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# LAND USE PLAN UPDATE

PREPARED FOR:

THE TOWN OF NEW BERN, N.C.



By:

**SATILLA PLANNING**

PLANNERS  LANDSCAPE ARCHITECTS

ADOPTED MAY 26, 1987

CERTIFIED BY THE COASTAL RESOURCES COMMISSION

JUNE 4, 1987

LAND USE PLAN UPDATE

New Bern, North Carolina

Prepared by

**SATILLA PLANNING**

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P.O. BOX 1110, ST. MARYS, GEORGIA 31558

Adopted by the City of New Bern: May 26, 1987

CRC CERTIFICATION: JUNE 4, 1987

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

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## INTRODUCTION

The Coastal Area Management Act of 1974 establishes a cooperative program of coastal area management between local governments and the State. Land use planning is intended to be central to the local government's involvement, providing local leaders an opportunity to establish and implement policies to guide the development of their community.

The New Bern Land Use Plan is an expression of long range planning goals and major policies which identify how and where development should take place during the next ten years.

The Land Use Plan is an important policy document at local, regional, state and federal levels. The users, in addition to the City of New Bern, are regional councils of government, State and Federal permitting agencies, and public or private funding and development groups.

### Local Government Uses

The plan provides policy guidance for decisions related to overall community development, while providing the basis for land development regulations and capital facilities programming. Planning for the provision of capital intensive services, such as central sewer and water, is aided by the Land Use Plan's identification of likely growth trends and by plan policies which will effect growth.

### Local Land Development Uses

Developers, investors and City residents can use the land use plan as a primary source of information about the community. The plan provides data and analysis on present development patterns, capacity of community facilities, population and growth patterns, and physical limitations to development, all of which are useful in market analyses, and other feasibility studies. The plan also provides the investor with information about the community's preferences for development types, densities, and locations.

### Regional Uses

The New Bern Land Use Plan will be used by the Neuse River Council of Governments for regional planning purposes and in its function as Regional Clearinghouse (A-95) for State and Federal funding programs. The local plan indicates to this agency what types of development the community feels are desirable and where the development should take place.

### State and Federal Uses

Local land use plans are used in the granting or denial of permits for various developments within the coastal area such as Corps of Engineers and C.A.M.A. permits. State and Federal agencies must ensure their decisions consider the policies and land classification system

established by this plan. The Coastal Area Management Act stipulates that no development permit may be issued if the proposed development is inconsistent with the local land use plan.

Similarly, decisions related to the use of Federal or State funds within the community and projects being undertaken by state and federal agencies themselves must also be consistent with the local plan. Examples include C.A.M.A. grant funds, Community Development Block Grants and Farmers Home Administration programs.

### Plan Summary

New Bern is emerging from a 30 year period (1950-1980) during which its population declined by 8%. In 1950 about one-third of Craven County's population lived in New Bern. By 1980 New Bern comprised only a fifth of the County's population. This trend has apparently reversed during the past six years. The City now has an estimated population of about 18,227, more than a 25% increase since 1980.

This recent growth and the prospects for continued development in and around New Bern has reconfirmed the importance of land use planning and the central role this update will serve in the City's land use planning programs.

During the preparation of this plan update, the City identified the following general developmental concerns:

- o Hurricane planning to guide the City response prior to, during and following a major storm.
- o Area Transportation Systems including the capacity of existing roads to handle projected traffic volume; the routing of truck traffic through and around the City; and freight trains passing through the City which block intersections for long periods of time.
- o Zoning and the effectiveness of the City's ordinance in managing growth proactively rather than in response to specific development proposals.
- o Preserving the integrity of single family areas by insuring that encroachment of commercial, industrial, and other incompatible uses does not occur.
- o Encourage the development of single family projects within the City's jurisdiction. For example, re-development of Martin-Marietta site for residential uses utilizing the existing lakes as amenities.

The policies of this plan address these issues in conjunction with the specific coastal resource management policies required by the Coastal Area Management Act. These policies are central to the land use planning process. General policy areas included in this plan are:

- o Resource Protection
- o Physical Constraints to Development
- o Resource Production and Management
- o Economic and Community Development
- o Storm Hazard Mitigation, Post-Disaster Planning
- o Continuing Citizen Participation

Finally, this plan's land classification section designates all areas within the City's jurisdiction as either Developed, Transition or Conservation. The Developed classification covers those areas of the City that are essentially built out and served with water, sewer and other City services. The Transition class covers those areas currently being developed or the areas proposed for development during the ten year planning period. Conservation areas are so designated because it is the City's policy that these areas remain in essentially their natural state.

## EXISTING CONDITIONS

### Background

The existing conditions section of this Land Use Plan presents brief descriptions of the conditions pertinent to land use in New Bern. Sources for Existing Conditions and all other sections of the plan are generally cited in the course of the text and include the North Carolina Departments of Natural Resources and Community Development, Transportation, Cultural Resources, and Administration; the Division of Marine Fisheries; the Federal Emergency Management Administration; New Bern officials, and personal observations by Satilla Planning, Inc.

### Existing Land Use

New Bern was founded in 1710 by Swiss adventurers at the confluence of the Neuse and Trent Rivers. It became the site of the first schools, banks, mail service and newspaper in North Carolina. New Bern is now predominantly a residential community. Its Central Business District and outlying commercial facilities serve the entire region surrounding the City.

Existing land use in New Bern is displayed by Map One. This data was collected by way of a field survey conducted in December, 1985. Aerial photography flown in January, 1984 (source: Weyerhaeuser) was used to complement the field survey. Field map data was then transferred to a Base Map provided by the City. Existing land use was tabulated for the following categories:

- o Single Family Residential. This category includes all predominantly single family areas. Typically, it consists of traditional single family homes on individual lots, in some cases, mobile homes and commercial uses such as offices are included in this category if they are isolated uses within a single family neighborhood.
- o Multi-Family Residential. Apartments, townhouses, public housing, and other residential uses with more than one dwelling unit per structure comprise this category.
- o Mobile Home Parks. Specific areas providing either rental spaces or subdivided lots for mobile home occupancy are included in this category.
- o Commercial. The Central Business District, outlying commercial development along major roads, shopping centers, motels, and offices comprise this category's land uses.
- o Industrial. Manufacturing, waterfront shipping, scrap/junk/salvage, mining operations, and similar intensive land uses are included here.
- o Transportation and Utilities. Utility company offices including system support areas, and the City's wastewater

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# NEW BERN, N.C.

## EXISTING LAND USE

### LEGEND:

#### RESIDENTIAL

 Single Family

 Mobile Home

 Multi-Family

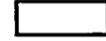
#### COMMERCIAL

 INDUSTRIAL

#### TRANSPORTATION & UTILITIES

 PUBLIC OR INSTITUTIONAL

#### CEMETERY, PARKS & OPEN SPACE

 VACANT/AGRICULTURE

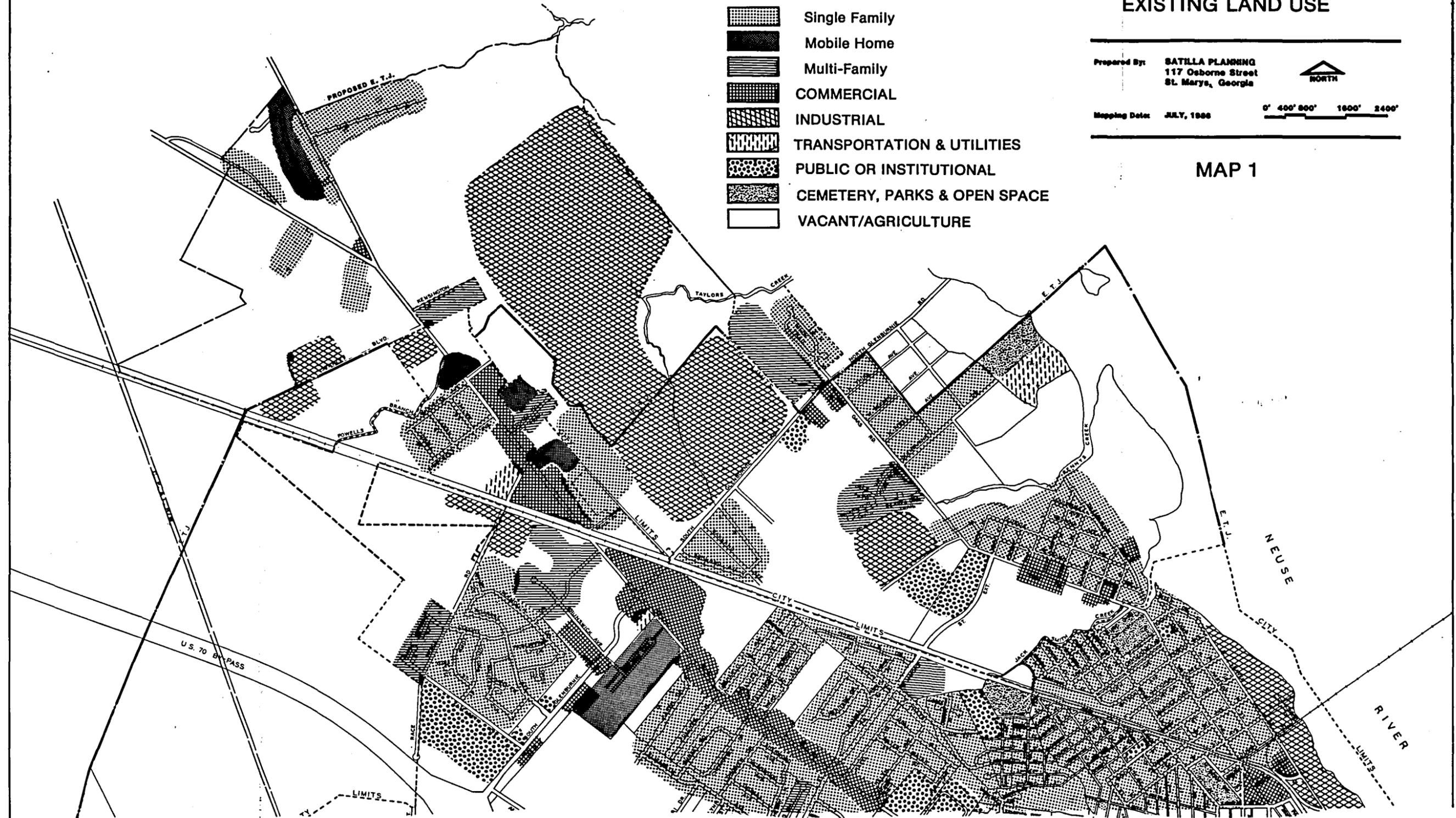
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### MAP 1



Existing Land Use - North Portion



Existing Land Use - South Portion

treatment plant, water storage/wells/and treatment plant are the principal land uses in this category. Road right-of-way fall within this area but the amount of land utilized has not been measured.

- o Public/Institutional. Municipal facilities (city hall, police, fire) County offices, schools, state offices, and the hospital make up this category.
- o Parks and Open Space. This category consists of City Parks, recreation areas, and cemeteries.
- o Vacant/Agriculture. All undeveloped-vacant land and land devoted to agriculture (predominantly crops) are included here.

Table One presents tabulations of Existing Land Use within New Bern's City Limits. Residential land uses comprise about 42% of all land within the City. About 85% of this residential area consists of single family homes - over 1,700 acres. Multi-family and mobile home parks account for 220 and 72 acres respectively. Vacant and agricultural areas constitute the next largest category - 1,487 acres or about one third of the land inside the City. There are 736 acres of Commercial Land use - more than 15% of New Bern's Land area. Public/Institutional uses account for 234 acres, about 5% of the City's area. Parks and open space also constitute about 5% of the City - 232 acres. Industrial uses occupy 118 acres or 2.4% of the City's area.

TABLE ONE  
Existing Land Use  
Within New Bern City Limits - 1985

<u>Land Use Category</u>	<u>Acres</u>	<u>Percent of Total</u>
Residential	2,061	42.3
Single Family	1,769	36.3
Multi-Family	220	4.5
Mobile Home Parks	72	1.5
Commercial	736	15.1
Industrial	118	2.4
Transportation and Utilities	8	0.2
Public/Institutional	234	4.8
Parks and Open Space	232	4.8
Vacant and Agriculture	1,487	30.5
TOTAL:	4,876*	100.0%

Source: Satilla Planning, Inc. from December, 1985 Field Survey and 1984 aerial photography.

Existing land use in the City's extraterritorial jurisdiction (ETJ) is presented by Table Two. The vast majority of the City's ETJ is either agricultural or vacant; 3,031 acres or about 73% of the entire ETJ falls into this category. Residential uses account for nearly all the balance, 16% or 673 acres. Of this 680 acres, all but 48 acres are single family homes - 625 acres or 15.2% of the ETJ.

In addition to the ETJ area that existed at the time the field survey was conducted (December, 1985) an area of approximately 1163 acres was proposed as an ETJ expansion. Existing land use in this area is identified by Table Three. Slightly less than 10% of this area or 114 acres is in single family residential use. The balance is: mobile homes - 29 acres or 2.5%; industrial (the Martin Marietta quarry site) - 442 acres or 38% and vacant/agricultural 578 acres or just under 50%.

TABLE TWO

Existing Land Use  
New Bern Extraterritorial Jurisdiction  
1985

<u>Land Use Category</u>	<u>Acres</u>	<u>Percent of Total</u>
Residential	673	16.3
Single Family	625	15.2
Multi-Family	38	0.9
Mobile Home Parks	10	0.2
Commercial	59	1.4
Industrial	234	5.7
Transportation and Utilities	42	1.0
Public/Institutional	73	1.8
Parks and Open Space	12	0.3
Vacant and Agriculture	<u>3,031</u>	<u>73.5</u>
TOTAL AREA	4,124	100.0%

Source: Satilla Planning, Inc. from December, 1985 field survey and 1980 aerial photography.

TABLE THREE  
Existing Land Use  
Proposed Expansion to New Bern  
Extraterritorial Jurisdiction  
1985

<u>Land Use Category</u>	<u>Acres</u>	<u>Percent of Total</u>
Single Family Residential	114	9.8
Mobile Home	29	2.5
Industrial	442	38.0
Vacant/Agriculture	<u>578</u>	<u>49.7</u>
TOTAL AREA:	1,163	100.0%

Source: Satilla Planning, Inc. from December, 1985 field survey and 1980 aerial photography.

