# NATURAL AND HISTORIC RESOURCES

*We can manage the earth so as to create environments . . . favorable to the continued growth of civilization.*

*Rene' Dubos*

## INTRODUCTION

This element provides guidance for achieving a balance between the need to protect the County's natural and historic resources while planning for the orderly development of Fayette County. The ability to protect and preserve these resources successfully over the long term depends upon a comprehensive, systematic approach.

The natural environment places certain opportunities and constraints on the way land is used. Soil characteristics, the slope of the land, and the flooding frequency are a few factors among many which affect where development can safely and feasiblely occur. Other areas such as wetlands, prime agricultural and forest areas, and sensitive plant and animal habitats, which are particularly vulnerable to the impacts of development, should be given consideration in the planning process and provided appropriate protection.

The first section of this element, Natural Resources, examines Fayette County's natural features (topography and geology) and its environmentally sensitive and ecologically significant areas (water supply watersheds, groundwater recharge areas, wetlands, protected rivers, soils, steep slopes, prime agricultural and forest land, plant and animal habitats, major park, recreation and conservation areas, and scenic views and sites. The second section of this element, Historical Resources, examines Fayette County's historic resources. The section contains a brief history of Fayette County as well as its resources as they pertain to the county's residential, commercial, industrial, institutional, transportation, and rural history.

# NATURAL RESOURCES

The impact of Fayette County's rapid growth could have a detrimental effect on its natural resources. For example, as land is cleared, soil erosion is increased. The filling of streams and lakes with sediment increases the potential for flooding and could destroy wildlife habitats. The rapid growth of population also brings an increase in the number of automobiles and the escalation of air pollution. Poor development practices can lead to the destruction of natural resources. However, with proper planning and development regulations, growth can take place in a manner which is sensitive to these resources.

Protecting the human and natural environment in Fayette County is complicated by the many different categories of concerns that are called "environmental". Solving environmental problems is further complicated by the environmental impacts that may result from efforts to resolve other major topical concerns, such as land use, transportation, recreation, and public facility issues. This

section of the Plan focuses primarily on environmental concerns which impact, or are impacted by, the development of land.

The Natural Resources section examines Fayette County's natural features as well as its environmentally sensitive and ecologically significant areas. Natural features refer to the County's underlying makeup: its topography, geology, soils and propensity for soil erosion. The County's environmentally sensitive and ecologically significant areas refer to those areas such as water supply watersheds, groundwater recharge areas and stormwater management - areas where the county can adopt ordinances to lessen the impact of development on these fragile systems.

## NATURAL FEATURES

### TOPOGRAPHY

Topography provides an accurate and detailed description of a place. The science of topography represents the surface features of a region, including its relief and rivers, lakes, etc. via maps or charts. Fayette County is within the Georgia Piedmont Province of the Southern Piedmont Region. With the Piedmont, Fayette County is in the Greenville Slope District. This district is characterized by rolling topography decreasing in elevation from 1,000 feet above sea level in the northeast to 600 feet above sea level in the southwest. All streams in Fayette County drain into the Flint River and eventually the Gulf of Mexico.

### GEOLOGY

Fayette County is underlain by rock formation germane to the Piedmont Province. These rock types consist of gneiss, schist, and weathered granite. Depth to bedrock in Fayette County can generally range from 32 to 60 inches. However, the soil survey indicates the potential for rock outcrops exists in Fayette County. Intensive development of areas with shallow depth to bedrock is difficult, costly, and has the potential of excessive runoff. Intense development of these areas should be discouraged.

## ENVIRONMENTALLY SENSITIVE AND ECOLOGICALLY SIGNIFICANT AREAS

### WATER SUPPLY WATERSHEDS

When rain falls, a portion of the rainfall seeps into the soil, but some of the rainfall does not enter the soil and runs across the ground surface, eventually entering a stream or lake. A "watershed" for a particular stream or lake is the area of land whose rainfall "runoff" drains into that stream or lake. If the stream or lake also happens to be used as a source of drinking water for nearby communities, then . . . this watershed would be considered a "water supply watershed" (Georgia Department of Community Affairs).

