TOWN OF BURGAW

1981

LAND USE PLAN

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Executive Summary

CAMA LAND USE PLAN UPDATE, 1981

Introduction

This planning document contains a comprehensive update of Burgaw's CAMA Land Use Plan, which was originally drafted and adopted in 1976. Both the land use plan update and the 1976 Plan were prepared in accordance with the land use planning guidelines established by the Coastal Area Management Act, although it should be noted that the guidelines have been amended substantially since 1976. It is expected that this plan will be updated once again in 1986.

Some of Burgaw's residents may wonder why Burgaw should have a land use plan. Most importantly, it provides all the citizens of Burgaw an opportunity to manage the ever increasing development pressures which are evident in eastern North Carolina. By managing land development pressures, Burgaw will be able to preserve the very features which make the area economically and aesthetically desirable.

Population and Economy

Through an analysis of Burgaw's population several significant trends were discovered. Most notably 1980 Census figures for Burgaw showed a 10% population decline since 1970, yet during the same time period Burgaw had a 10% increase in housing units. On the other hand, both Pender County and Burgaw Township experienced significant population gains, particularly the coastal areas of Pender County.

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Since the economies of Burgaw and Pender County were so closely meshed, economic analysis was generally made on a county-wide basis. Nonetheless the economic analysis identified an expanding economy in Pender County. Substantial increases in employment, retail sales and incomes during the recent past were documented. It is also important to point out that the Pender County economy is shifting from its historically agricultural base to a mixture of industry, agriculture, and tourism.

Existing Land Use

In order to gain a better understanding of existing and potential land use problems, land use throughout Burgaw's jurisdiction was mapped based upon the findings of a "windshield survey". From this survey it was found that transportation, communication and utilities was the largest urban use of land, followed in order by residential, recreation, governmental and institutional, commercial, and industrial. However, more importantly, undeveloped areas accounted for 87% of all the land in Burgaw's jurisdiction, indicating there is ample space for growth as well as the opportunity to manage this growth. The land use survey also revealed that land use trends documented in the 1976 Plan such as mixed land use, strip development, and suburban sprawl, have continued through 1980. This plan affords Burgaw another opportunity to address these issues.

Constraints To Development

Consideration of constraints to development was one of the most important features of the plan update, as it established Burgaw's ability to accomodate land development in the future. The capacity of local soils and Burgaw's wastewater treatment plant were identified

as the primary concern. Many of the soil types in Burgaw have limitations for septic tank use and surface drainage, creating a need for special consideration of soil potential whenever land development is proposed. Burgaw's sewer treatment plant, because of substantial infiltration and inflow, has an unmeasured capacity for additional customers. However, the Town of Burgaw is working with State and Federal agencies to solve the sewer problems and allow expanded use of the sewer system.

Estimated Growth Demand

Based on the analysis of Burgaw's population and economy, it was predicted that both population and economic growth could be expected for the Burgaw planning area. Burgaw's population was projected to increase 12% over the next ten years, resulting in a population of 1,765 in 1990. Population growth in the extraterritorial jurisdiction and surrounding areas was also predicted. Substantial economic growth was anticipated, in large part because of construction of Interstate 40 through Pender County, but also because of local industrial recruiting efforts, growth spurred by coastal development and industrial development in the Wilmington area.

Of course, economic and population growth will have an impact on land use and community facilities. It was estimated that approximately 167 acres of land would be required over the next 10 years to accomodate projected growth. With the exception of Burgaw's wastewater treatment plant, which has an unknown capacity for additional customers, it was concluded that existing community facilities can accomodate growth projected for Burgaw.

Development Issues and Policy Statements

Although Burgaw considered many different development issues there was little need for Burgaw to adopt drastic policy changes or initiatives as part of this plan update. This was primarily because of the moderate amount of land development and the absence of environmentally fragile lands in Burgaw's jurisdiction. Perhaps the most important policy initiative was the decision to study revisions to the zoning ordinance in an attempt to better manage land use problems. In any case, it should be stated that Burgaw has had a planning head-start on most of the towns and counties across North Carolina and the United States, for many towns have never had a land use plan much less zoning and subdivision regulations. Nevertheless, Burgaw is well prepared to manage land use for the betterment of the community.

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INTRODUCTION

PURPOSE OF STUDY

The Town of Burgaw prepared a Land Use Plan in 1976 in response to the Coastal Area Management Act, passed by the North Carolina Legislature in 1974. The purpose and intent of the act is best described in Section .0101 "Introduction to Land Use Planning" Subchapter 7B - Land Use Planning Guidelines (as amended 9/1/79):

.0101 Introduction

(a) The Coastal Area Management Act of 1974 establishes a cooperative program of coastal area management between local governments and the state. Land use planning lies at the center of local government's involvement, as it gives the local leaders an opportunity and responsibility to establish and enforce policies to guide the development of their community.

(b) The purpose of these state guidelines is to assist local governments in each of the 20 coastal counties with the preparation of their own individual land use plans. Each county and the municipalities within the coastal counties are encouraged to develop a plan which reflects the desires, needs and best judgment of its citizens. The land use plans prepared under these guidelines, when considered together, form the basis for "a comprehensive plan for the protection, preservation, orderly development and management of the coastal area of North Carolina," which is the primary objective of the Coastal Area Management Act of 1974.

Further in the guidelines in Section .0201 (c), the heart of why North Carolina communities and counties need to prepare land use plans is described.

.0201 Introduction

(c) Local governments, through the land use planning process, address issues and adopt policies that guide the development of their community. Many decisions affecting development are made by other levels of governments, and local policies must take account of and coincide with established state and federal policies. Most decisions, however, are primarily of local concern. By carefully and explicitly addressing these issues, other levels of government will follow local policies that deal with these issues. Policies which consider the type of development to be encouraged, the density and patterns of development, and the methods of providing beach access are examples of these local policy decisions.

More significant even than the "requirement" that communities prepare Land Use Plans every five years is the uses that are made of the local plans once they have been completed. In the publication, The Impact of State Regulation of Coastal Land in North Carolina, prepared by Charles D. Liner of the Institute of Government at Chapel Hill, he noted the impact of local land use plans on state and federal decisions:

...Land-use plans have a potential effect on (local) land use because:

(a) CAMA Permits may not be issued for development that is inconsistent with land-use plans (since CAMA permits are required only in AECs, this effect is limited to land within AECs).

(b) Local ordinances and regulations that apply to AECs must be consistent with the land-use plan; local ordinances and regulations affecting land outside AECs are subject to review by the Coastal Resources Commission, which is authorized to recommend modifications to the local government.

(c) Federal actions involving grants, licenses, permits, and development projects must be consistent with local land-use plans, as required by Section 307 of the FCZMA.

(d) In accordance with the Governor's Executive Order Number 15, certain state agency actions and policies must be consistent with land-use plans.

THE STUDY AREA

Burgaw is situated near the geographic center of Pender County, which is located on the Atlantic coast approximately 60 miles north of the North Carolina - South Carolina border. The Burgaw study area includes about 1,300 acres located within the Town Limits and 5,600 acres in Burgaw's extraterritorial planning jurisdiction, for a total of 10.8 square miles.

CITIZEN PARTICIPATION

Citizen participation is an important aspect of any community planning effort, but especially for a land use plan since it can have many effects on an individual's use of his land.

During the update of Burgaw's land use plan the Burgaw Planning Board was the primary vehicle for citizen input. Monthly meetings with the Planning Board provided the Board and the general public with an opportunity to comment on the plan as it was being developed. Two public information meetings, preceded by advertisements in the local newspapre, were conducted by the Planning Board for the purpose of securing input in development of the plan. At several of these meetings, including the public information meetings, the issues raised by the CAMA guidelines and additional issues raised during the meetings were discussed and analyzed until the Planning Board was satisfied that a workable solution had been reached. The Town Commissioners also held a public information meeting and a summary of the plan was published in the local newspaper.

As part of the preparation of Burgaw's 1976 CAMA Plan, a survey questionnaire was mailed to most of the households in Burgaw. A majority of the survey respondents favored a slight population increase while about one-third were in favor of a large population increase. Expenditure of more public funds for industrial development was most favored, followed by parks and recreation facilities, water and sewer facilities, fire and police protection, and storm drainage. When asked what areas should be preserved or protected in their natural state, the most frequent response was the Courthouse square, the hospital, the cemetery, and old homes.

Although five years have passed since the survey was conducted, it is felt that the results still represent the viewpoint of most of Burgaw's residents. The fact that the public's attitude has not changed measurably since 1976 was demonstrated throughout the plan update process. When existing policies were reviewed, the primary concern was to resolve issues which arose as a result of implementation of the 1976 Plan. For example, the Planning Board was especially concerned about "fine tuning" the present Burgaw Zoning Ordinance, which was drafted and adopted based on objectives in the 1976 Plan. The attitudes about man-made hazards, mobile homes, strip development, non-conforming uses, and other issues have not necessarily changed, it is just that the issues and their alternative solutions are better understood.

INTRODUCTION

An important step in the CAMA planning process involves analyzing the past and present conditions in Burgaw in order to gain a better understanding of the changes Burgaw has experienced since the 1976 CAMA Plan. This will provide an indication of the direction Burgaw is likely to take in the future.

As will be seen this chapter provides an analysis of the past and present population, economy, and land use in Burgaw. From this analysis it will be evident there have been few changes over the last few years, but that the groundwork has been laid for more significant changes in the near future.

In addition, this chapter includes a listing and brief discussion of the current plans, policies, and regulations that have an impact on land use in Burgaw's planning jurisdiction. An examination of these plans, policies, and regulations will provide some indication of why Burgaw exists as it does today as well as indicating which direction Burgaw will take in the future.

POPULATION

The population of the Town of Burgaw has been slowly declining since 1960. But the population of Pender County and Burgaw Township has shown increases in the last ten years. (See Table 1.)

Table 1...Population Change for the Town of Burgaw, Burgaw Township, and Pender County, 1950-1980

YEAR	BURGAW	% CHANGE	BURGAW TOWNSHIP	% CHANGE	PENDER CO.	% CHANGE
1950	1,613		4,068		18,423	
1960	1,750	+8.5%	4,135	+1.6%	18,508	+0.5%
1970	1,744	-0.3%	4,422	+6.9%	18,149	-1.9%
1980*	1,570	-10.0%	4,940	+12%	22,107	+22%

Source: U.S. Census 1950-1980
*1980 figures are the first final counts and are subject to revision.

The decline in Burgaw's population can be almost entirely attributed to the following factors: 1) movement of Town residents into the County, particularly Burgaw Township, 2) a decrease in the average number of persons per household from 3.11 in 1970 to 2.63 in 1980, 3) a declining birth rate, 4) and migration of Town residents to other counties and cities. Most of the population decline stems from the decrease in household size and the declining birth rate.

While these forces have been working to decrease Burgaw's population, there are other forces that have prevented the population decline from being so severe. This is exhibited by the substantial amount of growth that has occurred in and around Burgaw. For example, since 1970 the number of housing units increased by 10% in Burgaw and by 29% in Burgaw Township (see Tables 2,3,4 & 5). Many of the 1,816 housing units in Burgaw Township are within the Town of Burgaw's Planning Area. Actually there are 642 housing units in Burgaw and 371 housing units in Burgaw's extraterritorial jurisdiction. A substantial number of the housing units in the extraterritorial jurisdiction are new single family dwellings and mobile homes which are occupied by former Town residents.

On a countywide basis there was an even greater amount of growth in housing units, especially in the coastal areas where a large seasonal population is evident. Burgaw has no seasonal population and remains unaffected by seasonal population in the coastal area.

Regrettably, the 1980 Census information on the age, race and sex characteristics of the population are not yet available. As reported in the 1976 CAMA Plan, Burgaw's population was concentrated in the middle and elderly age groupings. Since Burgaw's birth rate has not been increasing and there has been no great influx of people through in-migration, one must assume the age characteristics remain similar to those reported in the 1976 plan. The same assumption holds true for the sex and race characteristics reported in the 1976 plan when the ratio of males to females was 49 to 51 and the ratio of blacks to whites was 44 to 56.

Future population trends and characteristics will be discussed in the chapter entitled "Estimated Demand".

