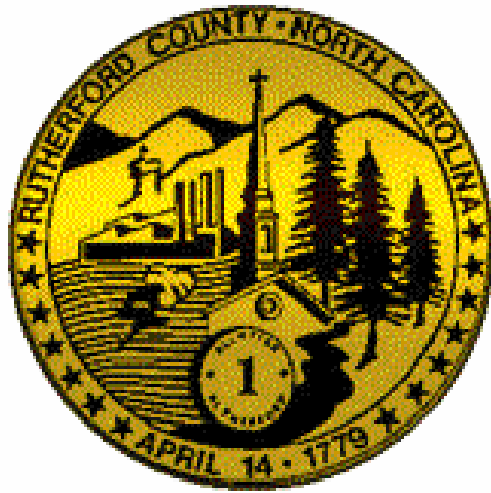


# **RUTHERFORD COUNTY**

## **LAND USE PLAN**



**REVISED - 2001**

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**Technical Assistance Provided by:  
Isothermal Planning and Development Commission  
NC Division of Community Assistance**

# RUTHERFORD COUNTY LAND USE PLAN

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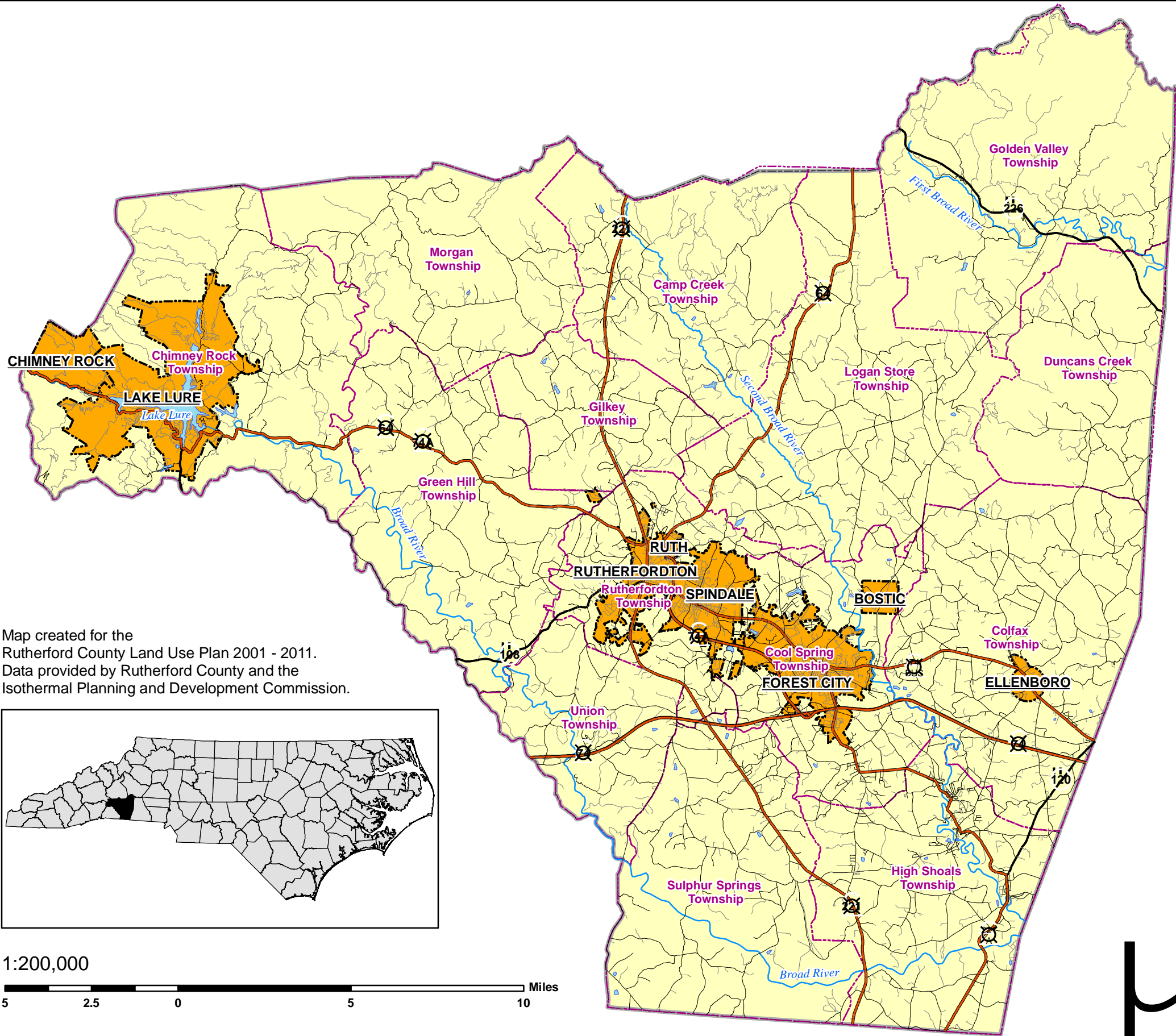
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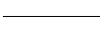
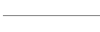
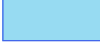
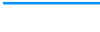



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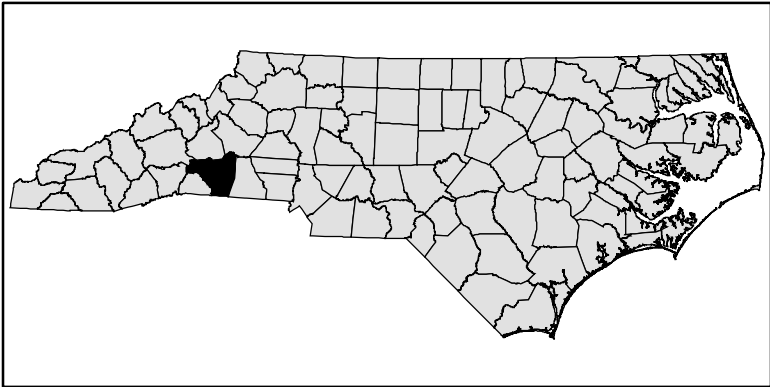
# RUTHERFORD COUNTY REFERENCE MAP



## Legend

-  US Highway
-  NC Highway
-  State Roads
-  Local Roads
-  Water Bodies
-  Major\_Rivers
-  Municipalities
-  Townships
-  Rutherford County Boundary

Map created for the Rutherford County Land Use Plan 2001 - 2011. Data provided by Rutherford County and the Isothermal Planning and Development Commission.



Map created by:  
 Isothermal Planning and Development Commission  
 111 West Court Street  
 P.O. Box 841  
 Rutherfordton, NC 28139  
 (828) 287-2281



"serving Cleveland, McDowell, Polk and Rutherford Counties"

# **INTRODUCTION**

In 1991, the Governor of North Carolina directed monies from the Appalachian Regional Commission in the form of grants to be awarded to individual mountain counties for land use planning. The North Carolina Department of Commerce, Division of Community Assistance administered the Mountain Area Planning Program. Specific requirements were established by the North Carolina Department of Economic and Community Assistance to ensure cohesion between all grant recipients.

Rutherford County, as a recipient of this planning program, contracted with Isothermal Planning and Development Commission to develop the original plan and to ensure that the specific requirements were adhered to. Rutherford County again contracted with Isothermal Planning and Development Commission in 2001 to update the original plan with current information.

The Rutherford County Land Use Plan in its updated form is a guidance document based on analysis of the county's existing physical resources, economic resources and natural resources. The planning process allows local government the opportunity to develop policies that address the needs of the community and to make informed decisions in light of existing financial pressures, county resources and public opinion.

## **PURPOSE AND SCOPE**

The purpose of this comprehensive land use plan is to address certain issues that are vital to the growth, development and protection of the natural and economic values of Rutherford County. To confront these issues, goals and objectives must be developed and incorporated into a plan of action. The actions are the land planning techniques that achieve the goals and the plan itself. Through gathering information and analyzing it, and through public input, local governments can make informed decisions on preserving and enhancing natural features while developing man-made features.

The scope of this report encompasses the eight (8) municipalities of Bostic, Chimney Rock Village, Ellenboro, Forest City, Lake Lure, Ruth, Rutherfordton and Spindale and Rutherford County. However, the emphasis of the plan is on the issues facing the county as a whole and particularly as a governmental unit. Although this document is a comprehensive plan, it focuses on land use management and the techniques that will affect land use in the future. It is proposed that the plan and its recommended techniques be implemented over the next ten-year period and reviewed annually as to the status of the plan and recommendations.

## **METHODOLOGY**

From commencement to completion, the work on the original planning project spanned from January 1992 to December 1992. The majority of information utilized for this plan was gathered from group forums, Isothermal Planning and Development Commission, the North Carolina State Planning Data and Demographics Center and the North Carolina Division of Community Assistance.

A 13-member Advisory Committee representing a cross-section of interest was appointed to assist the planner in the preparation of this plan. The Land Use Plan Advisory Committee's duties included the following:

- Identifying the issues and the strengths and weaknesses of the county.
- Assisting the planner in formulating goals, objectives and land management techniques.
- Reviewing the planner's recommended objectives and land management techniques.
- Reviewing the draft plan.

A mid-project report was presented to the Rutherford County Planning Commission. Also, the draft land use plan and the final plan were presented to the Planning Commission and to the Rutherford County Board of Commissioners for their review and acceptance. The 2001 update to this document took place from February through June, 2001 and involved updating, estimating, and projecting information and reviewing it with the Rutherford County Planning Commission.

## GENERAL OVERVIEW

Rutherford County is situated in the foothills of the Blue Ridge Mountains and South Mountains. To the east and the south, the county runs into the piedmont of North Carolina and South Carolina.

Five hundred and sixty-four square miles – encompassing mountains, rolling hills, lakes, rivers, streams, and waterfalls – are the foundation for the quality of life in Rutherford County. The mild climate, close proximity to major interstates, highways and cities, and the rural small town atmosphere adds to this foundation.

Rutherford County is located within a “thermal belt” as it is protected from the extremes of summer and winter weather by the mountains that flank the northwestern, north and northeastern borders. Average annual temperature is 60 degrees.<sup>1</sup>

The county is surrounded by major interstates and highways that ease the ingress and egress. Within relatively close driving distances are three metropolitan areas:

Asheville, North Carolina	(60 miles)
Charlotte, North Carolina	(70 miles)
Spartanburg, South Carolina	(40 miles)

There are eight incorporated towns and fourteen townships in Rutherford County. Rutherfordton, the county’s oldest town, was once a frontier town on the edge of the western wilderness. Now, Rutherfordton is the county seat and second largest town.

Forest City is the hub of the sprawling urban core of Rutherford County and is the largest of the municipalities. Spindale is the third largest town in the county and the location of Isothermal Community College. The towns of Lake Lure and Chimney Rock Village are the hub of the tourism industry in the county and play an important part in the recreational life of the community. Bostic, Ellenboro, and Ruth are other small towns located within Rutherford County.

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<sup>1</sup>Climatology of the United States

# **CHAPTER I**

## **DEMOGRAPHIC AND ECONOMIC ANALYSIS**

## DEMOGRAPHIC CHARACTERISTICS<sub>1</sub>

The analysis of demographic and economic characteristics of a county is very important when planning for future growth and development. By reviewing past and present census data, and internal and external forces, the future census can be estimated.