**Inventory**

There are five water supply watersheds (drainage basins) in Fayette County: Flint River Drainage Basin, Horton Creek Drainage Basin, Whitewater Creek Drainage Basin, Flat Creek Drainage Basin, and Line Creek Drainage Basin (Map N-1). Fayette County utilizes each of these basins as a source of drinking water.

Safe drinking water is essential for human life. Water treatment plants are designed for the purpose of treating water from lakes and streams to the point that it is safe to drink. However, the more contaminated the intake water, the more treatment is required. Eventually, it becomes extremely costly, and perhaps impossible, to make the water drinkable. Removing vegetation from the stream banks and increasing the impervious surface (paving over the soil) increases the volume and rate of surface runoff which, in turn, increases the potential for erosion, flooding, and sedimentation of the stream. The impervious surfaces of buildings and asphalt result in more stormwater runoff at more rapid velocities, often carrying pollutants like oil or pesticides, into the stream.

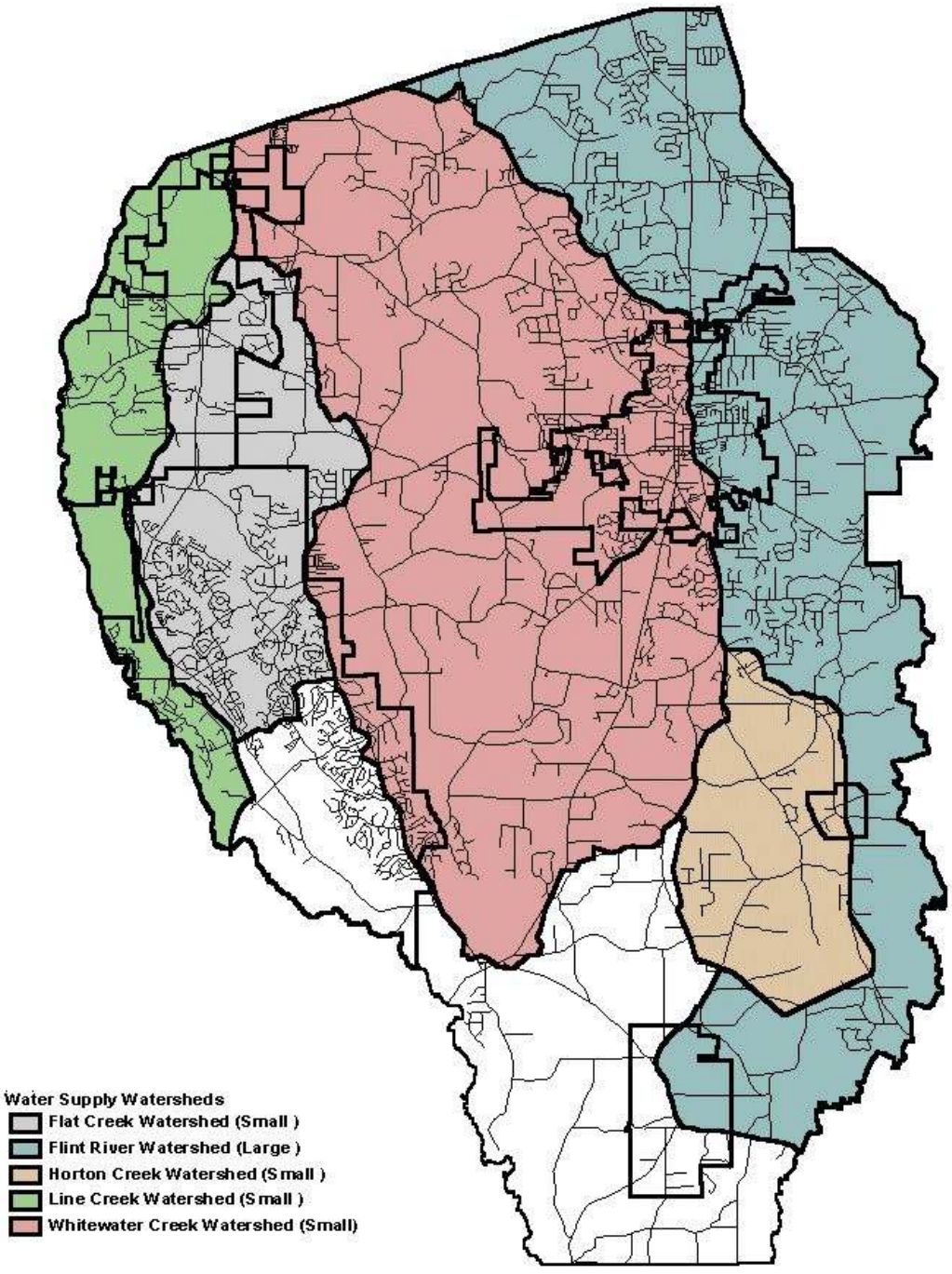
Water Quality: The Fayette County Water System monitors surface waters throughout the County on a quarterly basis for pollutants and water quality indicators such as water temperature, air temperature, conductivity, pH, turbidity and dissolved oxygen. The County established this monitoring process in 1997. Surface waters in Fayette County consistently meet the State Drinking Water Quality Standard for raw water sources.

