CAMA

LAND USE PLAN UPDATE

FOR

HYDE COUNTY

1986

LOCAL ADOPTION, MAINLAND - MARCH 16, 1987

CRC CERTIFICATION, MAINLAND - MARCH 27, 1987

LOCAL ADOPTION, OCRACOKE ISLAND - APRIL 6, 1987

CRC CERTIFICATION, OCRACOKE ISLAND - JUNE 5, 1987

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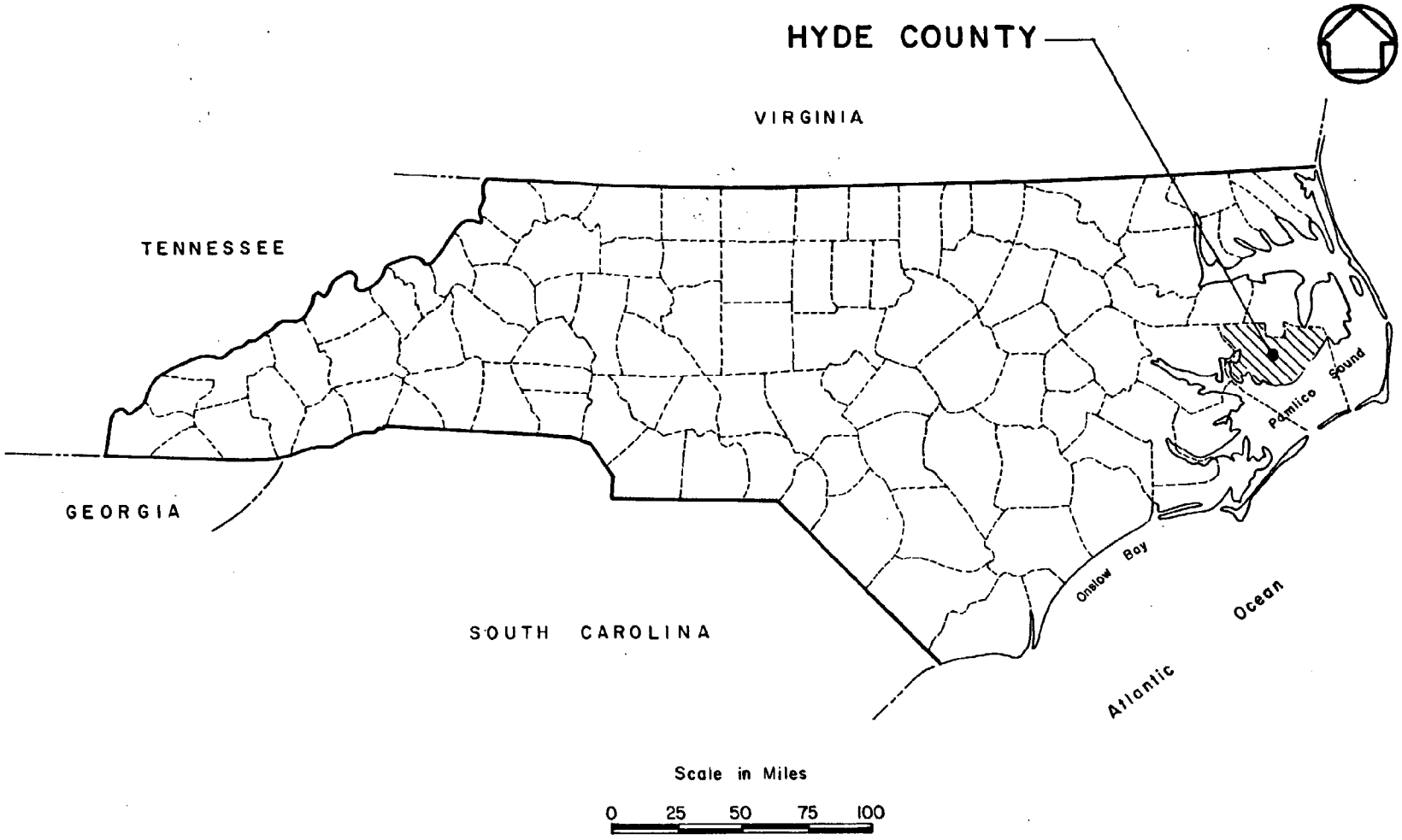

MAP I
LOCATION MAP

THIS DOCUMENT HAS BEEN PREPARED FOR THE RESIDENTS

OF

HYDE COUNTY, NORTH CAROLINA

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HYDE COUNTY, NORTH CAROLINA
LAND USE PLAN: 1986 UPDATE

TABLE OF CONTENTS

PART I: The Mainland	PAGE
SECTION I: Analysis of Existing Conditions	
A. Establishment of Information Base	1
B. Present Conditions	3
1. Population	3
2. Economy	6
a. Agricultural	6
b. Commercial Fishing	8
c. Commercial Forestry	9
d. Tourism	10
e. Employment & Income	11
3. Housing	12
4. Impact of Seasonal Population	14
5. Existing Land Use Analysis	14
a. Current Conditions	14
b. Compatibility Problems	16
c. Major Problems from Unplanned Development	17
d. Areas Experiencing or Likely to Experience Major Land Use Changes	18
e. Areas of Environmental Concern	18
6. Current Plans, Policies and Regulations	22
C. Contraints: Land Suitability	27
1. Physical Limitations	27
2. Well Fields	34
3. Fragile Areas	34
4. Areas with Resource Potential	37
D. Constraints: Capacity of Community Facilities	38
1. Water System	38
2. Sewage Disposal	38
3. Solid Waste Disposal	39
4. Schools	39
5. Transportation	39
6. Medical Services	40
7. Emergency and Protective Services	40
E. Estimated Demand	41
1. Population	41
2. Future Land Need	41
3. Community Facilities Need	41
F. Summary: Section I	43
SECTION II: POLICY STATEMENTS	44
A. Resource Protection	44
1. Areas of Environmental Concern: Development Policies	44
2. Development in Areas with Constraints	47
3. Hurricane and Flood Evacuation Needs	49

B. Resource Production and Management Policies 52
1. Agriculture 52
2. Commercial Forestry 53
3. Mining Resources Areas 54
4. Commercial and Recreational Fisheries 55
5. Off-Road Vehicles 56
6. Residential and Commercial Land Development 56
C. Economic and Community Development Policies 57
1. Types and Locations of Desired Industries 57
2. Local Commitment to Service Provisions 59
3. Desired Urban Growth Patterns 60
4. Redevelopment of Developed Areas 61
5. Commitment to State and Federal Programs 62
6. Assistance to Channel Maintenance 62
7. Energy Facilities Siting 63
8. Tourism 63
9. Density of Development 64
10. Land Use Trends 64
D. Continuing Public Participation Policies 64
E. Storm Hazard Mitigation, Post-Disaster Recovery, and Evacuation Plans 67
1. Storm Hazard Mitigation: Discussion 67
a. High Winds 67
b. Flooding 67
c. Wave Action 69
d. Erosion 69
e. Summary: Storm Hazard Mitigation Considerations 69
f. Policy Statements: Storm Hazard Mitigation 70
g. Implementation: Storm Hazard Mitigation 71
2. Post-Disaster Reconstruction Plan 72
3. Hurricane Evacuation Plan 76
4. Re-Entry 76

SECTION III: Land Classification System 78
A. Developed 78
B. Transition 79
C. Community 80
D. Rural 80
E. Conservation 81
SECTION IV: Relationship of Policies and Land Classifications 82
A. Developed and Transition Classes 82
B. Community Class 82
C. Rural Class 82
D. Conservation Class 83

HYDE COUNTY, NORTH CAROLINA

LAND USE PLAN: 1986 UPDATE
PART I: THE MAINLAND

List of Tables and Maps

TABLE NUMBERS — PAGE

1. Hyde County Population, 1990-1995 — 3
2. Hyde County Racial Composition: 1980, 1985, 1990, and 1995 — 4
3. Hyde County Population Distribution by Townships: 1970-1980 — 5
4. Hyde County: Estimated Population, July 1, 1985, by Age, Race, and Sex — 5(a)
5. Hyde County: Projected Population, April 1, 1990, by Age, Race, and Sex — 5(b)
6. Hyde County: Projected Population, July 1, 1995, by Age, Race, and Sex — 5(c)
7. Hyde County Crop Production Income: 1981-1984 — 7
8. Hyde County Livestock and Livestock Product Income — 8
9. Hyde County: Seafood Landings Comparison, 1965-1984 — 9
10. Commercial Forestry Income in Hyde County — 10
11. Hyde County Annual Employment, 1980-1983 — 11
12. Hyde County Per Capita Personal Income, 1981-1983, North Carolina and United States Comparisons — 12
13. 1980 Hyde County Housing Summary — 13
14. Selected Housing Conditions Summary, Hyde County — 13
15. Hyde County Land Use Changes: 1980-1985 — 15
16. Ferry Schedule — 24
17. Hyde County Ferry Operations, Fiscal Years 1978-1979 and 1981-1985 — 24
18. Hyde County School Enrollment Figures — 39
19. Primary Road Traffic Counts: 1981 and 1985 — 40
20. Percent of Structures Subject to Storm Drainage Factors, Hyde County — 71

MAPS

1. Location Map
2. Hyde County Townships — 4(a)
3. Existing Land Use Map — (attached)
4. Flood Hazard Areas — (attached)
5. Estuarine Erosion Areas — 29
6. General Soil Map — 31
7. Composite Hazard Areas — (attached)
8. Land Classification Map — (attached)

FIGURES

1. Flooding in the Albemarle Sound Region from Hurricanes Hazel, Connie, Diane, and Ione (1954-55) — 69

PREFACE

HYDE COUNTY
LAND USE PLAN UPDATE, 1986
Analysis of 1981 Policy Statements/Implementation Actions

The CAMA Land Use Plan for coastal communities is essentially a policy document aimed at guiding localities toward sound growth management. Because circumstances, conditions, and issues change over time, the Coastal Resources Commission, under State law, requires the local land use plans to be updated every five years in order to "take a second look" at old policies for their relevance as well as examine newly emerging trends and concerns. The Commission is also requiring in all 1986 updates an assessment of the previous policy statements and implementation steps taken to effectuate them. This summary analysis of the 1981 policies is being presented here as a "Preface" to the 1986 Plan Update of Hyde County's Plan for the mainland part of the County.

Policy Area

A. Resource Protection

Policy/Implementation	Status/Relevancy Actions
1. The County, in carrying out its policies on managing development within the AECs, will continue to support uses which are permitted under the State Administrative Code. However, it is the belief of Hyde County that variances to the restrictions of uses within the AECs should be permissable on the basis of a case-by-case review if an applicant for a proposed development can clearly demonstrate that no major or irreversible damage would result. To help determine the "clear demonstration" of no major or irreversible damage, the County Board of Commissioners will appoint a Development Review Board. This Board, working with the County Manager, the local CAMA Implementation and Enforcement Officer, and the Building Inspector, shall review each proposal for development within an AEC or natural or cultural resource area.	1. This policy was carried out in part, except the County did not appoint or activate a "Development Review Board."

2. The County will seek to establish an Historic Properties Commission. This Commission will have the authority to take necessary steps to protect properties of historic or architectural significance. Prior to developing such a Commission, the County will consult with the N.C. Department of Cultural Resources.	2. Not implemented. However, the Archaeology Branch of the State Division of Archives and History has been actively cataloging cultural resources in the County.
3. The County will discourage development in high flood-prone areas. However, Hyde County will continue to participate in the Federal Flood Insurance Program. Proposed developments which are not otherwise damaging to other AECs may be permitted in some flood-prone areas, provided protective measures which comply with flood insurance requirements.	3. Implemented. The County has received final flood maps from FEMA and is scheduled to enter the Regular Phase of the National Flood Insurance Program in late 1986.
4. Since a County-wide sewage collection and disposal system was shown to be economically infeasible (1978 201 Facilities Study), Hyde County will explore the feasibility of developing "limited-area" sewer systems which would coincide with existing population clusters and the current water service area.	4. This action was explored by the County and discussed with State officials, but due to a low-density population, was determined to be economically infeasible.

B. Resource Production and Management

Policy/Implementation	Status/Relevancy Actions
1. The County will continue to support the maintenance of existing drainage rights-of-way for farm drainage, including the use of the County-wide Agricultural Drainage Permit process.	1. Although existing drainage rights-of-way are maintained, the County-wide permit process has not been viewed as very effective.
2. The County will encourage, as much as feasible, agricultural drainage to run directly into Lake Mattamuskeet or some of the canals which drain the lake and which empty directly into the Pamlico Sound.	2. Nothing has been done toward this objective.

3. The County will seek Federal and State aid to have the Outfall Canal cleaned and maintained. This is a major drainageway running southward from Lake Mattamuskeet directly into the Pamlico Sound, which could be very useful in the drainage network to get freshwater directly into the Sound.	3. Nothing has been done toward this objective.
4. Because of the potentially favorable economic and employment benefits, Hyde County encourages and supports the development of peat mining. Since mining operations are relatively new, the County will seek to develop more information on the various impacts of peat mining. It is the desire of the County that mining activities cause no major or irreversible damage to any Area of Environmental Concern, or significant cultural or natural resource. Also, the County will encourage and support Federal and State regulations requiring land restoration and reclamation.	4. A major peat mining proposal for the White Tail Farms area is currently being held up, pending judicial clarifications and adoption of environmental regulations.
C. Economic and Community Development Policy/Implementation	Economic & Community Development - Actions
1. The County will establish more active contact with the State's industrial development representative for the region, and revive or make reappointments to its existing industrial development committee. This will be done in order to develop an industrial "sales team" approach. The County will actively explore funding assistance to develop an industrial park near the airport at Engelhard.	1. On-going. This is still being pursued with State officials. Prospects have been presented or discussed with the County, but nothing definite has been developed.
2. Hyde County will continue to provide new water service tap-ons to areas presently served. This will be both economical and foster growth in already established communities. The County will also explore the feasibility of developing limited sewer services to certain areas of the County where development may concentrate.	2. The County is currently seeking to expand both its water supply and service area, with assistance from the FmHA. Centralized sewer service has been determined to be not feasible.

D. Continuing Public Participation

Policy/Implementation	Continuing Public Participation - Actions
1. It is the belief of the Hyde County Board of Commissioners that all citizens be afforded adequate opportunities for participating in the governmental and planning decisions which affect them. Therefore, the County will maintain the Land Use Advisory Committee even after the updated plan is completed. This will provide continuous citizen review and comment on development proposals and useful input into governmental decisions.	1. Not implemented. After the completion of the 1981 Plan Update, the Committee did not meet again.

PART I
SECTION I
DATA COLLECTION AND ANALYSIS

A. ESTABLISHMENT OF INFORMATION BASE

This Land Use Plan Update for Hyde County has been prepared in accordance with requirements of the North Carolina Coastal Area Management Act (CAMA). Specifically, this document complies with the Land Use Planning Guidelines, as amended, June 17, 1985.

The initial Land Use Plan was prepared for Hyde County in 1976, with a revised Plan being prepared 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 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 1985 Update. This element is designed to help local governments effectively coordinate 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.

The initial 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, particularly for Ocracoke, which, as was the case with the 1981 Update, is being addressed primarily as Part II of this plan. Part I, likewise, will address primarily the mainland portion of the County. A number of data sources were tapped during the preparation of this plan in order to obtain updated population, housing, economic (including agricultural, fisheries, forestry, and tourism), and land use information. 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. Efforts were made to obtain data that was as up-to-date and accurate as possible.

The data analysis showed that in most cases, the changes since 1981 have not been dramatic, and in some cases, minimal or non-existing. The major conclusions of the updated 1986 Land Use Plan are:

1. Hyde County's population grew moderately between 1981 and 1985, reversing a five-decade-old trend of population losses noted in the 1981 Update. However, the rate of growth was somewhat slower than forecast in the 1981 Plan Update. Moderate population growth is projected to continue through 1995.

2. The economic importance of agriculture will remain dominant in the County throughout the next 10 years, but tourism, as an economic activity, will increase in significance (particularly on Ocracoke). The mining of peat resources, although virtually untapped, still has the potential to become significant within the next 10 years.

3. The overall land development pattern, being one with a predominantly rural, scattered residential character, will likely continue. The rapid clearing of forestland for conversion into agricultural use appears to have stabilized, but is still an issue requiring policy attention.

4. The major community facility needs in Hyde County will be additional potable water supplies, and some alternative to on-site waste water disposal facilities in the developed and developing communities.

5. In order to provide for economic expansion for the benefit of the overall populace, industrial development activities need to continue.

6. Growth pressures in Ocracoke, especially since the 1981 Plan Update, has made the issue of developing some form of local land use controls a critical one.

B. PRESENT CONDITIONS

1. Population

The historical nature of Hyde County's population has been and remains today that of a scattered, rural populace dominated by agriculture. With one of the smallest county populations in all of North Carolina, Hyde experienced population losses in six of the first seven decades of this century, i.e., from 1900 through 1970. A small gain was noted between 1920 and 1930. However, the 1980 U.S. Census population figures, as reported in the 1981 Plan Update, also showed for the second time in this century a small decennial gain. The 1980 population census indicated that the trend of population loss for the County was being supplanted by a growth trend. Notice Table 1, below.

TABLE 1
* HYDE COUNTY POPULATION 1900-1995

YEAR	POPULATION	NUMERICAL CHANGE	PERCENTAGE CHANGE
1900	9,278	--	--
1910	8,840	-438	-4.72
1920	8,386	-454	-5.13
1930	8,550	+164	-1.96
1940	7,860	-690	-8.07
1950	6,579	-1,281	-16.30
1960	5,765	-814	-12.37
1970	5,571	-194	-3.37
1980	5,873	+302	+5.42
1985	6,013	+140	+2.38
1990	6,141	+128	+2.12
1995	6,306	+165	+2.69

Sources: U.S. Census of Population, 1980 Advance Reports
N.C. Office of State Budget and Management (May 9, 1985)

* All of the figures were provided by the N.C. Office of State Budget and Management, except for 1980. The 1980 figure is the actual final count provided by the U.S. Census.

Since the 1980 Census, State figures indicate that Hyde County has experienced a modest population gain of 140 persons, an increase of 2.4%. This rate of increase is somewhat less than the projected rate of increase contained in the 1981 Update.

The 1981 Plan Update showed a population projection for 1990 of 6,386, with an increase of 8.73% over the 1980 figure. Since the preparation of the 1981 Update, however, the N.C. Office of State Budget and Management has developed revised population projections for Hyde County. The 1990 population figure is currently

forecast to be 6,141, thereby still showing an increasing population trend from 1980-1990, but at a very moderate rate. Also, an increase of 2.69 percent, or 165 persons, is projected to occur between 1990 and 1995, again reflective of a slow to moderate overall growth rate between 1985 to 1995. A net gain of only 293 persons is forecast for the 10-year period.

The out-migration of non-whites is a trend noted in the 1981 Plan Update and continues to occur (see Table 2, below). For the period 1980-1995, the non-white population is steadily declining, while the white population is increasing, thereby slightly altering the County's racial composition.

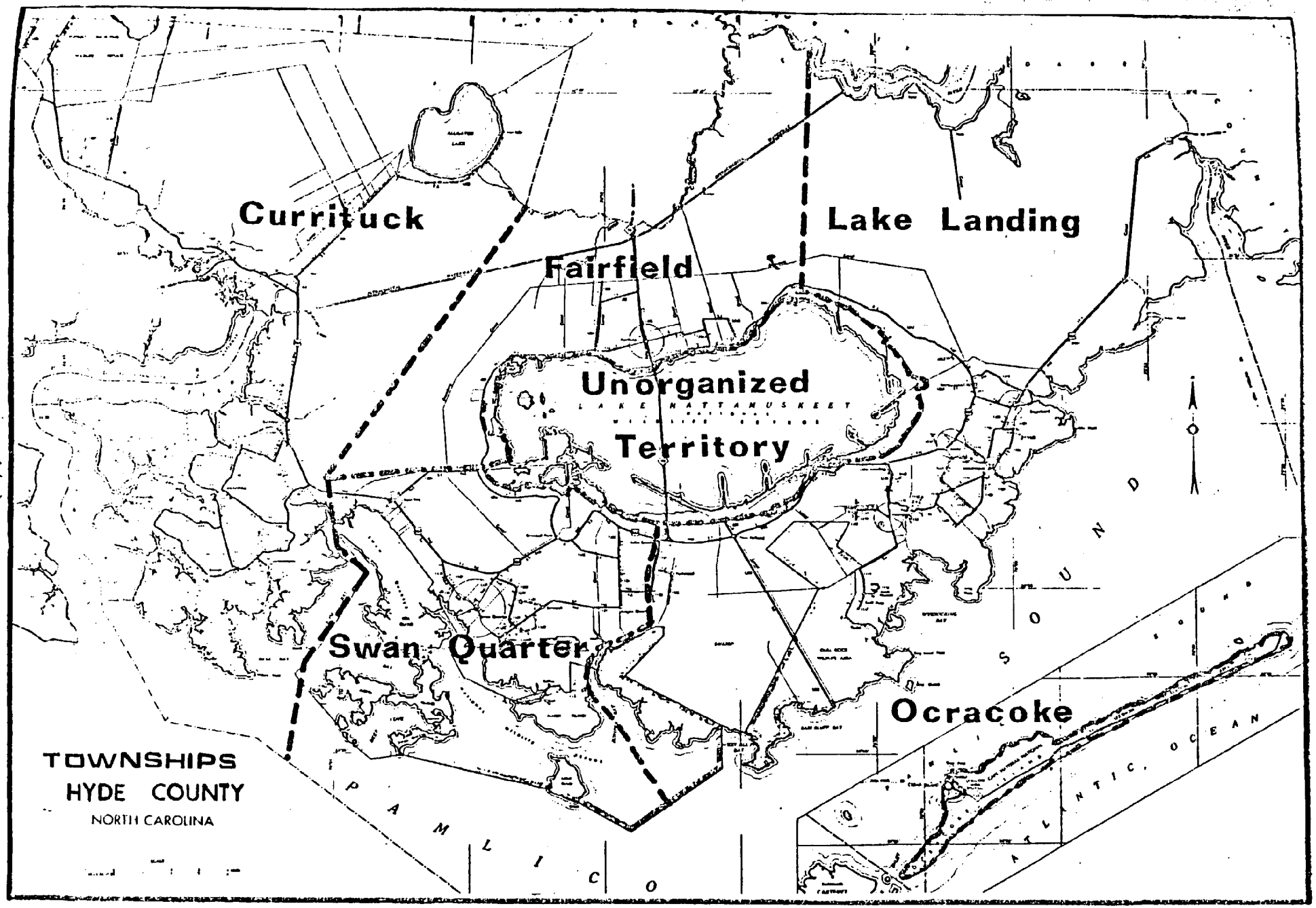
TABLE 2
HYDE COUNTY RACIAL COMPOSITION: 1980, 1985, 1990, and 1995

	WHITE		NON-WHITE		
YEAR	NO.	PERCENT	NO.	PERCENT	TOTALS
1980	3,777	64.3	2,096	35.7	5,873
1985	4,049	67.3	1,964	32.7	6,013
1990	4,282	69.7	1,859	30.3	6,141
1995	4,585	72.7	1,721	27.3	6,306

Source: U.S. Census; N.C. State Office Budget and Management

As was noted in the 1981 Plan Update, a shift in the age groups of Hyde County's population is continuing (see Tables 4, 5, and 6, pages 5a - 5c). School-age groups appear to be stabilizing, with a steady but slight decline through 1995. The dependent population (under 19 years and over 60) is expected to decrease from roughly 51% in 1985 to 48% by 1995. The 1985, 1990, and 1995 projections also indicate that the middle group (ages 20-44) will continue to increase during the late 1980's and 1990's. Since this group presents perhaps the most productive portion of the population, its growth is likely to have substantial impact upon future land use decisions. The formation of new households will increase the demand for housing, the employment base will need to expand in order to provide more job opportunities, and some community services may have to expand.

There are five townships in Hyde County, as Map 2, Page 4a, shows. Although there are no inter-censal data on townships for 1985, the trend is likely the same as identified in the 1981 Update (see Table 3, page 5). The Ocracoke Island Township grew at a faster rate than the other four townships from 1970-1980, with Currituck and Swan Quarter Townships next in line in population increases, growing at roughly the same rate. Lake Landing Township, which contains the communities of Engelhard, Gull Rock, and Nebraska, is the most populous township, but experienced a decrease in population for the 10-year period, as did Lake Mattamuskeet. Deviation from these trends may be indicated in


Currituck
Lake Landing
Fairfield
Unorganized
Territory
Swan Quarter
Ocracoke
TOWNSHIPS
HYDE COUNTY
NORTH CAROLINA
PAMLICO
SOUND
ATLANTIC OCEAN

4(a)

MAP 2

future census data; however, for the present time, the previously identified population patterns are assumed to be continuing.

TABLE 3
HYDE COUNTY POPULATION DISTRIBUTION BY TOWNSHIPS: 1970-1980

TOWNSHIP	1970	1980	NUMERICAL CHANGE	PERCENTAGE CHANGE
Currituck	1,133	1,302	169	14.9
Fairfield	541	582	41	7.6
Lake Landing	2,377	2,217	-160	- 6.7
Ocracoke	541	658	117	21.6
Swan Quarter	958	1,098	140	14.6
Lake Mattamuskeet	21	16	- 5	-23.8
TOTAL	5,571	5,873	302	5.4

Source: 1980 U.S. Census of Population and Housing; Advance Report; 1981 Land Use Plan Update

TABLE 4

HYDE

ESTIMATED POPULATION, JULY 1, 1985, BY AGE, RACE, AND SEX

AGE	TOTAL	WHITE			OTHER		
		TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
TOTAL	6013	4049	2023	2026	1964	915	1049
0-4	447	313	163	150	134	67	67
5-9	460	308	163	145	152	77	75
10-14	451	260	144	116	191	90	101
15-19	466	280	149	131	186	89	97
20-24	483	297	163	134	186	96	90
25-29	522	349	189	160	173	82	91
30-34	479	343	176	167	136	66	70
35-39	351	256	137	119	95	42	53
40-44	294	207	104	103	87	45	42
45-49	282	198	97	101	84	33	51
50-54	274	187	85	102	87	37	50
55-59	272	189	98	91	83	32	51
60-64	299	209	95	114	90	42	48
65-69	269	196	93	103	73	34	39
70-74	275	196	81	115	79	35	44
75-79	181	120	50	70	61	22	39
80-84	120	84	25	59	36	13	23
85&UP	88	57	11	46	31	13	18
		PERCENT OF COLUMN TOTAL					
0-4	7.43	7.73	8.06	7.40	6.82	7.32	6.39
5-9	7.65	7.61	8.06	7.16	7.74	8.42	7.15
10-14	7.50	6.42	7.12	5.73	9.73	9.84	9.63
15-19	7.75	6.92	7.37	6.47	9.47	9.73	9.25
20-24	8.03	7.34	8.06	6.61	9.47	10.49	8.58
25-29	8.68	8.62	9.34	7.90	8.81	8.96	8.67
30-34	7.97	8.47	8.70	8.24	6.92	7.21	6.67
35-39	5.84	6.32	6.77	5.87	4.84	4.59	5.05
40-44	4.89	5.11	5.14	5.08	4.43	4.92	4.00
45-49	4.69	4.89	4.79	4.99	4.28	3.61	4.86
50-54	4.56	4.62	4.20	5.03	4.43	4.04	4.77
55-59	4.52	4.67	4.84	4.49	4.23	3.50	4.86
60-64	4.97	5.16	4.70	5.63	4.58	4.59	4.58
65-69	4.47	4.84	4.60	5.08	3.72	3.72	3.72
70-74	4.57	4.84	4.00	5.68	4.02	3.83	4.19
75-79	3.01	2.96	2.47	3.46	3.11	2.40	3.72
80-84	2.00	2.07	1.24	2.91	1.83	1.42	2.19
85&UP	1.46	1.41	0.54	2.27	1.58	1.42	1.72

SOURCE - NORTH CAROLINA OFFICE OF STATE BUDGET & MANAGEMENT

BASED ON 70-80 CENSUS DATA
PREPARED MAY 9, 1985

TABLE 5

HYDE

PROJECTED POPULATION, APRIL 1, 1990, BY AGE, RACE, AND SEX

AGE	TOTAL	WHITE			OTHER		
		TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
TOTAL	6141	4282	2153	2129	1859	856	1003
0-4	457	333	173	160	124	62	62
5-9	407	260	140	120	147	71	76
10-14	475	326	175	151	149	76	73
15-19	455	270	155	115	185	84	101
20-24	434	295	152	143	139	58	81
25-29	436	313	174	139	123	68	55
30-34	542	384	209	175	158	78	80
35-39	479	355	180	175	124	58	66
40-44	347	265	144	121	82	38	44
45-49	294	206	101	105	88	45	43
50-54	288	204	97	107	84	29	55
55-59	282	197	91	106	85	37	48
60-64	279	200	105	95	79	31	48
65-69	300	206	86	120	94	45	49
70-74	224	161	73	88	63	27	36
75-79	223	167	64	103	56	22	34
80-84	127	81	26	55	46	15	31
85&UP	92	59	8	51	33	12	21
		PERCENT OF COLUMN TOTAL					
0-4	7.44	7.78	8.04	7.52	6.67	7.24	6.18
5-9	6.63	6.07	6.50	5.64	7.91	8.29	7.58
10-14	7.73	7.61	8.13	7.09	8.02	8.88	7.28
15-19	7.41	6.31	7.20	5.40	9.95	9.81	10.07
20-24	7.07	6.89	7.06	6.72	7.48	6.78	8.08
25-29	7.10	7.31	8.08	6.53	6.62	7.94	5.48
30-34	8.83	8.97	9.71	8.22	8.50	9.11	7.98
35-39	7.80	8.29	8.36	8.22	6.67	6.78	6.58
40-44	5.65	6.19	6.69	5.68	4.41	4.44	4.39
45-49	4.79	4.81	4.69	4.93	4.73	5.26	4.29
50-54	4.69	4.76	4.51	5.03	4.52	3.39	5.48
55-59	4.59	4.60	4.23	4.98	4.57	4.32	4.79
60-64	4.54	4.67	4.88	4.46	4.25	3.62	4.79
65-69	4.89	4.81	3.99	5.64	5.06	5.26	4.89
70-74	3.65	3.76	3.39	4.13	3.39	3.15	3.59
75-79	3.63	3.90	2.97	4.84	3.01	2.57	3.39
80-84	2.07	1.89	1.21	2.58	2.47	1.75	3.09
85&UP	1.50	1.38	0.37	2.40	1.78	1.40	2.09

SOURCE - NORTH CAROLINA OFFICE OF STATE BUDGET & MANAGEMENT

PREPARED MAY 9, 1985

TABLE 6
HYDE

PROJECTED POPULATION, JULY 1, 1995, BY AGE, RACE, AND SEX

AGE	TOTAL	WHITE			OTHER		
		TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
TOTAL	6306	4585	2312	2273	1721	783	938
0-4	440	335	174	161	105	52	53
5-9	465	344	182	162	121	61	60
10-14	413	278	154	124	135	64	71
15-19	452	336	177	159	116	55	61
20-24	422	289	166	123	133	62	71
25-29	451	328	171	157	123	53	70
30-34	443	332	183	149	111	59	52
35-39	533	396	216	180	137	69	68
40-44	483	361	182	179	122	56	66
45-49	358	275	144	131	83	35	48
50-54	303	219	109	110	84	41	43
55-59	294	216	104	112	78	28	50
60-64	284	198	85	113	86	37	49
65-69	245	173	86	87	72	27	45
70-74	251	179	72	107	72	31	41
75-79	181	129	52	77	52	21	31
80-84	156	108	39	69	48	17	31
85&UP	132	89	16	73	43	15	28
		PERCENT OF COLUMN TOTAL					
0-4	6.98	7.31	7.53	7.08	6.10	6.64	5.65
5-9	7.37	7.50	7.87	7.13	7.03	7.79	6.40
10-14	6.55	6.06	6.66	5.46	7.84	8.17	7.57
15-19	7.17	7.33	7.66	7.00	6.74	7.02	6.50
20-24	6.69	6.30	7.18	5.41	7.73	7.92	7.57
25-29	7.15	7.15	7.40	6.91	7.15	6.77	7.46
30-34	7.03	7.24	7.92	6.56	6.45	7.54	5.54
35-39	8.45	8.64	9.34	7.92	7.96	8.81	7.25
40-44	7.66	7.87	7.87	7.88	7.09	7.15	7.04
45-49	5.68	6.00	6.23	5.76	4.82	4.47	5.12
50-54	4.80	4.78	4.71	4.84	4.88	5.24	4.58
55-59	4.66	4.71	4.50	4.93	4.53	3.58	5.33
60-64	4.50	4.32	3.68	4.97	5.00	4.73	5.22
65-69	3.89	3.77	3.72	3.83	4.18	3.45	4.80
70-74	3.98	3.90	3.11	4.71	4.18	3.96	4.37
75-79	2.87	2.81	2.25	3.39	3.02	2.68	3.30
80-84	2.47	2.36	1.69	3.04	2.79	2.17	3.30
85&UP	2.09	1.94	0.69	3.21	2.50	1.92	2.99

SOURCE - NORTH CAROLINA OFFICE OF STATE BUDGET & MANAGEMENT

BASED ON 70-80 CENSUS DATA
PREPARED MAY 9, 1985

2. Economy

a. Agriculture

As noted in both the 1976 and 1981 Plans, during the 1970's, the economic picture of Hyde County improved significantly. Total retail sales for the County in Fiscal Year 1970-71 were $5,801,429. The total retail sales figure for Fiscal Year 1983-84 was $21,340,851--which is nearly quadruple the total over ten years ago. Though price inflation is a factor in this increase, there are other indicators of increased spending in the County, notably the increase in tourism on Ocracoke Island, for example. However, agricultural production has been and remains the major element in the County's economic base and, although there was a decrease in production income from 1983 to 1984, is growing. Table 7 below shows crop production income by crop harvested for 1981-1984.