### POPULATION

According to the 2000 U.S. Census, Rutherford County's population was 62,899. Of this total, only 18,040 people live within the eight incorporated towns. The remaining 71% of the populous reside in the rural areas of the county. More people reside in Forest City than any other incorporated town. The Cool Springs township, which includes Forest City in its boundaries, has the largest population of all townships. The following table reflects the population in towns and townships:

**Table I-1**

<b>Location</b>	<b>1990</b>	<b>Inc/Dec</b>	<b>2000</b>	<b>%/County</b>	<b>% Inc/Dec</b>
Rutherford County	56,918	5,981	62,899	100%	10.5%
<b>Townships</b>					
Chimney Rock	1,700	546	2,246	4%	32%
Colfax	6,841	839	7,680	12%	12%
Cool Springs	15,637	-822	14,815	24%	-6%
Rutherfordton	10,766	1,314	12,080	19%	12%
Cane Creek	1,168	79	1,247	2%	7%
Duncan Creek	494	123	617	1%	25%
Gilkey	1,402	371	1,773	1%	26%
Golden Valley	830	66	896	1%	8%
Green Hill	1,829	637	2,466	4%	35%
High Shoals	6,811	739	7,550	12%	11%
Logan	3,099	692	3,791	6%	22%
Morgan	1,166	324	1,490	2%	28%
Sulpher Springs	3,902	758	4,660	7%	19%
Union	1,273	315	1,588	3%	25%
<b>Municipalities</b>					
Lake Lure/Chimney Rock Village	691	511	1,027	16%	74%
Ellenboro	514	-35	479	.8%	-7%
Ruth	366	-37	329	.5%	-11%
Rutherfordton	3,617	514	4,131	7%	14%
Spindale	4,040	-18	4,022	6%	-.4%
Forest City	7,475	-588	7,549	12%	-8%
Alexander Mills	662	(Taken into Forest City)			
Bostic	371	-43	328	.5%	-13%

The 1990 and 2000 population figures indicate that the most growth within the county occurred in the following townships: Green Hill 35%, Chimney Rock Village 32%, Morgan 28%, Gilkey 26 %, Union 25%, Duncans Creek 25%, and Logan 22%.

The other townships experienced moderate increases while Cool Springs had a decrease of 6%. As shown in the 1992 Land Use Plan, it is interesting to note that townships with municipalities experienced low growth or negative growth (the exception being Chimney Rock Village), and that most growth occurred within the rural areas of the county.

According to the 1990 and 2000 U.S. Census, Rutherford County’s age distribution by population is as follows:

**Table I-2**

<b>Age Group</b>	<b>1990</b>	<b>Percent</b>	<b>2000</b>	<b>Percent</b>	<b>Increase/Decrease in Population</b>
0-14	11,371	20%	12,538	20%	9
15-34	16,572	29%	15,821	25%	-5
35-54	14,371	25%	17,867	28%	20
55-64	5,729	10%	6,606	11%	13
65-74	5,090	9%	5,255	8%	3
75 +	3,785	7%	4,812	8%	21

Based upon the age information available in the 2000 U.S. Census, several facts become evident:

1. Rutherford County’s median age of 38 is slightly higher than the state’s median age, but is growing at a similar rate. It is expected that the county’s median age in the 2000 census to be between 40 and 41.
2. While we have seen increases in some of the younger age categories over the past ten years, our younger population as a percentage of the total population, continues to decrease. In 1970, the 0-24 age category contained 45% of the county’s total population. In 2000, the same age category contained 32%.
3. The drop in the 15-34 age category results largely from a decline in the birth rate during the 1970’s.
4. The county’s 65 and older age categories should increase significantly over the next 30 years for two reasons – one being that people live longer now than they have in the past; and secondly, the baby boomers will be reaching these age categories.

According to the 2010 population projection, Rutherford County should experience an increase in all age groups with the exception of the 25-34 category. The largest increase in age categories will occur in the 55-64 age bracket. The total projected population for 2010 is 69,189.

**Table I-3**

	<b>1980-1990</b>	<b>1990-2000</b>	<b>2000-2010</b>
Births	7,315	8,016	8,051
Deaths	5,594	6,135	6,663
Natural Increase	1,721	1,881	1,388
Net Migration	1,410	1,418	4,555

**HOUSING**

According to the 2000 U. S. Census figures, there is a total of 29,535 housing units. Of this total, 25,191 units are occupied. Of these units, 18,796 are owner-occupied and 6,427 housing units are renter-occupied. Housing units for seasonal, recreational or occasional use total 1,513 units out of the 4,344 total vacant housing units.

Of the 29,535 housing units located within Rutherford County, 10,006 (34%) are located within the County's eight municipalities. Approximately 11,942 are single family units. Approximately .65% of the total county units lack complete plumbing, and approximately 4% of the total county units use wood as a principal heating fuel.

Average valuation per dwelling unit is \$77,600 as compared to \$119,000 for the rest of the United States. In 1990 the average valuation per dwelling unit was \$45,700.

Average rent for rental units in 2000 was \$296 as compared to \$310 in 1990.

According to the 2000 U. S. Census, the total number of persons per square mile within each township is as follows:

**Table I-5**

<b>Township</b>	<b>Land Area in Square Miles</b>	<b>1990</b>	<b>Persons per Square Mile</b>	<b>2000</b>	<b>Persons per Square Mile</b>
Camp Creek	37	1,168	31.6	1,247	33.7
Chimney Rock	65	1,700	26.2	2,246	34.6
Colfax	53	6,841	129.1	7,680	144.9
Cool Springs	33	15,637	473.8	14,815	448.9
Rutherfordton	26	10,766	414.1	12,080	464.6
Duncan Creek	30	494	16.5	617	20.6
Gilkey	19	1,402	73.8	1,773	93.3
Golden Valley	56	830	14.8	896	16
Green Hill	45	1,829	40.6	2,466	54.8
High Shoals	40	6,811	170.3	7,550	188.75
Logan	57	3,099	54.4	3,791	66.5
Morgan	37	1,166	31.5	1,490	40.3
Sulpher Springs	46	3,902	84.8	4,660	101.3
Union	21	1,273	60.6	1,588	75.6

**ECONOMIC DATA**

According to the 2000 census, Rutherford County's labor force has decreased 3% from 1990 to 2000. The labor force during 1990 was 29,083 people, 16 years and older. This figure represents 65% of the total persons 16 years and older. The labor force during 2000 was 28,250 people 16 Years and older. This represents 45% of the total persons 16 years and older.

According to the North Carolina Department of Commerce the Rutherford County labor force for the first quarter of 2000 was distributed as follows:

<u>Job Classification</u>	<u>No. Persons</u>	<u>% of Labor Force</u>
Agriculture	124	.5%
Construction	1,294	5.2%
Finance/Insurance/Real Estate	476	1.9%
Government	3,449	13.9%
Manufacturing	10,020	40.5%
Retail	3,690	14.9%
Wholesale	966	3.9%
Service	3,879	15.7%
Transportation/Communications/Public Utilities	834	3.4%

The average yearly wage per job in Rutherford County increased from \$17,499 in 1990 to \$25,376 in 2000.

Total farm employment decreased by 14% between 1987 and 1997. The total number of farms held steady around 500 during the same year period. The following table depicts the agricultural trends in Rutherford County.

**Table I-6**

	<b>1977</b>	<b>1982</b>	<b>1987</b>	<b>1992</b>	<b>1997</b>
Total Farm Employment	862	775	641	542	550
Total Farms	615	612	503	475	506
Acres in Farms	72,698	67,458	58,090	55,309	61,147
Average Farm Size (in Acres)	118	110	115	119	121
Average Value Per Farm (Land & Building)	94,163	123,849	129,306	169,208	219,606

Per capita income for Rutherford County as compared to the State of North Carolina is as follows:

**Table I – 7**

	<b>1990</b>	<b>1998</b>	<b>Percent of Change 1990 - 1998</b>
State of North Carolina	16,266	25,181	55%
Rutherford County	14,198	20,183	42%

Rutherford County ranks 53<sup>rd</sup> out of the state's 100 counties in median family income. Rutherford County's median family income increased 33% from \$31,300 in 1990 to \$41,400 in 2000 – gaining on the state's average in the same period – North Carolina, \$34,400 in 1990 to \$43,150 in 2000 (a 20% increase).

According to the consumer price index, Rutherford County's median family income matched the rate of inflation during the 1990's decade while the state's average did not. Thus the gain on the state's average. While Rutherford County gained on the state's average in median family income, Rutherford County's per capita income did not increase with the state's average.

ENDNOTE:

1. Unless otherwise stated, all demographic and economic information is obtained from the U.S. Bureau of the Census.

## **CHAPTER II**

### **INVENTORY AND ANALYSIS**

## NATURAL AND PHYSICAL RESOURCES

The quality of the environment in Rutherford County is a very important consideration in determining growth and development policies. The maintenance and preservation of natural resources and their beauty are significant indicators of the quality of life for area residents.

Quality of life is also dependant on existing land use, community facilities and utilities, and prime and important agricultural land. These elements are also important to consider when determining growth and development policies.

The natural features of Rutherford County consist of many interrelated components that function as a complex system. These natural features – including soils, topography, water supply and watershed areas, and vegetation – are all sensitive to changes generated by man. An analysis of natural features and manmade features are important in determining the suitability of various locations in the county for different types of land uses.

Certain natural conditions such as steep slopes, flood plains and certain soil associations are not conducive to intense development and should be considered when deciding where to encourage or discourage development. The location of public utilities and the community's infrastructure are also important factors to consider when deciding where growth should occur. Inappropriate land development can disrupt the health, safety and well-being of the citizens, animals, and the environment.

Some of Rutherford County's greatest assets are the natural resources that it offers. The county's rolling piedmont begins along the North Carolina and South Carolina state borders and runs northward into the mountainous areas of the county. To the northwest, are the Blue Ridge Mountains and to the northeast, the South Mountains. Sugarloaf Mountain is the county's highest elevation of 3,965 feet. Shumont Mountain, the second highest elevation at 3,842 feet, overlooks beautiful Lake Lure. Together with Chimney Rock Village, these areas are some of the most scenic in the county – not to mention the scenic rivers, waterfalls and stream valleys nestled among the mountains and the rolling piedmont.

**WATER SUPPLY WATERSHED**

The North Carolina Water Supply Watershed Protection Act of 1989 required the North Carolina Environmental Management Commission to revise and adopt water supply classifications and to develop state minimum protection rules. Therefore, each watershed classification has its own set of state mandated protection rules. The Act also requires all local governments with land use regulation authority over all or any part of any classified water supply watershed to adopt and enforce the N. C. Environmental Commission’s minimum protection standards for the watershed area within its jurisdiction. The four watersheds in Rutherford County are as follows:

**Table II-1**

<b>Watershed</b>	<b>Basin</b>	<b>Class</b>
Henry Fork River	Catawba	WS I
Broad River	Broad	WS IV
First Broad River	Broad	WS IV
Second Broad River	Broad	WS IV

Each watershed contains two parts, except for WS-I, which is strictly classified as a critical area.

- 1) The critical area is one-half mile and draining to water supplies from the normal pool elevation of reservoirs or to a river intake.
- 2) Protected area is five miles and draining to water supplies from the normal pool elevation of reservoirs, or ten (10) miles upstream of and draining to river intake.

Listed below are the Low Density Option land use control standards for the watershed classification types within Rutherford County.

**Table II-2**

<b>Classification</b>	<b>Allowable Density Without Storm Water Retentions</b>
WS I	No development of any kind is allowed.
WS IV	Critical Area/Protected Area – one dwelling unit per ½-acre or 24% built upon*  Non-residential development is allowed.