Table 2...Housing Change for the Town of Burgaw, Burgaw Township, and Pender County, 1970-1980

	HOUSING UNITS			HOUSEHOLD SIZE		
YEAR	TOWN	TOWNSHIP	COUNTY	TOWN	TOWNSHIP	COUNTY
1970	584	1,413	6,758	3.11	3.29	3.42
1980	642	1,816	10,397	2.63	2.90	2.92
% Change	+10%	+29%	+54%	-15%	-12%	-15%

Table 3...Housing Change for Towns in Pender County, 1970-1980

TOWNS	HOUSING UNITS 1970	HOUSING UNITS 1980*	HOUSING UNITS % Change	HOUSEHOLD SIZE 1970	HOUSEHOLD SIZE 1980
Burgaw	584	642	+10%	3.11	2.63
Atkinson	124	137	+10%	2.98	2.29
Topsail	471	805	+71%	2.41	2.06
Surf City	255	1,037	+307%	2.81	2.20
Watha	58	71	+22%	3.35	3.03

Source: U.S. Census
*1980 figures are the first final count and are subject to revision.

Table 4...Population Change For Towns in Pender County, 1970-1980

TOWNS	1970	1980*	% Change
Burgaw	1,744	1,570	-10%
Atkinson	1,023	996	-3%
Topsail	108	245	+127%
Surf City	166	390	+135%
Watha	181	185	+2%

Source: U.S. Census
*1980 figures are the first final count and are subject to revision.

Table 5...Population Change for Pender County, 1960-1980

TOWNSHIP	1960	1970	1980*	% Change, 70-80
Burgaw	4,135	4,422	4,940	+11.7%
Canetuck	466	256	330	+28.9%
Caswell	1,171	1,023	996	-2.6%
Columbia	1,691	1,542	1,740	+12.8%
Grady	1,148	1,264	1,360	+7.6%
Holly	1,579	1,373	1,684	+22.7%
Long Creek	1,045	886	1,158	+30.7%
Rocky Point	1,728	1,616	1,941	+20.1%
Topsail	2,431	2,860	4,515	+57.9%
Union	3,114	2,907	3,443	+18.4%
TOTALS	18,508	18,149	22,107	+21.8%

Source: U.S. Census
*1980 figures are the first final count and are subject to revision.

ECONOMY

The current economic state in Burgaw and Pender County is very similar to the economy when the 1976 CAMA Plan was prepared. The national economy is also in a situation similar to when the previous plan was done.

Because the Burgaw economy is affected by a number of forces, many of which are not local, this economic analysis will focus on employment, retail sales, and income data compiled on a county-wide basis. One should also consider Burgaw has historically been the county's economic center, although job opportunities in neighboring counties and increased mobility have changed this somewhat over the past 20 years.

EMPLOYMENT

Employment of Pender County residents has been steadily increasing over the last ten years, with the exception of the recession years in the mid-70's. Table 6 shows employment estimates by industry for the years 1970, 1975 and 1979. From this table one can see that all employment categories have experienced increases except the agricultural category. The decrease in agricultural employment is related to mechanization of farm operations and is in keeping with statewide trends.

Since 1976 there has been one industry to begin operation in Pender County, the Coastal Pallet Company of Hampstead. Myers Craft Manufacturing of Burgaw is presently undertaking an expansion of their existing plant and there have been employee expansions at several other manufacturers since 1976. Table 7 provides a listing of the manufacturing firms in Pender County and their respective employment ranges. This listing shows the close relationship between Pender County industries and agricultural-forest production.

PENDER COUNTY

Table 6...ANNUAL AVERAGE LABOR FORCE ESTIMATES 1970, 1975 & 1979

	1970	1975	1979
CIVILIAN LABOR FORCE/1	6,960	7,190	8,940
UNEMPLOYMENT, TOTAL	460	950	560
Rate of Unemployment	6.6	13.2	6.3
EMPLOYMENT, TOTAL	6,500	6,240	8,380
Agricultural Employment	1,140	1,030	760
Nonag. Wage & Salary Employ.	4,960	4,850	7,110
All Other Nonag. Employment/2	400	360	510

INDUSTRY EMPLOYMENT BY PLACE OF WORK/3

Manufacturing	580	290	710
Food	60	60	60
Lumber and Wood	120	60	130
Other Manufacturing/4	400	170	520
Nonmanufacturing	1,910	2,160	2,930
Construction	60	110	140
Trans., Comm., & P. Util.	90	80	100
Trade	540	770	1,150
Fin., Ins., & Real Estate	30	70	70
Service	250	230	370
Government	900	890	1,080
Other Nonmanufacturing/5	40	10	20

1/ Data based on place of residence.
2/ Includes Nonagricultural self-employed workers, unpaid family workers, and domestic workers in private households.
3/ Industry segments are not additive to the "Nonag. Wage & Salary Employ." shown under "CIVILIAN LABOR FORCE" since labor force data are by "Place of Residence."
4/ Includes Textiles; Apparel; Furniture; Printing; Chemicals; Stone, Clay & Glass; Elec. Machinery; Instruments; and Misc. Mfg.
5/ Includes Agricultural Services and Fisheries.

Source: N.C. Employment Security Commission

Table 7

PENDER COUNTY
Manufacturing Firms, 1980

NAME	LOCATION	PRODUCT	EMPLOYMENT RANGE
American Foods, Inc.	Burgaw	Packing fresh fruits	50-99
Batson Farmers Exchange	Burgaw	Chickens, dairy and hog feed	1-4
Burgaw Lumber Company	Rocky Point	dimension and chips	20-49
C.H. Clark & Son, Inc.	Rocky Point	sausage and liver pudding	20-49
Electronic Components Corp.	Burgaw	transformers	100-249
Filtro Pipes	Burgaw	tobacco smoking pipes	5-9
H & P Wood Turning, Inc.	Rocky Point	wood products	10-19
Holt Hosiery Mills, Inc.	Willard	hosiery	50-99
Lewis Sausage Co.	Burgaw	sausage products, smoked sausage links	10-19
Murphy Brothers Milling Co.	Burgaw	feed and grain	5-9
Myers Craft Manufacturing Co.	Burgaw	wood stretched strips, stretched art canvas, & and wood artist easels	20-49
Oxford of Burgaw	Burgaw	women's sportswear, jackets	
Pender Lumber Co.	Burgaw	lumber	10-19
Pender Packing Company, Inc.	Rocky Point	liver pudding, sausage, and bar-b-que	10-19
Rowe Fiberglass Corporation	Burgaw	fiberglass showers, tubs, and camper tops	5-9

(CONTINUED) Manufacturing Firms, 1980 Pender County

Southern Printing Company	Burgaw	commercial printing	1-4
Williams Lumber Company	Burgaw	plywood, roof decking	5-9

Source: 1979-1980 Directory of North Carolina Manufacturing Firms, N.C. Dept. of Commerce

OTHER PENDER COUNTY MANUFACTURING FIRMS

NAME	LOCATION
Rocky Point Milling	Rocky Point
Nunalee Lumber	Rocky Point
Carlyle Poultry and Egg	Burgaw
J.H. Lee Seafood	Hampstead
Atlantic Seafood	Hampstead
Carolina Blueberry Cooperative	Burgaw
True Blue Blueberry Cooperative	Burgaw
Leslie Lee Seafood	Topsail
Rivenbark Cabinet Shop	Burgaw
Langston Cabinet Shop	Rocky Point
Wood Treatment Equipment Company	Rocky Point
Wood Treaters	Rocky Point
Burgaw Veneer Company	Burgaw
Atlantic Limestone Company	Maple Hill
Coastal Pallet Company	Hampstead

Source: Burgaw Planning Board

It is important to remember that the civilian labor force figures provided in Table 6 are based on the place of residence of the employee. The employment information for manufacturing and non-manufacturing are based on the place of work.

This information makes it clear there is a broad difference in the number of Pender County residents actually working inside of the County. In fact, according to the 1976 plan, 46% of Pender County workers commuted out of the county for employment. More than 50% of these commuters worked in New Hanover County. The General Electric plant in New Hanover County is perhaps the largest of the outside employment draws.

A large out-commuting work force does have an effect on Burgaw's economy since people spend a significant portion of their income near the place of employment. It also indicates Burgaw and Pender County do not have enough jobs to meet the employment needs of their residents. However, it must also be noted that employment opportunities in surrounding counties have attracted new residents to Burgaw and Pender County.

Retail Sales

Pender County retail sales have increased 138% from 1970 to 1979 (see Table 8). But in constant dollars (a method of injecting the national inflation rate into the dollar value) the increase in retail sales amounts to 16%. Increasing retail sales indicates expansion in the retail sector of the economy and supports the contention that the county's population, employment, and income are increasing.

The amount of retail growth occurring in the Burgaw Planning Area cannot be determined from the available information. However, there have been several new retail establishments opened in the past few years in the Planning Area, most of which have located on U.S. 117 By-Pass. But when retail sales are considered in view of the population trends of Burgaw and the County, one would conclude most of the retail sales growth has taken place in the coastal vicinity where a majority of the County's population increase occurred in the last ten years.

The market area of Burgaw and Pender County is also an important consideration as far as retail sales. Burgaw and Pender County residents frequently travel to Wilmington, Jacksonville, and to a lesser extent Wallace for retail shopping. On the other hand, few retail customers travel from outside of the Burgaw area to shop in Burgaw.

Table 8... Retail Sales for Pender County, 1970 - 1979

Year	Dollar Volume	% Increase	Constant Dollar Value	% Increase
1970-71	$20,432,672		$17,102,146	
1971-72	24,042,981	18%		
1972-73	27,487,031	14%		
1973-74	33,853,823	21%		
1974-75	36,536,356	8%		
1975-76	40,346,464	10%		
1976-77	44,286,065	10%		
1977-78	44,747,643	1%		
1978-79	48,597,876	9%	19,827,933	16%

Source: N.C. Department of Revenue
U.S. Department of Labor, Consumer Price Index

Income

The 1976 CAMA Plan pointed out a disparity in income between Pender County and North Carolina as a whole. It also predicted the gap in incomes would begin dropping in the near future. According to 1975 income estimates prepared by the N.C. Department of Administration the difference in incomes has decreased. In 1970, per capita income for the State ($2,492) was 45% greater than that of Pender County ($1,713). By 1975 the difference had declined to 35% as Pender County per capita income rose to $3,646 and North Carolina to $4,922.

Another indicator of Pender County's income relative to the State is the number of persons receiving public assistance. (Public assistance includes the following programs: Aid to Families with Dependent Children, Aid to the Aged, Aid to the Disabled, and Aid to the Blind). The "Profile of North Carolina Counties, 1978" showed 8.5% of Pender County residents received public assistance whereas only 6.4% of the State's population received public assistance. Again this indicates the Burgaw area has proportionately more persons with low income than the State. Low income is directly related to the small proportion of employment in the manufacturing field.

EXISTING LAND USE SURVEY AND ANALYSIS

Introduction

This section provides a discussion of nine different land use classifications, including: residential; commercial; industrial; transportation, communication and utilities (TCU); government and institutional; cultural, entertainment and recreational; agricultural and woodlands; and undeveloped. The location and types of land use in the Burgaw Planning Area were identified by a windshield survey in October, 1980. Exhibit 1, the land use change map, depicts the locations where land use has changed from that which was shown on the 1976 map. The land use of the areas identified on the map changed from undeveloped (meaning agricultural, woodland, or unimproved) to either residential, commercial, or public use.

Table 9 contains a breakdown of the number of acres by land use category according to the results of the 1980 land use survey and the survey results included in the 1976 CAMA Plan. The acreages for 1980 land use were determined by adding the acreage of development since 1975 to the land use acreages listed in the 1976 CAMA Plan.

Prior to conducting the windshield survey, the planning area was separated into four quadrants for data collection and analysis purposes. As the survey was being conducted it became apparent that each quadrant represented a homogeneous residential neighborhood, in that housing types and conditions were fairly uniform within each respective quadrant. The quadrant boundaries are depicted on the existing land use map and are described as follows: NE Quadrant, N. Wright Street and Horse Branch Road to the West and E. Wilmington Street to the South; SE Quadrant, S. Wright Street and Dickinson Street to the West and E. Wilmington Street to the North; SW Quadrant, S. Wright Street and Dickinson Street to the West and W. Wilmington Street to the North; NW Quadrant, N. Wright Street to Horse Branch Road to the West and W. Wilmington Street to the South. These streets are the North-South and East-West axis which the Town uses for assigning addresses.

The survey results indicate recent urban development has been evenly distributed between Burgaw and its extraterritorial jurisdiction. It also shows that development trends identified in the 1976 CAMA Plan have been continuing; such as strip development, low density sprawl, and a slow growth rate.