Another way to view and analyze New Bern's existing land use pattern is to examine the net, developable area only excluding vacant, agricultural lands, water and streets. This analysis is presented by Table Four. This table demonstrates the residential character of New Bern - accounting for more than 60% of the City's developed planning area (City Limits plus ETJ). About 18% of the planning area's developed land is devoted to commercial uses. This relatively high percentage of commercial land indicates New Bern's status as a regional commercial center.

Table Five presents a comparison of 1985 existing land use with data from the 1981 plan. As indicated, significant overall growth occurred over the past five years: 1,360 acres were converted from vacant/agricultural to developed land uses. The overall mix of land uses remained relatively constant in all land use categories.

An examination of the Existing Land Use Map shows that certain key features of New Bern's land use pattern stand out as follows:

Residential Land Use. As stated, residential land uses comprise most of the developed land in New Bern. The original city area contains most of the City's single family residential neighborhoods with more recent developments to the southwest, west and northwest. Multi-family clusters are located within the central city area with newer developments to the west and northwest. The largest mobile home concentration is a park located southeast of the South Glenburnie Road - Neuse Boulevard intersection. Another mobile home park is located to the north of this area, northeast of Neuse Boulevard.

TABLE FOUR  
Existing Land Use  
Developed Areas Only  
New Bern, N.C.  
1985

Percentage of Land Area

<u>Land Use Category</u>	<u>Within City</u>	<u>Extraterritorial Jurisdiction (%)</u>	<u>Planning Area Total (%)</u>
Residential	60.8	61.6	61.0
Commercial	21.7	5.4	17.7
Industrial	3.5	21.4	7.9
Transportation and Utilities	0.2	3.8	1.1
Public/ Institutional	6.9	6.7	6.8
Parks and Open Space	<u>6.8</u>	<u>1.1</u>	<u>5.4</u>
TOTAL AREA IN ACRES	3,389 acres	1,093 acres	4,482.0 acres

Source: Satilla Planning, Inc. from December, 1985 field survey and 1980 aerial photography.

TABLE FIVE  
Existing Land Use - Developed Areas  
City of New Bern Planning Area (1)  
1981 - 1985

<u>Land Use Category</u>	<u>Percent of Developed Area</u>	
	<u>1981</u>	<u>1985</u>
Residential	59%	61%
Commercial	20%	18%
Industrial	6%	8%
Public/Institutional (2)	<u>15%</u>	<u>12%</u>
Total Land Area Developed	2,770 acres	4,482 acres
Total Land Area Undeveloped	<u>3,819 acres</u>	<u>4,518 acres</u>
TOTAL - DEVELOPED and UNDEVELOPED	6,589 acres	9,000 acres

(1) Includes both area inside City and extraterritorial planning jurisdiction.

(2) Includes parks, open space, transportation and utilities categories from Tables One - Four.

Source: Satilla Planning, Inc. from December, 1985 field survey, 1984 aerial photography and the 1981 Land Use Plan.

Commercial Land Use. New Bern's status as a regional commercial center is evidenced by the City's commercial land use pattern. The Central Business District (C.B.D.) remains relatively viable despite significant strip commercial development along the City's two major highways - U.S. 17 - west from the C.B.D. and Neuse Boulevard (NC 55). The shopping mall and associated development at the U.S. 17 and U.S. 70 bypass interchange represent the largest concentration of regional shopping facilities.

Industrial. There are two dominant industrial areas in New Bern's planning area: the waterfront industrial area north of the C.B.D. along the Neuse River and the Martin Marietta quarry to the north. In addition to these two concentrations, the New Bern area is also home to a number of significant manufacturing industries including: Hatteras Yachts, Robert Bosch Power Tools, Maola Dairy Products, Weyerhaeuser Co., and several apparel concerns. Carolina Co-Generation has an option to purchase land from Martin Marietta near Taylor's Creek in the City's E.T.J. for development of a peat co-generation energy facility. However, the land has not been purchased and permits to construct the facility have not been applied for.

Public and Institutional. Craven County Hospital on Neuse Boulevard, schools in the Craven County School system, Craven Community College, City and County facilities, State District transportation offices, and Tryon Palace constitute the most significant uses in this category.

Parks and Open Space. New Bern is fortunate to have nearly 7% of its developed land area devoted to parks and open space. The land use map indicates the location of parks, open space and cemeteries throughout the community with the most significant single facility in terms of land area being the Lawson Creek Park. Union Point Park is another important waterfront recreational area. A Swiss Bear task force is studying possible redevelopment options. In conjunction with the open space and recreational facilities that are located adjacent to school buildings (public and institutional category above), New Bern is indeed unique in amount of land dedicated to this land use category.

Summary. New Bern can be characterized as predominantly a single family community with regional commercial, industrial/manufacturing, educational and recreational facilities. Most new residential and commercial growth is occurring to the west and north west along the U.S. 17 and Neuse Boulevard (N.C. 55) corridors. New growth is occurring primarily on lands converted from agricultural uses.

### Roadways and Transportation

Street networks in and around a community are important aspects of future development. Road access can be a key determinant of the attractiveness of land for various types of land development. There are also critical reciprocal relationships between roads and land use. On one hand, the availability of good road capacity and traffic volume makes the adjoining land attractive for commercial uses that depend on high visibility and accessibility for economic success. On the other hand, the overloading of these roads with ill-designed land uses, such as strip commercial development with no control of curb cuts, can lead to problems of traffic safety, road capacity and poor visual appearance that can ultimately detract from the viability of the land uses and the road itself.

The North Carolina Department of Transportation prepared a Transportation Plan for a study area including New Bern, Trent Woods, and Bridgeton, which was adopted in 1978 by all three municipalities and the Board of Transportation. The plan contains eight recommendations for street and highway improvements through the year 2000 based on economic and population growth anticipated during the planning period. Some of the recommended improvements will be the responsibility of the municipalities while others will fall on the Board of Transportation.

The plan identifies seven streets that are expected to be over capacity by the year 2000. They are: 1) Broad Street Bridge; 2) Glenburnie Road; 3) Trent Boulevard; 4) U.S. 70 East; 5) U.S. 17 North; 6) Pollock Street; and 7) Oaks Road. Therefore, as stated in the 1981 Land Use Plan, it is crucial that the Thoroughfare Plan recommendations are implemented in order to prevent insufficient capacity on these streets.

## Community Facilities

Community facilities are an important land use planning factor not only because they can constitute significant land uses in themselves, but also because the type, location and capacity of these facilities bear an important reciprocal relationship to the areas they serve and therefore to most other land use categories.

The location of New Bern's Community Facilities are identified by Map Two as a full service municipality, the City's facilities are relatively extensive and include the following (Number indicate location on Map Two).

- 1 - Public library
- 2 - Parking lots
- 3 - Firemans Museum
- 4 - Central fire station
- 5 - Fire prevention office
- 6- City Hall
- 7 - Union Point Park
- 8 - Tryon Palace
- 9 - Police Station
- 10 - Kafer Park
- 11 - Cedar Grove Cemetery
- 12 - Bern Cemetery
- 13 - Recreational building
- 14 - Greenwood Cemetery
- 15 - Fire station
- 16 - Neighborhood park
- 17 - Pearce Field
- 18 - U.S. National Cemetery
- 19 - Hebrew Cemetery
- 20 - Duffyfield School
- 21 - Stanley White Rec. Center and Tennis Courts
- 22 - City Warehouse
- 23 - City Garage
- 24 - Lawson Creek Park and Landfill
- 25 - New Bern Sr. High School
- 26 - Trent Park Elementary School
- 27 - Craven County Hospital
- 28 - Craven County Health Department
- 29 - J.T. Barber Junior High School
- 30 - Evergreen Cemetery
- 31 - Oaks Road Elementary School
- 32 - Glenburnie Park
- 33 - H.J. McDonald School
- 34 - Craven Community College
- 35 - Seth Parrott Park

Water Supply and Distribution. Map Three identifies the system's general service area and major components including wells, storage and treatment plants. The City's water is supplied by a well field located near Cove City, 15 miles west of New Bern. Chlorine and fluoride are added at the wells. A single water transmission line delivers treated water to the City where it is pumped into the distribution system. In

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**LEGEND:**

- |                           |  |
|---------------------------|--|
| 1-PUBLIC LIBRARY          | 19-HEBREW CEMETERY                           |
| 2-PARKING LOTS            | 20-DUFFYFIELD SCHOOL                         |
| 3-FIREMANS MUSEUM         | 21-STANLEY WHITE REC. CENTER & TENNIS COURTS |
| 4-CENTRAL FIRE STATION    | 22-CITY WAREHOUSE                            |
| 5-FIRE PREVENTION OFFICE  | 23-CITY GARAGE                               |
| 6-CITY HALL               | 24-LAWSON CREEK PARK & LANDFILL              |
| 7-UNION POINT PARK        | 25-NEW BERN SR. HIGH SCHOOL                  |
| 8-TRYON PALACE            | 26-TRENT PARK ELEM. SCHOOL                   |
| 9-POLICE STATION          | 27-CRAVEN COUNTY HOSPITAL                    |
| 10-KAFER PARK             | 28-CRAVEN COUNTY HEALTH DEPARTMENT           |
| 11-CEDAR GROVE CEMETERY   | 29-J.T. BARBER JR. HIGH SCHOOL               |
| 12-BERN CEMETERY          | 30-EVERGREEN CEMETERY                        |
| 13-RECREATIONAL BUILDING  | 31-OAKS ROAD ELEM. SCHOOL                    |
| 14-GREENWOOD CEMETERY     | 32-GLENBURNIE PARK                           |
| 15-FIRE STATION           | 33-H.J. MCDONALD SCHOOL                      |
| 16-NEIGHBORHOOD PARK      | 34-CRAVEN COMMUNITY COLLEGE                  |
| 17-PEARCE FIELD           | 35-SETH PARROTT PARK                         |
| 18-U.S. NATIONAL CEMETERY |  |

**NEW BERN, N.C.**

**COMMUNITY FACILITIES**

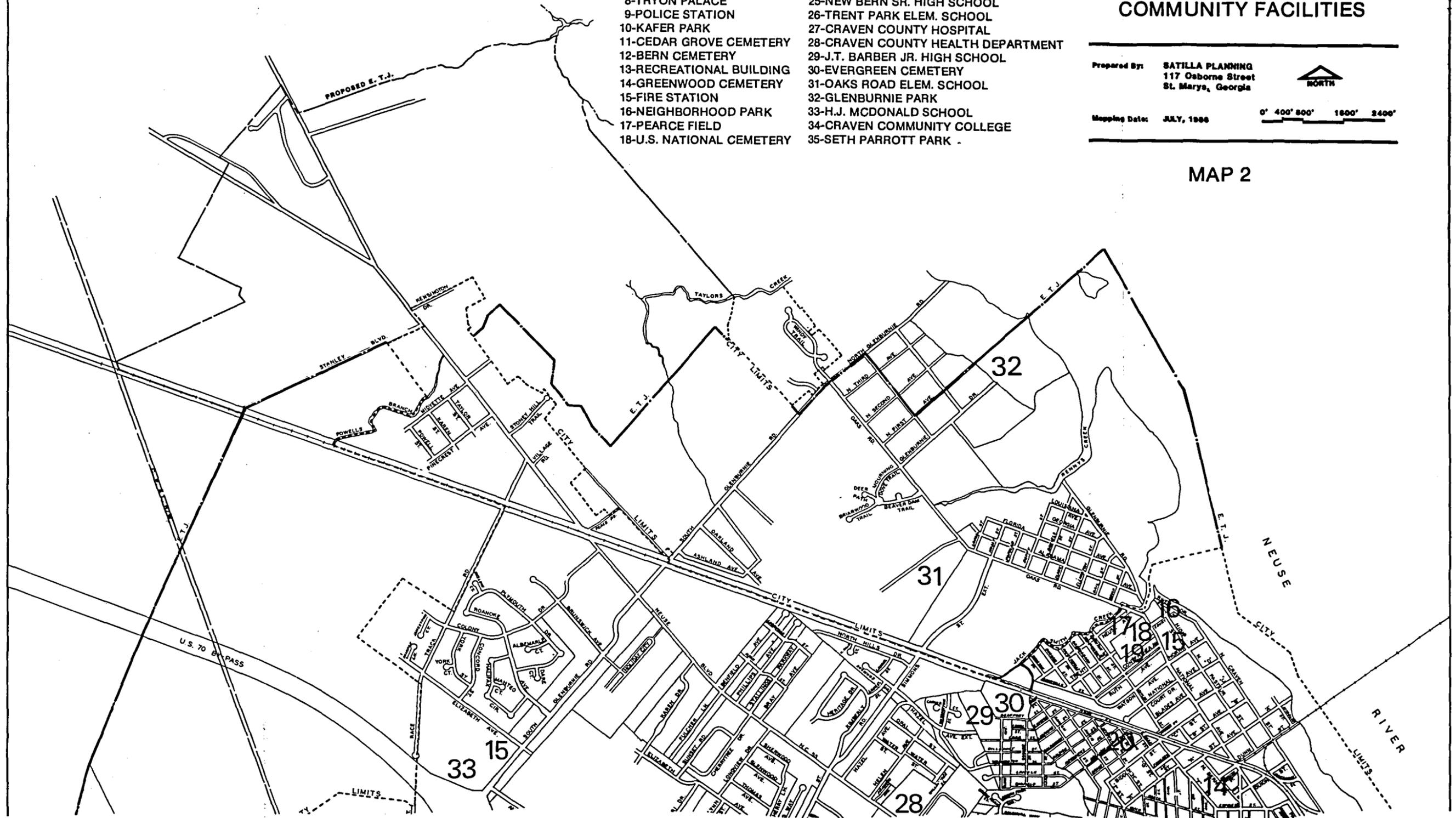
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**MAP 2**



Community Facilities - North Portion



Community Facilities - South Portion

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# NEW BERN, N.C.