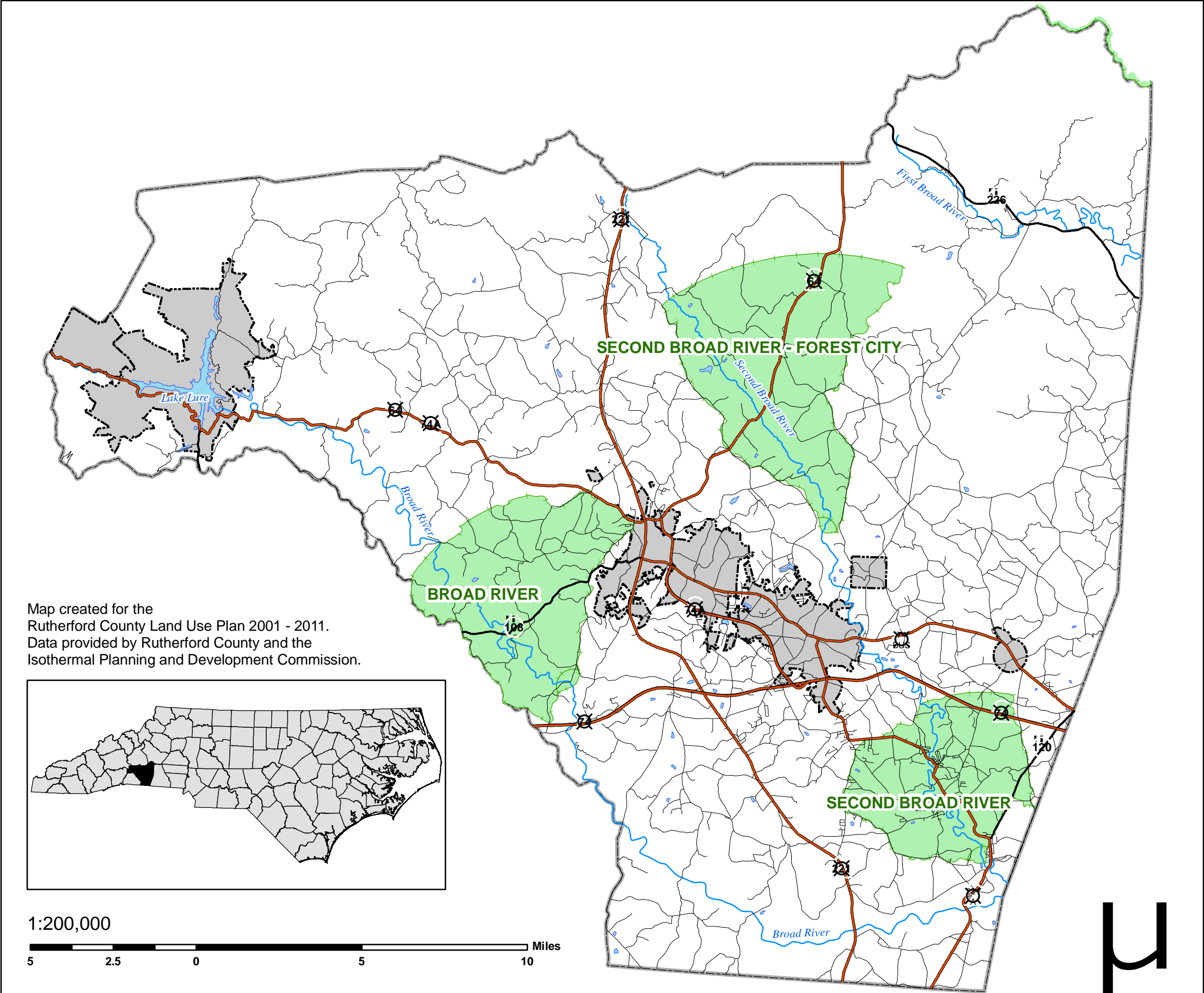
\*Built upon refers to the percent of the lot that can be covered with impervious surfaces such as roofs and asphalt.

In addition to development controls, Water Supply Regulations also places additional requirements on wastewater discharges, solid waste disposal, farming and forestry practices.

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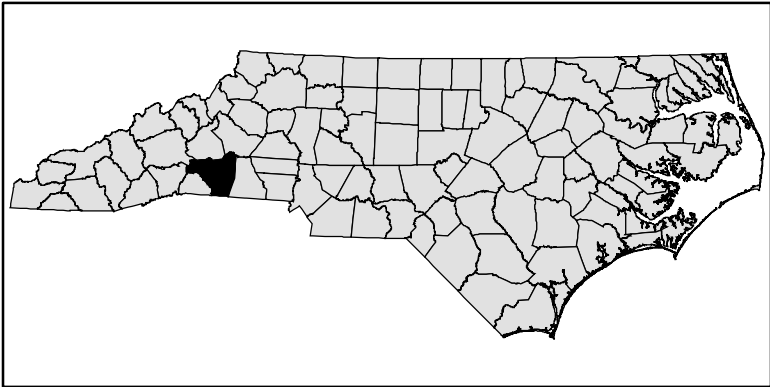
1N.C. Environmental Management Commission

# RUTHERFORD COUNTY WATER SUPPLY WATERSHEDS





- Legend**
- Water Supply Watersheds
  - US Highway
  - NC Highway
  - State Roads
  - Water Bodies
  - Major\_Rivers
  - Municipalities
  - Rutherford County Boundary

Map created for the Rutherford County Land Use Plan 2001 - 2011. Data provided by Rutherford County and the Isothermal Planning and Development Commission.



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"serving Cleveland, McDowell, Polk and Rutherford Counties"

## SOIL ANALYSIS

Soils occur in an orderly pattern that results from the combined influence of climate, parent material, relief, and plants and animals all interacting through time. Each soil type is associated with a particular kind of landscape or with a segment of the landscape. In developing the Rutherford County Soil Survey, soil scientists observe the steepness, length and shape of slopes, general pattern of drainage, crop production and native flora and fauna growing, and the types of bedrock. They observe and study the sequence of natural layers in a soil. They also note soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, depth to bedrock, distribution of plant roots, soil reaction, and other features that enable them to identify soils and determine their capabilities.

The general soil map utilized for this project reflects broad areas that have a distinctive pattern of soils, relief and drainage. Each map unit on the general soils map is a unique natural landscape. Typically, a map unit consists of one or more major soils and some minor soils with the map unit named for major soils.

The map can be used to compare the suitability of large areas for general land use. A knowledge of the soils and their properties can help the farmer, landowner, developer, sanitarian, planner and others when making land use decisions. Soil may be a key factor which will determine the success or failure of a proposed land use. Specific land uses such as the location of a stretch of road, a building, or planning the management of a field are more specific and would require the review of a detailed soil survey.

The suitability of soil combinations to accommodate different land uses is evaluated on numerous factors. Slope, wetness, permeability, depth of bedrock and susceptibility to erosion are just a few of the soil characteristics that determine suitability. Refer to the Rutherford County Soil Survey for a complete list of soil characteristics and definitions of suitability.

### SOIL ASSOCIATIONS

- 1) Cecil-Pacolet Association: CPA
- 2) Pacolet-Madison-Rion Association: PMRA
- 3) Pacolet-Bethlehem-Rion Association: PBRA
- 4) Pacolet-Saw Association: PSA
- 5) Tate-Greenlee Association: TGA
- 6) Evard-Fannin-Cowee Association: EFCA
- 7) Cowee-Clifffield-Ashe-Cleveland Association: CCACA
- 8) Toccoa-Chewacla-Buncombe Association: TCB

9) Ash-Cleveland Rock Outcrop

The major soil associations and descriptions of their use in Rutherford County are as described in Table II-3 below. Appendix A contains soil association descriptions.

The soil associations are ranked according to the most suitable to the least suitable associations for urban use. All soil associations with a greater than 15% slope are ranked poorly suited to unsuited depending on additional soil properties that may be restrictive. While some soil associations might have the same ranking, the greater percentage of favorable characteristics determines their suitability rank.

**Table II-3**

**Soil Association and Use Suitability**

<b>Soil Association</b>	<b>Urban Development</b>	<b>Residential Development</b>	<b>Crop Land</b>	<b>Hay Land</b>	<b>Pasture</b>	<b>Wood Land</b>	<b>Orchard</b>
CPA	2	1-2	1-2	1-2	1	1	1
PMRA	2-3	2-3	2-4	2-4	1-3	1-2	
PBRA	2-3	2-3	2-4	2-4	1-3	1-2	
PSA	2-3	2-3	1-2	1-2	1	1	
TGA	2-4	2-3	3-4	3-4	2-4	1-3	
EFCA	3-4	3-4	3-4	3-4	2-4	2-4	2-4
CCACA	3-4	3-4	4	3-4	2-4	2-3	2-3
TCBA	4	3-4	1-3	1-2	1-2	2	
ACRA	4	4	4	4	4	3-4	

- 1 = Well Suited
- 2 = Moderately Suited
- 3 = Poorly Suited
- 4 = Unsuited
- Blank = Not a Use

**\*PRIME AND IMPORTANT FARMLAND**

Generally speaking, prime and important farmland is prime land for development. When cross-referencing to Table II-3 and the Soil Analysis Map, it is important to note that the Toccoa, Chewacla and Cecil soil series located in the 0% to 8% slope range are the top producers of cropland in the County. These areas are often found in flood-prone areas which are considered as bottomlands.

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Information obtained from Rutherford County Soil Survey.



## ENVIRONMENTAL CONSTRAINTS

When deciding what areas are the most suitable for development, the environmental constraints must be evaluated. There are certain areas such as the North Carolina Game Lands and water supply/watershed areas that cannot be developed or that have restrictions due to state and federal laws and/or ownership. There are other areas, such as flood prone areas and steep slopes, where only residential development can occur and construction costs are high. Another consideration is the location of prime and important farmland and the preservation of these lands.

## TOPOGRAPHY

The Environmental Constraints Map reflects the portion of the county with the greatest concentration of the steepest topography; however, 8% to 45% slopes are characteristic throughout the county. The topography in this area is characterized by slopes of 15% to 95% and a minimal amount of 8% to 15% slopes. There is a more detailed breakdown of slope categories in Appendix A under soil descriptions.

Topographic slope is expressed as the percent of vertical change per hundred feet of horizontal distance. Thus, an 8% slope is one which increases or decreases eight feet vertically for every hundred feet horizontally.

The suitability of land for development relative to topographic slope can be analyzed according to certain standards. These standards relate to development suitability in terms of least construction cost and least environmental impact and are summarized as follows:

**Table II-4**

### **Land Use Suitability Relative to Topographic Slope**

<b>Topographic Slope</b>	<b>Suitable Land Use Types*</b>
Flat to Gentle Sloping** (0% to 7.9%)	Suitable for all types of industrial, commercial and residential development.  Well suited for primary and secondary roads and utility corridors.
Moderately Sloping*	Suitable for residential uses, but too steep for excessive industrial, commercial and high density use.  Suited for secondary roads.  Will require additional grading and higher construction costs.  Generally too steep for cropland, but suited for orchards.

(continued)

**Table II-4**

**Land Use Suitability Relative to Topographic Slope**

<b>Topographic Slope</b>	<b>Suitable Land Use Types*</b>
Steep to Severe Sloping*	Suitable for individual homes, but too steep for subdivisions.  Substantial limitations for other land uses.  Excessive grading, excavation and construction costs.  Suited for low-intensity uses and for active recreation (hiking, camping, fishing and skiing).

\* Does not limit other activity but cost would increase.

\*\* Land within this category may fall within flood-prone areas.

**WATER SUPPLY WATERSHEDS**

Although generalized on the Environmental Constraints Map, the water supply critical area and the watershed protected areas are illustrated. The graphics are to provide a general guideline as to the location of the watershed water supply boundary lines.

**FLOODPLAINS**

Floodplains are those areas of land adjacent to bodies of water that are subject to periodic flooding. Residential subdivisions, industrial parks, and commercial buildings are inappropriate types of development for floodplains.