TABLE 7
HYDE COUNTY CROP PRODUCTION INCOME: 1981-1984

Crop	DOLLAR VALUE 1984	1983	1982	1981
Field Crops				
Corn for Grain	$8,460,000	$10,045,000	$6,138,000	$6,227,500
Wheat	1,474,000	1,260,000	1,215,000	910,000
Grain Sorghum	52,060	--	50,600	54,480
Soybeans	7,318,500	10,931,250	7,131,750	6,532,680
Vegetables				
Carrots-processing	19,500	32,500	75,000	33,600
Corn, sweet (5 doz)	--	--	192,500	230,850
Cucumbers, fresh market	74,175	793,350	487,500	421,875
Nursery & Greenhouse				
Tomatoes	17,500	--	--	--
Fruits & Nuts				
Pecans	--	--	18,000	97,500
Subtotal	$17,415,735	$23,062,100	$15,308,350	$14,508,485
Government Payments	256,264	575,729	282,169	207,377
TOTAL CROP PRODUCTION INCOME	$17,671,999	$23,637,829	$15,590,519	$14,715,862

Source: Data Worksheets of Cash Farm Income - 1984, 1983, 1982, and 1981, Hyde County Agriculture Extension Office

As noted in the 1981 Update, production yields and price increases have accounted for some of the continued overall increase from 1981 to 1983. The conversion of forestland into productive croplands still is a significant factor in the County. The 1974 U.S. Department of Commerce Census of Agriculture showed that there was a total of 54,750 acres of farmland in crops. The 1978 Census of Agriculture figures showed 65,300 acres as being in cropland, and the 1982 Census of Agriculture reported 78,546 acres in cropland for the County. This represents a rather dramatic increase of 23,796 acres of cropland between 1974-82. However, it appears that land clearing is leveling off in the County.

Income from livestock production increased substantially during the 1970's, and seems to be fluctuating in the 1980's, considering a decrease in production income from 1982 to 1983 and no real gain from 1979 to 1984. Notice the income comparison between 1979 and 1984, as is shown in Table 8, below.

TABLE 8
HYDE COUNTY LIVESTOCK AND LIVESTOCK PRODUCT INCOME

YEAR	DOLLAR VALUE
1979	$2,497,250
1982	$3,517,668
1983	$1,985,250
1984	$2,101,400

Source: Estimated Income from Sale of Farm Products and Government Payments, By County, Extension District, and State of North Carolina; N.C. Agricultural Extension Service and N.C. State University, Raleigh, N.C.; Hyde County Agriculture Extension Office; 1981 Land Use Plan

A significant feature in the growth of the agriculture sector of Hyde County's economy, as noted in the 1981 Update, was the development of so-called "superfarms." The term "superfarm" was defined as large, highly mechanized farming operations with a corporate or conglomerate ownership. These farms, mainly because of mechanical sophistication, have the capacity to rapidly alter the landscape by clearing and draining new farmland on a massive scale. These farms, perhaps more than any other entity, have been a major factor in the conversion of woodlands into productive agricultural land during the last 15 years. Economically, these so-called "superfarms" are also quite significant, providing a substantial percentage of the County's tax base.

b. Commercial Fishing

Commercial fishing is still an important sector of Hyde County's economy, although since the 1981 Plan Update, overall landings and income declined from $4.1 million in 1980 to $2.9 million in 1981. However, 1983 and 1984 witnessed relatively "good" years. Table 9 below shows seafood landings and values for the years 1981-1984.

TABLE 9
HYDE COUNTY: SEAFOOD LANDINGS COMPARISON, 1965-1984

YEAR	POUNDS	VALUE
1965	1,883,100	$ 269,428
1966	3,384,800	$ 305,940
1967	2,970,100	$ 279,962
1968	3,311,400	$ 574,805
1969	5,784,300	$ 1,214,393
1970	4,781,100	$ 654,648
1971	2,944,100	$ 913,614
1972	2,448,700	$ 531,414
1973	2,224,900	$ 615,937
1974	3,663,500	$ 924,528
1975	3,203,700	$ 769,914
1976	2,875,600	$ 938,959
1977	4,993,400	$ 1,604,012
1978	8,327,500	$ 1,885,652
1979	8,014,800	$ 2,040,321
1980	13,055,684	$ 4,181,970
1981	10,251,802	$ 2,956,529
1982	9,537,139	$ 3,457,336
1983	9,190,366	$ 3,632,096
1984	10,121,620	$ 3,286,808

Source: N.C. Division of Marine Fisheries

From 1981 to 1984, total fish landings decreased by about one percent. The total value of the catch in 1984, however, increased by about 10% over the 1981 dollar figure. This is reflective of the increased 1984 flounder harvest and moderate price increases. Also, Hyde County has been consistently ranked fourth in the state for coastal counties seafood landings during the period 1981-1984.

c. Commercial Forestry

Commercial forestry ranks third in importance among the resource extraction industries in Hyde County. Dollar values for 1982-1984 are indicated in Table 10, below.

TABLE 10
COMMERCIAL FORESTRY INCOME IN HYDE COUNTY

YEAR	INCOME
1982	$717,016
1983	$794,475
1984	$907,500

Source: Estimated Income from Sale of Farm Products and Government Payments, by County, Extension District, and State of North Carolina for 1982, 1983, and 1984; N.C. Agricultural Extension Service and N.C. State University, Raleigh, N.C.

From 1982 to 1984, there was a substantial increase of 27% in commercial forestry income in Hyde County. Many of the County's residents are employed in the forestry industry. Income from forest products, as indicated in Table 10, is valuable to the County's economy.

d. Tourism

The fourth major element in Hyde County's economy, and which was noted as increasing in importance in the 1981 Update, is tourism. The appeal of Ocracoke Island, sportfishing, waterfowl hunting, deer hunting, and the wildlife refuge areas, continue to provide strong attractions for thousands of visitors each year. Also, bird watching is growing in significance as a tourist attraction in Hyde County. The appeal of the natural resources of the County are still important generators of vital income for many businesses, providing jobs and increased sales receipts. Ocracoke Village is almost totally reliant upon tourism for its economic sustenance. (See Part II for a more complete discussion of Ocracoke.

The tourist season extends throughout the late spring and summer months, and through the autumn and early winter hunting seasons. Since the County receives revenue from the State on the basis of total retail sales, the continued vitality of tourism is important to the County, both on the mainland and in Ocracoke. Figures from the State Ferry Traffic Report for July 1, 1984, to June 30, 1985, indicated that 772,872 passengers used the ferries going to and from Ocracoke. However, compared to fiscal year 1978, this represents a significant decrease in traffic, i.e., a decline of 144,769 passengers, as reported in the 1981 Update (See Table 17, page 24). Despite this decrease in the number of transient visitors, the revenue generated from tourism in the County, and particularly on Ocracoke, remains a steadily growing factor in Hyde County's economy. This is demonstrated in the following discussion. The North Carolina Department of Commerce, Division of Travel and Tourism, estimated that in 1981, tourism accounted for $10,445,000 in expenditures in Hyde County, but $12,094,000 in

1984. This represents a formidable increase of almost 14% during the three-year period. In fiscal year 1983-84, the North Carolina Department of Revenue reported that total retail sales in Hyde County were $21,340,851, with tourism accounting for almost 57% of that total. The impact of tourism, obviously, is no small matter in Hyde County. In 1976, the Division of Travel and Tourism reported tourist expenditures in Hyde County to be $2,309,000; therefore, almost a decade hence, tourism has grown by 89%. Tourism continues to assert itself as a growing and vital sector of Hyde County's economy.

e. Employment and Income

Overall employment has decreased in the County since the preparation of the County's Land Use Plan Update in 1981. Figures in Table 11 below, which were obtained from the North Carolina Bureau of Employment Security Research, indicate that employment increased at about the same rate as the growth in the labor force from 1981 to 1982. However, from 1982 to 1983, both the labor force and overall employment declined, which caused the unemployment rate to increase.

TABLE 11
HYDE COUNTY ANNUAL EMPLOYMENT, 1980-1983

YEAR	LABOR FORCE	EMPLOYED	UNEMPLOYED	UNEMPLOYMENT RATE
1980	2,950	2,720	230	7.8
1981	2,870	2,630	240	8.4
1982	3,720	3,400	320	8.6
1983	2,660	2,310	350	13.2

Source: N.C. Bureau of Employment Security Research

Income in Hyde County, compared to both North Carolina and the United States, is low. According to data compiled by the U.S. Department of Commerce, Bureau of Economic Analysis (BEA), the personal per capita income for Hyde County in 1981 was only 53 percent of the national per capita income, and 64 percent of the state's. By 1983, per capita income had grown by 5 percent in the County, but still at a much slower pace relative to North Carolina and the United States. The 1983 per capita personal income in the County increased over the 1982 figures to only 59 percent and 50 percent of state and national figures, respectively. Notice Table 12, below. The major employment sectors in Hyde County, i.e., farming, fishing, forestry, and tourism, generally do not provide for high-paying jobs.

TABLE 12
HYDE COUNTY PER CAPITA PERSONAL INCOME, 1981-1983
NORTH CAROLINA AND UNITED STATES COMPARISONS

	1981	1982	1983
Hyde County	$ 5,546	$ 5,590	$ 5,810
North Carolina	8,655	9,148	9,805
United States	10,544	11,113	11,687

Source: N.C. Office of State Budget and Management

To summarize Hyde County's economic conditions, it can be stated that the resource extraction industries continue to retain their historical significance to the County's economy. Tourism, however, has emerged as an important economic sector for the County. The 1981 Update implied that peat mining would also grow in economic importance. However, to date, no substantial activity involving the mining of peat has taken place. Nevertheless, the potential is still there. Hyde County has an estimated 80,640 acres of peat deposits containing about 70 million tons of moisture-free peat. If peat is ever mined on a significant scale, the employment and income potential for the County could be substantial. Finally, since income in the County is generally low, coming from the existing major employment sectors discussed above, any major expansion in both jobs and income will likely have to come from increased manufacturing activities within the County. This is an issue which will be addressed in Section II of this part under "Economic and Community Development," beginning on page 56.

3. Housing

In that no actual housing figures for Hyde County were available for the 1981 Plan Update, it is difficult to describe changes that have occurred since that time. However, in the table below, housing information based on the 1980 Census is presented, with mobile home units comprising 12% of the total year-round units. This percentage seems high and may indicate that mobile home units may be on the increase due to rising housing costs and relatively low incomes. Of the total year-round units, 551, or 21 percent, are vacant.

TABLE 13
1980 HYDE COUNTY HOUSING SUMMARY

ITEM	NUMBER
Total Units	2,836
Vacant Seasonal and Migratory	256
Year-Round Units	2,580
Vacant Year-Round Units	551
Occupied Year-Round Units	2,029
Year-Round Mobile Home Units	321
Persons in Occupied Units	5,859 (5,481 in 1970)
Average Household Size	2.89

Source: 1980 U.S. Census

More detailed housing information based on the 1980 U.S. Census is summarized in the table below. Just over one-half (53.6%) of the total housing units are connected to a public water system, whereas only roughly 5 percent of the units are tied to a public sewer system. Therefore, about 95% of the units must rely on a septic tank, cesspool, or other means of waste disposal. Only 69% of the units are equipped with at least one complete bathroom. Almost one-third of the total units were built before 1939.

TABLE 14
SELECTED HOUSING CONDITIONS SUMMARY, HYDE COUNTY

ITEM	NUMBER
Units with Public Water	1,522
Units with Public Sewer	150
Units with Complete Kitchen Facilities	2,096
Units with No Heating System	52
Units with Air Conditioning	979
Units with 1 or More Complete Bathrooms	1,953
Structures Built Before 1939	812

The above information and land use surveys conducted in late 1985 indicate a significant number of substandard units scattered throughout the County, particularly in the Lake Landing and Fairfield Townships. The County received Community Development Block Grant funding from the N.C. Department of Natural Resources and Community Development in fiscal year 1982. These funds were used to rehabilitate eight dwellings and make drainage improvements in the St. Lydia Housing Rehabilitation Area (between Engelhard and Swan Quarter), for a total of 37 beneficiaries. No extensive rehabilitation has been conducted since that time.

According to the Hyde County Maintenance and Inspection Department's "Report of Building or Zoning Permits Issued and Local Public Construction" (for U.S. Department of Commerce, Bureau of the Census), there were 35 permits issued for single-family detached housing units in 1985 (compared to 26 permits in 1983--1981 figures were not available), and 56 permits issued for mobile homes (compared to 42 in 1983). Due to aged housing stock and a large concentration of substandard housing, mobile homes appear to be increasing as a viable housing alternative. Most new construction appears to be taking place in the Lake Landing Township, particularly around the community of Engelhard.

4. Impact of Seasonal Population

As noted under the discussion on current economic conditions (Page 10), the major impact of the thousands of visitors who come to the County each year is upon the economy. Most of the tourists on the mainland are "day visitors," who come to hunt, fish, or visit the wildlife refuge areas. On Ocracoke, many tourists are transients who spend more time in the Village than day visitors do on the mainland. Since the 1981 Update, several new motels have been developed on Ocracoke. Ocracoke, however, also attracts substantial numbers of day visitors during the tourist season. (More details on Ocracoke's seasonal population are included in Part II of this Plan, beginning on page II-1.)

It is difficult to assess or estimate the number of tourists frequenting the mainland at any one time. Tourism does not have as significant an impact upon the mainland as it does on Ocracoke, a factor also pointed out in both the 1976 and 1981 Plans. Because of the tremendous importance of agriculture in the County, migrant farm workers also constitute a seasonal population in Hyde County. However, as noted in the 1976 Plan and the 1981 Plan Update, their impact is minimal and the major concern is for adequate housing. Two group housing facilities for migrant workers are located in Hyde County, one in Swan Quarter, and one in Fairfield. Both of these facilities are privately owned. An additional facility located in Swan Quarter has been closed since 1981, as a reduction in the planting of sweet corn also reduced the need for migrant workers and, therefore, the need for an additional facility. The two remaining facilities are considered adequate by the County Health Department.

5. Existing Land Use Analysis

a. Current Conditions

The overall land development pattern on Hyde County's mainland is essentially the same as it was when it was mapped for the 1981 Land Use Plan, although additional once-forested acreage has been cleared. The residential patterns are still the same, with most of the dwelling units being located along the frontage of

primary and secondary roads (see Map 2, Existing Land Use Map). Hyde County is a predominantly rural county and, as pointed out in the discussion on its economy, is dominated by agriculture and resource extraction activities. The overall land use pattern is reflective of the County's economic base. This is noted on both the 1981 Land Use Map and the updated Land Use Map attached to this updated Plan. Again, most significant land use changes since 1981 concern the conversion of forestland into productive agricultural land and other uses. As reported in the 1981 Plan, this has occurred mostly in the Ponzer, Fairfield, and Engelhard areas.

It is rather difficult to obtain detailed data on the land use mix in Hyde County, especially during "off census" years. Therefore, a variety of sources were carefully reviewed (some with conflicting data items) and compared to the estimated land use acreage for 1980 contained in the 1981 Plan Update. The results are shown in Table 15, below.

TABLE 15
HYDE COUNTY LAND USE CHANGES: 1980-1985

LAND USE	1980	1985	CHANGES (ACRES)
Federal	76,403	76,403	N/C
State	18,856	12,850	N/C
Urban & Built Up	2,730	2,930	200
Small Water Area	133	133	N/C
Cropland	79,187	78,546	- 641
Pastureland	1,000	2,126	+ 1,126
Forestland	188,911	187,936	- 975
Other (ditch banks, roadways, etc.)	25,100	25,390	+ 290

Sources: Department of Commerce, 1982 Census of Agriculture, Preliminary Report, Hyde County; N.C. Agricultural Statistics, 1985; and N.C. Division of Forest Resources

There were no changes in the Federal, State, or small water areas. The projected change in urban and built-up land reflects mainly increasing activity in and around Engelhard, Fairfield, and Swan Quarter. It is also of interest to note that the amount of "croplands" decreased by a small amount, while pasturelands appears to have increased a little. Forested acreage, according to estimates contained in Table 15, declined at a significantly lower rate than reported in previous plans. Massive-scale land clearing appears to be leveling off in Hyde County.

Although the large corporate farms have the capacity and mechanical sophistication for rapid clearance of large tracts of land, as reported in the 1981 Plan Update, the previously identified massive land clearing trend appears to be leveling. This, according to local officials, is the result of strict enforcement

of permits required by CAMA and the U.S. Army Corps of Engineers, and the expense (approximately $500/acre) of clearing land. As was thoroughly documented in the 1976 Plan and discussed in the 1981 Update, surface water drainage is virtually essential for all crops in Hyde County because of the low, flat topography and high water table. Drainage of large tracts of land increases the surface run-off of freshwater into many of the estuaries which border much of the mainland, causing a potential decrease in the salinity level. The effect of this extensive drainage was discussed in some detail in the 1981 Plan Update.

b. Land Compatibility Problems

Within the conventional concept of land use planning, there are no significant land compatibility problems on Hyde County's mainland. As stated in the 1976 Land Use Plan, "normally...compatibility problems are identified as those where two or more land use types are adjacent to each other and one is restrained from expansion due to adverse conditions, thus new investment is discouraged." A specific example might be the intrusion of an industrial development into a residential area. However, in a broader sense of land use compatibility, adverse environmental effects can also be a major consideration. In Hyde County, these adverse environmental effects still involve two areas: (1) septic tank suitability, and (2) agricultural freshwater drainage. Although both of these problems were addressed on pages 15-16 of the 1981 Land Use Plan Update, updated information is provided for each:

1. Septic Tank Suitability: Hyde County does not have a central sewage system, and the feasibility of developing a County-wide system is still not promising. A 201 Waste Water Facilities Plan for Hyde County was completed in 1978. The plan indicated that due to the lack of significant population concentrations, the costs of such a system would be prohibitive and user charges would have to be excessive. This plan did not include Ocracoke. In many areas of the County, the high water table impedes the proper functioning of septic tanks. On the other hand, other areas have high organic soils containing peat, which in some cases have a consistency similar to sawdust. These soils conditions also are not supportive of proper septic tank functioning. The basis for the environmental incompatibility is that currently on the mainland, septic tanks provide the only means for waste water disposal.

2. Agricultural Freshwater Drainage: The North Carolina Division of Marine Fisheries began conducting a study in 1977 on the effect of freshwater drainage into primary estuarine nursery areas of the Pamlico Sound, including Hyde County. This study was still in progress during the development of the 1981 Land Use Plan, but has since been completed and published. The conclusion of the study supports the preliminary findings, which were reported in the 1981 Plan Update. It should be noted that

all of the study areas were located in Hyde County. According to Marine Fisheries officials at the Washington, North Carolina, Regional Office, increasing levels of freshwater intrusion into the estuarine nursery areas, i.e., the bays and creeks along Hyde County's border with the Pamlico Sound, has caused "drastic fluctuations" in the salinity content. In proper concentrations, salt content is essential for the growth and development of many species of shellfish and finfish in the estuaries, including spot, flounder, shrimp, oysters, and crabs. The Marine Fisheries study showed, by comparing some estuaries which received drainage to some which did not receive direct run-off, that productivity levels were significantly lowered in the drainage receptive areas. This was demonstrated through a process of taking frequent samplings from both nursery areas. The study sites were located in the Rose Bay, Swan Quarter Bay, and Germantown Bay areas. The Division of Marine Fisheries will be conducting an additional study in the spring of 1986 at Broad Creek, off Long Shoal River in Hyde County, whereby biological responses will be measured after artificially inducing freshwater drainage into the nursery areas, and comparing those results to "normal" nursery areas. Lower productivity in the nursery areas will eventually mean lower catches for fishermen. However, drainage, as documented in the 1976 Plan and the 1981 Update, is virtually essential for farming in Hyde County. Commercial and sports fishing is also important in the County. It should be noted that there may be factors other than agricultural drainage affecting the fish harvest, as 1983 was a relatively dry year with little agricultural runoff. 1983 was a good farming year (See Table 7, page 7), but had a relatively low fish harvest (See Table 9, page 9).

As agricultural freshwater drainage into nursery areas may or may not adversely affect fish harvest, it must be noted that the converse, or salt water intrusion into agricultural lands, is also a significant concern in Hyde County. According to Soil Conservation Services personnel, salt water intrusion through ditches and canals spreads over the land, ruining crops by sterilizing the soils, and damages the productivity of the land itself. The area affected by salt water intrusion covers about 3,000 acres. There are currently proposals for two diking systems to alleviate this problem (one in Swan Quarter/West Canal and one in the Engelhard area). Although the completion date is dependent upon many factors, it is hoped that the diking systems will be completed by 1988.

Another issue of land use compatibility in Hyde County, and in several other coastal counties, is the extent of military airspace controlled by the Department of Defense, and proposals to expand this "restricted" space. The almost continual presence over Hyde County of low-flying military planes on subsonic training missions has been the source of many complaints from County citizens. Both fishermen and farmers voice dissatisfaction with these flights.

c. Major Problems from Unplanned Development

As population projections indicate, Hyde County is not in a "rapid growth" situation, particularly on the mainland. The most

extensive use of land is for agriculture and forestry, neither of which connotes "development". Although Hyde County has not historically emphasized County-wide planning controls, no major problems from unplanned development have resulted on the mainland. Lack of a centralized sewage facility and continued reliance upon septic tanks, however, have caused many individual homeowners problems with improperly functioning on-site systems. Some on-site systems, though not all, can be modified in order to function. However, because of the high-organic content of the soils, even modifications such as mound systems, sometimes do not function properly.

d. Areas Experiencing or Likely to Experience Change in Predominant Land Use

The major land areas experiencing change on the mainland has been, historically, the conversion of forests and woodlands into agricultural land. This activity appears to be slowing down somewhat. A notable change which may occur, however, is the development of condominiums in the White Plains Marina area. This area was classified "rural" in the 1981 Update, but if it is developed, will need to be reclassified for higher density uses. Generally, the overall residential and development pattern will likely remain the same on the mainland, unless local land use controls, such as zoning or subdivision regulations, are imposed. Also, if a limited-area sewage system were to be developed, a change in the development pattern might also result.

e. Areas of Environmental Concern

The Areas of Environmental Concern (AEC's), which occur in Hyde County, were identified in both the 1976 Land Use Plan and 1981 Update. The statutorily-defined AEC's are described within two broad categories, i.e., Estuarine System AEC's and Ocean Hazards AEC's. All of the AEC's on Hyde County's mainland are included within the Estuarine System Category. The Ocean Hazards AEC's apply only to the ocean side of Ocracoke Island, which is under federal control as part of the Cape Hatteras National Seashore Recreation Area. There is no need for detailed discussion of the Ocean Hazards AEC's since they are not within the County's jurisdictional control. No new AEC's have been added or expanded in area or location since the 1981 Update. The Estuarine System AEC's will be defined and described below:

1. Coastal Wetlands

Coastal wetlands or marshlands 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.

Coastal marshlands contain some, but not necessarily all, of the following marsh plant species:

(a) Cord Grass (Spartina alterniflora)
(b) Black Needlerush (Juncus roemerianus)
(c) Glasswort (Salicornia spp.)
(d) Salt Grass (Distichlis spicata)
(e) Sea Lavender (Limonium spp.)
(f) Bulrush (Scirpus spp.)
(g) Saw Grass (Cladium jamaicense)
(h) Cat-tail (Typha spp.)
(i) Salt Meadow Grass (Spartina patens)
(j) Salt Reed Grass (Spartina cynosuroides)

Included in this definition of coastal marshlands is "such contiguous land as the Secretary of NR&CD reasonably deems necessary to affect by any such order in carrying out the purposes of this Section." (G.S. 113-230[a])

Hyde County residents prefer to use the term "marshlands," instead of wetlands. "Marshlands" is more descriptive of the area included as an Area of Environmental Concern. The marsh areas are an essential element of the estuarine system. Without the marsh, the high productivity levels and complex food chains typically found in the estuaries could not be maintained. The 1976 Land Use Plan noted that there were both regularly flooded and irregularly flooded marsh areas in Hyde County (pp. 83-87). The regularly flooded salt marsh is located on the Sound side of Ocracoke Island within an area under the control of the National Park Service as part of the Cape Hatteras National Seashore. On the mainland, there are approximately 36,500 acres of irregularly flooded salt marsh, and about 3,400 acres of freshwater marsh. The irregularly flooded salt marsh of the County provides not only nutrients for shell and finfish, but also provides habitats for raccoon, muskrat, otter, and black duck. In addition, these same areas serve as a deterrent to shoreline erosion, especially in marshes containing heavily rooted species of Juncus roemerianus, known as Black Needlerush.

The location of the irregularly flooded salt marsh is extensive and found continuously from the mouth of the Long Shoal River to a point near Able Bay in Currituck Township. Refer to Map 7, page 84, 1976 CAMA Plan, for a graphic illustration (see Appendix 1). The location of the freshwater marsh is principally along the western boundary of the County, on the banks of the Pungo River. Freshwater marsh may also be located at the intersection of N.C. 94 and the intracoastal waterway (see Map 3, attached).

2. Estuarine Waters

Estuarine waters are defined in G.S. 113A-113(b)(2) as "all the water of the Atlantic Ocean within the boundary of North

Carolina and all the waters of the bays, sounds, rivers, and tributaries thereto 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 Natural Resources and Community Development filed with the Secretary of State, entitled "Boundary Lines, North Carolina Commercial Fishing -- Inland Fishing Waters," Revised to March 1, 1965.

Hyde County contains vast areas of estuarine waters, as was documented on pages 88-90 of the 1976 Plan. Estuarine waters include the waters of the Pamlico Sound, Pungo River, and Alligator River, which are adjacent to the land area of the County. The most complex area of estuarine waters on the mainland is the southwest quadrant of the County, due to the numerous small tributaries which flow into either the Pungo River or the Pamlico Sound, and includes Swan Quarter Bay and Rose Bay.

The significance of the estuarine system is that it is one of the most productive natural environments of North Carolina. It not only supports valuable commercial and sports fisheries, but is also utilized for commercial navigation, recreation, and aesthetic purposes. Species dependent upon estuaries include menhaden shrimp, flounder, oysters, and crabs. These species make up over 90 percent of the total value of North Carolina's commercial catch. These species must spend all or some part of their life cycle in the estuary. The preservation and protection of these areas are vitally important, as was noted in the discussion of "Land Compatibility Problems," on page 16 of this section. Prime fishing and spawning areas for shellfish and finfish were identified in the County on Map 4, page 56, of the 1976 Plan. The extent of the estuarine system in Hyde County is vast, extending from the mouth of the Long Shoal River at the Dare County line in the northeast and extending around the land mass to the waters of the Pungo River in the northwestern portion of the County. In addition to that area, the waters of the Alligator River from Cherry Point Landing to the Albemarle Sound are part of the estuarine system. The Pamlico Sound, for example, is approximately 48,000 acres, measured from Wysocking Bay to Rose Bay and extending an average width of two miles.

3. Public Trust Areas

Public trust areas are all waters of the Atlantic Ocean and the lands thereunder from the mean high water mark to the seaward limit of state jurisdiction; all natural bodies of water subject to measurable lunar tides and lands thereunder to the mean high water mark; all navigable natural bodies of water and lands thereunder to the mean high water level or mean water level as the case may be, except privately-owned artificially created bodies of water containing significant public fishing resources or other public resources which are accessible to the public by navigation from bodies of water in which the public has rights of navigation;

and all waters in artificially created bodies of water in which the public has acquired rights by prescription, custom, usage, dedication, or any other means. In determining whether the public has acquired rights in artificially created bodies of water, the following factors shall be considered:

(a) the use of the body of water by the public;
(b) the length of time the public has used the area;
(c) the value of public resources in the body of water;
(d) whether the public resources in the body of water are mobile to the extent that they can move into natural bodies of water;
(e) whether the creation of the artificial body of water required permission from the State; and
(f) the value of the body of water to the public for navigation from one public area to another public area. The public has rights in these areas, including navigation and recreation. In addition, these areas support valuable commercial and sports fisheries, have aesthetic value, and are important resources for economic development.

All of the waters described as Estuarine Waters (pages 19-20) in this section, are public trust areas on Hyde County's mainland.

4. Estuarine Shorelines:

Estuarine shorelines are those non-ocean shorelines which are especially vulnerable to erosion, flooding, or other adverse effects of wind and water and are intimately connected to the estuary. This area extends from the mean high water level or normal water level along the estuaries, sounds, bays, and brackish waters, for a distance of 75 feet landward.

As an AEC, Estuarine Shorelines, although characterized as dry land, are considered a component of the estuarine system because of the close association with the adjacent estuarine waters.

The majority of Hyde County's boundary, from the northeastern tip, southward, and around and up to the northwestern portion of the County, is the Pamlico Sound. The land area along the Sound and the shores of the many creeks and bays connecting to it, all make up the estuarine shorelines in Hyde County. This area is subject to erosion and occasional flooding, which could not only affect the quality of the adjacent estuarine life, but also threaten the security of personal property from developments located within this area.

Currently, all development and development-related activities within the designated AECs in Hyde County are regulated by the CAMA permit process.

6. Current Plans, Policies, and Regulations

No additional plans or regulations have been developed or adopted by Hyde County since the preparation of the 1981 Land Use Plan Update. Listed below are some local plans and regulations:

Flood Prevention Ordinances

The County is currently in the emergency phase of the National Flood Insurance Program.

Building Codes

The County, as a prerequisite to become qualified for the emergency phase of the National Flood Insurance Program, has adopted the State of North Carolina Building Code.

Septic Tank Regulations

The County has adopted and, through the Sanitarian, enforces the State of North Carolina Septic Tank Regulations.

Hyde County Land Use Plan, 1976.

