N8 O57 1987

HD
211
.N8
O57
1987

OPTION : FEBRUARY 16, 1987

IFICATION : MARCH 27, 1987

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.

1986

ONSLow COUNTY
LAND USE PLAN UPDATE

Prepared By

ONSLow COUNTY PLANNING BOARD

and

ONSLow COUNTY BOARD OF COMMISSIONERS

Assistance By

TALBERT, COX & ASSOCIATES, INC.

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

Local Adoption: February 16, 1987
CRC Certification: March 27, 1987

TABLE OF CONTENTS

1986 Land Use Plan Update
for Onslow County

	<u>PAGE</u>
I. DATA COLLECTION AND ANALYSIS	
A. Information Base (Effectiveness of Previous Policies)	1
B. Present Conditions	2
1. Present Population and Economy	4
2. Existing Land Use	14
a. Significant Land Use Compatibility Problems	17
b. Major Problems Resulting from Unplanned Development	18
c. Areas Experiencing or Likely to Experience Changes in Predominant Land Use	18
3. Current Plans, Policies, and Regulations	20
a. List and Summary of Existing Plans	
(1) Transportation Plan	20
(2) Community Facilities Plan	20
(3) Utilities Extension Policies	20
(4) Open Space and Recreation Policies	21
(5) Prior Land Use Plans and Policies	21
(6) County Disaster Relief Plan	21
b. List and Brief Description of Enforcement	
(1) Zoning	21
(2) Subdivision Regulations	22
(3) Flooding	22
(4) Building	22
(5) Septic Tanks	22
(6) Historic District	22
(7) Nuisance	22
(8) Dune Protection	22
(9) Sedimentation	23
(10) Environmental Impact Ordinance	23
C. Constraints - Land Suitability	
1. Physical Limitations for Development	24
a. Hazard Areas, Including Man-Made Hazards	24
b. Areas with Soil Limitations	24

	<u>PAGE</u>
(1) Hazards for Foundations	28
(2) Shallow Soils	28
(3) Poorly Drained Soils and Limitations for Septic Tanks	28
c. Water Supply	30
d. 12% Slopes	31
2. Fragile Areas	31
a. Coastal Wetlands	31
b. Sand Dunes	32
c. Ocean Beaches and Shorelines	32
d. Estuarine Waters and Estuarine Shorelines	33
e. Public Trust Waters	34
f. Complex Natural Areas	34
g. Areas that Sustain Remnant Species	35
h. Unique Geologic Formations	35
i. Registered Natural Landmarks	35
j. Wooded Swamps	35
k. Prime Wildlife Habitat	37
l. Scenic and Prominant High Points	37
m. Archaeologic and Historic Sites	37
3. Areas with Resource Potential	38
a. Productive and Unique Agricultural Lands	38
b. Potentially Valuable Mineral Sites	39
c. Publicly-Owned Forests, Parks, Fish and Gamelands	39
d. Prime Farmland	40
D. Constraints - Capacity of Community Facilities	41
1. Existing Water and Sewer	41
2. Design Capacity for Water Treatment, Sewage Treatment Plant, Schools, Landfill and Primary Roads	42
3. Level of Utilization and Capacity for Water System, Sewage System, Schools, Landfill and Primary Roads	43
E. Estimated Demand	48
1. Population and Economy	48
a. Seasonal Population	48
b. Local Objectives Concerning Growth	49
c. Forseeable Social and Economic Change	49

	<u>PAGE</u>
2. Future Land Need	49
3. Community Facilities Demand	49
 II. POLICY STATEMENTS	
A. Resource Protection	51
1. Areas of Environmental Concern	51
a. Coastal Wetlands	51
b. Estuarine Waters and Estuarine Shorelines	52
c. Public Trust Areas	52
d. Archaeological Sites	53
e. Ocean Hazard Areas	53
2. Hazardous and Fragile Land Areas	
a. Freshwater Swamps	53a
b. Marshes	53a
c. Maritime Forests	53a
d. Cultural & Historic Resources	53a
e. Man-made Hazards	54
f. Hurricane & Flood Evacuation Needs	54
g. Protection of Potable Water Supply	54
h. Use of Package Treatment Plants for Sewage Treatment Disposal	54
i. Storm Water Runoff from Agriculture, Residential Development, Phosphate or Peat Mining and Their Impact on Coastal Wetlands, Surface Waters or Other Fragile Areas	54
j. Marina and Floating Home Development	55
k. Industrial Impacts on Fragile Areas	55
l. Development of Sound and Estuarine System Islands	55
B. Resource Production and Management	56
Policy Statement on:	
1. Productive Agricultural Lands (Executive Order #96)	56
2. Commercial Forestlands	56
3. Existing and Potential Mineral Production Areas	57
4. Commercial and Recreational Fisheries, Including Nursery and Habitat Areas	57
5. Off-Road Vehicles	57
6. Residential and Commercial Land Development	57
7. Peat and Phosphate Mining and Industrial Impacts on Resources	57

	<u>PAGE</u>
C. Economic and Community Development	59
1. Types and Locations of Industries Desired	59
2. Local Commitment to Provide Services to Development	60
3. Types of Urban Growth Patterns Desired - Redevelopment of Developed Areas	61
4. Commitment to State and Federal Programs Include Erosion Control, Public Access, Highway Improvements, Port Facilities, Dredging Military Facilities	62
5. Assistance to Channel Maintenance and Beach Nourishment Projects, Including Provision of Borrow and Spoil Areas, Provision of Easement for Work	63
6. Energy Facility Siting and Development	64
7. Tourism and Beach and Waterfront Access	64
8. Coastal and Estuarine Water Beach Access	64
9. Anticipated Residential Development, Densities, location, Units Per Acre and Services Necessary to Support Development	65
10. Beach Area Development Policy	66
11. Clean County Committee	67
12. Mobile Home Ordinance	68
D. Storm Hazard Mitigation	69
1. Hazard Map	69
2. Existing Land Uses and Structures in Hazard Areas (portion of tax base subject to damage)	69
3. Monetary Value of Structures in Hazard Area	69
4. Hazard Mitigation Policy	69
Hurricane Damage Assessment and Reconstruction Plan	70
III. LAND CLASSIFICATION	90
A. Developed	91
B. Transition	91
C. Community	92
D. Rural	92
E. Conservation	92
IV. RELATIONSHIP OF POLICIES AND LAND CLASSIFICATION	96
V. INTERGOVERNMENTAL COORDINATION AND IMPLEMENTATION	98
VI. PUBLIC PARTICIPATION	98

APPENDIX

Public Information Meeting Notices
Beach Access Article
Department of Transportation Improvements List
Advanced Population Estimates
Commission Candidates' Ideas on Land Use Issues
Corps of Engineers Letter (Reference Wetlands)
1981 Land Use Plan Policies in Implementation of Goals
and Policies

TABLES

	<u>Page No.</u>	
Table 1	Onslow County Population Growth	4
Table 2	Population by Township	4
Table 3	Onslow County Population Change by Age Group Between 1970 and 1980	5
Table 4	Urban and Rural Population	7
Table 5	Population Density and Land Area	7
Table 6	Number of Households and Persons per Household	7
Table 7	Employment by Industry	8
Table 8	Acres of Harvested Cropland Estimated Income	9
Table 9	Fishing Industry Pounds Caught/Value	9
Table 10	Forestry, 1983	10
Table 11	Tourism Income	10
Table 12	Gross Retail Sales	11
Table 13	Per Capita Personal Income	12
Table 14	Soil Limitations	25
Table 15	Onslow County Water System	30
Table 16	Onslow County School Capacity	45
Table 17	Future Population Projections	47

MAPS

	<u>Page No.</u>
Population Change, 1970-1980	3
Land Area Not Available for Development	13
New Subdivision Locations Since 1984	16
General Soil Maps	27
Good Agricultural Land Map	27a
Prime Wildlife Areas	36
Existing School Sites	46
Beach Area Development Policy for Onslow Beach	66a
Existing Land Use Map (Attached)	
Composite Hazards Map (Attached)	
Land Classification Map (Attached)	

ONslow COUNTY LAND USE PLAN UPDATE

1986-1987

Policy Changes Between the 1981 Plan and 1986 Plan Update

The following represents changes in policy between the 1981 and 1986 plans or improved means for implementation of policies that were outlined in the 1981 plan with implementation policy in the 1986 plan.

<u>1981 Plan</u>	<u>1986 Plan</u>
Page 81: Growth of Onslow County	Page 66a: Beach Development
Allow development to occur in an orderly manner and establish a Land Use Plan by which development proposals may be reviewed for consistency.	Page 66a of the Plan Update contains a graphic and verbal policy on beach development which can be used to review development for consistency as recommended in the 1981 Plan.
Page 82: Estuarine Shoreline Development	Page 55
Future development should be compatible with the nature and the values of the estuarine system.	A density of 3-4 units per acre would be permitted only if all local, state, and federal regulations are met and a minimum of impervious surfaces is used.
1981 Plan did not address marine and floating home development.	Page 55
	Onslow County supports the development of marines, in compliance with applicable CAMA regulations. Floating home development has not taken place in the County, and because of potential damage to water quality, the County will not encourage floating home development.
Page 88: Residential Development	Page 68: Mobile Home Ordinance
Policy is to encourage the development of various housing types (such as mobile home parks, PUD's, apartments conventional homes) in proper location.	County policy will be to work toward the adoption of a mobile home park ordinance.

LAND CLASSIFICATION MAP

1981 Plan

Page 97: Rural Classification

The 1981 Plan was amended to provide a point system to allow residential development, provided a total of 50 points can be accumulated through a point system.

(See pages 97-98 of 1981 Plan for details of system.)

1986 Plan

Page 94

The 1986 Plan has included much of the County in high density transition and lower density transition, which permits residential development to eliminate the need for the point system used in the 1981 Plan.

DATA COLLECTION AND ANALYSIS

ONslow COUNTY LAND USE PLAN

A. INFORMATION BASE

The 1986 Land Use Plan Update for Onslow County has been prepared in accordance with requirements of the North Carolina Coastal Area Management Act (CAMA). Specifically, this document complies with Subchapter 7B, "Land Use Planning Guidelines," of the North Carolina Administrative Code, effective July 17, 1985.

The initial Land Use Plan was prepared for Onslow County in 1976, and the first update in 1981. According to the Land Use Planning Guidelines, the major purpose of periodic updating of local land use plans is to identify and analyze newly emerging community issues and problems. An additional element which was not required in either the 1976 Plan or the 1981 Update is a "Storm Hazard Mitigation, Post-Disaster Recovery, and Hurricane Evacuation Plan," and is required to be included in the 1986 Update. This element is designed to help local governments coordinate effective policies and actions relating to the impact of hurricanes or other severe storms.

The guidelines further give the following objectives the update should meet:

- to further define and refine local policies and issues;
- to further examine and refine the land classification system and the land classification map;
- to assess the effectiveness of the existing land use plan and its implementation;
- to further explore implementation procedures, and;
- to promote a better understanding of the land use planning process.

Both the 1976 Land Use Plan and the 1981 Update provided much of the needed information base for this update. However, in many cases, new information had to be developed or has become available since the 1981 Plan was completed. A number of data sources were used during the preparation of this plan to prepare updated analyses of population, housing, economics, (including agriculture, fisheries, and forestry), and existing land uses. Most of the data came from primary and secondary sources in the form of direct contacts with representatives of various state and federal agencies and/or previously published documents or reports. Also, "windshield" surveys were conducted to obtain data on existing land use patterns. Interviews were conducted with various County officials, and extensive effort was made before beginning the planning process to obtain citizen input on issues of local concern.

B. PRESENT CONDITIONS BACKGROUND

In preparing background information on Land Use and Economic Conditions for Onslow County, it was apparent that if current trends continue, Onslow County will continue to experience population and economic growth. Current land use patterns have been and will likely continue to be influenced by access to major thoroughfares, ease of access to Camp Lejeune which is a major employer in the area and access to the County water system. Also, the seasonal and permanent population of areas like West Onslow Beach, Sneads Ferry, Chadwick Acres, and the Queens Creek areas near Swansboro will continue to experience substantial growth because of waterfront access and ease of access to Camp Lejeune.

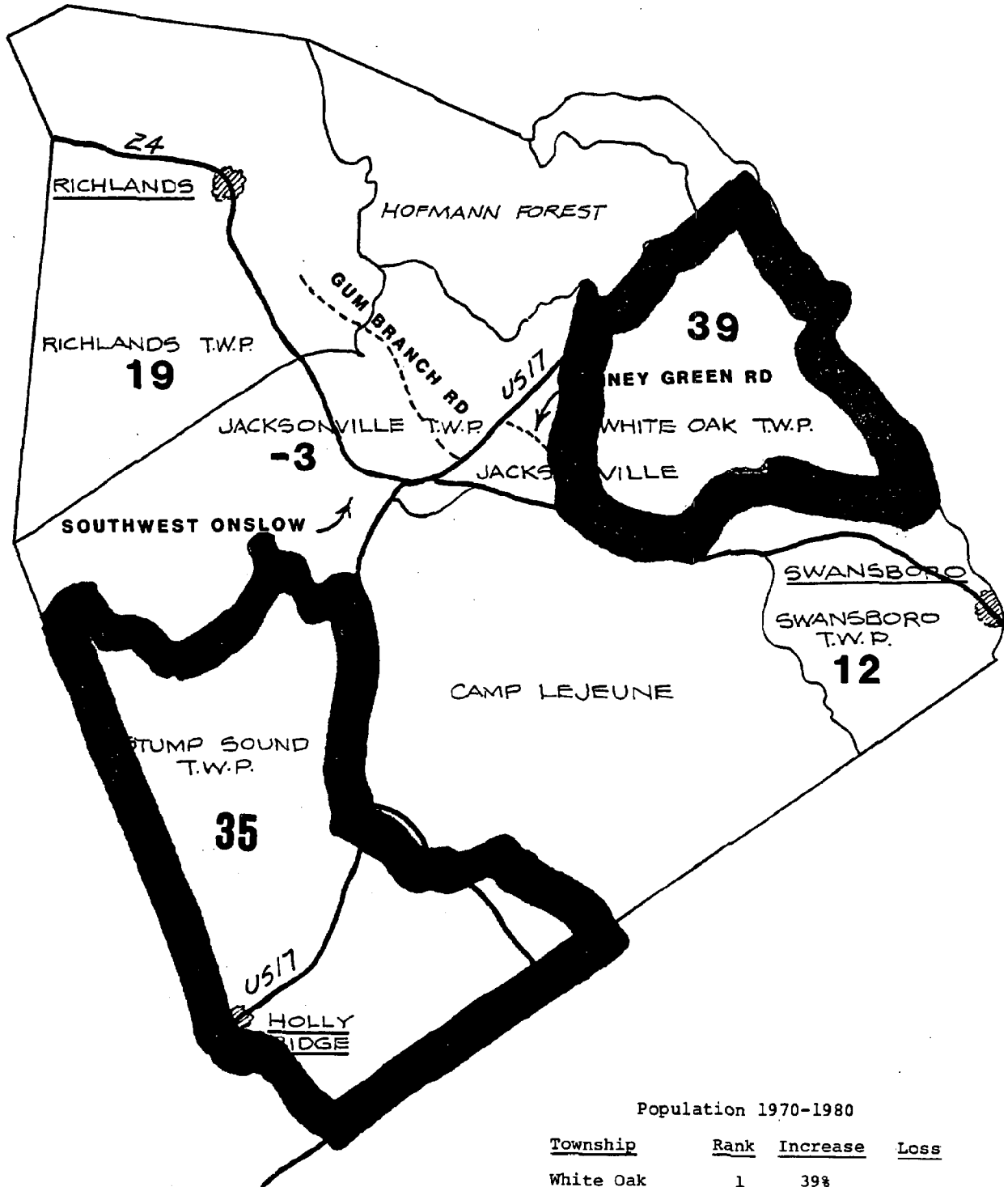
Waterfront property or property adjacent to the County's extensive estuarine system is in demand for development. The County would encourage development of these areas as the market justifies, as long as future developments are sensitive to this extensive estuarine system and meet applicable federal and state regulations.

Areas such as Southwest Onslow, Gum Branch Road and Piney Green Road have been and will most likely continue to experience substantial growth due to the geographic relationship of these areas to the City of Jacksonville and entrance gates serving Camp Lejeune. As shown on the General Land Use Map, several features such as the Camp Lejeune base, the Great Sandy Run Pocosin, a portion of which may be purchased for Camp Lejeune expansion, Hofmann Forest and Hammock State Park take up over 50% of the County's total land area. These large land areas restrict development to those areas of the County remaining and as discussed earlier. The remaining areas of the County, outside the County's four municipalities, is made up primarily of agricultural land, forested areas, residential and commercial development located along the County's primary and secondary highway systems. Natural features such as poor soil conditions and flood hazard areas, "A-zone," further restricts the areas available in the County for development.

Onslow County's economy is made up of, primarily, service business, retail business, and construction. Although the County does have some industry, work is being done by a full-time Director of the Economic Development Commission to encourage more industry. Currently, most of the job opportunities are at Camp Lejeune, or in businesses that provide sales and services to residences as well as visitors to the area. Commercial fishing, agricultural, and forestry provide job opportunities for Onslow citizens, but on a relatively small scale. The seasonal population and related businesses should continue to expand with the extensive development now taking place or being planned for the West Onslow Beach area.

TOWNSHIP MAP

Population Change 1970-1980



Population 1970-1980

<u>Township</u>	<u>Rank</u>	<u>Increase</u>	<u>Loss</u>
White Oak	1	39%	
Stump Sound	2	35%	
Richlands	3	19%	
Swansboro	4	12%	
Jacksonville	5		-3

1. Present Population and Economy

The most current population information for Onslow County is the 1980 Census data and the North Carolina Office of State Budget and Management estimates for 1985. As shown in the 1981 Land Use Plan, Onslow County had the following population in 1980 based on Census information.

Table 1: Onslow County Population Growth

	<u>Population</u>	<u>% Increase</u>
1930	15,289	17.0
1940	17,939	17.0
1950	42,047	134.0
1960	86,208	105.0
1970	103,126	20.0
1980	112,784	9.0
*1985	124,987	10.8% (5 years)

Source: 1980 U.S. Bureau of the Census

*July 1, 1985 N.C. Office of State Budget and Management

As shown on Table I, Onslow County continues to experience a steady rate of growth based on 1985 population projections, and this trend will most likely continue.

Table II below reflects population changes by township for 1960, 1970, and 1980.

Table 2: Population by Township

<u>Township</u>	<u>1960</u>	<u>1970</u>	<u>% Change</u>	<u>1980</u>	<u>% Change</u>
Jacksonville	40,834	55,737	36	54,111	- 3
Richlands	7,331	7,572	3	9,006	19
Stump Sound	5,486	5,545	1	7,500	35
Swansboro	21,678	20,800	- 4	23,380	12
White Oak	10,879	13,472	24	18,787	39
Total	86,208	103,126	20	112,784	9

Source: U.S. Bureau of the Census

As shown in Table II, between 1960 and 1970, Jacksonville experienced the largest increase in population during that period. However, between 1970 and 1980, the 1980 Census information showed that Jacksonville Township lost population. This census figure is questioned by local officials. Between 1960 and 1970, the White Oak Township area was experiencing the second fastest growth rate, and the 1980 Census information indicates that this growth trend

continues in this Township. Specifically, between 1960 and 1980, the Township has nearly doubled in population from 10,879 people in 1960 to 18,787 people in 1980. Much of this growth may be due to the relationship of this area to Jacksonville and gate access points at Camp Lejeune. During this same 10-year period, between 1970 and 1980, the Stump Sound, southeast of Jacksonville, has grown from 5,545 people in 1970 to 7,500 people in 1980, which represents a 35% increase in population during the 10-year period. Much of this growth appears to be concentrating in the Sneads Ferry area between U.S. 17 and Onslow Beach. Because of easy access to Jacksonville, major highways, beaches, and availability of County water, the Stump Sound, White Oak, and Swansboro Townships will probably continue to experience increases in population during the planning period. Richlands Township is a more rural part of the County with a 19% increase in population between 1970 and 1980.

Table 3: Onslow County Population Change by Age Group
Between 1970 and 1980

<u>Age Group</u>	<u>1970</u>	<u>1980</u>	<u>Increase/ Decrease in Population</u>	<u>Percent Change</u>
Under 5	9,609	10,282	673	+ 7.0
5-14	18,037	14,802	-3,235	- 17.9
15-24	42,927	43,715	788	+ 1.8
25-34	12,927	17,849	4,922	+ 38.0
35-44	8,672	9,857	1,185	+ 13.7
45-54	5,368	7,111	1,743	+ 32.5
55-64	3,182	5,020	1,838	+ 57.8
65 & over	<u>2,404</u>	<u>4,746</u>	<u>2,342</u>	+ 97.4
Total	103,126	113,382	10,256	

Table 3 reflects the fact that between 1970 and 1980, the 65 and over age group experienced the largest percentage increase in population, from 2,404 in 1970 to 4,746 in 1980, which represents an increase of 2,342 people or a 97.4% increase. The 55-64 age group experienced the second largest percentage of growth, with 57.8%. This increase is indicative of national trends which reflect the aging of Americans, and this trend will most likely continue in Onslow County as more people find this area an attractive area for retirement and the aging of those citizens that remain in Onslow County.

Table 3 shows the 25-34 age group as the fourth fastest growing age group in the County; specifically, from 12,927 in 1970 to 17,849 in 1980, which is a 38.0% increase over this 10-year period. This expanding age group will continue to have a positive affect on the local economy with the establishment of new households and related purchases of needed goods and services.

The 5-14 age group is the only age group that decreased in population between 1970 and 1980. This decrease may reflect the national trend to marry at a later age and reduced family size.

Table 4 shows how the County continues to shift from a rural county (81.8% rural in 1950, 35.4% rural in 1980). In 1950, the County was 18.2% urban, while in 1980, the County was 64.6% urban, with much of the urban-type growth taking place near Jacksonville and along the major highway corridors, such as 24, 258, and U.S. 17.

Table 5 shows that the population density in 1960 was 114 people per square mile, with 148 people by 1980. Although the population density is increasing, it is still relatively low when you compare this density to New Hanover County, which has the third highest density in the State, with a 1983 density of 589.7 people per square mile.

Table 6 shows a substantial increase in the number of households established between 1970 and 1980, while at the same time, the number of persons per household is dropping. Specifically, during the 10-year period, 7,546 new households were established in the County.

In summary, the County has been and will most likely continue to grow in population. If current trends continue, more and more of the population will concentrate in urban type areas and fewer in rural areas. Because of job opportunities in Jacksonville and Camp Lejeune, many of the younger age groups will locate in areas such as Stump Sound, White Oak and Jacksonville Townships. The older age groups will most likely continue to settle in or near Swansboro and Stump Sound with access to beach areas and waterfront access.

TABLE 4
 ONSLOW COUNTY, NORTH CAROLINA
 % OF URBAN AND RURAL POPULATION

	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>
Urban	18.2	20.5	57.5	64.6
Rural	81.8	79.5	42.5	35.4

Source: State Government Statistical Abstract, Fifth Edition, 1984, North Carolina

TABLE 5
 ONSLOW COUNTY, NORTH CAROLINA
 POPULATION DENSITY AND LAND AREA

	<u>1960</u>	<u>1970</u>	<u>1980</u>
Land Area in Square Miles			
	763	114	135
			148

Source: State Government Statistical Abstract, Fifth Edition, 1984, North Carolina

TABLE 6
 ONSLOW COUNTY, NORTH CAROLINA
 NUMBER OF HOUSEHOLDS AND PERSONS PER HOUSEHOLD

	<u>1960</u>	<u>1970</u>	<u>1980</u>
Number of Households	17,185	22,761	30,307
Persons Per Household	3.82	3.40	2.96

Source: State Government Statistical Abstract, Fifth Edition, 1984, North Carolina

EXISTING ECONOMY

The 1981 Land Use Plan briefly discussed the fact that Onslow County had at that time a very stable economy, which was attributed to the presence of Camp Lejeune, new industries, and thriving seafood businesses. As in 1981, Camp Lejeune personnel and civilian jobs available there have a very positive effect on the Onslow County economy. As discussed earlier, Onslow County has a service and tourism economy, with many jobs being created to provide services or sell products to local and visiting purchasers of goods and services; however, the local economy is shifting from agriculture and fishing to more of a retail and tourist economy, as shown in the following table:

Table 7: Employment of Persons 16 Years Old or Older by Industry 1980, Onslow County, North Carolina

6,986	Wholesale and Retail Trade
3,454	Manufacturing
2,829	Public Administration
2,355	Educational Services
2,301	Finance, Insurance, Real Estate, Business and Repair Services
2,173	Construction
1,825	Transportation, Communications, Other Public Utilities
1,361	Personnel, Entertainment and Recreational Services
1,317	Health Services
800	Agriculture, Forestry, Fishing and Mining
761	Other Professional and Related Services

Source: 1984 Profile of North Carolina Counties

As Table 7 shows, in 1980, nearly 7,000 jobs in Onslow County were in wholesale and retail trades, with nearly 3,500 jobs in manufacturing. Service industries, such as finance, insurance, real estate, business and repair services, and construction represented another 4,400 jobs, while agriculture, forestry, fishing, and mining represented only 800 jobs in 1980.

Table 8: Acres of Harvested Cropland and Estimated Farm Income

	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
Acres of Harvested Crop Land	51,500	55,300	50,000	44,300	44,900
Estimated Farm Income	28,859,000	33,811,000	32,974,000	32,376,000	32,340,000

Source: Fifth Edition 1984 North Carolina State Government Statistical Abstract

When we look at the acres of harvested cropland and estimated farm income between 1980 and 1984 on Table 8, we see that acres harvested have been reduced by 6,600 acres, while farm income for the same period increased from \$28,859,000 in 1980 to \$32,340,000 in 1984. Although agriculture remains a very important part of the Onslow economy, Table 8 shows that this part of the economy is not growing as are other areas of the economy, such as retail sales and tourism expenditures. Like agriculture, the fishing industry and forestry continue to provide job opportunities and have a positive impact on the economy. However, as shown in Tables 9 and 10 and as reflected in Table 7, few local jobs are provided by these industries and a relatively small amount of income is generated in each area.

Table 9: Fishing Industry in Onslow County - Pounds Caught/Value

<u>Year</u>	<u>Pounds</u>	<u>Value</u>
1980	4,092,464	\$3,385,907
1981	2,377,552	1,993,147
1982	4,078,931	4,346,447
1983	2,995,544	3,005,742
1984	2,829,568	3,217,880
1985	3,039,006	2,905,366

Source: Division of Marine Fisheries

Note: Higher percentage of shellfish in total pounds caught produces higher value

Source: N.C. Marine Fisheries

Specifically, Table 9 shows that the pounds caught and value of fish caught between 1980 and 1985 have decreased. In 1980, 4,092,464 pounds, worth \$3,385,907, were caught; while in 1985, 3,039,006 pounds were caught, with a value of \$2,905,366. This represents a reduction of over 1,053,000 pounds caught and over \$519,000 less value during this five-year period.

Although these dollar amounts appear to be relatively small compared to other sections of the economy such as retail sales, the fishing industry, both commercial and recreational fishing, is a very special and important part of the local character and economy of Onslow County and continues to provide job opportunities.

Table 10: Onslow County Forestry, 1983

Estimated Value to Land Owner *(Includes Public and Private Land)	\$3,016,000
Value of Logs Delivered to **Point of Manufacturing	\$6,052,000

Source: *Commodity Survey from N.C. Division of Forest Resources
**Stump Value Composite, Division of Forest Resources

Based on 1983 figures, Onslow County owners of timberland, both public and private, received an estimated \$3,016,000 for cut timber, which generated a value of logs delivered to private manufacturers of \$6,052,000. Again, this segment of the economy is very important, but like agriculture and fishing, few jobs are created, with a relatively small impact on the local economy compared to areas such as retail sales and tourism.

Table 11: Onslow County Tourism Income, 1980-1985

1975*	\$14,983,000
1979*	20,493,000
1980	30,027,000
1981	29,984,000
1982	31,208,000
1983	32,117,000
1984	43,624,000
1985	41,564,000

*1981 Land Use Plan

Source: N.C. Travel and Tourism Division, Department of Commerce

As shown in Table 11, one of the fastest growing segments of the economy is tourism. The 1981 Land Use Plan showed the County receiving \$14,983,000 in tourism income in 1975, with \$20,493,000 in 1979. From 1980 to 1985, Onslow County's tourism income increased from \$30,027,000 to \$41,564,000, which represents a 38.4% increase during the five-year period. With excellent public beach access, existing and proposed beach front and sound front development and improved access from the Piedmont scheduled for completion during the planning period, this segment of the economy will most likely continue to expand.

Table 12: Gross Retail Sales, Onslow County

	<u>1980-81</u>	<u>1981-82</u>	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>
Retail Sales	\$364,909,567	\$406,957,094	\$462,355,522	\$539,007,283	\$568,385,273
Food	101,486,612	111,847,827	122,265,808	+	+
General Merchandise	60,310,446	73,148,095	82,050,339	+	+
Autos	74,871,601	85,747,401	93,909,821	+	+
Building Mat.	18,703,227	20,271,183	26,644,539	+	+

(+ information not available)

Source: N.C. State Government Statistical Abstract, Fifth Edition, 1984

Table 12 shows that retail sales for Onslow County have increased from \$364,909,567 in 1980 to \$568,325,273 in 1985, which represents 56% increase in five years. Some of this increase is attributable to inflation; however, inflation has been relatively low during this period. Most of this increase is simply due to new businesses opening, continued increases in population, and more tourists visiting the area.

Table 13 shows that per capita personal income has continued to increase for Onslow County. This increase is most likely attributable to the shift from a rural county to more of an urban county, with more population, more jobs, and, therefore, increased incomes. As the population grows and more job opportunities and better paying jobs are made available, the per capita personal income will continue to increase.

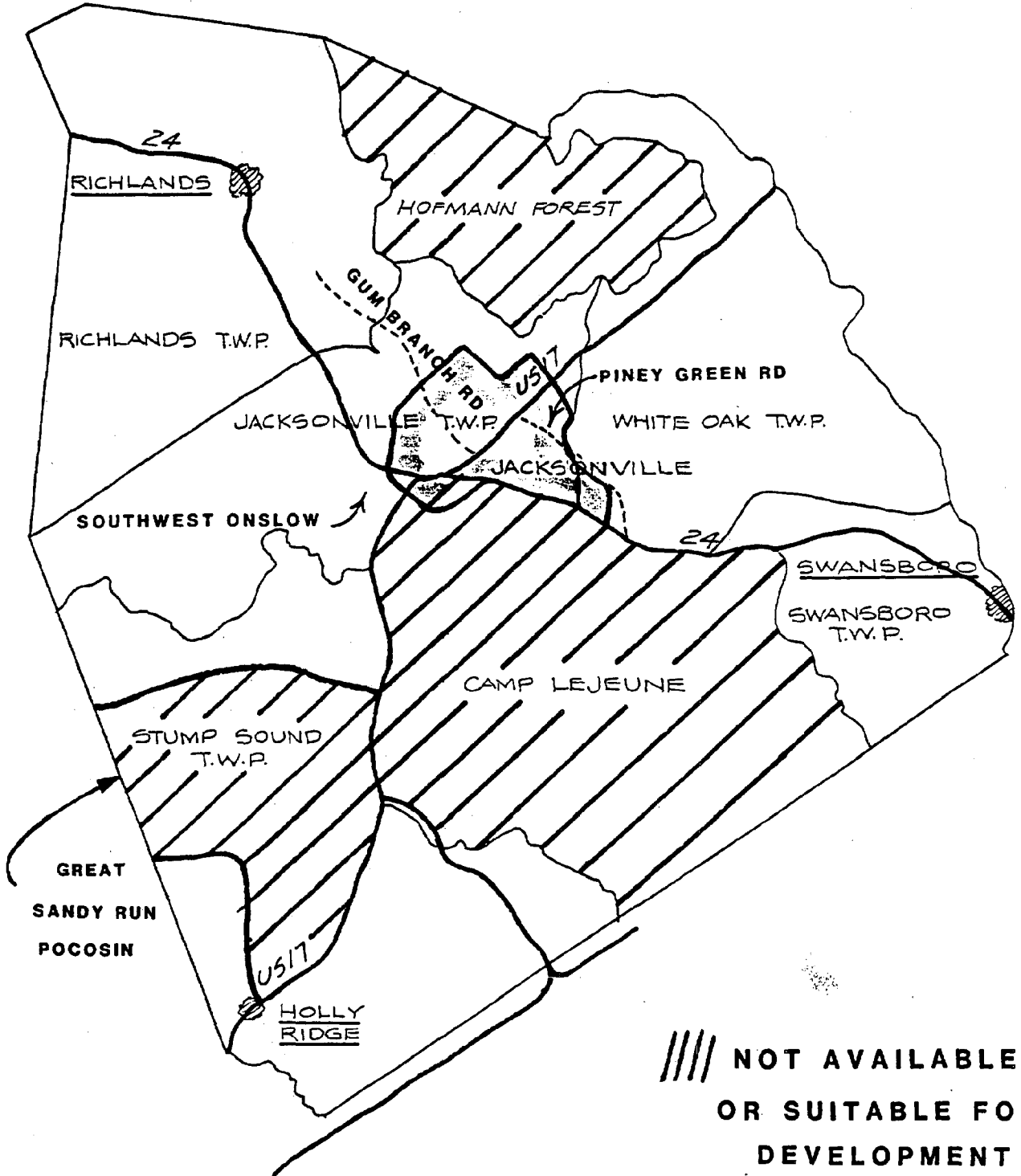
TABLE 13
ONSLOW COUNTY, NORTH CAROLINA
PER CAPITA PERSONAL INCOME
 1969 - 1981

	<u>69</u>	<u>70</u>	<u>71</u>	<u>72</u>	<u>73</u>	<u>74</u>	<u>75</u>	<u>76</u>	<u>77</u>	<u>78</u>	<u>79</u>	<u>80</u>	<u>81</u>
State	2,959	3,220	3,410	3,789	4,241	4,587	4,860	5,350	5,770	6,475	7,125	7,780	8,656
Onslow	2,828	3,314	3,339	3,931	4,341	4,851	4,661	4,834	4,499	4,934	5,401	5,989	7,089
Pender	2,034	2,357	2,495	2,808	3,203	3,462	3,765	4,031	4,380	4,901	5,485	6,054	6,892
New Hanover	3,175	3,398	3,555	3,970	4,386	4,677	4,964	5,497	6,002	6,728	7,591	8,339	9,158
Wake	3,677	3,962	4,182	4,563	5,018	5,465	5,922	6,459	7,026	2,835	8,851	9,633	10,623
Durham	3,376	3,680	4,072	4,460	4,711	5,176	5,711	6,225	6,744	7,498	8333	9,158	10,095
Mecklinburg	4,066	4,305	4,622	5,091	5,542	5,974	6,381	6,954	7,592	8,490	9,523	10,335	11,460
Guilford	3,864	4,154	4,444	4,920	5,381	5,890	6,179	6,708	7,274	8,204	9,045	9,913	10,943
Forsythe	3,705	4,025	4,243	4,652	5,182	5,654	6,101	6,776	7,459	8,198	8,958	9,912	11,014

Sources: September, 1984, Profile, North Carolina Counties

TOWNSHIP MAP

LAND AREA NOT AVAILABLE FOR DEVELOPMENT



2. Existing Land Use

The 1981 Land Use Plan did not include an existing Land Use Map. However, the 1981 Plan did include statistical information on the County that showed that over 23.5% of the County was in commercial forests with Camp Lejeune taking up another 22.4% of the County's land area. Hofmann Forest, located north of Jacksonville, included over 11% of the County's land area with all of this area being unavailable for residential or commercial development. These three large land areas represent over two-thirds of the County's land area, leaving one-third or more of the County's land area for development. Much of the future commercial and residential development will most likely occur as in-filling development in or near Jacksonville and Swansboro. As discussed earlier, many of the current and future job opportunities are available in Jacksonville and at Camp Lejeune, and for this reason many of the new subdivisions and mobile home parks are being developed in new areas with good highway access to Jacksonville. Also, numerous developments have been and continue to open in the Swansboro and Stump Sound Townships primarily because of waterfront access in these two townships.