In the event of a flood, these developments would incur costly damages. Individual home sites are the only type of development that is somewhat suitable for floodplain areas and this is not recommended. Floodplains should be maintained as conservation areas or parkland to preserve the natural environment of the river or stream and to prevent exorbitant property losses. The Environmental Constraints Map illustrates the general flood areas. Detailed Flood Insurance Rate Maps of the United States Department of Housing and Urban Development are available for exact site locations.<sup>1</sup>

## **PROTECTED LANDS<sup>2</sup>**

There are two million acres of North Carolina Game Lands set aside for people who hunt, trap and fish wildlife. The North Carolina Game Lands Program is cooperatively funded under provisions of the Federal Aid in Wildlife Restoration Act, which is administered by the U.S. Fish and Wildlife Service. The Dysartsville Game Land in Rutherford and McDowell Counties allows for fox, dove, quail, rabbit, squirrel, raccoon, deer, and turkey hunting. Unrestricted primitive camping for hunters is allowed.

Also included within protected lands are park lands, conservation easements, and land trust properties.

<sup>1</sup>U.S. Department of Housing & Urban Development

<sup>2</sup>N.C. Wildlife Resources Commission



## EXISTING LAND USE

Knowledge of existing land use is necessary when making objective rational decisions that will guide future land use. The type, arrangement and location of existing development are good indicators of what future development patterns might be. However, the most accurate indicator of the types of future development and where it occurs are the regulations that new development has to follow. Without regulations, there are no guarantees. Development can occur anywhere without the consideration of surrounding land uses.

To prevent un-orderly development from occurring within their jurisdiction, Rutherfordton, Spindale, Forest City and Lake Lure have zoning restrictions. Rutherford County and the other four municipalities do not have zoning restrictions.

The existing land use map reflects the development patterns throughout the county. The following classifications for existing uses are as follows:

1. DEVELOPED:

The purpose of the developed class is to provide for existing cities, towns and their urban environs which offer the usual municipal or public services.

2. URBAN TRANSITION:

The purpose of the urban transition class is to provide for those areas outside existing incorporated towns that are presently being developed for urban purposes. Urban transition areas are primarily commercial and industrial in character and have either private or public utility services.

3. LIMITED TRANSITION:

The purpose of the limited transition class is to provide for development in areas that have some services, but that are only suitable for lower densities than those associated with the urban transition class and/or areas that are geographically remote from existing towns and municipalities. Areas meeting the intent of the limited transition classification are primarily residential in character.

4. COMMUNITY:

The purpose of the community class is to provide for clustered, mixed land uses at low densities to help meet the housing, shopping and employment needs of rural areas. Areas meeting the intent of the community classification are presently developed at low densities that are suitable for private septic tank use.

5. RURAL:

The purpose of the rural class is to provide for agriculture, forestry, mineral extraction and other allied land uses. Very low-density dispersed single family residential users are also found within the rural class.

6. RURAL WITH SERVICES:

The purpose of the rural with services class is to provide for very low-density land uses including residential use where limited water services are provided to avert an existing or projected health problem.

7. CONSERVATION:

Areas meeting the intent of the conservation classification include lands significant because of the natural role in the integrity of the mountain region such as ridge tops, areas of excessive slope, floodplains, areas with a high potential for wildlife habitat and areas that contain significant productive, natural, scenic, cultural or recreational resources.

8. INDUSTRIAL:

An economic organization that trades, produces and/or manufactures goods.

**INDUSTRY**

The following is a listing of the industries within Rutherford county:

**Table II-51**

- |  |                            |
|--|----------------------------|
| 1. Aallied Die Casting                   | 13. Data Paper             |
| 2. A & E Products                        | 14. Duke Power             |
| 3. AFA Corporation                       | 15. EAC Metal Fabricators  |
| 4. AG Industries                         | 16. Ed's Pallet World      |
| 5. All American Homes                    | 17. Elmore Pisgah          |
| 6. American Water Graphics               | 18. Forest City Publishing |
| 7. Associated Printing                   | 19. Galey & Lord           |
| 8. Broyhill Furniture                    | 20. Gilkey Chair Co        |
| 9. Cliffside Hosiery                     | 21. Gilkey Lumber Co       |
| 10. Colorworks, Inc.                     | 22. Henson Timber Products |
| 11. Cone Mills Corporation (4 Locations) | 23. Howard Harrill Deco.   |
| 12. Dan River, Inc.                      | 24. Ingle Weaving, Inc.    |

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- |     |                                    |     |                         |
|-----|------------------------------------|-----|-------------------------|
| 25. | T.G. Thompson Enterprises          | 47. | Vintage/Real Toys       |
| 26. | KCH Services                       | 48. | Reeves Brothers         |
| 27. | Lakeside Mills                     | 49. | Schneider Mills         |
| 28. | Latco Concrete Products            | 50. | Scott Vending Inc.      |
| 29. | Leggett & Platt                    | 51. | Simeus Foods Int.       |
| 30. | Liberty Press                      | 52. | Sonoco Crellin          |
| 31. | Lipscomb Signs                     | 53. | Southeastern Rack       |
| 32. | Mastercraft Corp.<br>(3 Locations) | 54. | Spring Ford Knitting    |
| 33. | Mayse Manufacturing                | 55. | Sunray, Inc.            |
| 34. | Melton's Concessions               | 56. | Stonecutter Mills, Inc. |
| 35. | Milliken & Company                 | 57. | Tanner Companies        |
| 36. | Molding Dynamics                   | 58. | Theiman Metal Tech      |
| 37. | Mott Printing                      | 59. | Torrington Company      |
| 38. | National Textiles                  | 60. | Tri City Concrete       |
| 39. | OH Suzannah                        | 61. | Tri City Molds          |
| 40. | Packaging Corp. of America         | 62. | Ultimate Textiles       |
| 41. | Parker Hannifin Corp.              | 63. | United Southern         |
| 42. | Parton Lumber Company              | 64. | Wacasco Foundry         |
| 43. | Plastic Packaging                  | 65. | Watts Regulator         |
| 44. | R & D Weaving                      | 66. | Wayne Wire Cloth        |
| 45. | R & R Plastics                     | 67. | Williamette Industries  |
| 46. | Ramsey's Hardwood Mill             | 68. | Wood Works              |
|     |                                    | 69. | Riverstone Ind. Site    |
|     |                                    | 70. | Spindale Ind. Site      |
|     |                                    | 71. | Thompsons/APAC          |

**RECREATION**

Open space and recreational facilities are indicators of the quality of life in a community. There are several outstanding recreational features in Rutherford county that enhance the local environment.

Although not explicitly illustrated on the existing land use map, the following list reflects the general location of recreational facilities in Rutherford county. This list includes public and private facilities.

**PUBLIC FACILITIES**

- |               |   |
|---------------|---|
| BILL'S CREEK: | Community center, one tennis court, a basketball court, picnic area and playground equipment.   |
| BOSTIC:       | Playground – this playground consists of one picnic shelter, swings, slide, two tennis courts, restroom facilities, and other playground equipment. |

CAROLEEN:	Chase Community Park is located in Caroleen. This park consists of three picnic shelters, one lake (three acres), a fitness course, a lighted basketball court, one tennis court, two fenced ball fields, and a community center.
CLIFFSIDE:	There is a 10-acre park at this location. It consists of two ballfields, two tennis courts, one picnic shelter, playground equipment and restroom facilities.
CONCORD:	Community center.
ELLENBORO:	There is a fenced-in playground directly behind the City Hall. It has playground equipment and a few benches.
FOREST CITY:	There are eight ballfields, one golf course, two pools, one gym, six tennis courts, two playgrounds, two basketball courts, The Globe Theatre, Arts Council and the Rutherford County Senior Center.
GILKEY:	Community center.
GOLDEN VALLEY:	Community center, Camp McCall.
HARRIS:	Harris has four ballfields, two buildings and one gym.
HENRIETTA:	No facilities.
LAKE LURE:	Lakefront swimming and beach area, various sports equipment, boating, marina, community center, four tennis courts, playground, walking trail, nine-hole municipal golf course, boardwalk and basketball courts.
PEA RIDGE:	Community center.
RUTH:	No facilities.
RUTHERFORDTON:	Four tennis courts, four ballfields, four basketball courts, playground area and nine-hole golf course, picnic shelter, walking track and community center.
SANDY MUSH:	No facilities.
SHILOH:	No facilities.
SHINGLE HOLLOW:	One tennis court.

SIX POINTS:	Community center.
SPINDALE:	One swimming pool, two ballfields, eight tennis courts, two playground areas, and one gym/community center.
SUNSHINE:	Cherry Mountain Park (trails, picnic area) three ball fields, walking track, and a community center.
UNION MILLS:	Community center, a ballfield, Boy Scout Camp.
WASHBURN:	Community center, a ball field, and trails.

### **PRIVATE FACILITIES**

FAIRFIELD MOUNTAINS COMMUNITY:	Fairfield Mountains has two 18-hole golf courses, three pools, one spa, eight tennis courts, a marina, a beach, community building, mini-golf, basketball courts, and a bar. Fairfield Mountains Resort is located in Lake Lure.
GOLDEN VALLEY:	Girl Scout camp
HARRIS:	Race track and Boy Scout camp
FOREST CITY:	Two skating rinks, one driving range, one Putt-Putt, two par-three golf courses, one drive-in movie theatre, four walk-in movies, several fitness centers, three golf courses, bowling lanes, and Peachtree Racket Club.

### **THOROUGHFARES**

There are no interstates running through Rutherford County; however, the county is surrounded by them. Interstate 40 runs north of Rutherford County through McDowell County connecting Asheville to Hickory. In neighboring Polk County, I-26 connects Spartanburg to Asheville. To the south of Rutherford County, I-85 connects Spartanburg to Gastonia and Charlotte.

**The major thoroughfares in the county are the following U.S. Highways:**

- U.S. Highway 221 bisects the county from south to north.
- U.S. Highway 64 runs from west to north.
- U.S. Highway 74 bisects Rutherford County from east to west, connecting Charlotte to Asheville via I-26.

### **RAIL SERVICE**

There is no passenger service available in Rutherford County; however, carrier service is available through CSX Transportation Service. CSX Transportation Service begins in South Carolina and runs through Ellenboro and Bostic to Marion in McDowell County.<sup>3</sup>

The small space that runs from Forest City to Rutherfordton has been put into a rail banking system and is currently used as a walking trail.

### **AIRPORT SERVICE**

The county owned industrial airport has a 5,000-foot runway for twin engine planes and business jets. The airport is currently being widened from 75 feet to 100 feet and can accommodate flights of up to 30 passengers. The airport is self-sufficient and is leased to Free Spirit Aviation.<sup>4</sup>

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<sup>3</sup>Rutherford County Economic Development Director

<sup>4</sup>Rutherford County Airport Authority





## **COMMUNITY UTILITIES**

Water, waste water treatment, electricity, gas and solid waste disposal systems are the primary influences on urban development and where it occurs. The quality of life and of community growth are dependant on these utilities.

Individual wells and septic tank systems are found throughout the rural areas of the county. Within the incorporated towns and higher density communities, the municipality, community, and/or Broad River Water Authority provide services.

## **EXISTING WATER FACILITIES**

There are two major water systems in Rutherford County, both of which rely on surface water treatment plants for water supply and production. There are several small public water systems in the county, which rely on ground water wells for water supply and several other small communities who purchase water from one of the larger systems. Rural residents are served by individually owned wells.

There are two major water sources in the county, the Broad River (a Class IV stream with a mean flow at 1140 MGD) and the Second Broad River (also a Class IV stream with a mean flow of 131 MGD). The 7Q10 flow for the Broad River at the Broad River Water Authority Plant is 65 MGD. The 7Q10 flow to the Second Broad River at the Forest City Water Treatment Plant is 13 MGD.

There are currently six water distribution systems in the county. Two additional systems were recently purchased by the Town of Forest City and are now part of the Forest City system. Following is a brief description of each system.