## SEWER & WATER DISTRIBUTION AREAS

### LEGEND:

 SEWER & WATER DISTRIBUTION AREAS

 WATER DISTRIBUTION AREA

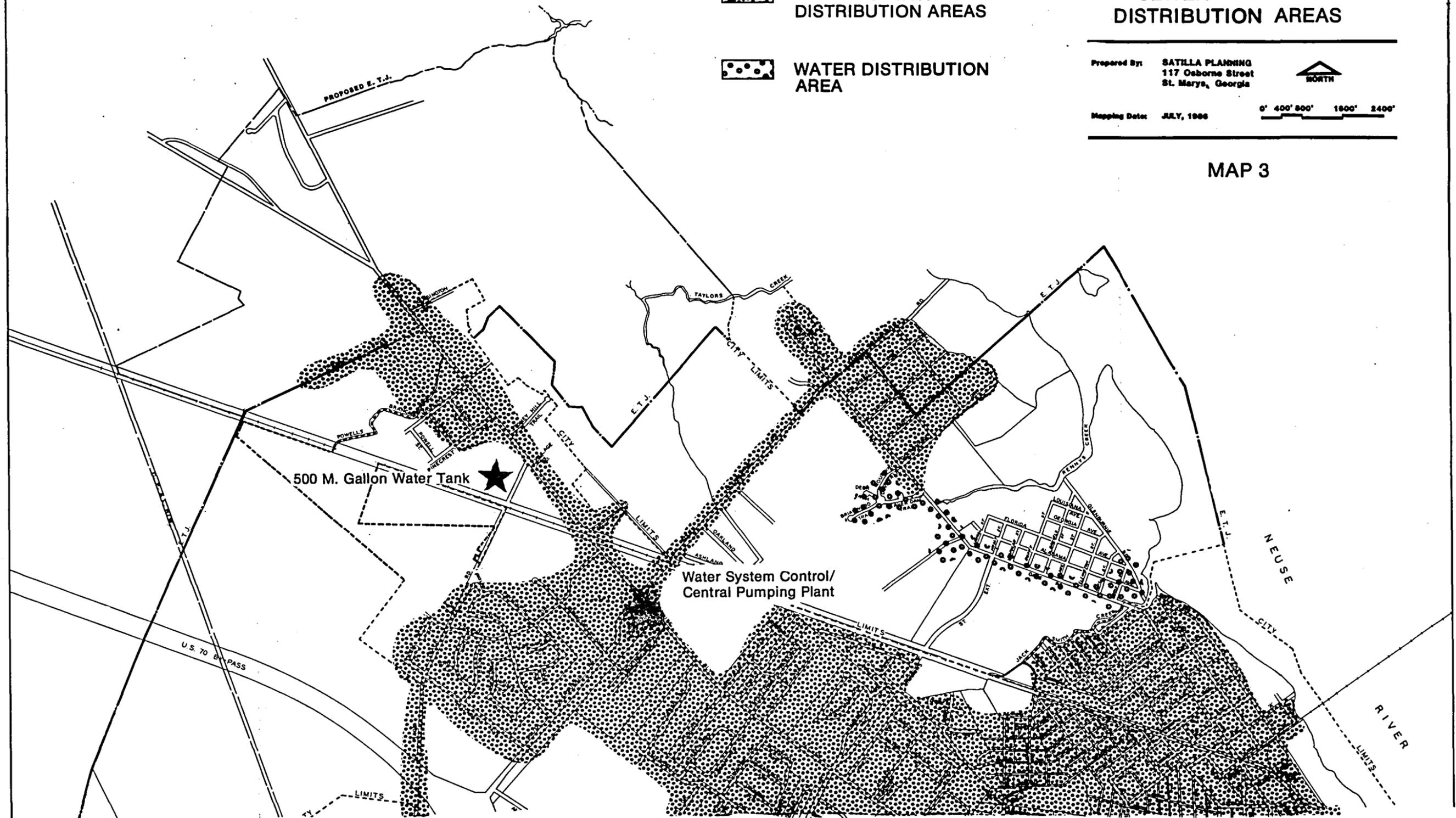
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### MAP 3



Sewered & Water Distribution Areas - North Portion



Sewered & Water Distribution Areas -  
South Portion

November, 1985, the City had the following customer base:

<u>Customer Categories</u>	<u>Number of Customers</u>
Residential, in City	5,221
Commercial, in City	664
Industrial, in City	55
Residential, outside City	860
Commercial, outside City	33
Industrial, outside City	9

Additionally, the City sells water on a wholesale basis to Trent Woods and the Neuse River Sewer and Water District. According to the City's consulting engineers, Finkbeiner, Pettis and Strout, the average daily water demand in 1983 was 3.06 million gallons per day (gpd) with a maximum day demand of 5.14 million gpd. The system's existing capacity is 4.0 million g.p.d. Therefore, average daily demand is 76.5% of capacity. Peak demand is 128.5% of capacity.

The City is currently preparing a long range water system improvements plan. While this plan is not yet in final form, the following major improvements are under consideration:

- o addition of a 5th water supply well.
- o improvements to the in City water pumping plant to increase capacity and system pressure.
- o construction of a 500,000 gallon elevated water tank.

The fundamental objections of these improvements are to increase overall capacity to 5.0 million g.p.d. while providing sufficient water pressure throughout the water distribution system. A water system improvement plan is being prepared to identify the capacities necessary to serve future growth in and around New Bern.

Wastewater Collection and Treatment. The service area of the City's sewage system and its treatment plant, containing 5,632 customers as of November, 1985, are identified by Map Three. The City currently operates a 4 million gallon per day trickling filter type secondary wastewater treatment plant located at the northern end of Glenburnie Drive. The plant discharges into the Neuse River. The average daily wastewater flow is currently about 2.8 million gallons per day. Average daily flow is therefore 70% of capacity.

However, the City is currently under a moratorium on new connections and has applied for a special order by consent (soc) from the N.C. Division of Environmental Management. The moratorium is based on the City's inability to meet effluent BOD limitations.

The City prepared an interim action plan in April, 1987 to address these deficiencies which includes technical, governmental and engineering program elements. The Board of Aldermen has given a high

priority to this plan which will require expansion and improvements to existing facilities not shown below.

The City's consulting engineers, Finkbeiner, Pettis and Strout, Ltd. prepared a master plan for trunk sanitary sewer improvements in May of 1986. The plan designates a sewer service area which generally corresponds to the City's extraterritorial jurisdiction (E.T.J.) and city limits plus areas south to the Trent River. Additionally, the City has agreed to accept wastewater from the Craven County Industrial Park which is located about 3 miles west of the current E.T.J.

The plan projects ultimate wastewater flows within the sewer service area including developments that are not presently served with sewer. The plan's recommendations include a means of intercepting all wastewater flows in the service area and transmitting them to the City's wastewater treatment plan.

The following improvements are recommended by the plan to provide sewage collection in the designated service area:

#### Construction of Northwest Interceptor Services

- Immediate o Construct common force main to replace flows from multiple pump stations south of U.S. 70 bypass; force main to connect with existing 12 inch gravity sewer at Glenburnie Road - Elizabeth Avenue intersection; this gravity sewer flows to a proposed pump station on Oaks Road near Renny's Creek.
- Future - o Replace existing gravity sewer along South Glenburnie from 5-10 years Elizabeth Avenue to Neuse Boulevard with 21" gravity sewer.
- Immediate o Replace existing gravity sewer along South Glenburnie from Neuse Boulevard to R.R. with 24" gravity sewer.
- Immediate o Construct new 27" gravity sewer from above 24" sewer at R.R. to new pump station at Oaks Road near Renny's Creek.
- Immediate o Construct new 20" force main from above pump station to sewage treatment plant.

The estimated cost of the three "immediate" phases identified above is \$2,050,000. The estimated cost of two future projects is \$275,000.

In addition to the northwest interceptor sewer, the following improvements are recommended to serve areas to the south that were annexed during 1984 and potential areas to the South. As indicated, some of these recommendations have either been completed or are now under construction:

- Completed 1986 o Construct 8" force main from existing Red Robin Lane pumping station which could in the future accommodate flows from future pumping station serving Pembroke,

Old Town and Fox Hollow.

- Completed 1986    o Construct 8" force main from existing Wilson Creek pump station which could in the future accommodate flows from Cypress Shores, Haywood Farms, Manning Park and Wilson Creek Heights.
- Under Construction    o Construct 10" force main on Race Track Road (South Glenburnie) from U.S. 17 to the proposed Greenbriar development where it will be temporarily connected to an existing 8" force main.
- Future 10-20 years    o Construct 16" force main from above point to proposed 21" gravity sewer at South Glenburnie Avenue and Elizabeth Avenue (abandoning existing 8" force main).
- Immediate    o Construct new 6" force main along R.R. from Trent Boulevard pump station to existing 12" gravity sewer at Third Street and Park Avenue which could in the future accommodate flows from Highland Park, Fox Hollow and Country Club Hills.

Finkbeiner, Pettis and Strout, Ltd., is presently preparing a plan for the City to address its long-range wastewater treatment needs other than those mentioned above. The plan has tentatively identified three options: 1) expansion of existing plant; 2) sequencing batch reactors; and 3) Barden PHO process.

Contingent upon final recommendations and the availability of funds, the City hopes to begin construction of a 5-6 million gallon per day average design capacity treatment facility in 1988.

Schools. The public school system in Craven County was consolidated under the Craven County Board of Education in 1981. Enrollments and capacities for County schools in New Bern's planning jurisdiction are indicated below for the 1985/86 school year:

TABLE SIX  
School Enrollment  
1985/86 School Year

<u>School</u>	<u>1985/86 Enrollment</u>	<u>Capacity</u>
Albert Banger Elementary (K-4)	542	600
Brinson Memorial Elementary (K-6)	750	850
F.R. Danyus Elementary (5)	313	425
H.J. MacDonald Middle School (6-8)	1,177	1,300
J.T. Barber, Junior High School (9)	446	600
Jasper Elementary (K-5)	371	600
New Bern Sr. High School (10-12)	1,289	1,300
Oaks Road Elementary (K-4)	606	600
Trent Park Elementary (K-4)	553	600
West Craven Middle School (6-8)	864	1,000

Enrollment is generally down from that in 1981 reflecting the national trend of smaller families and less school age children. As indicated above, there are no significant capacity problems at the New Bern schools.

Solid Waste. The City contracts with a private refuse service for the collection of solid waste which is disposed of at the County land fill. which has a projected useful life of 12 years. There are no current plans for expansion of the County landfill. The County is responsible for continued operations of the land fill including future plans once the existing facility has reached capacity. Ninety gallon roll out containers are utilized for residential service with collection twice weekly. Special pick-up is handled at curbside by call in request. Commercial pick-up is handled by way of dumpsters. As of December, 1985, there were 6,387 residential and 910 commercial customers. Craven County is considering the feasibility of solid waste incineration on a multi-county level as a future method of solid waste disposal.

### Land Use Regulations

The following identifies plans, ordinances and policies relevant to this Land Use Plan Update:

- o 1981 CAMA Land Use Plan. Provides data base information, development policies and land classification system in accordance with State regulations for CAMA plans.
- o Rules and Regulations of Use of City Docks at Parks. (City Code Chapter 5) establishes mooring restrictions and no swimming areas.
- o Flood Damage Prevention Ordinance. (City Code Chapter 9 1/2). Adopted May 24, 1978 in compliance with Federal Flood Insurance Program, requires elevation and/or floodproofing of construction i relation to the 100-year flood.
- o Minimum Housing Code. (City Code Chapter 12). Establishes minimum standards for: structural integrity, plumbing, heating, electrical, ventilation, and unit sizes.
- o Planning and Zoning Board. Includes nine city residents and 6 ETJ residents.
- o Comprehensive Plan. Required by Chapter 16, Section 25 of the City Code.
- o Tree Committee. (City Code Chapter 16-6). Five member committee established to advise Board of Aldermen on planting, growth and protection of trees on public properties.
- o Historic District Commission. (City Code Chapter 16-8). Nine member commission whose duties are established by the state's general statutes governing historic districts/commissions.

o Subdivision Regulations. (City Code Chapter 16, Appendix A.)  
Establishes standards for the subdivision of land including:

- o platting requirements
- o design standards
- o utility layout/construction standards
- o street paving and drainage standards
- o bond or similar guarantee required to insure completion of improvements

o Zoning Ordinance. (City Code Chapter 16, Appendix B.) The principal means of regulating land use in New Bern's planning area. All land falls into one of the following 14 zoning districts:

RA-15 Residential - single family homes with 15,000 square foot minimum lots

RA-10 Residential - single and two-family homes with 10,000 square foot minimum lot for 1 family dwellings and 15,000 square feet for 2 family dwellings

RA-10A - Single, two and multi-family dwellings plus RA-10 uses. Density and lot sizes the same as RA-10.

RA-8 Residential - Single, two and multi-family dwellings with 8,000 square foot minimum for one unit and 12,000 square feet for two units; multi-family density maximum is approximately 10.6 units per acre (based on a 5 acre tract).

RA-6 Residential - Single, two and multi-family dwellings, hospitals, trailer parks with 6,000 square foot minimum lots for one dwelling, 8,000 for two-family and a multi-family density of 21.2 dwelling units per acre (based on a 5-acre tract). Trailer parks are apparently limited to a gross density of 8 units per acre in accordance with Section 8.2,d.

O&I Office and Institutional - allows single family dwellings, boarding houses, offices, colleges, schools and similar uses.

B-1 Central Business District - allows a wide range of commercial uses including: retail sales, banks, food services, hotels, motels, offices, limited/small scale manufacturing for sale on premises, personal services, public buildings, recreational facilities. Screening/buffer required where district abuts residential zone.

B-2 Central Business District - All O&I district uses; most B-1 uses, wholesale businesses, two family dwellings, multi-family dwellings, offices. Screening/buffer required where district abuts residential zone.

B-3 Commercial District - Most B-1, B-2 uses, all O&I uses, animal hospitals, auto storage and repair, outdoor advertising, two family and multi-family uses. Screening/buffer required where district abuts any residential zone.

B-4 Neighborhood Business District - all residential zone uses, offices, retail, outdoor advertising, auto sales lots, trailer parks, personal services. Uses prohibited: light industrial uses such as building supply yards, petroleum bulk storage, auto storage, junkyards, uses omitting gas, fumes, odors, etc.

B-4A - Neighborhood Shopping Center District - most retail sales and services permitted - typically within a small shopping center. Site plan required for rezoning.

I-1 Industrial - manufacturing, processing and related uses ranging from light to very intense operations.

I-2 Industrial - warehousing, manufacturing and heavy commercial uses.

Historic District - this zone serves as an "overlay" to underlying commercial and residential districts thereby establishing additional requirements and standards that must be met in addition to the regular zoning district. Uses are not regulated through the Historic District overlay zone; a Certificate of Appropriateness must be issued in connection with exterior alternations to historic structures.

The City's zoning map is maintained and updated by the Department of Engineering. Current copies are available from that Department in City Hall.