Based on the windshield survey conducted by Talbert, Cox & Associates, Inc., in 1986, the following observations are made concerning existing land use on a township basis. (See Map #1, Existing Land Use.)

Swansboro Township

Most of the non-residential uses in this area are located along major thoroughfares such as N.C. 24, S.R. 1509 and a few along N.C. 172. Much of this is wooded with most residential uses being located adjacent to State roads. The Pines is a large single family development located off of N.C. 1501, another smaller development of new homes is located on N.C. 172 near the entrance to Camp Lejeune. Oyster Bays Estates is a new development on the waterfront overlooking the White Oak River with several new homes and several remaining lots for development. Several mobile home parks are located throughout this township with many of them having minimal improvements. With the availability of County water in the area, good access to Camp Lejeune and Jacksonville, and water access at Queen's Creek and the intercoastal waterway, this area will probably continue to experience rapid growth. Swansboro is the only municipality in this township.

Stump Sound Township

Stump Sound continues to be one of the fastest growing sections of the County. Sneads Ferry and Chadwick Acres west of U.S. 17 are two areas of this township with the greatest extent of development. Highway 210 has a clustering of commercial uses at the intersection of N.C. 172 and a new shopping center at State Road 1518. This area also contains numerous mobile homes

parks. Stump Sound Township, between U. S. 17 and the inter-coastal waterway is served by the County water system as is the West Onslow Beach area. A portion of West Onslow Beach is served by a private sewer system which is located at the intersection of N. C. 210 and S. R. 1518. The West Onslow Beach area of Stump Sound Township is continuing to experience rapid growth with many new low-rise and high-rise condominiums being located at the northern tip of the beach. A large undeveloped portion of beach remains between Highway 210 and the northern end of the beach, but many development plans are being discussed or implemented. Also, plans are being made to move the existing road back away from the beach to provide additional room for development between the new road location and beach front. The western portion of Stump Sound Township is made up primarily of the Great Sandy Run pocosin and some residential development along N. C. 50 near Holly Ridge. Holly Ridge is the only municipality in this township.

White Oak Township

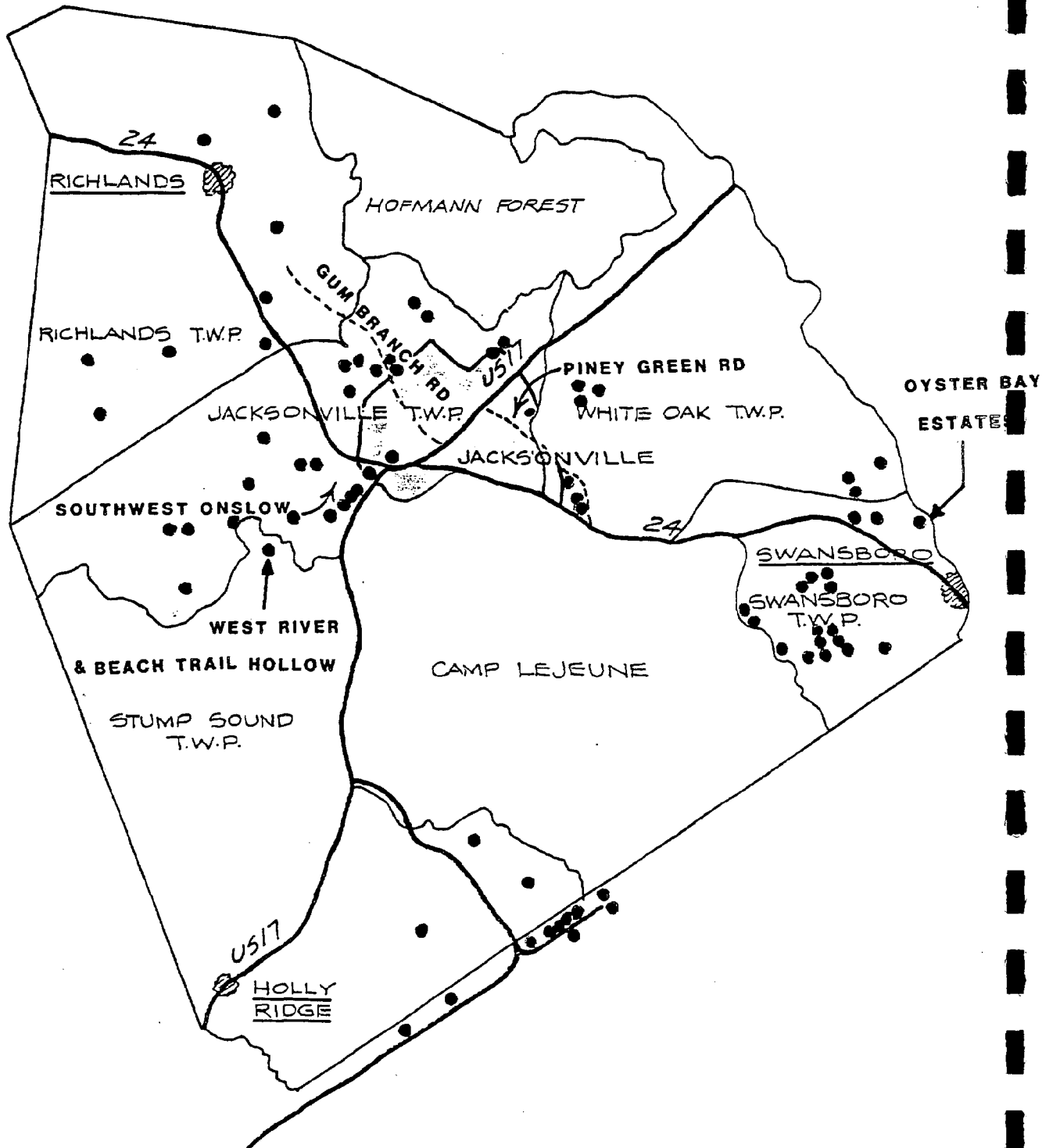
This township is located in the northeastern part of the County, specifically, east of U. S. 17 and north of N. C. 24. Primarily, this area's dominant land use, like other parts of the County, is residential lots along transportation corridors with forested areas throughout. The greatest concentration of development is located in the Piney Green Road area which has good access to U. S. 17 and N. C. 24. This township has been and will most likely continue to experience rapid growth because of its geographic location to Camp Lejeune and Jacksonville. This township does not contain any municipalities; however, over 90% of the area is served by the County water system.

Jacksonville Township

1980 Census information for the Jacksonville Township showed a 3% decrease in population between 1970 and 1980. However, based on the windshield survey conducted in 1986, it would appear that this decrease as reversed dramatically due to the numerous mobile home parks now located in this area. Also, the enclosed map showing the location of new development approved by the Planning Board since 1984 shows a large number located in the Jacksonville Township. Specifically, in the Southwest Onslow Area and along Gum Branch Road. The Southwest Onslow Area includes land from State Road 1107 and 1213 north to the Jacksonville planning jurisdiction line. New developments, like Beach Tree Hollow and West River, located on S. R. 1105 are developed with attractive single family homes. State Road 1111, 1108, 1109 and portions of N. C. 53 have a heavy concentration of mobile home parks mixed with single family homes along the same road fronts. At the southern portion of this township and near the Pender County line, the primary land use is forested areas with some rural housing along the major thoroughfares. Very few agricultural operations are located in this portion of the County.

TOWNSHIP MAP

NEW SUBDIVISION LOCATIONS SINCE 1984



SOURCE : ONSLOW COUNTY PLANNING DEPARTMENT

Richlands Township

This township is the most rural portion of Onslow County with much of the non-residential uses being concentrated along major thoroughfares like U. S. 258 or in the Town of Richlands. Like the southern portion of Jacksonville Township, the predominant land use is forested areas; however, there are also several large areas of this township being used for farming operations, particularly near the Jones and Pender County lines. Much of this township is also served by the County water system. This township also contains the Albert Ellis Airport, which is located near S. R 1101. Although this township has not been growing as rapidly as those townships closer to the water or Jacksonville, it is continuing to grow as reflected by several new subdivisions approved for this area since 1984 (See New Subdivision Map).

Summary

As discussed earlier, Onslow County continues to shift from a rural county to a more urban county with a rather low density of development. The new subdivision map reflects the fact that since 1984, when the Planning Department began keeping records, new development has been located throughout the County in areas suitable for development and with easy access to primary and secondary roads. Because less than 1/3 of the County's land area is available for development, County officials wish to encourage development in areas that meet market needs as long as proposed developments do not adversely impact on the environment. With Planning Board review and approval, Local and State CAMA approval, and Corps of Engineers review and approval, County officials feel that future development will not adversely impact on the environment.

a. Significant Land Use Compatibility Problems

The 1981 Land Use Plan discussed problems with malfunctioning septic tanks and how amended septic tank regulations would provide better protection in the placement and use of future septic tanks. Although these more stringent regulations will provide better guidance in the use and location of septic tanks, it does not affect those systems already in operation in soils with poor absorption and filtering qualities. This land use compatibility problem will continue until either a package treatment system is utilized rather than modified septic systems or until a County or private sewer system can be installed for use in lieu of existing individual systems.

Traffic volumes continue to increase along major highway corridors, such as U. S. 17, 24, and 258, with continued strip development along these corridors as was occurring and discussed in the 1981 Land Use Plan. The primary function of these major thoroughfares is to efficiently and safely provide for the movement of vehicles and con-

tinued strip development will reduce speeds, create numerous opportunities for turning movements, and effectively reduce the efficient functioning of these thoroughfares. Ultimately, these thoroughfares will become so congested that alternative routes will have to be purchased or expensive land acquisition will be required to widen these existing facilities to carry future traffic volumes.

Better land use controls such as zoning or adoption of a thoroughfare plan with adequate setbacks will provide a better means to control those areas that have not already developed along these major thoroughfares.

b. Major Problems Resulting from Unplanned Development

Following completion of the existing land use survey, two problems resulting from unplanned development were observed. Strip development, primarily along major thoroughfares continues to take place with residential uses and commercial uses in the same area. As the County continues to grow, this mixing of uses will make development of a zoning map and ordinance more difficult because of the need to determine what uses are appropriate in a given area. This problem has been made very apparent as the Planning Director and Planning Board study the possible zoning in the Sneads Ferry area.

The second obvious problem is the numerous mobile home parks being located throughout the County and particularly in the Jacksonville Township, with little or no design requirements. Dirt or gravel roads with no landscape amenities for these parks has the potential of reducing property values in surrounding areas if these parks are not properly maintained.

c. Areas Experiencing or Likely to Experience Changes in Predominant Land Use

Stump Sound Township

The undeveloped portion of West Onslow Beach will most likely continue to change from undeveloped land to higher density resort development on the sound side.

Land use along N. C. 210 from U. S. 17 to the beach will continue to change due to increasing traffic counts and the desirability of this property along the major access point to the Onslow Beach area. The availability of waterfront property, County water and a private sewer system will also add additional incentive for land use changes in this area.

Swansboro Township

Much of this township is served by the County water system. Because of good primary and secondary road access and waterfront access, this area will continue to change from a rural area to a more densely developed area, particularly along the waterfront and as property becomes available for development. The area along N. C. 24 near Swansboro will most likely experience additional commercial development.

Jacksonville Township

The U. S. 258 and Gum Branch Road area will most likely continue to experience additional residential subdivisions and mobile home parks. Both of these major thoroughfares provide convenient and easy access to Jacksonville and Camp Lejeune. The southwest Onslow area, again because of beach access, access to Camp Lejeune and Jacksonville, will most likely continue to change from wooded areas and open fields to mobile home parks and subdivisions. Based on the 1986 windshield survey, this trend is well underway with numerous mobile home parks already located in the area.

White Oak Township

The primary growth area, and area likely to change in predominant land use, is along Piney Green Road. Like other sections of the County, Piney Green Road provides easy access to the Jacksonville and Camp Lejeune areas.

Richlands Township

Changes in predominant land use for this township will most likely take place along U. S. 258 and in or near Richlands. Also, the airport area may experience some industrial development at or near the airport; however, this area is very rural in character at the present.

3. Current Plans, Policies, and Regulations

a. List and Summary of Existing Plans

(1) Transportation Plan (See DOT Improvements Plan in Appendix)

Onslow County prepared a revised Highway Improvement Plan in 1986. The plan includes priorities for major thoroughfare and secondary road improvements with a request to the North Carolina Board of Transportation to schedule these improvements on the State's long-range highway improvements plan. Improvements include:

- U. S. 17th Bypass
- Piney Green Road
- S. R. 1001
- Gum Branch Road
- Western Boulevard Beltline
- N. C. 50
- Other Secondary Road Improvements

(2) Community Facilities Plan

Although the County does not have a Community Facilities Plan document, the County does have a water system plan, airport plan, school system plan, recreation development policy and is currently working to establish a sewer policy and plan of action.

(3) Utility Extension Policies

In 1981, the County provided water to properties located along approximately 300 miles of County roads. Today, the County water system serves property along over 600 miles of County roads. Current water extension policy requires the developer requesting water service for property outside the County service area to pay all cost for water line extension. In the event there are other users between the development requesting service and the end of the County system, the County will consider a cost sharing with the developer. The County charges a \$400.00 tap-on fee for new customers of the system.

The County provides water to Holly Ridge and Swansboro; however, Richland has its own water system as does Jacksonville.

(4) Open Space and Recreation Policies

Currently the County has two Regional Parks serving the County. Hubert By-Pass Park is located in the Swansboro Recreation District off of N. C. 24 between Jacksonville and Swansboro. The Onslow Pines Park is located in the Southwest Jacksonville Recreation District. Current staff and Recreation Committee policy is to establish 3 additional regional parks to serve the Stump Sound, Richlands and White Oak Recreation Districts. At present, the County does not have a long-range Recreation and Open Space Master Plan. However, they have established a goal to provide recreational facilities in each recreation district. In addition to the regional parks, the County operates beach parks at three locations, with a WRC boat ramp on the island. The County has prepared an Access Plan using CAMA funds. See Appendix for map showing location of beach park facilities.

(5) Prior Land Use Plans and Policies

Onslow County has prepared and adopted CAMA Land Use Plans in 1976 and 1981. Both of these plans included background land use information and policies as required by the CAMA regulations and both plans have been used in the 1986 update.

(6) County Disaster Relief and Assistance

A plan was prepared in 1984 and outlines County response and action in case of emergency.

b. List and Brief Description of Enforcement

(1) Zoning

The present Onslow County Zoning Ordinance was adopted by the Onslow County Board of Commissioners on January 4, 1982, and became effective on January 15, 1982. At present, the only zoning area designated on the Official Zoning Map is the West Onslow Beach area. The Ordinance is enforced by the Onslow County Planning Board and Planning Department Staff. The County Airport is not presently zoned; however, the Airport does have height restrictions required by FAA.

(2) Subdivision Regulations

The Onslow County Subdivision Regulations became effective on October 4, 1979. This regulation is also administered and enforced by the Onslow County Planning Board and Planning Staff.

(3) Flood Insurance Program

The County has received copies of the preliminary flood maps and revisions to those maps are currently being made. The County is currently under the emergency phase of the Flood Insurance Program until official maps are available and an ordinance is passed to bring the County under the regular phase of the program. The County will hold a public hearing on March 2, 1987, to come under the regular Flood Insurance Program. (See Composite Hazard Map #3, which is based on preliminary flood maps.)

(4) Building

The North Carolina Building Code is enforced by the Onslow County Building Inspection Department and includes one- and two-family structures.

(5) Septic Tanks

Septic tanks and package treatment plants are used rather extensively in Onslow County. Enforcement of septic tank use is administered by the County Health Department using applicable State standards.

(6) Historic District

Onslow County has existing historic and archaeological sites, but no clusters of buildings for designation as an Historic District; however, Permuda Island has been designated as an AEC because of its archaeological importance and Archives and History has established development standards for this area.

(7) Nuisance

Onslow County does not have an existing Nuisance Ordinance.

(8) Dune Protection

Dune protection is regulated through the Coastal Area Management Act requirements. Minor permits are administered by the County's Permit Officer with major permits being administered by the State Permit Officer.

(9) Sedimentation

Onslow County concurs with the State's sedimentation control requirement, and all development in the County is subject to State sedimentation regulations if more than one acre of land is uncovered.

(10) Environmental Impact Ordinance

Onslow County does not have a local Environmental Impact Ordinance.

C. CONSTRAINTS - LAND SUITABILITY

1. Physical Limitations for Development

Physical limitations for development include man-made hazard areas, areas with soil limitations, water supply areas, and areas with slopes of 12% or greater.

a. Hazard Areas, Including Man-Made Hazards

Like most counties, Onslow County has several man-made or natural hazard areas that have been addressed in the County Disaster Relief and Assistance Plan. Flood hazard areas have been identified as part of the Federal Flood Insurance Program and these designated areas, "A" Zone, constitute a hazard area and will, in the future, require that all new construction within this zone establish the finished floor elevation above the "A" Zone elevation to protect the property from flood damage.

The Ellis Airport, west of Jacksonville, represents a man-made hazard area. By its very nature and function, this facility, as any airport, could be the site of or by its use could facilitate a plane crash situation for the County. Although an accident is unlikely, the Disaster Relief Plan provides a systematic way to handle such a disaster.

A railroad line running parallel to U.S. Highway 17, north of Jacksonville, is a potential man-made hazard. This line serves Camp Lejeune and the Havlock area of North Carolina. Both chemical supplies and other military supplies would be transported on this line.

Forest fires is another potential man-made or natural disaster that Onslow County is subject to because of extensive forested areas.

Camp Lejeune, with transportation and storage of ordnances on base, is, in itself, a man-made hazard.

b. Areas with Soil Limitations

When the 1981 Land Use Plan was prepared, the only soils information available at that time was the general soils map. Since then, the County has received a partially completed detailed soils report for the County with advance copy of soils maps. We found, in reviewing this information,

SOIL LIMITATIONS

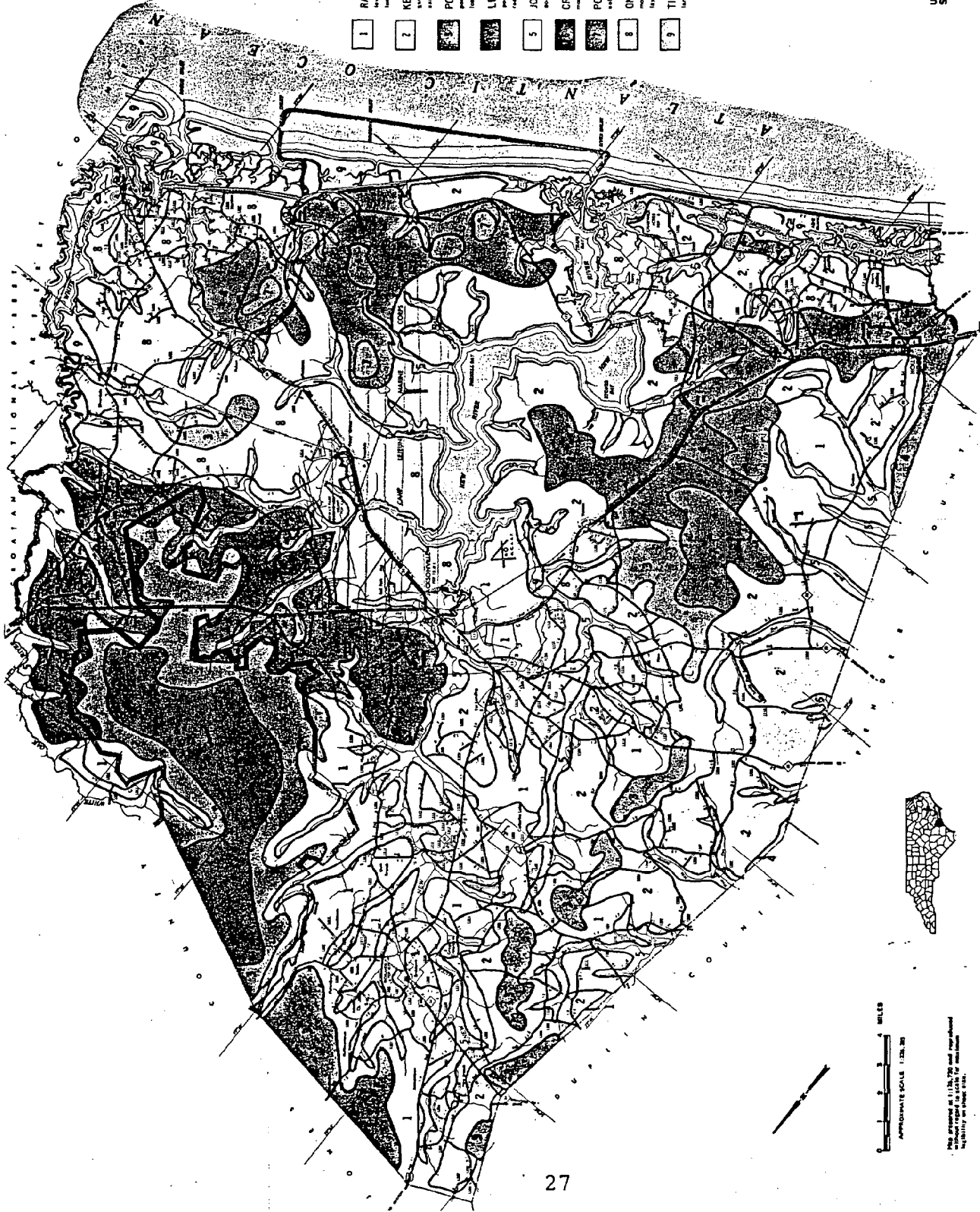
TABLE 14

<u>Symbols</u>	<u>Soils</u>	<u>Hazards For Foundations</u>	<u>Shallow Soils</u>	<u>Poorly Drained Soils</u>	<u>Limitations For Septic Tanks</u>
Iy	Lynchburg fine sandy loam	Severe (B)	Severe (C)	Severe (B)	Severe (A)
MaC	Marvyn loamy fine sand, 6 to 15 percent slopes	Moderate (A)	Moderate (G)	Moderate (A)	Moderate (E,F)
Mk	Muckalee loam	Severe (B,C)	Severe (A,C)	Severe (B,C)	Severe (A,B)
Mu	Murville fine sand	Severe (D)	Severe (A,B)	Severe (D)	Severe (C,D)
NDC	Newhan fine sand, 2 to 30 percent slopes	Severe (C)	Severe (A)	Severe (C)	Severe (D)
NoA	Norfolk loamy fine sand, 0 to 2 percent slopes	Severe (B)	Moderate (C)	Severe (B)	Moderate (A)
NoB	Norfolk loamy fine sand, 2 to 6 percent slopes	Moderate (B)	Moderate (C)	Moderate (B)	Moderate (A,F)
On	Onslow loamy fine sand	Severe (B)	Severe (C)	Severe (B)	Severe (A)
Pa	Pactolus fine sand	Severe (B)	Severe (A,C)	Severe (B)	Severe (A,D)
Pn	Pantego mucky loam	Severe (B)	Severe (C)	Severe (B)	Severe (A)
Ra	Rains fine sandy loam	Severe (B)	Severe (C)	Severe (B)	Severe (A)
St	Stallings loamy fine sand	Severe (B)	Severe (A,C)	Severe (B)	Severe (A,D)
Sw	Swansboro fine sand	Not Available	Not Available	Not Available	Not Available
To	Torhunta fine sandy loam	Severe (B)	Severe (A,C)	Severe (B)	Severe (A,D)
Ur	Urban land	Not Available	Not Available	Not Available	Not Available
Ut (Pt)	Udorthents, wet, sandy (Pits)	Not Available	Not Available	Not Available	Not Available
Wa	Wando fine sand, 0 to 6 percent slopes	Slight	Severe (A)	Slight	Severe (D)
Wo	Woodington loamy fine sand	Severe (B)	Severe (A,C)	Severe (B)	Severe (A)
W	Water	Not Available	Not Available	Not Available	Not Available
Ya	Yaupon silty clay loam	Severe (B,E)	Severe (C)	Severe (B,E)	Severe (A,E)
AnB (A1B)	Alpin fine sand, 1 to 6 percent slopes	Moderate (A)	Severe (A)	Moderate (A)	Slight to Moderate
AuB	Autryville loamy fine sand, 1 to 6 percent slopes	Moderate (B)	Severe (A)	Moderate (B)	Moderate (A)
AX	Axis mucky sandy loam	Severe (C,D)	Severe (B)	Severe (C,D)	Severe (B,C)
BmB (Bm)	Baymeade fine sand, 1 to 6 percent slopes	Moderate (B)	Severe (A)	Moderate (B)	Severe (D)

SOIL LIMITATIONS (Page 2)

<u>Symbols</u>	<u>Soils</u>	<u>Hazards For Foundations</u>	<u>Shallow Soils</u>	<u>Poorly Drained Soils</u>	<u>Limitations For Septic Tanks</u>
BaB	Baymeade-Urban Land Complex, 1 to 6 percent slopes	Moderate (B)	Severe (A)	Moderate (B)	Severe (D)
BN	Beaches-Newhan association, 0 to 30 percent slopes	Not Available	Not Available	Not Available	Not Available
Bo (BoH)	Bohicket soils	Severe (C,D,E)	Severe (B)	Severe (C,D,E)	Severe (B,C,E)
Ca (CaL)	Carteret Soils	Not Available	Not Available	Not Available	Not Available
Co	Corolla fine sand	Severe (B)	Severe (C)	Severe (B)	Severe (A,D)
CrB	Craven fine sandy loam, 1 to 4 percent slopes	Severe (B)	Severe (C)	Severe (B)	Severe (A,E)
CrC	Craven fine sandy loam, 4 to 8 percent slopes	Severe (B)	Severe (C)	Severe (B)	Severe (A,E)
Ct	Croatan muck	Severe (B,C)	Severe (D)	Severe (B,C)	Severe (A,E)
Da	Dorovan muck	Severe (C,D)	Severe (E)	Severe (C,D)	Severe (B,C)
DC	Duckston fine sand	Severe (C,D)	Severe (A,C)	Severe (C,D)	Severe (A,B,D)
DU	Duneland sand	Not Available	Not Available	Not Available	Not Available
FoA	Foreston loamy fine sand, 0 to 2 percent slopes	Moderate (B)	Severe (A)	Moderate (B)	Severe (A)
GoA	Goldsboro fine sandy loam, 0 to 2 percent slopes	Severe (B)	Severe (C)	Severe (B)	Severe (A)
GpB	Goldsboro-Urban Land Complex, 0 to 5 percent slopes	Moderate (B)	Moderate (C)	Moderate (B)	Severe (A)
Gt	Grifton fine sandy loam	Severe (B)	Severe (C)	Severe (B)	Severe (A,B)
KuB	Kureb fine sand, 1 to 6 percent slopes	Slight to Severe (A,D)	Severe (A)	Slight to Severe (A)	Severe (D)
La	Lafitte muck	Severe (C,F)	Severe (A,C,F)	Severe (C,F)	Severe (A,B)
Le	Lenoir loam	Severe (B)	Severe (C)	Severe (B)	Severe (A,E)
Ln	Leon fine sand	Severe (B)	Severe (A,C,E)	Severe (B)	Severe (A,D)

Hazards for Foundations A-Slope; B-Wetness; C-Flooding; D-Ponding; E-Shrink-Swell; F-Low Strength
Shallow Soils A-Cutbanks Cave; B-Ponding; C-Wetness; D-Excess Humus; E-Excess Humus & Ponding; F-Floods; G-Slope
Poorly Drained Soils A-Slope; B-Wetness; C-Flooding; D-Ponding; E-Shrink-Swell; F-Low Strength
Limitations for Septic Tanks A-Wetness; B-Floods; C-Ponding; D-Poor Filter; E-Perks Slowly; F-Slope



- #1 Good Agricultural Land
- #2 Poor Agricultural Land
- #3 Poorly Drained
- #4 Poorly Drained/Hard Pan Soils
- #5 Poorly Drained
- #6 Good Agricultural Land (Poor for Septic Tank)
- #7 Poorly Drained Soils
- #8 Good Agricultural Land
- #9 Tidal Marsh

LEGEND

- 1. RAINBOW-LYNCHBURG-GOLDSBORO ASSOCIATION: Nearly level to gently sloping, poorly to moderately well drained soils with sandy surface layers and friable sandy clay loam subsoils.
- 2. KENANSVILLE-DRAGON ASSOCIATION: Nearly level to gently sloping, poorly to moderately well drained soils with thick heavy sand surface layers and friable sandy loam subsoils.
- 3. PORTSMOUTH-TORHUNTA ASSOCIATION: Nearly level to poorly sloping, well to moderately well drained soils with heavy clay loam subsoils.
- 4. LEON-LYNHAVEN ASSOCIATION: Nearly level to gently sloping, poorly to very poorly drained soils with sand surface layers and clay loam subsoils.
- 5. JOHNSTON-BIBB ASSOCIATION: Nearly level to gently sloping, poorly to very poorly drained soils with heavy clay loam subsoils.
- 6. GRAVEN-LENOIR ASSOCIATION: Nearly level to gently sloping, moderately well to somewhat poorly drained soils with very fine clay subsoils.
- 7. PONZER-FAMILICO ASSOCIATION: Very poorly drained organic soils with 10 to 50 inches of much more sandy to heavy textured till.
- 8. ONSLOW-LUMBEE ASSOCIATION: Nearly level to gently sloping, poorly to very poorly drained soils with heavy clay loam subsoils.
- 9. TIDAL MARSH-COASTAL BEACH ASSOCIATION: Nearly level to lowland, well to very well drained soils with sand dunes.

This General Soil Map is available for use by the Government only. For more information, please contact the National Office of Soil Conservation, Raleigh, North Carolina.

GENERAL SOIL MAP
 TENTATIVE - SUBJECT TO CHANGE
 ONSLOW COUNTY
 NORTH CAROLINA
 U.S. DEPARTMENT OF AGRICULTURE
 SOIL CONSERVATION SERVICE
 RALEIGH, NORTH CAROLINA

APPROXIMATE SCALE 1:25,000
 MILES

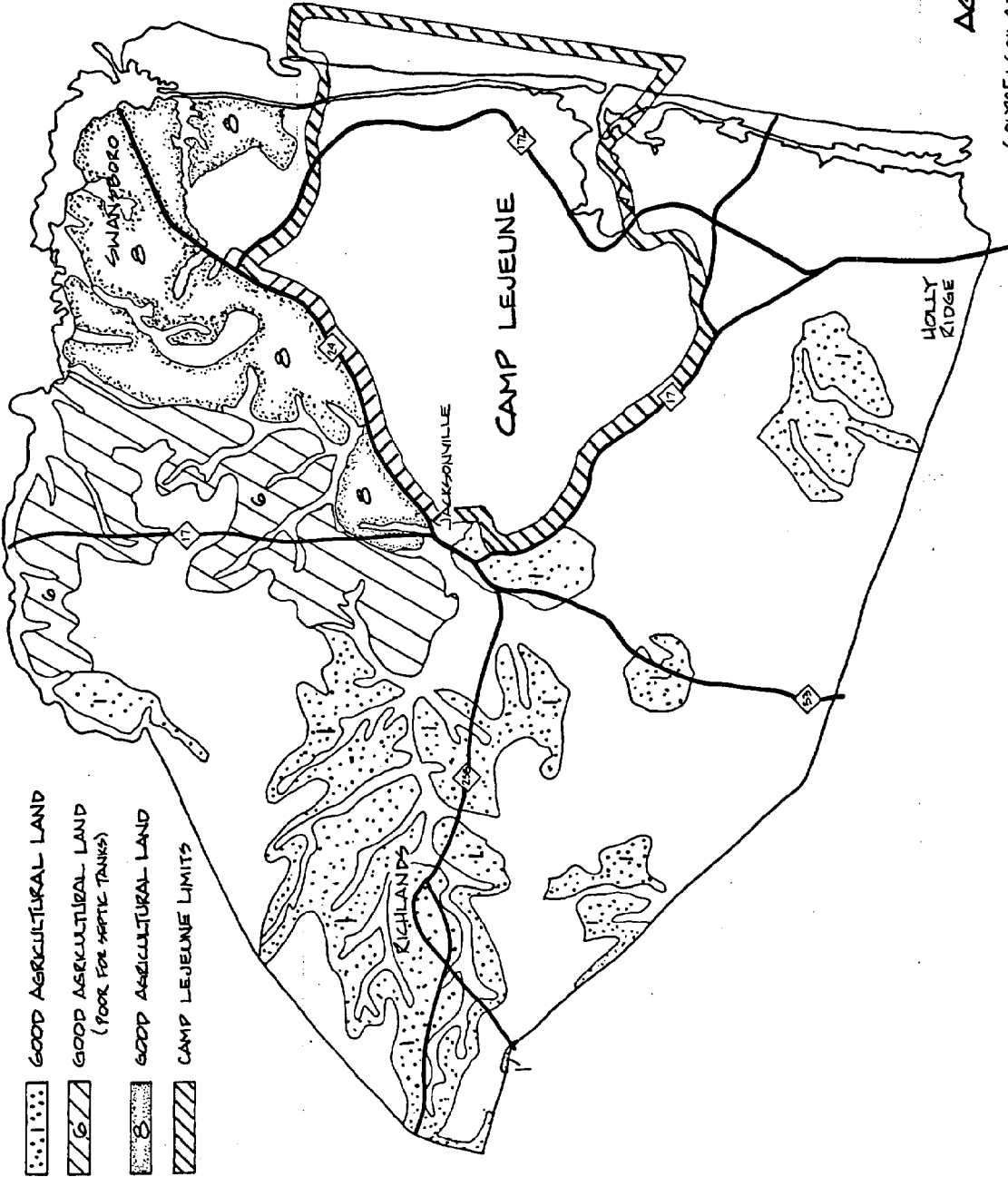
This map was prepared at 1:25,000 and reproduced by the Soil Conservation Service.

POLYCONIC PROJECTION

ON SLOW COUNTY AGRICULTURAL SOILS

SOURCE: SOIL CONSERVATION SERVICE OFFICE AND
GENERAL SOILS MAP

PREPARED BY: TALEBET, COX AND ASSOCIATES, INC.



that several soils types still remain incomplete; however, we have taken available information from the draft report and prepared a soils limitation chart that reflects soils with hazards for foundations, shallow soils, partly drained soils, and soils with limitations for septic tank use.