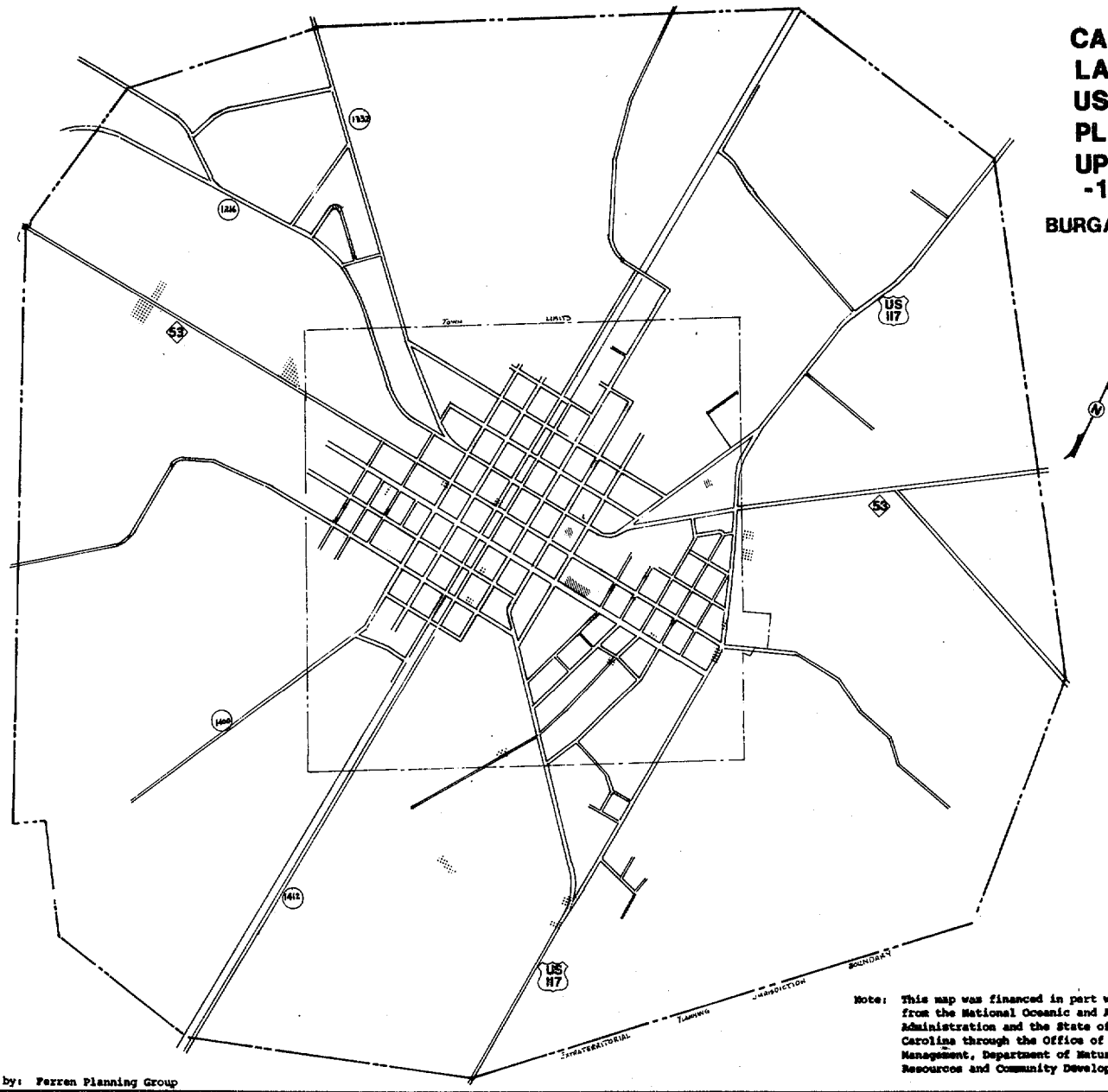
Residential Land Use

The residential land use category includes single family dwellings, mobile homes, and multi-family dwellings. Table 9 indicates residential land use increased in acreage more than any other classification since the 1976 CAMA Plan was prepared. This is substantiated by the 1980 Census of Burgaw which showed an increase in housing units from 584 in 1970 to 642, or a 10% increase.

Residential land uses occupy 29% of the total developed acreage within the Planning Area. The survey revealed only three (3) duplex and one (1) quadplex apartment building, for a total of ten (10) multi-family housing units. A total of 125 mobile homes were counted and the remaining 898 housing units within the Planning Area consist of single family homes.

CAMA LAND USE PLAN UPDATE -1981-

BURGAW, N.C.



Prepared by: Ferren Planning Group

Note: This map was financed in part with funds from the National Oceanic and Atmospheric Administration and the State of North Carolina through the Office of Coastal Management, Department of Natural Resources and Community Development.

LAND USE CHANGES

1976 – 1981

Residential

Commercial

Public

Table 9...Existing Land Use Acreages

Land Use Category	Burgaw 1975	Burgaw 1980	Extraterritorial Jurisdiction 1975	Extraterritorial Jurisdiction 1980	% of Total Developed
Residential	163.1	178.1	77.4	98.7	29.6%
Commercial	27.3	34.6	9.6	12.1	5.0%
Industrial	13.4	13.4	15.1	15.1	3.0%
TCU	200.0	205.0	171.2	173.2	40.0%
Govt. & Inst.	76.8	80.8	17.3	17.8	10.4%
Cult, Ent. & Rec.	11.2	11.2	95.5	95.5	11.4%
Total Urban Developed	491.8	523.1	386.1	412.4	100.0%
Agricultural	210.0	207.8	2462.3	2650.1	
Woodland	136.8	134.6	2280.5	2468.3	
Undeveloped	487.3	460.4	452.0	50.0	
Total	1325.9	1325.9	5580.8	5580.8	

Source: CAMA Land Use Plan, 1976, Burgaw; N.C. Department of Natural and Economic Resources, Windshield Survey, 8/75; Ferren Planning Group, Windshield Survey, 10/80;

During the land use survey subjective ratings of housing conditions were made. Each housing unit (excluding mobile homes) was rated with standard, deteriorated, or dilapidated. Dwellings were rated standard if they were not in need of repair, or if only minor repair was necessary; such as a need for paint, a broken window frame, or a broken gutter. A deteriorated rating was given where dwellings were found to be in need of major repairs; like replacing the foundation, a wall, or a combination of many minor repairs. A dilapidated dwelling included those in need of several major repairs. Frequently, they were uninhabited and/or uninhabitable. A listing of the number and condition of housing units by planning quadrant is provided in Table 10.

The overall condition of the housing units is very good, as only 32 dwelling units, or 4% of the total number in the Planning Area are classified as dilapidated. Inside the city limits 48% of the deteriorated and dilapidated dwellings are located in the southwestern quadrant. The northwestern quadrant exhibited the second highest incidence (22% of the total number) of substandard dwellings inside the Town. North Wright Street, the boundary between the northwestern and northeastern quadrants, also had a high concentration of substandard dwellings (48%). In the extraterritorial

Table 10...Housing Survey

City	Housing Units			Housing Conditions		
	Single Family	Multi-Family	Mobile Homes*	Standard	Deteriorated	Dilapidated
NE Quadrant	167	2	5	152	16	1
SE Quadrant	155	6	0	152	9	0
SW Quadrant	158	0	10	117	31	10
NW Quadrant	133	2	9	116	15	4
City Totals	613	10	24	537	71	15
Extra-territorial Jurisdiction						
NE Quadrant	108	0	23	88	15	5
SE Quadrant	47	0	34	33	5	9
SW Quadrant	33	0	2	30	3	0
NW Quadrant	82	0	42	76	3	3
Extra-territorial Jurisdiction Totals	270	0	101	227	26	17
Planning Area Totals	883	10	125	764	97	32

Source: Ferren Planning Group, Windshield Survey 10/80;
* Mobile homes are not included in the counts for "single family" or in the conditions survey.

jurisdiction the substandard dwellings were concentrated in the two eastern quadrants, primarily on unpaved roads.

Mobile homes are noticeably concentrated in the two western quadrants inside the city. In the extraterritorial jurisdiction, mobile homes are evenly dispersed except that none are located in the southwestern quadrant. All mobile homes are on individual lots with the exception of several relatively small mobile home parks. The practice of permitting mobile homes on individual lots next to a conventional dwelling can devalue the conventional dwelling and/or surrounding undeveloped land because the value of a typical mobile home is much less than that of a conventional home. Often this creates a situation where the conventional homeowner is reluctant to maintain his home in standard condition because he may not receive a return equal to his investment.

Another issue the Town should address is the increasing amount of strip residential development along the highways and state roads. A substantial number of new dwelling units have been constructed on lots adjacent to state highways and roads, particularly in the extraterritorial jurisdiction. Strip development of this nature decreases the traffic carrying capacity and safety of the highway, landlocks adjoining tracts of land, and increases the cost of delivering public services.

Some of Burgaw's residences have a problem with incompatible neighbors; for example, a manufacturing operation, service station, retail store, or in some cases home occupations. Instances of incompatible land use are most prevalent on the fringes of the downtown where homes surround the central business district. Each time a new or expanding business locates in this fringe area, it results in more encroachment on the residential uses. Many of the state roads and highways also have instances of residential and non-residential compatibility problems, especially Highway 117 Bypass and East Wilmington Street (Highway 53). The hospital and electric utility operation on East Fremont Street are other examples of incompatible land use encroaching on a residential neighborhood. Over an extended period of time, situations such as this sometimes lead to poor housing conditions since the homeowner and/or tenant no longer find the residence desirable because of the traffic, noise, trash, and unsightliness often generated by the non-residential neighbor. Residents frequently find it useless to continue investing money in an unsatisfactory home, so it is allowed to deteriorate.

Although a large number of homes have been built in strip development fashion since 1976, there has also been a substantial amount of development occuring in subdivisions, particularly on the East side of Town. Most of this subdivision development occurred in the area bounded by Fremont Street, Bickett Street, U.S. 117 Business and Bennett Street. In all likelihood, the undeveloped lots and tracts in this neighborhood will continue to be one of the principle residential growth areas in the Planning Area. And unless subdivision and zoning policies are changed, strip residential development will continue along the major roads and highways.

Commercial Land Use

Included in the commercial classification are uses such as professional offices, retail stores, services, and restaurants. Commercial land uses are presently concentrated in the downtown and on U.S. 117 By-Pass. Others are located along state roads and highways and a few are located within residential neighborhoods. Commercial land uses occupy 5% of the developed land in the planning area.

Several businesses have been constructed on U.S. 117 By-Pass since the 1976 CAMA Plan and the By-Pass is certainly desirable for additional development from the retailer's viewpoint. But continued strip development on the By-Pass will decrease the carrying capacity of that road and increase the probability of accidents.

The mixture of commercial land uses with residential land uses seems to be a problem in several areas of Town, as was mentioned in the discussion of residential land use. Frequently, the long term effect of mixed land uses is deteriorated housing conditions and struggling businesses. Many businesses cannot survive in a residential area because the location is often obscure, and at the same time the nuisances of traffic, parking and noise associated with the business make the surrounding environment undesirable for a home.

Industrial Land Use

The industrial land use category amounts to only 3% of the developed land in the planning area. Industrial land uses are not concentrated in any one area. Most are located along the major highways, state roads, or the railroad. In fact, all the industrial uses are located directly adjacent to or within a block of Highway 117 By-Pass, West Wilmington Street Extended (Highway 53), or the railroad.

As was mentioned earlier in the economy section, there have not been any new industrial operations in Burgaw's planning jurisdiction since the previous CAMA plan was prepared. But the Pender Progress Corporation, an industrial development authority chartered by the County Commissioners, recently acquired a 50 acre tract of land for development as an industrial park. The site has direct access to Dickson Street, the railroad, and S.R. 1413 and it also abuts the Burgaw Junior High School property.

Transportation, Communication, and Utilities

This category (TCU) has the largest amount of developed land use within the planning jurisdiction; representing 40% of all developed land. TCU includes streets, electric utilities, radio stations, and the telephone company among others. Most of the acreage in this classification is street or highway rights-of-way.

The street and highway network in Burgaw is not overburdened at present but as the Town grows, close attention should be directed to the location of additional major streets and the interconnection of streets in new subdivisions. Dead-end streets and subdivision development without interconnection of streets will create traffic circulation problems as the amount of urban development increases. Strip development adjacent to major streets is an issue of importance and has been discussed in other categories.