Stormwater Management: The rain water that is not absorbed into the ground is called "stormwater runoff". Stormwater management is a process which attempts to find ways to ensure that stormwater runoff will always be controlled as it flows off a site, and thus prevent flooding and damage to life and property. Stormwater management seeks to: (1) ensure that stormwater runoff will be controlled prior to running off a site, and (2) ensure that nearby water courses will always be able to convey this stormwater away from the site.

Fayette County's stormwater quantity and quality concerns come primarily from non-point sources. The county does not have a network of pipes and culverts to direct the runoff to a treatment area, rather it generally flows either to a detention pond or it flows directly to the nearest stream or other water body. Maintenance of detention ponds is a concern, however, as they can fill up through siltation and lose their effectiveness.

Fayette County currently requires a stormwater study be prepared for all development projects. The purpose of such a study is to provide for the effective and safe conveyance of excess stormwater off of the property in such a way and by such means that adjacent property owners are not adversely affected. Runoff, flow routing and detention or retention basin sizing and outlet control device design calculation must be presented in a hydrological study and report prior to the issuance of development permits.

**MAP N-1**
**WATER SUPPLY WATERSHEDS**




**Source: Fayette County Planning Department**

**Assessment**

Fayette County's growth will increase the potential for soil erosion which causes sedimentation and pollution of water supply watersheds. Clearly, it is preferable to plan in advance and prevent this type of contamination from occurring. To this end, the Georgia Department of Natural Resources (DNR) has developed standards for water supply watersheds. Georgia law now requires that local governments adopt minimum development standards for water supply watersheds. The DNR standards establish buffer, setback, and use restrictions for both large (greater than 100 square miles) and small (less than 100 square miles) watershed. Fayette County adopted a water supply watershed protection ordinance in 1987. This ordinance is in compliance with the standards established by DNR for watershed protection (Development Regulations, Article VII, Watershed Protection Ordinance, §8-201 - 8-205). The watershed protection ordinance regulates streams under three categories: major water supply streams, named tributaries, and minor unnamed streams.

The County will continue to enhance its Soil Erosion and Sediment Control Ordinance to prevent unnecessary erosion and sedimentation. Land disturbing activities must be vigorously enforced to ensure protection of water bodies and to avoid other potential land use problems.