(1) Hazards for Foundations

Soils with hazards for foundations are based on slope, wetness, flooding, ponding, shrink-swell factors, and the low strength of soils. Conditions ranged from slight limitations of the Wando Line sand (WA) to severe of the Bohicket (BO) soils based on flooding, ponding, and shrink-swell factors. The present draft report presently available does not address the extensiveness of each soil type in the County. When the detail soils report is complete, the County will have a better idea of how extensive the problem is for each constraint and soil type identified.

(2) Shallow Soils

Shallow soils included limitations based on cutbank caving, ponding, wetness, excess humus and ponding, flooding, and slope. Conditions ranged from moderate to severe, and again, information is presently not available to determine the extent of each soil type in the County.

(3) Poorly Drained Soils and Limitations for Septic Tanks

Both poorly drained soils and soils with limitations for septic tanks range in severity from slight to severe. Poorly drained soils were based on slope, wetness, flooding, ponding, shrink-swell, and low strength. Soils with limitations for septic tank use were based on wetness, flooding, ponding, poor filtering ability, slow perk, and slope.

Because the detailed County soils study is not complete, we have included information on soils from the General Soils Map. Based on discussion with the U.S. Department of Agriculture staff, we have gleaned the following information:

Using the General Soils Map, soil type 1, Rains-Lynchburg-Goldsboro Association is considered a good agriculture soil with sandy loam surface and fri-

able, sandy clay loam subsoils. Much of this soil type is located along the New River in western Onslow County. Also worth noting is the fact that most of the larger farms in Onslow County are found in this part of the County.

Soil type 2--Kenansville-Dragston Association is poor agricultural land with thick loamy sand surface layers and friable, sandy loam subsoils. Much of this soil type is located along the Duplin County and Pender County line. Much of this land area is presently being used for forestry with essentially no agricultural use. This soil type is also found in the Sneads Ferry area and Camp Lejeune.

Soil type 3--Torhunter Association is a poorly drained soil located primarily in the Hofmann Forest area in the northern part of the County.

Soil type 4--Leon is a poorly to very poorly drained soil with hardpan subsoil, making this soil unsuitable for septic tanks. Much of this soil type is located along U.S. 17 south of Jacksonville. There is also a large section of this soil type located in the eastern part of Camp Lejeune.

Soil type 5--Muckaleu is a nearly level, very poorly to poorly drained soils on flood plains and drainage ways. This soil type is found along the upper reaches of New River, Northeast Creek, Queens Creek, White Oak River, and tributaries running into the Cape Fear River.

Soil type 6--Craven Association is considered good agricultural land with moderately well to somewhat poorly drained soils with very firm clay subsoils. Although this is good soil for agriculture, it is poor for septic tanks because of clay content in subsoil. This soil type is found along each side of U.S. 17 north of Jacksonville.

Soil type 7--Croatan Muck is very poorly drained organic soils 12 to 50 inches of muck over sandy to loamy textured soils. This soil type is found primarily in the center of the Hofmann Forest area and the center of the Great Sandy Run Pocosin.

Soil Type 8--Onslow Association is nearly level to gently sloping moderately well to partly drained soils with an intermittent subsurface layer of thick hardpan friable sandy clay loam subsoils. This soil type is considered good agricultural soil with much of this soil being concentrated in the White Oak Township area along north side of NC 24.

Soil Type 9--Tidal Marsh - Coastal Beach Association is nearly level land overflowed by high tidewater and contains sand dunes. All of this soil type is located along the eastern most edge of the County.

c. Water Supply

Based on a 1984 Ground Water Resource Study prepared by Moore, Gardner and Associates, Inc., (now Black & Veach), Onslow County has only two aquifers, the Castle Hayne and Cretaceous aquifers, that contain water of sufficient quantity and quality to be utilized for municipal development. The Castle Hayne aquifer can yield up to 400-500 gpm of generally good water quality, but hard in character. The Cretaceous aquifer can yield approximately 500-600 gpm with excellent water quality and requiring no treatment. The Cretaceous aquifer is being used by the County for water supply, and this aquifer is being stressed both locally and regionally by heavy pumping.

The Onslow County water system is served by six active wells and over 600 miles of distribution lines throughout the County. Table 15 reflects the well capacity and safe yield for the County's six active well sites.

TABLE 15
ONSLow COUNTY WATER SYSTEM
Supply Wells - 1984

<u>Well No.</u>	<u>Nominal Pump Capacity</u> (gpm)	<u>Safe** Yield</u> (gpm)	<u>Well Capacity*</u> (mgd)
1	1,066	625	0.45
2	800	625	0.45
3	--	--	--
4	800	625	0.45
5	800	625	0.45
6	800	625	0.45
7	940	625	0.45
8		575	0.41
9		660	0.48
10	(under contract April '87)	650	0.47
11	Contract Awarded (end '87)	600	0.43
12	Contract Awarded (end '87)	300	0.22
Total, gpm	5,206	6,525	
mgd	7.5	5.4	2.70

* Pump running 12 hours per day.
**Recharge will equal withdrawal.

Note: Pump currently at Well 9 will be moved to Pump 12.

The County may consider seven (7) additional wells between 1987 and 2000.

Source: January 1985 Water Supply and Distribution Report
Moore, Gardner & Associates, Inc. (All references to
Moore, Gardner & Associates, Inc., now means Black & Veach
which has purchased the firm.)

d. 12% Slopes

As noted in the 1981 Land Use Plan, with the exception of coastal sand dunes, steep slopes are not a problem in Onslow County.

2. Fragile Areas

These are areas which could easily be damaged or destroyed by inappropriate or poorly planned development. There are several fragile areas in Onslow County including those areas identified as Areas of Environmental Concern (AECs), including coastal wetlands, estuarine waters, public trust waters, ocean hazards areas, and Permuda Island AEC for its archaeological significance. Other areas considered fragile, but not designated as AECs, are sand dunes along the outer banks, wooded swamps, archaeological and historic sites, and unique geologic formations.

a. Coastal Wetlands

Coastal wetlands are defined as any salt marsh or other marsh subject to regular or occasional flooding by tides, including wind tides (whether or not the tide waters reach the marshland areas through natural or artificial watercourses), provided this shall not include hurricane or tropical storm tides. Salt marsh or other marsh shall be those areas upon which grow some, but not necessarily all, of the following salt marsh and marsh species: Smooth or Salt Water Cordgrass (Spartina alterniflora); Black Needlerush (Juncus roemerianus); Glasswort (Salicornia spp.); Salt - Meadow Grass (Spartina Patens); Sea Lavender (Limonium spp.); Bulrush (Scirpus spp.); Saw Grass (Cladium Jamaicense); and Salt Weed Grass (Spartina cynosuroides). Included in this definition of wetlands is "any contiguous land as the Secretary of NRCDC reasonably deems necessary to affect by any such order in carrying out the purposes of this Section." (G.S. 113-230[a]).

Onslow County contains extensive wetland areas. The first extends from the Pender County line to and including a portion of wetlands along the New River not included as part of Camp Lejeune. It is also bounded on one side by Topsail Island and the other side by the mainland. Portions of other bodies of water like Beasleys Creek, Kings Creek, Mill Creek, Turkey Creek and Chadwick Bay also contain wetland areas. Much of this wetland area is accessible by road.

The second wetland area extends from the northeastern border of Camp Lejeune to the Carteret County line. It includes the following areas: wetlands between the mainland and the Atlantic Ocean; wetlands along Queens Creek and its tributaries; and the White Oak River as far inland as Grants Creek. Onslow County contains very extensive amounts of wetlands and those areas adjacent to these wetlands and water bodies are in many cases either undeveloped or underdeveloped.

These wetlands along our coast serve as a critical part of the ecosystem. Estuarine dependent species like fish and shellfish make up over 90% of the total value of North Carolina's commercial catch, and therefore, it is necessary that any future adjacent development be sensitive to this fragile environment and meet applicable state or federal regulations for development.

Low tidal marsh also serves as the first line of defense against shoreline erosion by dissipating wave action.

b. Sand Dunes

Sand dunes are defined as ridges or mounds of wind-blown material, usually sand. They comprise a major portion of the outer banks, which includes West Onslow Beach, Onslow Beach (Camp Lejeune), and Hammock Beach State Park. Development with inadequate design, construction or setback from the ocean may create problems with the dune's stability and increase the risk of damage to the development due to wind and water. Appropriate land uses shall be only those developments that are set back from the ocean to limit the risk of damage and those additions to structures of secondary usefulness which are unattached (ex. - gazebos, walkways, decks) and do not cause irreversible damage. Onslow County requires setback which is 30 times average annual rate of erosion. The first line is 60' in front of the stable natural vegetation with most of Onslow County having a 2' annual erosion rate.

c. Ocean Beaches and Shoreline

Ocean beaches and shoreline are defined as land areas without vegetation covering and consist of unconsolidated soil material that extends landward from mean low tide to a point where any one or combination of the following occur: (1) vegetation, or (2) a distinct change in predominant soil particle size, or (3) a change in slope or elevation which alters the physiographic land form.

Sand deposits of ocean beaches and shorelines represent a dynamic zone which does not afford long-term protection for development. The nature of tidal action and the force of storms is such that they cause the beach areas to shift constantly. Littoral drift is a natural phenomenon whereby sand is removed from beaches by wave action and littoral currents and is deposited upon a different stretch of the beach; this action also shifts the line of high tide and low tide. Ocean beaches and shorelines are valuable for public and private recreation and are located within natural hazard areas. Thus, development within these dynamic zones may result in loss of property and possible loss of life.

Such areas much be preserved to the greatest extent feasible with opportunity to enjoy the physical, aesthetic, cultural and recreational qualities of the natural shorelines of the State.

d. Estuarine Waters and Estuarine Shorelines

Estuarine waters are defined as all water of the Atlantic Ocean within the boundary of North Carolina and all the waters of the bays, sounds, rivers and tributaries there to seaward of the dividing line between coastal fishing waters and inland fishing waters, as set forth in an agreement adopted by the Wildlife Resources Commission and the Department of Conservation and Development filed with the Secretary of State entitled "Boundary Lines, North Carolina Commercial Fishing-Inland Fishing Waters, revised March 1, 1965" or as it may be subsequently revised by the Legislature.

These areas are among the most productive natural environments of North Carolina, for they not only support valuable commercial and sports fisheries, but are also utilized for commercial navigation, recreation, and aesthetic purposes. Species dependent upon estuaries, such as menhaden, shrimp, flounder, oysters and crabs make up over 90 percent of the total value of North Carolina's commercial catch, and these species must spend all or some part of their life cycle in the estuary. The high level of commercial and sports fisheries and the aesthetic appeal of coastal North Carolina are dependent upon the protection and sustained quality of our estuarine areas.

e. Public Trust Waters

Public trust waters are defined as all waters of the Atlantic Ocean and the lands thereunder from the mean water mark to the seaward limit of State jurisdiction, all natural bodies of water subject to measurable lunar tides and lands thereunder to the mean high water mark, all navigable natural bodies of water and lands thereunder to mean high water mark or ordinary high water mark, as the case may be, except privately owned lakes to which the public has no right of access, all waters in artificially created bodies of water in which exist significant public fishing resources or other public resources, which are accessible to the public by navigation from bodies of water in which the public has no rights of navigation, all waters in artificially created bodies of water in which the public has acquired rights by prescription, custom, usage, dedication or any other means. Included in public trust waters are areas such as waterways and lands under or flowed over by tidal waters or navigable waters, to which the public may have rights of access of public trust rights, and areas which the State of North Carolina may be authorized to preserve, conserve, or protect under Article XIV, Section 5, of the North Carolina Constitution. The New River and the White Oak River are examples of public trust waters.

f. Coastal Complex Natural Areas

Coastal complex natural areas are defined as lands that support native plant and animal communities and provide habitat qualities which have remained essentially unchanged by human activity. Such areas may be either significant components of coastal systems or especially notable habitat areas of scientific, educational, or aesthetic value. They may be surrounded by landscape that has been modified, but does not drastically alter conditions within the natural area. Such areas may have been altered by human activity and/or subject to limited future modifications, e.g., the placement of dredge spoil, if the CRC determines that the modifications benefit the plant or animal habitat or enhance the biological, scientific, or educational values which will be protected by designation as an AEC.

Onslow County does not currently have any areas designated as "coastal complex natural areas"; however, the National Heritage Program office has several areas that could potentially be designated as complex natural areas, and they include the following:

- Areas of Camp Lejeune
- Hammock Beach State Park
- Portions of the Maple Hill Area
- Hofmann Forest
- Rock House Caves

g. Areas That Sustain Remnant Species

There are no known areas that sustain remnant species in the County also based on information from the Wrightsville Beach Office of NRCO.

h. Unique Geologic Formations

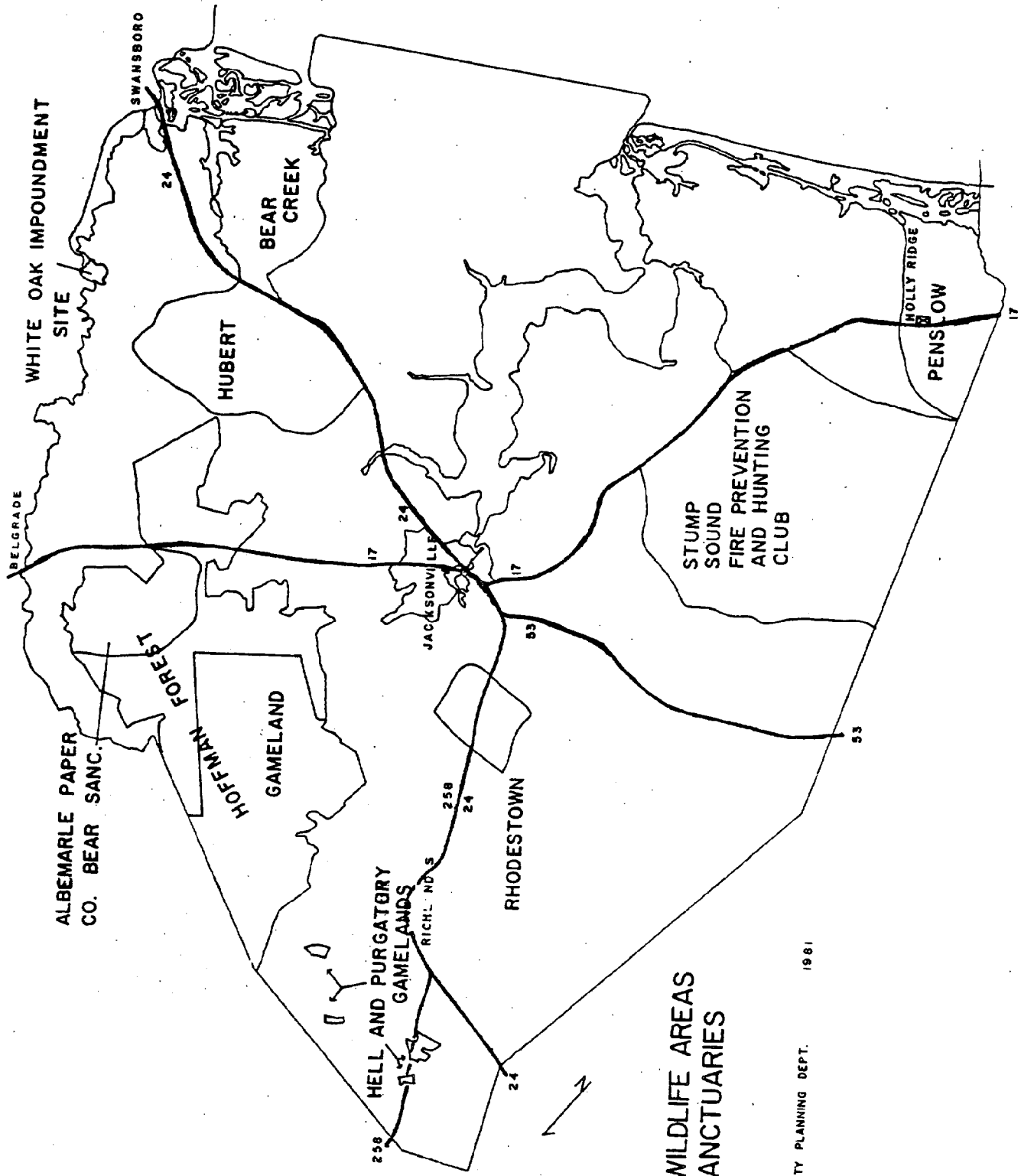
As discussed in the 1981 Land Use Plan, Belgrade Quarry is considered a unique geologic formation. It has been providing high quality limestone construction material for almost a quarter century. The lakes left as a by-product of this strip mining operation provide an excellent recreational resource, for they are abundant in fresh water fish and open to public enjoyment. The Belgrade Quarry is considered a unique geologic formation; however, it is not considered a fragile area.

i. Registered Natural Landmark

Onslow County does not have any Registered Natural Landmarks.

j. Wooded Swamps

Wooded swamps function in a manner similar to coastal wetlands by filtering pollution, protecting upland areas from flooding, and providing important wildlife habitat. "The Corps of Engineers regulates wetlands that it has determined to be responsible for under Section 404 of the Clean Water Act." The Corps of Engineers does not regulate all wetlands areas. (See appendix for letter from Corps of Engineers.)



**PRIME WILDLIFE AREAS
AND SANCTUARIES**

ONSLow COUNTY PLANNING DEPT. 1981

k. Prime Wildlife Habitat

Gamelands such as the Hofmann Forest and the Great Sandy Run Pocosin southwest of Jacksonville and along Highway U. S. 17 provide excellent wildlife habitat. All or part of the Great Sandy Run, approximately 5,200 acres is presently being considered for purchase by Camp Lejeune for their expansion needs. Marsh areas and large bodies of water such as the White Oak River also provide prime wildlife habitat. Prime Wildlife Areas are shown on a 1981 map from the 1981 Land Use Plan. Although the configuration of some of these areas may have been modified since 1981, it provides a general location of existing habitat areas.

l. Scenic and Prominent High Points

Although the County does not have any designated scenic or high points, it does have an abundance of scenic areas throughout the County and particularly along the waterfront areas and marsh areas.

m. Archaeologic and Historic Sites

The Coastal Resources Commission, on November 16, 1984, designated Permuda Island as a significant coastal archaeological resource area of environmental concern based on recommendations from the Division of Archives & History. Subsequent to beginning the LUP Update, the Nature Conservancy has purchased the island and is negotiating with the State of North Carolina to sell it to the State as an area to be protected from development. Permuda Island is a former barrier island located within Stump Sound in southwestern Onslow County. The island is 1.2 miles long and .1 - .25 mile wide. Archaeological evidence indicates earliest occupation from the Middle Woodland Period (300 B.C. - 800 A.D.) through the late Woodland Period (800 A.D. - 1650 A.D.), and historic occupations predating the Revolutionary War. Archaeological remains on the island consist of discrete shell heaps, broad and thick layers of shell midden, prehistoric refuse pits and postholes, as well as numerous ceramic vessel fragments and well-preserved animal bone remains. The resources offer extensive research opportunities.

Significant coastal archaeological resources are defined as areas that contain archaeological remains (objects, features, and/or sites) that have more than local significance to history or prehistory. Such areas will be evaluated by the North Carolina Historical Commission in consultation with the Commission as part of the procedure set forth in Rule .0503.

Significant coastal archaeological resources are important educational, scientific, or aesthetic resources. Such resources would be jeopardized by uncontrolled or incompatible development.

Specific information on the location of archaeological sites cannot be given in this report at the request of the North Carolina Department of Cultural Resources; however, Onslow County has approximately 405 sites, and current County policy is to submit proposed subdivision plans to Archives and History in Raleigh for their review and comment on how or if proposed developments will adversely impact any of these known archaeological sites. The County presently has one structure on the National Register which is the Palo Alto Plantation at Belgrade; however, the County does not have any areas with groupings of structures that could be considered for nomination as an historic district, with the exception of the Venters Farm Historic District, which is currently being nominated to the National Register of Historic Places. Structures on the study list, as provided by Renee Gledhill-Early of the Division of Archives and History include the following:

Dr. Ennett House, Sneads Ferry
Ringware House, Swansboro
David Sanders Aman House, Belgrade vicinity
James Battle Averette House, Catherine Lake vicinity
Collins House, Jacksonville
Pelletier House, Jacksonville
R. P. Hinton House, Jacksonville
Hawkins-Glover House, Swansboro
Venters Farm Historic District, Richlands vicinity

The State of North Carolina is currently considering the purchase of Permuda Island from the Nature Conservancy to protect this environmentally sensitive area.

3. Areas With Resource Potential

a. Productive and Unique Agricultural Lands

The County detail soil survey is presently in the draft stage and only an advance copy of soil maps and soil types is presently available. Current soils information does not permit the identification of the most productive or unique agricultural lands in the County. Hopefully, when the soils study is complete, more detailed information will be available to identify this natural resource.

b. Potentially Valuable Mineral Sites

The Great Sandy Run Pocosin southwest of Jacksonville is extensive and may contain substantial amounts of peat. Mining of peat in this area may become attractive in future years as a potential source for generation of electricity; however, this could require much research and higher cost for other fuels before this would be economically feasible, but the area does have potential value for mining of this natural resource.

Martin-Marietta continues to mine approximately 136 acres at the Belgrade Quarry. This is a substantial limestone quarry and will probably be mined for many years into the future. Other mining sites in the County as provided by the Division of Land Resources includes:

Haugen Sand Pit Haugen Company, Inc.	-	3 acres
Justice Sand Pit Justice Construction	-	2 acres
Bell Pit W. R. Willis Construction Co.	-	4 acres
Silverdale Pit Silverdale Marl Company	-	5 acres
Jones Mine Barrus Construction	-	11 acres
Moseley Pit Barrus Construction	-	4 acres
Wilson Barrus Construction	-	1 acre
Moseley Mine Haugen Company	-	4 acres
Parkertown Marl Pit Comer Brothers, Inc.	-	5 acres

c. Publicly-Owned Forests, Parks, Fish, and Gamelands

As discussed in the 1981 Land Use Plan, there are three major publicly-owned tracts within the County, the largest being the U. S. Marine Corps bases at Camp Lejeune. This federally owned land

accounts for approximately 20% of the County's total land and is not open for civilian use.

Hofmann Forest, open to public recreational use, is the second largest publicly owned tract within the County. It is owned by North Carolina State University.

The third major publicly-owned area within the County is Hammock Beach State Park. This park is developed as open-space recreation with picnicing areas, camping areas and swimming areas provided. Access to the beach is via passenger ferry which makes several round-trips daily. Much of the park is in its natural state. Forest and other game-lands have been discussed previously as well as public trust waters and other water bodies that provide access for fishing opportunities.

d. Prime Farmland

As discussed earlier, the current draft soils report for the County does not provide adequate soils information to map and identify prime farmland. The Soils Map on page 27a of this report shows "good agricultural lands."

D. CONSTRAINTS - CAPACITY OF COMMUNITY FACILITIES

1. Existing Water and Sewer

Jacksonville, the major urban area of Onslow County, obtains its water from two major well fields. The 258 well field is located on Old Tram Road, approximately six miles west of Jacksonville. The Gum Branch well field is located approximately nine miles from Jacksonville on State Road 1308. The 258 well site has a production capacity of 1,370 gpm or about 2 mgd. The Gum Branch well field has a water production capacity of 2,000 gpm or 2.9 MGD. The Jacksonville water system has a storage capacity of 3,300,000 gallons and a production capability of 4.9 mgd. Based on the 1985 Jacksonville CAMA Land Use Plan, Jacksonville had a water consumption rate of 3.0 mgd (average day) with a 4.80 mgd (maximum day) which is just below the 4.9 mgd capability of the Jacksonville system. The Onslow County system and Jacksonville water system have 2 interconnections for exchange of water in an emergency.

The Onslow County water system is discussed in great detail in two recently completed reports by Moore, Gardner and Associates, Inc., which are available at the County Planning Department. Based on these reports, Onslow County has a 12 hour well capacity of 2.7 mgd which meets State regulations in providing the annual average daily demand while operating the wells for a maximum of 12 hours per day. The average day demand of 2.2 mgd can be met with pumping of wells for 12 hours; however, wells must be pumped longer than 12 hours per day during maximum demand periods. Richland has its own water system; however, Swansboro and Holly Ridge are tied into the County water system.

The distribution system presently consists of over 600 miles of water line and six elevated storage tanks and the system currently services most of Onslow County. Specifically, the system, as of November 26, 1986, had a total of 17,684 accounts, with an additional 410 commercial accounts as shown below:

10,757	- Residential
4,671	- Multi-users (master meter for trailer parks, multi-family developments, etc.)
940	- Municipal
1,316	- 10 Private Systems
<u>17,684</u>	- Homes
410	- Commercial Accounts
<u>18,094</u>	- Accounts

Well #8 is a new well now in service, with Well #9 in temporary use. Three additional wells are now being drilled which, once complete, will provide the County system with an adequate water supply during the five-to ten-year planning period, or longer.

Richlands Water system consists of two wells and a storage tank with a 400,000 gallon capacity. The Richland Sewer system is currently operating at 80,000 gallon per day of treatment with plans to upgrade both the sewer plant and sewer mains.

Swansboro is presently purchasing approximately 135,000 gallons of water per day from Onslow County. The Town has a 100,000 gallon elevated tank with additional ground storage capacity in the form of an old 200,000 gallon tank which is presently not being used. However, consideration is being given to using this tank as a holding tank to pump water into the elevated tank. The Swansboro Sewer system is now treating approximately 125,000 gpd.

Onslow County does not presently have a sewer system; however, the County is presently conducting a study to determine the best approach to providing sewage treatment facilities such as the system currently serving the northern portion of West Onslow Beach and pending approval to serve the southern portion of West Onslow Beach. Jacksonville has a population of 39,000 people resulting in a flow of 4.46 mgd average with peak flows of up to 12.2 mgd. Holly Ridge has recently completed a 120,000-gallon capacity sewer system which is now in operation. Current use is 35,000 gallons per day, with an in-flow of 30,000 gallons per day. Engineers have projected a 20-year life on the system based on growth trends.

The County presently provides three beach access area facilities which have been developed with State assistance. The County continues to work with local developers in securing additional land for future access areas and these areas should be adequate to meet the County's needs during the planning period.

2. Design Capacity for Water Treatment, Sewage Treatment Plant, Schools, Landfill and Primary Roads

The County water system has a current design capacity of 2.7 mgd using 6 existing well sites and pumping 12 hours per day. The County currently does not have a central sewage treatment facility; however, the private package treatment facility serving the West Onslow Beach area has a capacity of 878,000 gpd. The

Holly Ridge sewage treatment facility has a 120,000 gallon capacity.

The Richland Water system has a pumping capacity of 600 gallons per min. using both wells with a storage capacity of 400,000 gallons. The Richland Sewer system can treat 216,000 gpd with plans to upgrade the system.

Swansboro is purchasing water from the County with a 100,000 gallon elevated tank and a potential ground storage capacity. The Swansboro Sewer system has a design capacity for treating 300,000 gpd.

Design capacity of Onslow County schools is shown on Table 16 with a total student capacity of 13,340 students.

The County landfill is located on Pony Farm Road with 150 acres currently being used and an additional 175 acres available for future use. Currently, the County does not have plans to provide a site in the eastern part of the County. The existing sites at Pony Farm Road should be adequate to meet County needs during the planning period.

Primary roads in the County include US 258, US 17, NC 24, NC 50, Piney Green Road, Gum Branch Road and the Western Boulevard Beltline. The State Highway improvement plan calls for additional lanes along NC 24 and US 258. The 1984 report prepared by Onslow County makes specific requests to the Department of Transportation to provide assistance in upgrading these facilities. (See Appendix, DOT Improvements.)

1985 Average Daily Traffic (ADT)

U.S. 17 South at County Line	-	5,200 ADT
N.C. 24 between Jacksonville and Swansboro	-	10,000 ADT
U.S. 258 West of Jacksonville	-	8,000 ADT
U.S. 17 South of Jacksonville	-	10,500 ADT
U.S. 17 North at County Line	-	5,500 ADT
N.C. 24 South of Richlands	-	6,900 ADT

3. Level of Utilization and Capacity for Water System, Sewage System, Schools, Landfill and Primary Roads

The County water system is presently working at or near capacity with bottlenecks in the distribution system due to high demand in areas that have continued to grow and that are presently served by water lines that are too small. The January, 1985, Water Supply and Distribution Facilities Report prepared by Moore, Gardner and Associates recommends improvements to the distribution system and recommended an increase in the number of wells to increase pumping capacity.

Richland has received approval on an \$800,000 water and sewer Bond Issue. The 400,000 gallon storage capacity and new improvements should keep this system adequate to serve Richland needs. The Richland sewer system is presently treating 80,000 gpd with a capacity of 216,000 gpd with plans to upgrade system. Richland's sewer extension policy requires developers to pay all cost for sewer extension.

Swansboro has the capacity to treat 300,000 gpd of waste and is currently treating 125,000 gpd. Based on the population growth the system should be adequate during planning period. Swansboro's sewer extension policy requires that developer pay cost for line extension or upgrading capacity to lift stations to serve developers' needs.

Swansboro, as discussed earlier, is purchasing water from Onslow County.

The package treatment facility presently serving West Onslow Beach is presently using 64,000 gpd of its capacity with a commitment for new or planned development of an additional 271,000 gpd. The North Topsail Water and Sewer, Inc. Franchise Area has been approved to serve the beach sewer needs south of 210 on the beach and portions of the mainland such as Pages Acres, Golden Acres and Chadwick Acres. As discussed earlier, Onslow County does not have a County sewer system; however, the County is studying what might be an appropriate approach to providing sewage treatment facilities for the County. In February of 1986 a \$16 million school bond issue was defeated. As shown on Table 16, several of the County schools are near or well above design capacity. To address this need, the County will have to consider another bond vote or raise funds through other means to make school improvements.

The landfill currently being used should be adequate to meet needs for an additional 6 years based on information provided by Andy Ennet of the Public Works Department. Hazardous waste material is disposed of at the Camp Lejeune landfill. At the present time, there is no landfill facility in the eastern part of the County which requires a substantial drive to utilize the Pony Farm Road facility. With the additional 175 acres adjacent to the existing site, this facility should be adequate through the year 2000. Also, the County with six other entities is studying a possible regional or subregional alternative trash disposal system.

All of the primary roads discussed earlier in this plan are at capacity and will require substantial improvement as discussed in the 1986 Highway Improvements Report prepared by the County and submitted to DOT officials.