- o Flood Insurance Study - prepared in connection with the City's Flood Insurance rate map, provides engineering background as to how flood elevations were established.
- o Annexation Feasibility Study - Prepared in December, 1978 the study identified four general areas for possible annexation. The Mall and Pinewood areas were subsequently annexed.
- o Thoroughfare Plan - Prepared in July, 1978 by the State Department of Transportation; its recommendations are designed to accommodate traffic through the year 2000.
- o Simmons-Nott Airport Master Plan Update - 1982 plan for improvements to this facility south of New Bern across the Trent River.
- o Five Points Development and Enhancement Plan - Plan recommends improvements to: buildings/facades, streetscape, traffic circulation and parking. The end goal is to revitalize this declining commercial area on U.S. 17 just west of the Historic Central Business District.
- o The City has participated in the National Main Streets Program of the National Trust for Historic Preservation. A Resource Team Report was prepared for New Bern in July, 1981 outlining design improvements, promotion methods, economic factors and an overall organizational structure.

- o U.S. 17 Corridor Study - July, 1982 N.C. D.O.T. - recognizes U.S. 17 as the major north-south highway in eastern North Carolina and recommends priorities for a series of projects consisting primarily of bridges, bypasses and four lane sections.

## GROWTH TRENDS

The 1981 Land Use Plan presented the following Table to illustrate population trends for Craven County and New Bern during the 30 year period 1950 - 1980.

TABLE SEVEN  
Population Trends 1950 - 1980  
New Bern, Craven County and Township 8

	<u>Craven County</u>	<u>New Bern</u>	<u>% of County</u>	<u>Twshp. 8 excl. of New Bern</u>	<u>Twshp. 8 as % of County (excl. of New Bern)</u>
1950	48,823	15,812	32.4	3,140	6.4
1960	58,773	15,717	26.7	4,969	8.45
% Chg.	20.4	-0.6		58.3	
1970	62,554	14,656	23.4	6,456	10.32
% Chg.	6.4	-6.8		29.9	
1980	71,043	14,557	20.5	8,911	12.5
% Chg.	13.6	-0.1		38.0	

Source: 1981 Land Use Plan and U.S. Bureau of the Census.

Although this information will not be updated until the 1990 census is complete, the Office of State Budget and Management estimates New Bern's population as of July 1, 1985, to be 18,227. This addition of 3,670 persons represents a 25 percent increase from the 1980 census. The important trends identified by Table Seven and the 1981 Land Use Plan are:

- o Craven County's population has steadily increased over the past 30 years from 48,823 to 71,043.
- o New Bern's population declined over the same period from 15,812 to 14,557; however, from 1980 to 1985 the City's population increased to a historic high of 18,227.
- o In 1950, one third of the County's population lived in New Bern; in 1980, only one fifth of the County's residents lived in New Bern; in 1984 slightly more than 23% of the County's population lived in the City.
- o Significant overall growth during the period occurred in the area immediately surrounding New Bern (Township 8).
- o The trend of overall population decline and the decline in New Bern's share of overall County population has apparently reversed since 1980.

According to the 1980 census there were 6,388 housing units in New Bern with an average 2.28 persons in each occupied unit. The following Table presents building permit data from City records which can be used to update the 1980 census data.

TABLE EIGHT  
Building Permits - New Construction  
New Bern Planning Area  
1981 - 1985

<u>Dwelling Units</u>				
<u>Year</u>	<u>Single Family</u>	<u>Multi-Family</u>	<u>Mobile Homes</u>	<u>Non-Residential</u>
1981	76	30	6	72
1982	21	101	22	36
1983	64	92	25	58
1984	54	23	23	51
1985	<u>59</u>	<u>258</u>	<u>27</u>	<u>37</u>
TOTAL UNITS	274	504	103	254

Total New Residential Units - 1981-1985: 881

Source: City of New Bern, Public Works Department.

The 881 new housing units identified by Table Eight represent a 14% increase since 1980 bringing the total estimated number of units to 7,269. This estimate may be high because it does not account for any units that may have been demolished during the same period. Another trend identified by Table 8 is the type of housing constructed; of the 881 new units 274 or 31% were single family, 504 or 57% were multi-family, and 103 or 12% were mobile homes. About 200 of the 504 multi-family are one project - a retirement village. This means that multi-family units are growing at a faster rate than single family; conversely, the 1981 land use plan found that single family units represented 55% of all housing built from 1975 to 1980.

## CONSTRAINTS TO DEVELOPMENT

### Physical and Environmental Constraints

The Environmental Determinants Map identifies three groups of environmental constraints to development that are relevant to the New Bern Land Use Plan Update:

- o Hazard to life, health, and property
- o Resources requiring protection
- o Land suitability for urban land use

In addition to those categories, North Carolina's Coastal Area Management Act identifies and regulates areas of environmental concern (AEC's). The implications of environmental determinants and State AEC regulations are discussed below.

Hazard to Life, Health and Property. A hazard assessment for flood prone areas in Craven County was prepared as part of the County's 1984 Storm Hazard Mitigation and Post Disaster Reconstruction Plan. Hurricane hazard areas consist primarily of the 100 year flood zone, which is delineated by the Town's Federal Flood Insurance Program rate maps, dated: Preliminary - August 8, 1985. This map establishes the following as the 100-year flood base elevation in and around New Bern:

- o Neuse River : 9 feet above M.S.L.
- o Rennys Creek: 9 feet above M.S.L.
- o Jack Smith Creek: 9 feet above M.S.L.
- o Trent River: 9 feet above M.S.L.
- o Lawson Creek: 9 feet above M.S.L.

In addition to the 100-year base flood, the City's August 8, 1985 Flood Study indicates the following still water elevations:

<u>Frequency of Event (1)</u>	<u>Flood Elevation Above Mean Sea Level</u>
10 year flood	6.1
50 year flood	8.3
100 year flood	9.1
500 year flood	10.9

(1) e.g. 10 year storm has a 1 in 10 chance of occurring in any given year.

A significant portion of New Bern's developed areas lie within the 100-year flood plain as indicated by Map 4. While hurricane storm surges constitute the primary source of flood hazard, New Bern is also susceptible to riverrine flooding (rainfall in the Trent and Neuse River Basins).

The New Bern Flood Damage Prevention Ordinance requires construction above the 100-year flood elevation. It should be kept in mind that many areas outside the 100-year flood plain can flood because of poor drainage and high water table. This type of flooding is addressed in the category: "Land Suitability for Urban Development."

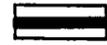
The preparation of this map was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the Coastal Zone Management Act of 1972, as amended, which is administered by the Office of Ocean and Coastal Resource Management, N.O.A.A.

**LEGEND:**

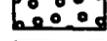
**I. HAZARD TO LIFE, HEALTH & PROPERTY**

 Major Flood Hazard, 100 Year Flood Area

**II. RESOURCE REQUIRING PROTECTION**

-  Historic District
  - A. New Bern National Register Historic District
  - B. Riverside Historic District
  - C. Ghent Historic District

**III. LAND SUITABILITY FOR URBAN LAND USE**

-  Suitable
-  Moderately Suitable, Some Drainage Required
-  Marginally Suitable, If Drained
-  Highly Unsuitable, Flooding Common

# NEW BERN, N.C.

## ENVIRONMENTAL DETERMINANTS

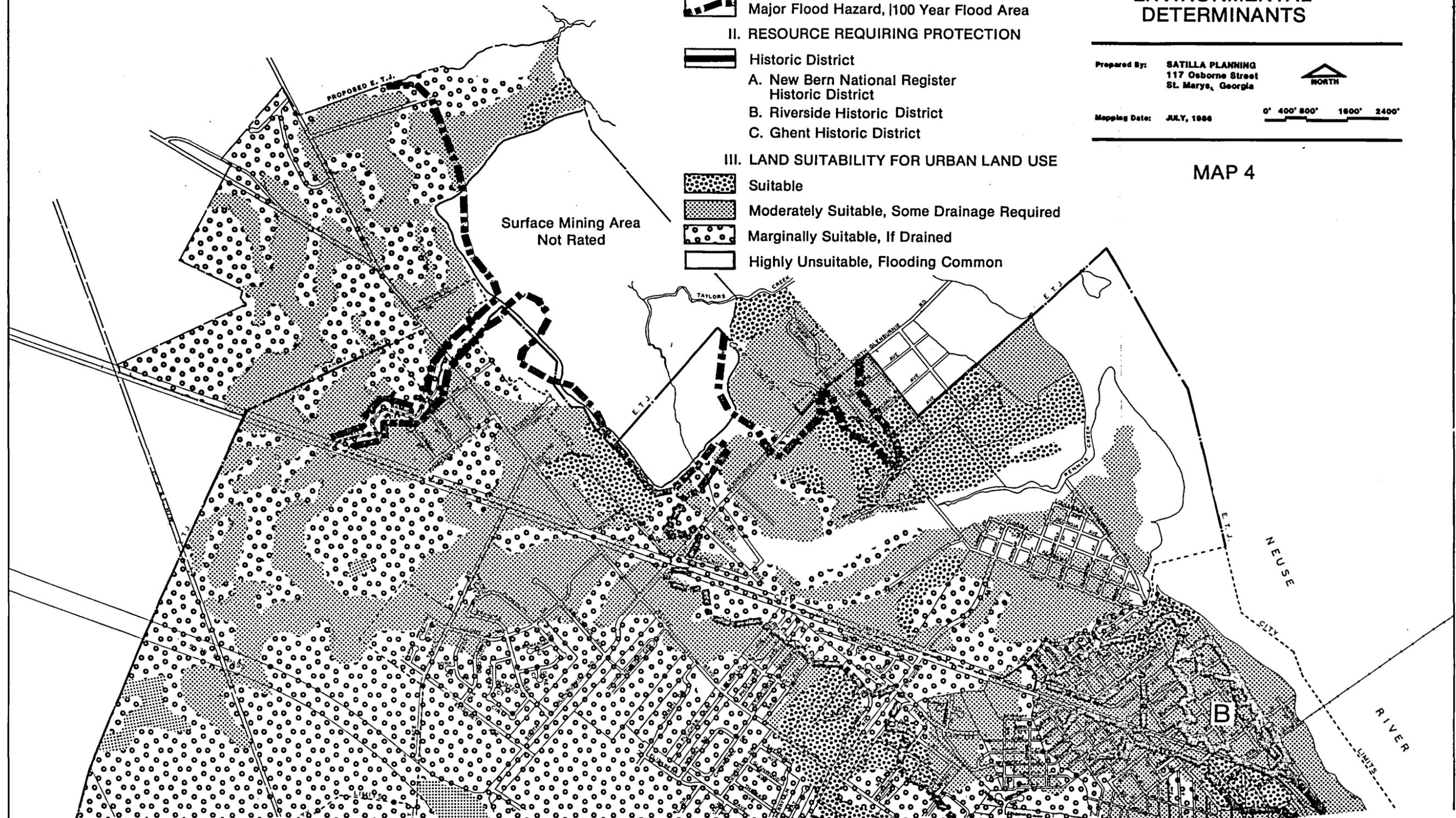
Prepared By: **SATILLA PLANNING**  
117 Osborne Street  
St. Marys, Georgia



Mapping Date: **JULY, 1988**

0' 400' 800' 1600' 2400'

### MAP 4





Environmental Determinants - South Portion

Other hazard areas are man made hazardous waste facilities. In New Bern's planning jurisdiction, several manufacturers are either generators or transporters of hazardous materials. The following list of Hazardous Waste facilities is from the Craven County Hurricane Evacuation, Hazard Mitigation and Post-Disaster Reconstruction, June, 1984:

CRAVEN COUNTY HAZARDOUS WASTE FACILITIES

<u>Facility Name</u>	<u>Primary Use</u>	<u>Location</u>	<u>In Flood Hazard Area</u>
AMF Hatteras Yacht	generator transporter	N. Glenbourne Rd.	yes
Agrico Chemical Co.	generator	Neuse Blvd. Highway 55W	no
B&H Construction Co.	transporter	Highway 70 E	no
Bayliner Marine Corp.	generator transporter	Highway 17 E	no
Clark Boat Co., Inc.	small generator	Highway 17 E	no
Encee Chemical Sales	small gener- ator transporter	Bridgeton	yes
Fuel Oil Service Co.	transporter	Windly Street	yes
Marine Corps Air Station at Cherry Point	generator storer	Cherry Point	no
Phillips Plating Co.	generator	Bridgeton	yes
Robert Bosch Power Tool	small generator	Highway 55 W	no
Salt Wood Products	small generator	Cove City	no
Stanadyne Moen Div.	generator	Craven Industrial Park	no
Weyerhaeuser Co.	generator transporter	Streets Ferry Road	yes

Resources Requiring Protection. The New Bern Historic District is identified under this category by Map Four. New Bern has numerous structures that have been individually listed on the National Register of Historic Places. The following is a list of these structures which are also protected by way of the local historic zoning district.

- o Attmore-Oliver House
- o Blades House
- o Bryan House and Office
- o Centenary Methodist Church
- o Coor Bishop
- o Coor-Gaston House
- o First Church of Christ Scientist
- o Gull Harbor
- o Harvey Mansion
- o William Hollister House
- o Jones-Jarvis House
- o Ulysses S. Mace House
- o New Bern City Schools Administration Building (Palmer-Tisdale House)
- o Simpson-Oaksmith-Patterson House
- o Eli Smallwood House
- o Benjamin Smith House
- o Edward R. Stanly House
- o Stevenson House (Tryon Palace Complex)
- o York-Gordon House
- o Bellair
- o Cedar Grove Cemetery
- o First and Second New Bern Academy Building
- o Clear Springs Plantation
- o First Baptist Church
- o First Presbyterian Church and Churchyard
- o Hawks House
- o Thomas Jerkins House
- o Justice House
- o Masonic Temple and Theatre
- o New Bern Municipal Building
- o Rhem-Waldrop House
- o St. Paul's Catholic Church
- o Slover-Bradham House (Burnside's Headquarters)
- o Smith-Whitford House
- o John Wright Stanly House (Tryon Palace Complex)
- o Isaac Taylor House

There are also two district areas within New Bern with National Register designation pending. Also identified by Map Four, these are: The Riverside Historic District and the Ghent Historic District. The N.C. Department of Cultural Resources has also determined that an archaeologically sensitive area exists near the mouth of Scott's Creek (not within the City's E.T.J.) and that eight underwater archaeological sites exist in the New Bern Area.