- A. **FOREST CITY:** The town of Forest City system relies on water from the Second Broad River for its raw water. The city treats the water with a rapid rate sand filter plant with a capacity of 8.0 MGD. The plant was built in 1948. The plant is currently being upgraded with new equipment. The city has a permit to withdraw at a rate of 12MGD. Any expansion would require additional improvements to the system including off stream storage.

The plant is operating at 67 percent capacity with a three consecutive monthly high production rate of 6.5 MGD. The distribution system consists of approximately 173 miles of waterlines ranging in size from 2-inch to 20-inch diameter. There are two major pump stations in the system with 3 pressure zones. System pressure is maintained by elevated water storage tanks with a total capacity of 2,650.00 gallons. The system has an additional 3,300,000 gallons of ground level storage capacity. An estimated 55 percent of the town's total water usage is industrial.

There are approximately 6,315 metered connections on the system. The town acquired the Alexander Mills Water System in 1999 and the Sandy Mush Community in 1998. The town also sells water to the towns of Bostic, Concord and Ellenboro. The treatment plant is currently being upgraded.

- B. BROAD RIVER WATER AUTHORITY: The Authority was formed in 1999 and purchased the existing water system serving Spindale and Rutherfordton from Duke Water Systems in December of 2000. The system relies on the Broad River for the raw water source utilizing rapid rate sand filtration at its Broad River Water Treatment plant. The plant has a permitted capacity of 12.0 MGD and was built in 1983. The plant is currently in compliance with State standards and there are no plans for upgrades or expansions at this time.

The treatment plant is operating at 44 percent capacity with a 3 consecutive month high production rate of 5.7 MGD. The distribution system consists of approximately 142 miles of waterlines ranging in size from 2-inch to 24-inch diameter. There is one major pump station in the system with 1 pressure zone. System pressure is maintained by elevated water storage tanks with a total capacity of 2,150,000. The system has an additional 7,500,000 gallons of ground level storage capacity. An estimated 68 percent of the system's total water usage is industrial. There are approximately 5,300 metered customers on the system.

- C. LAKE LURE: The Town of Lake Lure system relies on three ground water wells for its water source. The town does not provide any treatment to the water. The system has a capacity of 97,000 GPD. There are two ground level concrete storage tanks with a capacity of 100,000. The distribution system consists of 11.5 miles of one-inch to eight-inch diameter waterlines.

- D. CHIMNEY ROCK: The village of Chimney Rock water system relies on a single well for its water source. The village treats the well water with chlorine disinfection. The well has a capacity of 42,000 GPD. The system is operating a 57% capacity with a three consecutive months peak usage of 29,000 GPD. The distribution system consists of 3 miles of water lines ranging in size from one-inch to two-inch diameter. The system is gravity feed from a 20,000-gallon ground level storage tank.

There are 101 existing connections to the system with approximately half of the uses being seasonal. There are no industrial users on the system. The village recently completed work on abandoning a spring source and connecting to the well. However the existing concrete storage tanks is susceptible to leakage. There are plans for additional upgrades to the system.

- E. ALEXANDER MILLS: The Alexander Mills water system was purchased by Forest City in 1999. There are 350 connections on the system. These connections are included in Forest City's total connections. There is one elevated storage tank on the system and it is on the same pressure zone as the central Forest City system.
- F. BOSTIC: The town of Bostic's water system relies on purchased water from Forest City for its water source. The town has an average daily demand of 54,166 gallons. There are approximately 12 miles of waterline in the Bostic system. The line range in size from 2-inch to 6 inch in diameter. System pressure is maintained by and elevated water storage with a total capacity of 75,000 gallons. There are 219 residential customer connections on the system and 10 industrial connections.
- G. ELLENBORO: The Town of Ellenboro system relies on purchasing water from Forest City for its water source. The Town has 663 customer connections with only 229 being inside the town limits. The distribution system consists of some 30,000 linear feet of water line ranging in size from 2-inch to 8-inch diameter. System pressure is maintained by a 100,000 gallon elevated water storage tank. There are very few industrial users in Ellenboro. There are no major booster pump stations on the system. The system has an average daily demand of 133,000 gallons.
- H. CONCORD: The Concord Community water system relies on water purchased from Forest City for its water source. The system was installed in the 1960's using Farmers Home Loans funding. There have been extensions periodically added to the system. System pressure is maintained by a 100,000 gallon elevated water storage tank. There are approximately 330 residential customer connections on the system. The distribution system consists of 12.5 miles of waterlines ranging in size from 2-inch to 12-inch diameter. There are no large industrial users on the system. The system has an average daily demand of 84,000 gallons.
- I. SANDY MUSH: The Sandy Mush community water system was purchased by Forest City in 1998. The system relies on water from Forest City for its water source. The system was installed in the 1960's using Farmers Home Loan funding. There have been extensions periodically added to the system. Forest City has made some \$2,000,000 dollars worth of improvement to the system. Pressure is maintained by a 300,000 gallon elevated water storage tank. The City manually controls pressure and flow on the system by selective opening and closing water valves on the water source. There are approximately 1829 residential customer connections on the system. The distribution system consists of some 50 miles of waterlines ranging in size from two-inch to twelve inches. There is no large industrial user on the system.

## SEWER FACILITIES

1. There are three major municipal sewer systems in Rutherford County. The systems serve Forest City, Spindale and Rutherfordton. In addition, there are several small sewage treatment facilities, one of which serves the community of Lake Lure. Wastewater Treatment Facilities discharge to the surface waters of the County and are listed in Table IV-1. The existing facilities are shown on Figure IV-1. Rural residents outside of the municipal systems are served by septic tanks with ground absorption systems. Sewer service areas are divided into 7 drainage basins with the County. The basins are shown on Figure IV-3.

- A. FOREST CITY SEWERAGE SYSTEM: The Town of Forest City is divided into two drainage basins, the northern basin along the Second Broad River and the southern basin along Bracketts Creek. Highway 74 serves as the dividing line between the two basins.

Sewage flows from the south portion of the town are conveyed to the sewage pumping station at 74 Bypass and Bracketts Creek. From this point a force main and gravity interceptor convey this flow to the treatment facility located on Riverside Drive. Most of the wastewater flow from the north portion of Forest City is collected and conveyed to gravity lines in the Second Broad River Basin by a series of seven sewage pumping stations. The remaining wastewater flow is conveyed to the treatment facility by a gravity interceptor.

The town acquired the Alexander Mills Sewer system with the annexation in 1999. There have been upgrades to existing pump stations and additional upgrades are planned. The Alexander Mills Sewer Plant has been taken off line and flows from the 8 pump stations in Alexander Mills are pumped to the Forest City treatment plant.

The present sanitary sewage collection system serves approximately 3200 acres. Sewage flows in the Second Broad River basin are conveyed to the treatment facility by a new 24 inch outfall which is under construction. Flows generated within the Bracketts Creek basin enter the Bracketts Creek pumping station via a 30 inch outfall. From the pump station, flows are conveyed by an 18 inch force main to the 24 inch Valley View Outfall. flows from the 24 inch line enter the 18 inch line crossing Arlington Street and Georgia Avenue. The 18 inch line enters the 30-inch outfall at the Riverside Plant.

The Bracketts Creek pump station has a pumping capacity of approximately 4800 GPM. This station is the main transporter of sewage to the treatment facility.

The Forest City sewage treatment facility serves as the only disposal point for sewage collected by the city sewer system. The plant was constructed in 1960 and is located off Riverside Drive near the Second Broad River. Effluent from the plant is discharged into the Second Broad River.

The treatment facility consists of a bar screen, grit collector, primary clarifier, extended aerations, secondary clarifier, and chlorine contact chamber, sulfur dioxide sludge is aerobically digested, dried in a sludge dryer and ultimately used for land application.

Evaluation of plant operating data reveals that plant efficiency and performance is good. Average flows, influent and effluent BOD, suspended solids, and pH values and respective removal efficiencies are shown in Table IV-1.

**Table II - 6**

**Forest City Wastewater Treatment Facility  
Operating and Performance Data**

low (MGD)			BOD (mg/l)		Suspended Solids mg/l		PH		
Avg	Min	Max	Influent	Effluent	Influent	Effluent	Avg	Min	Max
4.00	1.25	5.6	206	7.6	261	14	7.6	7.42	7.74
D.N.E.R. Effluent Limitations*				25.5		30		6.0	9.0

\*Partial Listing

BOD and suspended solids removal efficiencies of 96 percent and 95 percent indicate that the Forest City extended aeration plant is operating at a high level of performance. Hydraulically, the plant was designed to operate at a flow of 4.95 MGD and the current average flow is 4.0 MGD. 550 dry tons of waste sludge were produced during the year and ultimately dried for disposal. The class "A" sludge is removed from the plant and disposed of by land application.

There are currently no operational problems at the facility.

- B. FORMER ALEXANDER MILLS WASTEWATER SYSTEM: The Alexander Mills area is divided into two drainage basins with U.S. 221A serving as the divide. Flows within the eastern portion of the system enter basin. Sewage flows within the Marrow Creek drainage basin are conveyed to four sewage pumping stations. From these stations, force mains convey the flow to the Bracketts Creek drainage basin where interceptors collect and transport all sewage flows to three additional pumping stations. Force mains then convey the flow to a pump station located on Bracketts Creek at the abandoned wastewater treatment plant. The present sanitary collection system serves approximately 250 acres.

The former Alexander Mills sewage flow is pumped to Bracketts Creek Pump Station and then treated in the Forest City Wastewater Plant.

- C. SPINDALE WASTEWATER SYSTEM: Wastewater flows from the portion of the Town of Spindale within the Stonecutters Creek drainage basin are conveyed to the sewage pumping station located on Stonecutters Creek. From this point a force main and interceptor convey this flow and a portion of the flow from Holland’s Creek drainage basin to the treatment facility located on Ecology Drive. The remaining flow from Hollands Creek drainage basin is conveyed by an interceptor to the treatment facility. The present sanitary sewage collection system serves approximately 2600 acres.

The town of Spindale operates the 4.5 MGD activated sludge wastewater treatment facility which services the Spindale area. The plant was built in 1971 in the northeast section of town off Ecology Drive. The facility’s effluent flows into Cathey’s Creek.

The plant uses a modified activated sludge waste treatment process consisting of a screen chamber, a grit chamber, an aeration basin, 3 clarifiers, a chlorine contact chamber, two de-chlorination chambers and 2 sludge holding tanks. Sludge is land applied.

Plant operation is evaluated using test data taken at the plant and summarized in Table IV-2.

**Table II – 7**

**Spindale Wastewater Treatment Facility  
Operations and Performance Data**

Flow (MGD)			BOD (mg/1)		Suspended Solids(mg/1)			Effluent NH3		Effluent DO mg/1
Avg	Min	Max	Influent	Effluent	Influent	Effluent				
2.1	0.7	3.5	232	10	121	41	7.6	6.9	8.5	
Proposed D.N.E.R. Effluent Limitations*				25.5		30			10	

\*Partial Listing

Average data values indicate that the plant effluent meets the D.N.E.R. effluent limitations for BOD, suspended solids and dissolved oxygen and pH concentrations; are mg/1, 7.7ug/1, 19.3 ug/1, 340 ug/1 respectively. Fecal coliform tests are run on the facility effluent and the D.N.E. R. requires fecal coliform count of less than 200 MPN/100ml.

D. RUTHERFORDTON WASTEWATER SYSTEM: The Town of Rutherfordton lies primarily within the upper bonds of the Cleghorn Creek basin. Because of this, the majority of wastewater flows are conveyed by gravity to the treatment facility located near the intersection of U.S. 221 and Oak Street, south of town. Several areas of residential development contiguous to the town limits are served by sewage collection systems with flows being pumped by lift stations to the Cleghorn Creek basin.

Wastewater flows generated from the Town of Rutherfordton and contiguous areas are treated in a modified extended aeration basin with a capacity of 1.0 MGD.