Onslow County School Capacity

ONSLow COUNTY SCHOOLS		ENROLLMENT					
		Final	5th Month	1980-81 2	1984-85 3	1985-86 4 (4th Month)	
School	ADM	Capacity	ARM	1978-79 1	1980-81 2	1984-85 3	1985-86 4 (4th Month)
1. Bell Fork		418	366	385	307	375	
2. Blue Creek		616	722	722	881	881	1,137
3. Clyde Erwin		550	623	640	717	858	889
4. Dixon Elementary		792	1,090	1,026	858	978	978
5. Dixon High		560	483	453	668	761	761
6. Jax. Jr. High		660	532	497	580	620	620
7. Jax. High		940	1,256	1,202	1,440	1,601	1,601
8. Morton Elementary		506	664	697	812	812	1,076
9. Northwoods Elementary		528	507	535	552	552	684
10. Northwoods Park		660	714	674	710	784	784
11. Parkwood		286	455	407	355	608	608
12. Richlands Elementary		1,034	981	937	889	960	960
13. Richlands High		700	595	626	545	601	601
14. Silverdale		242	260	242	245	283	283
15. Southwest Jr.-Sr. High		580	784	766	752	853	853
16. Summersill		396	512	564	611	659	659
17. Swansboro Elementary		462	461	427	561	603	603
18. Swansboro Middle		352	324	330	373	427	427
19. Swansboro Jr. High		242	280	224	252	288	288
20. Swansboro Sr. High		680	655	598	557	602	602
21. Tabernacle		616	697	708	683	786	786
22. Trexler		352	521	497	515	502	502
23. Thompson		528	508	485	468	650	650
24. White Oak		640	1,021	948	821	878	878
TOTAL:		13,340	15,011	14,590	15,152	17,605	

Source: 1 Onslow County School Survey Report, 1979-80, Division of School Planning
 2 1981 CAMA Land Use Plan, Table 30
 3 Onslow County School Survey Report, 1984-85 Update, Division of School Planning
 4 Mr. C. T. Hoyt, Assistant Superintendent

**EXISTING SCHOOL SITES
(INCLUDES CAMP LAJEUNE)**

1984-85

KEY

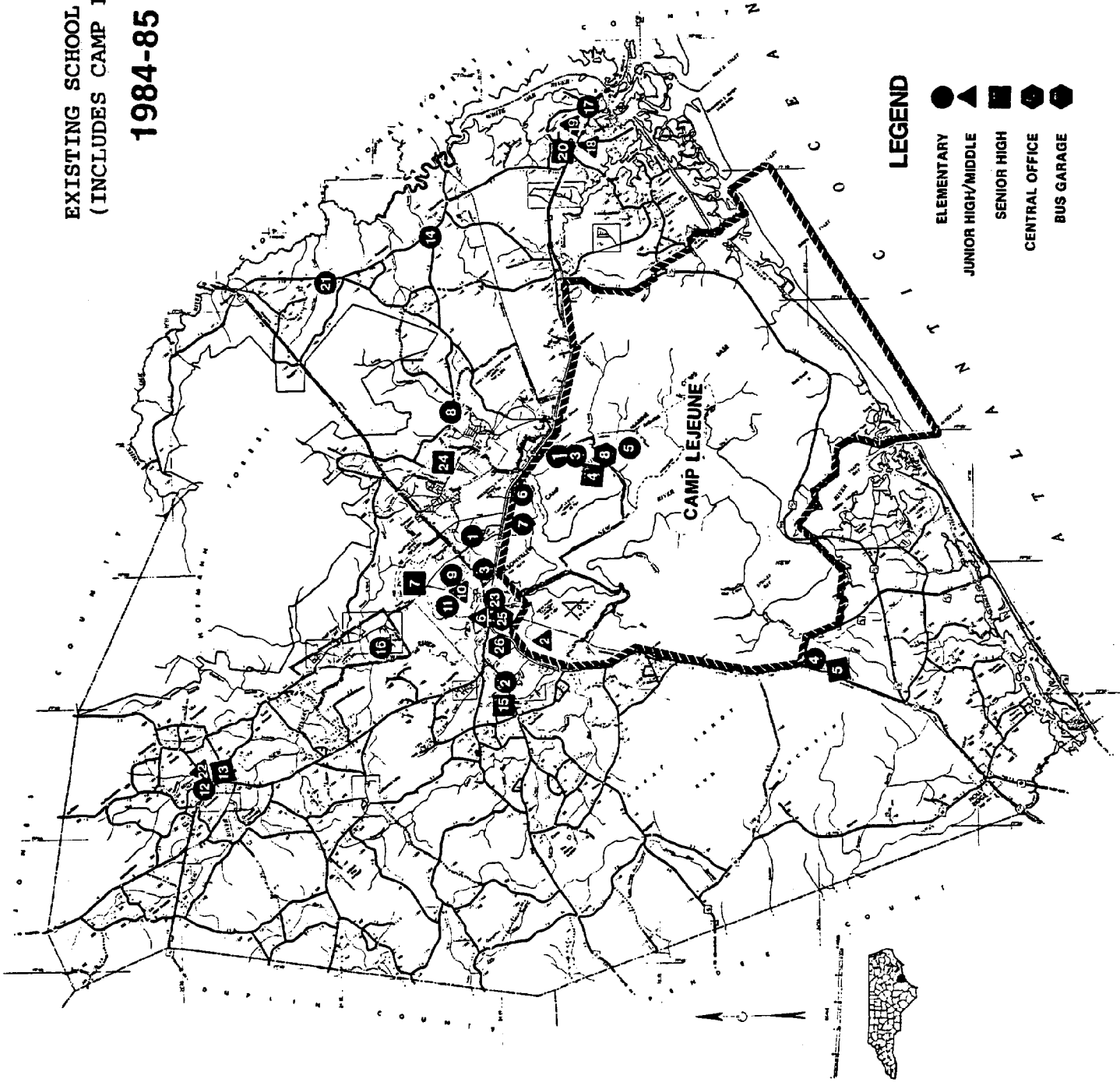
- ONSLOW COUNTY SCHOOLS**
1. BELL FORK K-3
 2. BLUE CREEK K-4
 3. CLYDE SWIN K-3
 4. DIXON K-4
 5. DIXON HIGH 7-12
 6. JACKSONVILLE MIDDLE 4-6
 7. JACKSONVILLE HIGH 9-12
 8. MORTON K-3
 9. NORTHWOODS K-3
 10. NORTHWOODS PARK MIDDLE 4-6
 11. FAIRWOOD K-3
 12. RICHLANDS K-3
 13. RICHLANDS HIGH 9-12
 14. SILVERDALE K-3
 15. SOUTHWEST HIGH 7-12
 16. SUMMERHILL K-3
 17. SWANBORO K-3
 18. SWANBORO MIDDLE 4-6
 19. SWANBORO JR. HIGH 7-8
 20. SWANBORO HIGH 9-12
 21. TALENACLE 4-8
 22. TREKLER 4-8
 23. WALTER M. THOMPSON K-3
 24. WHITE OAK HIGH 9-12
 25. CENTRAL OFFICE
 26. BUS GARAGE

CAMP LAJEUNE SCHOOLS

1. BERKELEY MANOR K-4
2. BREWSTER JR. HIGH 7-8
3. DALALIO K-3
4. LAJEUNE HIGH 9-12
5. STONE STREET K-4
6. TABAWA TERRACE I K-2
7. TABAWA TERRACE II 4-6
8. CENTRAL OFFICE

LEGEND

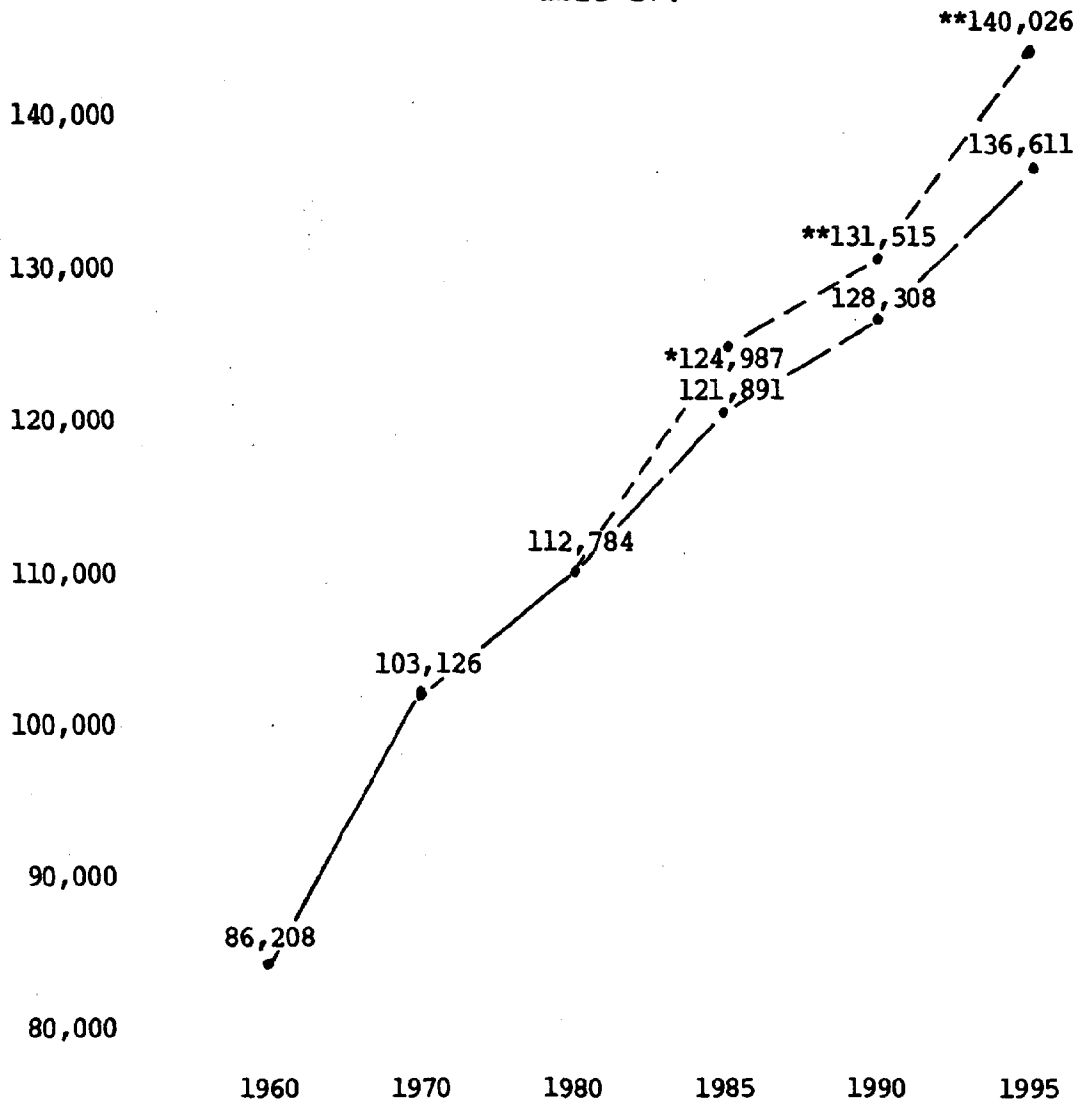
- ELEMENTARY
- ▲ JUNIOR HIGH/MIDDLE
- SENIOR HIGH
- ⬢ CENTRAL OFFICE
- ⬢ BUS GARAGE



FUTURE POPULATION OF ONSLOW COUNTY

Based on the North Carolina Office of State Budget and Management projections, Onslow County can anticipate continued population growth during the planning period, as shown on Table 17.

Table 17.



This growth projection by the State is based on Camp Lejeune personnel expanding, or at least staying constant, and continued expansion of the total local economy.

* Advanced Population Estimates for July 1, 1985 based on April 1986 Estimates.

** Note: 1990 and 1995 higher population figures based on April 1986 Estimates for July 1, 1985 of 124,987 population. Used 2.5% increase in State Management and Budget Projections for 1990 and 1995.

E. ESTIMATED DEMAND

1. Population and Economy

Based on the original and revised population projections for 1986 and beyond, Onslow County is projected to continue its growth in population. In April 1986 the State Office of Budget and Management increased the projected 1985 population of Onslow County from 121,891 people to 124,987. This increase represents a difference between the two projections of approximately 2.54% and this difference in per cent has been used to reflect the change in population for 1990 and 1995 if the same assumption used for the 1985 revised estimate stays true. Using their revised estimates Onslow County will increase in population by 15,039 people between 1985 and 1995.

With the continued efforts of a full time industrial development office working to expand the industrial tax base, anticipated increases in tourism and population expansion, the economic picture for Onslow County during the next ten years should be very bright. Obviously, much of this economic expansion will be based on Camp Lejeune remaining as approximately the same size and possibly expanding and continued tourism.

a. Seasonal Population

The 1981 Land Use Plan included information on seasonal population for the period between 1980 and projected for 1990, but no source for the information was given. In preparing the 1986 plan, we attempted to obtain information on seasonal population from the Chamber of Commerce, the County water department and planning department, and Office of Management and Budget, without success. At present, much of the seasonal population occurs between Easter and Labor Day primarily along the beachfront. Projects such as Saint Regis, Logerhead, San Marlo, and others are appealing to the vacationer. Specifically, Saint Regis, when completed, will have 330 units available in three buildings. A proposed 14-story hotel planned for the beach will have 210 units. Additional condominium projects located primarily at the northern end of the beach and large trailer parks at the southern end of the beach, plus individual beach cottages, will add additional population to the beach area during the summer vacation period. Although we do not have a specific seasonal population estimate, the County feels that current road, water, and sewer systems

can handle this increased population during the five- to ten-year planning period.

b. Local Objectives Concerning Growth

The primary concern of local officials is to permit expansion of the local economy while being sensitive to our local natural resources. Giving individuals a free choice as to location for housing and shopping etc., as long as it does not adversely impact on the environment and meets all current local, state and federal regulations is the primary objective of local officials.

c. Forseeable Social and Economic Change

As discussed in the population and economic section of the plan, Onslow County is shifting from a rural economy to a more urban economy. Also, the older population groups are expanding the fastest which will impact on the types of goods and services being required in the future. Also, families are becoming smaller in size with the 5-14 age group decreasing in population based on the 1980 census. If these trends continue, Onslow County will have a much larger population of citizens over 55 and fewer in the younger age groups.

2. Future Land Need

Using the 1985 and 1995 population projection for Onslow County, County officials can anticipate a population increase of approximately 15,039 during that ten year period. Using the 2.96 persons per household population figures from the 1980 census this projected population increase represents an additional 5,080 more households during this 10 year period. Assuming that current development trends continue, that is development being located throughout the County, these 5,080 additional dwelling units can easily be accommodated in the County. As discussed earlier, based on the 1980 Census Onslow County had a density of 148 people per square miles which is relatively low. If you assume a one acre lot per household this represents approximately 500 acres per year in development for housing with many of these lots probably already developed or approved for development.

3. Community Facilities Demand

As discussed earlier, the County water system is now in place to serve most all of the County. This system will require upgrading as there is increased demand in certain areas of the County. A County sewer

system is not presently available; however, the County is looking at alternatives and will be considering what is the most appropriate approach for the County to take as it relates to providing sewage treatment. Currently the private system serving the Sneeds Ferry area and Beach area is adequate; however, as this and other areas of the County continue to grow, the County will need to determine what, if anything, it should do to provide sewage treatment facilities as it has done with the County water system. At present and during the planning period, individual systems and package systems should be adequate; however, as the County continues to grow and change from a rural to a more urban county, a decision will need to be made concerning the best approach to provide sewage treatment needs in an effort to protect the local environment.

Several of the County schools are overcrowded and in need of expansion and renovation. In 1986, a bond referendum was turned down which will make expansion and renovation difficult. Several of the major roads leading into the Jacksonville area are in need of upgrading to handle anticipated traffic volume, and hopefully some of the improvements will be made during the 10-year planning period.

As the County continues to grow, there will be a need to provide additional and improved beach and waterfront access opportunities, as discussed on page 63 of this plan.

Sanitary landfill and trash disposal are provided by the County. The sanitary landfill at Pony Farm Road consists of 150 acres now in use, with an additional 175 acres for future expansion. Fourteen container sites are provided in higher-density areas for trash disposal. The County currently contracts for the removal of the containers for disposal at the landfill.

The County Sheriff's Department consists of the Sheriff, 58 deputies, and 33 office personnel. The department has 48 vehicles in use, with replacement of vehicles at the rate of 12 cars per year.

Onslow County is presently served by 20 volunteer fire departments, which range in size from 21 to 44 volunteers. The County presently has 8 rescue squads which are Jacksonville, Hawsrun, Nine Mile, Richlands, Swansboro, Sneeds Ferry, West Onslow Beach & Holly Ridge. The following table provides a summary of total personnel and equipment available for the fire department.

	<u>Personnel</u>	<u>---Equipment---</u>		<u>Crash Truck/ Utility Truck</u>
		<u>Pumpers</u>	<u>Tankers</u>	
20 Sites	596	44	24	18

POLICY STATEMENTS

A. RESOURCE PROTECTION

1. Areas of Environmental Concern

Issue: Protection of Onslow County Areas of Environmental Concern (AECs)

Onslow County recognizes the primary concern of the Coastal Management program is to provide a means for planning sound economic growth that is sensitive to the need to protect natural resources. County officials share this concern for the protection and sound management of these environmentally sensitive lands and waters. As listed in the 1981 Land Use Plan, Onslow County had the following Areas of Environmental Concern (AECs):

- a. Coastal Wetlands
- b. Estuarine Waters and Estuarine Shorelines
- c. Public Trust Areas
- d. Ocean Hazard Areas

Since the 1981 Land Use Plan was prepared, the Coastal Resources Commission has designated Permuda Island as an AEC because of archeological sites on the island. The designation was official as of November 16, 1984.

In terms of developing policies, the Estuarine System AECs, which include Coastal Wetlands, Estuarine Waters, Estuarine Shorelines, and Public Trust Areas, will be treated as one uniform grouping since they are so closely interrelated. Another reason for grouping these AECs together is the fact that the effective use of maps to detail exact on-ground location of a particular area sometimes poses serious limitations.

Onslow County's overall policy and management objective for the Estuarine System is "to give the highest priority to their protection and perpetuate their biological, social, economic, and aesthetic values, and to ensure that development occurring within these AECs is compatible with natural characteristics so as to minimize the likelihood of significant loss of private property and public resources." (15 NCAC 7H. 0203) In accordance with this overall objective, Onslow County will permit those land uses which conform to the general use standards of the North Carolina Administrative Code (15 NCAC 7H) for development within the Estuarine System. Generally, only those uses which are water dependent will be permitted. Specifically, each use permitted in the Estuarine System is discussed below.

- a. Coastal Wetlands (see definition on page 31)

The first priority of uses of land in this area will be uses which promote "conservation" of this sensitive

area, with conservation meaning the lack of imposition of irreversible damage to the wetlands. Generally, uses which require water access and uses such as utility easements, fishing piers, and docks may be allowed, but must adhere to use standards of the Coastal Area Management Act (CAMA: 15NCAC 7H).

b. Estuarine Waters and Estuarine Shorelines (see definition on page 33)

Onslow County officials are very much aware that protection of the estuarine waters and adjacent estuarine shorelines is of paramount importance to fishing, both commercially and for recreation. Onslow County recognizes that certain actions within the estuarine shoreline, which is defined as the area extending 75 feet landward of the mean high water line of the estuarine waters, could possibly have a substantial effect upon the quality of these waters.

In order to promote the quality of the estuarine waters, Onslow County officials will permit only those uses which are compatible with both the estuarine shorelines and which protect the values of the estuarine system. Residential, recreational, and commercial uses may be permitted within the estuarine shoreline, provided that:

- (1) A significant chance of pollution occurring from the development does not exist;
- (2) Development does not have a significant adverse impact on estuarine resources;
- (3) Development does not significantly interfere with existing public rights or access to, or use of, navigable waters or public resources.

c. Public Trust Areas (see definition on page 34)

Onslow County recognizes that the public has certain established rights to certain land and water areas, and that these public areas also support valuable commercial and aesthetic value. Onslow County will continue to promote the conservation and management of public trust areas. Appropriate uses include those which protect public rights for navigation and recreation. Projects which would directly or indirectly block or impair existing navigation channels, increase shoreline erosion, deposit spoils below mean high tide, cause adverse water circulation patterns, violate water quality standards, or cause degradation of shellfish waters shall generally not be allowed. Allowable uses shall be those which do not cause

detriment to the physical or biological functions of public trust areas. Such uses as navigational channels, drainage ditches, bulkheads to prevent erosion, piers or docks, and bridges may be permitted.

d. Archaeological Sites - Permuda Island (see definition on page 37)

The Coastal Resources Commission, based on the recommendation of Division of Archives & History, has designated Permuda Island as a significant coastal archaeological resource area of environmental concern on November 16, 1984. Permuda Island is a former barrier island located within Stump Sound in southwestern Onslow County. The island is 1.2 miles long and .1 - .25 mile wide. Archaeological evidence indicates earliest occupation from the Middle Woodland Period (300 B.C. - 800 A.D.) through the late Woodland Period (800 A.D. - 1650 A.D.) and historic occupations predating the Revolutionary War. Archaeological remains on the island consist of discrete shell heaps, broad and thick layers of shell midden, prehistoric refuse pits and postholes, as well as numerous ceramic vessel fragments and well-preserved animal bone remains. The resources offer extensive research opportunities. Only those uses permitted under applicable local, state, and federal regulations will be permitted. Subsequent to completion of the first draft of the LUP Update, the State is considering the purchase of this island from the Nature Conservancy to protect the island.

e. Ocean Hazard Areas

The primary causes of the hazards peculiar to the Atlantic shoreline are the constant forces exerted by waves, winds, and currents upon the unstable sands that form the shore. During storms, these forces are intensified and can cause significant changes in the bordering landforms and to structures located on them. Hazard area property is in the ownership of a large number of private individuals, as well as several public agencies, and is used by a vast number of visitors to the coast. Ocean hazard areas are critical, therefore, because of both the severity of the hazards and the intensity of interest in the areas.

The location and form of the various hazard area landforms, in particular the beaches, dunes, and inlets, are in a permanent state of flux, responding to meteorologically-induced changes in the wave climate. For this reason, the appropriate location of structures on or near these landforms must be reviewed carefully in order to avoid their loss or damage. As a whole, the same flexible nature of these landforms which presents hazards to development situation immediately on them offers protection to the land, water, and structures located landward of them. The

value of each landform lies in the particular role it plays in affording protection to life and property. Overall, however, the energy dissipation and sand storage capacities of the landforms are most essential for the maintenance of the landforms' protective function. Ocean hazard areas for Onslow County are shown on the official zoning map for the beach area and is available at the County Planning Office. Only those uses permitted under applicable local, state, and federal regulations will be permitted in a designated Ocean Hazard Area.

2. Hazardous and Fragile Land Areas

a. Freshwater Swamps

Onslow County supports the CAMA program and the U. S. Corps of Engineers 404 program which has jurisdiction on regulating development in designated freshwater swamp areas. The County will encourage landowners to establish or maintain vegetative buffers around sensitive wetlands and water bodies.

b. Marshes

Development in marsh areas is regulated by the local and State CAMA Permit Officers in addition to Corps of Engineers regulations. Onslow County policy is to continue support of these regulations in an effort to protect this sensitive natural environment.

c. Maritime Forests

Maritime forests are one of the most ecologically important components of the barrier island system. The County zoning map presently reflects conservation zones which, in some cases, include maritime forests, and these areas are being reviewed by the planning staff and Planning Board as part of the development review process, and this policy will continue.

d. Cultural & Historic Resources

Onslow County, through the Planning Board and Planning Staff, provides notification to Archives & History when a new subdivision is being reviewed to allow them the opportunity to comment on any adverse impact on archaeological sites. This is done in an effort to utilize the expertise of State staff in reviewing the impact of development on any known historic resources. This review procedure will continue to be County policy in the foreseeable future.

e. Man-Made Hazards

The Ellis Airport represents a potential man-made hazard area because of the potential of an air crash. In the unlikely event one should occur, it will be County policy to deal with such an event through use of the County Disaster Relief Plan.

f. Hurricane & Flood Evacuation Needs

An entire section within the Policy Statement discussions is included separately for hurricane and flood evacuation, as well as storm mitigation and post-storm redevelopment policies, beginning on page 69.

g. Protection of Potable Water Supply

As discussed in an earlier section, Onslow County has an extensive water system serving properties along over 600 miles of road front. This system has a total of 9 wells in operation, all of which are located west of Jacksonville. Land uses near groundwater sources are regulated by the North Carolina Division of Environmental Management through N.C.A.C., Subchapter 2L and Subchapter 2C. Onslow County recognizes the importance of protecting potable water supplies and, therefore, supports the enforcement of these regulations.

h. Use of Package Treatment Plants for Sewage Treatment Disposal

Package treatment plants are used rather extensively throughout the County. These facilities are regulated through the Division of Environmental Management guidelines. The County will continue to support the use of package treatment plants and enforcement of appropriate regulations in issuing permits for their use in an effort to protect water quality in adjacent waters.

i. Storm Water Runoff from Agriculture, Residential Development, Phosphate or Peat Mining

Through County support of the Division of Environmental Management, County officials support efforts to regulate storm water runoff through applicable State and Federal regulations. The County also requires drainage plans as part of the development review process; limited impervious surfaces is required and reviewed for compliance within CRC regulated areas.

j. Marina and Floating Home Development

The development of marinas has significant commercial and recreational potential in Onslow County. Therefore, the County supports the development of marinas, in compliance with applicable CAMA regulations. Floating home development has not taken place in Onslow County, and because of potential damage to water quality, the County will not encourage floating home development.

k. Industrial Impacts on Fragile Areas

Onslow County officials will continue to support applicable State and Federal regulations as they relate to the siting of new industry, or impact of new industry on environmentally sensitive areas. The County will encourage only water-dependent industries adjacent to water bodies.

l. Development of Sound and Estuarine System Islands

Onslow County would prefer lower intensity development in these areas if permitted by CAMA, Corps of Engineers, and zoning regulations. A density of 3-4 units per acre would be permitted only if all local, state, and federal regulations are met and a minimum of impervious surfaces are used.

B. RESOURCE PRODUCTION AND MANAGEMENT

1. Productive Agricultural Lands (Executive Order #96)

As discussed earlier, the County's draft detail soil survey does not address or identify the most productive agricultural lands in the County. At present, Onslow County has no zoning regulations to assist in conserving agricultural lands, and the law of supply and demand is used in the private sector to establish the highest and best use for existing agricultural land. As in the 1981 Plan, the County's policy will be to encourage and support where possible farm programs which will keep productive agricultural land in cultivation. The County will encourage the continued availability of the farmer's market as an outlet for locally produced agricultural products. The County will support as feasible the extension service efforts in working with federal procurement authorities at Camp Lejeune to purchase more local agricultural products for use on the Base.

2. Commercial Forest Lands

Commercial forest lands comprise over three-fourths of the land areas of the County. Specifically, Onslow County consists of 488,070 acres of land area with 342,703 acres in forest land. This natural and renewable resource is important to the County because of jobs provided through forest products, the aesthetic quality, natural habitat, and improved air quality provided through the abundance of forested areas.

The County's policy has been and will continue to be support of this natural resource through in-kind services to agencies directly involved with the maintenance and support of this resource. Specifically, the County will continue to support the Extension Service, Soil Conservation Service and N. C. Forest Service in their efforts to encourage good forest management. The County encourages the Agricultural Association's efforts to provide farmers financial incentives to leave forested buffer areas between productive agricultural areas and estuarine waters. The County will also continue to support CAMA and Federal Wetland Programs in an effort to protect fragile areas adjacent to timber lands.

3. Existing and Potential Mineral Production Areas

Onslow County presently has one large mining operation at Belgrade. This 136-acre site has been and will probably continue to be in operation for an extended period. Also, potential deposits of peat exist in several areas of the County and this could be a future source of energy.

The County will encourage the use of natural resources if mining operations meet all State and Federal laws and create no adverse impact on the environment. The County will continue to support the enforcement of State mining regulations.

4. Commercial and Recreational Fisheries, Including Nursing and Habitat Areas

The fishing industry, both commercial and recreational fishing, has been and continues to be an important part of Onslow County's economy. The County will continue to support recreational fishing by encouraging the expansion of tourism and vacation development. The County will encourage and support state and federal programs that work toward protection of nursery and fish habitat areas. The County will also support efforts to secure Economic Development Grants to develop a fish processing facility in the County.

5. Off-Road Vehicles

Protection of sand dunes and beach property is a high priority for Onslow County officials. The County presently regulates off-road vehicles at West Onslow Beach year-round; however, from May 15 to September 10, no vehicles are allowed on the beach strand other than emergency vehicles. Four-wheel drive vehicles are allowed on the beach strand during other periods, and these regulations will continue to be enforced by the County. Off-road vehicle regulations for public forests and other public lands are regulated by agencies other than the County.

6. Residential and Commercial Land Development

Onslow County has been and continues to grow in population. Current and future policy will be to allow the market place to establish the need for and location of future residential and commercial development. Current and future development must meet all established subdivision regulations, health department regulations, zoning, where applicable, and all State

or Federal agencies. The County Planning Board is currently studying expansion of the areas covered under zoning controls which, if expanded, will provide an additional means to guide future residential, commercial, and industrial development.

7. Peat and Phosphate Mining

At present, there are no known phosphate deposits in Onslow County large enough to justify mining. However, peat bogs do exist in the County, but due to current energy costs, peat mining does not appear to be economically feasible on a commercial scale. Onslow County officials will address these two issues and establish policy if and when activity in one or both of these areas appears feasible.

C. ECONOMIC AND COMMUNITY DEVELOPMENT

1. Types and Locations of Industry

One of the primary concerns of local officials and Onslow County citizens is the need for diversification of the County's economic base. Providing job opportunities to keep existing citizens here and to attract new business and industry is a top priority for the County. As discussed in the 1981 Plan, the County will continue to encourage industrial development that is sensitive to the environment and that will provide job opportunities for current and future citizens. Traditional manufacturing, tourism, commercial activities, and small businesses will be encouraged to expand and to in-migrate to Onslow County. A 1984 report by the Regional Development Institute of East Carolina University notes an economic benefit to North Carolina from affluent retiree in-migration. Onslow County will continue to provide a welcome environment for retirement development.

Policy: It shall be the policy of Onslow County officials to support and encourage efforts to secure traditional manufacturing industry that is sensitive to the environment, encourage the promotion of more tourism, to encourage new commercial and small business activity, and to support local and in-migration retirement opportunities.

Implementation:

- (1) County officials will work with DOT and other state officials to encourage the development of a connection from Onslow County to I-40 which will support industrial and tourism development. Also, a connector of 258 to NC 70 will be supported.
- (2) County officials will continue to encourage new industry to locate in the County and the County will actively work with communities that have water and sewer facilities to assist in developing industrial sites that can be served by water and sewer.
- (3) County officials will support efforts to develop more tourism, commercial and small business activity, and retirement opportunities.

- (4) County officials will support efforts to develop a civic center in Onslow County or Jacksonville as an additional incentive to encourage tourism.
- (5) County officials will support efforts to prepare promotional and statistical information on Onslow County designed to assist economic growth efforts and to publicize historic and other points of interest.
- (6) County officials will encourage a study to consider the possible expansion of the County museum to include all phases of Onslow County history such as the Marine Corps base, Sneads Ferry, New River, White Oak River, Swansboro, and historic points of interest.

2. Local Commitment to Provide Services to Development

At present, Onslow County provides water service to property adjacent to over 600 miles of the County's road system. Central sewage treatment and collection is not presently available; however, the County is studying the feasibility of providing such a system. At West Onslow Beach, a sewage collection and treatment system is available to serve this section of the County. The County also has several private sewage treatment facilities throughout the County that are working well and meet all State requirements. There appears to be a need for sewage collection and treatment facilities in developing areas such as Sneads Ferry and other rapidly growing areas to reduce the water quality problems being experienced from septic tank seepage into estuarine waters as discussed in the 1981 Land Use Plan. The County has designated areas adjacent to water bodies as transition areas on the Land Classification Map to reflect anticipated growth and to permit plans for the possible extension of a sewer system into these areas to reduce the use of septic tanks and thereby protect water quality. The County will continue to provide services such as trash removal, police protection, and fire protection and rescue squad through local volunteer fire departments and rescue squads.

Policy: The County will continue to provide water service to County residents and will continue the process of studying the County government's role in providing sewage treatment facilities for rapidly growing areas of the County. The County will secure federal or state grants, when feasible, to help carry out this policy.

Implementation:

- (1) Continue to improve or expand the County water system as feasible to meet the water requirements of County citizens.

- (2) Study and consider the feasibility of providing a sewage treatment and collection system for rapidly growing areas of the County or possibly several smaller systems to serve County needs.

3. Types of Urban Growth Patterns Desired and Redevelopment of Developed Areas

As discussed in the 1981 Land Use Plan, County citizens desired, at that time, moderate growth that would occur in an orderly manner, while preserving the existing character of rural areas. County officials feel that it would be in the County's best interest to encourage urban growth in areas already served by urban services or that could be served by urban services, such as water and sewer line extension. County officials also desire to assist those older developed areas that need redevelopment and that would qualify for State or Federal financial assistance.

Policy: County policy shall be to encourage urban development in or near Jacksonville, Richland, Swansboro, Holly Ridge, or West Onslow Beach and other growth areas, and specifically in areas that are or could be served by urban services, such as water and sewer. The County will continue to provide assistance where financially feasible to redevelop older developed areas through State or Federal programs.

Implementation:

- (1) Establish potential rapid growth areas of the County and consider the desirability of zoning these areas to provide a means to direct urban growth. Also, establish future sewer areas, using information provided by current sewer study.
- (2) Continue to work to secure financial assistance to redevelop older developed areas that qualify for State and Federal financial assistance.
- (3) Review current and potential growth patterns around Ellis Airport and implement Federal Aviation Administration regulations on height and zoning restrictions to protect from inappropriate development of this economic asset of Onslow County.
- (4) Review and update current mobile home park requirements now being used by the County.

- (5) Study of the possible use of a setback ordinance to establish a minimum distance back from highway roadways in lieu of zoning for predominantly rural areas of the County.

4. Commitment to State and Federal Programs Including Erosion Control, Public Access, Highway Improvements, Port Facilities, Dredging, Military Facilities

The County is committed to erosion control programs through support of the State Sedimentation Control Act. Public beach access has been and continues to be of great importance to local officials as demonstrated by the numerous public access points along the West Onslow Beach area and one access point to the sound and Intercoastal Waterway with other sites yet undeveloped.

Highway improvements are considered a major factor in ensuring the continued economic growth of the area. In 1986, the County Commissioners prepared and submitted to the Department of Transportation a report outlining requested improvements for major and minor thoroughfares in the County. The County also addressed the need for a bypass for US 17 around Jacksonville to eliminate the heavy through traffic that is presently and will most likely continue to be experienced along this major thoroughfare.

Large port facilities do not presently exist in the County, and any policy pertaining to any proposed facility would be considered on a case-by-case basis.

The County has and will continue to support efforts to dredge areas along the Intercoastal Waterway and the other major bodies of water to provide safe access for commercial and recreational boating.

The County considers Camp Lejeune a good neighbor and major economic resource for the County by providing numerous job opportunities for County citizens and the support of local business by military personnel stationed at Camp Lejeune. The County has and will continue to support the continuation of Camp Lejeune in Onslow County.

Policy: County officials will continue to support State and Federal programs that will benefit the County and County citizens.

Implementation:

- (1) Onslow County will continue to support erosion control regulations as required by the State Sedimentation Control Act.

- (2) Onslow County will continue efforts to provide and improve public access to the beach area and estuarine waters.
- (3) Onslow County will continue efforts to secure DOT funds to improve the County's major and minor thoroughfares.
- (4) Port facilities will be considered and policy established as need requires.
- (5) The County will seek funds and support efforts to dredge existing waterways as needed to ensure the continued safe use by commercial and recreational users.

5. Assistance to Channel Maintenance and Beach Nourishment Projects, Including Provision of Borrow and Spoil Areas and Provision of Easements for Work

Channel maintenance of areas, such as the New River Inlet, Atlantic Intracoastal Waterway, Bogue Inlet, and White Oak River, is very important to Onslow County because of the positive impact on commercial and recreational boating. Continued maintenance of these waterways is a high priority for County officials. Beach nourishment is not presently a problem, but if beach nourishment is needed, the County will assist in such effort by requesting State and Federal financial assistance.

Policy: County officials will continue to work with the Army Corps of Engineers and any other State and Federal agencies to ensure continued dredging and maintenance of channels and rivers as needed to keep these facilities open to navigation. Providing borrow or spoil areas and provision of easements for work will be determined on a case-by-case basis. The County would encourage spoil material being placed on those areas where easements for such use already exist.

Implementation:

- (1) Maintain contact with congressional representatives and Federal officials as dredging or other channel maintenance operations are needed.
- (2) County officials will continue to assist local users of these facilities as feasible, and as needs and concerns for dredging or maintenance are brought before local officials or as local officials determine that a need for such assistance exists.

- (3) County officials will consider requesting State and Federal assistance for beach nourishment if a request for such operations is made by County citizens or if County officials determine that a need for such assistance exists.

6. Energy Facility Siting and Development

At present, Onslow County is not aware of any plans to construct an energy facility in the County. County policy to deal with such a facility will be formulated if such a facility is proposed, and with the knowledge that such a facility would come under existing state and federal regulations prior to being located in the County.

7. Tourism and Beach and Waterfront Access

Tourism is a major economic benefit for Onslow County business and the Onslow County tax base. Providing public access to beaches and other waterfront access is a major goal and high priority for County officials as reflected in the three existing beach parks and one boat ramp at the beach already in existence, and three yet undeveloped park sites at the northern end of West Onslow Beach. Also, the County is working with Jacksonville, state and federal agencies to construct a waterfront park near the USO club in Jacksonville.

Continued efforts to provide more and first quality public beach and waterfront access should ensure the continued expansion of tourism in the County.

Policy: County officials will continue to work to expand and improve beach and waterfront access for public use.

Implementation:

- (1) Continue to apply for any State or Federal funds that are available for the purchase, development or improvement of new or existing public access sites.
- (2) Continue to look for other areas that might be available for access to beach or estuarine waters.

8. Coastal and Estuarine Water Beach Access

As discussed above, providing estuarine water and beach access for public use is a high priority for County officials. Therefore, it shall be County policy to make every effort to provide boating and pedestrian access to the County's estuarine and beach areas.

9. Anticipated Residential Development, Densities, Locations, Units Per Acre and Services Necessary to Support Development

Onslow County officials anticipate residential development to continue in the West Onslow Beach, Sneads Ferry, Southwest Onslow just south of Jacksonville, the Piney Green Road area, the Gum Branch Road area and the Swansboro and Queens Creek area. Much of this current and anticipated development directly relates to ease of access to either the Jacksonville and Camp Lejeune gates, the sounds and Intercoastal Waterway or the beach front. Densities and units per acre are presently determined by the County Zoning Ordinance for West Onslow Beach and by Subdivision Regulation Standards for Septic Tanks in the remaining portion of the County. The County presently provides water service to all current and anticipated growth areas. Public sewage treatment facilities are currently not available; however, the County is in the process of undertaking a study to determine the feasibility of providing a sewage system throughout the County. Also, a large private system at West Onslow Beach and Sneads Ferry is in operation with plans for expansion.

Services such as fire protection, roads improvements, and schools are monitored by the County to ensure that these facilities are providing the best possible service that is financially feasible to serve the needs of existing and anticipated development.