Burgaw has been able to reduce the amount of unpaved streets over the last few years in conjunction with the County's Community Development Block Grant Program and with Powell Bill Funds. On the other hand, new subdivision streets in many areas do not have curb and gutter, which will result in increased maintenance costs for the Town.

A discussion of the use and capacity of the Town's utilities and roads is included in the chapter on "Constraints to Development".

Government and Institutional

Schools, churches, government offices, and cemeteries are examples of land uses within this classification. Government and institutional land uses occupy 10.4% of the total developed land, the fourth largest amount in the planning area. The major addition to this category since 1976 is the County's new office building and law enforcement center.

Cultural, Entertainment, and Recreational

The golf course on East Wilmington Street and Pender Memorial Park on South Smith Street were the only land uses within Burgaw's planning jurisdiction included in this category. Recreation facilities on school premises are available but are not included in this classification.

Agricultural and Woodland

This category includes active agricultural lands and tracts of wooded land, but not vacant wooded lots. The agricultural and woodland classification has more acreage than any other, 74% of the total. In the past 10 to 15 years a significant amount of land in this category has been developed for urban purposes, especially in the extraterritorial jurisdiction. Land in this classification is likely to continue experiencing change during the planning period. But land is one of Pender County's more abundant resources since the county contains approximately 460,000 acres, the state's seventh largest county. According to the 1976 Pender County Land Use Plan, 62,000 acres are in cropland and 370,000 acres are in woodlands.

Undeveloped

The undeveloped classification includes vacant, unimproved land located in an urban surrounding. Of the total land area inside the Town limits, 35% or 460.4 acres are within this category. Most of the land classified as undeveloped is located within the town limits and has access to existing public facilities. Because of the availability of public facilities it would be advantageous to the Town if this land were developed before public facilities are extended into other areas.

The Osgood Branch is the principal drainageway in Burgaw and it has a considerable amount of undeveloped land adjacent to its banks. The probability of flooding adjoining lands will increase as urban development continues in the stream's drainage basin. Burgaw residents stated the stream overflows its banks occasionally but that it does not result in hazard or damage to property. Unfortunately, flood plain mapping is not available, which makes development on land adjoining the stream a risky venture unless structures are well setback from the stream.

Vacant lots are included in the undeveloped classification and a number of them are in need of a clean-up because of a possible health hazard from debris, rodents, and a couple of abandoned structures. One particular instance that needs prompt attention is an abandoned, dilapidated structure on the southern end of Vann Street.

The land use survey for the 1976 Plan listed 452 acres of undeveloped land in the extraterritorial jurisdiction, but only 5 acres were included on the 1976 existing land use map. Thus it was not possible to compare undeveloped land in 1980 to that in 1976 since the 1976 existing land use map was the only measure for comparison.

The 1980 land use survey identified 50 acres of undeveloped land in the extraterritorial jurisdiciton, which is a sizeable difference from the 452 acres listed in 1976. Again, one cannot explain why there is such a large difference because undeveloped land in the extraterritorial jurisdiction was not identified in 1976. But since the amount of urban development has increased by only 28.3 acres in the extraterritorial jurisdiction, one must assume that most of the land previously classified as undeveloped is now classified woodland or agricultural.

Nevertheless, the point to be made here is that urban development increased from 877.9 to 935.5 acres since 1976, which leaves 5971.2 acres, or 87% of Burgaw's jurisdiction undeveloped. With such a small amount of land being converted to urban use, the loss of agricultural and forestland is not a point of major concern to Burgaw.

CURRENT PLANS, POLICIES AND REGULATIONS

Listed below are the plans, policies and regulations which are presently in effect within Burgaw's planning jurisdiction. Each of the existing plans were reviewed in order to prevent duplication of effort during the update of this plan. The plans also serve as a source of information and as a base from which change in policies and physical conditions can be measured. An examination of the current policies and regulations will determine whether implementation has been effective as well as indicating where revisions are needed. It is the purpose then of this section to review existing plans, policies and regulations which have a direct or indirect impact on land use in Burgaw.

Current Plans

"201" Wastewater Management Plan - This plan was prepared in 1977 and adopted by the Town Board in the same year. It establishes a management and improvement program for Burgaw's sanitary sewer facilities for a 20 year planning period.

It was found that the Town's treatment plant was in good working order but occasionally stormwater inflow and groundwater infiltration overload the capacity of the treatment plant, resulting in untreated effluent being discharged directly into the receiving stream. The plan also states that insufficient stream flow in the Osgood Branch, which is the Town's receiving stream is leading to excess concentrations of treated wastewater in the stream flow.

Four alternatives were considered to solve these problems with the recommended solution being a correction of the stormwater inflow and relocation of the effluent discharge point to the Northeast Cape Fear River.

Burgaw has moved quickly to implement the program, as the inflow problems have been corrected and relocation of the effluent discharge has begun.

The "201" plan concluded that correction of the inflow problem would provide the plant with sufficient capacity to meet demand projected within the planning period. Maximum population during the 20 year planning period was projected at 2,250, with a reserve of 16,900 gallons per day for anticipated but unprojected needs.

Land Use Plan - Burgaw's current land use plan was prepared in 1975 and adopted in 1976 under the guidelines of the 1974 Coastal Area Management Act. It includes population, economic and land use data analysis, statements of land use policy and means for policy implementation, and a land classification map.

The principal objectives and policies approved in this plan, and their implementation status, are listed as follows:

1) Employ a town manager to direct implementation of plans and programs. The Town Board has not budgeted money for this position.
2) Employ a building inspector to enforce the building code, zoning ordinance, and subdivision regulations. A building inspector was hired and given

responsibility for enforcing the building code and zoning ordinance.

3) Encourage development within the Town limits and avoid urban sprawl. Development has been encouraged inside the Town by providing or requiring urban services (paved streets, water, sewer, fire, police) for new development and by permitting higher density development. On the other hand attempts to avoid sprawl have been negligible, as present land use controls outside the Town limits allow residential development on 20,000 square foot lots, plus water service has been extended to some areas outside of Town.
4) Establish a zoning district which permits mobile homes on individual lots within a specified area. Burgaw's current zoning ordinance permits mobile homes on individual lots in the R-20 zoning district. The entire extraterritorial jurisdiction is zoned R-20, with the exception of two B-2 and one O & I districts on Highway 117 Business and Bypass. There are no areas within the Town limits where mobile homes on individual lots are permitted.
5) Establish an industrial park. The Pender Progress Corporation, an industrial development authority established by the County Commissioners, purchased a 50-acre tract located on South Dickson Street and S.R. 1412. Interior streets and water and sewer services have not been installed on the site yet.
6) Adopt a thoroughfare plan with the N.C. Department of Transportation. No action has been taken towards preparing a thoroughfare plan.
7) Adopt subdivision regulations. Burgaw adopted a subdivision ordinance on November 11, 1975.

On the whole Burgaw has been successful in implementing the goals and objectives which were adopted in the 1976 Land Use Plan.

Downtown Revitalization Study - Burgaw contracted with the Cape Fear Council of Governments for preparation of this plan. It was completed in 1979 with the purpose of developing a strategy for improving the downtown. The principal conclusions of the plan were that a substantial amount of underutilized land and building space exists in the downtown and a number of activities formerly in the downtown are now moving to locations along major traffic arteries.

Citizen input was obtained by a survey questionnaire distributed through the schools and to downtown merchants. Most of the survey respondents indicated they shop in Burgaw and Wilmington on a regular basis. Downtown Burgaw was chosen as a shopping place primarily because of convenience. Respondents found absence of variety and unattractiveness to be the major shortcomings of downtown Burgaw.

The principal objectives and implementation strategies included improving the convenience and physical appearance and establishing an organization to promote the interests of the downtown.

Current Policies

Water and Sewer System Policies - Burgaw has an adopted policy whereby water and sewer services are extended to subdivisions that are located within the Town limits at the Town's expense. Another policy requires connections to the water and sewer system when a development is located within 300 feet of existing mains. In addition to those policies, Burgaw's subdivision regulations require the developer to install water and sewer services in subdivisions with lot sizes less than 20,000 square feet. Aside from these

policies, decisions relative to provision of water and sewer service are handled on a case-by-case basis.

Current Regulations

Building Code - The North Carolina State Building Code, Plumbing Code, Heating and Air Conditioning Code, and Electrical Code have been adopted by Burgaw. The Building Inspector is responsible for enforcing all of these codes.

Zoning Ordinance - Burgaw's zoning ordinance was prepared in 1976 by the North Carolina Department of Natural Resources and Community Development and adopted in September 1977. The ordinance contains residential, office and institutional, business, industrial and flood plain zoning districts. All of the districts are included on the zoning map except for the flood plain zoning district which is omitted because flood plain mapping is not available for Burgaw. In addition to building code enforcement, the Building Inspector is responsible for enforcing the zoning ordinance.

On initial examination of the ordinance several topics that deserve further study were discovered. First one could see that a number of nonconforming uses are located in the extraterritorial jurisdiction. Many of the nonconforming uses are businesses or industries located in an R-20 zoning district, principally on Horse Branch Road, N.C. 53 North and South, S.R. 1332, and Highway 117 South. Secondly with the exception of three small areas the entire extraterritorial jurisdiction is zoned R-20, a district which permits mobile homes and conventional dwellings on individual lots adjacent to one another. This zoning is contrary to the stated objective of "avoiding urban sprawl" which was adopted in the 1976 CAMA Plan. Lastly, although a number of zoning map changes have been approved by the Town Board since the ordinance was adopted, none of the zone changes have been made to the Town's official zoning map.

Generally speaking a zoning ordinance should have a comprehensive overhaul every five years. With that in mind plus the fact that new land use policies will be adopted as a part of this update, Burgaw should pursue a complete update of their zoning ordinance.

Subdivision Regulations - Like the zoning ordinance and land use plan, Burgaw's subdivision regulations were prepared with assistance from the Department of Natural Resources and Community Development. The sub regs were adopted in 1977, but responsibility for enforcement and administration of the ordinance has not been assigned. The Planning Board and Town Commissioners have been reviewing subdivision plats since the ordinance was adopted.

The subdivision ordinance provides Burgaw with a means for planning land division and street patterns. It requires subdivision development to comply with any other adopted plans or policies of Burgaw and to give consideration to protection of natural resources. Installation of streets, sidewalks, storm drainage, and water and sewer services are mandated by the subdivision ordinance.

Pender County Wastewater Disposal Ordinance - This ordinance applies within Burgaw's jurisdiction when land development without public sewer is proposed. It requires County Health Department approval for installation

of a septic tank. Although there is no written minimum, a lot size of 20,000 square feet or more is normally required for use of a septic tank, depending upon the land use and soil characteristics.

Current State and Federal Regulations - The following listing includes state and federal regulations affecting coastal land and water resources. Since Burgaw is not a coastal or riverfront community many of these regulations will have little impact on land use in Burgaw. The listing was provided by the Department of Natural Resources and Community Development.

Department of Natural Resources and Community Development, Division of Environmental Management:

..Permits to discharge to surface waters or operate waste water treatment plants or oil discharge permits; NPDES Permits, (G.S. 143-215)
..Permits for septic tanks with a capacity over 3000 gallons/day (G.S. 143-215.3)
..Permits for withdrawal of surface or ground waters in capacity use areas (G.S. 143-215.15)
..Permits for air pollution abatement facilities and sources (G.S. 143-215.108)
..Permits for construction of complex sources; e.g. parking lots, subdivisions, stadiums, etc. (G.S. 143-215.109)
..Permits for construction of a well over 100,000 gallons/day (G.S. 87-88)

Department of Natural Resources and Community Development, Office of Coastal Management:

..Permits to dredge and/or fill in estuarine waters, tidelands, etc. (G.S.113-229)
..Permits to undertake development in Areas of Environmental Convern (G.S.113A-118) Note: Minor development permits are issued by the local government.