The plant has an aerated lagoon modified to operate as an extended aeration basin. This basin has failed to meet the permitted discharge limits. A 440,000 gallon aerobic digester has been converted to an extended aeration basin. The existing lagoon is used for hydraulic equalization. It has a capacity of 6 million gallons. The plant has two secondary clarifiers and a chlorine contact chamber. Waste sludge is being transported to Forest City for disposal.

The facility has been out of compliance for twelve months and currently the system is under a state moritorium. The plant had a permitted capacity of 3 mgd, but with the recent modifications is limited to 0.6000 to 0.7 MGD. The facility discharges effluent flows into Cleghorn Creek.

Plant operation is evaluated using best data taken at the plant and summarized in Table IV – 3.

**Table II – 8**

**Rutherfordton Wastewater Treatment Facility  
Operations and Performance Data**

Flow (MGD)			BOD mg/1		Suspended Solids Mg/1		DO Mg/1	NH3 Mg/1	
Avg	Min	Max	Influent	Effluent	Influent	Effluent	Effluent	Influent	Effluent
0.5	0.27	0.78	162	23	150	10	5.9	16.4	9.3
DENR Effluent limitations			30		30			2.0 *(April 1 – Oct 21)  4.0 (Nov 1 – March 31)	

\*Date indicates that the plant effluent is not meeting DENR effluent limitations for NH3.

There are several operational problems at the facility. A major problem is with the modification made in the aerobic digester. The hydraulic volume at the plant is limited. There is no sludge disposal plan other than sending the sludge to Forest City. The plant no longer has an aerobic digester.

- E. LAKE LURE WASTEWATER SYSTEM: The Town of Lake Lure’s sewage treatment plant effluent is discharged into the Broad River Drainage Basin. The basin has 3 major legs of drainage along the Broad River and two small tributaries, all draining into Lake Lure. The collection system is all gravity flow, with one pump station located at the dam on the lake, which pumps the sewage up to the treatment plant. There are 28 miles of sewer line located under water in the collection system.

The collection system serves 9,645 acres and a population of 800. The collection system consists of 8-inch diameter lines. The pump station has capacity of 2.5 MGD.

The Lake Lure treatment facility serves as the only point of disposal for sewage collected by the system. The plant was constructed in 1967, with an original design capacity of 250,000 GPD. The plant has been upgraded and modified and now has a capacity of 995,000 GPD. The plant uses chemical addition and disinfection by chlorine as its treatment process. The plant consists of a bar screen, flash mix, flocculator, settling basin and secondary clarifiers. Disinfection is done at the head of the plant. The plant has average daily flows of 700,000 gallons with BOD’s averaging 10 mg/1. The plant is operated like a waste water plant due to the high amount of infiltration from the lake. The alum sludge is mixed with lime and then land applied on a 75 acre site.

Evaluation of the operating data indicates that the plant is treating 10 times more volume than normal. The plant does not meet the 85% reduction in treatment efficiency, but does meet its other criteria. Influent and effluent values are shown in Table IV – 4.

**Table II – 9**

**Lake Lure Wastewater Treatment Facility**

Flow MGD			BOD mg/1		Suspended Solids	
Avg	Min	Max	Influent	Effluent	Influent	Effluent
0.7	0.566	0.794	<10	<10	<10	<10

There currently are no operational problems other than the excessive infiltration.

F. OTHER WASTE WATER TREATMENT FACILITIES

CONE MILLS CORPORATION: Cone Mills in Cliffside operates an activated sludge treatment facility discharging to the Second Broad River. The plant has a permitted capacity of 1.75 MGD. The plant is presently operating in compliance with its effluent limitations. The plant has an average daily flow of .66 MGD.

DUKE POWER COMPANY: Duke Power operates a water treatment facility located north of Spindale. In order to treat backwash water and alum sludges produced by the water treatment operation, the Company has several settling basins which allow the sludge and other suspended matter to settle out. Supernatant is returned to the treatment process. Sediment is dredged from the basins after several years of operation, dried and disposed of on the adjacent Company property or else disposed of in a sanitary landfill. The plant does not have a limited discharge.

J. C. COWAN PLANT: The J. C. Cowan company a division of Burlington Industries, has a treatment facility southeast of Forest City. The plant is currently not operating and is for sale. The plant has a capacity of 2.5 MGD. The plant consists of an extended aeration basin and a clarifier. The plant also provides chlorination prior to discharging to the Second Broad River.

DAN RIVER MILLS: Dan River Mills operates an activated sludge sewer facility discharging to the Broad River. The plant has a permitted capacity of 0.91 MGD.

ELLENBORO WASTEWATER SYSTEM: Presently the residents of Ellenboro use individual septic tanks to dispose of waste water. In 1973 the Town employed the services of an engineering consultant to develop recommendations for providing sewer service and treatment facilities to the Town. The report indicated that sewer service should be made available to Ellenboro, and to several residential areas adjacent to the town limits. Further recommendations include two sewage lift stations on the eastern side of Ellenboro and a treatment facility located on the west side of Town. The treatment facility, tentatively located on an unnamed tributary of Webbs Creek would receive both domestic residential wastes and industrial sanitary wastes from the proposed service area. There currently is no action being taken on the system due to lack of funding.

BOSTIC WATER SYSTEM: The residents of Bostic use individual septic tanks to treat and dispose of generated waste water. No sewage collection system is available nor have any plans for providing collection and treatment of waste waters been contemplated.

CHIMNEY ROCK SYSTEM: Chimney Rock Village uses individual septic tanks as its only means of wastewater disposal. No plans for installing a collection system could connect to the existing Lake Lure collection system and the wastewater treated by Lake Lure.

## **COMMUNITY FACILITIES**

The provision of utility services, along with other community and transportation facilities, represents and available public means to promote efficient land development patterns. Facilities such as public schools, police departments, fire and rescue stations, medical facilities and government offices also reflect the quality of life in a community.

## **EDUCATION**

Rutherford County has 20 schools with a total enrollment of 10,212 children. There are three high schools and three middle schools. The remaining 15 are elementary schools. The following table illustrates Rutherford County schools and current enrollment:

**Table II – 10**

<b>School</b>	<b>Grades</b>	<b>Certified Teachers</b>	<b>2001 Enrollment</b>
Forest Hunt	K-5	34	561
Cliffside	K-5	24	435
Dunbar	K-5	27	212
Ellenboro	K-5	45	654
Forest City	K-3	37	475
Harris	K-5	45	622
Mt. Vernon	K-5	18	174
Ruth	K-5	17	153
Rutherfordton	K-5	32	503
Spindale	K-5	30	505
Sunshine	K-5	19	328
Pinnacle	K-5	26	495
Chase Middle	6-8	31	659
East Middle	6-8	31	757
R.S. Middle	6-8	31	856
Thomas Jefferson	6-10	7	114
Trinity	N-9	15	235
Chase High	9-12	74	676
East High	9-12	74	842
R-S Central	9-12	74	956

## **HIGHER EDUCATION**

Isothermal Community College, Polk County Campus – 25 minutes  
Isothermal Community College (Main Campus) – Spindale  
Blue Ridge Technical Institute, Hendersonville – 45 minutes

University of North Carolina at Asheville – 60 minutes  
 University of South Carolina at Spartanburg – 60 minutes  
 Converse College, Spartanburg, SC – 45 minutes  
 Wofford College, Spartanburg, SC – 45 minutes  
 Spartanburg Methodist College, Spartanburg, SC – 45 minutes  
 Spartanburg Technical College, Spartanburg, SC – 45 minutes  
 Gardner-Webb College, Boiling Springs, NC – 45 minutes

**POLICE DEPARTMENTS**

Rutherford County’s major municipalities operate their own police departments which are as follows:

Rutherfordton	13 Officers
Spindale	14 Officers
Forest City	27 Officers
Lake Lure	9 Officers

The Rutherford County Sheriff’s Department serves the rest of the county with 82 officers, including jail and 911 personnel. The Rutherford County Jail has recently been expand to house 208 prisoners.

**FIRE DEPARTMENTS**

Fire service for the County is provided by 17 volunteer departments with 19 stations. They are as follows:

**Table II - 11**

<b>DEPARTMENT</b>	<b>EQUIPMENT</b>
Bills’ Creek	Pumper, 2 tankers, brush truck
Bostic	2 pumpers, tanker, 2 brush trucks, utility truck
Cherry Mountain (Sub-stations I, II, III)	2 pumpers, tanker, 2 brush trucks, equipment truck
Chimney Rock	Pumper, tanker, brush truck, step van, pumper/tanker
Cliffside	3 pumpers, 2 tankers, 3 brush trucks, step-van
Ellenboro	3 pumpers, 2 tankers, 3 brush trucks, equipment truck
Fairfield Mountains	2 tankers, 2 brush trucks, 2 pumpers, 2 support units
Forest City	3 pumpers, brush truck, 1 equipment truck, 1 arial truck

<b>Table II – 11 (Continued)</b>	
Green Hill	Pumper, tanker, 2 brush trucks
Hudlow	2 pumpers, 2 tankers, 2 brush trucks
Lake Lure	26' pontoon – coordinates 3 mountain depts.
Rutherfordton	3 pumpers, tanker, brush trucks, equipment truck
Sandy Mush	3 pumpers, 2 tankers, 2 brush trucks
SDO	3 pumpers, 2 tankers, 2 brush trucks, equipment truck
Shingle Hollow	Pumper, tanker, brush truck, equipment truck
Spindale	2 pumpers, brush truck, 1 tanker, equipment van
Union Mills	Pumper, tanker, brush truck

### **EMERGENCY MEDICAL SERVICES<sup>3</sup>**

Within the County, there are approximately 65 Emergency Medical Technicians that volunteer their services as rescue workers. The Rutherford County Rescue Service has two stations; one in Cliffside and one in Forest City. The other two volunteer services that back up the Rutherford County Emergency Medical Services are the Volunteer Life Saving and Rescue, located in Rutherfordton, and the Hickory Nut Gorge EMS. The Rutherford County EMS is county-funded and employs 22 full-time and 15 part-time employees. There are also approximately 55 First Responders located in the Hudlow, Shingle Hollow, and Cherry Mountain Fire districts. Rutherford County Search & Rescue has 20 members.

### **MEDICAL SERVICES**

#### **Rutherford Hospital**

Founded in 1906 by Drs. Henry Norris and Montgomery H. Biggs, Rutherford Hospital today is a not-for-profit hospital governed by a local Board of Trustees. Divisions of Rutherford Hospital and Carolina Community Care. Our affiliates include Lake Lure Area Medical Services, the James Medical Clinic, OneSource Rehab, Cardiac and Pulmonary Rehab, the Psychiatric Center, Occupational Medicine Center, Becknell Family Practice, England and Godfrey Family Practice, Rutherford East Medical Services, and Rutherford East Pharmacy.

Licensed for 143 acute beds, Rutherford Hospital has experienced many expansions since 1911. The Outpatient and Surgery Center, which opened in 1995, is the most impressive expansion to date. More than 100 physicians and physician extenders on staff, representing 23 specialties,

provide the citizens of Rutherford County and its surrounding areas with a full range of state-of-the-art services to meet their health care needs.

**NURSING HOMES**

**Table II –12\***

<b>Nursing Homes</b>	<b>No. Beds</b>
Autumn Care Bethany Church Road, Forest City	128
Fair Haven Highway 74, Bostic	67
Oak Grove Healthcare Highway 221, Rutherfordton	80
Willow Ridge Tryon Road, Rutherfordton	150
White Oak Manor Oscar Justice Road, Rutherfordton	95

**ADULT CARE HOMES**

Located within Rutherford County there are a total of 11 adult care homes with a total capacity of 459 beds. The majority of these homes are located in Rutherfordton and Forest City.