Policy: County officials will continue to encourage residential development to serve the housing needs of existing and future residents of Onslow County. Providing adequate community facilities to serve residential development will continue to be a high priority for County officials.

- (1) The County will conduct a study to determine the feasibility of providing a public sewage treatment facility to serve the needs of County growth areas.
- (2) The County will consider zoning in rapidly growing areas to provide guidance in the location and density of future development.
- (3) The County will continue to work to provide recreational opportunities in all recreational districts.

- (4) Continue to support rural fire departments and rescue squads.
- (5) Continue extension and upgrading of County water system.
- (6) Continue to upgrade school facilities as feasible.
- (7) Continue to upgrade collector street system.

10. Beach Area Development Policy

See map and policy statement on next page.





BEACH AREA DEVELOPMENT POLICY ON SLOW BEACH

Onslow County's beach development policy will be to encourage higher density development on the Atlantic Ocean side of the beach road in areas that are either vacant or in higher density development already. The existing lower intensity residential pattern areas at the southern end of the beach will be encouraged to remain in a lower intensity use.

Lower density development will be encouraged on the Sound side of the beach road in an effort to protect adjacent waters in this more environmentally sensitive area by encouraging low-density development in this area rather than higher density development. Providing access to the oceanfront is the primary objective of the Onslow County beach development policy.

The County has recently adopted an amendment to the zoning ordinance that will help prevent overcrowding of taller buildings on the beach front. Specifically, the zoning ordinance now requires that additional side yard be provided as building height increases.

LEGEND

-  LOWER INTENSITY RESIDENTIAL PATTERN
-  LOWER DENSITY SOUND SIDE
-  EXIST. UNDEVELOPED
-  EXIST. HIGHER DENSITY

SOUND SIDE DEVELOPMENT MUST BE MORE SENSITIVE TO THE ENVIRONMENT.

REVISED RELOCATION OF SR 1568

WATER/SEWER & ROADS AVAILABLE

DEMAND IS FOR OCEAN FRONT ACCESS FOR RESIDENTIAL DEVELOPMENT.

11. Supporting the Efforts of the Local KEEP AMERICA
BEAUTIFUL SYSTEM - The ONSLOW CLEAN COUNTY COMMITTEE

The goal of the Onslow Clean County Committee is two-fold: (1) achieve a sustained reduction in litter, and (2) preserve and protect our natural resources. The "Committee" is a locally owned and operated non-profit organization financially supported by the County and functioning under the guidelines set down by the national resource, Keep America Beautiful, Inc. The Committee itself is composed of 25 dedicated citizen volunteers whose activities are supported by three staff members: the Executive Coordinator and two litter control wardens. Through the combined efforts of the staff and the citizens' committee, four components underlie all basic actions to ensure that the desires of the County are carried out:

- ° A unified, enforceable sanitation code/ordinance will be enacted
- ° Public education workshops specifically geared to involve each segment of the County in the program
- ° Upgraded solid waste collection procedures and technology
- ° Fair and consistent ordinance enforcement

County officials are aware that a clean community projects a positive image for industry, new business, and visitors to the area and will continue to support the efforts of the Clean County Committee. Complementing and supporting the primary goal of reducing litter/preserving-protecting natural resources, the Committee will address other community issues to include, but not be limited to, those listed below:

Implementation

- (1) The Committee will work with schools, business/industry, civic clubs, governments, and the media to provide comprehensive involvement of the community in the Keep America Beautiful System.
- (2) The Committee will continue to work toward establishing alternatives to landfilling, such as recycling programs, waste-to-energy programs, and reusing programs among both private and public sectors.
- (3) The Committee and staff will continue to provide upkeep of West Onslow Beach by providing pedestrian litter receptacles, regulatory signs concerning the beach, and litter

ordinances. Routine maintenance will also be accomplished for receptacles and signs.

- (4) The Committee and staff will continue to enforce dune/beach regulations on West Onslow Beach.
- (5) The Committee and staff will continue to monitor the County container sites and assist the Solid Waste Department to provide clean, safe, and adequate disposal sites for County residents.
- (6) The Committee and staff will continue to serve as an agency to utilize DWI Community Service workers to perform various tasks for improvement of the County.

12. Mobile Home Ordinance

In August 1980, the Neuse River Council of Governments prepared a study of the existing conditions and trends of mobile homes in Onslow County at that time. In 1980, there were 212 mobile home parks containing nearly 2,900 units. Also, at that time, the average park contained about 15 units. In 1986, there are between 450 and 500 mobile home parks, ranging in size from five mobile homes to 600 mobile homes, with many parks being concentrated in the southwest Onslow and Swansboro Township areas. Based on a windshield study conducted by the Onslow County planning staff of the Snead's Ferry area, they found that this one portion of the County contained over 370 individual sited mobile homes and over 400 mobile homes in parks. This continuing growth in mobile homes and the current lack of regulations to guide mobile home development, other than minimal state water and sewer regulations as administered by the County Health Department, have the potential for complete overdevelopment of the County in mobile homes. Because mobile homes provide affordable housing resources for County citizens, County officials do not wish to restrict their use. However, because of the rapid growth in the use of mobile home parks, County officials feel that they need to be better regulated.

Policy and Implementation:

County officials will instruct the Planning Director and Planning Board to draft a mobile home ordinance for review and adoption. County policy will be to work toward the adoption of a mobile home park ordinance.

The County will incorporate into a mobile home ordinance guidelines on road construction, utilities, and landscape buffering.

D. STORM HAZARD MITIGATION

1. Hazard Map

The County has in place a Hurricane Damage Assessment and Reconstruction Plan which has been incorporated into this Land Use Plan. As part of the Land Use Plan update process we have identified from the existing Land Use Map and Flood Insurance Boundary Map approximately 907 structures of varying value that are within the 100-year flood area. This figure does not include the beach area because flood insurance maps in this area were not correct when received by the County and are presently being revised. However, based on the existing land use survey it appears that less than 200 mobile homes and less than 50 conventional cottages would be below the final designated 100-year flood level. This observation is made based on the fact that many of the newer structures at the northern end of the beach and many at the southern end of the beach are built on pilings at 12.5 feet above mean sea level, as recommended by local inspectors as part of the Emergency Flood Insurance Program.

2. Existing Land Uses and Structures in Hazard Area

The Flood Boundary Map shows that approximately 907 structures are located in the 100-Year Flood Area. Many of these are along the upper reaches of the New River, Southwest Creek and Queen Creek. (See Map #3, Composite Hazards Map.)

3. Monetary Value of Structures in Hazard Area

<u>Mainland</u>		
Approximately 907 Structures @ \$35,000*		\$31,745,000
<u>Beach</u>		
Approximately 200 Trailers @ \$10,000		2,000,000
<u>Beach</u>		
Approximately 50 Conventional Beach Cottages @ \$50,000		<u>2,500,000</u>
Estimated Value of Structures Subject to Storm Damage by Flooding		\$36,245,000

*Source: Typical replacement value from Tax Office

4. Hazard Mitigation Policy

It shall be the policy of Onslow County to enforce the Federal Flood Insurance requirements by setting finished floor elevations of new construction above the 100-year flood level to protect future development from flood damage as much as possible. In the event of storm damage, reconstruction would be permitted if the new construction meets all local, state, and federal regulations.

ONslow COUNTY
HURRICANE DAMAGE ASSESSMENT
AND RECONSTRUCTION PLAN

MARCH, 1984

Prepared at the Direction of
Onslow County Office of Emergency Management
and
Onslow County Board of Commissioners

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

HENRY VON OESEN AND ASSOCIATES, INC.
Consulting Engineers & Planners
611 Princess Street ** P. O. Drawer 2087
Wilmington, North Carolina 28402

ON SLOW COUNTY HURRICANE DAMAGE ASSESSMENT AND RECONSTRUCTION PLAN

TABLE OF CONTENTS

	PAGE
RECORD OF CHANGES	72
1. PURPOSE	73
2I. AUTHORITIES	73
3II. ORGANIZATION	74
4V. CONCEPT OF OPERATION	74
5. RESPONSIBILITIES	75
6I. INSTRUCTIONS FOR DAMAGE ASSESSMENT	79
7II. INSTRUCTIONS FOR RECONSTRUCTION TASK FORCE ACTIVITIES	82
8III. APPROVAL	83
Attachment 1 - Organizational Chart, Damage Assessment Teams	
Attachment 2 - Personnel Rosters and Vehicle Assignments, Damage Assessment Teams	
Attachment 3 - Personnel Roster, Reconstruction Task Force	
Attachment 4 - Sample Damage Assessment Worksheet and Instructions	
Attachment 5 - Damage Assessment Report	

ONLOW COUNTY

HURRICANE DAMAGE ASSESSMENT AND RECONSTRUCTION PLAN

RECORD OF CHANGES

CHANGE NUMBER	DATE OF CHANGE	DATE ENTERED	CHANGE MADE BY (SIGNATURE)

ONslow COUNTY

HURRICANE DAMAGE ASSESSMENT AND RECONSTRUCTION PLAN

I. PURPOSE

This plan sets forth the authority, organization, concept, assigns responsibilities and provides instructions for the conduct of damage assessment and reconstruction operations by means of on-the-scene surveys following a hurricane disaster in Onslow County. For definition of damage assessment, see Paragraph VI.A. The information obtained during the survey is essential in assessing the extent of damage within the County and is required when requesting State and Federal assistance. This plan will be used for assessing damage caused by a hurricane. However, it also may be used to assess damages caused by other types of disasters such as a flash flood, tornado, winter storm (northeaster), etc.

II. AUTHORITIES

- A. Public Law 93-288
- B. NC General Statutes Chapter 166A
- C. Civil Preparedness Ordinances and Agreements
 - (1) Jacksonville-Onslow County Civil Preparedness Resolution
 - (2) Jacksonville-Onslow County Disaster Operations Plan
 - (3) Jacksonville-Onslow County-American National Red Cross Agreement
 - (4) County of Onslow State of Emergency Ordinance, as amended.

III. ORGANIZATION

- A. Damage Assessment Operations. The organization for damage assessment operations will be as shown in Appendix 1 - Organization Chart to this Plan. Personnel Rosters and Vehicle Assignments are shown in Appendix 2.
- B. Reconstruction Task Force. The organization of the Reconstruction Task Force will be as shown in Appendix 3.

IV. CONCEPT OF OPERATION

- A. Pre-Disaster. County Emergency Operating Center (EOC) personnel and Damage Assessment Section (DAS) will maintain equipment and supplies (maps, forms, city directories, photo records of structures, tax value information, etc.) in readiness condition. The Damage Assessment Section (DAS) will be provided damage assessment training, at least annually. The Reconstruction Task Force (RTF) will meet to discuss procedure coordination at least annually.
- B. During the Disaster. DAS and RTF personnel will remain in shelters, listen to the radio, and prepare to respond to a telephone call, commercial radio and television or other message to report for duty.
- C. Post-Disaster. As soon as safety conditions permit, DAS and RTF personnel when notified will report to the County EOC, receive assignments and pick up equipment and supplies, move to emergency or disaster area in vehicles equipped with two-way radios, survey assigned areas,

record damage, transmit general damage assessment information via radio or other means to EOC, return to EOC when directed, and provide specific written report to EOC. Damage assessment will continue until all suspect areas are covered even though Federal or State assistance has arrived. The Reconstruction Task Force will meet to recommend the declaration of a moratorium on repairs and new development (if necessary) in accord with the County of Onslow State of Emergency Ordinance, as amended. Also, the RTF will oversee the reconstruction process and advise the County Commissioners on any policy questions which may arise. The RTF will work closely with the State and Federal representatives on the Interagency Regional Hazard Mitigation team and the Section 406 Hazard Mitigation Survey and Planning teams.

V. RESPONSIBILITIES

A. Emergency Management Coordinator (EMC)

- (1) Ensure that equipment and supplies (damage assessment planning maps, photo records of all existing structures, property evaluation and insurance data, damage assessment forms, city directories, etc.) are readily available in the EOC. Schedule damage assessment training for the DASA and provide for the instruction at least annually and no later than March of each year. Update this plan annually.

- (2) Notify the County Damage Assessment Officer that an emergency or disaster is imminent or has occurred and arrange to assist him in notifying the Survey Teams and Recovery Task Force members via telephone, commercial radio and TV or other means. Provide situation briefing in EOC and in coordination with the Damage Assessment Officer dispatch teams as needed to affected areas. Remain in the EOC and receive damage reports from the Damage Assessment Officer, analyze same and advise heads of local governments of situation. Provide consolidated damage assessment data to the State Emergency Management at the State EOC in Raleigh; or to the State Emergency Response Team (SERT) at its Field Command Post if it is operational.
- (3) Retain reports for use in future to support disaster impact data (see Paragraph VI A (9) below).

B. Damage Assessment Officer (DAO)

- (1) Assist the County EMC in maintaining DAS readiness to include this plan, equipment and supplies, and training. Update damage assessment planning maps, photo records of all existing structures and property evaluation and insurance data to include information available in the Onslow County Tax Office and from local insurance firms. Update personnel rosters and vehicle assignments.

- (2) Upon notification of an emergency or disaster, report to the EOC and notify Survey Teams. In coordination with the EMC, dispatch appropriate teams to the affected area. Remain in the EOC and receive damage data from the teams, review for accuracy, record and plot information, assess values to damages, and advise EMC of the situation. Contact local American Red Cross Chapter for damage assessment data. Prepare consolidated damage assessment data in prescribed format for transmittal by the EMC to State Division of Emergency Management. (See Appendix 5 of the Plan).

C. Damage Assessment Teams (DATs)

- (1) Assist DOA and EMC in maintaining readiness by checking equipment and supplies, attending training sessions and reporting any changes to personnel rosters.
- (2) Upon official notification, report to the EOC as soon as safety conditions permit, receive assignments, pick up equipment and supplies, move in vehicles equipped with two-way radios to the emergency or disaster area assigned, survey area, record damage, transmit general damage assessment information via radio to EOC, return to EOC when directed and provide specific written reports to Damage Assessment Officer.

D. Reconstruction Task Force (RTF)

- (1) Review the nature of damages, identify and evaluate alternate approaches for repairs and reconstruction, and formulate recommendations for handling community recovery.
- (2) Recommend to the County Commissioners the declaration of a moratorium on repairs and new development.
- (3) Set a calendar of milestones for reconstruction tasks.
- (4) Initiate orders for repairs to critical utilities and facilities.
- (5) Recommend the lifting of a moratorium for "minor" repairs.
- (6) Recommend the lifting of a moratorium for "major" repairs to conforming structures.
- (7) Evaluate hazards and the effectiveness of mitigation policies and recommend the amendment of policies, if necessary.
- (8) Initiate negotiations for relocations and acquisitions of property.
- (9) Recommend the lifting of moratorium on "major" repairs (with approved changes to conform).
- (10) Participate in federal hazard mitigation planning.
- (11) Recommend the lifting of moratorium on new development.

VI. INSTRUCTIONS FOR DAMAGE ASSESSMENT

A. Definition. Damage assessment is a rapid means of determining a realistic estimate of the amount of damage caused by a hurricane (or other emergency or disaster). For the purpose of this plan, it is expressed in terms of numbers of structures, type of damage (destroyed, major damage, minor damage, habitable or uninhabitable), estimated total dollar loss, estimated total dollar loss covered by insurance, and information describing the impact of the disaster. Disaster impact information may include but is not limited to the following:

- (1) Number homes inaccessible (due to loss of roads, bridges, presence of overwash fans, or for other reasons).
- (2) Number of people displaced and in need of housing.
- (3) Number of substandard homes damaged or destroyed.
- (4) Unemployment estimates, businesses affected and estimated length of problem.
- (5) Needs for food, clothing, and medicine.
- (6) Needs of elderly.
- (7) Minority problems.
- (8) Economic conditions of community - normal or depressed.
- (9) History of past disasters.
- (10) Debris problems.
- (11) Emergency protective measures taken by government.

- (12) Resources available to meet the needs of people.
- (13) Resources needed and unavailable in terms of type, quantity and duration.

B. Reports

- (1) To State. Damage Assessment Reports will be submitted by the County government for the entire County and will consolidate municipal and County data. Reports will be submitted to the State Director, NC Division of Emergency Management and a copy provided to the Area Coordinator as soon as possible, generally within 24 hours, but no later than 48 hours following the occurrence. The reports will be in the format prescribed in the Onslow County Disaster Relief and Assistance Plan, and as shown in Appendix 5 of this Plan.
- (2) To County. Survey team reports will be completed by Team Captains in accordance with the procedure shown below, reported as rapidly as practicable using best available means of communication, and confirmed with a completed form when the team returns to the EOC.

C. Team Procedure. Form EM-39 (Percentage of Value Method) will be used by the teams (or team members) who will estimate the extent of damage sustained expressed as a percentage of the total value of the structure (See Appendix 4). Determination of estimated dollar loss will be calculated by the Damage Assessment Officer using best available property value listings and other information.

- (1) Survey area assigned preferably by on-site visit. (Note: If not possible, obtain data by other means, e.g., telephone or other personal contacts).
- (2) Complete the Damage Assessment Worksheet (Form EM-39 - Percentage of Value Method), a copy of which is shown in Appendix 4, in accordance with the Damage Assessment Worksheet Instructions.
- (3) Transmit general damage assessment information via radio or other means to the EOC. Provide followup written reports of general damage to the Damage Assessment Officer.

D. Section Procedure. Damage Assessment Officer will:

- (1) Review all team worksheets for accuracy.
- (2) Consolidate all team worksheets.
- (3) Using the Damage Assessment Planning Map, photo files, and Property Evaluation and Insurance Data on file, complete that portion of the worksheets entitled "For Use By Damage Assessment Officer" in accordance with instruction contained in the reverse of each worksheet.
- (4) Using the above data, complete Section A of the County Damage Assessment Report in accordance with instructions contained in Appendix 5.
- (5) Obtain "Private Property - Agricultural" data from the County USDA Emergency Board and enter in Part B of the report.

- (6) Complete Section C - Economic Impact and Section D - Public Property in accordance with Appendix 5.
- (7) Pass report to EMC and retain one copy for files.

VII. INSTRUCTIONS FOR RECONSTRUCTION TASK FORCE ACTIVITIES

A. Task Force Procedures

- (1) Based on preliminary damage assessment reports, recommend the declaration of a moratorium on repairs and all new development by County Commission.
- (2) Prepare a calendar of milestones for reconstruction and set priorities for repairs to roads, water and sewer systems, telephone and electrical power line/facilities, waterways, beach dunes, public structures, etc.
- (3) Initiate orders for repair of infrastructure based on establishment priorities.
- (4) Initiate special reconstruction permitting procedures using the resources of the existing County Building Inspector's office.
- (5) Meet on site to (a) establish the new CAMA setback line for all beachfront construction, (b) establish the locations of roads, utilities, etc., (c) mediate decisions regarding relocation of structures away from hazard areas, and (d) negotiate the acquisition of land for public use.
- (6) Recommend specific further mitigation of hazards based on presently unknown conditions extant following the storm.

- (7) Recommend the gradual lifting of moratoria as reconstruction progresses.
- (8) Conduct a post reconstruction meeting to review the disaster experience and to modify the role of the Task Force as needed.
- (9) Revise the Hurricane Damage Assessment and Reconstruction Plan as required to meet future needs.
- (10) Prepare a final disaster recovery report following the reconstruction period.

VIII. APPROVAL

Emergency Management Coordinator

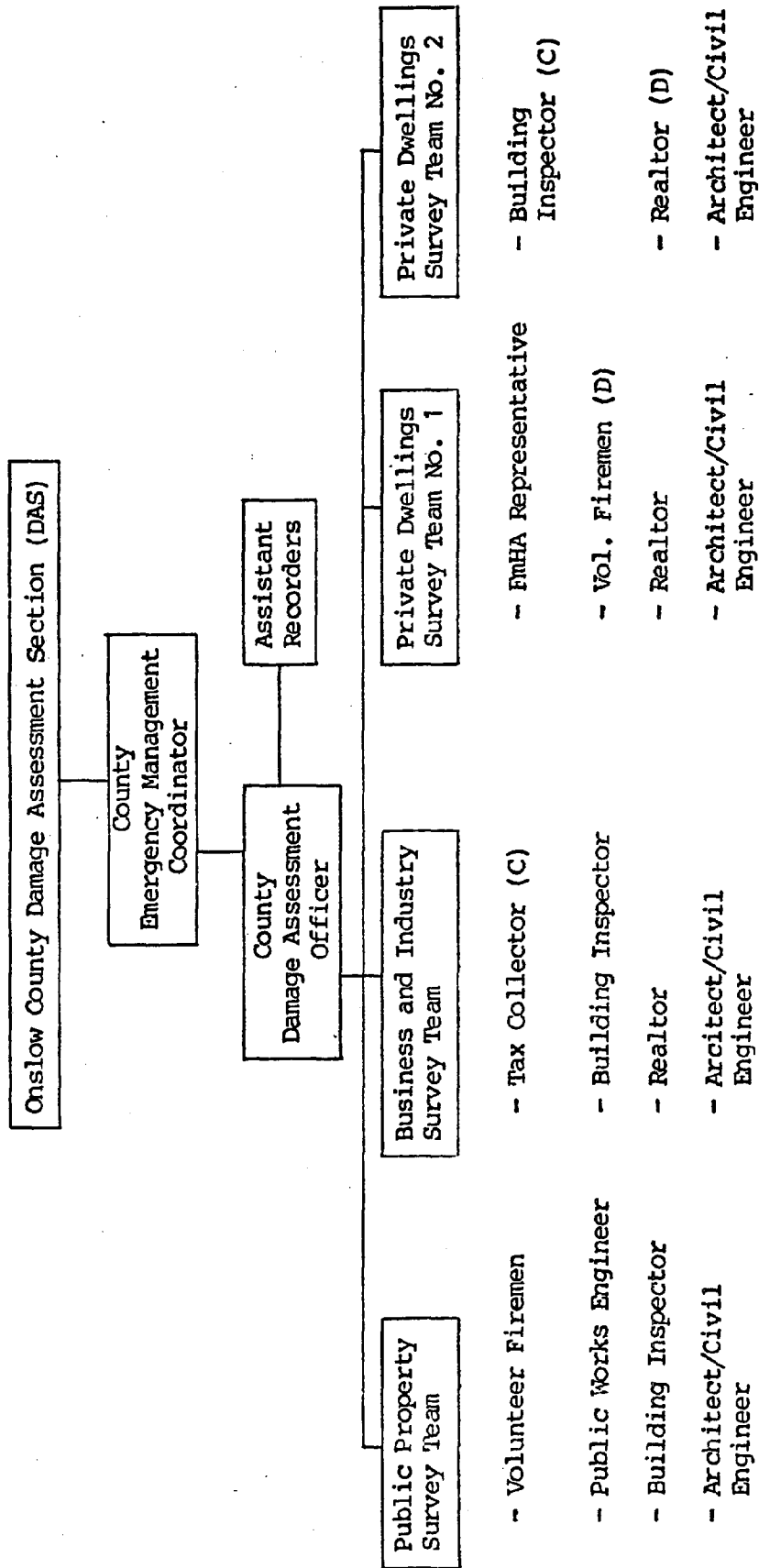
Damage Assessment Officer

APPENDICIES

1. Organizational Chart, Damage Assessment Teams
2. Personnel Rosters and Vehicle Assignments, Damage Assessment Teams
3. Personnel Roster, Reconstruction Task Force
4. Sample Damage Assessment Worksheet and Instructions
5. Damage Assessment Report

APPENDIX 1

ORGANIZATION CHART



C = Team Captain
 D = Driver

NOTE: The organization shown above is designed to show the various sources of personnel which may be available for survey teams. Onslow County should specify the composition of the teams.

APPENDIX 3

PERSONNEL ROSTER OF RECONSTRUCTION TASK FORCE

Telephone
Office - Home

Name

Title

A. County Personnel

1. Chairman, Onslow County Board of Commissioners (Team Leader)
2. Onslow County Emergency Management Coordinator
3. Damage Assessment Officer (County Auditor)
4. County Sanitarian
5. County Sheriff
6. County Building Inspector

28

B. Private Sector Personnel

1. Realtor
2. Civil Engineer
3. Architect
4. Banker

C. Designated Representatives From Following Public Agencies or Private Corporations

1. Onslow/Jones County Electrical Membership Corporation
2. Carolina Telephone Company
3. NC Department of Transportation
4. NC Division of Environmental Management
5. NC Office of Coastal Management
6. US Army Corps of Engineers
7. Farmers Home Administration

DAMAGE ASSESSMENT REPORT INSTRUCTIONS

Reports will be made by county governments and State Departments and will cover damages within the entire county including municipalities.

The Damage Assessment Report will be submitted following a significant emergency or disaster. Assessments are required in numerical and dollar value terms. They must be made by qualified personnel and should be the best estimates that can be made in the immediate post-emergency/disaster period. Numbers and dollar values are totals for the county. In completing Sections A and B below the following definitions will apply:

- DESTROYED - More than 80% of value to repair; unusable, uninhabitable.
- MAJOR DAMAGE - More than 30% of value of a structure; uninhabitable.
- MINOR DAMAGE - 30 % or less of the value of a structure; uninhabitable.
- HABITABLE - Damage amounting to 15% or less of value of structure; usable for intended purpose.
- UNINHABITABLE - Unusable for intended purpose.
- TOTAL DOLLAR LOSS - Repair/replacement cost at current prices; restore to pre-disaster conditions (present standards).
- INSURANCE COVERAGE - Average insurance coverage by type of property expressed in percentage of total property value.
- N/A - Not Applicable.

Section A - Private Property - nonagriculture - includes all dwellings, businesses (large and small commercial concerns) and privately owned utilities in urban, suburban and rural areas except properties of individuals principally engaged in agriculture.

Section B - Private Property - agriculture - reports damages to agricultural property including dwellings of farmers. Care should be taken to ensure that damaged dwellings are reported in only one Section.

Section C - Economic Impact - includes information necessary to estimate the amount of individual assistance which will be needed in categories such as temporary housing, food stamps, unemployment compensation, individual and family grants, and Small Business Administration Loans.

Section C, Economic Impact is completed as follows:

1. Business Losses - List information requested based on conversation with owners or managers of damaged businesses.
2. Losses by Income Level:
 - a. From Section A, determine total dollar loss for all types of property.
 - b. From Section B, determine total dollar loss for all types of property.
 - c. Add a and b above to obtain grand total dollar loss.
 - d. On the basis of the Damage Assessment Officer's knowledge of the prices of the damaged/destroyed property, divide C (grand total dollar loss) into three parts; that which could be attributed to low, middle, and high income families. For example, if 2/3 of the dollar value of private property damage was sustained by low income families/individuals, then 2/3 of the total dollar loss would fall under the "Dollar Loss" column in the "Low" (Income) row. Divide the remaining 1/3 appropriately between middle and high income groups, using the same procedure. Enter these figures under the "Dollar Losses" column.
 - e. Based on the Damage Assessment Officer's knowledge of the damage communities, estimate the average insurance coverage in the high, middle and low income groups and enter these figures under the average % insurance coverage column.
 - f. Compute the uninsured losses for the three income levels by multiplying the dollar loss figures for each income group times the appropriate % insurance coverage and subtract the result from the appropriate income level dollar loss figure. Enter the result under the Uninsured Losses column in the appropriate Income Level Row.
3. Effects on Transportation - Give a verbal and/or numerical description of the effects of the disaster on public and private transportation.
4. Effects upon farm employment. From the County ASCS Emergency Board, obtain an estimate of the number of farm and migrant workers who are affected by the disaster.

Section D - Public Property - includes all properties and facilities owned by legal governmental entities within the county including publicly owned utility systems. It also includes damages to private nonprofit educational, utility, emergency medical and custodial care facilities which have an effective ruling letter from the Internal Revenue Service granting tax exemption.

All sections are required for a complete Damage Assessment Report. Where any of the three categories of property (private, agricultural, public) received no damages, it should be noted as "none."

Normally, one complete Damage Assessment Report will be submitted and will be shown as report number one. Changes or additions can be made by submitting revised reports which will be reports number two, three, etc.

LAND CLASSIFICATION

III. LAND CLASSIFICATION SYSTEM

The land classification system provides a uniform way of looking at how the planned use of land interacts with environmentally sensitive areas and with the development of a County. It is not a strict regulatory device in the sense of a zoning ordinance or zoning map. It represents more of a tool to understand relationships between various land use categories and how these relationships help shape local policy. Particular attention is focused on how intensely land is utilized and the level of services required to support that intensity. Land classification is also useful in the staging of services necessary to support development. The regulations for the Coastal Area Management Act state:

"The land classification system provides a framework to be used by local governments to identify the future use of all lands. The designation of land classes allows the local government to illustrate their policy statements as to where and to what density they want growth to occur, and where they want to conserve natural and cultural resources by guiding growth." (7B.0204) (b)

There are five general land use classifications under CAMA: Developed; Transition; Community; Rural; and Conservation. In applying the land classification system, each local government gives careful consideration to how, where and when certain types of, and intensity of "development," will be either encouraged or discouraged. A brief summary of the five broad classifications, as contained in the CAMA rules, might illustrate this. For example:

"Urban land uses and higher intensity uses which presently require the traditional urban services should be directed to lands classified developed. Areas developing or anticipated to develop at urban densities which will eventually require urban services should be directed to lands classified transition. Low density development in settlements which will not require sewer services should be directed to areas classified as community. Agriculture, forestry, mineral extraction and other similar low intensity uses and very low density, dispersed residential uses should be directed to lands classified rural. Generally, public or private water or sewer systems will not be provided in areas classified rural as an incentive for intense development." (7B.0204) (c)

The purpose of the conservation class is to "provide for the effective long-term management and protection of significant, limited, or irreplaceable areas." Consequently, urban services (whether public or private) should not be provided to those areas as an incentive to "stimulate" more intense development. Each of these classes must be represented on a Land Classification Map.

The five land classifications and Land Classification Map are therefore intended to serve as a visual reflection of the policies previously stated in earlier sections of this plan. Ideally, the map which depicts these classifications should be as flexible as the policies that guide them. Also, the areas shown as conservation includes AEC's, wetlands, floodways with ultimate determination of their location on the ground being made by the appropriate regulatory staff or County permit officer. (See Map 2, Land Classification Map)

The five land use classifications, used in the CAMA program are:

A. DEVELOPED

The developed class of land use provides for continued intensive development and redevelopment of existing cities or municipalities. Areas to be classified as "developed" include lands currently developed for urban purposes or approaching a density of 500 dwellings per square mile that are provided with usual municipal or public services, police and fire protection. In other words, such areas must currently be "urban" in character, i.e. have mixed land uses such as residential, commercial, industrial and institutional, or other uses at high to medium densities.

B. TRANSITION

Transition land is classified as those lands providing for future intensive urban development within the ensuing ten years on lands that are most suitable and that will be scheduled for provision of necessary public utilities and services. They may also provide for additional growth when additional lands in the developed class are not available or when they are severely limited for development.

Lands classified "transition" may include:

- ° lands currently having urban services;
- ° lands necessary to accommodate the population and economic growth anticipated within the planning jurisdiction over the next five to ten years;
- ° areas which are in, or will be in, a "transition" state of development, i.e. going from a lower intensity to a higher intensity, of uses and will eventually require urban services.

Transition lands must further:

- ° be served or be readily served by public water, sewer, and other urban services including public streets, and
- ° be generally free of severe physical limitations for urban development.

The "transition" class should not include:

- lands of high potential for agriculture, forestry, or mineral extraction, or land falling within extensive rural areas being managed commercially for these uses, when other lands are available;
- lands where urban development might result in major or irreversible damage to important environmental, scientific, or scenic values, or;
- land where urban development might result in damage to natural systems or processes of more than local concern; and
- lands where development will result in undue risk to life or property from natural hazards or existing land uses.

C. COMMUNITY

The "Community" classification provides for clustered land uses to meet housing, shopping, employment, and public service needs within the rural areas of the County. It is usually characterized by a small grouping of mixed land uses which are suitable and appropriate for small clusters of rural development not requiring municipal sewer service.

D. RURAL

The "Rural" class provides for agriculture and forest management, mineral extraction and other low intensity uses on large sites including residences where urban services are not required and where natural resources will not be unduly impaired. These are lands identified as appropriate locations for resource management and allied uses; land with high potential for agriculture, forestry or mineral extraction; lands with one or more limitations that would make development costly and hazardous; and land containing irreplaceable, limited, or significant natural, recreational or scenic resources not otherwise classified.

E. CONSERVATION

The final land use category, according to CAMA guidelines, is the "Conservation" class, which provides for effective long-term management of significant, limited, or irreplaceable resources, specifically, and at minimum, all of the statutorily defined AECs. However, beyond the presence of AECs, other areas within the County, because of natural, cultural, recreational, productive, or scenic value, may also require similar "effective long-term management." Examples could include major wetlands (other than statutorily defined coastal wetlands); essentially undeveloped shorelines that are unique, fragile, or hazardous for development; lands that provide necessary habitat conditions (especially for remnant species); pocosins; or publicly owned water supply watersheds and aquifers.

The designation "Conservation" should not be misconstrued to imply "non-use," but does imply a need for careful and cautious management of any allowable use. For example, within a "conservation" area, there may be high ground areas which are suitable for "development," in which case development should be allowed to take place under carefully managed conditions. The term "preservation," on the other hand, implies total restriction on all uses. Within lands designated Conservation, each proposal, or application for any "developed" use should be reviewed on a case by case basis.

Since, as stated previously, "Conservation" does not imply "Preservation," specific allowable uses in the Conservation class shall include:

1. Drainage: Adequate drainage is essential to the economic vitality of Onslow County; therefore, drainage facilities over and through these areas, but not with the intent of draining the Conservation areas for "developed" purposes, will be allowed. Such facilities may include diking, tiling, and piping systems.
2. Low density residential development if and as approved by the County Health Department and local, state, and federal regulations. However, water and/or sewer services will not be extended to such a residential area merely to stimulate additional growth and development. On-site sewer services will be required and must be feasible.
3. Water-oriented uses such as piers, docks, and marinas, if they are shown not to cause detriment to the estuarine waters or the Conservation lands.
4. Necessary utility service lines, such as water, sewer, electrical, natural gas, etc., may be transmitted through areas classed as conservation. These lines would have a destination outside of areas classed conservation and would serve only areas outside the conservation class and would not act as a stimulus to development within the conservation class. These transmission lines shall not violate the environmental integrity of the conservation class, and if permitted, must meet all applicable federal, state, and local regulations.
5. Roadways, when construction of roadways can be conducted without significantly altering the ecological system, and in compliance with existing federal, state, and local regulations.
6. Timber harvesting with approved management practices.
7. Barge landings.

8. Marinas (upon careful determination that substantial pollution will not occur) and as permitted by local, state, and federal regulations.

In conjunction with the Policy Statements section of this Plan, each application for a "developed" use in the Conservation classification shall be brought before the County Planning Board and reviewed on a case-by-case basis prior to approval. The County Planning Board may recommend modification of the proposal and may require engineer's reports to show that no adverse impact on the environment will be caused by the proposed development.

The County has chosen to use two types of transition on the land classification map in lieu of the current point system that has been established since completion of the 1981 plan to change a land classification designation from rural to transition to permit development. The higher density transition includes those areas experiencing rapid growth with the lower density transition, including those areas that are in a state of transition from a lower intensity of use to a higher intensity of use.