Land Suitability for Urban Development. The recently completed soils analysis for Craven County was used to develop a general soils map for the New Bern planning area. Soils were analyzed according to their development suitability for six indicators:

- o Frequency of flooding
- o Septic tank absorption fields
- o Shallow excavations
- o Dwellings without basements
- o Small commercial buildings
- o Local roads and streets

Based on these six indicators, soils were classified on the Environmental Determinants Map in one of four categories:

- o suitable
- o moderately suitable; some drainage needed
- o marginally suitable if drained
- o highly unsuitable, flooding common

Suitable soils:

- o Autryville loamy sand
- o Conetoe loamy sand
- o Norfolk loamy fine sand
- o State loamy sand
- o Tarboro sand

While most of the soils in New Bern's planning area are classified as moderately or marginally suitable, Map Four does indicate several areas in the suitable category including about half the Central Business and Historic Districts. Suitable soils generally only have limitations for shallow excavations. These are also the only soils in New Bern that are suitable for septic tanks without drainage improvements.

Moderately Suitable Soils:

- o Altavista fine sand loam and Urban Land Complex
- o Craven silt loam
- o Goldsboro loamy fine sand
- o Seabrook loamy sand and Urban Land Complex

Moderately suitable soils pose constraints on construction of buildings and roads which can, in most cases, be overcome by adequate drainage. However, limitations on septic tanks are severe for this category. Either central wastewater treatment or substantial site improvements are required.

Marginally suitable soils:

- o Arapahoe fine sand loam
- o Bayboro murky loam
- o Croatan muck
- o Lenoir silt loam
- o Leon sand
- o Lynchburg fine sandy loam and Urban Land Complex
- o Pantego
- o Rains fine sandy loam
- o Tomotley fine sandy loam
- o Torhunta

Marginally suitable soils generally place severe limitations on any development but are not subject to regular flooding. Substantial site modifications and/or provision of central sewer would be necessary to develop sites with these soils.

Highly Unsuitable Soils:

- o Dorovan Muck
- o Lafitte Muck
- o Johnston and Muckalee

These soils have severe limitations in all categories including frequent flooding.

About half of New Bern's Planning area falls within the marginally suitable area including the areas currently receiving most of the new growth to the west. These lands can be satisfactorily converted to urban land uses provided that drainage improvements and sewer is provided. Additionally, organic material must be removed from the surface of some soils in the marginal category. It must be understood, however, that the cumulative effect of development in these areas can create water quality problems.

Areas of Environmental Concern. Areas of Environmental Concern (AEC's) are sensitive environmental and cultural areas protected by the Coastal Area Management Act (CAMA). General categories of these areas are identified through State guidelines according to the Administrative Procedures Act, as administered by the Division of Coastal Management. Special areas of local or regional environmental or cultural significance can be nominated as AEC's by individuals, groups or governing bodies. See also N.C.A.C. Section 15-7 for actual state regulations defining and governing allowable uses in these areas.

AEC's lying within New Bern's jurisdiction include Public Trust Waters, Coastal Wetlands, Estuarine Waters, and Estuarine Shorelines. Development or other land and water uses within AEC's generally require CAMA permits. The State has established extensive guidelines regarding activities within AEC's, but generally does not preclude any land use by right. As part of an effort to share implementation of the Coastal Area Management Act with local governments, the State's land use planning guidelines require that local governments identify acceptable land uses within AEC's in their planning jurisdiction. Descriptions of AEC's within New Bern's jurisdiction are provided below.

- o Public Trust Waters

These are legally defined areas of environmental concern where the public has a right to navigation and recreation. The primary concern is that uses such as bulkheads and marinas which must utilize public trust areas, do so without interfering with the public interest in these areas.

- o Coastal Wetlands

Coastal wetlands, or high tide marshlands, are found adjacent to the Neuse and Trent Rivers in two separate locations. The largest wetland area adjoins the Trent River and Lawson Creek, containing approximately 214 acres. Another wetland area is located on the western side of the Neuse River eastward from Woodrow subdivision. The primary plant species in both areas is cordgrass (*spartina alterniflora*).

These marshes provide habitat for wildlife and waterfowl and act as a deterrent to shoreline erosion and sediment runoff

- o Estuarine Waters

Estuarine waters in New Bern's jurisdiction are those areas

of the Neuse and Trent Rivers between the city limits and the mean high water mark, the high water mark being described as the clear line impressed on the land adjacent to the rivers. Generally the New Bern city limits extend about 300 feet from the high water mark into the Neuse and Trent Rivers. Estuarine waters are bordered by estuarine shoreline. These waters are among the most productive natural environments in North Carolina. Many fish and shellfish species spend all or part of their life cycle in estuarine waters. The water areas are used for commercial and recreational navigation, water sports, and provide aesthetic benefits.

o Estuarine Shorelines

Estuarine shorelines are defined as non-ocean shorelines which are especially vulnerable to erosion, flooding, or other adverse effects of wind and water and are intimately connected to the estuary. The estuarine shoreline encompasses the area landward along the estuaries, bays, sound and other brackish waters for a distance of 75 feet from the mean high water level. There are no specific restrictions within estuarine shoreline areas. The prime requirement is that all development substantially preserve natural barriers to erosion. In New Bern's planning jurisdiction, all shorelines of the Neuse and Trent Rivers fall within this classification.

Management guidelines and rules for uses for all Areas of Environmental Concern are described in the most recently amended version of Section 15-7H of the North Carolina Administrative Code. These rules are available through Division of Coastal Management offices in both Raleigh and Morehead City.

Community Facilities Capacity

Community Facility Capacities are identified and discussed by the Community Facilities Section (page 12) of Existing Conditions.

## POLICY STATEMENTS

### Assessment of 1981 Policies

The 1981 Land Use Plan presented policies under major headings of Resource Protection, Physical Constraints to Development, Resource Production and Management, Economic and Community Development, Continuing Public Participation and Special Issues. The purpose of this section is to assess the progress that was made since adoption of the 1981 plan in implementing its policies. This assessment, in turn, provides a basis for formulation of this plan's revised and updated policy statements.

### Resource Protection

- o Estuarine System. The Plan identified the Areas of Environmental Concern: Estuarine Waters, Estuarine Shorelines, Coastal Wetlands and Public Trust Areas. Policies based on subchapter 7H of State C.A.M.A. regulations restricted uses in these areas to those meeting local development codes (zoning, flood plain ordinance, etc.) and C.A.M.A. regulations. These local and state policies have been enforced consistently over the past five years.

### Physical Constraints to Development.

- o Septic Tank Suitability. Policy was to permit development only where adequate wastewater disposal was available. The County, which is in charge of permitting septic tanks, agreed not to issue such permits in New Bern's jurisdiction without receiving a valid City zoning permit. This policy continues to be enforced.
- o Storm Drainage. The City requires adequate provisions for storm drainage; this continues to be enforced through its subdivision regulations.
- o Flood Hazard Areas. All new development is to comply with the City's Flood Damage Prevention Ordinance. This policy continues to be enforced.
- o Cultural and Historic Resources. The City's Historic Zoning District was adopted in 1980. This comprehensive section of the City's zoning ordinance continues to be successfully enforced. Appendix B of the Zoning Ordinance sets forth recommended archaeological safeguards for the historic district.
- o Manmade Hazards. The Zoning Ordinance restricts the location and storage of such materials and continues to be enforced.

## Resource Production and Management

- o Mineral Production Areas. Plan reorganized the Martin-Marietta limestone quarry on the north side but did not consider it a current planning/land use issue and therefore did not adopt a policy.
- o Off-Road Vehicles. Policy considered but not adopted; not considered an issue requiring action.
- o Commercial and Recreational Fisheries. Plan expressed concern over declining fisheries and water quality but no specific policies were adopted.

## Economic and Community Development.

- o Types and Location of Industries Desired. Policy consisted entirely of existing zoning regulations which were consistently enforced.
- o Local Commitment to Providing Services to Development. The City code stipulates specific policies for providing water and sewer to development. Annexation is required for water and sewer service in unincorporated areas. The policies continue to be enforced.
- o Redevelopment of Developed Areas. New Bern has long been committed to redevelopment. The City continues to emphasize redevelopment through participation in the Community Development Block Grant program, Main Street, support of the Historic New Bern Foundation and Swiss Bear. The most significant redevelopment project since the last plan update was completion of the 100-room waterfront hotel complex.
- o Commitment to State and Federal Programs. New Bern continues to support state and federal programs and has successfully utilized C.A.M.A. and the Community Development Block Grant Program to implement local projects and programs such as the Lawson Creek Park and Community Revitalization programs.
- o Assistance to Channel Maintenance. The City continues to support channel maintenance in the Neuse and Trent Rivers.
- o Types of Growth Desired. "The location of urban growth within New Bern's jurisdiction has not been an issue". This was the finding of the 1981 plan and no policy statement was made.
- o Energy Facility Siting and Development. No policy for energy facilities due to remote possibility of location in area; this policy area focused on the

coal train issue. The City has been successful in limiting coal trains to two per day which it considers to be an acceptable level.

- o Tourism/Beach and Waterfront Areas. Previous plan policies recognized the Historic District as the most significant tourist resource. Recreational access to the Trent and Neuse Rivers was identified as an ongoing priority. The addition of lodging accommodations downtown was a stated priority and a 100-room waterfront hotel is now open. The city continues to develop public water access through improvements to existing waterfront parks (with boatramps) and development of the Lawson Creek Waterfront Park.

### Continuing Public Participation

- o Public Education and Continuing Participation. The Planning Board was charged with the responsibility of maintaining ongoing public participation. The Planning Board, itself composed of 'citizen planners' geographically representing New Bern's citizenry, continues its meetings and utilizes the media as the primary means of informing the public of its ongoing planning activities.

### Special Issues

- o Neuse River Water Quality. Friends of the Neuse, Inc. formed in 1980. Premise: "the effective clean-up of the Neuse River will have to start at home."
- o Waterfront Development. Objectives: "Pedestrian Park" to run along the water's edge from the city park at the U.S. 17 Bridge to the Union Point urban renewal site; develop Lawson Creek Park; develop marina on the Trent River. Each of these objectives is either complete or under development. The city continues its strong commitment to the Historic District and redevelopment of waterfront areas.
- o Annexation/Shopping Center. Annexation Study completed--four general areas identified. The mall and Pinewood areas annexed. City continues policy of only providing water and sewer outside the city in conjunction with annexation. Ongoing analysis of E.T.J. and future annexation continues as part of long range water and sewer programming and land use planning.

## Background and Policy Outline

The City of New Bern has adopted the following policies to address land use planning and development issues which will affect its planning jurisdiction during the next ten years. These policies establish a systematic means of evaluating specific development proposals or other actions affecting the City's land and water resources. If a proposed project, development or other activity would violate the intent of these policies, action to prevent its construction or implementation will be taken by local, state and federal government agencies.

### 1. Resource Protection

- a. The Estuarine System
  - (1) Estuarine Waters
  - (2) Estuarine Shorelines
  - (3) Coastal Wetlands
  - (4) Public Trust Areas
- b. Storm Water Runoff
- c. Marina Development
- d. Floating Home Development
- e. Potable Water Supply

### 2. Physical Constraints to Development

- a. Septic Tank Suitability
- b. Package Treatment Plants
- c. Storm Drainage
- d. Flood Hazard Areas
- e. Cultural and Historic Resources
- f. Man-Made Hazards

### 3. Resource Production and Management

- a. Forest and Agricultural Lands
- b. Mineral Product Areas
- c. Off-Road Vehicles
- d. Commercial and Recreational Fisheries

### 4. Economic and Community Development

- a. Types and Locations of Industries Desired
- b. Local Commitment to Providing Services to Development
- c. Redevelopment of Developed Areas
- d. Commitment to State and Federal Programs
- e. Assistance to Channel Maintenance
- f. Types of Growth Patterns Desired
- g. Energy Facility Siting and Development
- h. Tourism--Beach and Waterfront Areas

5. Storm Hazard Mitigation and Post-Disaster Recovery
6. Continuing Public Participation
  - a. Public Participation During the Plan Update
  - b. Means for Public Education on Planning Issues
  - c. Means for Continuing Public Participation

## 1. RESOURCE PROTECTION

- a. The Estuarine System. The Areas of Environmental Concern (AEC's) within New Bern's planning jurisdiction are all components of the Estuarine System. These AEC's, as described by the Constraints to Development Chapter (page 23 ), are: 1) estuarine waters; and 2) estuarine shorelines of the Neuse and Trent Rivers, Jack Smith Creek, Lawson Creek and Renny's Creek to points inland where ocean tides no longer affect these water bodies; 3) coastal wetlands; and, 4) public trust areas. All shorelines below Wilson's Creek on the Trent River and Pitch Kettle Creek on the Neuse River are defined as Estuarine Shorelines and subject to applicable policies and regulations. The State Policy Statements for AEC's offer protection for New Bern's fragile and significant environmental resources through CAMA permitting procedures. In accordance with those policies set forth in subchapter 7H of the State CAMA regulations, New Bern adopts the following policies concerning AEC's in its jurisdiction.

- (1) Estuarine Waters. In recognition of the importance of estuarine waters for the fisheries and related industries as well as aesthetics, recreation, and education, New Bern shall promote the conservation and quality of this resource. Activities in the estuarine water areas shall be restricted to those which do not permanently or significantly affect the function, cleanliness and circulation of estuarine waters. Appropriate uses are restricted to those such as marinas, piers, docks, boat ramps, bulkheads and aids to navigation that will prompt the public's interest in maintaining the critical Areas of Concern.
- (2) Estuarine Shorelines. The City recognizes: the close association between estuarine shorelines and adjacent estuarine waters; the influence shoreline development has on the quality of estuarine life; and the damaging processes of shorefront erosion and flooding to which the estuarine shoreline is subject.

Suitable land uses are those compatible with both the dynamic nature of estuarine shorelines and the values of the estuarine system.

Residential, recreational, commercial and industrial land uses are all appropriate types of use along the estuarine shoreline provided that:

- a. All CAMA permitting requirements are met;
- b. All terms of the New Bern Zoning Ordinance are met;
- c. The construction of impervious surfaces and areas

not allowing natural drainage is limited to only the minimum amount necessary to adequately serve the development;

- d. Development meets requirements of the City's Flood Damage Prevention Ordinance;
  - e. Development must be consistent with Downtown Development and Redevelopment Plan.
- (3) Coastal Wetlands. Activities in coastal wetland areas shall be restricted to those which do not significantly affect the unique and delicate balance of this resource. Suitable land uses include those giving highest priority to the protection and management of coastal wetlands, so as to safeguard and perpetuate their biological, social, economic, and aesthetic values to establish a coordinated management system capable of conserving and utilizing coastal wetlands as a natural resource essential to the functioning of the entire estuarine system. Highest priority of use shall be allocated to the conservation of existing coastal wetlands. Second priority shall be given to those uses that require water access and cannot function elsewhere.