Department of Natural Resources and Community Development, Division of Earth Resources:

..Permits to alter or construct a dam (G.S. 143-215.66)
..Permits to mine (G.S. 74-51)
..Permits to drill an exploratory oil or gas well (G.S. 113-381)
..Permits to conduct geographical exploration (G.S. 113-391)
..Sedimentation erosion control plans for any land disturbing activity of over one contiguous acre (G.S. 113A-54)

Department of Natural Resources and Community Development, Secretary of NRCD:

..Permits to construct an oil refinery

Department of Administration:

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

Department of Human Resources:

..Approval to operate a solid waste disposal site or facility (G.S. 130-166.16)
..Approval for construction of any public water supply facility that furnishes water to ten or more residences (G.S. 130-160.1)

Army Corps of Engineers (Department of Defense):

..Permits required under Sections 9 and 10 of the Rivers and Harbors Act of 1899; permits to construct in navigable waters
..Permits required under Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972
..Permits required under Section 404 of the Federal Water Pollution Control Act of 1972; permits to undertake dredging and/or filling activities

Coast Guard (Department of Transportation):

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

Geological Survey, Bureau of Land Management (Department of Interior):

..Permits required for off-shore drilling
..Approvals of OCS pipeline corridor rights-of-way

Nuclear Regulatory Committee:

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

Federal Energy Regulatory Commission:

..Permits for construction, operation and maintenance of interstate pipelines facilities required under the Natural Gas Act of 1938
..Orders of interconnection of electric transmission facilities under Section 202(b) of the Federal Power Act
..Permission required for abandonment of natural gas pipeline and associated facilities under Section 7C (b) of the Natural Gas Act of 1938
..Licenses for non-federal hydro-electric projects and associated transmission lines under Sections 4 and 15 of the Federal Power Act

CHAPTER III

INTRODUCTION

Like most other eastern North Carolina towns and counties, there are natural and man-made conditions in Burgaw's planning jurisdiction that present some type of constraint or limitation to various types of land use. The purpose of this chapter is to identify those constraints and the implications they have for land use. They can be divided into three general categories, man-made hazards, capacity of community facilities, and physical conditions. Because there have been few significant changes since the 1976 land use plan was prepared, most of the discussion in this chapter is based on information found in the earlier plan.

NATURAL CONSTRAINTS

SOIL LIMITATIONS

Soil conditions are one of the most important considerations when determining the suitability of land for development. Soils can have a great affect on the foundations of buildings and streets, drainage of storm water, and wastewater disposal. Crop and wood production is also greatly affected by soil conditions as any farmer would tell you.

The most recent soil data for the Burgaw area was discussed in the 1976 land use plan. According to this information all soil associations, except for the Nixonton assication, have severe limitations to septic tank use primarily because of a high water table. To a lesser extent soils also pose a limitation to sanitary sewer systems, outdoor recreation, streets, light industry, agriculture and forest production.

Fortunately, the Soil Conservation Service is presently conducting a detailed soil survey and analysis for the entirety of Burgaw's jurisdiction. According to preliminary results from the survey there will be revisions to both the soils map and the limitations associated with the soil associations. Upon completion of the soil survey Burgaw will have the information necessary to determine more accurately when development proposals need to give special attention to soil conditions. In all cases the Burgaw Planning Board should use the best available information to determine whether adequate consideration has been given to soils during preparation of a subdivision plat. Careful attention should be directed to provisions for storm water drainage, wastewater disposal, and street construction when reviewing subdivision plats.

Conversations with local officials and citizens identified one area that was experiencing septic tank problems. The area was located on the southwest side of Penderlea Road and was developed prior to adoption of land use controls. Drainage, building foundation and street foundation problems were not identified although the potential exists. However, as mentioned in the previous chapter the sanitary sewer system has been plagued with infiltration due to the high water table.

SOURCES OF WATER SUPPLY

For obvious reasons land use planning, or the lack thereof, can have significant implications for the quality of water supplies. Seepage of chemicals into groundwater recharge areas or wellfields and undue soil erosion into watersheds are examples of how land use can have an adverse impact on the quality of water supplies.

In Burgaw groundwater is the sole source of water supply, therefore it is not pertinent to discuss watershed areas. Burgaw has three wells which pump groundwater from the upper Cretaceous System Acquifer according to the 1976 plan. In regards to Burgaw's water supply the regional hydrologist with the then Department of Natural and Economic Resources stated the following: "it is unlikely future man-made activities in Burgaw would degrade the good water quality presently pumped from the well-field. Nor is the future quality of ground water... in jeopardy." The hydrologist also pointed out there is a limited amount of knowledge about groundwater recharge in the Burgaw area, therefore each well should be closely monitored to determine variations in quantity or quality.

SLOPE AREAS

The CAMA guidelines specify that land with a predominant slope in excess of 12% should be given special consideration. However there are no areas within Burgaw's jurisdiction which fit this description, thus it is not relevant to discuss this topic.

FRAGILE AREAS

Sand dunes, ocean beaches, coastal wetlands, public trust waters, estuarine waters, estuarine shorelines, complex natural areas, areas that sustain remnant species, unique geologic formations, natural landmarks, prime wildlife habitats, scenic and prominant high points, archeological sites, historic properties, and wooded swamps are lands classified as fragile by the CAMA guidelines. No fragile areas within Burgaw's jurisdiction have been identified, but as previously pointed out in the 1976 plan a number of structures and sites of possible architectural and historical significance have been identified. The courthouse and courthouse square, several churches, and a number of commercial and residential buildings merit special consideration for their historical and architectural value. There also is a possibility of both prehistoric and historic archaeological sites in the Burgaw planning area. Hence Burgaw should solicit the expertise of the N.C. Division of Archives and History when large construction projects are initiated in the area.

RESOURCE POTENTIAL

Agricultural land, woodlands, mineral sites, gamelands, fishing areas, areas with recreational value, and wildlife sanctuaries are among the different types of land valued for their resource potential. Within Burgaw's planning area agricultural lands and woodlands are the only identified lands with resource potential. Their location is graphically depicted on the existing land use map included in the summary of the 1976 Land Use Plan.

On a countywide basis, agriculture and forest production provide an invaluable input into the local economy, but the contribution from land within Burgaw's jurisdiction is small when compared to the County as a whole. This is especially evident when one realizes there are over 400,000 acres of land in Pender County but just 7,000 acres are located within Burgaw's jurisdiction.

Undoubtedly as Burgaw continues to grow the acreage devoted to agricultural and forest production will decline. But this would be an efficient use of land since it would allow concentration of urban development in Burgaw while preserving outlying areas for resource production. The soil survey did not identify any lands considered as excellent or prime for resource production.

MAN-MADE HAZARDS

A number of land uses within Burgaw's jurisdiction were considered man-made hazards, with each one being either a bulk fuel of chemical storage facility. Most of these facilities were located adjacent to major roads and some were found adjacent to residences.

The obvious hazard associated with such a facility is the potential for a fire, explosion, or spill that could result in significant damage to unsuspecting neighbors. All of the observed storage facilities were above ground and many were observed in close proximity to adjoining land uses. Additional setback requirements, below ground storage, and spill retention ditches are measures that would significantly reduce the potential for damage to adjoining properties.

CAPACITY OF COMMUNITY FACILITIES

Heretofore the discussion of development constraints has focused on the natural environment. This section will focus on Burgaw's capacity to provide services to its residents. Specifically, the water and sewer system, schools, and roads will be examined to determine their current use and capacities.

WATER SYSTEM

As mentioned earlier there are no bodies of surface waters in the Burgaw area, therefore groundwater serves as the supply source. Three wells capable of pumping 750 gallons per minute provide water for an estimated population of 1,600. Approximately 550,000 gallons per day could be provided based on a 12-hour demand according to information in the previous CAMA plan. Two elevated storage tanks provide a reserve capacity of 175,000 gallons.

In the 1976 plan it was estimated that average daily usage was about 250,000 gallons, a figure that has not changed markedly. In fact Town records show that average daily usage was approximately 220,000 gallons per day during February, 1981 or 40% of the system's capacity. Exhibit depicts the service area of the water system. From the map one can see that most of the developed areas within the town limits are served by the Town water system. There are also a few areas outside the Town limits which are served.

SEWER SYSTEM

Burgaw's wastewater treatment plant has a design capacity of 300,000 gallons per day. According to the "201" wastewater facility plan the average flow per day was 220,000 gallons. The plan also explained that infiltration and inflow cause the plant to be overloaded from time to time, but particularly during rainy periods. The amount of inflow has been reduced significantly since the "201" plan was completed, but a precise estimate of the reduction is not available.

The "201" plan states that the existing system is capable of serving a population of 2,250 persons while providing a reserve of 16,900 gallons per day for potential industrial customers upon correction of the inflow problems. With current water consumption at 220,000 gallons per day and using the assumption given in the "201" plan that only 80% of water consumption enters the sewer system, it is estimated that present average daily wastewater flow is 176,000 gallons per day. This amounts to 59% of plant capacity. However, it does not include infiltration and inflow, which exists in unknown quantity.

The service area of the sewer system is roughly equivalent to the developed areas within the corporate limits. There are no areas outside of town served by the sewer system.

The N.C. Division of Environmental Management has placed a restriction on new sewer taps and line extensions because the treatment plant's receiving stream, the Osgood Branch, does not have sufficient flow to meet effluent limitations. To remedy this problem the main outfall line is in the process of being relocated to the Northeast Cape Fear River which has sufficient flow to comply with effluent limitations. The relocation project is expected to be completed within 12 months and it is anticipated that the Division of Environmental Management will remove the restriction on sewer taps upon completion of the project. If the restriction is lifted Burgaw would be allowed to provide service to new customers within the capacity of the treatment plant. Officials of the Division of Environmental Management have stated that requests for sewer service by industrial customers will have to be considered on a case-by-case basis.

STREET SYSTEM

According to the North Carolina Department of Transportation traffic estimates all of the primary roads within Burgaw's planning jurisdiction are well within their design limits. During 1979 the highest average daily traffic count (ADT) on a Burgaw street was 5,500 vehicles. Not suprisingly this count was recorded on U.S. 117 Bypass. Other roads with relatively high traffic volumes include N.C. 53, U.S. 117A, Penderlea Road, Wright Road, Dickson Street and Freemont Street. It was stated in the 1976 CAMA plan that the design capacity for a two lane road with parking on both sides is approximately 6,000 to 8,000 vehicles per day.

SCHOOL SYSTEM

Educational services for Burgaw residents are provided by the Pender County Board of Education. Three of the county's thirteen schools serve Burgaw residents. As noted in the 1976 CAMA plan the school facilities are inadequate, with mobile units and temporary buildings acting as classrooms in some cases. Since that time the Board of Education and County Commissioners have adopted a program of school construction and improvement. Upon completion of the program the schools will meet existing needs. The State Board of Education projects a relatively constant level of school enrollment countywide at least through the 1983-1984 school year.

The design capacity and school enrollment for the three schools attended by Burgaw residents are listed below. The Pender Board of Education provided the current school enrollment figures and the design capacity was included in the earlier land use plan.

Burgaw Elementary School
Design Capacity: 450
1980 Enrollment: 635

Burgaw Junior High School
Design Capacity: 300
1980 Enrollment: 614

Pender High School
Design Capacity: 800
1980 Enrollment: 892

INTRODUCTION

The purpose of this chapter is to develop a projection or prediction of how Burgaw's population, economy and land use will change between 1980 and 1990. Since changes in land use are so closely related to the population and economy, the first part of this chapter will focus on Burgaw's future population and economy.

POPULATION AND ECONOMY

In Chapter II of this update it was determined that Burgaw's population has been declining since 1960, whereas population in Burgaw Township has been on the increase. Burgaw's population decrease was attributed mainly to a drop in the average household size, which was a result of a low birth rate and a high out-migration rate. Even though a population decrease was reported Burgaw did exhibit substantial growth in the number of housing units. And in the land use analysis it was shown that the number of acres converted from undeveloped to developed in the Town and extraterritorial jurisdiction were approximately equal.

The information in Chapter II also showed that population growth in Burgaw is closely related to the economic situation in Pender and neighboring counties, especially New Hanover County. It was noted that employment gains in Burgaw and Pender County were principally a result of increased non-manufacturing employment in Pender County and manufacturing employment in New Hanover County.

These employment trends are expected to continue throughout the planning period, with one exception. An increase in manufacturing employment in the Burgaw area is expected. The largest factor in favor of increased manufacturing employment in the Burgaw area is the current construction of Interstate 40 through Pender County. In addition to the impact of I-40, previous industrial recruiting efforts such as hiring a professional recruiter and acquiring an industrial park, suggest that new industry will locate in the Burgaw area in the near future. The end result will be migration of population into the area. Now the question is how many jobs will become available and how many people will move into Burgaw's planning area in order to fill these jobs. Unfortunately, no one can answer either of these questions precisely. However, it is known that Pender County is actively recruiting both large and small industries.