Higher Density Transition - This transition classification as reflected on the land classification map includes those areas of the County that are experiencing rapid growth, are served by County water, streets and other services, including some package treatment plants and areas that may be the first priority areas to be served by sewer. Areas in this classification and as shown on the land classification map, include the West Onslow Beach Area and Sneads Ferry area which is now or soon will be served by a private sewer system. The Southwest Onslow area and Gum Branch Road and Highway #258 Corridor is also a rapidly growing area in transition. The US #17 North of Jacksonville and the Piney Green Road area is also becoming a higher density area with rapid growth because of the access to Camp Lejeune and Jacksonville. Finally, the Queen Creek and other land areas West of Swansboro and on each side of NC #24 are considered Higher-Density Transition Areas. The boundary of these transition areas may be amended based on County decisions or future location of sewer lines.

Lower Density Transition - The lower density transition includes the remaining portion of the County not designated Higher Density Transition, Developed, Rural, or Conservation, and that is or will be in a "transition" state of development, i.e., going from a lower intensity to a higher intensity of use and may eventually require urban services in addition to existing County water services or where the County may wish to extend urban services. As shown on the land classification map, the lower density transition is located primarily north of N.C. 24 and east of U.S. 17. Other areas include the area southwest of Richlands along 258 and N.C. 24, and along highway and road corridors in the southern portion of the County not designated rural, conservation, or transition on the land classification map.

The Developed Classification for Onslow County includes the four municipalities of Jacksonville, Swansboro, Holly Ridge and Richland.

The Rural Classification includes those areas in the County being used primarily for agriculture or forestry operations with little or no development anticipated during the planning period. As shown on the land classification map, this includes areas along the southern edge of the White Oak River and not designated "Conservation." The land area south of Hofmann Forest and not designated, higher or lower transition or conservation. All of the land area along the southern and western edge of the County not shown as conservation or lower and higher transition is included in the rural class.

The Conservation Classification includes the 100 year flood boundary as defined by the Federal Flood Insurance Program and applicable building height requirements, Public Trust Waters, Estuarine Waters and Estuarine Shorelines, ocean hazard areas and the archaeological site of Permuda Island. As noted on the Land Classification Map, conservation areas are shown for general use only and final determination of location shall be made by the responsible federal, state or local agency having regulatory authority. Such determination shall be made based on a field investigation of any area in question.

Relationship of Policies and Land Classification

As discussed in the data collection analysis section of the Land Use Plan, Onslow County is in a transition from what has been a rural county to a more urban county. Many of the recent developments for housing and commercial use have been concentrating in areas such as southwest Onslow, the Piney Green Road area, the Gum Branch Road area, along 258, and between U.S. 17 and the Intracoastal Waterway near Chadwick and Snead's Ferry. Also, the Queen's Creek area has been experiencing considerable residential development in recent years, and all of these areas will most likely continue to grow in population.

As also discussed in earlier sections of the plan, the County presently provides a County-wide water system throughout the area, along with fire protection, streets, garbage collection, and other urban-type services, with the exception of sewer service. However, as was mentioned earlier, there are several package treatment facilities throughout the County providing sewage treatment.

The County's primary policy is to permit expansion of the local economy, while being sensitive to the local natural resources. The County is also concerned that individuals be given a free choice as to location of housing and shopping, as long as it does not adversely impact on the environment and meets all current local, state, and federal regulations. For this reason, the County has chosen to identify five land classifications, those being: Higher Density Transition, Lower Density Transition, Developed, Rural, and Conservation. The conservation areas include the coastal wetlands, estuarine waters, estuarine shorelines, public trust waters, Permuda Island, and the 100-year flood boundary and Ocean Hazard Areas. The four municipalities of Jacksonville, Swansboro, Richland, and Holly Ridge are all considered developed for purposes of the County's Land Use Plan.

The higher density transition, as discussed in the Land Classification section, is represented by those rapidly growing areas identified on the existing land use map, which include a portion of the Swansboro Township area on each side of N.C. 24, the Snead's Ferry/Chadwick area between U.S. 17 and the Intracoastal Waterway, southwest Onslow, the area along 258 and along Gum Branch Road, areas adjacent to U.S. 17 north of Jacksonville, and the area adjacent to the Piney Green Road area, as shown on the land classification map. The lower density transition areas include all those portions of the County not included as a conservation, developed, or higher density transition areas or rural areas. Rural areas are those areas under agricultural production or forest production.

In summary, the primary policy of County officials is to give County citizens the opportunity to locate businesses and residential uses throughout the County as is currently taking place, with

the understanding that all future development must meet all applicable local, state, or federal regulations, and the land classification map and this policy reflects that primary goal.

It shall be the policy of Onslow County to enforce the Federal Flood Insurance requirements by setting finished floor elevations of new construction above the 100-year flood level to protect future development from flood damage as much as possible. In the event of storm damage, reconstruction would be permitted if the new construction meets all local, state, and federal regulations.

Intergovernmental Coordination and Implementation

During the data collection and analysis process, Talbert, Cox & Associates contacted Richland, Swansboro, and Holly Ridge to collect information that would impact on Onslow County. Specifically, we collected information on the extent, availability, and adequacy of water and sewer systems in those municipalities. Onslow County and the four municipalities have had and continue to have working sessions on a monthly basis to discuss joint concerns and problems, such as water systems, landfill, animal control, emergency preparedness, and emergency rescue services. This intergovernmental coordination will continue in the future.

Public Participation

Beginning in November 1985, the Onslow County Planning Board has had the 1986 Land Use Plan Update on the agenda. Specifically, the Land Use Plan has been on the agenda between November 1985 and May 1986 for open discussion during any of these Planning Board meetings. In addition to this, the Planning Board has sent 50 notifications to persons on the Planning Board's mailing list one week before each meeting. Also, each meeting has been covered by two to four members of the media. In addition to the regular Planning Board meetings, there have been several open work sessions of the Planning Board to discuss policies and other portions of the Land Use Plan document. Specific Planning Board meetings with the Land Use Plan on the agenda include:

November 7, 1985
December 5, 1985
January 9, 1986
January 27, 1986 (Public Information Meeting)

February 6, 1986
March 6, 1986
April 3, 1986
May 1, 1986 (Draft Handout)

June 19, 1986 (Public Information Meeting - Review of
Draft Plan)
October 9, 1986 (Planning Board Work Session)
February 2, 1987 (County Commissioners Work Session)
February 16, 1987 (Public Hearing)

During the initial public information meeting, a citizen suggested that the Planning Board consider an annual review of the Land Use Plan Update. After discussion by the Planning Board and Planning Director, it was determined that this would be one way to review the implementation of policy statements and would provide a means of annual review and update of the Land Use Plan document. Therefore, it will be the policy of the Planning Board and County Commissioners to conduct an annual review of the Coastal Area Management Land Use Plan for Onslow County.

APPENDIX

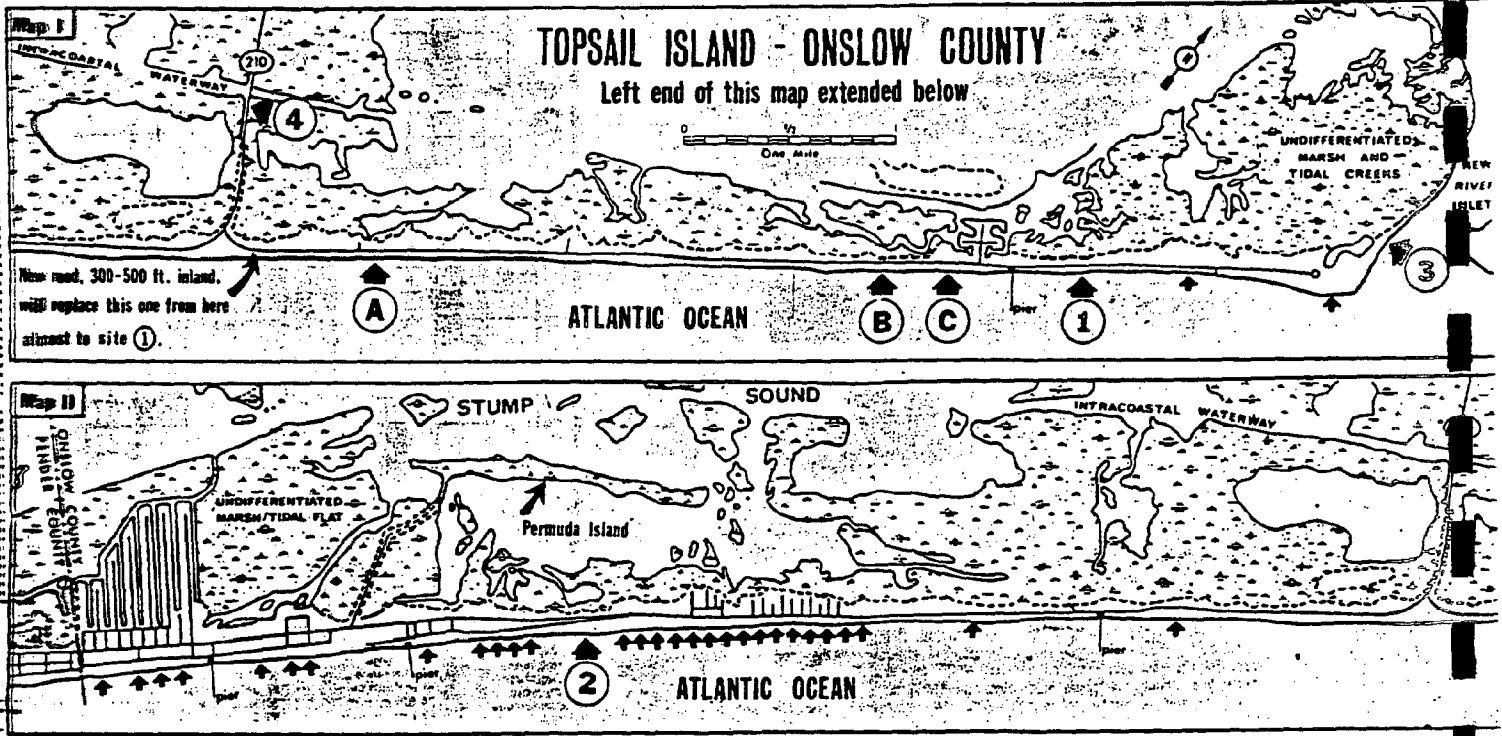
**PUBLIC INFORMATION MEETING
ONSLow COUNTY PLANNING BOARD
ONSLow COUNTY CAMA LAND USE PLAN UPDATE
MONDAY JANUARY 27, 1986 7:00 P.M.
COMMISSIONER'S ROOM, SUMMERSILL BUILDING**

The Onslow County Planning Board will conduct a public information meeting for the purpose of soliciting suggestions on issues to be considered in the planning process. The CAMA Land Use Plan is a basic planning tool which will influence future growth and development of the County. All interested persons should plan to attend. For further information contact the Onslow County Planning Department at 455-3661.

January 20, 1986.

**PUBLIC
NOTICE**

On June 19th, 1986 at 7:30 p.m. in the Commissioner's Room of the E.W. Summersill Building, the Onslow County Planning Board will hear a presentation of the Preliminary Draft of the 1986 Land Use Plan Update. The public is cordially invited to attend.



A look at beach access

Symbols on the above maps show where public access to the beach exists or is now planned for West Onslow Beach on Topsail Island. The maps cover all of Topsail within Onslow County, from New River Inlet at the upper right to the Pender County line at lower left. Recent beach development is not indicated because the base map, the only one readily available at the right scale, dates from an earlier era. New development in progress extends over most of the right third of the beach shown on Map I. The left two-thirds of beach shown on Map II also is developed, mostly with older structures. A stretch of about five miles of beach between these two developed areas remains essentially undeveloped, or sparsely so.

Public access without parking

The small arrows give an approximate indication of the number and locations of the smallest existing easements, or pedestrian rights of way, to the oceanfront from the closest public thoroughfare paralleling the beach. Although used extensively by beach residents, few of these accesses are of much value to the general public because of very limited parking space available for public use. Most are on easements no wider than 10 feet. They were provided by developers primarily for the use of owners of non-waterfront property to the rear of the same developments. In past years, Onslow County has improved about 20 of these accesses by constructing narrow elevated ramps of salt-treated lumber, facilitating traffic over the dunes and greatly reducing damage to them.

Public access with parking

The sites marked by the widest arrows are examples of the second alternative, as explained in the shaded box, in which public parking and beach access are combined.

Beach Park No. 1

This site, designated Onslow County Public Beach Park No. 1, was the first of several properties given to the county by Rose Hill developer Marlow F. Bostic. With its facilities constructed and maintained by the county, the park was opened for public use in May 1964. The parking lot, surfaced with crushed rock, can accommodate about 65 vehicles. Although parking is actually 400 feet inland from the oceanfront, the lot is connected to the beach by a walkway that includes an elevated wooden "stair" extending across the dune line. At the parking lot, a small but well-designed and attractive pavilion on pilings houses lavatories for men, women and the handicapped. Also provided are an outdoor shower, plus a drinking fountain and pay phone.

Beach Park No. 2

This facility, known as Onslow County Public Beach Park No. 2, is substantially larger than No. 1, and is a year newer, opened for public use in May 1965. It is on property obtained by Onslow County partly through donations from developers and property owners, and partly by purchase with federal, state and county funds.

The access alternatives

Onslow County zoning regulations require beach developers to provide 10-foot easements to be used as public accesses at intervals of at least every 600 feet along the oceanfront. In lieu of this, developers may combine into one or more locations for a given tract of land at least as much oceanfront footage as would be made available for beach access by the 10-foot easements. Providing 10-foot easements with no public parking was the method followed by earlier developers, as evident on Map II. In recent years, however, the Onslow County Beach Access Committee and the county Board of Commissioners have strongly advocated combining beach access with parking space at larger sites. New development now proceeding in the area shown on Map I generally favors this alternative. Combining access with parking goes further toward meeting the needs of public and permits the facility to be more efficiently maintained and policed. The same would apply to lifeguard service, should it be provided.

The site occupies 400 feet of beach front. It extends inland to include the sound side of N.C. 210, its rear boundary being the shore of Muddy Creek, about 800 feet back from the ocean front. Parking space, provided on both sides of the highway, will accommodate a total of about 165 cars. The surface of the two lots is of crushed rock. An attractive elevated wooden pavilion similar to that provided at Beach Park No. 1, but larger, houses lavatories for men, women and the handicapped. It also offers a large sheltered observation deck. Showers, a drinking fountain and pay phone are provided, as is a ramp to the upper level for handicapped persons. Again, an elevated wooden walkway gives access over the dunes to the beach. Negotiations are in progress aimed at enlarging the facility through acquisition of additional adjoining property.

Beach Park No. 3

Access 3, traditionally a popular place for surf fishing, was donated to the county for public use by developers Marlow Bostic and Roger Page. With a 700-foot front facing New River Inlet, the property extends inland an average of about 200 feet to River Road. Space for parking of about 40 cars is available on a sand surface, about a third of which is firm enough for two-wheel-drive traffic. Operators of four-wheel-drive vehicles with the proper county permits can drive out on the strand here and then proceed to wherever they may wish to go along Topsail Island's nearly 20 miles of ocean shore. Large numbers of people do this, except from mid-May to mid-September when such traffic is prohibited. Surf overwash occurs here from time to time during stormy weather, but this is of no immediate consequence, since no one visits the site then, anyway. Consideration is being given to erecting a pilings-supported public convenience facility here, similar to that now provided at Beach Park No. 1, provided the required permit can be obtained from the N.C. Department of Natural Resources and Community Development. Discussions have been going on between environmental authorities and county officials with a view to possibly providing a firmer natural surface over part of the parking lot. Consideration also is being given to extending the property boundaries by further acquisition of land.

Beach Park No. 4

This facility differs from others shown here in that it is intended for access to the sound side of Topsail Island, rather than for ocean access, although the ocean is close by for those family groups who have private interests. The site is maintained by the N.C. Wildlife Resources Commission, rather than by Onslow County. The parking area, which measures approximately 100 by 400 feet, accommodate 20-30 vehicles with trailers. A wide concrete ramp is div by a sturdy wooden pier, such that two boats can be launched or retrieved simultaneously. The slip is directly under the ocean end of the N.C. 210 highway and provides immediate access to deep water leading to the Intracoastal Waterway and other sound waters.

Park Sites A, B, C

These three as yet undeveloped oceanfront sites recently were earmarked for use as combined public parking and beach access facilities, or public beach parks. Most of the land at site A and all of it at sites B and C are to be donated to Onslow County by Marlow Bostic, present owner and developer of the property. Bostic's contributions here were made partly in connection with an agreement reached with the state by which he was granted permission to relocate the beach road inland, as noted in the lower left corner of Map I. Site A, with ocean frontage measuring 600 feet, extends inland about 100 feet to Mason Creek. The site, when developed by the county, is to provide both ocean access and boating access to sound waters. The parking lot will have space for 570 vehicles. Site B will have 46 parking spaces, while site C will have 18. Sites A, B, and C, when developed, are to have public convenience facilities similar to those now provided at Beach Park No. 1 or 2. Of interest is the fact that these three facilities will give the county a combined total of about 1,000 feet of choice oceanfront property. Site A, which extends along a stretch of coast that, from the N.C. 210 bridge to Beach Park No. 1, measures 3.8 miles. This 1,000 feet of public access is about three times that required by county zoning regulations at the rate of one 10-foot access every 600 feet.

Other forms of access to beaches in Onslow

Beach access in the county is by no means limited to that shown on the above maps. The two ferries and other facilities serving otherwise isolated Hammock Beach on Bear Island accommodate up to 375 visitors daily the height of the three-month summer season, with some would-be visitors having to be turned away on peak days. An average of 20,000 people visit the island each summer via the state-operated ferries. More than half the population of Onslow County consists of active-duty retired military people or their dependents who are entitled to a portion of Onslow Beach that lies inside Camp Lejeune. Many do so regularly without overcrowding those beaches and without competing with civilian demand for the use of other beaches. Finally, a growing number of condominiums, cottages, hotels and other properties offer on-the-beach accommodations to property owners and their families as to countless thousands of the general public who can afford the price of a weekend or holiday vacation on the seashore. From all the above, it can be seen that, at least for the present, all those who love our beautiful beaches have a wide variety of public access facilities from which to choose, and the supply is generally adequate to meet current demands. (See today's Daily News Opinion for further commentary.)

DOT IMPROVEMENTS

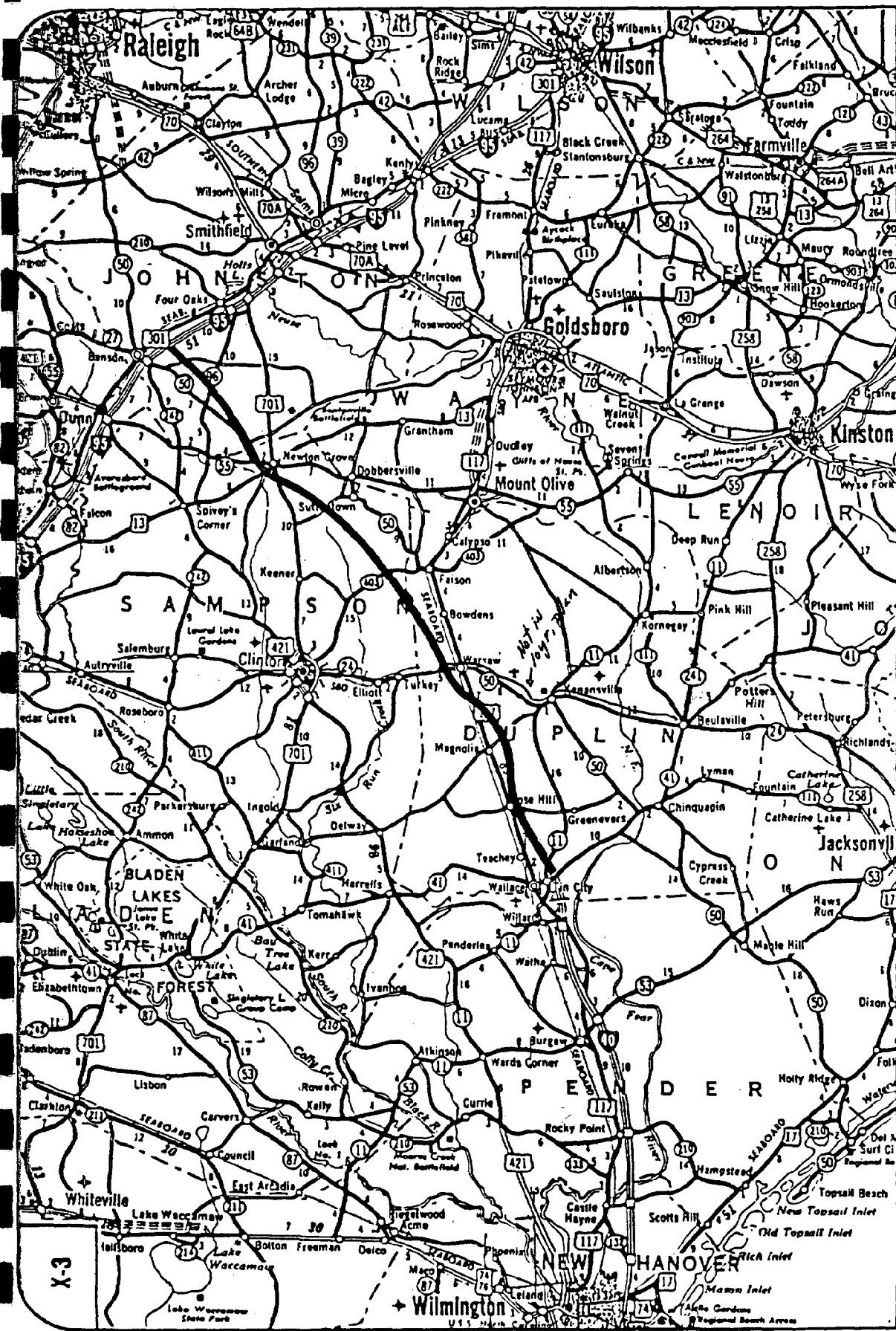
ONSLOW

HIGHWAY PROGRAM

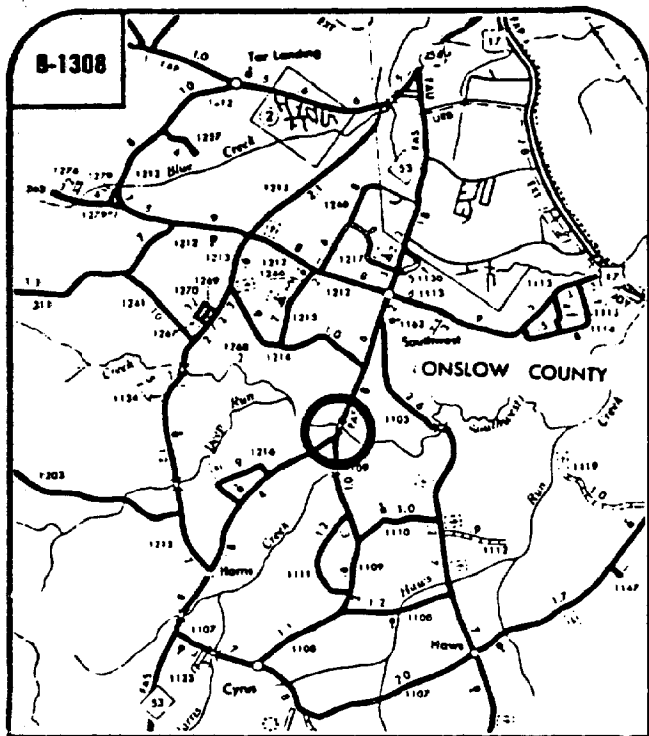
ONSLOW COUNTY

ROUTE/CITY	I.D. NO.	LOCATION AND DESCRIPTION	TOTAL EST. COST	SCHEDULE		
				FY—TYPE WORK	—EST. COST	
NC 24	R-2010	US 258 NEAR RICHLANDS TO BEULAVILLE. (10.0 MILES). WIDEN EXISTING ROADWAY TO A FOUR LANE SHOULDER SECTION.	15000	FY89 FY90 FY91 FY92	ROW ROW CONST CONST	1500 1500 6000 6000
US 258/NC 24	R-1021	NC 111 TO NC 24 WEST OF RICHLANDS. (9.3 MILES). WIDEN EXISTING ROADWAY TO MULTI-LANE FACILITY.	7800	PRIOR YEARS FY86 FY87	ROW CONST	200 800 6800
US 258/NC 24	R-217	SR 1251 TO NC 111 . (3.9 MILES). WIDEN EXISTING TWO LANE FACILITY TO FIVE LANE SECTION.	5549	PRIOR YEARS FY86	CONST	713 4836
JACKSONVILLE	U-2008	NC 24, BELL FORK ROAD TO HOLCOMB BLVD. AT MARINE BASE GATE. (2.7 MILES). ADD AN ADDITIONAL LANE TO THE EXISTING FACILITY.	1900	FY88	CONST	1900
JACKSONVILLE	U-2107	US 17 BYPASS, US 17 SOUTH TO NC 24. (7.0 MILES). FIVE LANE CURB AND GUTTER FACILITY ON NEW LOCATION.	21900	FY95 POST YEAR	ROW CONST	1900 20000
NC 53	B-1308	SOUTHWEST CREEK. REPLACE BRIDGE NO. 18	225	FY89	CONST	225
NC 172	B-2060	NEW RIVER. REPLACE BRIDGE NO. 17	3600	FY87	CONST	3600
SR 1225	B-2157	BRANCH OF NEW RIVER. REPLACE BRIDGE NO. 49	192	FY91	CONST	192
SR 1402	B-1310	NEW RIVER. REPLACE BRIDGE NO. 191	940	FY87	CONST	940
SR 1406	B-2158	LITTLE NORTHEAST CREEK. REPLACE BRIDGE NO. 121	327	FY91	CONST	327
SR 1518	B-1309	MILL CREEK. REPLACE BRIDGE NO. 182	205	FY88	CONST	205
US 17	L-2011	NEAR WESTERN BLVD. IN JACKSONVILLE. LANDSCAPING.	8	FY86	CONST	8
NC 24	L-2012	INTERSECTION OF LEJEUNE BLVD. & NEW BRIDGE ST. (SR 1402) IN JACKSONVILLE. LANDSCAPING.	3	FY86	CONST	3
SR 1413	Y478	NORTHEAST OF JACKSONVILLE AT CAMP LEJEUNE 722 904M REVISE AUTOMATIC WARNING DEVICES	67	FY86	CONST	67

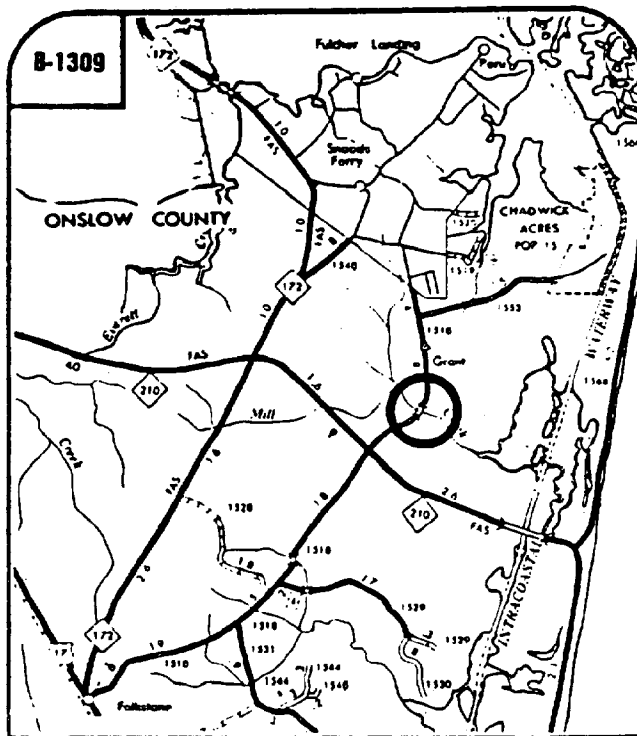
US 17	W1004	US 17 FROM SR 1130 TO SR 1400, NEAR JACKSONVILLE. CONSTRUCT LEFT-TURN LANES AT 7 MEDIAN CROSSEOVERS, CONSTRUCT INSIDE PAVED SHOULDERS, INSTALL ADDITIONAL SIGNING, INSTALL GUARD RAIL AT TWO BOX CULVERTS AND REVISE DRAINAGE ON US 17 EAST OF SR 1124. LENGTH 1.8 MILES.	173	PRIOR YEARS FY86 PE FY86 CONST CONSTRUCTION PENDING	93 6 74
US 17	W738	US 17 AND SR 1130, US 17 AND SR 1117. WIDEN US 17 NORTH OF SR 1117 FOR DUAL LEFT. WIDEN SR 1130 AND SR 1117 FOR TWO LANE APPROACH. REVISE SIGNAL.	149	PRIOR YEARS FY86 ROW FY87 CONST	24 20 105
US 17	W767	US 17 FROM SOUTHWEST CREEK TO SOUTH OF VERONA. CONSTRUCT BYPASS OF VERONA.	797	PRIOR YEARS FY87 CONST	53 744
NC 53	W749	NC 53 FROM US 258-NC24 TO SR 1105, WIDEN NC 53 FROM 20 FEET TO 35 FEET FROM SR 1130 TO US 258-NC 24, OVERLAY WITH MINIMUM ASPHALT, AND REMARK AS A THREE LANE SECTION UTILIZING 11 FT. LANES WITH 1 FT. PAVED SHOULDERS. CONSTRUCT LEFT TURN LANES ON NC 53 AT SR 1116, SR 1113-1212 AND OVERLAY WITH MINIMUM ASPHALT.	304	PRIOR YEARS FY86 ROW FY87 CONST	40 5 259
SR 1117	W1020	SR 1117 FROM 100 + OR - FEET NORTH OF US 17 TO NC 53 NEAR JACKSONVILLE. CONSTRUCT TWO-FOOT PAVED SHOULDERS ALONG SR 1117 FROM US 17 TO NC 53, CONSTRUCT LEFT-TURN LANE AT CRITICAL LOCATIONS AND OVERLAY WITH MINIMUM ASPHALT. (1.10 MILES).	75	PRIOR YEARS FY87 CONST	7 68
SR 1308	W1023	SR 1308 FROM 0.10 MILE SOUTHEAST OF SR 1905 NORTHWEST TO SR 1322, LENGTH = 0.90 MILE. CONSTRUCT A THREE LANE SECTION FROM 0.10 MILE SOUTHEAST OF SR 1905 NORTHWARD TO SR 1322. INSTALL ADDITIONAL REGULATORY AND WARNING SIGNS AND RAISED PAVEMENT MARKERS.	715	PRIOR YEARS FY86 ROW FY86 CONST	61 180 474



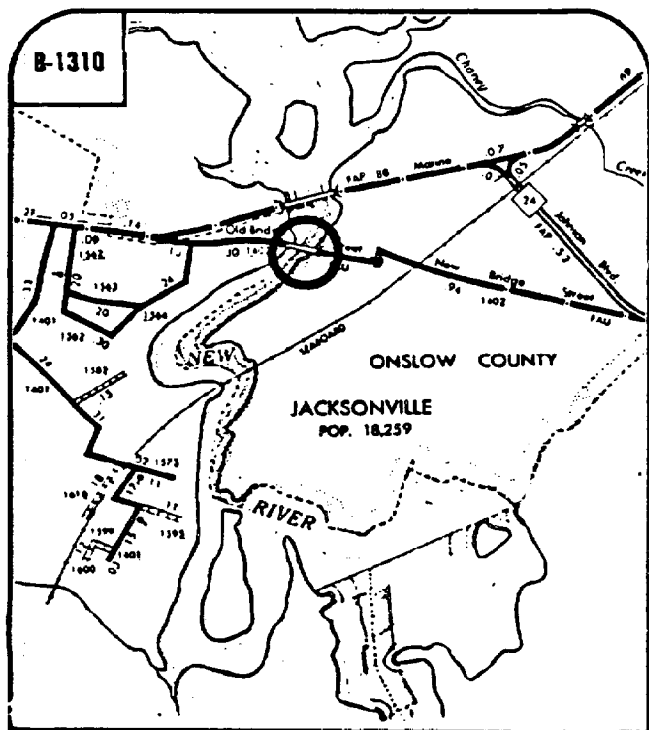
I-40, I-95 AT BENSON TO WILMINGTON
 Construct a four lane divided freeway on new location.



NC 53, BRIDGE #18, ONSLOW COUNTY
Replace Bridge over Southwest
Creek.

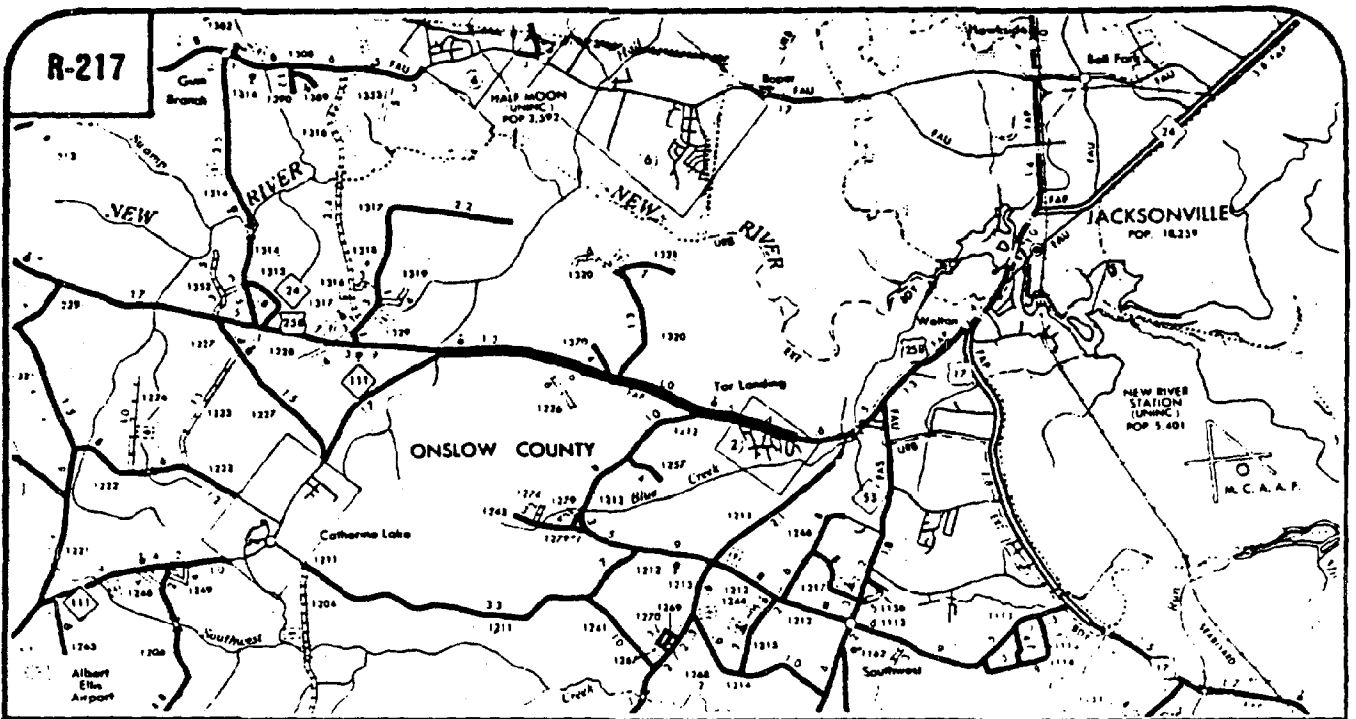


SR 1518, BRIDGE #182, ONSLOW COUNTY
Replace Bridge over Mill Creek.