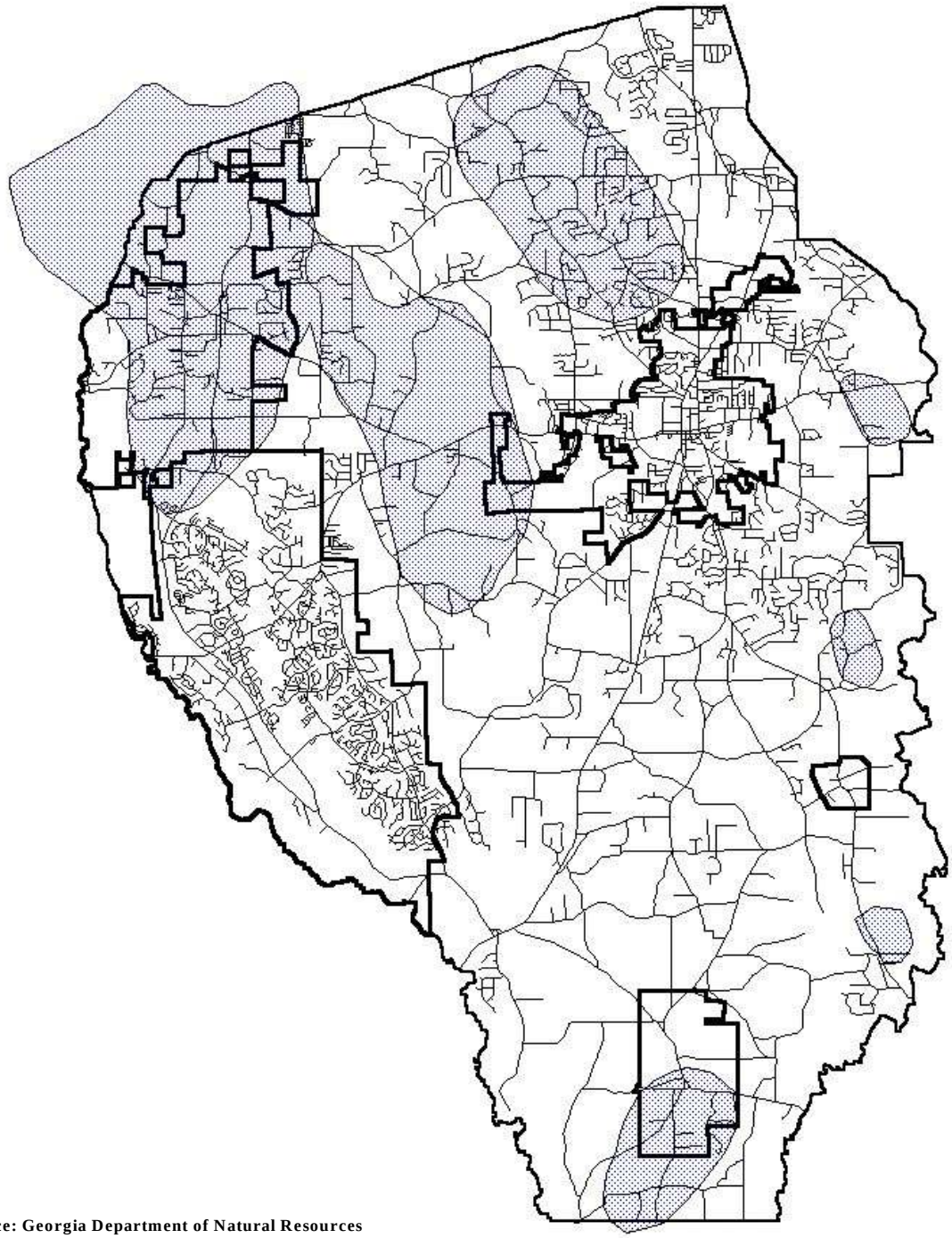
The Federal Phase II Stormwater regulations (40 CFR Part 123.33) require operators of small municipal separate storm sewer systems (MS4s), such as Fayette County, to apply for coverage under a National Pollution Discharge Elimination System (NPDES) permit for discharge from its storm sewer system. Fayette County submitted its Notice of Intent for coverage under the State of Georgia's General Stormwater Permit (no. GAG610000) in March 2003. The Notice of Intent provides a framework for the County to develop a Storm Water Management Plan (SWMP) and contains six minimum control measures, which must be addressed by December of 2006. These six areas include: public education and outreach, public involvement/participation in the development of the plan, illicit discharge detection and elimination, construction site stormwater runoff control, post-construction stormwater management, and pollution prevention/good housekeeping for municipal operations.

## GROUNDWATER RECHARGE AREAS

A recharge area is any area that facilitates the flow of surface water into an aquifer (an underground reservoir) to recharge it with more water. Significant recharge action replenishes the supply of well water. While recharge takes place throughout practically all of Georgia's land area, the rate, or amount, of recharge reaching underground aquifers varies from place to place depending on geologic conditions.