Acceptable land uses may include utility easements, fishing piers, docks, marinas and bulkheads, provided that any such use conforms to applicable C.A.M.A. permit standards.

- (4) Public Trust Areas. In recognition of certain land and water areas in which the public has certain established rights and which also support valuable commercial and sports fisheries, have aesthetic value, and are resources for economic development, New Bern shall protect these rights and promote the conservation and management of public trust areas. Suitable land/water uses include those which protect public rights for navigation and recreation and those which preserve and manage the public trust areas in order to safeguard and perpetuate their biological, economic, social, and aesthetic value, e.g. dredging, bulkheading, jettying.

- b. Storm Water Runoff. Development in the vicinity of coastal waters can pose a serious threat to the estuarine system through the rapid discharge of pollutants washed off of impervious surfaces via storm water. Impervious surfaces include streets, parking lots, and rooftops.

New Bern will promote the use of best available management practices to minimize the threat of pollution from storm water runoff for developments in close proximity to coastal waters. Examples of these practices include using pervious

or semi-pervious materials, such as turfstone or gravel, for driveways and walks; retaining natural vegetation along waterfront areas to retain its natural filtering properties; and allowing storm water to percolate into the ground rather than discharging it directly to coastal waters. The City will consider amending its zoning and subdivision ordinances to address storm water management issues. Specific considerations will include:

- o special minimum lot sizes adjacent to water areas;
- o special setbacks adjacent to water areas;
- o the use of conservation zones adjacent to water areas;
- o the submission of water management plans for large scale developments; and
- o proper site planning for waterfront development including vegetated buffers and the use of pervious materials for drives and parking.

Alternatively, the City will consider adoption of a comprehensive stormwater runoff control ordinance.

- c. Marina Development. Marinas can impact surrounding land and water areas in many ways. Recognizing this, the State, U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers have placed extensive limitations on the alteration of natural systems in conjunction with marina development.

The City recognizes the positive recreational and economic aspects of marina development and will support proposals that are consistent with the City zoning ordinance, this plan, and other applicable plans, policies and ordinances. The City will consider amending its zoning ordinance to specifically address marinas; this will include a definition, development standards and treatment as a special or conditional use in appropriate zoning districts.

- d. Floating Home Development. Overnight tie-up at City owned docks is prohibited by Chapter 5 of the City Code. Floating Home Development may be appropriate as part of an approved marina development provided such proposal meets and is consistent with all applicable plans, policies and ordinances.

- e. Potable Water Supply. New Bern's water supply is provided by deep wells located in Cove City, about fifteen miles west of the City. The water is piped to New Bern and fed into the City's water distribution system. The Cove City wells are supplied by the Black Creek aquifer which is

recharged in the Piedmont area of the state. A regional groundwater study, sponsored by the U.S. Geological Survey and area local governments, is currently being prepared. Once finalized, the recommendations of this study will serve as the basis for management of the city's groundwater resources.

2. PHYSICAL CONSTRAINTS TO DEVELOPMENT.

a. Septic Tank Suitability.

A wastewater disposal ordinance has been adopted by Craven County, and, through coordination with New Bern, zoning and building inspection officials, land development is permitted only when adequate wastewater disposal (septic tanks, sewer) is provided. The County will not issue a wastewater disposal permit in New Bern's jurisdiction without first receiving a zoning permit from New Bern.

The City's subdivision ordinance also provides an opportunity to address sewage disposal problems before land is platted for development. This ordinance requires the subdivider to give evidence that adequate wastewater disposal methods will be provided throughout the subdivision.

- b. Package Sewage Treatment Plants. The City may permit the use of private package sewage treatment plants if the associated development is consistent with the City's plans and policies; the system meets state and federal permitting requirements; the project will have no inverse impacts beyond its boundaries; and, perpetual operation and maintenance of the system is guaranteed without obligation to the City in any way.
- c. Storm Drainage. New Bern's location in the low coastal plain of the east coast causes drainage to be a significant problem for most development within its jurisdiction. It is the City's policy to ensure that adequate provision has been made for the drainage of surface water as part of its subdivision regulations.
- d. Flood Hazard Areas. All development within the City's jurisdiction shall be in compliance with the New Bern Flood Damage Prevention Ordinance (City Code Chapter 9 1/2).
- e. Cultural and Historic Resources. A local historic zoning district was enacted by the City of New Bern in 1980. The district prescribes various architectural standards for properties in the historic zoning district. In addition there are a number of properties on the National Register of Historic Places, which are protected by Federal statutes.

- f. Man-Made Hazards. Bulk storage of flammable and explosive materials is restricted to several districts which are defined in Section 9-30 of the New Bern City Code. A plat identifying the districts defined in 9-30 is on file in the City Clerk's Office for public review. In addition, the zoning ordinance requires above ground storage tanks to be located no less than 100 feet from the nearest property line. See page 25 for a list of known hazardous waste facilities in Craven County.

### 3. RESOURCE PRODUCTION AND MANAGEMENT

- a. Forest and Agricultural Lands. Although the forestry and agricultural industries are important parts of the regional economy, very little land is used for agricultural or forest production in New Bern's planning area. Lands which are presently used for agricultural or forest production will provide needed space for urban development in the future. New Bern does not consider it necessary to adopt policies to prevent conversion of these lands to urban use.
- b. Mineral Production Areas. One area in New Bern's planning jurisdiction has been identified as a productive mineral site, the Martin-Marietta Company limestone quarry on the west side of N. Glenburnie Road. The quarry is important because it provides limestone for a multi-county area. It is located in an area which is relatively undeveloped and has not caused problems with adjoining land uses. The limestone quarry has not been a land use issue and is not considered an issue now. Since mining operations are regulated by the State and Federal governments, New Bern finds a policy on mining inappropriate and unnecessary.
- c. Off-Road Vehicles. The City will consider an ordinance to prohibit the operation of off-road vehicles on City property.
- d. Commercial and Recreational Fisheries. These fisheries are not major components of New Bern's economy. However, the city recognizes their importance to the coast overall and encourages the preservation and expansion of fishery industries, particularly sport. The City's Resource Protection Policies covering estuarine waters, estuarine shorelines, coastal wetlands, and public trust areas, will be enforced recognizing that habitat must be preserved for all life cycle stages.

### 4. ECONOMIC AND COMMUNITY DEVELOPMENT

The New Bern Zoning Ordinance establishes the types of development which are encouraged and permitted within the planning area. In addition, New Bern has a Community Development Block Grant program aimed at neighborhood improvements and a downtown revitalization program. The County

has a full time industrial recruiting organization and an industrial park with vacant land space available is located near New Bern. It has been demonstrated before that existing facilities are sufficient to service new developments.

- a. Types and Locations of Industries Desired. Sections 5.12 and 5.13 of the New Bern Zoning Ordinance contain a listing of industries permitted in New Bern's planning jurisdiction. Industrial uses such as boat manufacturers, food processors, lumberyards, and pharmaceutical producers are allowed. The alternative locations for industrial uses are presented on New Bern's zoning map. Present zoning policy relative to industrial uses is considered satisfactory.
- b. Local Commitment to Providing Services to Development. Existing policy for provision of water and sewer services, as stated in Section 19-19, 19-20 and 19-21 of the New Bern City Code, requires a prospective developer to install water and sewer according to City specifications and at the developer's expense unless the City chooses to pay the expenses. Prior to connecting with New Bern's water and sewer system, the owner of the property if it is located outside the city limits, must submit a petition requesting annexation into the New Bern city limits. After the water and sewer lines are installed they are conveyed to the City for maintenance. A number of annexations have been adopted as a result of this policy.
- c. Redevelopment of Developed Areas. Commitment to redevelopment has long been a high priority in New Bern. Community Development Block Grant funds have been used for housing rehabilitation, demolition of dilapidated structures, and improvements in City services such as streets, storm drainage, recreation facilities, and sidewalks. New Bern remains committed to a continuation of this program.

New Bern was among the first five cities in the state to receive approval for the Main Street Demonstration Program. The overall goal of this program is to encourage economic development within the context of historic preservation. The July 1981 Resource Team Report by the National Main Street Center, National Trust for Historic Preservation presents findings and recommendations for Downtown New Bern.

A special tax district, covering the Central Business District, has been established to provide additional monies for public improvements in the downtown. New Bern's staff provides technical assistance to merchants and property owners. The City has received an Urban Development Action Grant (UDAG) to assist in the construction of a 100-unit hotel on the waterfront with associated support facilities. The City adopted a local historic zoning district which

establishes architectural guidelines intended to preserve and enhance the character of the historic district. Private groups, such as the New Bern Preservation and Swiss Bear, Inc. are also active in redevelopment and preservation projects. In fact, Swiss Bear, Inc. has provided for a full time downtown revitalization manager.

There are approximately two blocks of undeveloped city owned land on New South Front Street. New Bern supports and will pursue preparation of a plan for the development of this area.

- d. Commitment to State and Federal Programs. New Bern has demonstrated its commitment to State and Federal programs through participation in a number of programs in the recent past. New Bern has achieved several CAMA program objectives with its HUD sponsored Community Development Block Grant program. Drainage and stabilization improvements to the Jack Smith Creek Watershed and improvements to Lawson Creek park, including a public boat ramp, were a direct result of New Bern's CDBG program.

State improvements to U.S. 70 were supported by the City while continued coordination with State highway improvement goals are insured by New Bern's Thoroughfare Plan, which is jointly adopted by the City and State. The City will continue its support of State and Federal programs including Community Development Block Grant and Housing programs.

- e. Assistance to Channel Maintenance. The Neuse and Trent Rivers have always played an important part in New Bern's development. New Bern supports state and federal efforts to maintain channels for navigation; further, the city supports private maintenance of channels in connection with approved upland use.

- f. Types of Growth Patterns Desired. The New Bern Zoning Ordinance serves as the primary tool for managing growth patterns, while the provision of water and sewer services also has an impact on where growth occurs. Development densities and locations are specified by the Zoning Ordinance. Sites for single and multi-family residential development, commercial, and industrial development are provided within the planning area. In addition, with water and sewer services available throughout the City limits and by making them available to developments adjacent to the City limits, an incentive is provided to develop these areas.

Despite the availability of water and sewer inside the City, most of the recent growth in the New Bern vicinity has taken place south and southwest of the New Bern planning jurisdiction. An important factor in developing these areas was their accessibility to recreational and

aesthetic amenities, such as the New Bern Golf and Country Club and the Trent River. A substantial amount of this development has been provided with City water service, acting as additional encouragement to develop in the area.

The City will continue its policy of encouraging development in and adjacent to its city limits through enforcement of its zoning ordinance and policies governing water and sewer extensions.

- g. Energy Facility Siting and Development. Proposed energy facilities will be evaluated for consistency with the city's zoning ordinance, the policies of this plan, and other applicable development standards.

It is the City's policy that no more than two (2) trains per day pass through New Bern to or from the Port at Morehead City. Further, it is the city's policy that it be notified 24 hours in advance of the transport of any hazardous materials by way of train through its jurisdiction and that no train block any intersection for more than five (5) minutes.

- h. Tourism/Beach and Waterfront Access. Perhaps the greatest tourist impact on New Bern results from the motoring public passing through the City on trips to coastal beaches. However, the City's numerous historic sites, coupled with river access and downtown revitalization, promise increased tourist activity. In the past New Bern has promoted historic preservation, among other reasons, as one means of increasing tourist interest. Automobile and pedestrian tours of New Bern's historic areas are on the increase, with groups such as the Historic New Bern Foundation sponsoring tours of private homes and businesses. Continuing downtown revitalization efforts are also expected to attract increased numbers of "tourist" customers.

Development of a 100-room hotel on the waterfront through the UDAG program is aimed at downtown revitalization while increasing public water access. Further, the city will require pedestrian walks along the entire waterfront as part of individual development plans. The development of Lawson Creek Park and proposed improvements at Union Point will further accomplish the city's objective of improving public water access facilities.

## 5. STORM HAZARD MITIGATION AND POST-DISASTER RECOVERY AND EVACUATION PLANS

The primary policies of these plans are part of the Land Use Plan and are summarized below. See also the separate plan document for additional information.

### a. Storm Hazard Mitigation

Storm Hazard Mitigation planning in New Bern is addressed through the City's existing development regulations. Being inland, New Bern is not susceptible to the magnitude of damage that can be expected to occur directly on the coast. Nevertheless, much of New Bern is susceptible to storm damage, particularly flooding. About a third of the City is within the 100-year flood plain. The City would also be subject to wind damage from a major storm passing directly through the New Bern area. In general, the City's existing mitigation policies meet the requirements for hazard mitigation planning outlined in Before the Storm. Specifically:

1. The Town's policies support and are consistent with State policies and regulations for development in Areas of Environmental Concern.
2. All new development must conform with the provisions of the N.C. Building Code.
3. The City's floodplain development policies conform with all Federal and State requirements.
4. The City does a good job of controlling mobile home developments in order to minimize hazard damages. Mobile homes are restricted to a specific district and must conform with elevation and other requirements.

### b. Post Disaster Reconstruction

The City's Post Disaster Reconstruction Plan was developed as part of this land use plan update. It is organized in the following sections:

- o Introduction
- o Organization of Local Damage Assessment Team
- o Damage Assessment Procedures and Requirements
- o Organization of Recovery Operations
- o Recommended Reconstruction Policies

The following provides a summary of the Plan's most important provisions and policies from each of these five sections:

- (1) Introduction. Defines plan purpose and use; identifies 3 distinct reconstruction periods: Emergency, Restoration, and Replacement/Reconstruction. Outlines sequence of procedures to be followed to meet State and Federal Disaster Relief regulations: 1) Assess storm damage and report to County; 2) County compiles and summarizes individual community reports; 3) State compiles County data and makes recommendation to the Governor; 4) Governor requests Presidential declaration; 5) Federal relief programs available.
- (2) Organization of Local Damage Assessment Team. Outlines personnel available; establishes team members; designates a team chief.
- (3) Damage Assessment Procedures and Requirements. The purpose of this phase is to rapidly determine immediately following a storm disaster: 1) number of structures damaged; 2) magnitude of damage by structure type; 3) estimated total dollar loss; and 4) estimated total dollar loss covered by insurance. To accomplish this, the Plan establishes four categories of damage: 1) destroyed - (repairs over 80% of value); 2) major (repairs over 30% of value); 3) minor (repairs under 30% of value); and 4) habitable (repairs under 15% of value). A color coding system in conjunction with County tax maps is recommended for this phase of damage assessment. Total damage in dollars is estimated by taking the County tax valuations times a factor to make prices current and then factoring these figures according to the above damage classifications. Estimated insurance coverage is made by utilizing information as to average coverage obtained from insurance agencies on an annual basis.
- (4) Organization of Recovery Operations. The Mayor and Board of Aldermen assume the duties of a Recovery Task Force with the City Manager being responsible for day to day activities.
  - o Establish overall restoration schedule
  - o Set restoration priorities
  - o Determine requirements for outside assistance and request such assistance when beyond local capabilities
  - o Keep appropriate County and State officials informed using Situation and Damage Reports
  - o Keep the public informed
  - o Assemble and maintain records of actions taken and expenditures and obligations incurred
  - o Proclaim a local "state of emergency" if warranted

- o Commence cleanup, debris removal and utility restoration activities.
- o Undertake repair and restoration of essential public facilities and services in accordance with priorities developed through situation evaluations.
- o Assist individual property owners in obtaining information on the various types of assistance that might be available from federal and state agencies

A schedule outlining tasks and general time frames is provided in the plan.