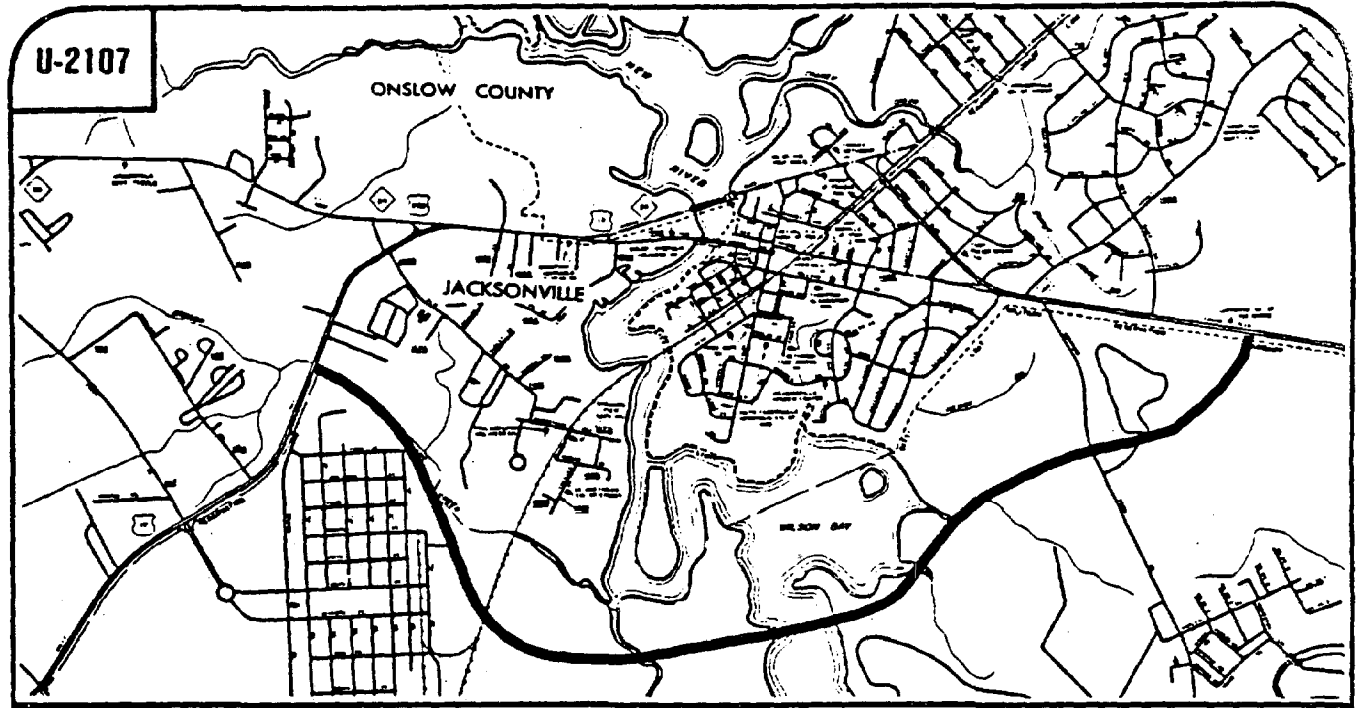


SR 1402, BRIDGE #191, ONSLOW COUNTY
Replace Bridge over New River.

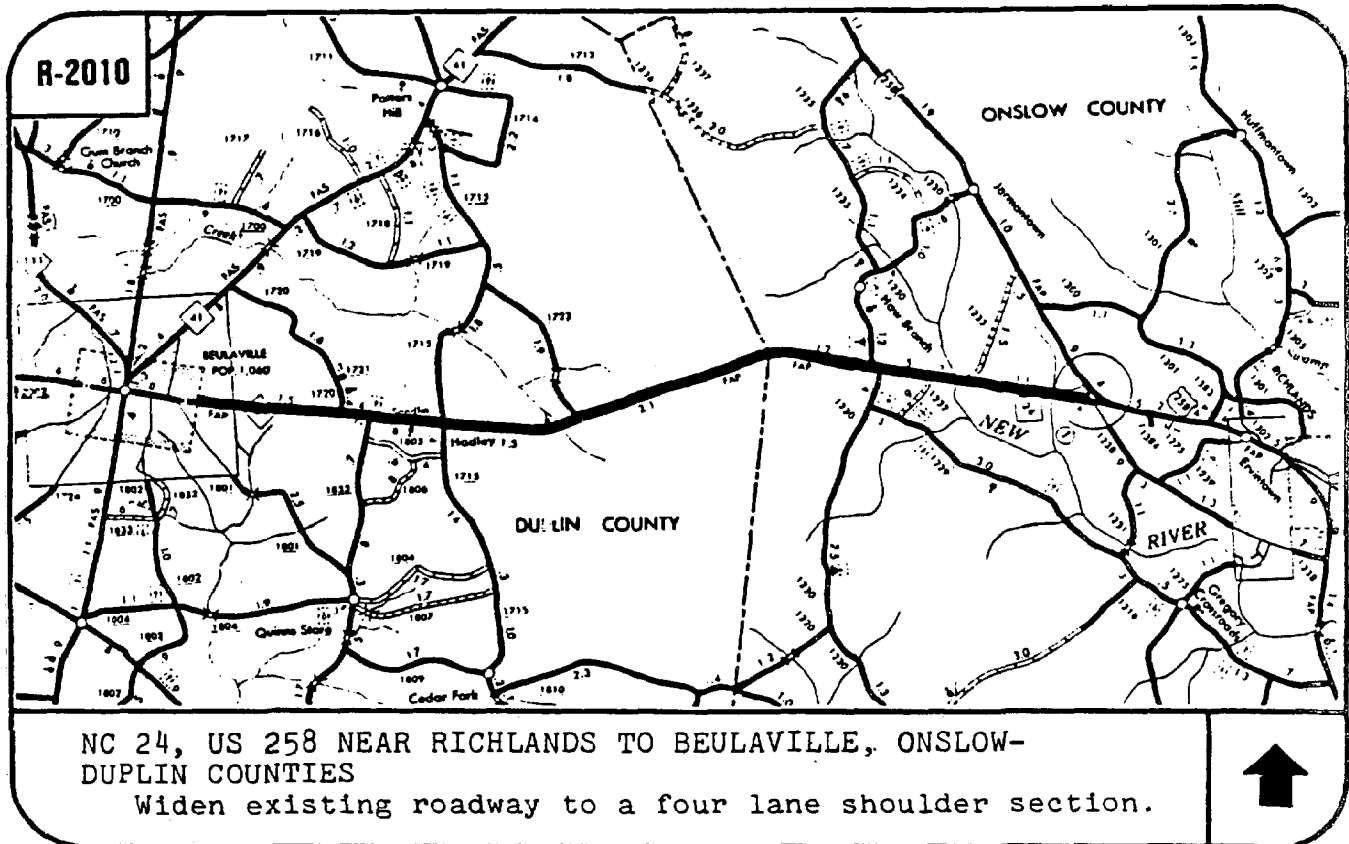
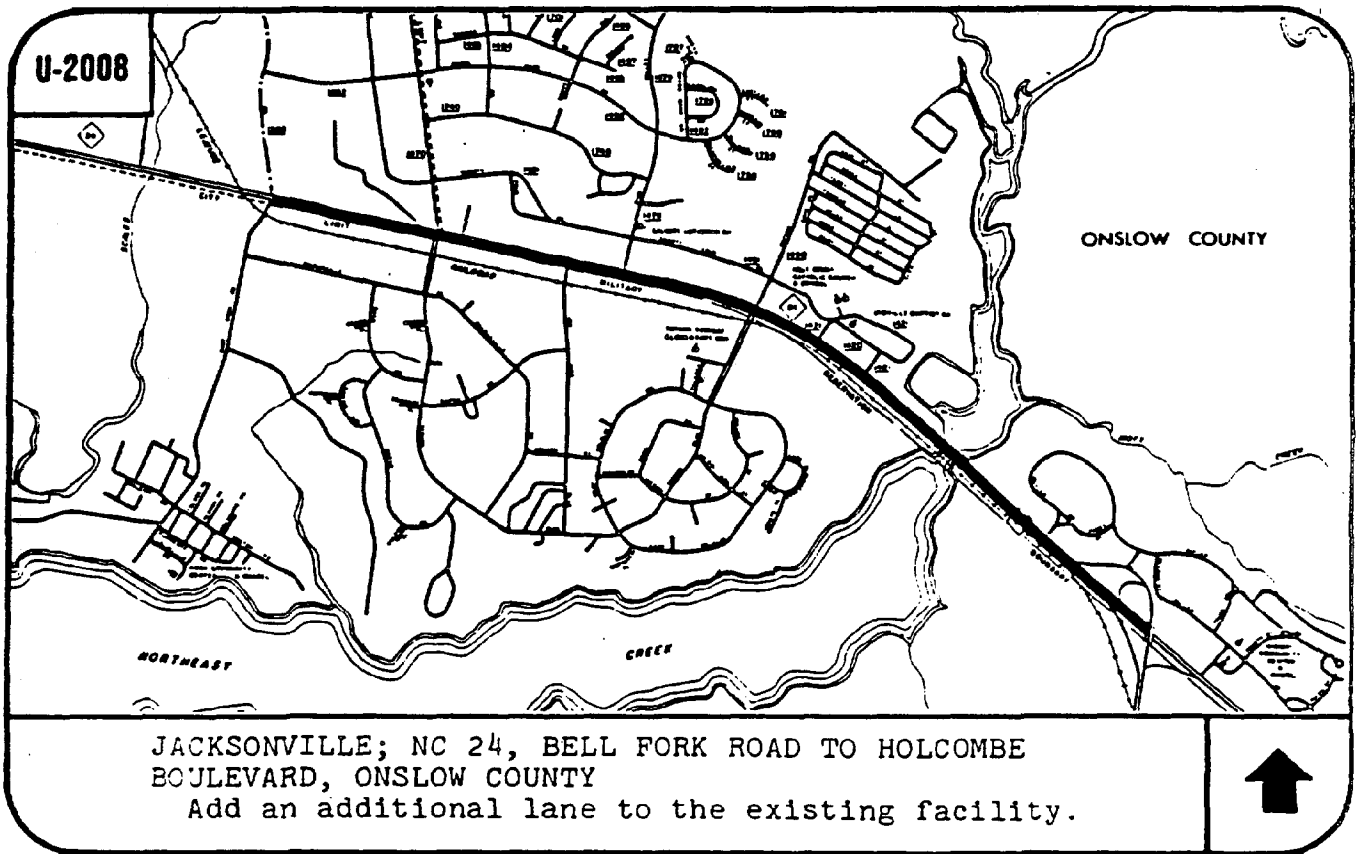


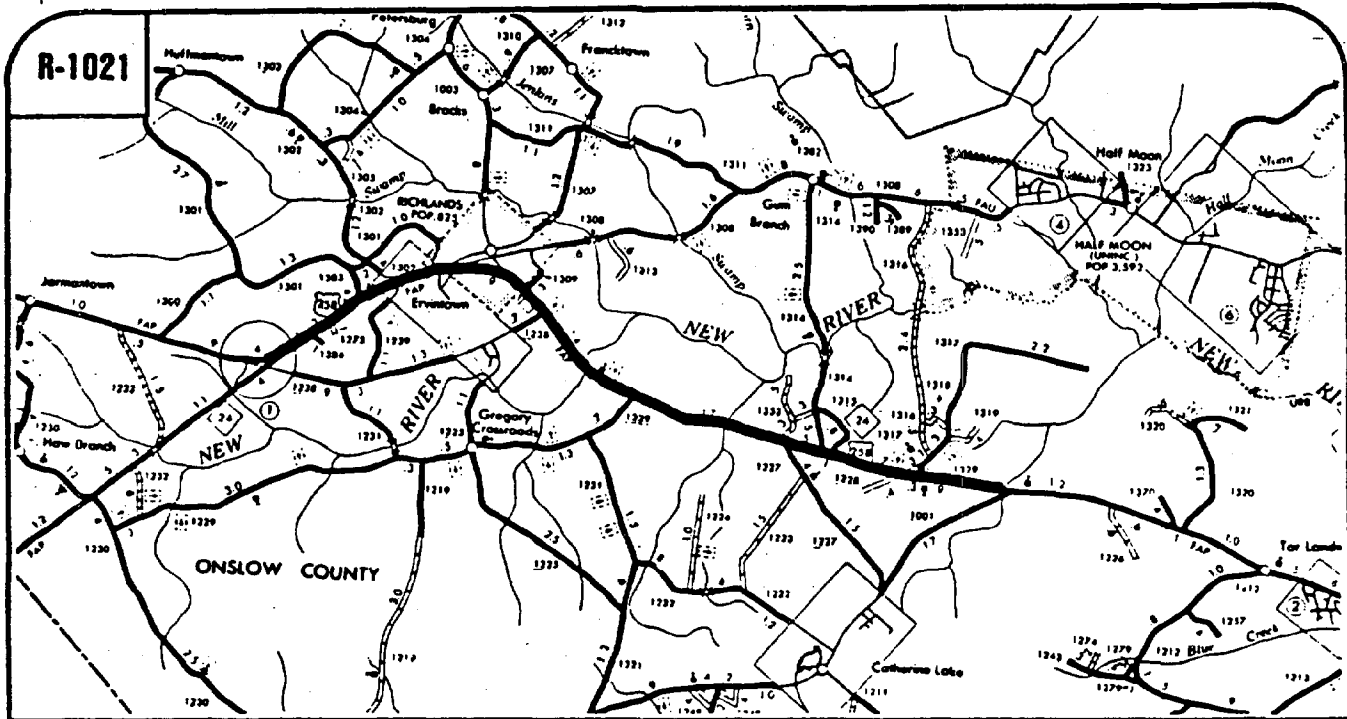


US 258-NC 24, SR 1251 TO NC 111. ONSLOW COUNTY
Widen existing two lane facility to five lane facility.

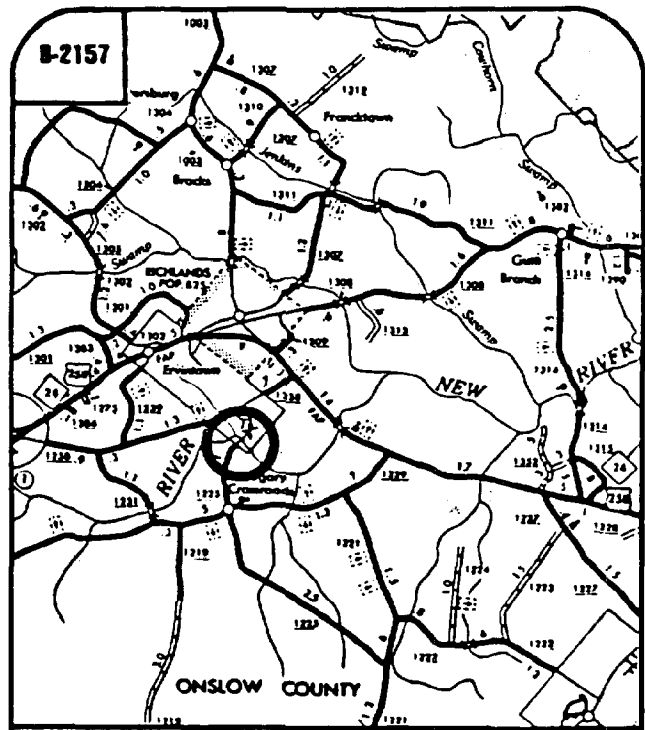


JACKSONVILLE BYPASS; US 17 SOUTH TO NC 24, ONSLOW COUNTY
Five lane curb and gutter facility on new location.



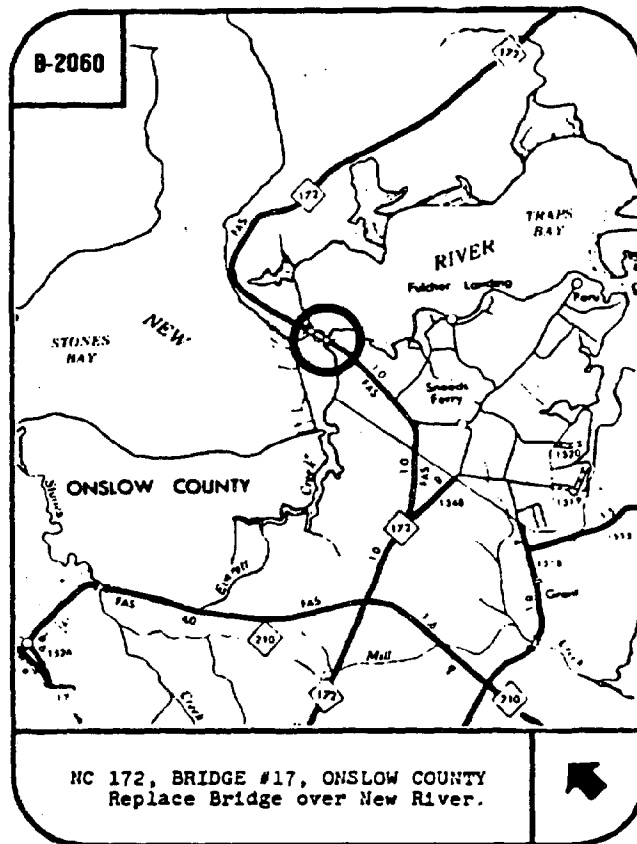
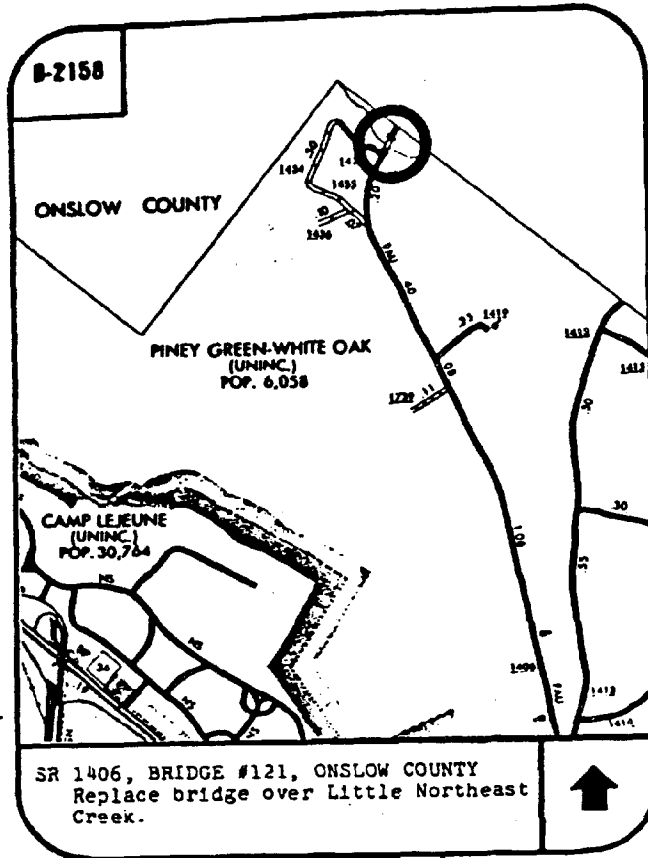


R-1021
 US 258, NC 111 TO NC 24, ONSLOW COUNTY
 Widen existing roadway to multi-lane facility.



B-2157
 SR 1225, BRIDGE #49, ONSLOW COUNTY
 Replace bridge over branch of
 New River.





ON SLOW COUNTY

Graham K. Eubank

County Office Building

Office of the
Planning Department

39 Tallman Street
Jacksonville, NC 28540
Telephone (919) 455-3661

May 13, 1986

MEMORANDUM

TO: Rick G. Leary, County Manager
FROM: Stephen E. Davenport, Planning Director
SUBJECT: Advanced Population Estimates

Neuse River COG recently provided a copy of Advanced North Carolina County Population Estimates: July 1, 1985. A copy is attached. These are for planning purposes only. The estimates for revenue programs will be finished later.

The Onslow County estimate for the date is 124,987 as compared to 112,784 in the April 1980 census. The actual increase for the County during the 5-year period was 12,203. This is fifth among the 100 counties in actual increase following Wake, Mecklenburg, Forsyth, and Cumberland in that order (and only 221 behind Cumberland).

Onslow County was also one of 15 counties that experienced a double-digit growth rate (10.8%) during the period. Of the 15 higher growth rate counties, 7 are coastal and 3 are mountain.

In total population Onslow County ranks as 9th behind Mecklenburg, Wake, Guilford, Cumberland, Forsyth, Gaston, Buncombe and Durham in that order. In the 1980 census Onslow was 10th but has now passed Davidson County by 7801.

SED:srf

Attach.



Triangle Council of Governments

P.O. Box 1777 - 1404 Neuse Blvd. - New Bern, N.C. 28560

Telephone 919-638-3185

May 7, 1986

M E M O

TO: County Planning Department

FROM: Thomas M. Combs TC

Enclosed is a copy of the Advanced estimates of the population of North Carolina counties that were prepared by the Demographic Research Unit of the Office of State Budget and Management with the aid of the U. S. Bureau of the Census. These estimates will be used for planning purposes only. As in previous years, the provisional estimates, which will be released in late June, will be certified as the 1985 county estimates and used for revenue sharing.

jdh

Enclosure

STATE OF NORTH CAROLINA

Office of State Budget & Management
Management and Information Services
April 1986

ADVANCED ESTIMATES OF THE POPULATION OF NORTH CAROLINA COUNTIES
July 1, 1985

This report presents advanced estimates of the population of North Carolina counties as of July 1, 1985. These estimates were prepared by the Demographic Research Unit of the Office of State Budget and Management with the aid of the U. S. Bureau of the Census. These estimates will be used for planning purposes only. As in previous years, the provisional estimates, which will be released in late June, will be certified as the 1985 county estimates and used for revenue sharing.

These advanced estimates were computed by adjusting, for each county, the 1985 estimate from the Regression (Ratio-Correlation) Method, one of the two methods used for the provisional estimates, by the average historical deviation (over 1981, 1982, 1983, and 1984) of the provisional estimate from the estimate from the Regression (Ratio-Correlation) Method.

In the Regression (Ratio-Correlation) Method, a multiple-regression equation is used to relate changes in the distribution of a number of different data series to changes in the distribution of population among counties. For both the development of the regression equation and the computation of the population estimates, the data for all variables are transformed by calculating ratios of percentage shares in the later year to corresponding percentage shares in the earlier year. These transformations cause the resulting coefficients in the prediction equation to add approximately to 1.0. The series of data used in the Regression method for North Carolina are Federal income tax returns (X1), school enrollment in grades 1 through 8 (X2), and automobile registrations (X3). The regression equation for North Carolina is given by

$$y = -0.019 + 0.296(X1) + 0.336(X2) + 0.385(X3).$$

These advanced county estimates were controlled to the provisional State estimate for North Carolina, which was produced by the U. S. Bureau of the Census with the help of some data collected by the Demographic Research Unit. The 1980 census populations shown for the State and counties reflect corrections made through March 1986.

Advanced North Carolina County Population Estimates: July 1, 1985
(cont.)

County	July 85 estimate	April 80 (census)	Difference	
			Number	%
Johnston	76,518	70,599	5,919	8.4
Jones	9,600	9,705	-105	-1.1
Lee	40,632	36,718	3,914	10.7
Lenoir	60,211	59,819	392	0.7
Lincoln	45,386	42,372	3,014	7.1
McDowell	36,303	35,135	1,168	3.3
Macon	23,005	20,178	2,827	14.0
Madison	17,320	16,827	493	2.9
Martin	26,270	25,948	322	1.2
Mecklenburg	439,479	404,270	35,209	8.7
Mitchell	14,570	14,428	142	1.0
Montgomery	24,014	22,469	1,545	6.9
Moore	54,615	50,505	4,110	8.1
Nash	70,969	67,153	3,816	5.7
New Hanover	111,492	103,471	8,021	7.8
Northampton	22,419	22,195	224	1.0
Onslow	124,987	112,784	12,203	10.8
Orange	82,148	77,055	5,093	6.6
Pamlico	11,134	10,398	736	7.1
Pasquotank	29,232	28,462	770	2.7
Pender	24,268	22,262	2,006	9.0
Perquimans	10,516	9,486	1,030	10.9
Person	30,276	29,164	1,112	3.8
Pitt	96,314	90,146	6,168	6.8
Polk	14,182	12,984	1,198	9.2
Randolph	96,589	91,300	5,289	5.8
Richmond	46,562	45,481	1,081	2.4
Robeson	105,707	101,610	4,097	4.0
Rockingham	85,334	83,426	1,908	2.3
Rowan	104,148	99,186	4,962	5.0
Rutherford	57,416	53,787	3,629	6.7
Sampson	50,311	49,687	624	1.3
Scotland	33,616	32,273	1,343	4.2
Stanly	50,499	48,517	1,982	4.1
Stokes	35,297	33,086	2,211	6.7
Surry	61,034	59,449	1,585	2.7
Swain	10,792	10,283	509	4.9
Transylvania	25,759	23,417	2,342	10.0
Tyrrell	4,194	3,975	219	5.5
Union	78,055	70,436	7,619	10.8
Vance	38,350	36,748	1,602	4.4
Wake	353,148	301,429	51,719	17.2
Warren	16,647	16,232	415	2.6
Washington	14,416	14,801	-385	-2.6
Watauga	34,336	31,666	2,670	8.4
Wayne	99,203	97,054	2,149	2.2
Wilkes	60,591	58,657	1,934	3.3
Wilson	64,112	63,132	980	1.6
Yadkin	29,156	28,439	717	2.5
Yancey	15,644	14,934	710	4.8
North Carolina	6,253,951	5,800,415	373,536	6.4

On May 6, voters will choose between eight Democratic candidates for county commissioner. The three top vote-getters will face Republican candidates in November. There is no Republican primary. Here are the Democrats' views on issues facing the county, ranging from development to school construction and county services.

1) If given the authority, what one change or new idea would you bring into county government?

David Clement:

I would strive to provide statesmanship in the management of public affairs. I might well achieve this because I come with no strings attached, with ample time, energy and dedication to serve the people with honesty and integrity.

Arthur Marshall Davis:

No extra voting, such as the school bond and runoff elections. They cost the taxpayers thousands of dollars that could be used for school needs.

Larry Fitzpatrick:

I would institute long-range planning and set goals and priorities to achieve those plans instead of reacting to crises (such as our schools funding).

Sybil Gandy:

I would have the county commissioners agenda published in the Daily News one week in advance of meetings in order to give the county citizens time to react to items of interest and concern to them.

Willie Humphrey:

Onslow County has a wealth of retired persons living in the county. I believe many of these people would volunteer their services as consultants, as hands-on workers or as supervisors if given the opportunity. Our county would benefit from their knowledge and save tax dollars from their donated time.

The Rev. Floyd Jones:

My idea would be that all Onslow County agencies be required to submit a deficit statement on spending once each year. The statements would be scrutinized by the Board of Commissioners according to its annual budget.

Cecil Morton:

To meet fiscal demands, counties need the authority to create new sources of revenue in order to relieve the burden on the property

Daily News

Sunday, April 27, 1986

Commission candidates share ideas on issues

taxpayer. Local governments must meet fiscal demands and pressures which are placed on them through mandates from the state and federal government as well as agencies dependent upon the local governments for support.

Bert Pansock:

The one change or new idea that I would bring into county government would be more and closer liaison with other local governments in the county. We could share our problems and work together for better solutions countywide. A greater common bond would aid future cooperation.

2) The county commissioners are directly responsible for the level of funding for school construction

projects but in the past have passed responsibility for distributing that money to the school board. Would you be in favor of continuing that arrangement or would you like to see the county commissioners use more influence in the determination of how school construction funds are spent?

David Clement:

County commissioners have failed to provide for school construction needs, and they have entangled the school board in a conspiracy to deceive the public. In 1981 and 1982, the school board properly advised the commissioners regarding school construction needs, and when the commissioners refused to provide, the school board resorted to the

responsibility for schools, should seek opportunities to meet with the school board, visit schools and talk with school administrators about school problems and plans. I believe that is one of the school board's problems now — there is not enough interaction between the school boards and county commissioners. Anytime we become part of an organization we are more willing to contribute.

Willie Humphrey:

An elected Board of Education and the school administration should retain its responsibility for distributing funds for school construction projects. It is necessary that the county commissioners receive good input from the two groups to find what is needed and practice good fiscal management in our county.

The Rev. Floyd Jones:

I would like to see the county commissioners be more concerned about the Onslow County schools' construction projects. I would encourage the county commissioners to use more influence on how school funds are spent.

Cecil Morton:

The local Board of Education is an elected board in its own right, and that board has the responsibility for overseeing educational programs in our county. These elected school board members should be in a position to be better informed regarding school needs than the county commissioners are. The county should continue to provide funding within its capabilities; however, the responsibility for establishing priorities for construction should remain with the Board of Education since it is familiar with problems and has information available to it to make the priority determinations based on need.

Bert Ponsock:

Bad publicity received by the school board during the recent school bond campaign has created doubts concerning their ability to responsibly distribute money for school construction. Composition of the school board may also be greatly affected by the outcome of the current campaign. Therefore, re-evaluation of the county commissioners' position is necessary re-

See ONSLOW, 5F

courts. Then, in some hidden way, the school board was seduced into remaining silent from 1983 on, possibly on the promise of a school bond issue to solve the mounting problems. The question is not: How are school construction funds spent; but rather: Are the needed funds provided?

Arthur Marshall Davis:

I favor having the school board decide what needs to be done, and then let the county commissioners have a final say in which projects have priority. They should go back to the construction of the basic schools and stop paying architects outrageous fees to design school buildings with so much wasted space in them.

Larry Fitzpatrick:

I would like to see the county commissioners use more influence in the determination of how school construction funds are spent by meeting with the Board of Education more frequently and planning for future needs, since the county commissioners are ultimately held responsible by law and their constituents for appropriating those funds.

Sybil Gandy:

The commissioners should become directly involved in this area. The Board of Commissioners is an integral part of the legal structure of public education. They are the tax-levying authority for schools. These county officials, who have the

• Onslow

From Page 1F

garding the arrangement for the distribution of funds and the determination of school construction expenditures. Responsible voters can help the county commissioners reach the right decision.

3) The county is presently looking at additional office space. Would you be in favor of keeping county offices primarily in downtown Jacksonville or would you like to see the county invest in other locations?

David A. Clement:
I favor locating public offices and services so as to achieve convenience, and I equate convenience to consolidation of related activities and ease of access. Renewal of the downtown area not only would remove an eyesore, but also would permit a convenient complex of county offices.

Arthur Marshall Davis:
Keep the county offices all in downtown Jacksonville and add on to what we already have. Why spend taxpayers dollars to buy other locations and then have to pay county employees for extra travel expense?

Larry Fitzpatrick:
I am in favor of keeping the county office complex in the downtown area as long as property is available. It is a convenient location, and we already have an enormous investment in the Summersill Building, tax office building, county manager's office and the pending expansion of the Sheriff's Department.

Sybil Gandy:
I believe it would be irresponsible to move the county offices away from downtown Jacksonville. Government offices need to be grouped together. As we expand the county complex, it would also help blot out the nauseating blight of adult businesses around our law-making bodies.

Willie Humphrey:
County government should be centrally located whenever possible. Only when the cost of additional office space in downtown Jacksonville becomes prohibitive should the county invest in other locations.

The Rev. Floyd Jones:
For many years the county government has used the downtown area in Jacksonville as a center place for the county seat. I would be in favor of keeping the county office in the downtown area of Jacksonville unless office space and buildings would not be available.

Cecil Morton:
A more efficient level of operations could be achieved if all county-related agencies were in one central location. There are many demands being made on the county for providing additional space to accommodate court-related functions, and the amount of available resources will eventually determine the future location of county offices.

Bert Ponsock:
Present traffic congestion in the downtown area tends to favor the investment in other locations for additional office space. However, the efficient operation of county government must be the primary concern. If the revitalization plan could provide the space and improve traffic, then the downtown area would be more favorable.

4) Should the county expand zoning beyond the beach and the airport? If you favor such an expansion, how far would you carry it?

David A. Clement:
Zoning is intended to protect the values that a neighborhood holds dear; yet, zoning may be changed when the neighborhood favors change. Furthermore, zoning permits a neighborhood to have some influence over its own development. If intelligently conceived and intelligently applied, I favor countywide zoning now.

Arthur Marshall Davis:
Zoning is for the protection of property rights and values. I have not given zoning limits a lot of consideration at this time. I do feel each zoning regulation should be examined and studied very carefully.

of Commissioners and viewed by concerned citizens of the county. However, I believe as the population and industries grow, zoning may be necessary within an orderly manner.

Cecil Morton:
At the present time the Planning Board is evaluating some areas, including those waterfront areas on the mainland side of the Intracoastal Waterway, to determine the need for zoning. If the Planning Board recommends, I would consider some limited zoning in these areas to protect our estuarine areas. I am not in favor of countywide zoning at this time, but limited zoning in some areas may be desirable for the protection of existing property owners from undesirable development and to ensure that future development is consistent with existing growth patterns.

Bert Ponsock:
Eventual countywide zoning could help determine the future growth pattern in this area. Cautious planning processes must be followed after careful and detailed studies are made so that proper zoning is accomplished. This could create greater stability in planning and growth development.

5) The idea of workfare — making certain social services clients work at public-service jobs to earn assistance — is receiving some consideration in Onslow County. Do you have any reservations about this proposal?

David A. Clement:
If nothing else, work builds character. The concept of earning an income is a better idea for all involved than is the concept of welfare. There is some job suitable for almost everyone. Let's find some fair work for all who can work and make workfare workable.

Arthur Marshall Davis:
I do not have any reservations about workfare. I feel a honest day's work never hurt anyone and our future generations need the role model of a working parent.

Larry Fitzpatrick:
I have reservations about workfare until I know more about: Who would be required to work? How would they be supervised? Would this stack another layer of county government on top of what we already have? Above all, would the cost outweigh the savings to the taxpayer?

Sybil Gandy:
This is a very constructive idea. It not only helps our county financially, but it also helps the person who is working gain a feeling of self-worth. It may also open up an avenue for employment. If an able-bodied person refuses to work, they should be refused assistance.

Willie Humphrey:
Workfare should have been implemented many years ago. Social Services clients that are physically and mentally able to work should be given the opportunity to earn their payment. The jobs they perform should develop job skills that can be used in the private sector whenever possible.

The Rev. Floyd Jones:
Any recipient of social services that is physically able should be given some work to do to supplement the expense of our government.