**FAMILY CARE HOMES**

Scattered throughout Rutherford County there are a total of 26 Family Care homes with a total of 154 beds.

**SENIOR CENTER**

The Rutherford County Senior Center located at the Rutherford County Office Complex between Spindale and Forest City has much to offer seniors in our county. There are four satellite locations scattered throughout the county and it is staffed by 6 full-time and 6 part-time employees.

The center offers congregate meals, home delivered meals, help and assistance with insurance, help with Medicaid, exercise programs and health screenings. The center serves approximately 500 seniors in Rutherford County.

## **GOVERNMENT OFFICES**

Each municipality has its own Town Hall, with the exception of Chimney Rock Village. Rutherfordton is the county seat and is the location of the Rutherford County Courthouse and the County Administration offices. The rest of the county's offices are located at the Rutherford County Complex between Spindale and Forest City off of US Highway 74 Business.

## **BROADBAND TELECOMMUNICATIONS**

With the explosive growth of the Internet and the digital economy, the availability of high speed, high capacity telecommunication services has become an important part of a community's infrastructure, and a key element in successful economic development. Broadband service is generally defined as digital information transmission rates significantly higher than the nominal 56 kilobits per second (Kbps) available with an ordinary, high quality telephone voice circuit. New electronic communication technologies are bringing changes to many aspects of daily life, from distance learning to tele-medicine to video-conferencing to electronic commerce.

Unfortunately, much of this potential is being limited by the lack of capacity (bandwidth) in the telecommunication infrastructure. Rural areas are facing a "digital divide", and risk losing the economic development, education and other benefits to more urbanized areas, where higher population densities and more demand make the delivery of broadband services easier and less expensive. A recent study by the N. C. Department of Commerce found that the average cost of a 128 Kbps Internet connection in rural areas was over four times higher than in highly-urbanized areas.

Rutherford County is fortunate to have several local Internet service providers (ISP's), so that local dial-up access to the Internet is available throughout the county. These providers are also developing the ability to deliver higher bandwidth services, such as wireless systems, digital subscriber line service and cable modem connections. However, county-wide availability of high bandwidth service is not likely in the near future.

The 2000 Session of the N. C. General Assembly authorized the creation of the Rural Internet Access Authority to guide efforts to improve broadband service to rural areas of the state. The initial goals of the Authority are to provide local dial-up Internet access from every telephone exchange in North Carolina within one year; and to provide high-speed Internet access at competitive prices (at least 128K for residential customers and at least 256K for business customers) to all North Carolinians within three years. Subject to future legislative appropriations, the Authority is expected to assist in funding projects to upgrade rural telecommunication services. In addition, the Authority is charged with increasing public understanding of the opportunities created by the digital economy, increasing personal ownership of computers that are connected to the Internet, and providing information about service availability.

In support of the state's efforts to increase telecommunication connectivity, local government can encourage the identification of economic development strategies geared to the digital economy. Citizens need to understand the potential economic benefits of participation in the new economy and to support the building of a strong technology infrastructure. Local government can also make use of new technologies to provide services more efficiently and to improve citizen access to services.





## LAND CLASSIFICATION

This land use plan is designed to provide a guide for future growth and development in the county. The proposed Future Land Use Map, is the graphic guide illustrating anticipated growth patterns. The suggested growth patterns are the result of the analysis of natural features, existing development and infrastructure, and current demographic characteristics and projections.

By looking into the past and present, we can anticipate and plan for the future. However, there are internal and external forces that could disrupt the normal progression of growth and the character of the community. The wise use of land can produce prosperity, health, and scenic beauty just as the misuse of land can bring poverty, environmental distraction and eyesores. This is why it is so important for decision makers to have a guide or plan of action when making decisions concerning the future of Rutherford County.

Specific classifications reflecting the areas of anticipated growth and development were established by the North Carolina Division of Community Assistance as a requirement of the Mountain Area Planning Program. The seven classifications are as follows:

1. DEVELOPED:

The purpose of the Developed class is to provide for continued development and redevelopment of existing cities, towns and their urban environs. Areas meeting the intent of the Developed classification are currently urban in character where minimal undeveloped land remains and that have in place, or are scheduled for the timely provision of, the usual municipal or public services.

2. URBAN TRANSITION:

The purpose of the Urban Transition class is to provide for future intensive urban development on lands that are suitable and that will be provided with the necessary urban services to support intense urban development. Areas meeting the intent of the Urban Transition classification are presently being developed for urban purposes or will be developed in the next five to ten years to accommodate anticipated population and urban growth.

3. LIMITED TRANSITION:

The purpose of the Limited Transition class is to provide for development in areas that will have some services but that are only suitable for lower densities than those associated with the Urban Transition class and/or areas that are geographically remote from existing towns and municipalities. Areas meeting the intent of the Limited Transition classification will experience increased development (primarily residential) during the planning period. They will be in a state of development necessitating some municipal type services such as community water or sewage systems.

4. COMMUNITY:

The purpose of the Community class is to provide for clustered, mixed land uses, at low densities to help meet the housing, shopping and employment needs of rural areas. Areas meeting the intent of the Community classification are presently developed at low densities that are suitable for private septic tank use.

5. RURAL:

The purpose of the Rural class is to provide for agriculture, forestry, mineral extraction and other allied land uses. Areas meeting the intent of the Rural Classification are appropriate for or presently used for agriculture, forestry, mineral extraction and other uses that, due to their hazardous or noxious nature, Should be located in a relatively isolated and undeveloped area. Very low density dispersed single family residential users are also appropriate within the Rural class.

6. RURAL WITH SERVICES:

The purpose of the Rural with Services class is to provide for very low density land uses including residential use where limited water services are provided to avert an existing or projected health problems. Areas meeting the intent of the rural with Services classification are appropriate for very low density residential uses and where provision of services will not disrupt the rural character of the land.

7. 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 natural productive values of both local and more than local concern. Areas meeting the intent of the Conservation classification include lands significant because of their natural role in the integrity of the mountain region such as ridge tops, areas of excessive slope, floodplains, wetlands, areas with a high potential for wildlife habitat and areas that contain significant productive, natural, scenic, cultural or recreational resources.





## **CHAPTER III**

### **COMMUNITY ISSUES AND PUBLIC INPUT**

## **RESEARCH DESIGN**

When the Rutherford County Comprehensive Land Use Plan was originally created the planner held a series of group meetings throughout Rutherford County to inform citizens on the values and objectives of Land Use Planning. These meetings were held to receive views on issues confronting Rutherford County from various interest groups throughout the communities of the county.

The following issues were identified as a result of these meetings with community groups and also from discussions with the Rutherford County Commissioners. The Rutherford County Planning Commission and the Rutherford County Land Use Advisory Committee.

## **LAND USE ISSUES**

1. The protection of individual property rights and public interest.
2. The need for further economic development, commercial, industrial, and tourism.
3. The extension of water and sewer lines.
4. The protection and enhancement of cultural, scenic, natural, and historic areas.
5. The need for recreational facilities.

Because of time constraints while developing the 2001 update of the Comprehensive Land Use Plan, a number of government business and civic leaders were informed of the planning process and questioned as to their views and opinions on current trends and issues. Subsequently, it was decided that the issues that were identified in 1992 were still confronting Rutherford County in 2001.

Unwanted uses, protecting property values, the continued decline in textile manufacturing, private wells failing and the need for recreation are issues that confront Rutherford County daily and will continue to do so until these issues are addressed.

In Chapter IV, the issues, goals, objectives and recommendations will be outlined and discussed in order to assist Rutherford County in planning for its future.

## **CHAPTER IV**

### **PLAN ELEMENTS**

#### **ISSUES, GOALS, OBJECTIVES AND RECOMMENDATIONS**

## **PLAN ELEMENTS**

The Rutherford County Comprehensive Land Use Plan is designed to be a practical guide for organized growth and development, and for the provision of community needs. The goals and objectives formulated in this plan are developed to provide general policies for the achievement of desired growth patterns. The community's visions are reflected in the stated goals. The listed objectives are the actions necessary to achieve the stated goals.

As stated in Chapter III, to ensure that the goals and objectives represent the needs of the Rutherford County citizens, the 1992 original and 2001 revisions to the Rutherford County Comprehensive Land Use Plan involved as much public input as time constraints would allow. This document is designed to be flexible. As other issues and needs are identified or goals met, this plan may be modified.

This plan is only a guide for helping to decide how and where to direct the future use of the communities' land. This plan is not regulatory (such as a noise ordinance, junked motor vehicles ordinance, subdivision ordinance, noxious vegetation ordinance, or zoning ordinance). Regulatory actions may be recommended by this plan, but will require future action by the Rutherford County Commissioners in order to be implemented.

The Rutherford County Land Use Plan is designed as a medium range plan, to be implemented in stages over the next ten years. All of the identified issues and objectives will have recommendations and a specified time period in which to be implemented. The specified time periods are as follows:

Short Range	1-3 years
Medium Range	4-6 years
Long Range	7-10 years
Continual	1-10 years

### **RUTHERFORD COUNTY LAND USE ISSUES, GOALS, OBJECTIVES AND RECOMMENDATIONS**

#### **ISSUE #1**

##### **THE PROTECTION OF INDIVIDUAL PROPERTY RIGHTS AND PUBLIC INTEREST.**

Basically we all have the right to decide how we want to use our personal property, as long as we do not harm our neighbors. As Rutherford County's population grows, and large tracts of land are divided into smaller tracts, what we do with our property affects more and more people. Generally Land Use regulations are in-acted to protect our rights and interests. These regulations range from ordinances against noise and pollution, to ordinances that regulate subdivisions and zoning. When deciding to regulate land use, citizens give up a portion of their rights to use their land without regard to others, but they gain other rights such as having a say whether their neighbors put in a gravel operation, or an asphalt plant.

## GOAL

The Rutherford County Board of Commissioners need to protect individual rights of landowners while protecting the safety, health, and general welfare of all citizens from inappropriate and disorderly development.

## OBJECTIVES

Encourage well planned development that is coordinated with necessary services such as water, sewer, electric, gas, solid waste and transportation.

Protect available residential, farmland and industrial land from inappropriate types of development.

Encourage the development of the most appropriate land and target the most suitable locations for development, such as residential areas, industrial parks and commercial parks.

Protect the quality of life in Rutherford County from eyesores and nuisances, and inappropriate development.

## RECOMMENDATIONS

It is recommended that Rutherford County implement regulations that address concerns such as noise, junked and abandoned motor vehicles, dilapidated buildings, dangerous animals and removal and disposal of trash as it deems necessary to protect the quality of life.

It is recommended that Rutherford County develop and implement a zoning ordinance and map to accomplish the following:

1. To sustain the character of the County, its suitability for particular uses, and promote desirable living conditions and neighborhood stability.
2. To prevent overcrowding of land and lessen the probability of traffic congestion.
3. To balance economic development with conservation and protection of natural resources.
4. Encourage the most appropriate use of land and protect property from blight and depreciation.
5. Insure the adequate provision for the public such as transportation, water, sewage, schools and parks.
6. Provide for the health, safety, and general welfare for the citizens of Rutherford County.

Whether developed on a township level or county wide, the zoning ordinance should be developed with as much public participation as possible and should provide for flexibility, speed

in processing and fairness. The types of ordinances and regulations specified here should be implemented short range 2001-2004.

## **ISSUE #2**

### THE NEED FOR FURTHER ECONOMIC DEVELOPMENT, COMMERCIAL, INDUSTRIAL AND TOURISM.

Because of the decline in textile manufacturing, Rutherford County needs to continue to encourage diversified economic development as well as promote the continued growth of the tourism industry. Not only would this add to the county's tax base and create a desirable job market, but it would increase the chances of recruiting more young adults to our area, as well as keeping our own young adults here after high school and college.