It is now established that Burgaw and Pender County's economy will continue to expand. However, it has also been pointed out that a new industry has not located in the Burgaw area since before 1970.

It was decided that a projection of future housing units would provide the most accurate means of determining future population in Burgaw. There are two reasons for this decision. First, the population decline experienced since 1960 resulted mainly from a paralleling decrease in household size. Secondly, there was an increase in the number of housing units in Burgaw. Thus a projection based on past population trends would continue to show a population decrease even though Burgaw has been experiencing growth.

There are two assumptions made here in order to project Burgaw's population. One is that average household size will equal 2.5 persons in 1990. The second is that the number of housing units will continue to grow at a pace comparable to that experienced during the 1970's.

It was noted in Chapter II that Burgaw had a 10% increase in housing units from 1970 to 1980. A similar increase during the 1980's would amount to 64 new housing units by 1990. And with 2.5 persons per unit, this would result in a population increase of 195 persons for a total 1990 population of 1,765, or a 12% increase over the 1980 population.

For a population projection in the extraterritorial jurisdiction, housing figures from Burgaw's 1974 Land Development Plan and the 1980 Land Use Survey will be used. In the 1974 Plan 292 housing units were identified in the extraterritorial jurisdiction. This had increased by 27% in 1980, or 4.5% a year. Again assuming past trends continue through 1990, an increase of 45% can be expected or 167 new housing units. Assuming 2.5 persons per household, an additional 418 persons can be expected outside of Burgaw's town limits, resulting in a total 1990 population of 1,345.

A combination of the projections produces a total 1990 population of 3,110 for the planning area, which amounts to an 18% increase.

While this projection indicates a substantial amount of growth, one must remember it is based on past trends, which are subject to change in the future. And it was mentioned earlier that a change is expected, i.e. the addition of new industry in the Burgaw area. Based on case studies across the nation, the U.S. Chamber of Commerce estimates each new manufacturing job produces 2.5 new jobs in the service and retail sector. Therefore, based on this estimate, Burgaw could expect to gain an additional 350 in population if a manufacturing plant employing 100 persons chooses to locate nearby. There are several qualifications which could affect this estimate, including how close a prospective manufacturer located to Burgaw or how high the wages are comparable to existing income levels.

The point to be made about these population figures is that Burgaw will continue to grow in the future. The question now is whether existing public facilities can support this growth and how much land will be required for new homes, businesses, or industries.

FUTURE LAND NEEDS

Although Burgaw experienced a population decline in the 1970's there still was a demand for undeveloped land. In fact, 31 acres were developed for urban purposes in Burgaw from 1975 to 1980. Over the same period of time the extraterritorial jurisdiction had 26 acres converted to urban use. And according to the preceding discussion, population increases are expected during the planning period in both Burgaw and its extraterritorial jurisdiction, which will result in continued demand for undeveloped land.

In order to determine an estimate of land needs for the projected population increase, it was necessary to determine present land use densities within the planning area. After computing the existing land use densities, they were multiplied times the expected population increase for 1990, which produces an estimate of land need for 1990. (See Table 11).

This method of projecting land needs also does not consider the possibility of new industry locating in the Burgaw area but the preceding discussion did estimate population increase that can be expected from a new industry. This information could be used to add the land needs generated by a new industry to those presented in Table 11.

Although the projected land needs given in Table 11 cannot be considered absolute, they do indicate a significant number of acres will be developed for urban purposes during the next ten years.

COMMUNITY FACILITIES DEMAND

In the foregoing discussion moderate economic and population growth was projected for Burgaw and its extraterritorial jurisdiction. Of course, this growth will place an added demand on the public services provided by Burgaw. An indication of the existing demand and limitations of Burgaw's public services was presented in Chapter III. The next step then is to identify the impact this projected growth will have on public services.

First, the capability of Burgaw's water system to meet projected demands will be considered. In Chapter III, Constraints to Development, estimates showed the water system was operating at 40% of capacity. Therefore, based on the preceding population and land use projections, it will not be necessary to expand the water system's capacity above what is presently available.

Information presented in Burgaw's "201 Wastewater Management Plan" will be used to determine whether existing sewer treatment capacity is sufficient to meet anticipated demand. The "201" plan estimated that Burgaw's sewer system was capable of serving a population of 2,250 persons while maintaining a reserve capacity of 16,900 gallons per day for anticipated but unprojected needs (i.e. industrial use). Since Burgaw's projected population for 1990 was 1,765 persons it would seem the existing plant has the capacity necessary to meet projected demand. However, as previously mentioned, the Division of Environmental Management has placed a restriction on new sewer taps and line extensions because Burgaw's receiving stream, the Osgood Branch, does not have adequate streamflow. As a solution to the problem Burgaw has begun a

Table 11.....FUTURE LAND USE REQUIREMENTS

Land Use Category	1980 Acreages	Acres Per Person/1980	1990 Land Need*	Annual Acres Needed by 1980
Town of Burgaw				
Residential	178	.11	21.5	2.2
Commercial	35	.02	3.9	.4
Industrial	13	.01	1.95	.2
TCU	205	.13	25.35	2.5
Govt. & Inst.	81	.05	9.75	1.0
Cult., Ent., Rec.	11	.01	1.95	.2
			64.4	6.5
Extraterritorial Jurisdiction				
Residential	99	.09	24.21	2.4
Commercial	12	.01	2.69	.3
Industrial	15	.01	2.69	.3
TCU	173	.16	43.04	4.3
Govt. & Inst.	18	.02	5.38	.5
Cult., Ent., Rec.	96	.09	24.21	2.4
			102.22	10.2

*1990 Land Need was computed as follows: 195 (expected population increase in Burgaw) x .11 (acres per person in 1980) = 21.5 from 1980 to 1990

Source: Ferren Planning Group, Windshield Survey, 10/80

project to relocate its main outfall line to the Northeast Cape Fear River, which according to Division of Environmental Management officials should result in removal of the restriction.

The State Board of Education, as discussed in Chapter III, has projected a relatively constant level of school enrollment on a countywide basis through 1984. However, some of the existing schools were considered inadequate (for present use), which places the school system in a "catch up" position. The County School Board and Commissioners have shown their committment to school needs by adopting a program of construction and improvement intended to alleviate existing inadequacies.

The existing usage of principal streets and highways was shown to be much less than capacity in Chapter III. In addition, with the completion of Interstate 40 a significant amount of North- South through traffic should be diverted from U.S. 117 and N.C. 53 to the Interstate. Even though the existing street and highway system have sufficient capacity for the planning period, Burgaw should prepare and adopt a thoroughfare plan in order to determine what actions will be necessary once traffic volumes move closer to capacity. In addition, one of the adopted goals in the 1976 CAMA Plan was to jointly prepare a thoroughfare plan with the State.

Overall Burgaw's capacity to provide these public services is well within the demand anticipated for the next 10 years. But just one of many variables, such as a large new industry, could greatly increase the demand for these services. Plus in addition to the services discussed here, there are other services, like recreation, fire, and police, which should be considered but are not within the scope of this update.

INTRODUCTION

In the preceding chapters discussion has focused on identification of land use, population, and economic conditions in the Burgaw planning area. Through these discussions it has become evident that Burgaw, like many other coastal communities, is faced with a number of issues which will affect future development and land use in Burgaw. It is the purpose of this chapter to discuss those issues, along with those mandated by the CAMA guidelines, and to examine the different approaches that Burgaw has considered in an attempt to improve upon existing conditions or prevent potential problems.

The following pages then include a discussion of issues identified in the preceding chapters as well as issues specified in the CAMA guidelines. In addition to the discussion of land use issues, this chapter presents the policies that Burgaw has selected as a means of addressing the issues. This chapter also contains the mechanisms which Burgaw selected to implement the adopted policies.

The issues are presented within the framework of four broad topics contained in the CAMA guidelines and listed as follows; resource protection, resource production and management, economic and community development, and public participation. The selection of policy statements was done in the following manner: 1) several alternative policies relative to each issue were presented to the Burgaw Planning Board; 2) the alternative policies were reviewed and discussed by the Planning Board; 3) the Planning Board then chose the policy, or combination of policies, which it found best suited to the needs of Burgaw. After the Planning Board selected a policy to address each issue, methods for implementing the policies were chosen.

ISSUES

Resource Protection

Under CAMA guidelines issues such as areas of environmental concern, soil limitations, water supply sources, areas of severe slope, preservation of historically significant buildings, fragile areas and man-made and flood hazard areas are included within this broad topic. However, in Burgaw's jurisdiction the only relevant issues were soil limitations, preservation of historically significant buildings and man-made hazards since the other issues were not identified in Burgaw.

Previous discussions have identified soils as a point of concern because all of the soils within Burgaw's jurisdiction were found to have some degree of limitation to urban development. Soils were considered a limitation to urban development principally for two reasons: 1) because of

potential for malfunctioning septic tanks and 2) more frequent and early deterioration of street and building foundations. Malfunctioning septic tanks were found in one location, an area adjacent to S.R. 1332 west of Burgaw. Problems with streets or building foundations were not found although the potential exists.

Burgaw is confronted with the question of whether or not current regulations are sufficient to prevent development that is incompatible with the soils. Presently when public sewer is not available to a development, the Pender County Health Department by use of an ordinance regulates the use of septic tanks. Pender County's septic tank ordinance is similar in some respects to ordinances in other eastern North Carolina counties but it does not contain a minimum lot size requirement for septic tank use. As a general rule, however, the Health Department requires 20,000 square feet per lot where an individual well and septic tank is used for a residence. In addition to the County's septic tank ordinance, most of the undeveloped land without public sewer and water are zoned such that 20,000 square feet is the minimum lot size.

Burgaw's Subdivision Ordinance establishes construction standards for streets according to the North Carolina Department of Transportation standards. The Ordinance also provides review of soil conditions prior to approval of a subdivision, thus giving Burgaw an opportunity to determine whether a development would be compatible with the soils.

Man-made hazards, such as bulk petroleum and chemical storage, were considered a potential problem in view of the possibility of spills or explosions. Under Burgaw's current zoning ordinance, this type of land use is restricted to industrial zoning districts, where structures must be at least 50 feet from a street or residence. However, bulk storage facilities could locate directly opposite uses like restaurants or building supply storage yards, which would result in increased hazard to both life and property. There are no provisions in the Zoning Ordinance which would reduce the possibility of damage from a spill or chemical explosion, such as a retention pond or an increased setback requirement.

As mentioned before, flood hazard areas have not been identified in Burgaw's planning area, therefore the Town does not participate in the federally sponsored flood management program. However, all Pender County flood hazard areas are being mapped at this time under the auspices of the Federal Emergency Management Association. If the completed mapping delineates flood hazard areas in Burgaw's planning area, it will be necessary for Burgaw to decide whether a flood management program should be adopted.

In the 1976 CAMA Plan and again in Chapter III of this update, it was pointed out Burgaw has a number of buildings with architectural and historical significance. A detailed inventory and analysis of these buildings has never been conducted, which may explain why they do not receive special attention or protection. At the time of the recent land use survey many buildings of apparent significance were in use and did not appear to be threatened with removal. A complete inventory of Burgaw's historically and architecturally significant structures, should be undertaken, perhaps jointly with the County, before any course of action is taken. Otherwise any decision would be made without a complete listing of the buildings or understanding of their value.

Resource Production and Management

Even though prime farmland or woodlands have not been identified in Pender County, both agriculture and forest production have been considered an integral part of the local economy. There is over 400,000 acres of agricultural and forest land available countywide, an amount that is sufficient to meet urban needs yet it would not adversely affect agricultural and forest production. This is especially easy to recognize when one finds that only 57 acres of undeveloped land were converted to urban use from 1975 to 1980 in Burgaw's jurisdiction. In the preceding pages it was projected that 106 additional acres would be needed for urban use by 1990, which would leave approximately 5,900 undeveloped acres (85%) in Burgaw's jurisdiction. Thus, with such an abundance of land and a relatively slow rate of conversion to urban use, Burgaw does not consider it necessary to adopt policies to protect lands used for agricultural and woodland purposes from conversion to urban use.

The CAMA guidelines also require localities to address existing and potential mineral production areas, commercial and recreational fisheries, and off-road vehicles. Burgaw considers each of these topics irrelevant to its particular situation, therefore no policy alternatives were considered relative to these issues.