Cecil Morton:
I would favor this program if it were cost-effective in that it would save more dollars than would be expended in program administration. There may be some question as to whether or not sufficient private sector jobs exist to employ the number of public assistance recipients necessary to reduce welfare rolls and result in reduced expenditures.

Bert Ponsock:
My reservations about workfare: 'Don't spend a dollar to save a nickel.' When the cost of the program exceeds the assistance saved, it is unwise to adopt the program regardless of whether the

money comes from county, state or federal funds.

6) What approach do you think the county should take in ensuring that sewer services are available to meet present needs and to accommodate expected growth?

David A. Clement:
For years I have proposed that county officials confer with basin officials about forming a consolidated sewage district. It makes good sense. Many military installations throughout the country use the same sewage systems as are used by their civilian communities. Then why not here? Now that we are beginning to talk about integration of Marine Corps base military children into the county schools why not talk also about integration of civilian and military sewage.

Arthur Marshall Davis:
Good sewer systems are a health necessity. We do not have a choice in this matter. At the rate our communities are growing, we need more sewer connections to take care of this growth. A study of what exists and the direction of need is necessary to ensure an adequate sewer system in our county.

Larry Fitzpatrick:
We must have a countywide sewer system to develop our fast-growing county properly and to protect water quality. We already have septic tank problems, and some land does not 'perk.' We must start planning now by looking at the small sewer plants now operating in the county, consider the high growth areas that need sewer now, and plan for funding a system that will not put an undue financial burden on taxpayers or users.

Sybil Gandy:
Perhaps we will have to apply the same method used in supplying water, by serving the most populous areas first and then moving on to less populous areas as finances become available. Perhaps requiring larger developers to install private systems with the understanding that when the county becomes financially able it will assume responsibility for the operation of the plant.

Willie Humphrey:
The county should take the same approach with sewer service that was taken with countywide water. The impetus for developing a countywide sewer system should come from the county, but it should be paid for by user fees rather than tax dollars. Sewer service should begin in high-development areas around our waterways and in other high-development areas not served by town sewer systems.

The Rev. Floyd Jones:
The approach of getting input from residents of Onslow County, which was used in developing a water system, could be copied in developing a sewer system.

Cecil Morton:
The county recently authorized an engineering firm to undertake a feasibility study regarding countywide sewer. This study will assess the areas that are in most critical need of sewer services, and the study will also present alternatives to addressing these needs in particular areas. Construction of sewer facilities is expensive, and I will need the information available from this study to make any decisions about providing sewer services to areas of the county where a need exists.

Bert Ponsock:
The present county commissioners have ordered a feasibility study into the county water and sewer systems and their incorporation with or complementation of other local government systems. Pending the outcome of the study, speculation of the needs and accommodations for expected future growth would be impractical.

7) Over the next decade, Onslow
See ONSLOW, 6F

Larry Fitzpatrick:

I am not in favor of zoning beyond the beach, the sound side of Topsail Island and the airport at this time because the county is too rural. But in the future, we may have to look at zoning for industry and large, fast-developing areas.

Sybil Gandy:

Not at this time. If and when it ever became necessary, there should be some type of grandfather clause to protect those who are already established.

Willie Humphrey:

Countywide zoning is not needed at the present time, but we should begin to look at areas that may need zoning soon. Areas around our towns and the Intracoastal Waterway are potential sites for zoning expansion.

The Rev. Floyd Jones:

I believe the county's zoning laws should be scrutinized by the Board

shopping centers and recreational facilities.

The Rev. Floyd Jones:

I believe the county commissioners should make some plan for the future dealing with the elderly population. I believe the commissioners should study the economy of the county, and communicate the elderly's needs with various county agencies such as hospital staff and medical doctors, and with the state and federal government.

Cecil Morton:

The county is aware of the anticipated growth rate in its elderly population and a task force has been appointed to study the needs of the elderly. Our elderly population will require housing and services and the task force is comprised of people who have some expertise in this area. The task force will identify specific needs which might require attention.

Bert Ponsack:

There is a task force presently formed to determine the future needs of our expanding elderly population. Although we should encourage local housing industries to help at present with the shortage of housing, further plans may rest heavily on the reports of the task force. I would also encourage local volunteer organizations to help repair the present housing occupied by the elderly.

8) Would you favor spending any county money for legal costs if the battle over the military's proposal to expand into southwestern Onslow County reaches the courts? If no money should be used, what role would you favor for the county?

David A. Clement:

I would avoid unpromising endeavors. While I sympathize deeply with those affected, I would place paramount effort in negotiating the best possible outcome for those who are displaced such as the movement of their house and cemetery to a place of their choice provided by the Marine Corps.

Arthur Marshall Davis:

I believe a polling of the people who will be affected should be undertaken first and then to what extent the expansion will add to the county or what losses it will incur before we start spending money on a legal battle.

Larry Fitzpatrick:

I am in favor of financing the impact study to see what effect this expansion will have. The course I think we should take to prevent this expansion is for the citizens to band together and get our elected and appointed officials (local, state and federal) to work with us.

Sybil Gandy:

No. Legally it is a winless situation. The commissioners have taken the right stand by uniting and letting those in Washington know they oppose this proposal, pointing out the tax base they have once before taken from Onslow. Concerted lobbying and an intensive letter-writing campaign may divert this action.

Willie Humphrey:

Spending county money in a legal battle against the base expansion could be fruitless. There have been several good alternatives to the base expansion into southwestern Onslow County. Utilizing land in Hofmann Forest or Croatan National Forest is one alternative. Another alternative proposed is the construction of a four-lane road to present military facilities in Fort Bragg. This road

would benefit the military and civilian population. We must present a unified front to lobby Washington expressing our concerns on the base expansion.

The Rev. Floyd Jones:

I would not favor Onslow County spending the taxpayers' money for legal costs to battle the military's proposal. However, I would favor setting aside a minimal amount to support a committee that is looking into this matter for the interests of concerned land owners.

Cecil Morton:

At the present time I do not feel that it is necessary for the county to expend any money for legal fees. The county has assumed an active role in opposing the takeover of land through condemnation procedures by adopting a resolution and by communicating its feelings to military officials and our federal representatives. We have asked the congressman's assistance in obtaining federal funding for a study to evaluate the impact of this proposed expansion on both the people and the property which might be affected.

Bert Ponsack:

By the time the battle over the military's proposal to expand into southwestern Onslow County reaches the courts, it will be too late to spend county money for legal costs. The time for action is now. Alternate training areas must be found in the planning stage.

9) The county has assumed a stance of encouraging more high density development on oceanfront land at the beach and less density on the sound side. How do you feel the beach should be developed?

David A. Clement:

To safeguard seafood nursery areas where there is an important sound, I would encourage development on the ocean front. But where there are no large nursery areas, I would encourage development away from the beach so that the public might continue to enjoy a view of the ocean.

Arthur Marshall Davis:

I believe that we should put a halt to the development. God almighty made the beaches for everyone's enjoyment, not just for those with more money. If it keeps on at the present rate, our children will not be able to get on the beach.

Larry Fitzpatrick:

I feel the beach and the sound side should be developed in accordance with the county's land-use plan, the Coastal Area Management Act on density and the Environmental Management Commission's guidelines for protecting water quality and natural resources, making sure there are plenty of public beach accesses, restrooms and parking facilities.

Sybil Gandy:

That is probably the best plan since the sound side is more fragile. If I understand the guidelines, for every unit built a developer must donate a certain portion of like land to the county. I would rather have land donated on the ocean front than the sound side.

Willie Humphrey:

I believe beach development should be provided in a manner that will ensure no damage to the fragile environment around the beach and provide public parking and access to the beach. I believe our present zoning and environmental acts are moving in the right direction. A well-developed beach and tourism

from that development will improve our economy and increase our tax base so we can provide our citizens with the necessary county services at minimum cost.

The Rev. Floyd Jones:

I believe our county government should have made some provisions in the past at the beach to provide for recreation and parking space along with development. I believe the county government could reserve a larger area for recreation and parking.

Cecil Morton:

Property owners should have the right to develop their property within allowable guidelines. Higher density development on the ocean front is more desirable than higher density on the sound side because it affords greater protection of fragile estuarine areas. These recommendations regulating the location of higher density development have been made by the Planning Board, and I feel that existing regulations are sufficient to prohibit extreme high density development from taking place on either the ocean front or the sound side areas of the beach.

Bert Ponsack:

Development is inevitable; therefore, the encouragement of high density development on the ocean front at the beach and less density on the sound side seems to be a reasonable stance. However, this should be slowly accomplished and only after careful and considerable evaluation of the environmental impact on the area.

10) The county schools received about \$300,000 this past year in federal revenue sharing money. With the impending loss of revenue sharing, would you favor increasing the allocation to county schools for capital improvements?

David A. Clement:

Yes. The county should never borrow money for expenses that can be anticipated. Since school construction and maintenance can be clearly anticipated, the county should establish a school capital reserve fund into which annually is placed substantial sums of money to pay for future capital improvements as they are needed.

Arthur Marshall Davis:

Yes, I would favor increasing the allocation. Our children and grandchildren need good sound basic schools for better education.

Larry Fitzpatrick:

With a legislature-approved half-cent sales tax for five years targeted for new construction, and with \$1.2 million (40 percent of current sales tax) plus \$325,000 impact aid for maintaining teacher supplements as well as repairing and renovating current facilities, in five years our problems could be solved.

Sybil Gandy:

Yes. With the increase of 500 students per year, our finances should be geared toward facilities. The schools are very crowded at the present and with the county growing as it is, I see no signs of the school population decreasing in the future.

Willie Humphrey:

Capital improvements for our schools must be met regardless of where the money comes from, but we must make sure we are spending our tax dollars wisely and with good planning for the future. We must provide good schools for future generations. I believe that with a



DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
P.O. BOX 1890
WILMINGTON, NORTH CAROLINA 28402-1890

August 12, 1986

IN REPLY REFER TO
Regulatory Branch

Mr. Haskell Rhett
Division of Coastal Management
N.C. Department of Natural Resources
and Community Development
7225 Wrightsville Avenue
Wilmington, North Carolina 28403

Dear Mr. Rhett:

The Corps of Engineers is mandated by the Clean Water Act under Section 404 to regulate the discharge of dredged and fill materials into wetlands, many of which occur in the twenty coastal counties. Within these counties, any permit issued by the Corps requires a consistency determination by the State stating that the proposed permitted activity is consistent with local land use plans.

This brings us to our area of concern. At present, the local land use plans do not identify wetlands. Wetland values which have received national attention and recognition have apparently attained only minimal importance at the local level.

The construction problems that are induced by wetland characteristics (specifically hydric soils and poor drainage) would appear to justify identification of these areas in local land use plans to identify those areas where development would require special measures. At the same time, identification of the wetlands would alert potential developers and the buying public that Federal and State permission is required for certain activities.

We believe that a lot of confusion could be eliminated if discussion and mapping of wetlands were included in the land use plans. We would like to suggest several methods that could be used to accomplish this goal.

a. The Coastal Resources Commission could designate wetlands as an Area of Environmental Concern. This not only would assist

the State's role in making a consistency determination of a Corps permit, but would allow the State to require a CAMA permit for the action.

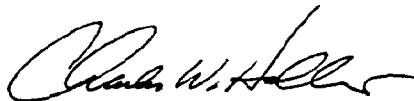
b. Designate wetlands as conservation areas under the present classification scheme and map accordingly. Local definitions of conservation areas would dictate what level of development would occur in these areas, but the classification would "flag" wetlands as areas where activities may require permits.

c. Create a special classification category called wetlands. The local governments would have the flexibility to specify the degree of local control over these areas, but the areas would be identified as potentially regulated by the Corps of Engineers.

It should be pointed out that all wetlands are not regulated by the Corps. The Corps regulates only those wetlands that it has determined to be responsible for under Section 404 of the Clean Water Act. Although we do not have a map of Section 404 wetlands, we believe that a very acceptable product for the purposes of local land use plans can be obtained from the National Wetland Inventory program (NWI). The NWI effort in North Carolina is being conducted by Mr. Steve Leonard, Division of Soil and Water Conservation. The NWI mapping is relatively economical and quick. The NWI classification is broader and more encompassing than the Corps jurisdiction. Nevertheless, the NWI mapping would identify for planners, developers, and perspective buyers those areas that are valuable for natural resources, those areas that would likely pose development problems, and those areas that may require permits.

Thank you for allowing this opportunity to relate our concerns with you. We would be glad to meet with you and local government officials to discuss this in greater detail.

Sincerely,



Charles W. Hollis
Chief, Regulatory Branch

Copy Furnished:

Mr. Joseph A. Uravitch
Regional Manager
National Oceanic and Atmospheric
Administration
Office of Ocean and Coastal Resource
Management
1825 Connecticut Avenue, NW.
Washington, D.C. 20235

COMMUNITY ISSUES/POLICIES AND OBJECTIVES

I. ISSUE - Growth of Onslow County!

Onslow County's growth has caused some problems but has also created many benefits. The booming economy of the 1940's, 1950's and 1960's slowed somewhat in the 1970's. This trend will probably continue throughout the next decade. Much of the county's growth will continue to be in the vicinity of the City of Jacksonville while some scattered rural and community development will be evident. The new County Water System may encourage development in some portions of the county outside Jacksonville's "sphere of influence". West Onslow Beach will grow by leaps and bounds barring problems associated with hurricanes. Beach erosion at this point in time is minimal.

According to the Land Use Plan questionnaire, residents desire a moderate amount of growth that can be handled properly while preserving the existing character of rural areas. Successful promotion of industry in the vicinity of our communities and the airport should generate some growth.

Policies include:

1. Allowing development to occur in an orderly manner.
2. Permit intense development in those areas which are served or will be served with urban services.

Means for implementing policies include:

1. Establish a Land Use Plan by which development proposals may be reviewed for consistency.
2. Conform to the State's Balanced Growth Policy.
3. Conform to all land use ordinances enforced by Onslow County.

Primary responsibility will lie with the Board of County Commissioners, the Planning Board, the County Manager, and the County Planning Director.

III ISSUE - Resource Protection

- A. Ocean dunes and beaches
- B. Coastal wetlands
- C. Estuarine waters
- D. Public trust waters
- E. Estuarine shoreline
- F. Other hazardous, fragile or historic areas
- G. Off-road vehicles

Suitable Uses

- Reserve Dune System
In Need
is No Process To Do

A. Ocean dunes and beaches - Uses shall be compatible with CAMA regulations and policies. Highest priority given to preserving the dune system and preserving access to the beach strand. Onslow County Subdivision Regulations require a 10 ft. pedestrian access for every 600 ft. of ocean-front subdivision. Second priority is given to uses which comply with all local, state and federal laws. Depending on the site and surrounding land uses, possible uses could include residential, commercial, public, semi-public or recreational uses.
- Reserve Access to Beach

B. Coastal wetlands - Uses shall be compatible with CAMA regulations and policies. Highest priority shall be given to preserving coastal wetlands. Second priority shall be given to those activities which require water access and cannot function elsewhere, or agricultural areas.
- Reserve Coastal Wetlands

C. Estuarine waters - Uses shall be compatible with CAMA regulations and policies. Conservation of these waters and its components is very important. Uses shall be allowed which require water access or which cannot function elsewhere such as channels, erosion control structure, navigational channels, docks, marinas, piers, wharfs, pilings or bridges.
- Monitoring of Water Quality

D. Public trust waters - Uses shall be compatible with CAMA regulations and policies. Permitted uses shall not hinder access or cause biological or physical damage to the estuary. These uses include navigational channels, drainage ditches, erosion control structures, piers, wharfs, marinas, and bridges. Uses should be monitored to insure that navigation will not be hindered, erosion will not be perpetuated, and water quality will not be damaged.
- X

E. Estuarine shoreline - A strip of land 75 feet wide from mean high water inland. Uses shall be compatible with CAMA regulations and policies. Future development should be compatible with the nature and the values of the estuarine system. Permitted uses should consist of recreational uses and low density residential and commercial uses which will not greatly increase run-off into an estuary.

Need Regulations for
Protection of Dunes
Maritime Forests

	In	Need
Yes	No	To Do
X		

Review of Archeo-
logical Sites a part
of Subdivision review
process

X		
---	--	--

Off-Road Vehicle
Regulations Need
Improvements

X		
---	--	--

F. Other hazardous, fragile or historic areas - Builders and home-buyers should be aware that the New River Inlet has historically moved north and south for several thousand feet from its present location. The inlet is presently moving southerly and could endanger structures adjacent to it in the future. All uses in the inlet hazard area, as defined by the Coastal Resources Commission, shall comply with all CAMA regulations and policies. In 1979 the Onslow County Planning Board, considering maritime forests and dunes outside AEC's as a unique resource, drew up regulations to protect them. These regulations were never approved. According to the Onslow County Archeological Assessment conducted in part of Onslow County in 1979, many portions of the county have archeological significance. Most of the sites are located along the White Oak River and at West Onslow Beach. Lands known to have archeological significance will be reviewed prior to any development. The N. C. Division of Archives and History will be notified and also given an opportunity to review the sites. This review is allowed through the Onslow County Subdivision Regulations, Article IX, Section 3.04.

Portions of Onslow County around Albert J. Ellis Airport are subject to high noise levels and potential airplane accidents. A Land Use and Noise Analysis is presently being conducted to determine where problem areas are and what can be done to either alleviate them or to keep them from multiplying. Recommendations made in this study should be considered to preserve the safety and property of nearby residents.

G. Off-road vehicles - Off-road vehicles are presently regulated by the county at West Onslow Beach. From May 15 to September 10 of each year no vehicles are allowed on the beach strand or dunes. Only four-wheel drive vehicles (with 2 minor exceptions) are allowed on the beach strand during other periods. Strick regulations are enforced as to crossovers and legal driving areas.

Means of protecting AEC's and other sensitive areas while insuring public access:
Implementation methods for protecting AEC's and other sensitive areas while insuring public access:

X		
---	--	--

1. Support the work of the work of the North Carolina Office of Coastal Management and the local CAMA Permit Officer.
2. Support the evaluation and permitting of activities in environmentally sensitive areas by the U. S. Army Corps of Engineers and N. C. Division

X		
---	--	--

<u>s</u>	<u>No</u>	<u>In</u>	<u>Need</u>
		<u>Process</u>	<u>To Do</u>

- | | | | |
|--|--|---|--|
| | | | of Marine Fisheries. |
| | | | 3. Continue to enforce health regulations relevant to septic tank placement. |
| | | | 4. Protect environmentally sensitive areas by locating new development in accordance with the CAMA Land Use Plan. |
| | | | 5. Seek grants to study and evaluate our natural resources. |
| | | | 6. Seek the purchase or donation of oceanfront and other beach property to provide public access to the Atlantic Ocean and sufficient parking areas. Fencing and crosswalks should be installed to protect the dune system. |
| | | X | 7. Adopt a Flood Hazard Ordinance after the county has been officially mapped for flood prone areas. |
| | | X | 8. Support the construction of central facilities where septic tank effluent is a contributor to water pollution and shellfish closings. |
| | | X | 9. Build permanent vehicle crossovers from the highway to the beach strand. |
| | | | 10. Continue to enforce the ordinance regulating vehicular traffic on the beach strand. |
| | | X | 11. Continue to require the donation of easements for public access in beach subdivisions as provided in the Onslow County Subdivisions Regulations or the donation of an least an equivalent amount of oceanfront property. |

III. ISSUE - Resource Production and Management

Onslow County has a number of resources which are very productive and should be protected. They include:

- A. Productive agricultural lands.
- B. Commercial forest lands.
- C. Mineral production areas.
- D. Commercial and recreational fishing.

A. Productive agricultural lands - If growth continues to occur under present laws and policies, there is a greater possibility of converting productive agricultural land to non-agricultural uses. Three options exist: (1) try to stop growth, which is totally undesirable; (2) promote growth anywhere, which is equally undesirable; or (3) develop Onslow County with sensitivity to what is already here and at a rate our resources can handle while preserving our agricultural land.

Policies include:

1. Encouraging the use of productive agricultural lands for agriculture.
2. Assessing land constraints prior to changing land from agricultural uses.
3. Encouraging the passage of bills in the General Assembly which would preserve productive agricultural land.
4. Encouraging farm programs which will keep good land in cultivation.
5. Encourage federal procurement authorities at Camp Lejeune to purchase more local agricultural products for use on the Base.

Means of implementation:

Yes	No	In Process	Need To Do	
X				1. Use the Soil Conservation Service soil survey in evaluation proposed developments.
		X		2. Have farmers sign tax agreements for keeping property valuations lower in exchange for keeping their land in agriculture.
X				3. Work with the Agricultural Extension Service and other agricultural related organizations to improve awareness of the necessity of preserving productive land.

B. Commercial forest lands - Commercial forest lands comprise over three-fourths of the land area in Onslow County. Much of this land is owned by timber companies while private individuals, the U. S. government and the State own the rest. This resource is not only important to Onslow County but to the entire southeastern portion of the State. Many incomes are derived through forest products. However, due to nature's delicate

balance, our forest resources should not be abused.

Policies include:

1. Encourage reforestation of harvested timber land.
2. Encourage land-owners to work with agencies (N. C. Forest Service, etc.) that will help them protect and market their timber.
3. Encourage landowners to protect fragile areas adjacent to their timber land (marsh, estuaries, etc.).

In Need
is No Process To Do

Means of implementation:

1. Landowners are eligible for free seedlings through the local ASCS office.
2. Ask landowners to contact the N. C. Forest Service before burning of any type.
3. Ask landowners to check into proper harvesting techniques and reforestation methods before cutting timber.
4. Ask landowners to leave a natural barrier around streams when cutting timber in an effort to cut down on pollution and siltation.

C. Mineral Production Areas - Mineral resources in Onslow County are minimal. Only stone is being mined in the Belgrade community adjacent to the White Oak River. However, large peat bogs are located in several portions of the county and may be a source for future energy demands.

Policies include:

1. Support the development of mineral deposits found in the future.
2. Insure that developing mineral resources does not harm our economy or our water and air quality.
3. Requesting consultation in the review process before peat mining is allowed.
4. Peat mining should be done in such a manner as to protect estuarine water quality.
5. Support the conversion of peat to methanol near the mining site to protect our highways and attract more industry.

Means of Implementation:

- X 1. Seek grants to fund the evaluation of developing our mineral resources such as peat.
2. Support the preparation of environmental impact statements for projects like peat mining.
3. Work with the State in reviewing peat mining proposals.

Yes	No	In Process	Need D. To Do
-----	----	------------	---------------

X			
---	--	--	--

Commercial and Recreational Fishing - The fishing industry has always been important to Onslow County and is continuing to grow. However, siltation, fresh water intrusion and shallow channels are causing problems which must be alleviated.

Policies include:

1. Support the expansion of commercial and recreational fishing and shellfish.
2. Improve access to ports through widening and deepening channels.
3. Support efforts to limit fresh water intrusion into salt waters.
4. Support efforts to cut down on the siltation and pollution of our salt water estuaries.
5. Support efforts to expand markets for local seafood.
6. Support efforts to determine the problems of the White Oak River and resolve them.
7. Encourage federal procurement authorities at Camp Lejeune to purchase more local, fresh seafood for use on the Base.

Means of implementation:

X			
---	--	--	--

1. Have the Economic Development Commission seek to have seafood processing industries locate in Onslow County or to find seafood processing industries that will handle more of the local catch.

X			
---	--	--	--

2. Seek funding from state and federal agencies that can provide funds for dredging channels into the New River and White Oak River for better boat access.

--	--	--	--

3. Evaluate all channelization projects that can cause water quality problems in our estuaries.

X			
---	--	--	--

4. Seek funds to build an artificial fishing reef off the coast.

X			
---	--	--	--

5. Seek funding to evaluate the effects of the N. C. 24 bridge-causeway and the Atlantic Intracoastal Waterway on the White Oak River.

X			
---	--	--	--

6. Seek funding to implement the recommendations of the White Oak River Study.

IV. ISSUE - Economic and Community Development

- A. Residential
- B. Commerical
- C. Industrial
- D. Public facilities
- E. Energy Resources
- F. Commitments to state and federal programs
- G. Redevelopment of older areas
- F. Channel maintenance and beach nourishment

A. Residential -- Presently only 11% of Onslow County's housing stock is substandard, a very low figure compared to other counties in eastern North Carolina. Occupancy rates of available housing are very high. If present rates continue, more than 2,600 new housing units must be built by 1990 to keep up with growth. Look for mobile homes to increase in popularity as conventional single-family homes increase in price.

Policies include:

1. Encourage the development of various housing types (such as mobile home parks, planned unit developments, apartments, conventional single-family homes, etc.) in the proper location.
2. Support efforts to improve the quality of living in Onslow County.
3. Support local communities in their efforts to be served by water and sewer facilities.
4. Encourage residential development to occur near municipalities or communities.
5. Help communities with their water and sewer problems.

Means of implementation:

	In	Need
Yes	No	To Do

- | | | | | |
|---|--|--|--|---|
| X | | | | 1. Continue to enforce county-wide Subdivision Regulations. |
| X | | | | 2. Continue to enforce the State Building Code and CAMA Regulations. |
| X | | | | 3. Enforce the Onslow County Zoning Ordinance where residents feel it is necessary to preserve their rights. |
| X | | | | 4. Educate county residents about the benefits of zoning. |
| X | | | | 5. Continue to seek funds such as Community Development Block Grants to improve housing and public services. |
| X | | | | 6. Continue to support the County Water System. |
| X | | | | 7. Continue to support health and sanitation regulations. |
| X | | | | 8. Continue to support the housing rehabilitation efforts of the Dept. of Social Services, Region P and other qualified agencies. |

X _____

9. Seek funding for community facilities through EPA, Farmers Home Administration, HUD, etc.

B. Commercial development In Onslow County is increasing as shown by the construction of a new mall this year on Western Boulevard. This new development is needed to serve existing and future residents.

Need
Yes No Not Sure To Do

Policies include:

_____ X

1. Commercial development should be clustered around intersections and not stripped along major highways.

_____ X

2. Commercial development should be compatible with its surroundings and not encroach on residential areas.

X _____

3. Onslow County should work to recruit new businesses.

4. Regulate the location and density of adult businesses.

X _____

5. Promote tourism throughout the county.

Implementation methods:

1. Enforce the Onslow County Zoning Ordinance where it is deemed necessary by the Board of County Commissioners.

2. Encourage businesses to locate at intersections.

C. Industrial The need to diversify our economy is paramount. Not only would new industry provide more, better paying jobs, but it would add to the county's tax base, spur home building, generate more retail sales and many other benefits. When seeking industry, however, we should seek quality and not quantity. We should also seek industry that will not waste or pollute our natural resources.

Policies include:

1. Encouraging industries that will be compatible with the surrounding communities, and will comply with state and federal standards.

2. Supporting public facilities extentions as inducement for locating industry in Onslow County.

3. Evaluating the impact of new industry on the county's resources.

4. Seeking military discharges with proper training to work for local industries.

5. Working with local industries in the training of workers at the new Skills Center at Coastal Carolina Community College.

Means of implementation:

- | | | |
|---|----|--|
| | 1. | <u>Develop an evaluation criteria</u> in cooperation with the Economic Development Commission for new industry (see <u>Environmental Effects of Potential Development Activities in Coastal Onslow County</u>). |
| X | 2. | Continue supporting the Economic Development Commission. |
| X | 3. | Help local communities with their planning and financing of community facilities. |
| X | 4. | Coordinate the efforts of the Onslow County Planning Department, Y. O. U. and the <u>Economic Development Commission in locating industrial sites.</u> |

Onslow County is awaiting the results of the CEIP study being done by the N. C. Office of Coastal Management before dealing with policies related to outer continental shelf pipeline landfalls and corridors or off-shore coal facilities.

- D. Public facilities - The questionnaire which is a part of this land use plan gives some indication as to the types of services and facilities requested by the citizens of Onslow County.

Policies include:

1. Developing services and facilities in coordination with expected growth.
2. Locating services and facilities where they may best serve the county's population.
3. Seeking funds from various sources to provide public facilities for county residents.

Means of implementation:

- | | | |
|---|----|--|
| | 1. | Prepare and distribute a citizen survey periodically to determine levels of need. |
| | 2. | Address the following needs as recorded through the Citizens Land Plan Questionnaire. |
| X | a. | Maintain mosquito control and drainage by air spraying and ditching in areas where stagnantwater stands. Coordination with State regulations in necessary. |
| X | b. | Continue to improve county recreation facilities and beach access for the public by developing a Master Park Plan for |

the county and by purchasing or receiving donations of land at West Onslow Beach. Continue to require pedestrian easements as required by the County Subdivision Regulations. Funding: County taxes and the National Park Service.

c. Promote the improvement of our transportation systems in order to foster economic development. Promote the widening of U. S. 17, N. C. 24, and U. S. 258, paving secondary and primary roads, bridge improvements, improved channelization of the New River and White Oak River, and continued operation of all railroad lines in the county. Promote connection of I-40 to beach area
Funds: Dept. of Transportation, U. S. Army Corps of Engineers, Sea Grant program.

d. Schools - Improve the quality of schools by updating classrooms facilities, cutting teacher/student ratios and building other facilities deemed necessary by the Board of Education when funds permit. Funding: State of North Carolina, U. S. Government, county taxes, county bond referendum.

e. Public transit - Public transit is being offered to a number of needy residents by OUTF (Onslow United Transit System), a combined effort of the Dept. of Social Services and several other human service agencies. Additional public transit is provided by Camp Lejeune for its personnel. The opportunity for a county public transit system is remote due to the lack of dense population.
A study should be done to determine the feasibility of public transit in the Jacksonville - Camp Lejeune area.
Funding: U. S. Dept. of Transportation.

f. Land use planning - An effort should be made to implement a comprehensive land use planning program in portions of Onslow County subject to future development demands. This includes continued use of the County Subdivision Regulations, implementation of zoning where the need arises, solid waste planning, implementing CAMA regulations, etc. Funding: County taxes, CAMA grants.
Zoning where Needed

g. Undertake measures to reduce crime in the county. Evaluate and study existing policies and methods and determine a course of action by 1985. Funding: County taxes, State of North Carolina.

h. Review the Land Use Plan annually to insure compatibility with the plans and programs of other counties, our municipalities, and Camp Lejeune.

i. Discuss with officials at Camp Lejeune the possibility of locating a landfill on the periphery of the Base which could be used, if feasible, by both the Base and the County.

- E. Energy Resources - A local as well as a national issue is the need to conserve our existing resources in addition to identifying and developing new resources. Easily identifiable energy resources throughout the county include the wind, peat, wood, corn, chicken and swine manure, and garbage. However, the feasibility of using these resources cannot be determined without further study.

Policies include:

1. Evaluating our energy resources so that we may plan for effective utilization.
2. Evaluating the impact of developing our energy resources on the surrounding environment.
3. Promoting the development of locally produced alternative fuels.
4. Promote the Onslow County Energy Commission and its public education programs.

Means of implementation:

1. Seeking grants to fund the evaluation of our energy resources.
2. Preparing Environmental Impact statements for energy development projects.
3. Seeking grants to determine the impact of energy projects on the county's economy.
(Funds may be available through the U. S. Dept. of Energy).

- F. Commitments to State and Federal Programs - Onslow County is committed to those programs that will help the economy, preserve our natural resources and make Onslow County a nice, safe place to live.

Policies include:

1. Continue to work with Camp Lejuene in making Onslow County a good place to live.
2. Continue to support CAMA regulations and to limit development in highly erodible areas.
3. Work with appropriate state and federal agencies to locate and use spoil areas (with property owner consent) for dredging projects in the New River and White Oak River.

- 4. Assist in developing and implementing plans for dredging New River and rehabilitating the White Oak River.
- 5. Help the state and federal governments to enforce their laws and licensing requirements contained herein by working with them.

Yes	No	In Process	Need To Do
-----	----	------------	------------

Means of implementation:

- 1. Developing a task force made up of representatives from Camp Lejeune, New River Air Station, Onslow County and it's municipalities to meet periodically to discuss mutual problems as related to land use, solid waste, sewage, transportation, etc.
- 2. Seeking funds to rehabilitate the White Oak River and dredge deeper channels for the New River.

G. Redevelopment of older areas - Since much of Onslow County has grown since 1940, most areas are relatively new. However, those areas which are older and need economic stimulus should be helped, within the capabilities of Onslow County.

Policies include:

- 1. Encouraging builders and property owners to build new buildings and improve existing ones.
- 2. Serving these areas with county water when economically feasible.
- 3. Seeking funds (state, federal) for redevelopment.

Means of implementation:

- 1. Meeting with prospective homebuilders to advise them about building in redevelopment areas.
- 2. Apply for Community Development Block Grants for redevelopment of those areas that qualify.
- 3. Review applications for public facilities from redevelopable areas.

H. Channel Maintenance and Beach Renourishment

Channel maintenance is a problem for portions of several bodies of water in Onslow County. New River Inlet must be dredged very often to keep it open. The intersection of the Atlantic Intracoastal Waterway with the New River Inlet also must be dredged frequently. A 12-foot deep channel, like the inlet and the AIWW, also is maintained by the U. S. Army Corps of Engineers for portions of New River. Marinas and fish houses in the Sneads Ferry community often have problems with their boats running aground trying to get to and from the Corps maintained channel in the New River.

The White Oak River, along Onslow County's eastern border, has many problems such as siltation, poor flushing and fresh water intrusion. These are documented in the White Oak River System Study, (Henry Von Oesen and Associates, Wilmington, N. C. 1981). Bogue Inlet, also along Onslow County's eastern border, is one of the widest and most fluctuating inlets along the entire North Carolina coastline. Due to many factors, the inlet is shallow and dredging must be done to allow commercial vessels to enter and exit.

Beach renourishment is not a problem for West Onslow Beach at this point because of low erosion rates over the past 40 years. Future projections show only a gradual erosion of 2.5 feet or less.

Policies include:

- _____ 1. Encouraging the U. S. Army Corps of Engineers to continue dredging the Atlantic Intracoastal Waterway, New River Inlet, New River and Bogue Inlet.
- _____ 2. Encouraging the U. S. Army Corps of Engineers to dredge portions of the White Oak River.
- _____ 3. Requesting help from the State of North Carolina in saving the White Oak River from siltation, poor flushing and its other problems.
- _____ 4. Reviewing alternatives of action if the erosion rates at West Onslow Beach begin creating a need for a renourishment project.

Implementation methods:

Yes	No	In Process	Need To Do	
-----	----	------------	------------	--

- | | | | | |
|---|-------|-------|-------|---|
| X | _____ | _____ | _____ | 1. Contacting the U. S. Army Corps of Engineers and Congressmen if funds for present maintenance dredging are endangered to request that the funds not be omitted. |
| X | _____ | _____ | _____ | 2. Requesting, through our Congressman, that funds be allocated by Congress to dredge the White Oak River in accordance with appropriate plans required by the state and federal governments. |
| X | _____ | _____ | _____ | 3. Submitting the appropriate studies which would determine the course of action in saving the White Oak River. |
| | | | | 4. Consider organizing a Special Service District at West Onslow Beach to pay for all or part of beach renourishment, should erosion become a problem. |

NOAA COASTAL SERVICES CENTER LIBRARY

3 6668 14101 0597