Recharge areas also provide a potential path for contaminants to enter the ground water. It is important, therefore, to know and understand the recharge mechanisms for groundwater sources of drinking water. Most of northern Georgia is underlain by crystalline rocks with complex geologic character and with little or no porosity within the rocks themselves. While the overall porosity tends to be low, the rocks do contain joints and fractures along which groundwater can move. The crystalline rocks are overlain by a weathered zone called saprolite, which is relatively

**MAP N-2**
**SIGNIFICANT GROUNDWATER RECHARGE AREAS**



**Source: Georgia Department of Natural Resources**

porous. Precipitation infiltrates downward into the soil and saprolite and fills fractures and joints in the rock where they occur. Well water can be obtained either from the saprolite or from the fractures in the rock; however, the more reliable sources of groundwater are from zones where the bedrock has been intensely fractured.

**Inventory**

Because groundwater systems and the factors controlling recharge vary with geology, different approaches to identification are required for different areas of the state. Fayette County is located in the Piedmont Province of the north Georgia region. The north Georgia region is underlain by rock which has little or no porosity. However, there are cracks in this layer of rocks which allow the movement and storage of groundwater. Areas which contain thick soils, or saprolite, and slopes of less than eight percent have the potential of being significant recharge areas.

The Georgia Department of Natural Resources (DNR) has mapped all of the recharge areas in the state which are likely to have the greatest vulnerability to pollution of groundwater from surface and near surface activities of man. The map indicates thick soils exist in the northern portion of Fayette County in the Tyrone area and in the southern portion of the county in the Brooks area. (Map N-2).