The Plan provides a description of present conditions of population, economy and land use constraints to development. It discusses fragile and hazard areas, areas of environmental concern, areas with resource potential, and community facilities. It estimates future needs and sets out policies and objectives related to implementing those needs.

Hyde County Land Use Plan Update, 1981.

This was the first 5-year update of the initial CAMA Plan (1976) and contains a re-assessment of existing conditions and projections of population, land use, and economic conditions. Updated policy statements on various development issues and implementation strategies are also in the Plan Update.

Several other policies and plans have been updated since the 1981 Plan Update and are discussed below.

a. Community Facilities

1. Water Distribution

Water is the major utility provided by Hyde County. As noted in the 1981 Land Use Plan Update, the County water system was

based on the combining of three former independently developed water associations' systems at Swan Quarter, Engelhard, and Mattamuskeet. In 1977, however, the County developed a well field, treatment facility, and 100,000 gallon elevated water tower at Fairfield. The Fairfield facility was connected to both the Engelhard and Swan Quarter systems to provide water for most of the County. The major population area not served by the existing water system is along U.S. 264, northwest of the Intracoastal Waterway Bridge.

The wells at Fairfield still provide the major source of raw water for the County's system, with the capacity to produce over 500,000 gallons per day (gpd) of moderately hard water, containing some manganese and iron. Otherwise, the water is of an excellent quality, as noted in a recent overview study of the system by the County's consulting engineers. However, due to limitations on pumping and treatment facilities, only 250,000 gpd is currently being pumped. The County is currently seeking funds to upgrade the pumping capacity to 450,000 gpd. This rehabilitation of the Fairfield facility, which is scheduled for completion in 1987, would reduce the current pumping time of 24 hours to approximately 16 hours for a more efficient system. Because of the threat of saltwater intrusion, the Engelhard facility has been closed for several years. A consulting engineers' report noted that due to the prohibitive costs of desalinization, further development of the Engelhard water source was discouraged. One other facility, at Swan Quarter, has a 75,000 gpd capacity. The report recommended that the Fairfield system be relied upon as the major resource of raw water in the County. After the Fairfield facility has been upgraded, additional tap-ons will be granted on a first-come, first-serve basis.

2. Sewer

As reported in the 1981 Update, a 201 Waste Water Facility Plan was completed for Hyde County in 1978. However, the implementation of the plan, i.e., the development of a County-wide system, would have been cost-ineffective. The population density was then, and still is, insufficient to support "reasonable" user fees. Until this becomes a reality, on-site septic systems are the primary waste water disposal alternative in Hyde County.

b. Transportation

1. Ferry Service

There are three ferries which offer residents and tourists in Hyde County easy access to and from Ocracoke and the mainland, and Cedar Island and Hatteras: Ocracoke-Swan Quarter ferry, a toll, year-round operation; Cedar Island-Ocracoke ferry, also a toll, year-round service; and Hatteras Inlet ferry, which offers service free-of-charge and is year-round. Table 16 below shows the current ferry schedule.

TABLE 16: FERRY SCHEDULE

Ocracoke-Swan Quarter (2 1/2 hours)

Twice daily - morning and afternoon - year-round

Cedar Island - Ocracoke (2 1/4 hours)

April 15 - May 31	- 4 times daily
June 1 - September 15	- 5 times daily
September 16 - October 31	- 4 times daily
November 1 - April 14	- 2 times daily

Hatteras Inlet (40 minutes)

April 15 - October 31	- 22 times daily
November 1 - April 14	- "every hour on the hour" from 5:00 a.m. - 5:00 p.m., and at 7:00 p.m., 9:00 p.m., and 11:00 p.m. (leave Hatteras) - "every hour on the hour" from 6:00 a.m. - 6:00 p.m., and at 8:00 p.m. and 10:00 p.m. (leave Ocracoke)

As stated earlier, there was a decrease in ferry traffic from the fiscal year '78-'79 figure reported in the 1981 plan update and the '84-'85 figure. Notice Table 17, below:

TABLE 17: HYDE COUNTY FERRY OPERATIONS
FISCAL YEARS 1978-1979 and 1981-1985

	1978-79	1981-82	1982-83	1983-84	1984-85
Vehicles	270,313	267,881	270,359	281,348	293,459
Passengers	917,641	729,643	728,054	748,410	772,872

*Includes totals for Hatteras Inlet, Cedar Island, Ocracoke, and Swan Quarter-Ocracoke ferries.

Source: 1981 Plan Update and NCDOT Ferry Division

Although the Ocracoke-Swan Quarter ferry has two daily runs year-round, the Cedar Island and Hatteras ferries have adjusted schedules to handle more passengers during tourist and fishing seasons, and fewer passengers during off-peak seasons. As discussed in this section, Part 2d, Tourism, page 10, the number of passengers (despite an increase in the number of vehicles) has been greatly reduced in the past six to seven years, which may cause concern as to the reduction in ferry operations.

2. Roads and Bridges

The North Carolina Department of Transportation's Secondary Road Improvement Program has provided for improvements for many roads in the County. However, most of these improvements have been relatively minor ones, such as spot stabilization with stone, and minor widening and paving.

One of the more significant transportation features in the County since 1981 is the construction of the Walter B. Jones Bridge (over Wilkerson Creek) over the Intracoastal Waterway in the northwest section of the County. The bridge was constructed by the U.S. Army Corps of Engineers and was completed by late 1981. This high-rise span replaced an old, narrow bridge across the waterway and greatly facilitates flows in the County.

Currently, surveying is being conducted prior to the widening (to 22 feet) and resurfacing of U.S. 264E from SR 1129 north of Swan Quarter to the bridge north of Engelhard. Actual construction of these improvements should be completed in fiscal year 1987. Also, there is a bridge replacement proposed for fiscal year 1989 at the canal north of Engelhard. There are also some long-range plans by the federal government for the replacement of a tendon bridge over the Intracoastal Waterway across N. C. 94 north of Fairfield.

3. Airports

In late 1980, the first paved air landing strip on the mainland was completed near Engelhard. A small terminal building was constructed near this site in 1983. Although there are no hangars available, there are approximately 15-20 tie-downs available for small aircraft. Currently, planning discussions are being made to install a non-directional beacon to aid airport traffic. Additional improvements will be made as the need and funding become available. According to corporate representatives, private air traffic has increased substantially in the past four years. The airport is used by hunters; corporate farms; banks; law enforcement officials; foresters; local, state, and federal government; emergency personnel; crop dusters; and for helicopters. Private air traffic will likely continue to increase throughout the 10-year planning period. There is also an airport at Ocracoke, which is discussed in Part II: Ocracoke.

c. Other Policies

The County has not developed any additional policies other than those listed in the 1981 Land Use Plan, for utilities extension, open space, or recreation. The 1976 Land Use

Plan and the 1981 Update are the only prior land development documents in the County.

d. Regulations and Enforcement Provisions

The major land use control regulations on the Hyde County mainland are the CAMA major and minor development permits. The County Building Inspector is also the CAMA minor permit officer.

Septic tank regulations and mobile home placement design standards are enforced by the County Health Department through the local Sanitarian. The County did adopt, in 1979, a Building Permit Ordinance, and established a permit program, enforced by a building permit officer.

Hyde County also has a County-wide Agricultural Canal Permit Program which allows local farmers to apply for canal maintenance permits locally, rather than directly to the U.S. Corps of Engineers. This program is designed to speed up the application approval time from both Federal and State agencies for maintenance of existing drainage canals. The drainage canal maintenance program allegedly has not worked as efficiently as planned. Many farmers claim that permit and regulatory officials do not always follow the policies in the land use plan, but utilize other technicalities to deny needed permits.

There are no other local regulatory controls concerning land use on the County mainland. Ocracoke Village, however, does have additional development controls in the form of the "Development Ordinance for the Village of Ocracoke," adopted in April, 1986. The provisions of this ordinance will be discussed more in Part II of this plan.

C. CONSTRAINTS: LAND SUITABILITY

1. Physical Limitations

Physical limitations to development, which include man-made and natural hazards, soils suitability, and water supply sources, are basically the same in Hyde County as was noted in the 1976 CAMA Plan. Two notable additions to the consideration of man-made hazards are the new, paved airstrip near Engelhard and airspace restrictions imposed by military training operations over the County. The natural hazards, as noted in the 1976 Plan, are mostly on Ocracoke Island (see Part II). The soils map and conditions ratings, along with the discussion of soils limitations in the 1976 Plan, are essentially the same in Hyde County today, since no updated soils survey has been completed. These soils limit both septic tank installation and structural foundations in some areas.

a. Natural Hazard Area

1. Flood Hazard Area

When the 1981 Land Use Plan Update was developed, a detailed Flood Insurance Study showing elevations and flood hazard areas had not been prepared for Hyde County. However, the Federal Emergency Management Agency (FEMA) initiated a detailed study in 1982, with the preliminary results being published in April, 1985. The study, which consists of a report and a series of maps of all of the County, shows the areas which are subject to inundation by the 100-year flood (Zone "A"s) along with elevations, as distinguished from areas subject to minimal flooding dangers (Zone "C"). Not surprisingly, the detailed study shows that nearly all of Hyde County is subject to the 100-year flood; however, there is a significant amount of area included in the "Zone C" classification, i.e., in the 500-year flood area and subject to minimal flooding. This area is located in the northwestern portion of the County, north of the Intracoastal Waterway between Alligator Lake and the Pungo Wildlife Refuge Area. Another small pocket of relatively "high ground" is found in the northeast, south of the Waterway (see Map 4, attached). The rest of the County is located within the 100-year, or "high hazard" flood area. The existing land uses within the high hazard flood area consist mostly of residential, agricultural, and forestry uses.

2. Estuarine Erosion Area

As discussed under identification of Areas of Environmental Concern (AECs), Hyde County has a substantial area of estuarine waters and estuarine shorelines. Erosion of the estuarine shoreline can pose possible hazards for certain waterfront developments, particularly residential. Estuarine erosion areas were determined by the Soil Conservation Service for 15 points or

"reaches" along the Pamlico Sound and Pungo River. Average annual erosion rates were identified in the 1976 plan by "reach" areas and are shown on the following page, along with a map of the reach areas (Map 5).

The overall average erosion rate is about 3.0 feet per year for Hyde County's estuarine shorelines. This rate of loss could be greatly intensified in the event of major storms. However, as the existing land use map (Map 1, attached) shows, residential development is not extensive in this area.

b. Areas with Soils Limitations

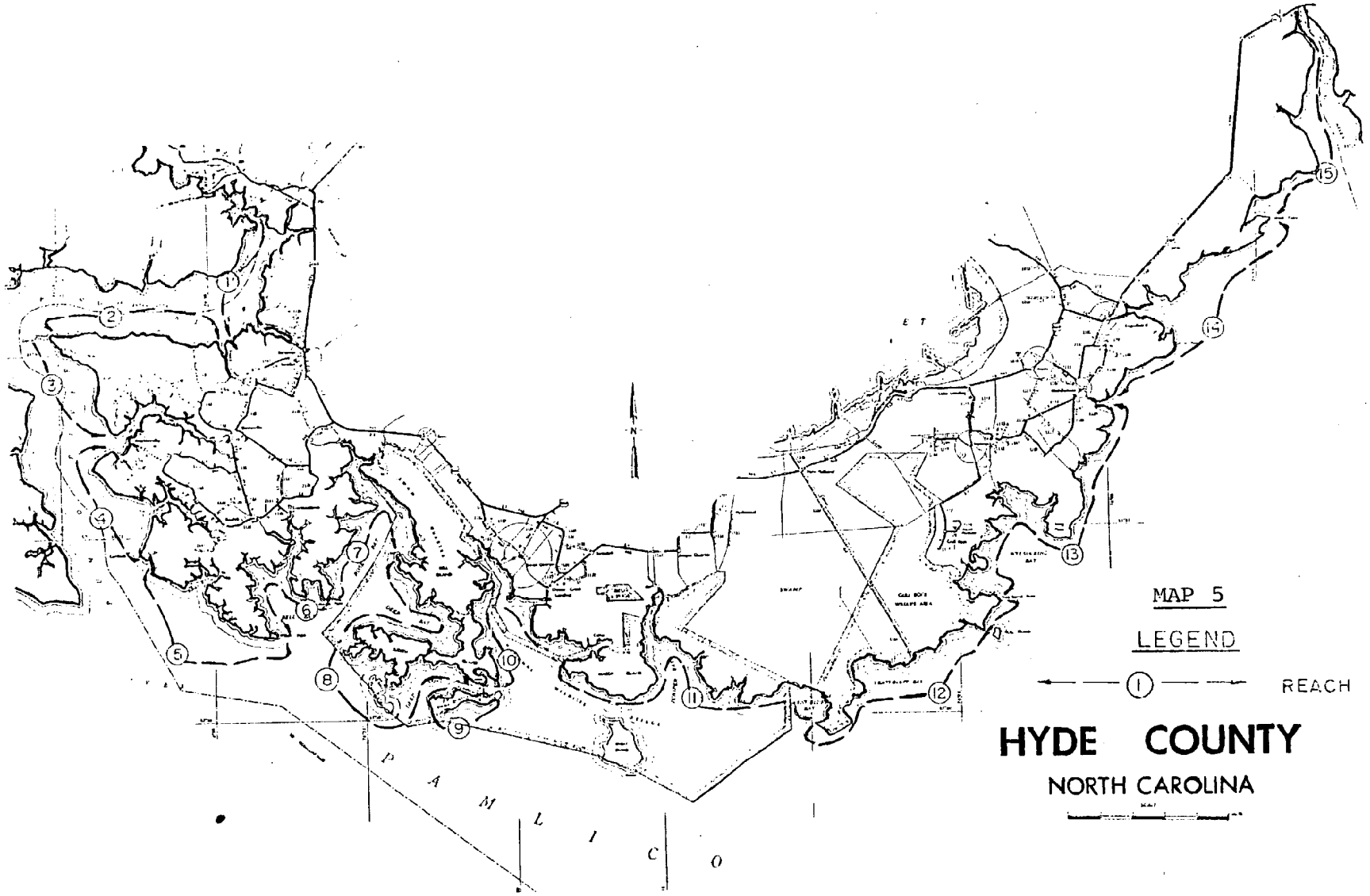
A detailed soils survey and soils report is not available for Hyde County. The best available data is the "General Soil Map" for Hyde County, which was included in the 1976 Plan and also shown in Map 6 , page 31. According to the general map, nearly all of the soil types in Hyde County (including Ocracoke) are characterized as poorly drained, "wet" type soils, with limitations for most "developed" purposes. (See accompanying Chart I, page 32.) Approximately 50% of the County consists of very wet soils. However, an updated, detailed soils survey needs to be prepared.

c. Sources and Estimated Quantity of Water Supply

1. Groundwater

The major source of water supply for the County's central water system is groundwater. There are two aquifers supplying water to Hyde County. The Castle Hayne aquifer, consisting of predominantly porous shell, limestone, and calcarous sand, is a highly productive source of water supply for the northwestern portion of the County. In that section of the County, individual wells may produce from 50 to 500 gallons per minute. The Castle Hayne aquifer lies approximately 250 feet below the surface, although many wells are only 40 feet deep and can obtain water from the aquifer.

The principal source of groundwater supply for the County is the Yorktown Formation. This aquifer is above the Castle Hayne and is composed of interbedded marls, massive clays, sands, and shells. Wells drilled into the aquifer range from 125 feet in the west to 250 feet in the eastern portions of the County. Yields from the Yorktown Formation have been reported to be 50 gallons per minute from a two-inch diameter well. The recharge of the Yorktown Formation is directly at the point of outcrop and indirectly by the seepage of water through the overlying surficial sands. Overlaying the Yorktown Formation is a non-artesian or water table aquifer. This aquifer is the most widely used source for domestic wells. This aquifer is recharged directly by precipitation and surface storage. It is this non-artesian aquifer which is more susceptible to contamination from septic tanks or



"ESTUARINE EROSION AREAS"

REACH NO. 1

Av. width lost to erosion	75.0 feet
Av. height of bank	1.1 feet
Length of shoreline eroding	16.5 miles
Length of shoreline accreting	0 miles
Total length of shoreline	16.5 miles

REACH NO. 2

Av. width lost to erosion	75.0 feet
Av. height of bank	2.1 feet
Length of shoreline eroding	7.4 miles
Length of shoreline accreting	0 miles
Total length of shoreline	7.4 miles

REACH NO. 3

Av. width lost to erosion	75.0 feet
Av. height of bank	1.8 feet
Length of shoreline eroding	14.6 miles
Length of shoreline accreting	0 miles
Total length of shoreline	14.6 miles

REACH NO. 4

Av. width lost to erosion	75.0 feet
Av. height of bank	1.8 feet
Length of shoreline eroding	12.3 miles
Length of shoreline accreting	0 miles
Total length of shoreline	12.3 miles

REACH NO. 5

Av. width lost to erosion	75.0 feet
Av. height of bank	.7 feet
Length of shoreline eroding	13.8 miles
Length of shoreline accreting	0 miles
Total length of shoreline	13.8 miles

REACH NO. 6

Av. width lost to erosion	75.0 feet
Av. height of bank	.5 feet
Length of shoreline eroding	18.5 miles
Length of shoreline accreting	0 miles
Total length of shoreline	18.5 miles

REACH NO. 7

Av. width lost to erosion	75.0 feet
Av. height of bank	.5 feet
Length of shoreline eroding	23.8 miles
Length of shoreline accreting	0 miles
Total length of shoreline	23.8 miles

REACH NO. 8

Av. width lost to erosion	75.0 feet
Av. height of bank	.5 feet
Length of shoreline eroding	21.8 miles
Length of shoreline accreting	0 miles
Total length of shoreline	21.8 miles

REACH NO. 9

Av. width lost to erosion	75.0 feet
Av. height of bank	.5 feet
Length of shoreline eroding	6.7 miles
Length of shoreline accreting	0 miles
Total length of shoreline	6.7 miles

REACH NO. 10

Av. width lost to erosion	75.0 feet
Av. height of bank	.5 feet
Length of shoreline eroding	18.8 miles
Length of shoreline accreting	0 miles
Total length of shoreline	18.8 miles

REACH NO. 11

Av. width lost to erosion	75.0 feet
Av. height of bank	.5 feet
Length of shoreline eroding	19.2 miles
Length of shoreline accreting	0 miles
Total length of shoreline	19.2 miles

REACH NO. 12

Av. width lost to erosion	75.0 feet
Av. height of bank	.5 feet
Length of shoreline eroding	14.9 miles
Length of shoreline accreting	0 miles
Total length of shoreline	14.9 miles

REACH NO. 13

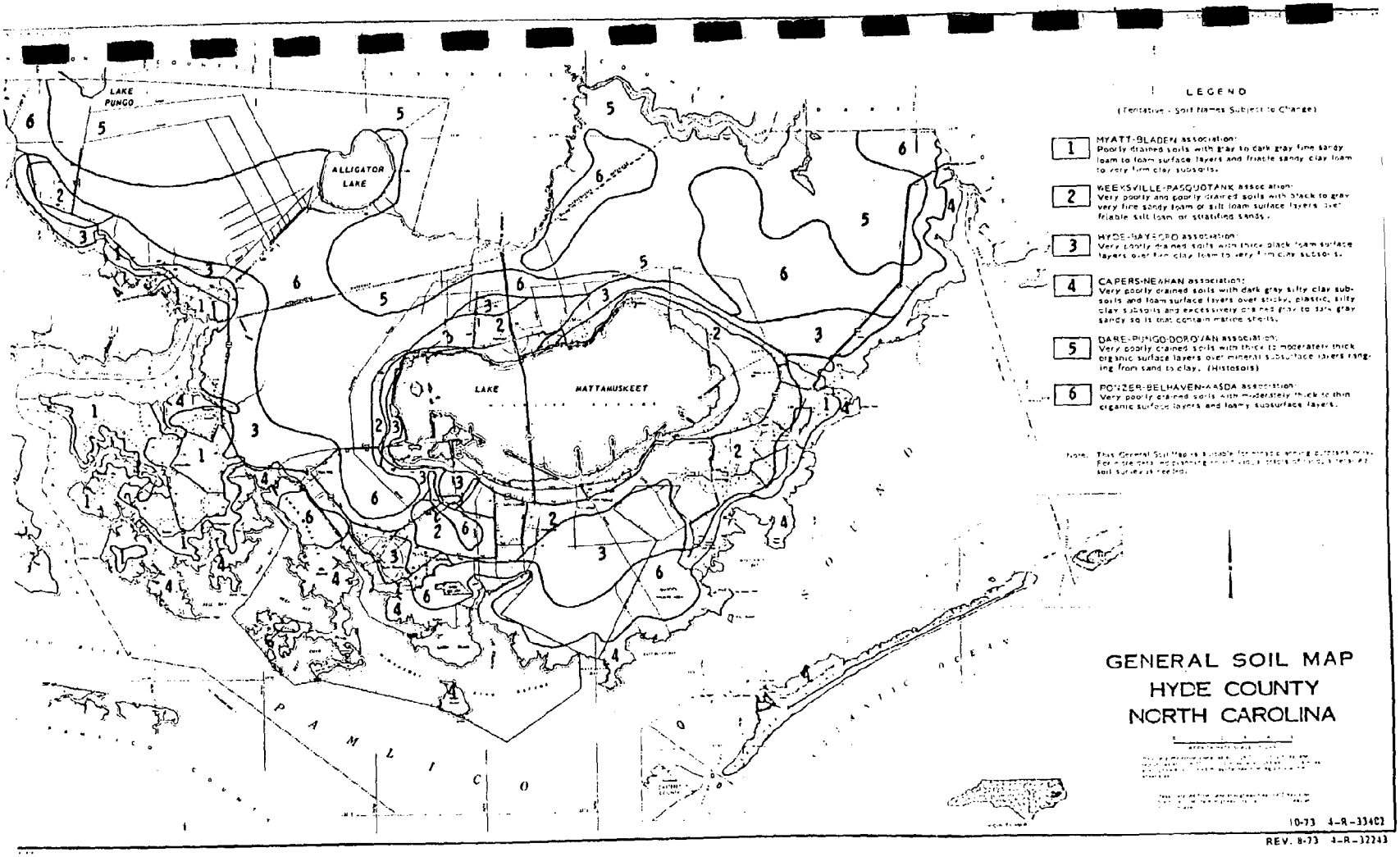
Av. width lost to erosion	75.0 feet
Av. height of bank	.5 feet
Length of shoreline eroding	20.5 miles
Length of shoreline accreting	0 miles
Total length of shoreline	20.5 miles

REACH NO. 14

Av. width lost to erosion	75.0 feet
Av. height of bank	.5 feet
Length of shoreline eroding	15.3 miles
Length of shoreline accreting	0 miles
Total length of shoreline	15.3 miles

REACH NO. 15

Av. width lost to erosion	75.0 feet
Av. height of bank	.5 feet
Length of shoreline eroding	11.1 miles
Length of shoreline accreting	0 miles
Total length of shoreline	11.1 miles


LEGEND
(Tentative - Soil Names Subject to Change)
1 MYATT-BLADEN association: Poorly drained soils with gray to dark gray fine sandy loam to loam surface layers and friable sandy clay loam to very firm clay subsoils.
2 WEEKSVILLE-PASQUOTANK association: Very poorly and poorly drained soils with black to gray very fine sandy loam or silt loam surface layers over friable silt loam or stratified sands.
3 HYDE-BAYFORD association: Very poorly drained soils with thick black loam surface layers over firm clay loam to very firm clay subsoils.
4 CAPERS-NEWHAN association: Very poorly drained soils with dark gray silty clay subsoils and loam surface layers over sticky, plastic, silty clay subsoils and excessively drained gray to dark gray sandy soils that contain marine shells.
5 DARE-PUNGO-DOROVAN association: Very poorly drained soils with thick to moderately thick organic surface layers over mineral subsurface layers ranging from sand to clay. (Histosols)
6 PONZER-BELHAVEN-WASDA association: Very poorly drained soils with moderately thick to thin organic surface layers and loamy subsurface layers.
Note. This General Soil Map is suitable for broad planning purposes only. For more detailed planning on individual tracts of land, a detailed soil survey is needed.
LAKE PUNGO
ALLIGATOR LAKE
LAKE MATTAMUSKEET
PAMLICO
GENERAL SOIL MAP
HYDE COUNTY
NORTH CAROLINA
10-73 4-R-33402
REV. 8-73 4-R-32243

MAP 6

CHART I

HYDE COUNTY SOIL INTERPRETATION FOR SELECTED DEVELOPMENTAL ACTIVITIES

SOIL SOCIATIONS	% OF COUNTY	% OF ASSOCIATION	DWELLINGS WITH SEPTIC TANKS	LIGHT INDUSTRIES	ROADS AND STREETS	SUITABILITY FOR AGRICULTURE
att-Bladen	7					
Myatt		55	Sev. Wt. Fl.	Sev. Wt. Fl.	Sev. Wt. Fl.	Good
Bladen		30	Sev. Wt. Fl.	Sev. Wt. Fl.	Sev. Wt. Fl.	Good
eksville-Pasquotank	11					
Weeksville		65	Mod. to Sev. Wt.	Mod. to Sev. Wt.	Mod. to Sev. Wt.	Good
Pasquotank		20	Mod. to Sev. Wt.	Mod. to Sev. Wt.	Mod. to Sev. Wt.	Good
de-Bayboro	12					
Hyde		40	Sev. Wt. Fl. Perm.	Sev. Wt. Fl.	Sev. Wt. Fl.	Good
Bayboro		40	Sev. Wt. Fl. Perm.	Sev. Wt. Fl.	Sev. Wt. Fl.	Good
pers-New Han.	8					
Capers		65	Sev. Wt. Fl.	Sev. Fl. Cor.	Sev. Fl.	Poor
New Han.		25	Sev. LFC.	Sev. Fl.	Mod. Texture	Poor
re-Pungo-Dorovan	20					
Dare		35	Sev. Fl.	Sev. Fl. Cor.	Sev. Fl. TSC.	Poor
Pungo		35	Sev. Fl.	Sev. Fl. Cor.	Sev. Fl. TSC.	Poor
Dorovan		15	Sev. Fl.	Sev. Fl. Cor.	Sev. Fl. TSC.	Poor
nzer-Belhaven	30					
Wasoa		40	Sev. Wt. Fl.	Sev. Fl. Wt.	Sev. Fl. TSC.	Good
Ponzer		30	Sev. Wt. Fl.	Sev. Fl. Wt.	Sev. Fl. TSC.	Poor
Belhaven		15	Sev. Wt. Fl.	Sev. Fl. Wt.	Sev. Fl. TSC.	Good
Wasoa						

SOURCE: United States Department of Agriculture, Soil Conservation Service, Raleigh, North Carolina, 1974.

Notes for Soil Interpreting:

Moderate (MOD): Soils have properties moderately favorable for the rated use. Limitations can be overcome or modified with planning, design, or special maintenance.

Severe (SEV): Soils have one or more properties unfavorable for the rated use. Limitations are difficult and costly to modify or overcome, requiring major soil reclamation, special design or intense maintennce.

Abbreviations for Limiting Factors:

Fl.	Flood Hazard
Wt.	Water Table
Cor.	Corrosion Potential
TSC	Traffic Supporting Capacity

The suitability of soils for agricultural production was based upon the production of corn, soybeans, and other small grain crops only.

other sources of groundwater pollution. As noted previously, most of Hyde County is served by the County water system, which draws from deep wells below the non-artesian layer. However, of concern to Hyde County is the occasional intrusion of saltwater into the domestic supply. In recent years, salt intrusion forced the closing of the well at Engelhard.

2. Surface Water

Surface water in Hyde County, though nearly all brackish, is abundant. The quality generally is good and the waters are not subject to acute long-term pollution. There has been concern in recent years over the impact of freshwater intrusion into the saline-concentrated estuarine waters, mainly from surface runoff.

d. Slopes in Excess of 12%

Topography in Hyde County is very low, and there are no steep slopes in excess of 12% within the County's jurisdiction.

2. Well Fields

The wells which supply the County's raw water are all deep wells, which are not significantly affected by land development around them. Thus, the well fields pose no constraint to land development.

3. Fragile Areas

These are areas which could easily be damaged or destroyed by inappropriate or poorly planned development. There are several fragile areas in Hyde County, including those areas previously identified and discussed as Areas of Environmental Concern (AECs). These included coastal marshlands, estuarine waters, public trust areas, and estuarine shorelines (see pages 18 through 23, this section). However, there are other fragile areas in the County which are not classified as Areas of Environmental Concern, but nevertheless, due to either natural or cultural significance, are environmentally sensitive. All of these areas will be identified and discussed below as either "Natural Resource fragile areas," or "Cultural Resource fragile areas."

a. Natural Resource Fragile Areas

Natural resource fragile areas are generally recognized to be of educational, scientific, or cultural value because of the natural features of the particular site. Features in these areas serve to distinguish them from the vast majority of the landscape. These areas include: complex natural areas, areas that sustain remnant species, unique geologic formations, pocosins, wooded swamps, prime wildlife habitats, or registered natural landmarks.

The specific environments of the endangered species or species of special concern in Hyde County, which include Cooper's hawk, the bald eagle, the golden eagle, peregrine falcon, American alligator, Outer Banks kingsnake, loggerhead turtle, Carolina salt marsh snake, osprey, and the black bear, have not been studied enough in detail to provide land use policy implications. Plant species listed as significantly rare are the southern twayblade, the tiny-fruited seedbox, and the hardstem bulrush.

Complex natural areas are defined as "lands that support native plant and animal communities and provide habitat conditions or characteristics that have remained essentially unchanged by human activity." These areas are to be determined to be rare within the County or to be of particular scientific or educational value.

There are a few such areas which have been identified within Hyde County, containing cypress, pocosin vegetation, and some endangered animal species. Among them are the Mattamuskeet National Wildlife Refuge, Scranton Hardwood Forest, Swan Quarter National Wildlife Refuge, and Cypress Park.

There are no registered natural landmarks or unique geologic formations in Hyde County.

b. Cultural Resource Fragile Areas

Fragile areas may be particularly important to a locale either in an aesthetic or cultural sense. Fragile coastal cultural resource areas are generally recognized to be of educational, associative, scientific, aesthetic, or cultural value because of their special importance to our understanding of past human settlement of and interaction with the coastal zone. Their importance serves to distinguish the designated areas as significant among the historic architectural or archaelogical remains in the coastal zone, and therein establish their value.

In the early 1980s, a comprehensive inventory of Hyde County identified hundreds of structures of architectural and/or historical significance, according to the State Department of Cultural Resources. As a result of those surveys, two sizeable historic districts were nominated to the National Register of Historic Places, i.e., Lake Landing and Fairfield districts.

Although there has been no systematic archeological investigation of Hyde County, the State Division of Archives and History has recorded 12 such sites in the County, including one prehistoric site on Ocracoke. None of these sites have been investigated for inclusion in the National Register of Historic Places. However, there are many areas which have historic and architectural value beyond local significance, discovered by the previously mentioned surveys. In addition to the five historic places in Hyde County that had been placed on the National Register of Historic Places by 1981, one additional property, the George V. Credle house and cemetery, has been added. These National Register properties are identified by location, below.