### GOAL

Rutherford County needs to encourage and promote planned, diversified growth and development of business, industry and tourism that will enhance economic vitality while protecting the county's resources.

### OBJECTIVES

Plan and develop an infrastructure system (water, sewer, transportation) that will enhance opportunities for economic development.

Plan and develop marketing strategies to promote Rutherford County and recruit business and industry.

Promote diversified economic development as well as encourage and support expansion of existing business and industry.

Encourage development of employment opportunities that take advantage of local skills.  
Encourage job and employment training programs.

Encourage and promote the further development of tourism by providing facilities for business, cultural and nature oriented activities.

Develop marketing strategies that offer Rutherford County as a tourist destination.

### RECOMMENDATIONS

1. The Rutherford County Economic Development Commission is recommended to develop a strategic plan to set specific goals and objectives, and work towards the fulfillment of those goals and objectives. Short range 2001-2004.

2. The Economic Development Commission as well as the Rutherford County Chamber of Commerce should develop marketing strategies to attract diversified business and industry. Continual 2001-2004.
3. Infrastructure will be discussed as Issue #3.
4. Rutherford County (government, schools, community college and Isothermal Planning and Development Commission should continue its efforts to train both high school students and adults in vocational and technical skills to meet the needs of a more diversified economy. Continual 2001-2011.
5. The Tourism Development Authority and the Chamber of Commerce should continue to promote and market Rutherford County as a tourist and travel destination. Continual 2001-2011.
6. Rutherford County should develop a greenways/trail system which would encourage nature oriented recreation and activities. Long Range 2008-2011.
7. It is recommended that the county continue to allocate all of the Motel Occupancy Tax towards tourism.

### **ISSUE #3**

#### THE NEED TO EXPAND AND IMPROVE INFRASTRUCTURE (WATER, SEWER, TRANSPORTATION, SOLID WASTE).

One of the major components in attracting business and industry to any particular area is the availability of adequate water and sewer services. In the past, water and sewer services were offered periodically within the eight municipalities or their close proximity, but with the creation of the Broad River Water Authority, and the ability for the Town of Forest City to expand its system, water services may be available to large areas of the county in the future. Transportation and solid waste disposal are also important components of Rutherford County's infrastructure.

#### GOALS

To provide adequate infrastructure to meet present and future needs for the health, safety, and general welfare of Rutherford County.

#### OBJECTIVES

1. Encourage cooperation among the municipalities, the Broad River Water Authority, and industry concerning the extension of water/sewer services.
2. Utilize the placement of water/sewer services to guide future development.
3. Work to eliminate safety/health hazards and problem areas. (Inadequate wells and septic systems).

4. Maintain a current, comprehensive thoroughfare plan as an element of the transportation plan in cooperation with the North Carolina Department of Transportation.
5. Work with the North Carolina Department of Transportation to upgrade and expand current road systems to provide safe and efficient transportation.
6. Require all new public roads to meet North Carolina Department of Transportation standards.
7. Provide efficient, and sanitary solid waste disposal.

#### RECOMMENDATIONS

1. The Broad River Water Authority and the Town of Forest City should cooperate to expand water services to other areas of Rutherford County to stimulate economic development and to provide water to areas experiencing problems with private systems or wells. Continual 2001-2011.
2. Rutherford County and its eight municipalities should coordinate efforts to provide with existing and prospective business and industry to provide sewer service that would provide opportunity for future development. Continual 2001-2011.
3. Rutherford County and its eight municipalities are advised to coordinate efforts with the North Carolina Department of Transportation to develop a comprehensive coordinated transportation plan in order to identify and prioritize transportation projects in Rutherford County. Short Range 2001-2004.
4. The coordinated transportation plan should be coordinated with the land use plan and future land use regulations to enhance economic development and protect the character of the county. Medium Range 2005-2007.
5. Rutherford County should continue to monitor and evaluate solid waste disposal efforts in order to ensure the most safe and efficient methods available. Continual 2001 – 2011.

#### **ISSUE #4**

##### THE PROTECTION AND ENHANCEMENT OF CULTURAL, NATURAL, SCENIC AND HISTORICAL AREAS.

Rutherford County has long been known for its rural quaintness and natural beauty. Lake Lure, Broad River, the hills of the Sunshine Community and all of the gently rolling areas in between, come together to form Rutherford County's unique mix of scenic and natural features. Formed in 1779, Rutherford County is also steeped in history and many cultural aspects.

## GOALS

To protect and preserve the physical environment and natural resources of Rutherford County for present and future residents.

To protect and preserve Rutherford County's historical and cultural resources. To protect the County's rural character and preserve prime farmland.

## OBJECTIVES

1. Identify eyesores and nuisances, eliminate them and prevent them from occurring in the future.
2. Conserve soil and prime farmland.
3. Continual development within watersheds that serve as drinking water supply areas.
4. Promote greenways along streams and ecologically sensitive areas.
5. Preserve scenic, environmentally, historically, and culturally sensitive areas.
6. Encourage good logging practices.
7. Protect the integrity of existing and proposed neighborhoods.

## RECOMMENDATIONS

1. As recommended under Issue #1, Rutherford County needs to enact and enforce Land Use Regulations in order to eliminate and prevent eyesores, nuisance and inappropriate land uses. Short Range 2001-2004.
2. Rutherford County needs to continue to enforce watershed/water supply regulations. Continual 2001-2011.
3. Rutherford County needs to coordinate efforts with the State of North Carolina to enforce sedimentation and pollution control regulations. Continual 2001-2011.
4. Rutherford County needs to consider implementing a Farmland Preservation Program (NCGS 106, Article 61, Preservation of Farmland), which would allow the county to create Agricultural Districts which would preserve acreage and protect the agricultural areas. Long Range 2011.
5. Rutherford County should continue to offer incentives (Use Value Assessment, CRP, ACSP) for local farmers. Continual 2001-2011.

6. Rutherford County should inventory its historically significant properties and enact incentives and regulations to preserve and protect them.

### **ISSUE #5**

#### THE NEED FOR RECREATIONAL OPPORTUNITIES IN RUTHERFORD COUNTY.

From children to senior citizens, almost everyone in Rutherford County is involved in some sort of recreation. Whether it is soccer, baseball, football, swimming, walking, boating, golf, etc. most people enjoy recreation. Although many opportunities exist, there is a perception that the variety, location and frequency could be improved upon.

#### GOAL

To develop a wide range of recreational opportunities to serve residents, tourists, and visitors, and to act as a stimulus for economic development.

#### OBJECTIVES

Inventory all facilities, programs, and participants throughout the county to determine what needs exist, and determine how those needs are to be addressed.

#### RECOMMENDATION

1. Rutherford County should form a recreation advisory committee consisting of members from various age groups, and recreational backgrounds. This committee would inventory all public and private facilities, programs and participants to determine what needs exist and how Rutherford County can best address these needs. Continual 2001-2011.

## **EDUCATION, PUBLIC UNDERSTANDING AND PARTICIPATION**

For any planning program to be successful, the general public needs to be informed, needs to understand, and needs to participate in the planning process.

Land use plans, policies and regulations can sometimes be complex documents that are hard to read and understand. Generally, a lack of understanding leads to either a lack of input or a negative attitude toward the whole process.

Rutherford County needs to coordinate efforts with Rutherford County Schools, Isothermal Community College and with the assistance of Isothermal Planning and Development Commission, develop and implement an educational program on land use planning and growth management tools to be taught in grades from elementary through community college level.

Rutherford County should implement programs to increase citizen awareness and participation in local government. These programs would include activities such as public forums, brochures, public announcements, local television and radio broadcasts, and could cover such topics such as Land Use Planning, Budgeting, Revaluation, Code Enforcement and other community issues.

# APPENDICES

## APPENDIX A

### SOIL ASSOCIATIONS:

- 1) CECIL-PACOLET ASSOCIATION: CPA  
Located in the piedmont uplands in the central, northern and northwestern part of Rutherford County below 1,200 feet in elevation. Broad ridges and adjacent side slopes; 2% to 15% slope with well drained soils and a predominantly clayey subsoil.
- 2) PACOLET-MADISON-RION ASSOCIATION: PMRA  
Located in the piedmont uplands in the central and southeastern part of the County below 1,200 feet in elevation. Ridge tops and adjacent side slopes, 8-45% slope with well-drained soils and a predominantly clayey or a loamy subsoil.
- 3) PACOLET-BETHLEHEM-RION ASSOCIATION: PBRA  
Located in the piedmont uplands in the central and southeastern part of the County below 1,200 feet in elevation. Ridge tops and adjacent side slopes, 8 to 45% slope, well-drained soils with predominantly clayey or loamy subsoil.
- 4) PACOLET-SAW ASSOCIATION: PSA  
Located in the piedmont uplands in the southern part of Rutherford County below 1,200 feet in elevation. Broad ridges and adjacent side slopes; 2% to 15% slopes with well drained soils with a predominantly clayey subsoil and 20-40 inch deep hard bedrocks.
- 5) TATE-GREENLEE ASSOCIATION: TGA  
Mountain coves in the western part of Rutherford County above 1,200 feet in elevation extremely stony and bouldery mountain coves and foot slopes above 1,200 feet in elevation, 8-60% slopes, well drained soils with an extremely stony and bouldery surface and a loamy subsoil.
- 6) EVARD-FANNIN-COWEE ASSOCIATION: EFCA  
Located in the mountain uplands in the western, northern and eastern part of Rutherford County above 1,200 feet in elevation. Stony ridges and adjacent stony side slopes, 15-85% slope, well drained soils with a predominantly stony surface and loamy subsoil.
- 7) COWEE-CLIFFIELD-ASHE-CLEVELAND ASSOCIATION: CCACA  
Located in the mountain uplands in the western and eastern part of the County above 1,200 feet in elevation. Very stony ridges adjacent to very stony side slopes with rock outcrops, 15-95% slope, excessively drained soils with a predominately very stony surface and loamy subsoil.
- 8) TOCCOA-CHEWACLA-BUNCOMBE ASSOCIATION: TCBA

Areas adjacent to major creeks and rivers below 1,200 feet in elevation. Active floodplains, 0-5% slope, excessively drained to somewhat poorly drained with a loamy subsoil or predominantly sandy underlying material.

9) ASH-CLEVELAND-ROCK OUT CROP ASSOCIATION: ACRA

Located in the mountain uplands in the north and northwestern part of the County above 1,200 feet in elevation. Very strong side slopes with rock out crops, 50%-95% slope with somewhat excessively drained soils with a predominantly very strong surface and a loamy subsoil.

## APPENDIX B

### RURAL CONSERVATION AND DEVELOPMENT AREA

Councils made up of representatives of local sponsors are the primary means of program delivery in each RC&D area. These RC&D councils are responsible for directing the program at the local level by combining a planning and implementation process which addresses local objectives. Much of the work and coordination is done by volunteers giving of themselves to better the area they live in. They seek to “make things happen” to enhance social, economic, and environmental conditions in rural areas by finding technical and financial assistance from a variety of sources. RC&D councils assist with natural resource development, reduce chronic unemployment or underemployment, and improve economic activities and living standards.

### N.C. AGRICULTURE COST – SHARE PROGRAM

The North Carolina Agriculture Cost Share Program is intended to reduce the input of sediments, nutrients, animal wastes and pesticides into the water courses of the state. The cost-share program helps landowners improve their level of on-farm management through the use of best management practices.

### OPEN SPACE

A term used to identify areas that are not developed and that are usually found in their natural state. These areas could include farmland and forest land, scenic landscapes, aquifers and flood plains, or any undeveloped land. The purpose of open space is generally to preserve an area for educational and recreational type activities and for general public benefit.

### INAPPROPRIATE DEVELOPMENT

Development that is incompatible with surrounding existing uses because of, but not limited to, negative environmental, health and aesthetic factors, sound (noise) and smell.