(5) Recommended Reconstruction Policies. The policies outlined are for the Mayor and Board of Aldermen to consider after a storm occurs. It is not practical to determine at this time what specific responses are appropriate. The following policy areas are discussed:

- o Permitting. Permits to restore previously conforming structures outside AEC's issued automatically. Structures suffering major damage allowed to rebuild to original state but must be in compliance with N.C. Building Code, Zoning and Flood Hazard Regulations. Structures with minor damage allowed to rebuild to original state before the storm. Structures in AEC's allowed to rebuild only after determination has been made as to adequacy of existing development regulations in these special hazard areas.
- o Utility and Facility Reconstruction. Water and sewer system components repaired or replaced must be flood-proofed or elevated above 100-year flood levels.
- o Temporary Development Moratorium. To be considered after major storm damage for AEC's if existing regulations appear inadequate to protect structures from storm damage.

c. Hurricane Evacuation Plan

Evacuation procedures for the City of New Bern fall under the umbrella of the Craven County Hurricane Evacuation Plan of June, 1984. The following summarizes this plan as it pertains to New Bern.

1. Designated Evacuation Shelters. All of the public schools in New Bern were designated Evacuation Shelters (see page 46 for list with student capacities). Of the ten public schools in New Bern, the 1984 plan recommended eliminating four schools due to potential susceptibility to flooding. The six remaining schools are (student capacity):

- o Banger Elementary (600)
- o Brinson Elementary (850)
- o Jasper Elementary (600)
- o MacDonald Middle School (1,300)
- o New Bern High School (1,300)
- o Trent Park Elementary\* (600)

\* Secondary shelter or support for MacDonald Middle School.

2. Identification of Evacuation Routes. The County plan focuses on major routes; in the City of New Bern, local roads will be utilized. A route system is not designated for City residents to individual shelters. Route 70 serves as the major route into New Bern from the east and west; it has no apparent flooding problems. U.S. 17 may experience flooding in certain areas southwest of the City.
  
3. Procedural and Organizational Responsibilities. The County Plan states that the N.C. State Highway Patrol is responsible for traffic control on the State Highway system. The plan recommended assignments for County Sheriff's Department staff to monitor roadways for flooding problems. Additionally, coordinative assignments should be made between City police forces, Sheriff's deputies and the State Patrol.

The shelters are to be staffed by the Red Cross, County Health Department and County Social Services Department. Public awareness and warning issuance recommendations of the 1984 plan included:

- o mailing summary copies of the evacuation plan with tax bills (the City could do this as well)
  
- o including summary copies of the plan as a supplement to the Sunday paper at the beginning of hurricane season.
  
- o publishing a one page generalized map for distribution.

## 6. CONTINUING PUBLIC PARTICIPATION

- a. Public Participation During the Plan Update. A Committee of the New Bern Planning Board in conjunction with City staff supervised the preparation of this land use plan update. Representing a wide variety of social, business, cultural and other interests, they reviewed each section of this plan in draft form from their collective and individual perspectives. The Plan reflects their views and knowledge of the needs of the City. Through each committee member the various segments of the community were represented. Specific means to notify the general public were utilized in the most cost effective and generally acceptable manner. Meetings open to the public were held on the following dates during the preparation of the land use plan update:

October 8, 1985  
November 20, 1985  
December 17, 1985  
January 29, 1986  
April 23, 1986  
June 3, 1986  
August 5, 1986  
August 19, 1986  
August 20, 1986

- b. Means for Public Education on Planning Issues. As this plan suggests, the next decade will pose numerous challenges to the decision-makers of the City. The problems they will face will have long lasting implications. The need to better understand these issues, to know the alternatives and to reduce uncertainty, will require a better partnership between elected officials and citizens.

While the local media will continue to be heavily utilized for public education it will be through working relationships with groups, such as the Friends of the Neuse and neighborhood groups, that public education will be encouraged and promoted. This type of education program should do much to develop an informed citizenry and a better prepared group of elected officials.

- c. Means for Continuing Public Participation. The objective will be to focus on narrowly defined issues. The means for continuing public participation will be to encourage public attendance at Planning Board and Board of Aldermen meetings and use of the local media as a means of public awareness.

## LAND CLASSIFICATION

The Land Classification Map differentiates between development-oriented areas and areas which have been set aside for natural resource protection purposes.

New Bern's land classification designations are consistent with the State Land Use Planning Guidelines (NCAC 15, Subchapter 7B). The majority of New Bern's land area has been classified as "developed" while the majority of the Town's extraterritorial jurisdiction is classified as "transition". Coastal Wetlands and estuarine water areas have been placed in the "conservation" category. The classifications were based on the following descriptions:

### Developed

This classification is intended to provide for continued intensive development and redevelopment of existing areas that are at or approaching the following densities:

- o 500 dwelling units per square mile, or
- o Three (3) dwelling units per acre, or
- o Where a majority of lots are 15,000 square feet or less, and which are currently served by public water, sewer, recreational facilities, police and fire protection.

### Transition

The intent of the transition classification is to provide for future intensive urban development at the densities specified above under the developed classification. These are or will be served with the same urban services as those areas in the developed land classification.

### Conservation

The purpose of the conservation class is to provide for the effective long term management and protection of significant, limited or irreplaceable areas. Management is needed due to the natural, cultural, recreational, scenic or productive values that are of both local and regional significance.

The Conservation class in New Bern is applied to lands that contain:

- o AEC's including but not limited to public trust waters, estuarine waters, coastal wetlands, etc. as identified in NCAC Section 15 - 7H; and
- o Other similar lands, environmentally significant because of their natural role in the integrity of the coastal region and which include, but are not limited to, major wetlands, areas

that are fragile or hazardous for development and necessary as wildlife habitat or areas that have a high probability for providing necessary habitat conditions.

#### Relationship of Policies and Land Classification

The policies contained in this plan reflect the views of the City that growth over the ten year planning period will be much the same as it has been in the past. New Bern's growth potential must become inner directed as well as encourage a better utilization of vacant land. The Economic and Community Development policies express several ways that this type objective can be accomplished.

Major new development is projected to occur in the transitionally classed lands. The recent experience with historic preservation suggests that the City can continue to expect urban infill to occur. Both the developed and transition classes are expected to continue the trend of relatively intense development. The conservation class will be regulated through the use of the CRC guidelines and development will be limited to those water dependent uses such as marinas and docks.

The preparation of this map was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the Coastal Zone Management Act of 1972, as amended, which is administered by the Office of Ocean and Coastal Resource Management, N.O.A.A.

# NEW BERN, N.C.

## LAND CLASSIFICATION MAP

**LEGEND:**  
 DEV DEVELOPED  
 TRAN TRANSITION  
 CON CONSERVATION

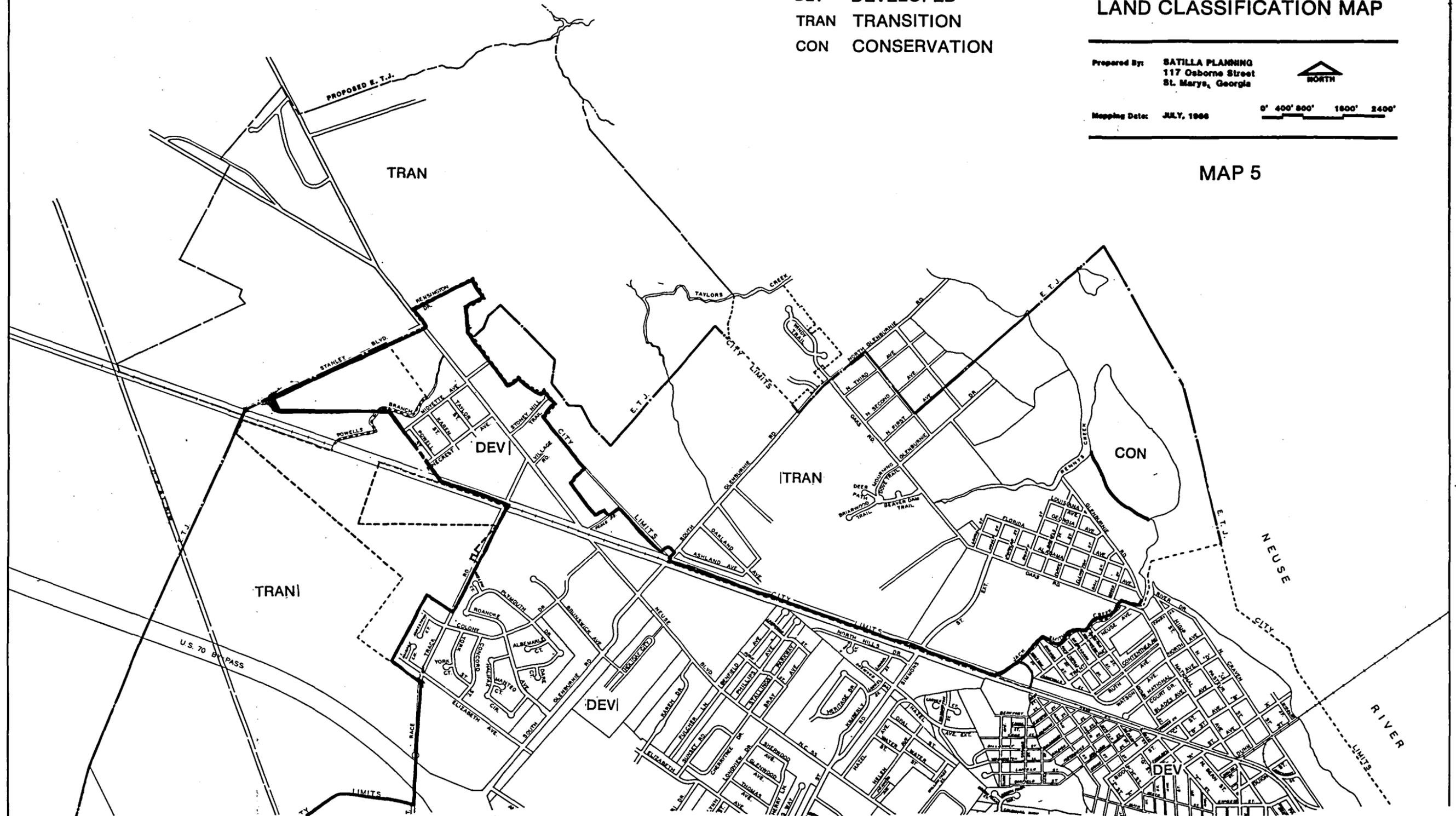
Prepared By: **SATILLA PLANNING**  
 117 Osborne Street  
 St. Marys, Georgia



Mapping Date: **JULY, 1988**

0' 400' 800' 1600' 2400'

### MAP 5



Land Classification - North Portion

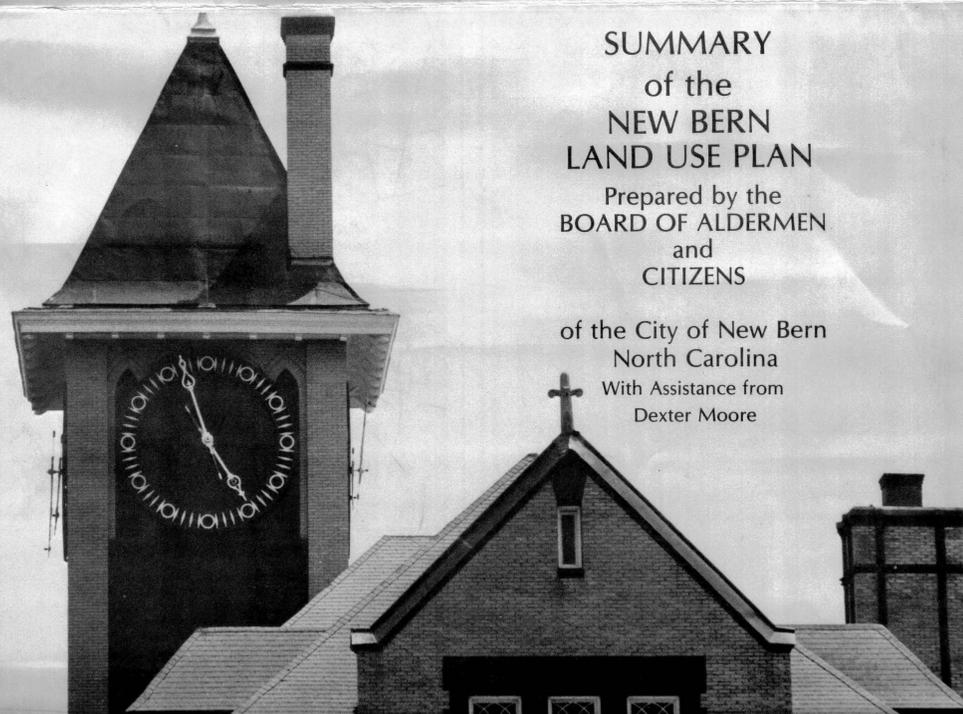


Land Classification - South Portion

# SUMMARY of the NEW BERN LAND USE PLAN

Prepared by the  
BOARD OF ALDERMEN  
and  
CITIZENS

of the City of New Bern  
North Carolina  
With Assistance from  
Dexter Moore



BULK RATE  
U.S. POSTAGE  
PAID  
New Bern, N.C. 28560  
PERMIT NO. 187

## INSIDE CITY RESIDENTS

413 Responses	% of Total Responses
Liked most about New Bern	26% Natural resources
Liked least about New Bern	16% Lack of developed recreational facilities
Most needed at New Bern	41% Lack of jobs
Ideal fully developed	15% Jobs
Should grow as necessary	91% Should grow as necessary
Remain same size as now	3% Remain same size as now
Not exceed 24,000 (Average)	6% Not exceed 24,000 (Average)
Satisfied with New Bern development	59% Yes
Satisfied with New Bern zoning	84% Yes
Liked most about downtown	40% Convenience in shopping
Liked least about downtown	33% Lack of parking
New Bern	16% Lack of adequate waterfront shopping
Best use of downtown Urban Renewal Waterfront Property	61% Recreation
Adequate shopping in city	50% Yes
Prefer shopping in a major center rather than scattered as currently developed	73% Yes
Satisfied with New Bern neighborhood development	63% Yes
Satisfied with New Bern neighborhood zoning	87% Yes
adjacent to commercial area	87% Yes
adjacent to apartment project	57% No
adjacent to neighborhood	65% No
adjacent to industrial area	61% Yes
adjacent to recreational facility	89% No