1. Inkwell (Octagon House)--Amity Vicinity
2. Clarke House (Wynne's Folly)--Englehard Vicinity
3. Hyde County Courthouse--Swan Quarter
4. Ocracoke Light Station--Ocracoke
5. Mattamuskeet Lodge--Lake Mattamuskeet area
6. George V. Credle House and Cemetery--Rose Bay Vicinity

In addition to these six properties, twenty-four additional ones have been placed on a "study list" for possible inclusion on the National Register. These twenty-four properties include:

1. Amity Rural Historic District, Amity Vicinity
2. Hyde County Plantation District, US 264
3. Middletown Commercial District, Lake Landing Township
4. Ocracoke Village Historic District, Ocracoke
5. Bell-Jennette House, Lake Landing Township
6. William Sylvester Carter House, Fairfield Township
7. Samuel Lincoln Fisher House, Currituck Township
8. Henry Gibbs House, Lake Landing Township
9. John and Thomas Mann Houses, Fairfield Township
10. O'Neal Midgett House, Lake Landing Township
11. Ocracoke Lighthouse Keepers Quarters, Ocracoke
12. Rose Bay Missionary Baptist Church, Swan Quarter Township
13. Rose Bay School, Swan Quarter Township
14. St. John's Episcopal Church, Currituck Township
15. St. John's Episcopal Church, Sladesville
16. Elisha Sewell House, Lake Landing Township
17. Soole Methodist Church, Swan Quarter Township
18. Marcus Swindell House, Lake Landing Township
19. Watson House, Lake Landing Township
20. G. I. Watson House, Lake Landing Township
21. I. B. Watson House, Lake Landing Township
22. Preacher Watson House, Lake Landing Township
23. Joseph Young House, Lake Landing Township
24. Young-Roper-Jarvis House, Lake Landing Township

All of Ocracoke Village, which is presented as Part II of this Plan, can be considered a cultural resource beyond local significance (see Part II, Ocracoke). Also, the above-mentioned comprehensive survey titled "Comprehensive Historical Inventory of Hyde County," will be used to help identify other potentially fragile historic properties.

In addition to architecturally significant historic properties, Hyde County has 35 known sites of archaeological significance, according to the Archaeology Branch of the State Division of Archives and History. Although not yet proven conclusively, within the Lake Landing Historic Architectural District (which is a nationally designated historic district on the National Register of Historic Places), is one site thought to be the location of the lost Indian village of Pomeiooc. This 16th century village was referenced to and depicted in vivid water colors by John White,

one of the early English settlers, in one of the colonies sponsored by Sir Walter Raleigh. John White, unlike the settlers of the "Lost Colony," returned to England, where the paintings were preserved. The Village of Pomeiooc was long thought to be in the vicinity of Lake Mattamuskett, but no evidence was found.

It should be pointed out, however, that all information on the location, nature, and content of archaeological sites in North Carolina is protected under terms of N.C.G.S. 70, Article 2. Release of detailed information, because of risk of harm to the site, is very tightly controlled. Actual site locations are confidential and should not be made part of any public document, although maps may be examined in Raleigh.

4. Areas with Resource Potential

A primary area with resource potential in Hyde County concerns productive agricultural lands, which include 70,600 acres in harvested cropland for 1984 (N.C. Agricultural Statistics, 1985). Other areas of resource potential include the four wildlife refuge areas and one "bird refuge" on the mainland, and the Cape Hatteras National Seashore Recreation Area on Ocracoke, which are publicly-owned forests, parks, or fish and gameland areas.

As reported in detail in the 1981 Plan Update, Hyde County, along with several other coastal counties along the Pamlico Basin, are known to have substantial deposits of peat. According to a document titled 1980 Annual Report on Peat Resources in North Carolina, by Lee T. Otte and Roy L. Ingram, November 1980, there are two significant peat deposits located in Hyde County. The first is known as the Pamlimarle Peninsula, which also lies in parts of Washington, Tyrrell, and Dare Counties. It is estimated that approximately 120 square miles of this deposit, which contains about 70 million tons of moisture-free peat, lies in Hyde County. A second, much smaller deposit is located in the Gull Rock Wildlife Area, currently under state control, covering a six-square-mile area. These two deposits encompass an estimated 80,640 acres of land, or 126 square miles. Productive water bodies, particularly those designated as primary nursery areas, are also significant natural resource areas in the County.

Other natural resource areas of significance in Hyde County from an economic standpoint are Lake Mattamuskeet and the Swan Quarter National Wildlife Refuge. These two areas offer some of the most fertile water fowl hunting areas in all of North Carolina and the many hunters and fishermen attracted to the County do have a positive impact upon the local economy. According to the North Carolina Division of Environmental Management, the Swan Quarter National Wildlife Refuge is designated as a "Class I," or "pristine" air quality area, making it an area to be protected from sources of controllable air pollution from air emissions. All of the County's wildlife refuge areas and Lake Mattamuskeet are important resources which should be protected from unnecessary encroachment or degradation.

D. CONSTRAINTS: CAPACITY OF COMMUNITY FACILITIES

The capacity of Hyde County's community facilities, with the exception of water, has not changed significantly since 1981. In addition to the water systems, there have been some minor changes in the County's community services, as discussed below.

1. Water System

Hyde County's water system consists of two facilities, one at Fairfield with a capacity of 250,000 gallons per day (gpd), and one at Swan Quarter with a 75,000 gpd capacity. The Fairfield facility has the same capacity as it did in 1981; however, the capacity of the Swan Quarter facility has been reduced from about 90,000 gpd in 1981 to 75,000 gpd in 1985. Therefore, the total County capacity is about 325,000 gpd, a reduction of 15,000 gpd since 1981. In 1985, however, the Swan Quarter water facilities did experience serious chloride problems and there is a need to expand the water supply.

Peak demand for water, according to the County Utilities Director, is about 280,000 gpd, which is about 45,000 gpd less than the current capacity. So, although the County's water capacity has been reduced, water utilization peaks at only 86 percent of that capacity. Water demand peaks during the summer when cucumbers are being processed, migrant laborers are present, and the shrimp boats are in. Off-peak demand is about 200,000 gpd, which is significantly higher than the 80-90,000 gpd range reported in the 1981 Plan Update.

As the County grows during the next 10 years, the provision of adequate amounts of water may pose a serious constraint to development. Water quality also is of some concern. Also, it should be noted that the County intends to upgrade the pumping capacity of the Fairfield facility to 400,000 gallons per day by mid-1987. The County is proposing, also, to develop a long-term solution to its water problem by developing a new well site in the western end of the County. This source, however, was contingent upon the passing of a bond referendum in late 1986. The referendum was passed, and the new system is projected to be in operation by 1989 and will serve the entire County.

2. Sewage Disposal

The County still does not have a centralized collection and disposal system. Septic tanks are the sole means of waste water disposal for nearly the entire County. However, the Mid-East public housing project and the Lake Mattamuskeet Wildlife Refuge both have small, private "package" treatment plants which discharge effluent. Also, a package treatment plant is proposed to be developed at the White Plains Marina hunting club

development. The County high school is served by a septic tank, sand filter, discharge system which, according to regional Division of Environmental Management offices, is currently out of compliance with its effluent limits and needs to be upgraded. (See Item a-2 page 23, this section.)

3. Solid Waste Disposal

Solid waste disposal is still a problem for Hyde County's mainland. Because of the high water table and low topography, state regulations prohibit the establishment of a landfill on the mainland. The County does have a garbage and trash collection system with public dumpsters. However, all of the waste must be trucked to landfills in nearby Beaufort and Dare Counties. The Beaufort County landfill is projected to be usable until mid-1988, and the County has already taken steps to obtain permits to develop a new landfill. The current Dare County landfill was opened in 1982, and is projected to have a useful lifespan of 20 years. As long as Hyde County is unable to obtain permits to establish its own landfill, this expensive practice will have to continue. This factor, however, should not be considered as a serious constraint to development during the next 10 years.

4. Schools

Although the school facilities in Hyde County have not changed since the 1981 Plan Update, overall enrollment has declined. The 1981 school enrollment figure was 1,163 students, as shown in Table 17, below. All but 105 of these students were on the mainland. Figures for school year 1984-85 show total enrollment to be 1,004, which is a decrease of 159 students, or about 13 percent. Enrollment on Ocracoke has been steadily declining since school year 1981-82. Although there is, in theory, excess capacity of about 570 students, there are no "unused" facilities in the schools. This "excess" allows Hyde County to update the standards in some facilities, such as libraries.

TABLE 18: HYDE COUNTY SCHOOL ENROLLMENT FIGURES

	1980-81	1981-82	1982-83	1983-84	1984-85
Hyde County	1,163	1,111	1,066	1,045	1,004
Ocracoke	105	113	112	105	94

5. Transportation

There are three primary roads in Hyde County: U.S. 264, N.C. 94, and N.C. 45. In relation to the capacities of these roads, overall traffic volumes have not changed significantly since the 1980 figures reported in the 1981 Plan Update. No counts are available for N.C. 45.

TABLE 19: PRIMARY ROAD TRAFFIC COUNTS: 1981 & 1985

LOCATION	*VOLUMES 1980	1985	CHANGE
N.C. 94 North of U.S. 264	700	700	0
U.S. 264 East of N.C. 94	900	1,400	+500
U.S. 264 West of N.C. 94	1,500	1,000	-500

Source: N.C. Department of Transportation, Planning and Research Branch, Raleigh, N.C.
* Vehicles per day

On N.C. 94, north of U.S. 264, traffic volume remains constant. On U.S. 264, west of N.C. 94, traffic volume has declined. Volume has increased on 264 East, which is perhaps reflective of ferry-generated traffic.

The capacities of both of these roads range from 5,700 to 8,200 vehicles per day, posing no constraint to future development or vehicular congestion. On the other hand, however, the conditions of some secondary routes in the County are less than desirable and the roads need to be repaired. This is especially true in the Sladesville area.

6. Medical Services

There is currently one full-time physician in Hyde County, and one physician's assistant from nearby Belhaven (in Beaufort County), although no physician has yet been hired for the Rural Medical Center. The Engelhard area is served by one physician, who also has a self-contained pharmacy. Also, there is a full-time dentist in Swan Quarter.

7. Emergency and Protective Services

Hyde County has its own Emergency Medical Service Team, complete with ambulance, about 15 certified Emergency Medical Technicians, and 24-hour dispatch service through the Sheriff's Department.

Four fire stations in the County are rated by the North Carolina Department of Insurance. One of these fire stations is located at Scranton, and one is on Ocracoke Island. Fire stations are staffed with approximately 40 volunteer firemen.

The Sheriff's Department provides protective services for Hyde County and is staffed with approximately eight officers who serve both the mainland and Ocracoke Island.

Also, there are two highway patrolmen assigned to Hyde County, two game wardens, and three Division of Marine Fisheries Enforcement Officers.

E. ESTIMATED DEMAND

Population

According to projections in Tables 1 and 5, Hyde County can anticipate a population of 6,306 persons by 1990. This projection, provided by the North Carolina Office of State Budget and Management, would be an increase of 293 persons over the 1985 population projection for the County. This growth rate (4.64 percent) does not imply that rapid growth is likely to occur in the County within the next ten years.

Most of the new mainland residents will likely continue the growth trends in the Currituck and Swan Quarter Townships. The 293 new persons, at an average household size of 2.7 persons per household (interpolated from the 1980 U.S. Census), would create 109 new households. These new households would place added demands upon the County in terms of land and community facilities.

2. Future Land Need

The 1980 population of Hyde County, minus Ocracoke Village, was 5,215 (see Tables 1 and 3, pages 3 and 5, respectively). The "Urban and Built-up" acreage in Hyde County (not including the 775 acres in Ocracoke) was 1,985 acres in 1980 (see Table 15, page 15, this section). The population density in the "Urban and Built-up" acres on the mainland was 2.62 persons per acre. If the population does increase on the mainland by 314 persons in 1990, then an additional 120 acres of Urban and Built-up land will be needed. Part of this additional acreage will be in the form of residential lots, but additional commercial developments--with proper parking facilities, etc., can also be expected. If all of the projected 116 families build homes or place mobile homes on one-half acre lots, then 58 additional acres would be needed for residential use by 1990. It is unlikely, however, that additional permanent residential development will deviate from previous patterns. The scattered, single-family detached dwellings, which are spread across the County's rural landscape, will probably still be the dominant permanent residential type. The availability of land will not be a problem in Hyde County, since in 1984, there were 187,936 acres of forestland in the County.

However, the introduction of a major, planned seasonal residential community in the County, i.e., the White Plains Marina hunting club, would have a significant impact on the County's population density at certain times. At full development, the proposed 144 two-bedroom units could contain up to 576 people, nearly 10% of the County's 1985 population.

3. Community Facilities Need

As noted in the discussion of "Constraints" (Part D, pages 38 through 40, this section), all of the basic services which the County currently provides, except one, are projected to be adequate throughout the 10-year planning period. The County is presently seeking funds to upgrade the Fairfield water facility's pumping capacity up to 450,000 gallons per day. This would make the Fairfield well the major source of raw water in the County. Hopefully, the system will be upgraded by mid-1986. The current daily per capita consumption rate ranges from 33 to 47 gpd. With an upgraded capacity in Fairfield, combined with 75,000 gpd from Swan Quarter well, Hyde County would have a total capacity of 450,000. This capacity could support a population of up to 9,042 persons at current consumption rates.

Continued reliance upon septic tanks, however, may cause problems in areas with unsuitable soils during the period. Some type of centralized sewage collection and disposal systems may need to be developed--even if only for the population clusters in the Currituck and Swan Quarter Townships.

Solid waste disposal, as the population increases, will continue to be a problem. Because of the County's inability to obtain permits for landfill sites, the current practice of taking refuse to a landfill may continue to be the most practical method of disposal during the planning period.

Other facilities and services, such as schools, roads, protective, and emergency services, are projected to be minimally adequate on the mainland throughout the planning period.

F. SUMMARY: SECTION I

This section has focused on analyzing the existing conditions on Hyde County's mainland, as they may affect the formulation of land use policy. Various issues which do have policy implications have been presented in this section. In the following section, however, specific Policy Statements, as they relate to the issues, will be presented.

PART I
SECTION II
POLICY STATEMENTS

SECTION II: POLICY STATEMENTS

The formulation of specific policies regarding growth and management objectives is perhaps the most important part of this updated Land Use Plan. Those policies must, in some cases, strike a delicate balance between objectives of the Coastal Resources Commission and the desires and objectives of the citizens of Hyde County. Most of the trends identified in the 1981 Plan Update are still continuing, so in many instances, policies set forth in the 1981 Plan Update will not require modification. As the analysis of existing conditions showed, these ongoing trends include: a moderately growing population, a growth in agricultural and tourist economy, and the continuing potential for the mining of peat. Also, the continual growth and development of Ocracoke Village could threaten the historic quaintness and charm of this community.

The Coastal Resources Commission, recognizing the diversities which exist among the Coastal counties and communities, required the County to specify particular development policies under four rather broad topics in 1981. For the 1986 Update, however, the CRC has added a fifth issue, i.e., "Storm Hazard Mitigation." In most cases, policies developed under these topics will cover most of the local development issues, but in some cases, they do not. In the latter case, the locality has the flexibility to address its own locally defined issues. The five required broad topics are:

-- Resource Protection
-- Resource Production and Management
-- Economic and Community Development
-- Continuing Public Participation
-- Storm Hazard Mitigation

After an analysis of the existing conditions and trends and input from the County's citizens, the foregoing policies were developed to provide an overall framework for guiding growth and development in Hyde County throughout the 10-year planning period.

A. RESOURCE PROTECTION

1. Areas of Environmental Concern: Development Policies. Hyde County recognizes the primary concern of the Coastal Resources Commission, in terms of protecting resources, as managing Areas of Environmental Concern (AEC's). The County also shares this concern for the protection and sound management of these environmentally sensitive lands and waters. The AEC's which occur in Hyde County were identified in Section I of this Plan on pages 18 through 22. All of these areas are within the Estuarine System. (The ocean hazards AEC's apply only to the ocean side of Ocracoke Island, which is under federal control as part of the Cape Hatteras National Seashore, and therefore, not under the County's jurisdictional control). In terms of developing policies, the Estuarine System AEC's, 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 AEC's together is the fact that the effective use of maps to detail exact on-ground location of a particular area, pose serious limitations.

Hyde County's overall policy and management objective for the estuarine system is "to give the highest priority to the protection and coordinated management of these areas, so as to safeguard and perpetuate their biological, social, economic, and aesthetic values and to ensure that development occurring within these AEC's 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, Hyde 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 of the AEC's within the Estuarine System is discussed below, according to definitions derived from 15 NCAC 7H. It should be noted, however, that occasionally portions of the Administrative Code change, which may affect definitions and use standards.

a. Coastal Wetlands

In line with the CAMA definitions, Hyde County prefers to use the term "marshlands" instead of wetlands. "Marshlands" is more descriptive of the areas included as an Area of Environmental Concern, which are regularly flooded marsh areas often containing specific marsh plant species. The first priority of uses of land in these areas should be the allowance of uses which promote conservation of the existing marshlands. Second in priority will be uses which require water access. All acceptable uses such as utility easements, fishing piers, and docks, will be required to adhere to the use standards under the North Carolina Administrative Code (15 NCAC 7H). Geographic descriptions of marshlands are contained on page 18, Section I, of this document.

b. Estuarine Waters and Estuarine Shorelines

The importance of the estuarine waters and adjacent estuarine shorelines in Hyde County was discussed in Section I of this document on pages 18 - 22. Hyde County is very much aware that protection of the estuarine waters and adjacent estuarine shorelines -- both vital components of the estuarine system -- is of paramount importance to fishing, both commercially and for recreation.

Hyde County recognizes that actions within the estuarine shoreline, which is defined as the area extending 75 feet landward of the mean high waterline of the estuarine waters, could have a substantial effect upon the quality of these waters. This area is subject to erosion and occasional flooding, which could not only affect the quality of the adjacent estuarine life, but also

threaten the security of personal property from developments located therein.

In order to promote the quality of the estuarine waters as well as minimize the likelihood of significant property loss due to erosion or flooding, Hyde County will permit only those uses which are compatible with both the dynamic nature of the estuarine shorelines and the values of the estuarine system. Residential, recreational, and commercial uses may be permitted within the estuarine shoreline, provided that:

1. a substantial chance of pollution occurring from the development does not exist;
2. natural barriers to erosion are preserved and not substantially weakened or eliminated;
3. the construction of impervious surfaces and areas not allowing natural drainage is limited only to that necessary for development;
4. standards of the North Carolina Sedimentation Pollution Control Act 1973 are met;
5. development does not have a significant adverse impact on estuarine resources;
6. development does not significantly interfere with existing public rights or access to, or use of, navigable waters or public resources.

c. Public Trust Areas

Hyde County recognizes that the public has certain established rights to certain land and water areas. (For definitions and geographic locations of public trust areas, see pages 20-21, Section I). These public areas also support valuable commercial and recreational fisheries, waterfowl hunting, and also contain significant aesthetic value. Tourism has increased over the years and is becoming more and more important to the County. Public trust areas are an important attraction to tourists as well as the local citizens. Hyde County will 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, docks, or marinas, shall be permitted.

Hyde County does not currently enforce local land use controls such as zoning or subdivision regulations for the mainland portion of the County. The major controls over development in Hyde County are the CAMA development permits, septic tank placement regulations, and the County's building permit program. The

County, in carrying out its policies on managing development within the AEC's, will continue to support uses which are permitted under the State Administrative Code. However, it is the belief of Hyde County that variances to the restrictions of uses within the AEC's should be permissible on the basis of a case by case review if an applicant for a proposed development can clearly demonstrate that no major or irreversible damage would result. To help determine the "clear demonstration" of no major or irreversible damage, the County Board of Commissioners will appoint a Development Review Board. This Board, working with the County Manager, the local CAMA Implementation and Enforcement Officer, and the Building Inspector, shall review each proposal for development within an AEC or natural or cultural resource area. The Board shall report its findings and recommendations to the County Board of Commissioners. The commissioners shall notify the appropriate State and/or Federal review and permit agencies of the County's position.

2. Development in Areas with Constraints

The constraints to development in Hyde County were discussed in Section I (pages 38-40) and relate to both physical constraints and limitations of community facilities. The physical constraints include man-made hazards such as the airports, flood prone areas, soils limitations, and natural and cultural resource fragile areas.

The high hazard flood areas, i.e., areas susceptible to the 100-year flood, include the majority of Hyde County's land area. As the attached Map 4 indicates, nearly all of Hyde County is considered to be in the "Zone A" category, according to preliminary Flood Insurance Rate maps prepared by the Federal Emergency Management Agency. However, there is a substantial area of Zone "C," i.e., minimally flooded area, in the northwestern part of the County. The areas with the highest risk appear to be the immediate estuarine shoreline areas and interior lowland swamp areas. Again, since most of the County is flood prone, it is not realistic that all development should be prohibited from these areas.

Estuarine erosion areas, as a physical constraint to development, are closely related to the high hazard flood areas. Soils limitations for development are also nearly a County-wide phenomenon. Most of the soil types have limited permeability or too rapid permeability, making septic tank placement a problem. Also, the excessive spreads of muck or silt-type soils and peat-type soils, cannot support septic tanks nor bear the construction of heavy structures.

The natural resource fragile areas are closely linked with the previously identified AEC's and the cultural resource fragile areas were discussed on page 35. Existing community facilities, i.e., solid waste collection, etc., do not pose a serious constraint to development. Water, however, may pose a constraint.

a. Policy Alternatives

Possible policy alternatives regarding managing growth and development in areas with identified constraints include:

1. Develop local regulations to include strict design standards, and/or appoint a local Development Review Board.

2. Develop and adopt additional regulations such as a Zoning Ordinance and pursue participation in the regular phase of the National Flood Insurance Program (including adoption of a Flood Damage Prevention Ordinance). These devices will help regulate or prohibit all development in areas with identified physical constraints.

3. Permit development in areas with constraints, utilizing current state, federal and local regulatory processes, i.e., CAMA, flood insurance, and Corps of Engineers 404 permits, and where adequate protective measures have been taken.

b. Policy Choices

Hyde County adopts the following policies regarding development in areas with constraints.

1. A Development Review Board will be appointed by the Board of Commissioners to review development proposals in sensitive areas. (See page 47.)

2. Development will be permitted in some areas subject to erosion, provided proposals comply with provisions outlined for development within the estuarine shorelines.

3. Hyde County realizes the inevitability of some development occurring in high hazard flood areas, because of the availability of soils suitable for septic tank placement. Therefore, the County will continue to participate in the National Flood Insurance Program and promote enforcement through the County Building Inspection Program. Proposed developments which are not otherwise damaging to AEC's may be permitted, provided protective measures which comply with flood insurance requirements are imposed.

4. Development in areas where soil types have limited bearing capacity will not be encouraged.

5. In areas with possible septic tank limitations, Hyde County will remain committed to decisions rendered by the Health Department's Sanitarian.

6. The County will not encourage residential or commercial development within airport approach zones.

c. Implementation Schedule

1. The County will support the State CAMA permit process where applicable.

2. The County will continue support of the federal Flood Insurance Program.

3. The County will continue to support enforcement and permit authority of the County Sanitarian concerning the placement of septic tanks.

3. Hurricane and Flood Evacuation Needs and Plans

An entire section within the Policy Statement discussions is included separately for hurricane and flood evacuation, as well as storm mitigation of post-storm redevelopment policies, beginning on page 64.

4. Other Resource Protection Policy Areas

There are some additional resource protection issues which are required to be addressed by the CAMA planning guidelines, some of which have lesser definition in Hyde County than in some other coastal areas. These areas, along with relevant policy discussion and statements, are included below:

a. Protection of Potable Water Supply

As discussed in Section 1, page 38, Hyde County's water distribution system currently is based on groundwater drawn through wells located at Fairfield and Swan Quarter as the main supply source. It was also noted that the Swan Quarter facilities have experienced problems because of chloride intrusion and that the water supply and distribution system needs to be expanded. Because of the past problems of chloride intrusion, the County plans to develop wells tapping groundwater in the northwestern part of the County, near Ponzer. The County is aware that inappropriate land uses near well fields increase the possibility of well contamination. Land uses near groundwater sources are regulated by the North Carolina Division of Environmental Management through N.C.A.C., Subchapter 2L and Subchapter 2C. Hyde County recognizes the importance of protecting potable water supplies and therefore supports the enforcement of these regulations.

b. Use of Package Treatment Plants

Since there is no centralized sewer service in the County, it may become necessary to develop additional small package treatment systems in order to accommodate certain types of development in outlying areas. (Several package treatment plants already operate in Hyde County.) This development may be residential, commercial, or industrial. It shall be the policy of Hyde County to continue

to allow such package plants if they can be constructed within the overall intent of this plan and meet other federal and state environmental regulations.

c. Stormwater Runoff Associated with Agriculture, Residential Development, Phosphate or Peat Mining, and Its Impact on Coastal Wetlands, Surface Waters, or Other Fragile Areas

Stormwater runoff is basically the same issue as surface drainage in Hyde County. Policies on surface drainage are addressed in other areas of this Plan. (See Part B, this section, "Resource Production and Management Policies", for policies relating to agriculture, [B.1], residential development [B.6], and peat mining [B.3], and discussion of related impacts. Phosphate mining is currently not an issue in Hyde County.

d. Marina and Floating Home Development

The development of marinas has significant commercial and recreational potential in Hyde County. Therefore, the County supports the development of marinas, in compliance with existing environmental regulations. The County believes that additional studies of the County's needs are required in order to indicate possible sizes or locations of marinas. (Also, see Part C.4, "Redevelopment of Developed Areas", Section II). Although so-called "floating homes" have not been an issue or problem in Hyde County, this issue might become important in the future. If and when it does, Hyde County will develop policies which are most appropriate at the time.

e. Industrial Impacts on Fragile Areas

Part C.1, "Types and Locations of Desired Industry", contains specific policy statements on industry. (See pages 57-59).

f. Development of Sound and Estuarine System Islands

There appear to be one of two small estuarine system islands in Hyde County's jurisdiction, i.e., Hog Island near Swan Quarter Bay, and one near Ocracoke Island. These islands can likely be characterized as natural fragile areas. It is the County's policy that these areas should be protected from any environmentally adverse development.

g. Other Hazardous or Fragile Areas

Other areas of the County which might be considered "fragile" include non-CAMA "404 wetlands," as determined and regulated by the U.S. Army Corps of Engineers. Hyde County recognizes the presence of such areas within the County, and as a general policy supports the enforcement of 404 regulations by the Corps of Engineers.

Another type of "hazard" which should also be addressed in this Land Use Plan Update is the presence of and proposed expansion of military airspace and the attendant restrictions it places on the County. The County has serious concerns about the expansion of military airspace and does not support such expansions. Hyde County has gone on record in voicing its concern to the Federal Aviation Administration. (See Appendix 2.)

h. Cultural Resources

Hyde County is aware of the increasing importance of its cultural and historical heritage and the need to enhance and protect such valuale resources. The "Lost Village of Pomeiooc" and any future such discoveries are examples. As a matter of policy, the County believes that no development which could threaten, damage, or destroy valuable historic, cultural, archaeological, or architectural resources should be permitted.

B. RESOURCE PRODUCTION AND MANAGEMENT POLICIES

Appropriate management of productive resources is very important to any locality. However, in Hyde County, the productive resources are intricately tied to the predominant economic sectors of the County which makes the necessity of balanced management policies of paramount importance. The major productive resources to be considered relate to agriculture, commercial forestry, commercial and recreational fisheries, hunting, and peat mining.

1. Agriculture

Agriculture, as discussed under analysis of existing economic conditions, has been and remains the major element in the County's economic base and is steadily growing. With its substantial economic impact upon the County, both in terms of employment and taxes, agricultural production is of paramount importance to Hyde County. The importance of farming and its supportive activities such as proper land clearing and development of adequate drainage facilities, cannot be overestimated in Hyde County. Executive Order 96, "Conservation of Prime Agricultural and Forest Lands", was supposed to have led to the identification of "prime areas," in both agriculture and forestry, by the soil and water conservation districts. However, this identification has not occurred in Hyde County.

a. Policy Alternatives

Possible policy alternatives include:

1. Developing local regulations to restrict land clearing activities.

2. Monitoring land clearing by requiring local "clearance permits."

3. Encouraging farmers to develop crops which require fewer drainage activities.

4. Continue to support maintenance of existing drainage rights-of-way and encourage all new drainage to empty directly into the Pamlico Sound, or freshwater bodies.

b. Policy Choices

Because of its continuing importance to the County's economy, Hyde County will not seek to impose severe restrictions on agricultural production through drainage controls. However, the County is aware of some of the negative effects of poor or improperly managed drainage activities. Therefore, Hyde County adopts the following policy positions.

1. The County will continue to support the maintenance of existing drainage rights-of-way for farm drainage, including the use of the County-wide Agricultural Drainage Permit process.

2. Hyde County will continue to support the clearing of land for agricultural uses.

3. The County will encourage, as much as feasible, drainage to empty directly into the Pamlico Sound, or freshwater bodies.

4. Hyde County will continue to support State and Federal programs which promote stabilization of productive agricultural land.

c. Implementation Schedule

The County will seek assistance from State and Federal agencies to help identify most "productive" agricultural lands. Also, the County will request assistance from the U. S. Soil Conservation Serrvice to help identify feasible ways of redirecting existing drainage and guiding new drainage directly into the Pamlico Sound, or freshwater bodies.

2. Commercial Forestry

The importance of this sector of the County's economy is recognized by Hyde County. The County also recognizes the relationship between commercial forestry and agricultural products. For example, some of the current land clearing activities initially results in income from timber products. Eventually, much of the land is drained in order to develop productive agricultural land. As agricultural land increases, forestry income declines. This is particularly true when the transfer of land use is from commercial forest to cropland. The economic importance of commercial forestry in Hyde County is likely to continue throughout the next 10 years. The County generally supports the maintenance of its commercial forestlands in line with its support of productive agricultural land.

a. Policy Alternatives

1. The County could encourage the maintenance of its most productive commercial forests by discouraging non-commercial land clearing except for agricultural land development.

2. The County could seek to identify its most productive areas and classify the areas as "conservation" on the Land Classification Map for long-term maintenance.

b. Policy Choice

1. The County will encourage and support the maintenance of its most productive commercial forests by discouraging land clearing except for commercial purposes or the development of productive agricultural lands.

c. Implementation Schedule

1. Leave the existing process as is.

2. Encourage the Regional Soil and Water Conservation District to identify prime forestlands by FY 87, so that these areas can be mapped.

3. Continue to support State Clearinghouse review of the impact of development projects on prime forestlands.

3. Mining Resource Areas

The County still has vast, virtually untapped peat reserves, as noted in the 1981 Land Use Plan Update. Proposals at that time to develop peat mines did not materialize. However, the potential is very much still there. If peat resources could be mined, the economic impact upon the County could be substantial. The ad valorem tax base could receive a generous boost; greatly needed semi-skilled and unskilled jobs could be created, and, possible "spin-off" support industries and commercial facilities could develop. Currently (as of the writing of this report), substantial discussion has been generated because of the proposed large-scale peat mining operations at White Tail Farms. Of central concern is the potential for added runoff of surface water and subsequent effects. The State Environmental Management Commission has adopted special "runoff" standards for peat mining, which basically requires that all mining operations be conducted so that "natural" drainage of the site is maintained. Potential mining companies will have to submit a "water management plan" prior to receiving a discharge permit.

a. Policy Alternatives

1. The County could adopt local ordinances regulating the mining of peat and requiring certain safeguards to be imposed.

2. Not develop any local ordinances at this time, but rely solely on State and Federal regulatory enforcements, i.e., National Environment Protection Act of 1969, along with the Clean Air and Clean Water Acts enforced by the State Division of Environmental Management, the State mining permit provisions, and the 404 wetlands permit process, enforced by the U. S. Army Corps of Engineers.

b. Policy Choice

1. The County supports the eventual mining of peat resources in Hyde County consistent with State and Federal environmental regulations in order to mitigate possible adverse impacts upon environmentally sensitive areas.

c. Implementation Schedule

1. Continue to rely on State and Federal enforcement provisions and activities.

4. Commercial and Recreational Fisheries

The productive water bodies in and around Hyde County have been valuable contributors to the local economy as well as provided many opportunities for recreational fishing. With increasing annual catches over the last several years, it appears that commercial fishing has the potential to expand in Hyde County. It is, therefore, very important to protect the water quality of productive fishing areas. In recent years, concern has been raised by commercial fishermen along North Carolina's Coast and the State Division of Marine Fisheries, that freshwater runoff (particularly from agricultural drainage) has been detrimental to estuarine waters by altering the salinity content. Concern also has been raised because of incidences of fecal coliform showing up in primary shell-fishing waters and forcing the "closing" of such waters. Hyde County would like to see water quality in all of the productive water bodies improved.

a. Policy Alternatives

1. Seek to develop impositions, prohibiting the clearing of additional land, and thereby reducing the extent of freshwater runoff.