Economic and Community Development

The topic of economic and community development contains a broad range of issues which are particularly relevant to Burgaw. However, before these issues are discussed it is important to state that Burgaw is committed to economic and community development. Recent actions by the Town of Burgaw, such as a downtown revitalization study and support of the County's industrial recruiting efforts, point to their commitment. But questions remain about the manner in which Burgaw will address the specifics of economic and community development. For example, will all types of development be encouraged and permitted, or will development be limited to subdivisions, mobile home parks, shopping centers, and industrial parks? Will development be guided in a specific direction or with no regard for specific locations? What will happen with existing development in Burgaw, will a housing or downtown improvement program be initiated? Will water and sewer services be adequate to meet future demands? Do the zoning and subdivision regulations manage development as they were intended? The discussion that follows will consider each one of these issues plus a number of others raised by the CAMA guidelines.

Since industrial development is considered by many to be synonymous with economic development, it will be discussed first. The previous chapters have shown that recent growth in Burgaw was related to industrial development, but to industrial development in New Hanover County primarily. However, Pender County has begun an industrial recruiting program aimed at bringing industries into the County. One of the first actions of this program was the acquisition of a 50-acre industrial park located adjacent to the Burgaw Junior High School. This tract of land was rezoned to permit industrial uses, an action which indicates one area where Burgaw will encourage industrial development. In addition to this site the interchange of Interstate 40 and N.C. 53 is regarded as a prime industrial site. Although the interstate does not pass through

Burgaw's jurisdiction, it is located within the wastewater facility planning area which may result in the Town being called upon to provide sewer service to the area. Burgaw's capability to provide sewer service is another issue in itself and will be presented later. Two other areas are also zoned appropriately for industrial use, thus leaving the question of whether or not existing sites are adequate.

As previous discussions have pointed out Burgaw still must address residential and commercial development even if industrial recruiting efforts are unsuccessful. In all likelihood development patterns which were identified in the land use analysis will continue unless policies are adopted to the contrary. The development patterns are strip residential and commercial development, mobile homes on individual lots, and mixed land use. A continuation of these patterns may result in problems that will demand corrective measures. For example, mixed land use has been identified as a cause of housing deterioration, therefore if mixed land use is allowed to spread then the logical conclusion is that housing deterioration will spread. Burgaw's zoning and subdivision ordinance could be used to prevent or reduce the frequency of these patterns, but the existing design of the ordinances will allow them to continue.

The subject of mobile homes is an issue in itself for Burgaw residents, principally because there are questions as to whether enough mobile home sites are available. Under Burgaw's present zoning regulations mobile homes are permitted on individual lots in the R-20 zoning district plus mobile home parks are permitted in the R-20 and R-5 zoning districts. Burgaw's extraterritorial jurisdiction is zoned almost exclusively R-20, providing over 5,000 acres of land zoned suitably for mobile home use. Within the Town limits there are three areas, totalling about 250 acres, that are zoned R-5. Hence all mobile home development inside the Town limits is restricted to mobile home parks. Any revision of the mobile home regulations should be conducted only with a complete understanding of its affect on other land uses. For instance, a relaxation of the requirements may allow an increased number of mobile homes mixed in with conventional dwellings whereas more restrictive requirements may cause a shortage of suitable mobile home sites.

As the population in Burgaw's retail market area continues to increase, so will the demand for retail goods and services. It is likely there will be pressure to locate these services outside of the downtown area, probably on U.S. 117 Bypass. There is also a strong possibility that a shopping center will locate on the bypass and judging from past trends, strip commercial development along other major roads and highways may occur. But Burgaw's zoning map would require revisions to permit these types of commercial development whereas vacant buildings and lots are available in the downtown area.

Mention of the downtown leads to another issue, that of downtown and neighborhood improvement. In the past Burgaw has shown its concern for improving both. The Town contracted with the Cape Fear Council of Governments in 1979 to prepare a "Downtown Revitalization Study". The plan was completed but there has been little progress towards implementation. One of the more relevant recommendations of the plan was to "adopt strict land use policies to prevent the further erosion of the CBD and to protect stable residential areas from the intrusion of commercial and professional interests". Neighborhood improvements such as street paving, sidewalk construction, and installation of water and sewer services, have been completed in the recent past with assistance from the County's

Community Development Block Grant Program. These improvements were made in areas with relatively high incidences of substandard housing as an incentive for the homeowner to improve his home.

The County no longer has any CDBG monies yet there are still areas with concentrations of substandard housing and public services. Burgaw had also considered a minimum housing code but chose not to adopt it. Both the downtown and areas of substandard housing will continue to deteriorate until positive action is taken. A more concentrated effort towards implementing the downtown study would help improve both problems. Continued cooperation with the County may be the best approach to the housing problem particularly because of limited resources.

Through discussions with the Planning Board the zoning map was identified as a point of concern, primarily because of a sizable number of nonconforming uses but also because the extraterritorial jurisdiction was almost completely zoned R-20. Revisions of the zoning map to address these issues might produce unexpected results. More specifically revisions of the map with the intent of reducing nonconforming uses could subject residences to further encroachments from business and industries. Before changes of this nature are made to the zoning ordinance careful study should be a prerequisite in order to determine all the consequences.

Before any of the issues about type and location of development can be settled the matter of how or if Burgaw can provide services to development should be considered, since the availability of public services is so closely related to the kinds of development that can be allowed and encouraged. In Chapter III, Constraints to Development, it was shown that Burgaw's water system is more than adequate to meet expected demand. Unfortunately the capacity of the sewer system is not as clear cut as that of the water system. Under the present circumstances sewer taps are not allowed unless an exception is granted by the N.C. Division of Environmental Management. This restriction is expected to be lifted after the main sewer outfall line is relocated from Osgood Branch to the Northeast Cape Fear River, or within 12-18 months. Upon completion of the project it is anticipated that residential and commercial taps will be permitted within the limits of the plant's capacity. Taps for industrial users will be considered on an individual basis by the Division of Environmental Management. Burgaw's "201 Wastewater Facility Plan" estimated the treatment plant had sufficient capacity to serve a population of 2,250 with a reserve of 16,900 gallons per day for prospective industries. Neither of these limits are being approached, as the 1980 population was 1,570 persons and there have not been any industrial users added to the system since 1977 when the plan was prepared.

Once the restriction on sewer taps is removed, Burgaw will be capable of extending sewer lines to areas which have not been served in the past. However there is no comprehensive policy to determine the circumstances when water and sewer services will be extended. The lone policy regarding utility extensions states that the Town is responsible for extending water and sewer services to subdivisions inside the corporate limits. In other situations a request for a service extension must be considered on an individual basis and without an established policy. In the absence of an overall policy it will be difficult to justify why one request for service extension was approved and why another was denied. By establishing the Town's responsibility in respect to providing services, an adopted policy would also assist developers to determine whether a

project is financially feasible. In addition a service extension policy could be used as a tool for guiding or establishing development patterns since public services act as an inducement to development. Due to the limited capacity of the sewer treatment plant it would be wise to restrict sewer service to areas within the corporate limits otherwise the Town would not receive tax benefits from the prospective development.

One issue which the CAMA guidelines stress is the potential for development of energy facilities. But the possibility of an energy facility, such as a nuclear reactor, locating in Burgaw is quite remote because of the absence of large supplies of surface water. Therefore Burgaw does not consider this issue relevant.

Another issue raised by the guidelines is that of local committment to state and federal programs. Unlike the coastal towns and counties where beach nourishment, port development and flood hazards are dealt with on a regular basis Burgaw is seldom required to participate in intergovernmental programs. When the situation arises Burgaw has shown its willingness to cooperate such as in the CAMA planning process, the County's Community Development Block Grant Program, and "201" Wastewater Facility Planning.

Issues such as channel maintenance, beach nourishment, beach and water access, and tourism are specified for local consideration by the CAMA guidelines. Burgaw has considered these issues and does not find them applicable.

Continuing Public Participation

Recognizing the broad impact a land use plan has on the citizens of each town and county, the CAMA guidelines required consideration of public participation. The Town of Burgaw also recognizes the need for public input into the planning process. However, since Burgaw does not have any "overwhelming"problems or issues such as shoreline erosion or construction of a major energy facility, it is sometimes difficult to generate public input even though the Town is committed to it. In a town the size of Burgaw, the Planning Board and Town Commission are often kept abreast of the public viewpoint through discussions with the townspeople instead of through a structured public forum. Perhaps the question in Burgaw is whether it is necessary to pursue formal means of public participation since the Board members often have daily contact with concerned citizens.

POLICY STATEMENTS

The previous section identified the various land use issues that will confront Burgaw in the near future. The contents of this section spell out the different policy alternatives that the Burgaw Planning Board considered to address these issues. It also contains the selected policy alternatives and explains the means by which Burgaw will implement the policies.

For many of the issues addressed in the CAMA guidelines, such as areas of environmental concern and beach access, Burgaw did not consider policy alternatives because the issues were irrelevant to Burgaw. In other cases, like soil protection or types and location of desired development, Burgaw had already established a policy on the issue. Therefore, in many instances the alternative was whether existing policy was satisfactory or were revisions desirable.

Resource Protection

Issue - Soils

Policy Statement - The Town of Burgaw feels there is no alternative as to whether or not good soils practices are utilized. Therefore, Burgaw will continue to permit urban development under the existing regulations and practices as they relate to soil protection, which consists of the County's septic tank ordinance, advice from the Soil Conservation Service upon request, and Burgaw's Zoning and Subdivision Ordinance.

Issue - Man-made Hazards

Alternative 1 - Burgaw could allow existing bulk storage facilities to remain in their present condition and permit construction of additional facilities under present land use restrictions.

Alternative 2 - Burgaw could encourage cooperation between fire and rescue personnel to minimize accident potential and/or revise existing land use controls for regulation of future man-made hazards.

Policy Statement - Burgaw will encourage cooperation between fire and rescue personnel to minimize accident potential from existing hazards and study present land use controls for revisions to reduce the impact from future development of man-made hazards.

Implementation - The Burgaw Fire Department will maintain a coordinated "plan of action" to reduce the potential for damage to life and property from existing man-made hazards. The Zoning Ordinance will be studied for revisions that would reduce or eliminate hazard to properties adjoining future man-made hazards. Requirements for increased setbacks, retention ponds and ditches, and underground storage will be considered.

Issue - Preservation of historically and architecturally significant properties

Alternative 1 - Burgaw could conduct a professional inventory and analysis of architecturally and historically significant properties.

Alternative 2 - Burgaw could implement existing land use controls and the Downtown Revitalization Study in a manner that would encourage use (i.e., preservation) of architecturally and historically significant properties.

Alternative 3 - Burgaw could adopt a policy of inaction towards preservation of architecturally and historically significant properties.

Policy Statement - Burgaw will identify said properties and implement land use controls and the "Downtown Revitalization Study" in a manner that would encourage use of historically and architecturally significant properties.

Implementation - Burgaw will request Pender County to apply for a grant from the North Carolina Division of Archives and History for a joint Town-County architectural and historical property survey. Burgaw will consider the impact of zoning changes on historically and architecturally significant properties. Continue efforts to implement the "Downtown Revitalization Study".

Economic and Community Development

Issue - Types and location of industrial development

Alternative 1 - Burgaw could continue to permit industrial development within the existing zoning and subdivision regulations and utility practices.

Alternative 2 - Burgaw could assume a larger role in the County's industrial recruiting program.

Alternative 3 - Burgaw could revoke existing land use controls for industrial development.

Alternative 4 - Burgaw could revise and update existing land use controls to further reduce the impact of industrial development on other land uses.

Policy Statement - Burgaw will continue to permit industrial development within the existing zoning and subdivision regulations and utility practices.

Issue - Types and location of residential (exclusive of mobile homes) and commercial development

Alternative 1 - Burgaw could continue to permit commercial and residential development within existing zoning, subdivision, and utility regulations and practices.

Alternative 2 - Burgaw could revise and update existing land use controls to reduce or prevent strip development and mixed land use.

Alternative 3 - Burgaw could encourage commercial development along U.S. 117 Bypass.

Alternative 4 - Burgaw could encourage commercial development in the downtown.

Policy Statement - Burgaw will study existing land use controls for revisions that would reduce or prevent strip development and mixed land use and encourage commercial development in the downtown and along U.S. 117 Bypass. Other policies relative to residential and commercial development will remain unchanged.