## EXTRATERRITORIAL JURISDICTION RESIDENTS

111 Responses	% of Total Responses
Liked most about New Bern	36% Natural resources
Liked least about New Bern	21% Lack of developed recreational facilities
Most Needed at New Bern	41% Lack of jobs
Ideal fully developed	15% Jobs
Should grow as necessary	96% Should grow as necessary
Remain same size as now	6% Remain same size as now
Not exceed 24,000 (Average)	7% Not exceed 24,000 (Average)
Satisfied with New Bern development	63% Yes
Satisfied with New Bern zoning	85% Yes
Liked most about downtown	31% Shopping
Liked least about downtown	36% Lack of parking
New Bern	13% Lack of parking meters
Best use of downtown Urban Renewal Waterfront property	49% Commercial
Adequate shopping in city	51% No
Prefer shopping in a major center rather than scattered as currently developed	75% Yes
Satisfied with New Bern neighborhood development	53% No
Satisfied with New Bern neighborhood zoning	87% Yes
adjacent to commercial area	53% No
adjacent to apartment project	54% Yes
adjacent to neighborhood	57% Yes
adjacent to industrial area	89% No

## INTRODUCTION

The coastal areas of North Carolina provide a tremendous natural resource to the citizens of North Carolina. This area provides both recreational benefits and food production from our coastal waters. In some areas, the pollution from overdevelopment may significantly damage the food production of nearby waters. This potential problem was the major reason that the Coastal Area Management Act was ratified by the North Carolina General Assembly in 1974. The purpose of the Coastal Area Management Act is "to insure the orderly balance of use and preservation of our coastal resources on behalf of the people of North Carolina and the nation." The Coastal Resources Commission was created to insure that the purpose of the new state law is followed.

Land Use Plans have been developed by each local government within the twenty coastal counties and will be the administrative tool for carrying out the provisions of the law. These plans cannot survive unless they represent the views of the local citizens. For this reason, the Coastal Resources Commission has required that a public participation program be the foundation of the Land Use Plan.

The City of New Bern was founded in eastern North Carolina in 1710 by Swiss and German colonists. Located at the confluence of the Neuse and Trent Rivers, the city provided an excellent early harbor for colonial ships bringing commerce from England and other old world countries. This good location is the primary reason New Bern grew to such prominence during the Colonial Period. It was the first major city in North Carolina and was the second largest as late as 1860. Until the turn of the century, it had more people than most of North Carolina's present day cities. Based on 1974 population estimates, New Bern currently ranks twentieth.

## GOALS AND OBJECTIVES

The Planning and Zoning Commission and the Board of Aldermen formulated the Public Participation Program as a foundation for New Bern's Land Use Plan. A questionnaire was developed and used to secure the development views of a wide cross section of New Bern's citizens.

Efforts were made to solicit participation from as many people as possible in the City's Land Use Planning Process. The people contacted were from all age groups, all income levels, and all ethnic groups living within the city's planning area. Public hearings were held to discuss the questionnaire results and all ethnic groups living within the city's planning area. Attendance at the only one such meeting was scheduled. Attendance at the meeting was not good. The Planning Board decided that the best approach was to take its planning program directly to the people. Five thousand copies of the questionnaire were printed and distributed through the public school system. Of these 5,000 questionnaires distributed, 486 were returned from within the city's jurisdictional area. An additional 170 completed questionnaires were obtained via interview of New Bern citizens by students of the sociology classes of Craven Community College. In addition to the questionnaire program, presentations were made to eight civic clubs serving the New Bern-Trent Woods area.

## DEVELOPMENT LIMITATIONS

In the development of an area, two elements are extremely important: soil conditions and public services. Most of the soils in the New Bern planning area are highly organic with low load-bearing capacity. Although in some locations filling is necessary to prevent possible flood damage, foundation construction techniques currently used in New Bern have solved the load-bearing problem in most local soils.

Water and sewer service is available throughout the entire City of New Bern. Service is also currently available for portions of the extraterritorial planning area. As development occurs in other parts of the planning area, water and sewer service will be available in these areas also. The expense of providing service to new subdivisions is the responsibility of the development company which develops the subdivision.

Water supply is provided to the City of New Bern from wells located in Cove City, approximately seventeen miles west of New Bern. These deep wells pump an extremely high quality water from the Tuscaloosa formation. New Bern, Kinston, and LaGrange each use water from this formation. From the wells in Cove City, water is gravity fed through a thirty inch main to the city's treatment plant in west New Bern. The current design capacity of the wells is six million gallons per day. Based on current industrial, commercial, and residential usage, the wells have a reserve capacity for an additional 10,000 people. At current growth levels this reserve capacity is estimated to provide for approximately twenty-five years' growth.

The city's sewage treatment facility is located on the Neuse River approximately one mile west of the city limits. It has a design capacity of four million gallons per day. Although some minor improvements will be necessary within the near future, the plant has a reserve capacity for an additional 7,000 people, for approximately twenty-five years.

New service streets are constructed by local developers consistent with the city's thoroughfare plan and construction standards.

## ESTIMATED FUTURE POPULATION

The 1975 population has been estimated by the State of North Carolina to be 16,710 people. The growth which has occurred in New Bern is expected to continue to occur in the foreseeable future. The following projection is based on current New Bern construction trends and Craven County projections by the State of North Carolina.

### ESTIMATED FUTURE POPULATION

City of New Bern		
	Range	
1980	17,072	— 20,941
1985	17,448	— 22,383
2000	18,581	— 25,411
2025	20,469	— 30,172

This projection is consistent with the views expressed by the citizens in the public participation program, and is to be considered as the probable future population.

## Development Objectives

- To promote the development of well-planned residential areas with quick, safe access to schools, work and shopping areas; free from incompatible commercial uses, industrial uses, excessive noise, excessive thru traffic, and unpleasant odors.
- To encourage the development of commercial land in planned commercial patterns rather than in hazardous highway strip commercial development.
- To expand the city's economic base by supporting programs which will assist in the development of quality industry within New Bern's economic area.
- To provide for a coordinated historical scheme for the development and adaptive restoration of property within the City's Historical District.
- To encourage the development of the Urban Renewal Area in such a way as to accommodate commercial, recreational, and cultural activities.
- To provide for a vital and dynamic park development program with consideration given for advanced acquisition of open space at locations which would have good pedestrian and vehicular access to residential areas, prior to the development of residential, commercial and industrial areas.
- To develop a drainage program with a purpose to eliminate damage due to flooding within the city's planning area.
- To develop a street construction program which will effectively coordinate future development and street patterns with the city's thoroughfare plan.
- To provide that new development throughout the city's planning area be connected to the city's services wherever possible.
- To work for the renewal of all deteriorated areas within the city.
- To provide for a system for adapted recreational use of existing surplus land and buildings currently owned or to be acquired by the city in the future.

These objectives were developed in an effort to prevent the recurrence of current land use difficulties.

## Land Use Conditions

Prior to the 1940's, the city was a compact unit with the central business district as a focus. Few residents lived beyond walking distance of the central business district. The waterfront of both the Neuse and Trent provided harbors for the movement of goods. Commercial, industrial, and warehousing were the dominant land uses adjacent to the waterfront areas. Since that time, the automobile has allowed the New Bern growth area to spread in all directions.

There is a total of 2,752 acres of land area within the City of New Bern. In the city's extraterritorial jurisdictional area, there is an additional 3,810 acres. Seventy-eight percent of the land within the city is developed. Only forty-nine percent of the land in the extraterritorial area is developed. The largest existing land use within the city is residential—1,445 acres. Within the extraterritorial area, 642 acres are devoted to residential use.

Commercial development presents the major land use problem for the City of New Bern. Ten percent, 268 acres, is devoted to commercial activity. Only 29 acres of the commercial development is within the central business district. Most of the remaining 239 acres are developed as strip commercial and are located along major traffic routes. With the exception of two and one-half blocks, the entire length of U.S. #70 through New Bern is zoned for strip commercial. A similar development pattern is emerging along U.S. #17. Development of this type chokes the carrying capacity of major thru-street and creates hazardous traffic situations.

Once strip commercial becomes established upon a street, it becomes very difficult to contain. One possible way of containing strip commercial is buffering the area with transition zoning, such as institutional or multi-family from the adjacent single family areas. Another technique is to stop the strip commercial area at a good natural boundary and refusing to approve commercial rezoning requests past that boundary.

Only ninety acres within the city are devoted to industrial activity. Within the extraterritorial area, 255 acres are devoted to industrial uses. The four largest industries within the New Bern economic area are located outside the city's planning jurisdiction.

Land devoted to Recreational uses for the city total fifty-one acres, or two percent of the city's total land area. Within the extraterritorial area there are an additional ten acres. The existing land use map is included in this report.

## POTENTIAL AREAS OF ENVIRONMENTAL CONCERN

The key element within the Coastal Area Management Act is the establishment of Areas of Environmental Concern. New Bern has land which fits five such areas. These proposed areas are: Coastal Wetlands, Estuarine Waters, Public Trust Waters, Coastal Floodplains, and Historic Areas. All of these areas and appropriate uses are now under study to determine future management needs.

The City has approximately 245 acres of Coastal Wetland. These high tidal marshlands are adjacent to the Neuse and Trent Rivers. Appropriate land uses within these areas may include utility easements, fishing piers, docks and other similar uses not involving excavation or fill.

Estuarine waters include both the Neuse and Trent Rivers. The development of navigational channels, the use of bulkheads to prevent erosion, and the building of piers or wharfs are examples of uses appropriate within estuarine waters, provided that such land uses will not be detrimental to the biological and physical estuarine functions and public trust rights.

Public Trust Waters include all waters accessible by boat from the high water mark to and including the ocean. Appropriate uses in this area include channels, drainage ditches, bulkheads, piers and other similar uses, provided these facilities do no damage to the biological environment or restrict public access within public trust areas.

Over sixty percent of the City of New Bern is within the Coastal Floodplain. Coastal Floodplains are land areas adjacent to coastal sounds, estuaries or the ocean which have a possibility of flooding at least once in one hundred years. Development is appropriate within this area provided it is protected from flooding by filling or flood proofing.

New Bern's Historic Area has been defined by the North Carolina Department of Archives and History. Included in this area are structures which are on the National Register of Historic Places. This designation includes the area between Neuse River and Fleet Street, and Trent River and Queen Street. Appropriate uses are those which will not result in substantial damage to the historic value of the area.

Upon approval of the New Bern Land Use Plan, the Coastal Resources Commission designated some of these Interim Areas of Environmental Concern. Designation of an area for study does not prohibit use of that area, it is only a warning to be careful. New construction must be consistent with the City's Land Use Plan.

When the study is completed and official areas are designated, most types of development within an Area of Environmental Concern must have a permit. The Act does not require a permit for development outside areas of environmental concern. The Act requires the following projects in Areas of Environmental Concern to obtain a permit from the Coastal Resources Commission: Those projects currently needing state permits, those of greater than 20 acres in size, those that involve drilling or excavating natural resources on land or underwater, and those which involve construction of one or more structures having an area in excess of 60,000 square feet will require a permit from the Coastal Resources Commission. Local governments will establish regulations for the types of developments in areas of environmental concern which will need permits from them. Local development regulations will be developed to conform to the plan requirements within Areas of Environmental Concern.

## LAND CLASSIFICATION

The Coastal Resources Commission requires that all land within the twenty coastal counties be described according to five classifications: developed, transition, community, rural or conservation. New Bern has land which falls into three of these classifications—developed, transition, and conservation. The classification of land will guide development and public services into appropriate areas of the community.

**Developed**—Lands where existing population density is moderate to high and where there are a variety of land uses which have the necessary public services.

**Transition**—Lands where local government plans to accommodate moderate to high density development during the following ten year period and necessary public services will be provided to accommodate that growth.

**Conservation**—Fragile, hazard and other lands necessary to maintain a healthy natural environment and necessary to provide for the public health, safety, or welfare.

All of the land adjacent to New Bern's Transition area within the Trent Woods planning area is classified as Transition. All of the land adjacent to New Bern's planning area within the county is classified as either Transition or Rural. The New Bern area is shown on the Land Classification map included in this report.

## PERIODIC REVIEW

Planning under the Coastal Area Management Act is recognized as a continuing process. The planning guidelines require that the Land Use Plan be periodically reviewed and revised in the light of changes in life style, economic pressure and environmental pressure. The City of New Bern will review its Land Use Plan at a public meeting annually. City citizens are requested to exercise their civic responsibility by helping the elected government maintain a development course which will provide long range benefits for the people of New Bern.

## IMPLEMENTATION

This synopsis of the New Bern Land Use Plan is designed for distribution to all citizens of New Bern. The essential elements of the Land Use Plan have been summarized for the convenience of the reader. More detailed information can be obtained from the complete Land Use Plan, which is available at the New Bern City Hall.

The Land Use Plan for New Bern was prepared from a public participation program developed by city officials. In that program, development issues most expressed by the citizens were the desire to have additional developed recreational facilities, the desire to have more job opportunities, the desire for a more compact shopping area, and the desire for a portion of the Urban Renewal property to be used for recreational purposes. The citizens also indicated that New Bern should grow as necessary to accommodate those who want to live here. Based on current growth trends, existing water and sewer facilities can accommodate at least twenty-five years' growth within the City of New Bern.