2. Not impose local restrictions on additional land clearing, but rely on the 404 permit process and enforcement of septic tank placement regulations, particularly in areas with unsuitable soils and high erosion areas.

3. Seek funding assistance to develop artificial reefs in the Pamlico Sound to attract fish, and thereby enhance commercial and recreational opportunities in the County.

b. Policy Choices

1. The County does not believe that it is necessary to limit either land clearing or unnecessarily restrict agricultural drainage. The 404 permit process and

other environmental regulations are viewed as being sufficient in limiting the amount of land cleared.

2. The County will support enforcement of septic tank placement regulations by the Health Department and the Soil Conservation Service, to minimize the likelihood of effluent from septic systems in unsuitable soils contaminating fishing waters.

3. The County will apply for funds through the N. C. Division of Marine Fisheries' Reef Development Program in FY 87 in order to develop artificial reefs in selected locations along the Pamlico Sound. The reefs should attract fish and enhance commercial and sports fishing in Hyde County.

c. Implementation Schedule

1. Continue to support enforcement of existing regulatory provisions as outlined in b. above.

5. Off-Road Vehicles

The primary area where off-road vehicles would be of concern is on Ocracoke Island in the Cape Hatteras National Seashore Area. This area, as stated previously, is under the management and control of the U. S. Park Service. Nevertheless, off-road vehicles are important in some sections of Hyde County because of the necessity for landowners to travel in swampy areas on private property. However, since improper use of off-road vehicles in these areas could possibly damage natural ragile areas, it is the general practice to travel only on existing trails. The use of these vehicles is acceptable in such cases.

6. Residential and Commercial Land Development

Hyde County, as discussed under sections of this report analyzing existing population and economic trends, is very sparsely populated and has one of the lowest County per capita incomes in North Carolina. The 1980 population census indicated that the trend of population loss for the County was being supplanted by a growth trend. Hyde County is not in a "rapid growth" situation and does not suffer the potentially related pressures resulting from increased residential, commercial, or industrial uses of land. Besides the limitations presented in other policy discussions in this report (particularly those relating to protection of sensitive natural and cultural resources), Hyde County views itself as being in a position to accommodate growth and development. For instance, the proposed White Plains project, which will involve the construction of condominiums in the White Plains Marina area, as well as the provision of water and development of wastewater treatment, is a recent example. Also, other areas in the County have the potential for transitioning to higher density, more intense land uses.

Additional development, particularly commercial and industrial development, is regarded as desirable because of the important local revenue and employment generating impacts. The other policy statements regarding resource protection adequately voice the County's concerns regarding these resources. However, land development, whether for residential, commercial, industrial or peat mining uses, and in conformance with existing regulatory controls will be encouraged in Hyde County.

A more detailed discussion of the specific types of development along with relevant policy statements are included in the following section, "Economic and Community Development Policies".

C. ECONOMIC AND COMMUNITY DEVELOPMENT POLICIES

The analysis of overall existing conditions and trends for this 1986 Update of the Hyde County Land Use Plan did not show any alarming trends which would drastically alter general economic and community development policies contained in the 1981 Plan. However, some relevant trends which have been identified include:

- -- Population growth in the County;
- -- Increase in the unemployment rate, indicating a need for expanded job opportunities;
- -- Growth and stability of the County's three basic resource extraction economic activities, i.e., farming, fishing, and forestry;
- -- Continuing potential for the mining of peat in Hyde County;
- -- Continuing decline of the existing conventional housing stock.

Hyde County is very much concerned about the future growth in economic and community development. As the population gradually increases, the economic base will need to expand, more housing will be needed and increased, although relatively minor, pressures will be placed on community facilities. Sound public investment decisions will also have to be made. All of these issues and others are important in the formulation of land use policies. Particular issue areas and policy statements are discussed below.

1. Types and Locations of Desired Industry

Hyde County has an intense need for increased job opportunities for many of its unemployed and underemployed citizens. Industrial development could provide these opportunities as well as expand the County's tax base.

Hyde County would like to see industry developed which could take advantage of existing natural resources and/or expand upon the current three major industries in the County. Industries such as seafood processing, food canneries, paper and wood manufacture, and marine-related industries might be considered desirable as long as the integrity of environmentally sensitive areas could be

assured of maintenance and stability. Also, other low-pollution, light manufacturing and/or assembly industries would be desirable.

a. Locations and Standards

The County would like to see industry locate, if feasible, in industrial parks which could be developed in suitable locations in the County. However, because of soil and other limitations, individual plant sites may be more feasible. All industrial prospects will be required to comply with general development standards which are designed to protect environmentally sensitive areas, including:

1. Providing an assessment of the impact of the development of the industry and be required to use the best available technology to avoid pollution of air or water during construction or operation.

2. Be located on land having stable, well-drained soils. The sites should be located in areas adequately protected from flooding and be accessible to existing public utilities and transportation routes.

Some industries such as boat or ship maintenance and repair, may need to be close to water areas, or have adequate water access.

b. Policy Alternatives

Possible policy alternatives concerning industrial development in Hyde County include:

1. the development of an active industrial recruiting program within the County;

2. conducting studies to see which industry types may want to locate in the County, and assessing possible environmental impacts; and

3. seeking funding and technical assistance to develop industrial parks within the County.

c. Policy Choices

As Hyde County recognizes the need for economic expansion and the fact that industrial development can greatly enhance this expansion, the County hereby adopts the following position.

1. The County will seek to develop an active industrial recruitment program, seeking low-pollution, light manufacturing industries. The County Finance Officer will coordinate this activity.

2. Hyde County will seek technical assistance and financial help to develop at least one industrial park, to be located near the airport at Engelhard.

3. The County believes that all industrial prospects should be given a fair, case-by-case assessment in order to carefully compare possible economic benefits with possibly negative environmental effects.

4. The County will provide, as much as is locationally and economically feasible, basic support services such as water and sewer, if possible, to newly locating industries.

d. Implementation Schedule

The County will establish more active contact with the State's industrial development representative for the region. The County will actively explore funding assistance to develop an industrial park near the airport at Engelhard.

2. Local Commitment to Service Provisions

Currently, the major service to development provided by the County is water. The water service area generally includes those areas around Swan Quarter, Fairfield, Engelhard, Sladesville, Ponzer, and Scranton.

Hyde County is committed to providing basic services such as water and, where feasible, sewer, to serve increased development in the County, particularly prospective industrial development, in those areas most suited for development. As development occurs and the local tax base expands accordingly, slightly higher levels of county-provided services can be provided.

a. Policy Alternatives

1. Do not encourage the provision of services for new development in an attempt to keep things as they are.

2. Encourage extension and expansion of needed services as much as feasible, to accommodate new residential, commercial, or industrial development.

b. Policy Choice

1. Hyde County will remain committed to providing needed services, as economically feasible, to accommodate new residential, commercial, and industrial development in the County.

c. Implementation Schedule

1. The County will work throughout the period to encourage the provision of services where needed, and as feasible, for new development.

3. Desired Urban Growth Patterns

Although, as noted previously, there are community clusters in the County, there is no area on the mainland that resembles an "urban", i.e., dense or compact pattern. Even the cluster communities are widely separated, spaced out along U. S. 264, and major paved secondary routes. This type of development pattern, which consists mostly of low-to-moderate income single-family homeowners, some scattered mobile homes on individual lots, and scattered commercial developments, is likely to continue in Hyde County. There are no subdivision communities currently in the County. As the population on the mainland increases, as it is projected to do through 1995, the areas with the water service will likely take in this growth. The conditions of the soils and the absence of a central sewage facility in the County present serious constraints to increased development. Nevertheless, as some residents who formerly migrated in search of job opportunities return, and as more and more of the younger people decide to remain in the County, the demand for adequate sewage disposal will gradually increase.

Although the County has participated in three separate Community Development Block Grant Programs aimed at rehabilitating many substandard dwelling units, there is still a significant portion of the population residing in substandard housing. Since incomes are generally low in the County, there will be a need throughout the next 10 years for lower income housing. However, as of the writing of this report, the cost of housing, particularly financing, is steadily increasing. The definition of what constitutes "lower-income" housing during the planning period may be a subject of local, state and national debate. An important consideration in the total cost of housing is the location and availability of basic services such as water and sewer. Since there is no central sewer in the County, the location of water services, as a factor in housing location, becomes all the more crucial. This is a factor which is recognized by Hyde County.

Another trend in the County possibly affecting urban growth patterns is the increasing number of mobile homes. Although mostly scattered on individual lots, mobile homes have established themselves as a viable housing alternative for many residents and the County may wish to plan for the eventuality of mobile home parks.

The proposed project, "Lake Landing Condominiums at White Plains Marina," will introduce 144 2-bedroom units. The County will encourage such high-density development if community services are adequate to support such a development.

a. Policy Alternatives

1. Hyde County could encourage the continuation of existing rural cluster community patterns.

2. The County could discourage a duplication and continuation of the existing development patterns by adopting a Zoning Ordinance which could prohibit areas with identified limitations (soils, or presence of AECs, for example) from developing.

3. Adopt and develop a Mobile Home Park Ordinance to establish design standards for mobile home parks which may eventually be proposed in the County.

b. Policy Choices

1. The existing rural cluster communities are a long established residential pattern in Hyde County, and will not be discouraged by the County. However, the County will not encourage "new" developments in areas with identified limitations such as soils or proximity to AEC's; specifically, the County will not extend water service to such areas. However, redevelopment, or rehabilitation activities are viewed as being acceptable.

2. The County does not deem it necessary to adopt a Zoning Ordinance at this time, but will consider the development of a draft Mobile Home Park Ordinance to establish design standards for mobile home parks.

c. Implementation Schedule

1. Obtain assistance in developing a draft Mobile Home Park Ordinance in FY 87.

4. Redevelopment of Developed Areas

The only area worthy of consideration under this issue in Hyde County is the area around Silver Lake on Ocracoke Island. Policy discussions for Ocracoke are contained in Part II of this update. As noted previously, however, the County has operated several projects under the HUD-sponsored Community Development Block Grant Program, including housing rehabilitation, drainage improvements, and construction of a community building and fire station. A substantial number of substandard dwellings, notably around the Lake Landing and Fairfield Townships, remain in the County. As block grant funds are available, Hyde County will continue to apply for such funds in order to help alleviate the substandard housing conditions of many of its low and moderate-income citizens.

a. Policy Alternatives

1. Seeking funding through the State-administered Small Cities Community Development Block Grant Program to establish a housing improvements program in needed areas.

b. Policy Choices

1. Hyde County would like to see redevelopment/rehabilitation activities occur in such communities where there are concentrations of substandard housing conditions.

c. Implementation Schedule

1. In FY 87, Hyde County will apply for Community Development Block Grant funding.

5. Commitment to State and Federal Programs

Hyde County is generally receptive to State and Federal programs, particularly those which provide improvements to the County. The County will continue to fully support such programs. The North Carolina Department of Transportation road and bridge improvement programs are very important to Hyde County.

Examples of other State and Federal programs which are important to and supported by Hyde County include: drainage planning and erosion control activities carried out by the U.S.D.A. Soil Conservation Service, which is valuable to farmers; dredging and channel maintenance by the U.S. Army Corps of Engineers; continued ferry service to and from Ocracoke; and Federal and State projects which provide efficient and safe boat access for sports fishing.

All of these programs and others are important to Hyde County, and the County is committed to their continued support.

6. Assistance to Channel Maintenance

Proper maintenance of channels is very important in Hyde County, mainly because of the substantial economic impact of commercial fisheries. Commercial fishing is increasing in the County. If silt or other deposits fill in the channels, this could impede efficient docking of the commercial vessels. With adequate channel maintenance, Hyde County could begin to make more utilization of its extensive waterways for water transportation purposes. Since there are no railroads in the County, water transportation (particularly along the Intracoastal Waterway) could be useful for bulk shipments in the County. The County is quite aware of this situation. Hyde County provides assistance to the Corps and State officials by either helping to obtain or pro-

viding spoil sites. The County will remain committed to providing such assistance.

7. Energy Facilities Siting

In Hyde County, the siting or location of energy facilities relates almost solely to peat mining, as noted in the 1981 Plan Update. The nature of peat mining is such that there is little choice about particular extraction sites. Peat mining, like strip-coal mining, must be done where the mineral is located. It is always an on-site operation, yet the conversion or processing of it can occur somewhere else. The County believes that off-site processing should not occur in environmentally sensitive or hazardous areas, or in any area where it is known that major or irreparable environmental damage will result. The County also believes that any land disturbed as a mining site should be reclaimed as much as possible.

8. Tourism and Waterfront Access

As discussed under the economic analysis section, tourism has historically had a significant impact upon Hyde County's economy. Tourism is a growing sector of Hyde County's economy and the County would like to protect and enhance those attractions and related facilities which help make tourism effective. The continued operation of the ferry services, particularly when the number of annual passengers is considered, is obviously crucial to a sustained tourist economy on Ocracoke. On the mainland, the waterfowl, deer, and other small game hunting, sportsfishing, and wildlife observations, do not depend upon the ferry. Nevertheless, these activities also add to the County's economy. On both the mainland and on Ocracoke, waterfront access is an important aspect for both tourists and citizens as well. On the mainland, access appears to be generally adequate, with about 10 private boat ramps and two public ramps. The 10 private ramps charge a nominal launching fee and are utilized mostly by sports fishermen. These are mostly of concrete construction and some have a few parking spaces. On Ocracoke, however, there are no public access ramps.

Since the County receives revenue from the State on the basis of total retail sales, the vitality of Ocracoke's economy is important to the County as a whole. Any reduction in the ferry services could have a negative impact upon the County's economy. Also, the provision of public waterfront access facilities is a real need in Ocracoke Village.

As a matter of policy alternatives, the County could continue to support tourism by seeking to develop increased opportunities on the mainland. The County could also request that the State not reduce ferry services to Ocracoke, which would have negative ramifications for both the Village's and the mainland's economy. Tourism in Hyde County, as in other coastal counties, is vital. The policy alternatives are limited. Therefore, the County will,

as a matter of policy, continue to support and promote tourism, both on the mainland and on Ocracoke. On Ocracoke, the County supports the development of public waterfront access facilities in the Village.

9. Density of Development

Overly dense development is not a problem in Hyde County, nor is anticipated to become a problem during the period covered by this plan update. With an anticipated population growth of 293 persons between 1985 and 1995, (an increase of 4.8% over the 1985 estimate), the rate of growth will not push developed densities to unacceptable levels.

10. Land Use Trends

The overall land use trends, as have been discussed in other sections of this report, include continuing, although at a slower rate, land clearing activities; continued emphasis on agricultural uses of land, and increasing, although not dramatically, water-front residential development. The projected land use changes are not anticipated to be causes for alarm in Hyde County. Continued enforcement and coordination, of existing local, state, and federal land use regulations, i.e., through CAMA, Corps of Engineers, 404 process, sanitary regulations, and building inspections program, are adequate to help assure orderly growth and development in the County.

D. CONTINUING PUBLIC PARTICIPATION POLICIES

Hyde County recognizes that an important element in developing and implementing any local policies or plans regarding the use of land in the County, is involvement of the County's citizenry. From the initial stages of development of this 1986 update of the County's CAMA Land Use Plan, Hyde County has sought to provide open opportunities for citizen input. A "Public Participation Plan" was developed for the plan updating process, outlining the methodology for citizen involvement. (See Appendix 3.) The plan stated that public involvement on both the mainland and Ocracoke was to be generated primarily through two Land Use Planning Advisory Committees appointed by the County Board of Commissioners, and through "public information" meetings, advertised in local newspapers and open to the general public. The Land Use Planning Advisory Committees' meetings also were open to the general public. In all, a total of 15 work sessions and/or public meetings were held, i.e., seven on the mainland and eight on Ocracoke. Two meetings each on the mainland and in Ocracoke (a total of four), were advertised in local newspapers as "public" information meetings soliciting citizens' input. Specific meeting dates were as follows: Mainland; November 6, 1985; February 12, March 13, April 10, May 1, May 29 (preliminary draft presented to Commissioners on June 16), all in 1986; Ocracoke; November 7, November 18, 1985; February 13, March 12, April 9, May 28, and June 4, 1986. Final work sessions were held November 19, 1986, on

the mainland, and November 26, 1986, in Ocracoke to review CRC comments to preliminary drafts.

In order to continue providing citizens an awareness of the land use planning process, all of the regular meetings of the Board of Commissioners will be announced in local newspapers.

It is the belief of the Hyde County Board of Commissioners that all citizens be afforded adequate opportunities to participate in the governmental and planning decisions which affect them. Therefore, citizens' input will continue to be solicited, primarily through the Board of Commissioners with advertised and adequately publicized public meetings held to discuss special land use issues, and to keep citizens informed.

E. Storm Hazard Mitigation, Post-Disaster Recovery, and Evacuation Plans

The entire North Carolina Coastal region, including Hyde County, faces strong threats of damage each year from hurricanes, Northeasters, or other major storms. For nearly 20 years, there was a marked "slowdown", or "lull", in hurricane activity along the State's coast. Predictions were that a major storm could strike the State at any time during the hurricane season, since such a storm was "long overdue". And then, in September, 1984, the "waiting" ended. Hurricane Diana, with some of the strongest sustained winds ever recorded, rammed into the Southeast coast near Wilmington. Although damage was extensive, the potential destruction was much greater and the damage would have been greatly escalated had the storm hit land at a slightly different location. Again, a little over a year later in late September, 1985, coastal North Carolina faced another serious threat from Hurricane Gloria. Fortunately, this storm veered off the coast, took a northerly turn, and left no more than a good drenching for some areas. For two consecutive years, the State and the coastal areas were relatively fortunate. But what about next time?

Notice the excerpt below from, Before the Storm: Managing Development to Reduce Hurricane Damages, McElyea, Brower, & Godschalk, 1982, concerning development in coastal communities:

> "At the same time, development along the coast has grown by leaps and bounds. Unless this development is wisely located and built to withstand hurricane forces, North Carolina's coastal communities will face massive destruction. Local governments, as the primary protectors of the public health, safety, and general welfare, have a responsibility to reduce the risk of property damages and loss of life attending coastal development. They also have a responsibility to ensure that reconstruction following a major storm can occur quickly and leave the community safer from disaster in the future. These are the goals of hazard mitigation and reconstruction planning." (p.iii)

The purpose of this section of the 1986 CAMA Land Use Plan Update, is to assist Hyde County in managing development in potentially hazardous areas through establishing hazard mitigation policies and to reduce the risks associated with future hurricanes by developing post-disaster reconstruction/recovery policies, and reviewing the adequacy of current evacuation plans. The overriding concept of this exercise is simply "planning ahead of time."

> "Hazard mitigation includes any activity which reduces the probability that a disaster will occur or minimizes the damage caused by a disaster. Hazard mitigation includes not only managing devlopment, but also

evacuation planning and other measures to reduce losses of life and property. Reconstruction involves the full range of repair activities in the wake of a disaster which seek to return the community to a "normal" level of operations." (McElyea, Brower, & Godschalk, p. iii).

With this introduction, the following pages will present the storm hazard mitigation and post-disaster recovery policies, and review of the existing evacuation plan along with appropriate discussions and maps.

1. Storm Hazard Mitigation: Discussion

Hazard mitigation, or actions taken to reduce the probability or impact of a disaster could involve a number of activities or policy decisions. The starting point, however, is to identify the types of hazards (including the relative severity and magnitude of risks), and the extent of development (including residential, commercial, etc.) located in storm hazard areas.

Hurricanes are extremely powerful, often unpredictable forces of nature. The two most severe effects are fatalities and property damage, which are usually the result of four causes: high winds, flooding, wave action, and erosion, each of which are discussed briefly below.

a. High Winds

High winds are the major determinants of a hurricane, by definition, i.e., a tropical disturbance with sustained winds of at least 73 miles per hour. Extreme hurricanes can have winds of up to 165 miles per hour, with gusts up to 200 miles per hour. These winds circulate around the center or "eye" of the storm. Although the friction or impact of the winds hitting land from the water causes some dissipation of the full force, there is still a tremendous amount of energy left to cause damage to buildings, overturn mobile homes, fell trees and powerlines, and destroy crops. Also, tornadoes can often be spawned by hurricane wind patterns. Wind stress is an important consideration in storm hazard mitigation planning. Because of a hurricane's size and power, it is likely that all of Hyde County would be subject to the same wind velocity in the event of a storm.

b. Flooding

Flooding, on the other hand, may not affect all areas with equal intensity. The excessive amounts of rainfall and the "storm surge" which often accompany hurricanes can cause massive coastal and riverine flooding causing excessive property damage and deaths by drownings. (More deaths are caused by drowning than any other cause in hurricanes.) Flooding is particularly a problem in ocean coastal areas because of the storm surge and low-lying areas. However, flooding can cause extensive damage in inland areas also,

since many coastal areas have low elevations and are located in high hazard or "Zone A" flood areas according to the Federal Emergency Management Agency Maps. (See "Note" below.)

According to a recently published preliminary flood insurance study for Hyde County, prepared by the Federal Emergency Management Agency (FEMA), dated April 19, 1985, the "dominant source of flooding in Hyde County is storm surge generated in the Atlantic Ocean by tropical storms and hurricanes. In addition, this surge propagates into Pamlico Sound and further propagates into Pamlico River, Lake Matamuskett and a multitude of small watercourses where high winds associated with tropical storms can produce high waves" (p.4, Flood Insurance Study). Based on recent preliminary flood insurance maps prepared for Hyde County, nearly all of the County is classified as being in the 100-year "high hazard" flood zone, or Zone A. (There is, however, an extensive area of "Zone C," i.e., minimally flooded area, in the west part of the County.) Because of low elevation, nearly all of the County would be subject to flooding during a severe hurricane. (See Map 7, "Composite Hazards Map," attached.)

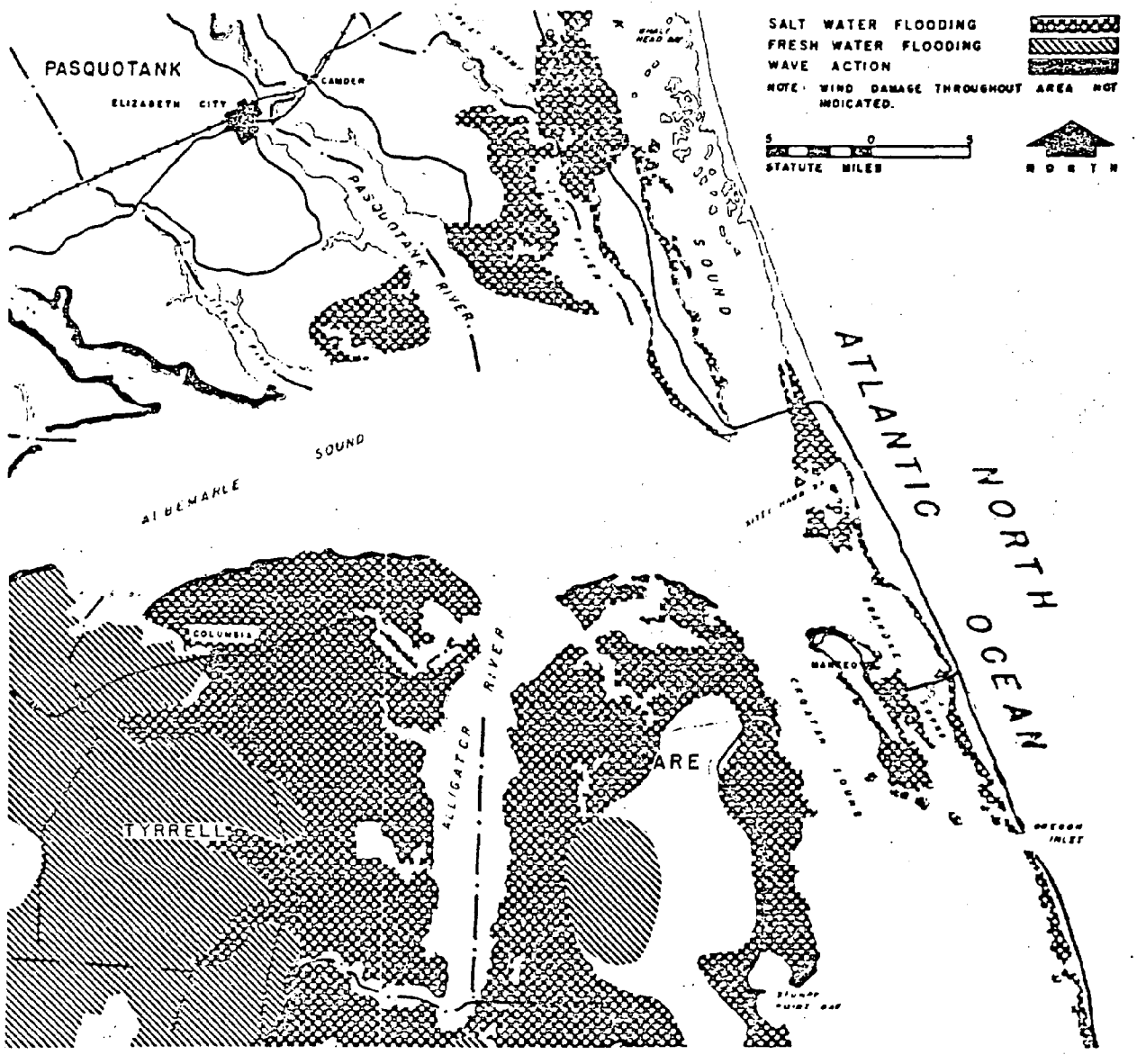
As Map 7 shows, virtually all of the "development" in Hyde County is in the high hazard Zone A areas.

Flooding cannot only cause damage to buildings, but saltwater flooding can cause serious damage to croplands, which is what took place in the Albemarle region in 1954 and 1955 from Hurricanes Hazel, Connie, Dianne, and Ione (McElyea, Brower, & Godschalk, pp. 2-8, 9). Notice Figure 1 on the following page, which shows only the northern edge of Hyde County, but still enough to indicate saltwater flooding in the northeast area, south of the Alligator River. Freshwater flooding appears to have occurred in other parts of the County. Consideration of potential flood damage is important to Hyde County's efforts to develop storm mitigation policies.

Note: It should be noted here that a special study of overland flooding from hurricane surges called "SLOSH" (i.e., Sea-Land Overland Surge from Hurricanes) was in process during the preparation of this plan udpate. This study, jointly supported by the National Weather Service, Federal Emergency Management Administration, Corps of Engineers, and the N.C. Division of Environmental Management, is to show projected areas of flooding from hurricanes in the State's coastal counties. Final maps for Hyde County were not available during plan development.

FIGURE 1

Flooding in the Albemarle Sound Region from Hurricanes Hazel, Connie, Diane, and Ione (1954-1955)



Source: N. C. Council of Civil Defense, 1955.

c. Wave Action

Damage from wave action is connected very closely to the storm surge, i.e., wind-driven water with high waves moving to vulnerable shoreline areas. As the previously cited flood study noted, "The wave action associated with storm surge can be much more damaging than the higher water level" (p.4). Areas most likely to be affected are ocean erodible areas and estuarine shoreline areas. There are no ocean erodible areas in Hyde County's jurisdiction (since in Ocracoke, the ocean beaches are part of the Cape Hatteras National Seashore). However, there are extensive estuarine shoreline areas (75 feet inland from the mean high water mark of estuarine waters) in the County. However, wave action damage would have the most significant impact along the Pamlico Sound shoreline. As the existing land use map (Map 1, attached), and the composite hazards map (Map 7, attached) show, fortunately, there are not significant amounts of residential development in or near the estuarine shoreline area on the Hyde County mainland. And even on Ocracoke, there is very little development immediately adjacent to the Sound. Wave action can cause erosion as well as push possible flood waters to areas not reached by the storm surge itself. The estuarine shoreline along Hyde's riverine shoreline, i.e., Pungo River and the Alligator River, is sufficiently inland from an open coast so that the wave energy is dispersed and diffracted.

d. Erosion

The final major consideration in storm hazard mitigation is severe erosion, caused by high winds, high water, and heavy wave action. Again, in Hyde County, the area most susceptible to storm-related erosion is the estuarine shoreline AEC along the Pamlico Sound. This is essentially the same area potentially affected by the action of damaging waves and described in part c, above. Shoreline erosion could lead to loss of property through portions of waterfront lots being washed into the Sound or even actual structural damage to buildings. Although most of the shoreline along the Sound is undeveloped marshlands, erosion potential is an important factor to consider in developing storm hazard mitigation policies.

e. Summary: Storm Hazard Mitigation Considerations

In summary, all four of the major damaging forces of a hurricane, i.e., high winds, flooding, wave action, and shoreline erosion could have a potential impact upon Hyde County in the event of a major storm. The degree of susceptibility to losses and/or damages was generally alluded to in the previous discussions. However, Table 19, below, provides a better projection of the percent of the County's building structures (residential and commercial, etc.), subject to the potentially devastating effects of a major storm:

Table 20: *Percent of Structures Subject to Storm Damage Factors, Hyde County

Storm Impact	Percent Structures Possibly Affected	1985 Tax Value (Millions)
1. High winds	100%	195.0
2. Flooding	100%	195.0
3. Wave Action	0%	0.0
4. Shoreline Erosion	0%	0.0

Based on preliminary projections derived from examination of Existing Land Use Map. Map prepared by Talbert, Cox & Associates. Tax value provided by County Finance Office.

The information in the Table above is preliminary and is not intended to convey the impression that every single structure possibly affected by damaging factors would be affected, only that the potential is there. Knowing that the potential is there forms the basis for setting forth storm hazard mitigation policies, keeping in mind that "mitigate" means actions which may reduce the probability of disaster, or minimize the damage caused by a disaster (McElyea, Brower, & Godschalk, p. iii).

f. Policy Statements: Storm Hazard Mitigation

In order to minimize the damage potentially caused by the effects of a hurricane or other major storm, Hyde County proposes the following policies.

1. High Winds

Hyde County supports enforcement of the N. C. State Building Code, particularly requirements of construction standards to meet wind-resistive factors, i.e., "design wind velocity". The County will also support provisions in the State Building Code requiring tie-downs for mobile homes, which help resist wind damage.

2. Flooding

Hyde County is supportive of the hazard mitigation elements of the National Flood Insurance Program. Currently, Hyde County is pursuing participation in the regular phase of the insurance program. Hyde County also supports continued enforcement of the CAMA and 404 Wetlands development permit processes in areas potentially susceptible to flooding.

3. Wave Action and Shoreline Erosion

Hyde County is supportive of the CAMA development permit process for estuarine shoreline areas and the requisite development standards which encourage both shoreline stabilization and facilitation of proper drainage.

g. Implementation: Storm Hazard Mitigation

1. Hyde County will continue to support the County-wide building inspection program, with the services of a building inspector, enforcing provisions of the N. C. State Building Code for new construction. These provisions will include designing for wind resistance and mobile home tie-downs for newly placed mobile homes.

2. Hyde County will adopt the Flood Damage Prevention Ordinance for the Regular Phase of the National Flood Insurance Program, in FY 86-87, as of the effective date of the finalized Flood Insurance Rate Maps. This ordinance which will require basic floodproofing for all new construction, including all first floor elevations being at or above the base flood elevations, will be enforced as part of the County's building inspection program. The base flood elevations, as shown on the flood insurance maps, are the elevations of the 100-year flood.

3. The County will continue to support enforcement of State and Federal programs which aid in mitigation of hurricane hazards, including CAMA and the U. S. Army Corps of Engineers 404 permit process.