Implementation - Zoning, subdivision and utility regulations will be studied for revisions that would reduce or prevent strip development. Policies relative to reverse frontage lots, frequency and design of driveways and intersections, frontage roads, and extension of utilities along state roads will be considered. The zoning ordinance will be studied for changes that would reduce the occurence and impact of mixed land use. Performance standards, such as screening and increased setback requirements, will be considered as well as reviewing the zoning map for situations that permit mixed land use. Efforts to implement the "Downtown Revitalization Study" will be continued and supported. Zoning amendments that would permit controlled commercial development, such as a shopping center, along U.S. 117 Bypass will be examined.

Issue - Mobile Homes

Alternative 1 - Burgaw could retain existing land use controls relative to mobile homes.

Alternative 2 - Burgaw could revise existing zoning regulations such that the impact of mobile home development on other land uses would be reduced.

Alternative 3 - Burgaw could revise existing zoning regulations such that sites for mobile homes would be increased.

Policy Statement - Burgaw will retain existing land use controls relative to mobile homes.

Implementation - Enforce existing zoning regulations.

Issue - Redevelopment

Alternative 1 - Burgaw could allow existing urban development to remain in its present condition without initiating any actions to improve existing urban development.

Alternative 2 - Burgaw could pursue State and Federal programs that would provide assistance for improving housing and neighborhood conditions.

Alternative 3 - Burgaw could seek continued assistance from the Pender County Community Development program.

Alternative 4 - Burgaw could adopt the "Downtown Revitalization Study".

Policy Statement - Burgaw will continue efforts to implement the "Downtown Revitalization Study".

Issue - Urban Growth Patterns

Alternative 1 - Burgaw could retain the existing Zoning and Subdivision Ordinance and service extension practices as they relate to directing the location of urban development.

Alternative 2 - Burgaw could revise and update their land use ordinances and adopt service extension practices that would promote development of land adjacent to existing urban development.

Policy Statement - Burgaw will continue to promote development within the Town limits by permitting higher density development within the Town limits as opposed to the extraterritorial jurisdiction.

Implementation - Enforce existing zoning regulations.

Issue - Zoning Map

Alternative 1 - Burgaw could conduct a comprehensive review of the existing zoning map directed primarily at reducing the number of nonconforming uses as well as considering alternatives to R-20 zoning in the extraterritorial jurisdiction.

Alternative 2 - Burgaw could maintain the existing zoning map and consider zoning changes upon individual requests.

Policy Statement - Burgaw will conduct a comprehensive review of the map for the purpose of reducing the number of nonconforming uses plus considering alternatives to R-20 zoning in the extraterritorial jurisdiction.

Implementation - Burgaw will apply for state planning assistance and/or grant money to address the zoning issues raised through the plan update.

Issue - Provision of Public Services to Developments

Alternative 1 - Burgaw could continue to provide water and sewer services under existing policies.

Alternative 2 - Burgaw could develop a comprehensive water and sewer policy that would specify situations where services will be extended to new developments and at whose costs.

Alternative 3 - Burgaw could extend water and sewer services to "prime development sites" as an encouragement to development.

Policy Statement - Burgaw will provide water and sewer services according to existing policies.

Implementation - Continue enforcing existing water and sewer policies.

Issue - Continuing Public Participation

Alternative 1 - Burgaw could not promote public participation in land use planning.

Alternative 2 - Burgaw could continue to provide public notice and public hearings for revisions in land use controls.

Alternative 3 - Burgaw could provide an annual public meeting for the purpose of reviewing implementation of these policies or for updating policies.

Policy Statement - It shall be the policy of the Town of Burgaw to encourage and allow public participation in all land use planning matters.

Implementation - Provide an annual public meeting before the Planning Board for the purpose of reviewing implementation of these policies or for updating them. Burgaw will continue to provide public notice and public hearings for consideration of revisions to local land use regulations.

Issue - Commitment to State and Federal Programs in the area

Alternative 1 - Burgaw could continue to cooperate in State and Federal programs where those programs are considered compatible with Town policy.

Alternative 2 - Burgaw could discontinue cooperation with State and Federal programs altogether.

Policy Statement - It shall be the policy of the Town of Burgaw to cooperate with State and Federal programs in the area where those programs are considered compatible with Town policy.

INTRODUCTION

The final step in the CAMA Plan Update process is preparation of a land classification map. The land classification mapping system was developed by the Coastal Resources Commission to assist in implementation of the polices adopted as part of the local land use plans. It allows local governments to specify precise areas where certain local, state and federal policies will apply. For example, federal assistance for water and sewer projects or home mortgages normally would be guided to areas classified developed or transition. The system contains five separate land classifications for use on the map (See Exhibit 2). Even though the different classes are placed on the map they should not be considered as a regulatory mechanism but as a means of assisting policy implementation. The designation of land classes permits Burgaw to demonstrate where and to what density it wants urban growth to occur.

LAND CLASSIFICATIONS

The CAMA guidelines establish five broad land classes which will be defined in the following discussion. The impact and purpose of each classification on land use and their relationship to Town policies are also contained in the discussion.

Developed Land

Areas classified as developed include lands presently developed for urban purposes at or approaching a density of 500 dwellings per square mile that are provided with municipal or public services, including at least public water, sewer, recreational facilities, police and fire protection.

The purpose of the developed class is to provide lands for continued intensive urban development and redevelopment. Generally areas classified as developed are those lands used for urban purposes and located inside the Town limits. It should be noted that several small areas were classified developed which do not have water and/or sewer service.

Transition Land

Areas classified as transition include lands currently having some urban services and other lands necessary to accomodate the population and economic growth anticipated within the planning jurisdiction during the ensuing 10-year planning period. Lands classified transition to meet the demand for population and economic growth must be served or be readily served by water and sewer and other urban services and be generally free of severe physical limitations to development.

The purpose of the transition class is to provide areas for future urban development on lands that are most suitable and that are scheduled to receive public services. This class also provides for growth when lands in the developed class are not adequate or available. The developed and transition classes are the lands under consideration by the Town for intensive urban development requiring urban services. State and Federal expenditures on projects associated with development, such as water, sewer, and streets will be directed to developed and transition areas. Land classified as transition in Burgaw's planning area are generally located adjacent to the existing Town limits and are undeveloped. Provision of water and sewer services in developed and transition areas will be the responsibility of the developer and/or landowner as required by the subdivision ordinance. The zoning ordinance guides higher development densities to the transition and developed areas because of the availability of public services. Industrial, multi-family and most commercial development will be limited to these areas.

Community Land

Lands classified as community are those areas within the extraterritorial jurisdiction characterized by a small grouping of mixed land uses such as residences, churches, and schools, and which are suitable and appropriate for small clusters of rural development not requiring public sewer service.

The purpose of the community class is to provide for clustered land development to help meet housing, shopping, employment and public service needs within the rural sections of the planning jurisdiction. Some of these areas may require Town water because land use or development density precludes using both private wells and septic tanks. One area classified as community is located around the intersection of U.S. 117 Bypass and U.S. 117 Business south of Town. Most of this area is already served by the Town water system. The only other area classified as community is located northwest of Town adjacent to Penderlea Road where septic tank problems have been identified. Urban development in the community classification must comply with the County's septic tank policy, as public sewer is limited to developed and transition areas.

Rural Land

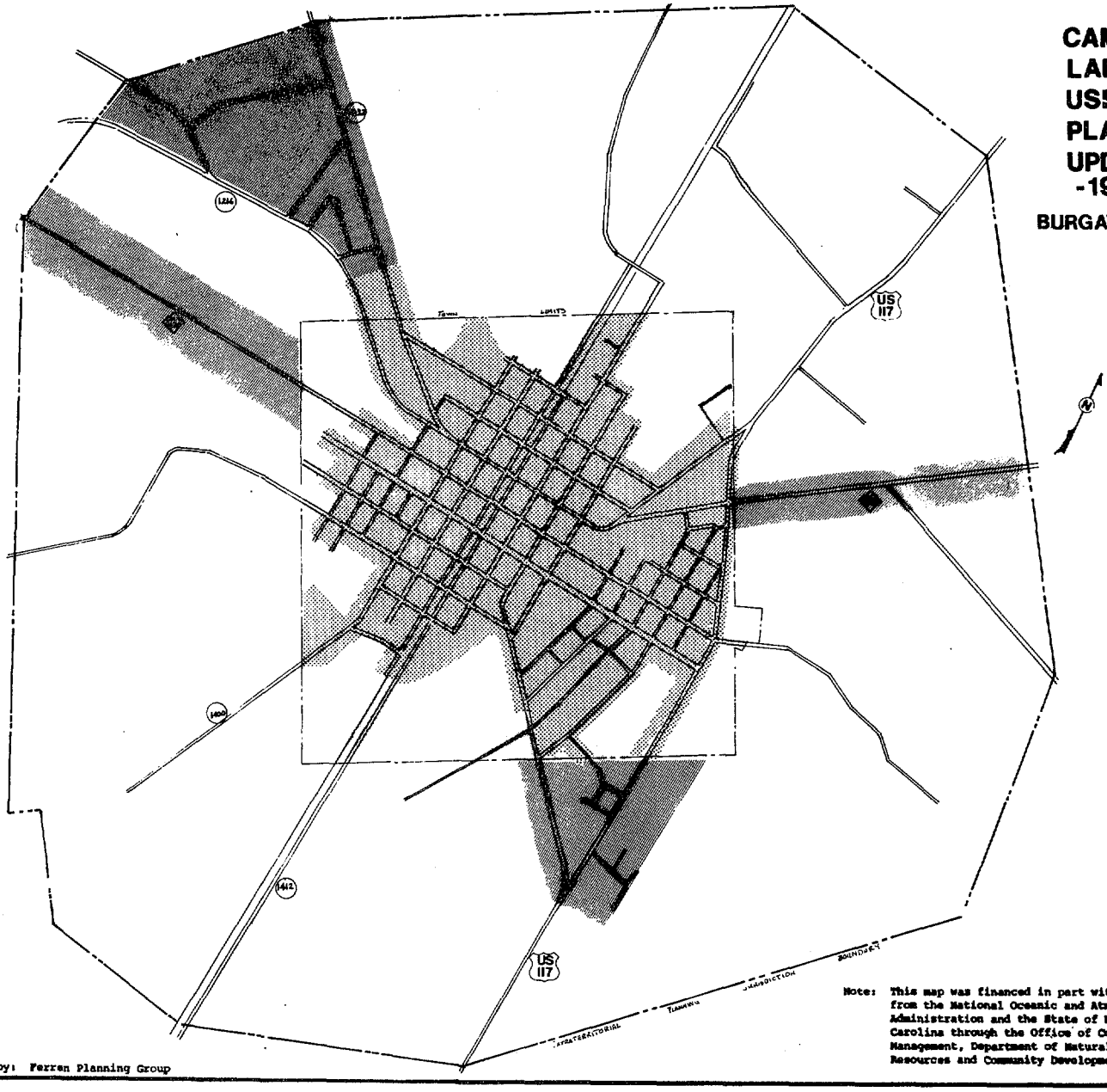
Lands classified as rural are those best suited for agriculture, forest management, and low density urban uses where urban services will not be required and natural resources will not be permanently impaired. The rural class is the broadest of the five classes.

The purpose of the rural classification is to provide for agriculture, forest management, mineral extraction and other low intensity uses such as a small residential subdivision. These areas are not expected to require any urban services during the planning period although water service would be available where provided at the developer's expense. Most of Burgaw's extraterritorial jurisdiction is classified rural. Areas classified as community and rural are generally zoned R-20, a district which permits low density residential uses. Urban development in the rural classification must meet the County septic tank policy since public sewer is limited to developed and transition areas.

Conservation Land

Lands classified as conservation are those containing major wetlands, undeveloped shorelands that are unique, fragile, or hazardous for development, necessary wildlife habitat, publicly owned watersupply watersheds and acquifers, and forest lands that are undeveloped and will remain undeveloped for commercial purposes.

The purpose of the conservation classification is to provide for effective long-term management of significant limited or irreplaceable areas. Management is considered necessary because of the lands natural, cultural, recreational, productive, or scenic values. It is intended that these areas not be identified as transitional in the future. There were no areas suitable for the conservation class in Burgaw's jurisdiction.



CAMA LAND USE PLAN UPDATE -1981-

BURGAW, N.C.

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Prepared by: Ferren Planning Group

LAND CLASSIFICATION MAP

Developed

Transition

Community

Rural