4. The County also plans to locate its new water plant facilities in the Ponzer area, outside of the 100-year flood zone area, in an area designated as "Zone C."

h. Other Mitigation Policy Areas

According to the CAMA Planning Guidelines, policy statements should also address the following three areas:

(1) Means of dealing with structures and uses which do not conform to the hazard mitigation policies.

(2) Means of encouraging hotels, restaurants, and similar large commercial structures to locate outside of erosion-prome areas.

(3) Policies which deal with the acquisition of parcels located in hazard areas or rendered unbuildable, for the purpose of public access.

All existing structures which do not conform to the County's mitigation policies can only be subject to the existing regulations. No additional requirements will be imposed. The latter two policy areas, above, cannot be effectively addressed by Hyde County, since they appear to be more applicable to oceanfront areas. The oceanfront area on Ocracoke Island is under the jurisdiction of the U.S. Park Service.

2. Post-Disaster Reconstruction Plan

Hyde County recognizes that in the event of a major storm, it will be very important to have, at a minimum, a general recovery and reconstruction plan. Although Hyde County has a formally adopted Hurricane Evacuation Plan (June 1977, revised July 1984), there are many elements needed to address what to do after the storm. This section of the Land Use Plan Update will address this issue.

a. Appointment of a "Post Disaster Recovery Team"

Prior to a major storm having landfall in the vicinity of Hyde County, when evacuation orders are issued, the Chairman of the County Board of Commissioners, who is the head of the Control Group as stated in the Evacuation Plan, shall appoint a "Post-Disaster Recovery Team". This team shall consist of all of the members of the Evacuation Plan Support Group also identified in the Hyde County Evacuation Plan, and others whom the Chairman may appoint. The total team may consist of the following:

1. County Manager
2. County Finance Officer
3. Emergency Preparedness Coordinator (Team Leader)
4. County Sheriff
5. County Building Inspector
6. Director of Social Services
7. County Sanitarian
8. Superintendent of Schools
9. Chief, Swan Quarter Volunteer Fire Department
10. Tax Supervisor

The Emergency Preparedness Coordinator will serve as the Team Leader and will be responsible to the Chairman of the Board of Commissioners. The base of operations will be the Emergency Operations Center (EOC) identified in the County Evacuation Plan (the County Courthouse in Swan Quarter). The Disaster Recovery Team will be responsible for the following:

1. Establishing an overall restoration schedule.

2. Setting restoration priorities.

3. Determining requirements for outside assistance and requesting such assistance when beyond local capabilities.

4. Keeping the appropriate County and State officials informed.

5. Keeping the public informed.

6. Assembling and maintaining records of actions taken and expenditures and obligations incurred.

7. Recommending to the Chairman of the Board of Commissioners to proclaim a local "state of emergency" if warranted.

8. Commencing and coordinating cleanup, debris removal and utility restoration which would include coordination of restoration activities undertaken by private utility companies.

9. Coordinating repair and restoration of essential public facilities and services in accordance with determined priorities.

10. Assisting private businesses and individual property owners in obtaining information on the various types of assistance that might be available to them from federal and state agencies.

b. Immediate Clean-Up and Debris Removal

Coordination of this activity will be the responsibility of the Disaster Recovery Team.

c. Long Term Recovery/Restoration

The Disaster Recovery Team will be responsible for overseeing the orderly implementation of the reconstruction process after a major storm or hurricane in accord with the County's policies.

1. Damage Assessments

Damage assessments will be necessary to determine as quickly as possible a realistic estimate of the amount of damage caused by a hurricane or major storm. Information such as the number of structures damaged, the magnitude of damage, and the estimated total dollar loss will need to be developed.

As soon as practical after the storm, i.e., clearance of major highways and paved roads in the County, the Disaster Recovery Team Leader shall set up a Damage Assessment Committee (DAC), consisting of the Building Inspector, Emergency Preparedness Coordinator, a local realtor or building contractor, and appropriate personnel from the Hyde County tax department. The DAC will immediately begin to make "windshield" surveys of damaged structures to initially assess damages and provide a preliminary dollar value of repairs or replacement. The following general criteria shall be utilized:

a. Destroyed (repairs would cost more than 80 percent of value).

b. Major (repairs would cost more than 30 percent of the value).

c. Minor (repairs would cost less than 30 percent of the value, but the structure is currently uninhabitable).

d. Habitable (some minor damage, with repairs less than 15 percent of the value).

Each damage assessment will be documented according to County tax records. Also, County tax maps (including aerial photographs) and/or records may be used for identification purposes. The total estimated dollar value of damages will be summarized and reported to the Disaster Recovery Team Leader.

2. Reconstruction Development Standards

Generally, reconstruction shall be held at least to the same standards as before the storm. However, developed structures which were destroyed and which did not conform to the County's storm hazard mitigation policies, i.e., with basic measures to reduce damage by high winds, flooding, wave action or erosion, must be redeveloped according to those policies. In the event the loss of property containing shoreline structures is substantial enough to prohibit the reissuing of a septic tank permit, the County will support the decision of the Sanitarian. In some instances, this may mean relocation of construction, or no reconstruction at all. To the extent feasible, when relocation is required, such relocation will be placed in less hazardous areas. Building permits to restore destroyed or damaged structures, which were built in conformance with the State Building Code and County storm hazard mitigation policies, shall be issued automatically, all structures suffering major damage will be repaired according to the State Building Code. All structures suffering minor damage, regardless of location, will be allowed to be rebuilt to the original condition prior to the storm.

3. Development Moratoria

Hyde County, because of a lack of densely populated areas, does not foresee the need to prohibit any and all development for any specified period of time. Residents shall be allowed to proceed with redevelopment and reconstruction as soon as practical and in accord with the various levels of State and federal disaster relief provided to them. Damage to the properties in some areas of the County may indicate a

higher susceptibility to storm damage than other areas. If the County determines that some areas are more vulnerable to storm damage than others, then the Board of Commissioners may declare a development moratorium, prohibiting all redevelopment for a specified period of time. This will allow the County time to assess previous damage mitigation policies for their effectiveness and possible modification.

4. Repair/Reconstruction Schedule

The following schedule of activities and time frame are proposed with the realistic idea that many factors of a hurricane may render the Schedule infeasible.

Activity	Time Frame
a) Complete and Report Damage Assessments	Two weeks after storm
b) Begin Repairs to Critical Utilities and Facilities	As soon as possible after storm
c) Permitting of Reconstruction activities for all damaged structures ("minor" to pre-storm original status, "major" to State building code and hazard mitigation standards)	Two weeks after damage assessments are complete

5. Agency Responsible for Implementation

The Chairman of the Hyde County Board of Commissioners, as chief elected official of the County, will serve as overall Emergency Coordinator. The Board Chairman will delegate the oversight of the reconstruction and recovery effort and implementation of the plan.

6. Repair and Replacement of Public Utilities

If water lines or any component of the water system are damaged and it is determined that the facilities can be relocated to a less hazardous location, then they will be relocated during reconstruction.

3. Hurricane Evacuation Plan

As stated previously, Hyde County has an official "Hurricane Evacuation Plan," covering both the mainland and Ocracoke. The following outline summarizes this plan.

A. Early alerting of officials and concerned agencies in the entire County.

B. Overall direction and decision-making by a Control Group.

C. Increased readiness actions taken progressively as the hurricane approaches and as the threat of injury and damage increases.

D. Evacuation of residents and visitors on beaches and in threatened low-lying areas upon decision of the Control Group.

E. Primary evacuation of Ocracoke will be in coordination with Dare County and evacuees will move through Dare County.

F. Persons leaving Ocracoke on the last run of the Cedar Island and Swan Quarter ferries should continue inland and not require local shelter. These ferries will not be a major factor in evacuation due to time required for a trip.

G. Movement of evacuees to designated and operating public shelters, or out of Hyde County and the threatened area.

H. Mass care for evacuees in predesignated shelters in accordance with agreements.

I. Reentry of evacuees to evacuated areas when authorized by the Control Group and when the hurricane threat has passed or damage assessments indicate that reentry is feasible.

J. Local governments request State and/or Federal assistance, as necessary, before or after a hurricane.

4. Re-Entry

Factors regarding re-entry are also included in the County Hurricane Evacuation Plan. Because of the possibility of fallen power lines, or telephone lines, re-entry will be closely coordinated with utility companies, such as VEPCO. Specifically, the Hurricane Plan states:

A. Upon cancellation of all hurricane warnings and watches which include Hyde County and when no damage has been experienced, the Control Group will authorize reentry to all evacuated areas.

B. When hurricane damages have resulted, reentry to evacuated areas will be based upon damage assessments and any rescue or other relief operations in progress. Reentry will be authorized by the Control Group to specific evacuated areas and under conditions specified.

The Plan was also reviewed by the North Carolina Division of Emergency Management, without any substantive comments.

PART I
SECTION III
LAND CLASSIFICATION SYSTEM

SECTION 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 particular locality. 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. 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 in each county. The designation of land classes allows the local government to illustrate their policy statements as to where to what density they want growth to occur, and where they want to conserve natural and cultural resources by guiding growth.: (7B.0204) (a)"

The five land classifications and land classification maps are therefore intended to serve as a visual reflection of the policies previously stated in Section II. Ideally, the map which depicts these classifications should be as flexible as the policies that guide them. (See the attached Land Classification Map, Map 8).

The five land classifications in Hyde County are identified and defined below.

A. DEVELOPED

The developed class of land use provides for continued intensive development and redevelopment of existing cities. 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 including at least public water, sewer, recreational facilities, police and fire protection. Areas which exceed the minimum density but which do not have public sewer service may best be divided into a separate class to indicate that although they have a developed character, they will need sewers in the future.

Within Hyde County, the developed areas complying with the above definition are Swan Quarter, Engelhard, Fairfield, and Ocracoke Village. Most of the population growth projected by 1995 will occur in and around these areas. Adequate water supplies are currently provided to these areas and will continue to be provided throughout the planning period. Septic tanks are the major source of waste water disposal in these areas.

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 urban utilities and services (whether from public or private sources). 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:

1. land currently having urban services, and
2. lands necessary to accommodate the urban population and economic growth anticipated within the planning jurisdiction over the next five to ten years.
3. 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.

Lands classified for the latter reason must:

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

The "transition" class should not include:

1. 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;
2. lands where urban development might result in major or irreversible damage to important environmental, scientific, or scenic values, or;
3. land where urban development might result in damage to natural systems or processes of more than local concern; and
4. lands where development will result in undue risk to life or property from natural hazards or existing land uses.

The lands in Hyde County that will be classified "transitional" are those areas adjacent to the identified developed clusters of Swan Quarter, Engelhard, Fairfield and Ocracoke Village, and in the White Plains Marina area. In the future, land areas near the new airport at Engelhard may also be classified as transitional, if it is determined that these areas are suitable for more intensive development (industrial parks, for example).

The relationship between the "developed and transitional" classification is important in predominantly rural counties like

Hyde. The first class is meant to define the already developed areas and/or those areas where public investment decisions will be required to provide the necessary urban services. These become important areas to closely monitor. The Coastal Resources Commission has further clarified this relationship as described below.

The Developed and Transition classes should be the only lands under active consideration by the County or municipality for intensive urban development requiring urban services. The area within these classes is where detailed local land use and public investment planning will occur. State and federal expenditures on projects associated with urban development (water, sewer, urban street systems, etc.) will be guided to these areas. Large amounts of vacant land suitable for urban development within the Developed class should be taken into account when calculating the amount of additional lands needed to accommodate projected growth.

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.

This is an important classification in Hyde County, since nearly all the rest of the County's population not residing in the areas classified previously as either "developed" or "transitional," live in such clusters. There are no incorporated municipalities in Hyde County, but many small communities are along the primary roads in the County. Areas classified as "Community" include: Ponzer, Scranton, Sladesville, Rose Bay, Lake Comfort, New Holland, Nebraska, Gull Rock, Middletown, and the area along S. R. 1304, northwest of Fairfield.

D. RURAL

The purpose of the rural class is to provide for agriculture, forestry, mineral extraction, and various other low intensity uses on large sites, including low density dispersed residential uses where urban services are not and will not be required. Any development in this class should be compatible with resource production and should not significantly impair or permanently alter natural resources. Areas meeting the intent of this classification are appropriate for or presently used for agriculture, forestry, mineral extraction, and similar allied uses. Very low density dispersed, single-family residential uses are also appropriate within rural areas where lot sizes are large and where densities do not require the provision of urban-type services. Private septic tanks and wells are the primary on-site services available to support residential development, but fire, rescue

squad, and sheriff protection may also be available. Population densities may be very low, possibly less than one person per acre.

The majority of land within Hyde County falls within the "Rural" classification. This classification is very important in Chowan County because of the economic importance of agriculture and forestry activities.

E. CONSERVATION

The "conservation" class provides for effective long-term management of significant limited or irreplaceable areas. This management may be needed because of its natural, cultural, recreational, productive or scenic values. This class should be limited to lands that contain: major wetlands, essentially undeveloped shorelands that are unique, fragile, or hazardous for development, wildlife management areas or areas that have a high probability for providing necessary habitat conditions; publicly owned water supply watersheds and aquifers. However, there may be high ground areas within the conservation class that may be suitable for development. Each application for development shall be reviewed on a case by case basis.

In Hyde County, the environmentally sensitive areas identified as Areas of Environmental Concern (AECs), i.e., Coastal Marshlands (which includes a rather extensive area along the immediate shorelines of the Long Shoal River and the Pamlico Sound in the northeast and east, around to the Pungo River and some of its tributaries in the western part of the County's mainland), Estuarine Waters, Estuarine Shorelines, and Public Trust Areas, are classified as "conservation." Also included in this classification are the State and Federally owned and managed wildlife refuge areas, gamelands, and the Cape Hatteras National Seashore Recreation Area.

SECTION IV: RELATIONSHIP OF POLICIES AND LAND CLASSIFICATIONS

The Coastal Resources Commission requires each land use plan to relate the policies section to the land classification map and to provide some indication as to which land uses are appropriate in each class.

A. DEVELOPED AND TRANSITION CLASSES

As mentioned in the discussion of existing conditions, most of the County's growth will occur in and around the developed communities of Swan Quarter, Engelhard, Fairfield, and Ocracoke Village where basic services such as water and community support services are available. The developed and transition classes were specifically designed to acommodate these more intensively developed areas and land uses, including residential, commercial, industrial parks and open space, community facilities and transportation. Hazardous or offensive uses such as land application systems, power plants, airports and bulk chemical storage facilities will be located away from these classes.

B. COMMUNITY CLASS

Intensive development will not be encouraged in this class due to the lack of urban services and/or physical limitations. The general range of acceptable uses are limited to residences, isolated general and convenience stores and churches, and other public facilities. These areas are usually found at crossroads within the "rural" classification. Some of these areas are not currently served by the County and because of the low-density development, do not require centralized sewage collection and disposal.

C. RURAL CLASS

The Rural Class is the broadest of the land classes and is designated to provide for agriculture, forest management, mineral extraction and other low intensity uses. Residences may be located within the Rural Class where urban services are not required and where natural resources will not be permanently impaired. Some large developments may be encouraged in the Rural Class when there is an absence of otherwise suitable land within the Development and Transition Classes and/or when there is a possible threat to the urban populace. Such large developments include airports, power plants, and hazardous materials storage. The County also reserves the privilege of allowing specific types of industrial development in the rural areas if in the opinion of the government there will be no harmful effects from such a location.

D. CONSERVATION CLASS

The Conservation Class is designated to provide for effective long-term management of significant limited or irreplaceable areas which include coastal marshlands, undeveloped shorelines that are unique, fragile, or hazardous for development, wildlife habitat areas, publicly owned gamelands and parks and undeveloped forest lands and cultural and historical sites. Development in the estuarine system should be restricted to such uses as piers, bulkheads, marinas, and other water-dependent uses. Policy Statements under Resource Protection, and Resource Production and Management in Section II, Part I, of this plan address the County's intentions under this class.

PART II OCRACOKE

SECTION I

ANALYSIS OF EXISTING CONDITIONS AND ESTIMATED DEMAND

PREFACE

HYDE COUNTY (OCRACOKE)
LAND USE PLAN UPDATE, 1986
Analysis of 1981 Policy Statements/Implementation Actions

The CAMA Land Use Plan for coastal communities is essentially a policy document aimed at guiding localities toward sound growth management. Because circumstances, conditions, and issues change over time, the Coastal Resources Commission, under State law, requires the local land use plans to be updated every five years in order to "take a second look" at old policies for their relevance as well as examine newly emerging trends and concerns. The Commission is also requiring in all 1986 updates an assessment of the previous policy statements and implementation steps taken to effectuate them. This summary analysis of the 1981 policies is being presented here as a "Preface" to the 1986 Plan Update of Hyde County's Plan for Ocracoke.

Policy Area	Policy/Implementation	Status/Relevancy Actions
A. Resource Protection	1. If water demands exceed the system's current capacity, the Ocracoke Sanitary District should seek to increase its pumping capacity and obtain another reverse osmosis desalinizing machine.	1. Seasonal water demands, combined with chloride intrusion, has led to a demand for a fourth reverse osmosis machine, as well as rehabilitation of the other units. This should be completed by late 1986.
	2. Alternative means of solid waste disposal, such as the development of high-pressure incinerators on the island, need to be explored.	2. This alternative has not been explored since the 1981 Plan Update.
B. Resource Production and Management	1. Seek to protect and maintain primary nursery areas (Ocracoke's Estuarine Waters) from the negative effects of development, particularly effluent pollutions, by strict enforcement of the septic tank placement regulations, and the County Building Permit Program.	B. Resource Production and Management 1. Implemented. However, pollution of Silver Lake is still a matter of serious concern.

C. Economic and Community Development

1. As development continues in response to the Village's appeal as a tourist attraction, continued expansion of incompatible land uses will prove to be quite limited and undesirable. Therefore, the development and enforcement of local land use controls will be studied for feasible application in Ocracoke. The County Commissioners, through the County Manager's Office, will, in Fiscal Year 1982, seek funding from the N.C. Office of Coastal Management to conduct a preliminary zoning study for Ocracoke Village.

2. In Fiscal Year 1984-1985, funding assistance will be sought to help develop a central waste water collection and disposal system on the island, with the aim of reducing the burden on user charges.

3. Hyde County recognizes this importance and would like to see those attractions and services which help make tourism effective, enhanced and protected. This concern is particularly true regarding the continued operation of a viable and dependable ferry service. It is the County's policy, therefore, to continue to support and promote tourism as a vital economic activity on Ocracoke.

C. Economic and Community Development

1. Implemented. However, the preliminary zoning ordinance was defeated by a referendum in 1982. Nevertheless, the County and the villagers saw the need for land use controls and in April 1986, the first "Development Ordinance" for Ocracoke was adopted by the Hyde County Board of Commissioners. The ordinance regulates density of all new development, contains parking requirements, and calls for the establishment of a Planning Board.

2. Discussions have been held between the Sanitary District and state officials. However, preliminary indications are that user charges would be "excessive" if such a system were developed.

3. This issue is still an ongoing concern.

D.	Continuing Public Participation	Status/Relevancy Actions
	1. The County Commissioners will continue its practice of conducting at least two of its regular monthly meetings during the year in Ocracoke Village.	1. Implemented. Also, several "public information forums, organized by the County Commissioners from Ocracoke, which involves inviting officials or representatives from various state and federal agencies to an open meeting with the citizens of Ocracoke.

HYDE COUNTY, NORTH CAROLINA
LAND USE PLAN: 1986 UPDATE

TABLE OF CONTENTS

PART II: Ocracoke	PAGE
SECTION I: Analysis of Existing Conditions	
A. Establishment of Information Base	1
B. Present Conditions	2
1. Population	2
2. Seasonal Population	3
3. Economy	5
4. Housing	7
5. Existing Land Use Analysis	7
a. Current Conditions: General Patterns	7
b. Compatibility Problems	8
c. Major Problems from Unplanned Development	8
d. Areas Likely to Experience Major Land Use Changes	9
e. Areas of Environmental Concern	10
6. Current Plans, Policies and Regulations	11
C. Contraints: Land Suitability	15
1. Physical Limitations	15
2. Fragile Areas	16
3. Areas with Resource Potential	16
D. Constraints: Capacity of Community Facilities	17
1. Existing Water Service Areas	17
2. Sewer Service Area	17
3. Schools	18
4. Transportation	18
E. Estimated Demand	
1. Population and Economy	19
2. Future Land Need	21
3. Community Facilities Need	21
SECTION II: POLICY STATEMENTS	22
A. Resource Protection	22
1. Natural Resource Areas	22
2. Cultural Resource Areas	22
3. Constraints to Development: Physical Limitations	23
4. Constraints to Development: Capacity of Community Facilities	23
5. Hurricane and Flood Evacuation Needs and Plan	25
B. Resource Production and Management	25
1. Commercial and Recreational Fisheries	25
2. Off-Road Vehicles	26
C. Economic and Community Development	26
1. Local Commitment to Service Provisions	27
2. Desired Urban Growth Patterns	28
3. Redevelopment of Developed Areas	29
4. Commitment to State and Federal Programs	30

D. Continuing Public Participation Policies 30
E. Storm Hazard Mitigation, Post-Disaster Recovery, and Evacuation Plans 31

SECTION III: Land Classification System 32
A. Developed 32
B. Transition 32
C. Conservation 33

SECTION IV: Relationship of Policies and Land Classifications 34
A. Developed and Transition Classes 34
B. Conservation Class 34

HYDE COUNTY, NORTH CAROLINA

LAND USE PLAN: 1986 UPDATE
PART II: OCRACOKE

List of Tables and Maps

TABLE NUMBERS		PAGE
1.	Ocracoke Population	2
2.	Ocracoke Island Ferry Passengers	3
3.	Water Demand for Ocracoke: 1980 and 1985	4
4.	Commercial Establishments in Ocracoke	6
5.	Ocracoke School Enrollment, 1980-81 thorugh 1984-85	18
6.	Average Annual Daily Traffic: Ferry Service to Ocracoke, Calendar Years 1981 and 1984	19

MAPS

9.	Existing Land Use Map	(attached)
10.	Land Classification Map	(attached)

PART II
SECTION I
DATA COLLECTION AND ANALYSIS

A. Establishment of Information Base

Although it is a political subdivision of Hyde County, Ocracoke Village is located approximately 23 miles across the Pamlico Sound near the southern end of an 18-mile long barrier island. All of the island, except for the 775 acres which comprise the Village, is part of the Cape Hatteras National Seashore Recreation Area and forms a part of North Carolina's Outer Banks. The Village is located on the southwestern side of the island, extending out into the Pamlico Sound, and situated around Silver Lake. Silver Lake is one of the finest natural harbors for small vessels along the Atlantic Coast.

Ocracoke Village remained relatively removed from the rest of the world until the 1950's, with the advent of State-supported ferries. At first hundreds, then thousands, of tourists began visiting the Village each year because of its unique historic and aesthetic appeal. The growth in tourism, spurred primarily because of the quiet, fishing village appeal, threatened the retention of that appeal. The consideration of land use management policies by Hyde County has been recognized as essential.

In developing the analysis of conditions on Ocracoke, various data sources were tapped. A number of primary sources were useful including: personal interviews with some of the Village's citizens; public meetings for additional local input; local land use surveys; and interviews with local and State government officials. Discussions with representatives of the Division of Coastal Management, the N. C. Division of Marine Fisheries, and the Shellfish Sanitation Unit of the State Department of Human Resources were quite helpful in identifying land use constraints. Major secondary sources included: the Hyde County Land Use Plan, CAMA, 1981; and Ocracoke Village, Land Use - Development Potential, East Carolina University, Regional Development Institute, 1972.

Major conclusions of the data analysis are:

-- The population, both permanent and seasonal, will continue to increase moderately, along with more vacation cottages and second homes, in spite of constraints;

-- Unsuitable soils for septic tanks, and the lack of central sewage facilities pose serious development constraints;

-- The long-time absence of land use controls fostered the growth of incompatible land uses; and

-- Local citizens are concerned about balancing the economic base (tourism) with retention of the Village's character.

B. Ocracoke Present Conditions

1. Population

Although it is under the political jurisdiction of Hyde County, Ocracoke Village represents a unique entity as far as land use development and policy planning is concerned. Ocracoke Island's population is concentrated in the Village of Ocracoke. The Village is not incorporated so annual estimates are not made; therefore, population figures for 1985 discussed herein are estimated from the best available data.

The 1980 Census of Population final report showed Ocracoke's population to be 658 for 1980, an increase of 117 new permanent residents, or 21.6 percent over the 1970 U.S. Census figure, making the Village the fastest growing area in the County. By comparison, the County's overall rate of population growth during the 1970-80 period was only 5.4 percent. Ocracoke's rate of growth was four times faster than the County's total. The growth rate, approximately 2% per year, was projected in the 1981 plan to continue. However, based on a population survey conducted by the Ocracoke School in January-February 1986, the year-round population actually decreased slightly between 1980-1986. The 1986 count of Village residents by the school projected a total of 651 persons--seven fewer than shown in the 1980 Census. This figure, 651, will be considered the "base" population for this 1986 Plan Update for Ocracoke. In spite of the minor population decline from 1980-86, it is unlikely that Ocracoke's population will continue to decline throughout the next 10 years. For planning purposes, a moderate growth rate of 1% per year will be assumed.

At the assumed very moderate growth rate of 1% per year, projections for 1990 and 1995 can be made as follows:

Table 1: Ocracoke Population

Year	Population
1970	541
1980	658
1986	651
*1990	677
*1995	705

* estimated

Source: U.S. Census, 1970, 1980; Projections by Talbert, Cox and Associates
1986 figure furnished by data collected by the Ocracoke School

The 1995 permanent population in the Village could reach 705 persons. This rather moderate population increase, however, along with continued development of second homes and commercial establishments, could have major impacts on Ocracoke. This is true, both from the standpoint of affecting its historically quiet, Village character and exerting new demands on the provision of basic services, mainly water and sewer.

2. Seasonal Population

The seasonal population flows have always been significant in Ocracoke. The number of people visiting Ocracoke by means of the ferry fluctuated from 1981 through 1985. Notice Table 2, below, which shows July-June data for the reporting years.

Table 2: Ocracoke Island Ferry Passengers

Ferry	1981-82	1982-83	1983-84	1984-85	% Change 1981-85
Hatteras Inlet	542,536	535,806	561,648	582,827	+7.4
Cedar Island-Ocracoke	155,094	155,191	152,382	155,875	+0.5
Swan Quarter-Ocracoke	32,013	37,057	34,380	34,170	+6.7
Total Passengers	729,643	728,054	748,410	772,872	+6.0

Although the passenger levels fluctuated, all three services showed moderate net increases from 1981 to 1985, with the Hatteras Inlet ferry showing the strongest net gain (7.4%). Peak usage occurs from May through August, which is usually the height of the tourist season. Although it has the lowest number of passengers annually, along with the two other ferries, i.e., Cedar Island and Hatteras Inlet, the Swan Quarter ferry brings thousands of transient visitors and summer dwellers to Ocracoke each year. Since the island is geographically isolated, the ferry services are very important to Ocracoke.

In 1985, when the approximate 308 cottages and second homes as well as the 240 motel rooms were filled, it is estimated that nearly 3,500 persons were inhabiting the island at any given time. Transient "day-visitors" and campers using the 137 U. S. Park Service campsites account for hundreds more. Such an influx of people obviously has a substantial impact upon the Village. One of the most important impacts is the demand for water. During the summer months of 1985, the monthly demand for water tripled from 1.4 million gallons in January, to 4.2 million gallons in August (peak demand). Compared to a peak demand of 3.62 million gallons in August of 1980, demand for water has increased by 14% (or 580,000 gallons for a "peak" month) in the past five years. The U. S. Park Service campsites, which are supplied by the Village system, also have bathrooms and showers, adding to the water demand.

This increase in demand has caused some problems with the Village water system's ability to supply all of the water needs at peak periods. In 1985, a moratorium was declared, not allowing any additional water hook-ups until a proposed expansion of the system was complete. In June, 1977, the Ocracoke Sanitary District Water Association began operating the first centralized water system on the island. The system consists of two 600 feet deep wells, which tap a Castle Hayne aquifer. Because of salt intrusion along with other materials, the water must be desalinized and only about 45 percent of the total water pumped is yielded as usable. Desalinization is accomplished through the Reverse Osmosis (R.O.) process, which currently involves three R.O. machines. These machines produce up to 150,000 gallons of usable water per day (gpd). The seasonal peak demand in August of 1985, averaged about 136,000 gpd, or about 90 percent of capacity. However, the closer the output goes to capacity, water quality declines. Proposed improvements, including a fourth R.O. machine, will increase the water capacity to a range of from 200,000 to 210,000 gpd, after desalinization. Note that in January 1985, usage for permanent residents was only 44,387 gpd, or about 27 percent of current capacity. Note Table 3, below.

Table 3: Water Demand for Ocracoke: 1980 and 1985

	Total Capacity	PEAK (August)	% Capacity	OFF-PEAK (January)	% Capacity
1980	162,000 gpd	121,500 gpd	75%	42,250 gpd	26%
1985	150,000 gpd	136,000 gpd	90%	44,387 gpd	30%

Source: Ocracoke Sanitary District Water Association

As shown in the table above, the off-peak percentage of capacity has remained roughly the same for 1985 as for 1980. However, the peak percentage of capacity has increased by almost 10% in the past five years. Addition of a fourth reverse osmosis machine, plus rehabilitating the existing three machines, would meet this demand. If this peak demand continues to increase, then more water capacity will be required in 1990.

At a seasonal peak population of 3,500, daily per capita water use was about 39 gpd. This figure is somewhat less than the average consumption rate for the permanent population, i.e., approximately 651 persons and 68 gpd.

There is no central sewage collection and disposal system on Ocracoke Island. Wastewater is disposed of through individual on-site systems, i.e., septic tanks. The use of septic tanks has serious limitations on Ocracoke because of the general soil conditions. The limited capacity of the soils to absorb effluent is also taxed heavily during the seasonal population peaks.

3. Economy

Another major impact of the seasonal population is the effect upon the island's economy. Ocracoke's economy is mostly a seasonal one. There are no manufacturing industries and no agricultural activities on the island. The economic base is dependent largely upon the tourist income. Commercial fishing plays a smaller role in the economy, serving mostly as a supplementary source of income. But, by and large, it is revenue generated by the motels, gift and specialty shops, rental cottages, and restaurants that is the backbone of Ocracoke's economy. Ocracoke contributes perhaps more than a fair share in the total annual retail sales for Hyde County, although no total figures are available for the Village, as it is unincorporated and figures are not recorded for unincorporated towns. Table 23, page 6, shows a list of the businesses located on Ocracoke. It is significant to note that growth in the number of businesses has increased rather dramatically in the past four years, with 3 new eating establishments, 3 new hotels and motels, and 8 new specialty shops. The new hotels have added 88 additional rooms, and the restaurants have added 135 additional seats.

Table 4: Commercial Establishments in Ocracoke

Eating Establishments

The Back Porch Restaurant and Bake Shop
Captain Ben's Restaurant
Island Inn Dining Room
Pelican Restaurant
Pony Island Restaurant
Maria's Restaurant
Trolley Stop One
Howard's Pub

Stores

The Community Store
Lakeside Tackle and Beach Rentals
Ocracoke Hardware, Inc.
Ocracoke Variety Store
Tradewinds
Beachcomber Convenience Store
South Point Fish and Crab

Specialty Shops

Rag Picker
The Gathering Place
Harborside Gift Shop
Jo Ko Art Gallery at the Gathering Place
Ocracoke Artists' Co-op
Ocracoke Shell Shop and Museum
The Merchant Mariner
The Old Post Office Shop
Pamlico Gift Shop
Village Craftsmen
Our Creations

Hotels and Motels

The Anchorage Inn
The Berkley Center Country Inn
Blackbeard's Lodge
Bluff Shoal Motel
The Boyette House
Edwards Motel
Harborside Motel
Island Inn
Lakeside Cottage Court
Pony Island Motel
Sand Dollar Motel
Silver Lake Motel
The Yaupon Tree

Tourist Homes

Beach House B&B
Harborview House
Ocracoke Guest House
Oscar's House
Crews Inn

Other Businesses

East Carolina Bank
N. C. State Highway Office (Ferry)
N. C. State Highway Office (Reservations)
Ocracoke Water Association
Ocracoke Crab Company
Tideland Electric Membership

Source: "Directory of Ocracoke Island," Ocracoke Civic Club

4. Housing

The 1980 Census Advance Reports showed that the number of housing units increased from 305 in 1970 to 471 in 1980. Although there is no building permit data for 1981, records have been kept since 1982. From 1982 through April, 1986, residential permits were issued for 91 new dwelling units, including 14 mobile home units. Even excluding 1981 units, along with the 471 units reported in the 1980 Census, there currently are 562 dwellings in Ocracoke. This growth reflects the increasing attractiveness of Ocracoke as a summer home and cottage location. If the average household size for Ocracoke, according to the 1980 Census, is still 1.78 persons, then its 651 citizens occupy only 366. i.e., 65% of the total 562 units. The rest, i.e., 197 units, would be either rental cottages or second homes.

On the surface, it appears that the total supply of suitable dwelling units is adequate on the island. However, as more of the island's young people remain in the Village after completing high school to work in the tourist industry, there will gradually be a need for more affordable housing. The pressures for second home and tourist development have caused land prices to increase rapidly in recent years. The prices are such that young, native Villagers who remain to work in tourism or fishing cannot afford to purchase lots for homesites on land which their grandparents may have sold. While there is currently not an acute housing shortage, as land values increase, many native Villagers may be priced out of their own housing market. In addition, of the other townships in Hyde County, Ocracoke has the highest median value of its housing units, $43,200, with Swan Quarter next in line having a median value of $24,900. Consistent with that trend, Ocracokers also pay higher rent than renters of the other townships. Source: 1980 Census of Housing, General Housing Characteristics.

5. Existing Land Use Analysis

a. Current Conditions

Ocracoke Island is about 18 miles long and two to three miles wide in some areas, and contains a total of 5,535 acres. Of the total acreage, the Village of Ocracoke takes up only 775 acres (1.21 square miles), which is only 14.0 percent of the total. The remaining 4,760 acres is all under government ownership and control as part of the Cape Hatteras National Seashore and Recreation Area. Since the County cannot exercise any control over the federally owned land, only the 775 acres composing Ocracoke Village can be considered in relation to the formulation of land use policy by Hyde County.

Since the 1981 plan update, the overall land development patterns have remained the same. The most significant changes

have been in the number of second homes, motels, and cottages developed. The land use patterns in the Village of Ocracoke lack definite uniformity. Residential areas are adjacent to commercial areas in an inconsistent pattern. This is largely due to the fact that Hyde County had never adopted any locational land use control devices such as zoning or subdivision ordinances. Such unregulated development, if continued, could have led to significant and perhaps detrimental problems related to land use incompatibility, because these problems generally necessitate public investment before they can be corrected.

In 1981, a zoning referendum was put before the Village residents, but was opposed 424 to 238 (voters included absentee property owners). Although there were many reasons offered for the defeat of the referendum, the basic feeling was that the referendum was either too complicated and not explained clearly, or that residents thought that they would not be allowed to preserve their lifestyle, e.g., not being allowed to maintain boats, etc., in their yards. It can be assumed that although Ocracokers recognize the need for an organized pattern of development, this pattern must also be "in tune" with the character and atmosphere of the Village. However, after many months of discussion, consultation, and public hearings, in April, 1986, the Hyde County Board of Commissioners adopted a set of development controls and regulations to apply only to Ocracoke, titled the "Ocracoke Village Development Ordinance." The purpose of this ordinance is to "promote the public health, safety and general welfare by regulating the density of population; the size of yards and other open spaces; the height, size and location of buildings and other structures; to provide for an adequate transportation system; and to provide for adequate drainage, water supply, and sewage disposal." Enactment and enforcement of this ordinance will have a significant impact upon the future orderly development of the Village, especially within the constraints of existing community facilities.

b. Land Compatibility Problems

The most significant land compatibility problem on Ocracoke, as stated above, is the inconsistent land use patterns. Up until the recent adoption of the "Development Ordinance" and absence of local land use controls, commercial and residential developments occurred, in a sense, "in spite of each other", with little regard for the incompatibility.

Silver Lake, perhaps the most scenic attraction at Ocracoke, is considered by many island residents to be over-developed. The shores of the lake are currently dotted with various residential, commercial and governmental developments. Concern has been raised over possible problems of public access to the lake if intensive private development continues. The natural aesthetic beauty of the lake is thus threatened by unregulated development.

Since septic tanks are the sole means for wastewater disposal in Ocracoke, intensive development along the lakefront will lead to the seepage of effluent into its waters. Such pollution would seriously threaten the life of the lake itself. With the specter of pollution, lack of public access, and destruction of its natural beauty hanging over Silver Lake, regulation of adjacent development is a matter for serious concern. Density of development is one of the major issues addressed in the new "Development Ordinance."

c. Problems from Unplanned Development

Ocracoke Village remained in relative isolation from the rest of the world until the late 1950's. In 1957, when State-supported ferries first began operating, an almost immediate demand for tourist-related activities resulted. The limited services in Ocracoke were not able to handle the seasonal influx of people who were now "discovering" the island. Through the years, however, motels, restaurants, rental cottages, and vacation homes were developed, but at a faster pace than community facilities. The Village water system was not inititated until 1977 and there is still no central sewage system. The 1985 tourist season saw serious water supply problems develop, but, as noted, steps have been taken to address these problems. The low topography of the island combined with soils generally unsuited for septic tank installation, has led to the pumping in of sand as fill to build up developable land. In the early 1960's, developers pumped sand onto the marshes on the Sound side of the island to make room for new residential development. The residential structures which currently exist in these "made-land" areas stand in locations which were once virtually submerged by storm surges, which provided a natural storm buffer for the Villagers. These residents, like the ones in the Oyster Creek area, are particularly susceptible to storm damage (see Map 9, attached). The destruction of the Sound side marsh areas by dredge and fill, and the subsequent construction of houses are major problems caused by unplanned development.

The long-time lack of development regulations eliminated controls over design standards for streets or the provision of utilities. Thus, most of the new residential development, though consisting of large and expensive homes, is poorly designed with inadequate road and bridge access in some cases. Responsibility for maintenance of these new access roads is uncertain.

d. Areas Likely to Experience Change in Predominant Land Use

Future land development in Ocracoke, as noted earlier, will begin to be controlled by land use regulations. The overall developable acreage is not extensive, but the recent development trends are likely to continue, although the patterns will be

affected by the Development Ordinance. This means that the newer residential areas on the back side of the island, such as the ones in the Oyster Creek area, the Jackson Dunes, and Trent Woods area, will likely continue the current residential development trend (See Map 9, attached). Existing commercial uses are also likely to remain and expand along NC Highway 12 southward in the direction of the Cape Hatteras National Seashore area. There are no areas expected to experience major changes in predominant land use in Ocracoke.

e. Areas of Environmental Concern (AEC's)

In the 1981 Plan Update, specific proposed Areas of Environmental Concern were delineated for Ocracoke Island. The designated Areas of Environmental Concern (according to 15 NCAC 7-H) in Ocracoke need to be pointed out separately from the mainland, though they are the same, and have not changed in location or size of area since the 1981 Update. Below are the AEC's for Ocracoke:

1. Coastal Wetlands, which are defined as any salt marsh or other marsh subject to regular or occasional flooding by tides, including wind tides (whether or not the tidewaters reach the marshland areas through natural or artificial watercourses), provided this shall not include hurricane or tropical storm tides. Coastal Marshlands also contain certain marsh plant species. Ocracoke Island contains about 1,600 acres of regularly flooded salt marsh area. This area is located on the Pamlico Sound side of the island and most of it is under the jurisdiction of the U.S. National Park Service as part of the Cape Hatteras National Seashore.

2. Estuarine Waters are defined as "all the water of the Atlantic Ocean within the boundary of North Carolina and all the water of the bays, sounds, rivers, and tributaries thereto seaward to the dividing line between coastal fishing waters and inland fishing waters (N.C.G.S. 113A-113(b)(2)). The estuarine waters are very important for a number of reasons, mainly because they serve as the birthplace and nursery areas for many species of finfish and shellfish. Estuarine waters support the valuable commercial and sports fisheries of the coastal area which are comprised of estuarine dependent species such as menhaden, flounder, shrimp, crabs, and oysters. These species must spend all or some part of their life cycle within the estuarine waters in order to mature and reproduce. Estuarine waters in Ocracoke include Silver Lake, the Pamlico Sound, and Northern Pond. Both Hatteras Inlet and Ocracoke Inlet are also part of the estuarine system.

3. Public Trust Areas, which are partially defined as all waters of the Atlantic Ocean and the lands thereunder from the mean high water mark to the seaward limit of state jurisdiction; all natural bodies of water subject to measurable lunar

tides and lands thereunder to the mean high mark; all navigable natural bodies of water and lands thereunder to the mean high water level or mean water level, as the case may be. In other words, public trust areas are waters and lands thereunder, the use of which, benefits and belongs to the public. Public trust areas are used for both commercial and recreational purposes. In Ocracoke, Hatteras Inlet, Ocracoke Inlet, the Atlantic Ocean adjacent to the beaches, Pamlico Sound, and Silver Lake, are all major public trust AEC's. These areas support recreational uses such as swimming, boating, water skiing and sportsfishing and some commercial fishing. Most of the Public Trust Areas are under the jurisdiction of the U.S. Park Service.

4. Estuarine Shorelines are defined as non-ocean shorelines which are especially vulnerable to erosion, flooding, or other adverse effects of wind and water and are intimately connected to the estuary. This area extends from the mean high water level or normal water level along the estuaries, sounds, bays, and brackish waters for a distance of 75 feet inland. These areas are significant because development within the shorelines can influence the quality of estuarine life and is subject to the damaging process of shorefront erosion and flooding. The shorelines of the estuarine waters mentioned on Page 10, Item e. 2, and 75 feet landward are the estuarine shorelines in Ocracoke.

Areas of Environmental Concern within the Ocean Hazard Areas Category are those areas considered to be natural hazard areas along the Atlantic Ocean shoreline where, because of their special vulnerability to erosion or adverse effects of sand, wind and water, uncontrolled or incompatible development could unreasonably endanger life or property. Ocean hazard areas include beaches, frontal dunes, inlet lands, and other areas in which geologic, vegetative and soil conditions indicate a substantial possibility of excessive erosion or flood damage.

All of the Ocean Hazard Area AEC's are included within the Cape Hatteras National Seashore under the control of the U.S. Park Service. Since land development will not affect these areas, these AEC's will not be discussed in this plan.

6. Current Plans, Policies, Regulations

a. Transportation

No transportation or thoroughfare plans have been developed for Ocracoke. The Village could benefit from such a plan. As noted previously, the State-supported Swan Quarter to Ocracoke ferry began operation in 1977 providing the first such direct link from the Hyde County mainland to the island. Just over 34,000 passengers used the ferry from July, 1984, to June, 1985. The ferry, which uses the same docking facilities as that provided for

the already existing Cedar Island ferry, has had an impact upon tourism and has made mainland services more accessible to the Villagers.

As noted in the discussion of "Tourism" in Part I, Section I, Page 24, and Part II, Page 3, this section, 772,872 passengers used the ferries to and from Ocracoke between July, 1984, and June, 1985 -- a significant reduction of 144,769 passengers, or 16%, since the 1978-79 figure reported in the 1981 update. Although this declining trend appears to be significant, it seems to have had no adverse effect upon the tourism industry.

Road improvements in Ocracoke since the 1981 Plan Update include minor repairs to S.R. 1134, 1335, and widening of S.R. 1341. No major improvements are proposed for the next 5-10 years. The upgrading of NC Highway 12 to a 2-lane, all weather road was completed in early 1985. Of concern to many Village residents is the fact that N.C. 12 contains about a two-mile stretch en route to the Hatteras ferry that is located close to the ocean and, therefore, subject to occasional flooding. This is a cause of frequent repairs. Suggested alternatives for alleviating this problem are discussed in Section II, Policy Statements.

Ocracoke Island Airport underwent improvements during the summer of 1985. The runway was graded, overlayed, and widened from 60 feet to 75 feet. There are presently plans being made to install a lighting system, build a terminal structure, i.e., pilot's shack. These improvements will be accomplished as soon as funding is available.

b. Community Facilities

1. Water Distribution Plan: Since the Village water system began operating in June, 1977, several areas were subdivided for development which were not in the initial water service area. Some of these areas will receive water from the central system as it expands. During 1986, the water system will undergo substantial improvements. According to the water superintendent, the entire Village area may be accessible to the water service area by 1987.

2. Wastewater Treatment Plans: Ocracoke was not included in a 201 Facilities Plan prepared in 1978 for Hyde County. The Ocracoke Sanitary District, which operates the water system, has discussed the feasibility of a 201 study. Preliminary discussions with State officials, however, indicate that if a wastewater collection and disposal system were to be developed, the individual user costs would be excessive.

3. Solid Waste Disposal: The Ocracoke Sanitary District, which operates the water system, has a contract with

Dare County for solid waste collection and disposal for the Village. Dare County maintains a truck in the Village, which makes daily pick-ups. When the truck is filled, it is ferried across the Hatteras Inlet and disposes of the refuse at the Dare County landfill. The current Dare County landfill was opened in 1982 and is projected to have a useful life of 20 years. This system is quite adequate for the present permanent and seasonal populations. If both the permanent and seasonal populations continue to increase, according to recent moderate growth rates, during the 10-year planning period, this service should be adequate.

4. Police and Fire Protection: Police protection on Ocracoke is provided by the Hyde County Sheriff's Department. Two deputies are stationed full-time at Ocracoke, and a new jail was dedicated in October, 1985, with two cell blocks. Currently, crime is not a major problem in Ocracoke Village. Although these two deputies appear to provide adequate police service to the Village now, studies for more urban areas indicate that in order for one officer to be "on the street" 24 hours a day, a force of at least five is needed, during seasonal peaks, especially. Eventually, as more urban development occurs at Ocracoke, more police officers may be needed. Fire protection in the Village was considered adequate until the construction of three-story buildings. Although there is a modern-equipped fire house located near the center of the Village, there is a need for a ladder and another fire truck.

5. Medical and Emergency Services: Ocracoke Village has a health center which, until 1985, had a physician from the National Health Corps. Currently, the center is staffed with a part-time physician, who is partially supported by N.C. Rural Health Service and partially by clinic revenues. There is no dentist in the Village. Efforts to obtain a dentist have been made. Village residents felt that previous emergency rescue efforts were inadequate because the old vehicle was not modern enough nor adequately equipped to serve the needs of Ocracoke. However, in July, 1986, Ocracoke received a new ambulance vehicle. Currently, there are five volunteer certified EMTs in Ocracoke.

6. Electrical Power: Tideland Electric Membership Corporation supplies Ocracoke Island with electric service from the North Carolina Power and Light Company (formerly VEPCO). As of January, 1986, Tideland EMC reported the number of active users (based on the number of meters) to be 712. However, that figure is expected to increase over the next six months, as there are approximately 30 new customers who have submitted applications for service. In order to adequately service the rising number of users, a larger cable is being proposed for installation in 1986. There have been occasional problems in the past with blackouts, brownouts, etc., on Ocracoke. Some residents have their own generators. The problem is more acute in the summer. These problems are significant, often having an adverse impact upon the

Village businesses. It is hoped that the new large cable will eliminate some of these occurrences so that electric utilities in Ocracoke can be adequate for the moderately-growing population.

c. Utilities Extension Policy

The Ocracoke Sanitary District Water Association, which operates the water system, requires all owners of new development to finance the cost of extending and tapping onto the existing waterlines. The extensions must meet previously set engineering specifications and must comply with County Health Department standards. After the extension has been completed, ownership of the lines is turned over to the Sanitary District.

d. Recreation Plans or Policies

There are no public recreation plans or policies which have been developed which include Ocracoke. The miles of ocean beaches maintained as part of the Cape Hatteras National Seashore Recreation Area, as well as the Pamlico Sound, two inlets and Silver Lake, provide ample recreation opportunities for residents and visitors alike. Camping facilities are also provided by the U.S. Park Service on Ocracoke. However, in spite of the extensive shorelines around Silver Lake and the "Soundside" of the island, there is no public waterfront access facility in the Village. Some public access facility is needed, both as a boost to tourism and for the total citizenry, as well. Public recreation activities in Ocracoke consist mainly of organized athletic activities through the school. Public recreation plans need to be reassessed, perhaps with intentions of hiring a Recreation Director or building a recreational facility for the residents of the Village.

e. Prior Land Use Plans

Ocracoke, although somewhat isolated geographically from the mainland, is still a very important part of Hyde County. In 1972, the Regional Development Institute of East Carolina University prepared a study titled Ocracoke Village: Land Use . . . Development Potential, April, 1972. This document focused on the prospects for development and potential problems for the Village, including land use implications. The Institute is in the process of conducting another similar assessment, from which additional implications may be noted.

f. Regulations and Enforcement Provisions

As noted earlier, the adoption of the "Development Ordinance for the Village of Ocracoke" by the Hyde County Board of Commissioners in April, 1986, was a historic move which will positively affect all future development in Ocracoke. The ordinance, adopted by Hyde County under the statutory authority of counties to enact zoning controls for all, or a portion of the county, will be

applied to no other part of Hyde County but Ocracoke. The ordinance will be enforced by the Hyde County Building Inspector, who will be responsible for reviewing all proposed development and the issuing of development permits. The ordinance contains minimum lot size requirements, as well as provisions for building setback, height restrictions, lot coverage, and parking. The major thrust of the ordinance appears to be density control. Other features of the ordinance include the involvement of a Planning Board, Board of Adjustments, and a procedure for granting variances.

All of the other regulations and enforcement provisions which are applicable to Hyde County also include Ocracoke Village. Refer to Part I, Section I, Item 6 (D), page 26, for a full discussion and listing of these provisions.

C. CONSTRAINTS: LAND SUITABILITY

There is relatively little undeveloped land remaining within the Village of Ocracoke. (See Map 9, attached.) Of the Village's 775 acres, there are not many more acres of developable land remaining. However, there is a pronounced trend of redevelopment in older developed areas. It is all the more imperative that Villagers and County officials become aware of the existing limitations to development. Physical limitations are important to recognize both from the standpoint of guiding land use decisions and in protecting the health, safety, and welfare of the general public. Below is a list of the physical limitations to development in Ocracoke:

1. Physical Limitations

Most of the physical limitations to development were noted in the 1976 Plan and the 1981 Plan Update. These included one man-made hazard, i.e., a small airport with a paved landing strip, and the natural hazard areas which coincide with the designated Areas of Environmental Concern (AEC's). Perhaps the most serious physical limitation to development in the Village continues to be the condition of the soils. The area is, for the most part, of low terrain, poorly drained, and without the addition of sand as fill, unsuitable for septic tanks. There are no areas in the Village where the slope exceeds 12 percent, adding to drainage problems. In the absence of a central sewer system, this is a severe constraint. The two dominant soil types around Silver Lake, Carteret Low and Corolla fine sands, are rated as having severe limitations for both dwellings and as septic tank filter fields, according to the USDA Soil Conservation Service.

The current source of water for the Village does not pose a serious physical limitation to development. The deep wells from which the water is pumped does contain some salt intrusion, but is desalinized through a reverse osmosis process.

2. Fragile Areas

These areas are ones which could easily be damaged or destroyed by inappropriate or poorly planned development. Most of the fragile areas coincide with the AEC's which were discussed in Part II, pages 9-11, of this Section. In addition to the AEC's, Silver Lake and the Old Lighthouse might both be considered as scenic and prominent high points which need protection from improper development. The Village of Ocracoke does not contain any of the following fragile areas: complex natural areas; areas that sustain remnant species; areas containing unique geologic formations; registered natural landmarks; wooded swamps, prime wildlife habitats, archeologic sites, or maritime forests.

There are, however, several other properties of historic significance in the Village. The Ocracoke Light Station was placed on the National Register of Historic Places in November, 1977. The Ocracoke Village Historic District and the Ocracoke Lighthouse Keepers Quarters have been placed on a study list for inclusion on the National Register of Historic Places. Additionally, the Hyde County Historic Society, with the aid of a planning consultant, has identified three other places in Ocracoke which have the potential for placement on the National Register. They are: (a) the Lela Howard house; (b) the Blanch Howard house; and (c) the Beverly Moss, or Big Ike O'Neal house. Land use policies for Ocracoke should take into consideration the protection of these culturally significant resources.

3. Areas With Resource Potential

There are no significant productive or unique agricultural lands in Ocracoke. Neither are there any potentially valuable mineral sites. However, as noted previously, most of the island is part of the Cape Hatteras National Seashore, which includes the entire land area adjacent to the ocean side of the island. The National Seashore area is a prominent tourist attraction for various types of non-intensive outdoor recreation activities. The Village would benefit from the installation of several public boat ramps on the northwest corner of the Park Service parking lot in the interest of providing additional recreation activities. Currently, there are no public boat ramps on public land, only three private ramps on Silver Lake in congested areas. New public ramps could also aid private hurricane evacuation efforts. The estuarine waters on the Sound side of the island are important breeding areas for both finfish and shellfish, and need to be protected from unsound development practices. Silver Lake has, for several years, been considered a "prohibited shellfish area", by the Shellfish Sanitation Unit of the State Division of Health Services. Water quality has not significantly improved, so the Lake still has this designation.

D. CONSTRAINTS: CAPACITY OF COMMUNITY FACILITIES

1. Existing Water Service Areas

The Village water system currently has a design capacity of 144,000 gallons per day (gpd) of potable water after allowance of "down" time for needed maintenance. However, as stated earlier, the capacity will increase to approximately 200,000 gpd with the addition of a fourth R.O. machine and rehabilitation of existing equipment is added in late spring of 1986. This work is to be completed in late 1986 and should improve the quality and quantity of the water.

The current water service areas, which was delineated with the system's initial operation in June of 1977, does not include four newly developing areas. Two developments near the Oyster Creek area on the Village's northeast side have begun developing since 1977. Also, one developing area on the southeast side of Ocracoke is outside of the current water service area. If these areas overcome other constraints, including septic tank suitability, then the Sanitary District estimates that there could be potentially 270 additional water users; however, only 100 will be allowed to have connections as a result of the 1986 improvements. There was a shortage of water in the summer of 1985 because of over-use. Therefore, a moratorium has been set for new water tap-ons until the fourth R.O. machine is installed.

If the average year-round per capita consumption were assumed to be 57 gallons per day, then at the projected 1986 total capacity (after completion of improvements) of 200,000 gpd, a maximum population of 3,508 persons could be sustained. However, consumption rates do fluctuate. However, the year-round population is not experiencing rapid growth. Nevertheless, it would appear that if the seasonal population continues to increase, Ocracoke's total water capacity will need to expand.

2. Sewer Service Area

Septic tanks are the only means for wastewater disposal on Ocracoke at this time. The installation of septic tanks is regulated by the Hyde County Health Department through the County Sanitarian. According to the County Sanitarian, as of the writing of this report, there are no areas in the Village which are suitable for septic tank installation without the addition of sand to build up the area sufficiently above the water table. However, the Sanitarian also noted that sand of sufficient quality is not available in the Village. Thus, new development, except for areas which have been built up previously, is at a virtual standstill unless developers are willing to go through the expense of purchasing and ferrying in suitable fill. Septic tank permits,

according to the County Sanitarian, cannot be issued unless the requirements for adequate drain fields are met.

3. Schools

There is one school in Ocracoke. Ocracoke School contains grades K through 12, and had a 1984-85 enrollment of 94 students, declining by 15% from the 110 students as reported in the 1981 Plan Update. The design capacity of the basic school facility is approximately 100 students. Notice Table 5, below.

Table 5: Ocracoke School Enrollment
1980-81 through 1984-85

	1980-81	1981-82	1982-83	1983-84	1984-85
# of Students	105	113	112	105	94

Although the Village's population is expected to increase, it is not likely that the number of school-age children will increase in proportion to the overall population growth. Many new residents, for example, will be retirees who will have no school-age children. Nevertheless, if school-age children increase throughout the planning period at one-half their current ratio to the population, then the total pupils would be 134. This increase of 24 additional students would be substantial enough in Ocracoke to require an expansion of facilities and the employment of one or more teachers.

4. Transportation

Transportation to and from Ocracoke is conducted almost totally by the three State-operated ferries. The main road on the island is NC 12, which begins at the ferry docking facilities at Silver Lake, and ends on the northern end of the island at the Hatteras Inlet ferry station. NC 12, within the Village, has recently undergone improvements to a 2-lane, all weather road, which was completed in early 1985 under the State's Transportation Improvements Program. All vehicular traffic, regardless of which ferry travelled on, must travel on NC 12. As noted previously, outside of the Village, en route to the Hatteras Inlet ferry, a two-mile stretch of the highway is very close to the ocean and subject to occasional flooding. This vulnerability sometimes inhibits travel on this road. See Section II, Policy Statements, for a discussion of alternatives for improving the potential problems with the vulnerability of NC 12. Traffic counts, in terms of volume, are not available for NC 12 from the State Department of Transportation. Daily average traffic counts for the three services, however, are available, as indicated in Table 6, below:

Table 6: Average Annual Daily Traffic: Ferry Service to Ocracoke, Calendar Years 1981 and 1984

Ferry	Vehicles per Day 1981	1984
Hatteras to Ocracoke	550	600
Cedar Island to Ocracoke	200	150
Swan Quarter to Ocracoke	40	50
	790	800

N.C. DOT Planning and Research Division
* Subject to change on demand

It is difficult to assess the capacity of the ferries since the capacity of individual ferries varies and the schedules are subject to change. One of the regular Ocracoke ferries, the "Pamlico" has been enlarged since the 1981 Plan. However, if the ferry services are reduced, particularly the one from Hatteras to Ocracoke, then such a reduction could become a constraint to development. The impact would be felt most notably in the economy, which is tourist-based. Projections for traffic increases, like population projections, are subject to various factors. Vacation traffic is highly subject to overall economic conditions, particularly the cost of fuels. If it is assumed that economic conditions will improve or remain fairly stable, then traffic increases will be likely. The current ferry service and N.C. 12 should have the capacity to handle projected increases.

E. ESTIMATED DEMAND

1. Population and Economy

The impact of population increases and the need for developable land and community services in Ocracoke must be examined from two perspectives. First, the impact of increases in the number of year-round, permanent residents must be considered. Second in consideration but at least of equal importance, is the growth in the seasonal population. The analysis of conditions on the island and in the Village, which has been discussed throughout this Section, has pointed out some rather serious constraints to future development. Unless the constraints are somehow overcome, mainly the lack of sanitary and environmentally sound wastewater disposal facilities, then projections for future development and increased demand will be automatically limited. The unofficial but realistic "moratorium" on substantial new development, because of the indigenous soils and the unavailability of suitable fill locally for septic tank placement, could continue indefinitely. Despite the presence of prohibitive constraints, the alluring charm of the

quiet, rustic sea Village will continue to attract thousands of tourists each year to Ocracoke. Thus, in making projections for increased demand, four significant assumptions must be made:

(1) The dissolution of the waste water disposal problems,
(2) Continued generally favorable economic conditions,
(3) Stable ferry service operations, and,
(4) Highway accessibility on the northern end being maintained and protected from ocean overwash.

With these assumptions in mind as cautions, below are projections for increases in both the seasonal and permanent populations and an examination of the impacts of both on the Village.

a. Permanent Population: Projections to 1995

As was noted in Part II, Page 2, of this Section, between 1970 and 1980 Ocracoke's permanent population grew at a rate of 21.6 percent from 541 to 658. However, an actual count by the Ocracoke School showed a total of 651 in early 1986--a slight decline since 1981. Nevertheless, a very moderate growth rate of 1% per year was assumed for the planning period. At this assumed rate of growth, the year-round population will increase by 54 persons in 1995 to 705. Such an increase could require the formation of nearly 40 new households, adding to the demand for adequate and affordable housing. The improved and expanded water system has adequate capacity to serve this projected growth, however. Sewage disposal, on the other hand, could become a matter for more serious consideration. Solid waste disposal would also present obstacles, since it is currently being ferried over to Dare County. Alternatives need to be explored since the expense of this practice will gradually increase.

The overall economy will expand somewhat, as the demand for goods and services will lead to more businesses remaining open all year-round, thus providing more jobs and an increase in annual retail sales.

b. Seasonal Population

In 1970, according to a report compiled by the Regional Development Institute of East Carolina University, the seasonal population at Ocracoke averaged 1,267 persons. In 1980, as discussed, the seasonal population averaged around 3,500 persons, a 10-year increase of 176 percent. It should be noted that in 1970, the water system had not been developed, the Swan Quarter-Ocracoke Ferry was not operational, and the Hatteras Seashore Campgrounds had not been improved. These developments, undoubtedly, helped boost the substantial increase in tourism between 1970 and 1980. For the next 10 years, however, it is unlikely that the seasonal population will again more than double. A more likely increase

would be double the assumed growth rate for the permanent population from 1985 to 1995, i.e., about 2 percent per year. At this rate, Ocracoke could anticipate a seasonal population of 3,942 by 1990 and 4,352 by 1995. These increases would have a significant effect upon the demand for water. The total water capacity, in order to serve the projected 1995 seasonal population at the 1985 per capita annual average consumption rate of 57 gpd (i.e., including transient day visitors), would need to be 248,064 gpd. This would be 48,064 gpd more than the projected maximum capacity of 210,000 gallons per day after improvements.

2. Future Land Need

Because of the limitations on septic tank placement in Ocracoke, it is difficult to assess the amount of land that is actually available for development within the Village. However, the estimated 1986 population density for year-round residents on the developed portion of the Village (about 465 acres and 651 persons) is 1.4 persons per acre. The 1985 seasonal peak density was about 5.4 persons per acre. At the 1995 year-round population estimate of 705 persons, the density would be 1.5 persons per acre. A seasonal average by 1995, of 4,352 persons, would cause the density to increase to 9.4 persons per acre. It should be noted that roughly 310 acres (about 40%) of the Village is not developable. Under normal urbanizing conditions, all of these density levels would be acceptable. However, land availability without the provision of basic infrastructure, limits adequate support for even low-density development. Higher densities must be supported by adequate community facilities or else controlled or restricted.

3. Community Facilities Need

In summary, if moderate population increases, both seasonal and permanent, continue, then Ocracoke will need to expand its service capabilities in the following areas:

-- water supply
-- police protection (the possible addition of one or two more officers for efficient law enforcement)
-- school facilities
-- recreational facilities
-- improved firefighting and rescue capability
-- improved surface water drainage facilities

Under generally favorable economic conditions, the attraction to Ocracoke is likely to continue. However, three main issues, i.e., the encroachment of development upon the Village's historic and aesthetic character, previous problems resulting from lack of land use controls, and inadequate provision of community facilities form a basis for consideration of policy development by Hyde County. Policy implications have been presented in this Section. Actual policy discussion, with alternatives and specific choices, will be presented in the following Section.

PART II: OCRACOKE

POLICY STATEMENTS

PART II: HYDE COUNTY LAND USE PLAN: OCRACOKE

SECTION II: POLICY STATEMENTS

Ocracoke, as a jurisdictional entity of Hyde County, is generally included under the policies stated under Section II, Part I, of this plan. However, because of the presence of natural and cultural resources on Ocracoke, which are not generally located on the mainland, the development of additional policies are appropriate. All of the five broad policy development areas, i.e., Resource Protection, Resource Production and Management, Economic and Community Development, Storm Hazard Mitigation and Post-Disaster Recovery, and Continuing Public Participation, will be addressed in this Section as they apply to Ocracoke.

A. Resource Protection

1. Natural Resource Areas

In the village of Ocracoke, the major natural resource areas which need protection are the identified Areas of Environmental Concern (AEC's). The AEC's in Ocracoke which are within the County's jurisdiction include: Coastal Wetlands, Estuarine Waters, Public Trust Areas, and Estuarine Shorelines. These areas were defined and identified geographically on Pages 18 through 21 in Section I of Part I. All of these areas, which are part of Hyde County's Estuarine System, are important natural resources to both Ocracoke and the mainland. Therefore, the same development alternatives and choices for Areas of Environmental Concern set forth for the mainland will apply to Ocracoke. These policies, including possible alternatives and implementation strategies, were discussed on Pages 45 through 50 of Section II, Part I.

2. Cultural Resource Areas

In some ways, it is difficult to define all of the culturally significant areas in Ocracoke. Because of its unique historic character, the entire Village itself could be considered a cultural resource of more than local significance. Hyde County recognizes the historic significance of Ocracoke Village and the value of protecting the Village as a significant coastal cultural resource in general. The Ocracoke Light Station is on the National Register of Historic Places, with the Ocracoke Village Historic District and the Ocracoke Lighthouse Keepers Quarters being placed on a study list for possible inclusion on the Register. Three other properties in the Village have been identified as having the potential for National Register nomination. These properties include: the Lela Howard House; the Blanch Howard House; and the Beverly Moss, or Big Ike O'Neal House.

In order to protect these areas from the encroachment of potentially damaging development, the policy statement by Hyde County on "Cultural Resource Areas" shall also apply to these

specific properties on Ocracoke and to others which may be identified during the planning period. The proposed implementation strategy will also apply to the Ocracoke properties.

3. Constraints to Development: Physical Limitations

The physical limitations to development in Ocracoke, as noted on Pages 14 through 16 of Section I, Part II, include both natural hazards and man-made hazards. The primary man-made hazard on Ocracoke Island is a small paved airplane landing strip. However, this airstrip is located outside of the Village area and is within the Cape Hatteras National Seashore Recreation Area. Natural hazard areas which present constraints to development are the previously identified Areas of Environmental Concern (AEC's).

Perhaps the most serious physical limitation to development in Ocracoke is the condition of the soils in and around the Village. An updated Soil Survey of the Outer Banks, which was published in 1977, showed that there were several soil types in Ocracoke which had "severe" limitations for both structural foundations and septic tank placement. This is particularly true around Silver Lake, which is dominated by Carteret Low and Corolla fine sands. Both of these soils have been identified by the USDA Soil Conservation Service as being severely limited, without proper modifications for septic tank placement and structural foundations.

In recognition of these physical constraints to development in Ocracoke, the Hyde County Commissioners will apply the same policies on constraints which were stated for the mainland to the Village. These policies, including alternative considerations and implementation strategies, were discussed on Pages 48-50, Section II, Part I.

4. Constraints to Development: Capacity of Community Facilities

The major community facility in Ocracoke is the central water system. The system's capacity and service area was discussed on Page 4, Section I, Part II, of this plan. The current capacity of the water system, even with the addition of a fourth R.O. machine, will still be inadequate to serve the needs of the projected 1995 permanent and seasonal populations.

Because of the soil limitations discussed above, the absence of a central sewage collection and disposal system is also a constraint of important consideration. Even with suitable sand as fill material, the generally small lots at Ocracoke could lead to an overloading of effluent from the ground absorption systems (septic tanks). This effluent could eventually reach the Estuarine Waters around the Village.

As discussed in Section I of Part II, Ocracoke would benefit from expanding recreational opportunities by perhaps hiring a Recreation Director and/or building a recreational facility for youth, and by modernizing medical services and improving emergency rescue services with the addition of a new rescue squad vehicle.

a. Policy Alternatives

Possible policy alternatives regarding managing growth and development in areas with identified constraints in Ocracoke include (in addition to those set forth for the mainland):

(1) Limit septic tank placement to compliance with State Health regulations as enforced by the County Sanitarian.

(2) Explore alternative means of solid waste disposal, such as the development of high-pressure incinerators on the island.

(3) Expand capacity of community facilities and services, such as water, schools, recreation, police and fire protection, and road capacity, as growth takes place and as needed.

(4) Request that the County pursue development of a public water access facility in the Village, with attendant parking.

b. Policy Choices

Ocracoke Island adopts the following policies in addition to those set forth for the mainland:

(1) In areas with septic tank limitations, Ocracoke will remain committed to decisions rendered by the Health Department's Sanitarian, even if it involves a moratorium on septic tank placement.

(2) Remain committed to exploring alternative means of solid waste disposal.

(3) Encourage the expansion of community facilities, especially in the areas of recreation (e.g., hiring a Recreation Director or constructing a community center) and medical services (e.g., filling a dentist position).

(4) Residents of the Village would like to have some type of water access facility developed which is available to the public, including Villagers and tourists.

5. Hurricane and Flood Evacuation Needs and Plans

Ocracoke will follow the prescribed Storm Hazard Mitigation and Post-Disaster Recovery policy statements set forth for Hyde County found in Part I, Section II E., Page 64.

6. Other Resource Protection Policy Areas

a. Marina and Floating Home Development

(See policy statements on page 50 dealing with the mainland.) Hyde County has strong concern over the possibility or incidence of floating home development in Ocracoke and the potential impact upon water quality, especially in the absence of facilities to support them. Therefore, the County cannot endorse the development of floating homes in Ocracoke. For the same reasons, marinas are not considered to be desirable in Ocracoke.

b. Maritime Forests

There are no areas designated or recognized as such in Ocracoke Village. However, should areas in the Village be determined as maritime forests, the County believes these areas should be protected from undue encroachment.

B. Resource Production and Management

Policy statements on the production and management of resources usually are concerned with the extraction of economically valuable resources from the lands or waters of coastal communities. This policy area was discussed for the County as a whole in Item B, Section II, Part I, Pages 51-55. Of the major issues discussed (i.e., agricultural production, commercial forestlands, commercial and recreational fisheries, and existing and potential mineral production areas), only commercial and recreational fisheries is a relevant issue in Ocracoke.

1. Commercial and Recreational Fisheries

As presented in the discussion on present economic conditions in Ocracoke, commercial fishing as an economic activity has greatly declined in importance in the Village. Tourist-related business is the most important employment segment in Ocracoke. However, some commercial fishing activity and considerable amounts of sports and recreational fishing are still being conducted in and around the island's waters.

The Hyde County Commissioners and the residents of Ocracoke would like to see productive fishing areas maintained and developed in order to further support fishing as an industry and as a recreational activity. Silver Lake is classified as a "Prohibited Shellfish Area" by the N.C. Division of Health Services, Shellfish Sanitation Unit. This means that due to the documented presence

of certain pollutants, or the presence of diseases in marine life, the extraction of shellfish from the lake for human consumption is prohibited.

Except for those statements dealing with agricultural drainage, the same policies for the support of fishing, which were developed for the County as a whole, shall also apply to Ocracoke.

a. Policy Alternatives

(1) Support any private, State, or Federal activities aimed at cleaning up polluted areas which are currently closed; and

(2) Seek to protect and maintain primary nursery areas (Ocracoke's Estuarine Waters) from the negative effects of development, particularly effluent pollutants.

b. Policy Choices

(1) Continue to support the activities of private, State, and Federal agencies dedicated to cleaning up polluted areas.

(2) Continue to enforce septic tank placement regulations and the County Building Permit Program.

2. Off-Road Vehicles

Off-road vehicles is an issue relevant to the ocean side beach areas on Ocracoke Island. This area, as noted previously, is under the control of the U.S. Park Service as part of the National Seashore Recreation Area. Thus, the issue of off-road vehicles is not a relevant one to Ocracoke at this time.

C. Economic and Community Development

The land development issues involving economic and community development in Ocracoke are different from similar issues on Hyde County's mainland. Major factors such as the economic base of the Village, its land development pattern and density, and overall increasing population growth rate, are all responsible for this difference.

Other changes and trends in Ocracoke also have serious implications for economic and community development land use policies. They include:

-- The adoption and enforcement of a Development Ordinance for Ocracoke Village, which is designed to regulate development density in Ocracoke and which will affect overall land use patterns;

-- Slight decrease in permanent population from 658 in 1980 to 651 in 1986, but with a projected increase by 1995 to 705 persons;

-- Increase in the number of vacation cottages and second homes (from about 208 in 1980 to 308 in 1985), in spite of identified constraints (see Page 7, Section I, Part II);

-- The growing importance of tourism.

These are factors which must be given serious consideration in adopting land use policies for Ocracoke Village. Some of the issues which communities are required to address, according to the Coastal Resources Commission's Land Use Planning Guidelines, are not relevant in Ocracoke. These are, "types and locations of desired industries" and "energy facility siting." Other issues which are relevant to Ocracoke, but were covered under the County's general policies in Section II, Part I, include "Commitment to State and Federal Programs" and "Assistance to Channel Maintenance."

Relevant issues and policy statements are discussed below:

1. Local Commitment to Service Provisions

Water

Currently, the only local service provided is water. The Village Water Association, under the auspice of the Ocracoke Sanitary District, intends to serve developing areas within the current water service area. Areas which are developing outside of the current service area will be served gradually over a period of years during the planning period.

Sewer

A 201 Waste Water Facilities Study has never been conducted for Ocracoke. Although preliminary discussions between the Ocracoke Sanitary District and State officials indicate that if a central sewage collection and disposal system is developed in the Village, user charges would be too expensive for the system to be supported by the current population.

Solid Waste Disposal

Throughout the planning period, the Sanitary District will continue to contract with Dare County for solid waste disposal. As the need dictates, this contract may be expanded.

Transportation

Ocracoke Island is concerned about an approximate two-mile section of N.C. Highway 12 which is located close to the ocean and is frequently flooded. Suggested alternatives to alleviate this problem are: to extend the road west, providing greater distance between the road and the ocean; stabilize the beach area to help prevent flooding; or relocate the ferry site to reduce the amount of traffic on that portion of road. Ocracoke Island will explore these alternatives with appropriate State officials in order to arrive at the best method of alleviating this problem.

2. Desired Urban Growth Patterns

Ocracoke is the most densely populated settled area in Hyde County. The compact development pattern in the Village makes no distinction between residential, commercial, or institutional uses. This incompatibility of land uses resulted from a historical lack of development and enforcement of local land use controls. However, all future development in Ocracoke will be controlled by a Development Ordinance for the Village, which will definitely affect urban growth patterns. As development continues in response to the Village's appeal as a tourist attraction, continued expansion of incompatible land uses may be mitigated somewhat. Additional controls, however, may be needed in the future.

a. Policy Alternatives

(1) The incorporation of Ocracoke as a Town under N.C. Statutes, giving it local authority to protect and promote the health, safety, and welfare of the Village residents; and

(2) Requesting that the County develop and adopt additional needed local controls, as development demands, for the Village.

b. Policy Choices and Implementation Schedule

(1) In Fiscal Year 1986-87, Hyde County will enforce provisions of the Ocracoke Development Ordinance.

The urbanizing uses of land within Ocracoke must also coincide with limitations of service provisions, and be consistent with policies regarding protecting natural and cultural resources (see Ocracoke's Policies under "Resource Protection," Page 24, this section).

3. Redevelopment of Developed Urban Areas

The area around Silver Lake is almost completely developed. Silver Lake is perhaps the most scenic attraction in the Village. The lake-front development currently consists of a mixture of land uses, including residential, commercial and government, and institutional. (See the Ocracoke Land Use Map, attached to this plan.) All of this development is not desirable from an aesthetic viewpoint. The broad, sweeping vista which Silver Lake has the potential to offer is somewhat obscured by much of the current waterfront development.

It is the belief of the Hyde County Board of Commissioners and the residents of Ocracoke that the natural aesthetics of Silver Lake should be maintained and enhanced as much as possible.

a. Policy Alternatives

(1) Only development which does not cause major or irreversible damage to the natural beauty and aesthetics of Silver Lake should be allowed along the waterfront.

(2) Land uses which are supportive of the desire to maintain open enjoyment of the Lake's attractiveness will be encouraged.

b. Policy Choices

(1) Continue to support only development and land uses which preserve the aesthetics of Silver Lake.

c. Implementation Schedule

(1) The County Commissioners, through the County Manager's office, will seek assistance from the N.C. Department of Natural Resources and Community Development (NRCD) to provide information on funds for preparing waterfront design alternatives.

(2) Contacts with the Washington, N.C., office of NRCD will be made in Fiscal Year 1987.

(3) The County Commissioners, through the County Manager's office, will, in Fiscal Year 1987, seek technical assistance from the East Carolina University Regional Development Institute and the Division of Community Assistance, NRCD, Washington Regional Office, to prepare preliminary additional development controls specifically designed for the aesthetics of Silver Lake. These preliminary criteria will show the potential impact of development devices around Silver Lake.

4. Tourism

Ocracoke Island continues to be a strong attraction for thousands of visitors each year. Thousands of visitors board the ferries from Cedar Island, Hatteras, and Swan Quarter to the Village of Ocracoke. Figures from the State Ferry Traffic Report for Fiscal Year 1984-85 indicated that 772,872 passengers used the ferries going to and from Ocracoke. Many of those transient visitors made substantial expenditures in the County and particularly on Ocracoke. The North Carolina Department of Commerce, Division of Travel and Tourism, estimated that in 1984, tourism accounted for $12,094,000 in expenditures in Hyde County. Although no separate figures are available, the majority of these expenses were likely generated by Ocracoke. Tourism is steadily growing in Ocracoke, and is the backbone of the Village's economy.

Hyde County recognizes this importance and would like to see those attractions and services which help make tourism effective, enhanced, and protected, including adequate public water access sites. As extensive as the shoreline around Silver Lake is, there are no public access sites in the Village, either for tourists of citizens. Public access sites, it is believes, would greatly enhance tourism in the Village. The County's concern is also particularly true regarding the continued operation of a viable and dependable ferry service. It is the County's general policy, therefore, to continue to support and promote tourism as a vital economic activity on Ocracoke. Specifically, the County will seek assistance in the planning and development of adequate waterfront access facilities in Ocracoke Village.

D. Continuing Public Participation

The importance of continued involvement by the citizens of Ocracoke Village in land use planning and governmental decisions is a factor recognized by the Hyde County Commissioners. One of the five County Commissioners is a resident of Ocracoke Village. During the preparation of this Plan Update, a total of eight (8) meetings were held with the Ocracoke Planning Advisory Committee, all of which were open to the public. Two of these meetings were advertised in newspapers. (See Appendix 2, and part I, Section II, page 64.)

It is the policy of the Hyde County Commissioners to help keep Ocracoke Village residents informed and involved in planning and governmental decisions which affect them. The ongoing public and private communications activities will continue, and include the following actions through the planning period:

1. Publish notices of hearings and meetings of local importance in The Coastland Times or other newspapers which circulate generally in Ocracoke;

2. Make public announcements on the Ocracoke cable TV;

3. Continue to send notices of meetings, hearings, etc., to leaders of civic clubs in Ocracoke and have them posted on the Community Bulletin Board.

4. Encourage the Village residents to relate particular concerns to the County Commissioners by contacting the Commissioner who lives in the Village; and

5. The County Commissioners will continue its practice of conducting at least two of its regular monthly meetings during the year in Ocracoke Village.

6. Hold informal, Village-wide meetings on various special issues, especially when agency representatives or officials are invited to address the citizens and/or answer questions.

E. Storm Hazard Mitigation, Post-Disaster Recovery, and Evacuation Plans

As a jurisdictional entity of Hyde County, policies in this area for Ocracoke are included in Part I, pages 66 through 78.

PART II
SECTION III
LAND CLASSIFICATION SYSTEM

SECTION III: LAND CLASSIFICATION SYSTEM

The five Land Classifications of the Coastal Resources Commission were defined in Section IV, Part I, of this plan, which focused on the mainland. (See pages 77-82). In Ocracoke Village, three of these classifications will be established. They are described below.

A. DEVELOPED

The developed class of land use provides for continued intensive development and redevelopment of existing cities. 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 including at least public water, sewer, recreational facilities, police and fire protection. Areas which exceed the minimum density but which do not have public sewer service may best be divided into a separate class to indicate that although they have a developed character, they will need sewers in the future.

Ocracoke, as discussed previously, does not have a central sewage collection and disposal system. However, the 775 acres in the Village is a total of only 1.21 square miles. The projected number of dwelling units will increase during the planning period. Most of the Village already has a "developed" character, in that, due to physical constraints of soil conditions, some areas cannot be developed further. This classification includes all of the currently developed or developing areas in the Village, with the exception of the land area owned by the U. S. Coast Guard, the State Department of Transportation (Ferry Office and Docking Facilities), and the U. S. Park Services; and the border around Silver Lake.

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.

Most of the land area adjacent to the portion of the Village classified as "developed," will be classed as "Transitional." As the Village population grows, both permanent and seasonal, the transitional areas will be needed to accommodate the additional growth. Present constraints, such as septic tank limitations, would be largely overcome if a centralized sewage collection and

disposal system were developed. The Village water system's lines are also accessible to these areas. This area includes lands North of the Old Cuttin Sage Lake areas, and the lands south of the currently developed lands, to the Cape Hatteras National Seashore Recreational area.

C. CONSERVATION

The "conservation" class provides for effective long-term management of significant limited or irreplaceable areas. This management may be needed because of its natural, cultural, recreational, productive or scenic values. This class should be limited to lands that contain: major wetlands, essentially undeveloped shorelands that are unique, fragile, or hazardous for development, necessary wildlife habitat or areas that have a high probability for providing necessary habitat conditions; publicly owned water supply watersheds and aquifers; and forest lands that are undeveloped and will remain undeveloped for commercial purposes. By statutory definition, all Areas of Environmental Concern (i.e., AECs) are included in the conservation classification.

In Ocracoke, the conservation class, according to the definition of the Estuarine Shoreline AEC, i.e., 75 feet inland from the the mean high water mark, shall include the land area generally bordering Silver Lake, the State and Federally owned land to the North of the Lake. Also, the other Estuarine Shorelines in the Village will be classified as conservation, and the land area around and adjacent to the Ocracoke Light Station and Keepers Quarters.

PART II
SECTION IV
RELATIONSHIP BETWEEN POLICIES
AND LAND CLASSIFICATIONS

SECTION IV: RELATIONSHIP OF POLICIES AND LAND CLASSIFICATIONS

After the Land Clasification System is developed, the Coastal Resources Commission requires each land use plan to relate the Policy Section to the land classification map and to provide some indication as to which land uses are appropriate in each class.

A. DEVELOPED AND TRANSITION CLASSES:

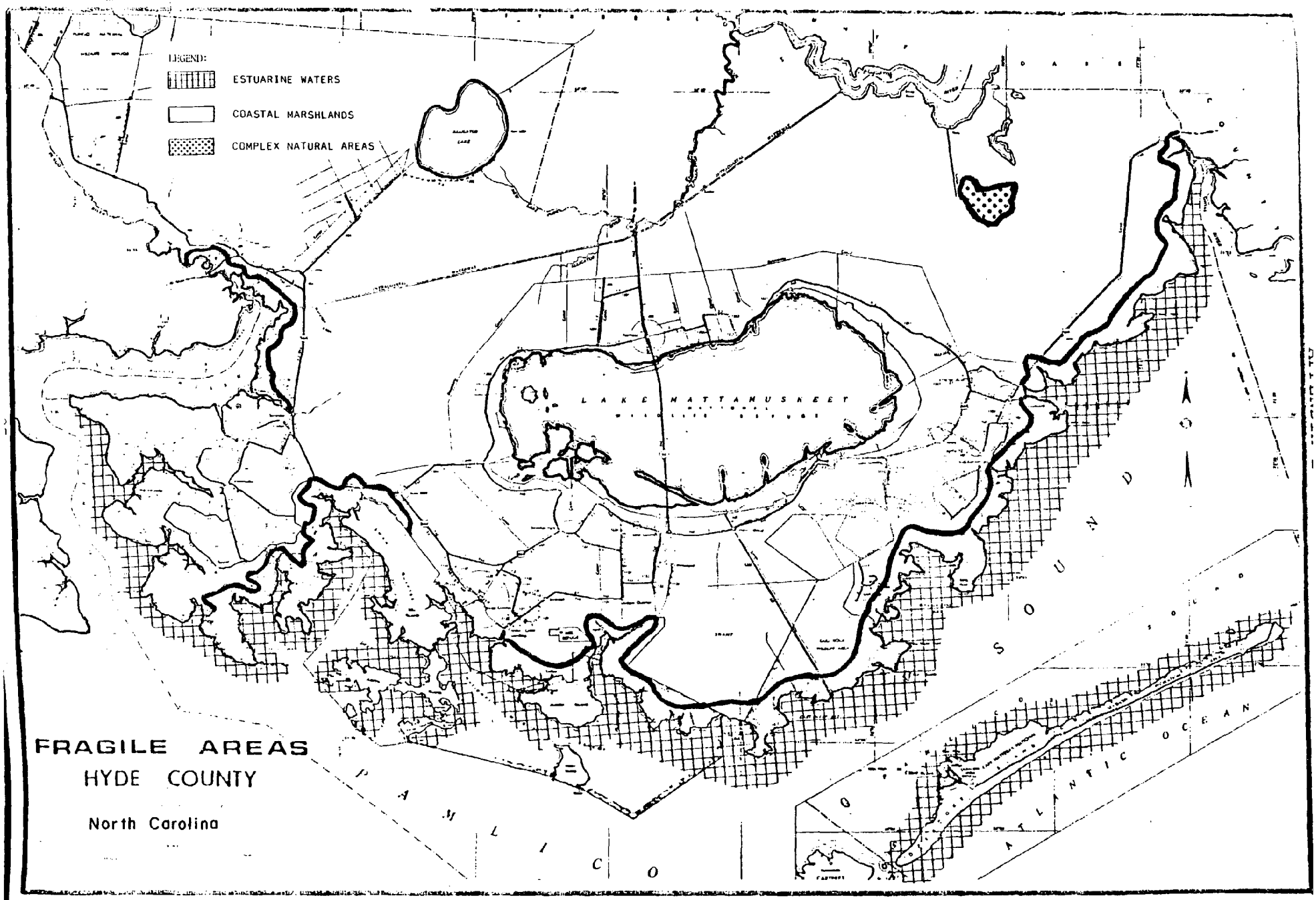
The Developed and Transition classes should be the only lands under active consideration by a county or municipality for intensive urban development requiring urban services. The area within these classes is where detailed local land use and public investment planning will occur. State and Federal expenditures on projects associate with urban development (water, sewer, urban street systems, etc.) will be guided to these areas.

As Ocracoke grows moderately throughout the planning period, the projected development will take place in these areas. Appropriate land uses will be residential, commercial and government and institutional. As is fiscally feasible, municipal services will be extended or made accessible to these areas as growth and development guides.

B. CONSERVATION CLASS:

The Conservation Class is designated to provide for effective long-term management of significant limited or irreplaceable areas which include wetlands, undeveloped shorelines that are unique, fragile, or hazardous for development, wildlife habitat areas, publicly owned watersheds and acquifers and undeveloped forest lands and cultural and historical sites. In the Estuarine System, development should be restricted to water-dependent uses such as piers, bulkheads, marinas, etc. Policy Statement under Resource Protection, and Resource Production and Management issues, for both Ocracoke and the Mainland, address Hyde County's intentions concerning the use of land within the conservation class.

APPENDICES



FRAGILE AREAS

HYDE COUNTY

North Carolina

APPENDIX 2

COUNTY OF HYDE

SWAN QUARTER, NORTH CAROLINA 27885

Office, Board of Commissioners
Michael T. Swindell, Currituck
J. B. Berry, Fairfield
J. B. Cahoon, Lake Landing
Alton M. Ballance, Ocracoke
Hal G. Swindell, Swan Quarter

Emily C. Thomas, County Finance Officer
Clifford Swindell, County Manager
Douglas A. Gibbs, Ass't County Manager

January 7, 1986

Director, FAA, Southern Region
Attention: Air Traffic Div., Docket #85-ASO-16
Federal Aviation Administration
PO Box 20636
Atlanta, GA 30320

Dear Sir:

We are opposed to the Military controlling any more airspace over Eastern North Carolina. For your information find enclosed a copy of our 10-7-85 minutes, including a resolution calling for a reduction in the amount of airspace controlled by the Military in Eastern North Carolina. Thank you for allowing our county to comment on this important issue.

Sincerely,

HYDE COUNTY BOARD OF COMMISSIONERS

/dg

cc: Mr. Will Sentl, Dir., NC Div. of Aviation

THE HYDE COUNTY BOARD OF COMMISSIONERS HELD ITS REGULAR MEETING ON MONDAY, OCTOBER 7, 1985

The meeting opened at 9:30 am by a word of prayer by Joseph B. Cahoon. Members present were Chairman Joseph B. Cahoon, Hal Swindell, Alton Ballance, and J. B. Berry.

Upon motion by Alton Ballance, seconded by Hal Swindell that the minutes of the last meeting be approved.

Commissioner Mike Swindell entered the meeting at 9:40am.

Upon motion made by Hal Swindell, seconded by Mike Swindell, that upon the Tax Administrator's recommendation, the Board of Commissioners adopt the schedule of land values and the revision made to the schedule as presented to the Commissioners. A copy of this order will be published in the local newspaper is on file in the minute docket book located in the Register of Deeds Office. Representative Howard Chapin met with the Board. No action was taken.

Ben Simons met with the board to explain the purpose of the Hyde County Waterfowl Committee, getting the trash dump at Fairfield cleaned up and rocked, also installing a fence around the dump was discussed. Mr. Simons also asked the Commissioners to take the necessary steps to stop vehicles parking on his property located at the intersection of Highway 94 and SR 1305 in Fairfield.

Motion by Mike Swindell, seconded by J. B. Berry that the Board go into executive session at 11:15 am with Jack Mason to discuss personnel matters. Motion made by Hal Swindell, seconded by J. B. Berry, that the Board come out of Executive session at 11:50 am.

The Commissioners met with the Board of Education from 1:00pm to 2:20pm at their office discussing fines and forfeitures in the school budget.

Upon motion made by J. B. Berry, seconded by Alton Ballance, BE IT RESOLVED that the County adopt a public participation plan for the land use plan update. [illegible] the participation plan [illegible] the minutes Book located in the Register of Deeds Office.

RESOLUTION

WHEREAS, the citizens of Hyde County have consistently shown their strong support for the military; and

WHEREAS, it is not in the best interest of the military, the civilian population, the environmental effects to the region, economic development of the region, and cost effectiveness.

NOW THEREFORE BE IT RESOLVED that the following military restricted and Military Operation Areas (MOA's) be changed as follows:

I. Delete the following special use air space:

a) R-5301 A, B, C, and R-5302 (Harvey Point)
b) R-5313 (Stumpy Point)
c) Stumpy Point MOA
d) Pamlico A MOA
e) Pamlico B MOA
f) VR-73 (low level mil. training route)
g) VR-1057 (low level mil, training route)
h) VR-1058 (low level mil. training route)
i) VR-1758 (low level mil. training route)
j) VR-85 (low level mil. training route)
k) Hatteras F MOA (low level mil. training route)

II. Install a radar system to provide low altitude air traffic advisory service in eastern North Carolina. Specifically, fill the radar "hole" existing between Cherry Point and Oceana Approach Control. The "hole" area is currently controlled by Washington Center.

III. Restructure, (reduce the size) the physical dimensions of R-5311 (Bear Range) and R-5306A (Cherry Point) to provide for safe turn radius, safety and egress corridors.

IV. Restructure R-5306 C and D to provide a corridor along the coast from W-122H to 2 NM inland, from ground level to 3000 feet.

DONE AND ORDERED in open meeting.

Joseph B. Cahoon, Chairman
Hyde County Board of Commissioners

The foregoing resolution was offered by Mike Swindell, and seconded by Hal Swindell, and was unanimously adopted.

Upon motion made by Hal Swindell, seconded by Alton Ballance, BE IT RESOLVED that the following budget revision, is approved:

Sheriff's Department	Budget Revision # 20
Health Department	Inter-departmental Transfer # 01-86
Child Health	Budget Revision # 06-86
Maternal Health	Budget Revision # 05-86
Family Planning	Budget Revision # 01-86
Health Department	Budget Revision # 03-86

Budget Revisions are on file in Minute Docket Book located in the Register of Deeds Office.

Upon motion made by Hal Swindell, seconded by Mike Swindell, BE IT RESOLVED that the Veterans Monument agreement be postponed until a later date.

BILLS & CHECKS APPROVED IN THE AMOUNT OF

$250,886.70	General Fu
$ 5,651.04	Revaluatio
$ 30,985.68	Water Syst

The meeting adjourned at 3:45 p. m.

THE HYDE COUNTY BOARD OF COMMISSIONERS HELD ITS REGULAR MEETING ON MONDAY, OCTOBER 21, 1985.

Chairman Joseph B. Cahoon called the meeting to order at 9:30 a. m. Commissio Michael T. Swindell offered prayer. Commissioners Berry, Ballance, and Hal C. Swindell were present.

Upon motion by Michael T. Swindell, seconded by J. B. Berry, BE IT RESOLVED that the minutes for the meeting held on October 7, 1985 are approved as they are recorded.

Hobie Truesdell & Quinten Bell, First Colony Farms, met with the Board and explained their proposal on peat mining 15,000 acres of land in Hyde, Washingto and Tyrrell Counties. [illegible] taken by the Board.

Jack Jones, Social Services Director, met with the Board concerning a State Transportation Grant. No action was taken.

RESOLUTION

WHEREAS, the Hyde County Department of Social Services has the authority to issue checks for the Hyde County DSS Fund; and

APPENDIX 3

HYDE COUNTY PUBLIC PARTICIPATION PLAN FOR THE 1985-86 CAMA LAND USE PLAN UPDATE

I. Introduction

Hyde County, in compliance with requirements of the North Carolina Coastal Area Management Act, is preparing an update to its Land Use Plan. The purpose of this updated plan is to generally re-assess growth and development trends of the County in relation to the capacity of community facilities and development constraints. Issues affecting the County's policies on growth and development will also be closely reviewed during this plan updating process.

A significant aspect of the plan updating process is the involvement of the County's citizenry. This Public Participation Plan will outline the means by which the County will foster and encourage such participation throughout the planning process.

II. Public Participation Plan

Public involvement in the 1985-86 Land Use Plan Update will be generated primarily through meetings with two advisory committees to be appointed by the Hyde County Board of Commissioners. The County Board of Commissioners will appoint an eight-member Land Use Plan Advisory Committee for the mainland, and a five-member Ocracoke Planning Advisory Committee for Ocracoke Village. The advisory committee for the mainland will be composed of two citizens each from each of the mainland's four Townships, giving an even geographic representation. All five members of the Ocracoke Planning Advisory Committee will be residents of the island community. These two groups will b the primary vehicle for citizen participation in updating the County's Land Use Plan.

These committees will work very closely with the planning consultant in a series of "work session" meetings. Also, general "public information" meetings will be held to present and discuss issues before the general public. All such meetings will be publicized through advertisements in local newspapers and posting of public notices. Presentations will also be made before the Hyde County Board of Commissioners. It should be noted that the meetings with the advisory committees and Board of Commissioners' meeting will be open to the public.

III. Preliminary Meeting Schedule

The initial tentative schedule of meetings is as follows:

A. Meeting with advisory committees to review preliminary development issues, November 6 (mainland), and November 7 (Ocracoke), 1985.

B. Public information meeting with citizens, December 2 (mainland), and December 3 (Ocracoke), 1985.

C. Meeting with the County Board of Commissioners to review preliminary issues, December 2, 1985.

Other meetings and work sessions will be scheduled and appropriately publicized throughout the land use plan update process. The above schedule is presented as being preliminary.

MAPS

DATE DUE

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