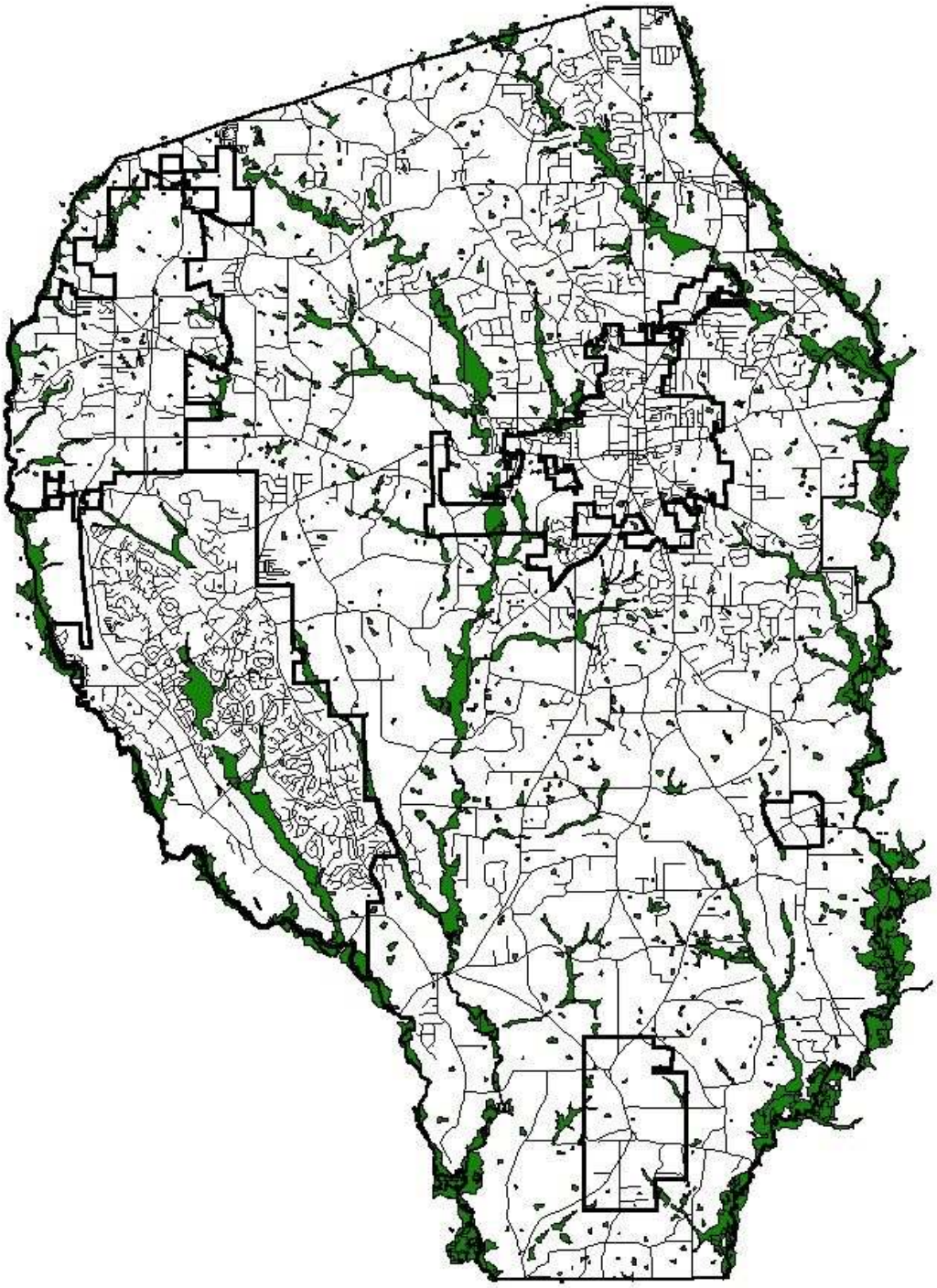
**Assessment**

Wells are now used throughout Fayette County for both public and private water supply. The relatively flat areas of thick soil are also choice sites for residential, commercial, and industrial development. In response, DNR has established standards to be used in the protection of recharge areas. These standards include the establishment of minimum lot size limitations for new homes and new mobile home parks served by septic tank/drain field systems; the use of agricultural waste impoundment sites; and secondary containment for above-ground chemical or petroleum storage tanks with a minimum of 660 gallons. Fayette County has adopted a groundwater recharge ordinance in compliance with the standards established by DNR for groundwater recharge area protection (Development Regulations, Article XI, Groundwater Recharge Area Protection Ordinance, §8-320 - 8-332).

## WETLANDS

Wetlands are defined in Georgia Department of Natural Resources (DNR) Rules as “areas that are inundated or saturated by surface or groundwater at a frequency and duration to support, . . . a prevalence of vegetation typically adapted for life in saturated soil conditions.” Wetlands include lakes, ponds, rivers, streams, swamps, marshes and isolated depressions. Under natural conditions, wetlands help to maintain and enhance water quality by acting as huge natural water filters, allowing flowing water to slow down, filtering out sediments and associated non-point source pollutants from adjacent land uses. They allow for groundwater recharge. They also store water, thereby stabilizing dry weather stream flows and flood hazards. In addition, wetlands serve important functions as fish, wildlife, and plant habitats.

**MAP N-3**
**WETLAND AREAS**



**Source: U.S. Fish and Wildlife**

Recognizing the important function of wetlands, Section 404 of the federal Clean Water Act requires that owners receive a permit from the U.S. Army Corps of Engineers to dredge or fill wetland areas. Before a Land Disturbance Permit can be issued by the County, the owner/developer must present a copy of the Army Corps of Engineers' determination as to the presence of wetlands and/or a 404 permit relative to the proposed work.

**Inventory**

According to the National Wetlands Inventory conducted by the U.S. Fish and Wildlife Service, significant wetland areas exist in Fayette County, especially along Whitewater Creek and the Flint River as shown in Map N-3. Wetlands also occur around the County's ponds and lakes. Wetlands along Whitewater Creek are extensive and have the least evidence of human disturbance.

**Assessment**

Careful control of development is required to ensure the logical preservation of wetlands. The Georgia Department of Natural Resources (DNR) has been given the responsibility of developing minimum criteria and standards for the protection of wetlands. The standards established by the DNR require the identification and mapping of wetlands and require that the issuance of any local building permit is coordinated with the Corps of Engineers' Section 404 permitting program in wetland areas. Fayette County has adopted a groundwater recharge ordinance in compliance with the standards established by DNR for groundwater recharge area protection (Development Regulations, Article IV, Flood Plain Regulations, §8-90).

## PROTECTED RIVERS

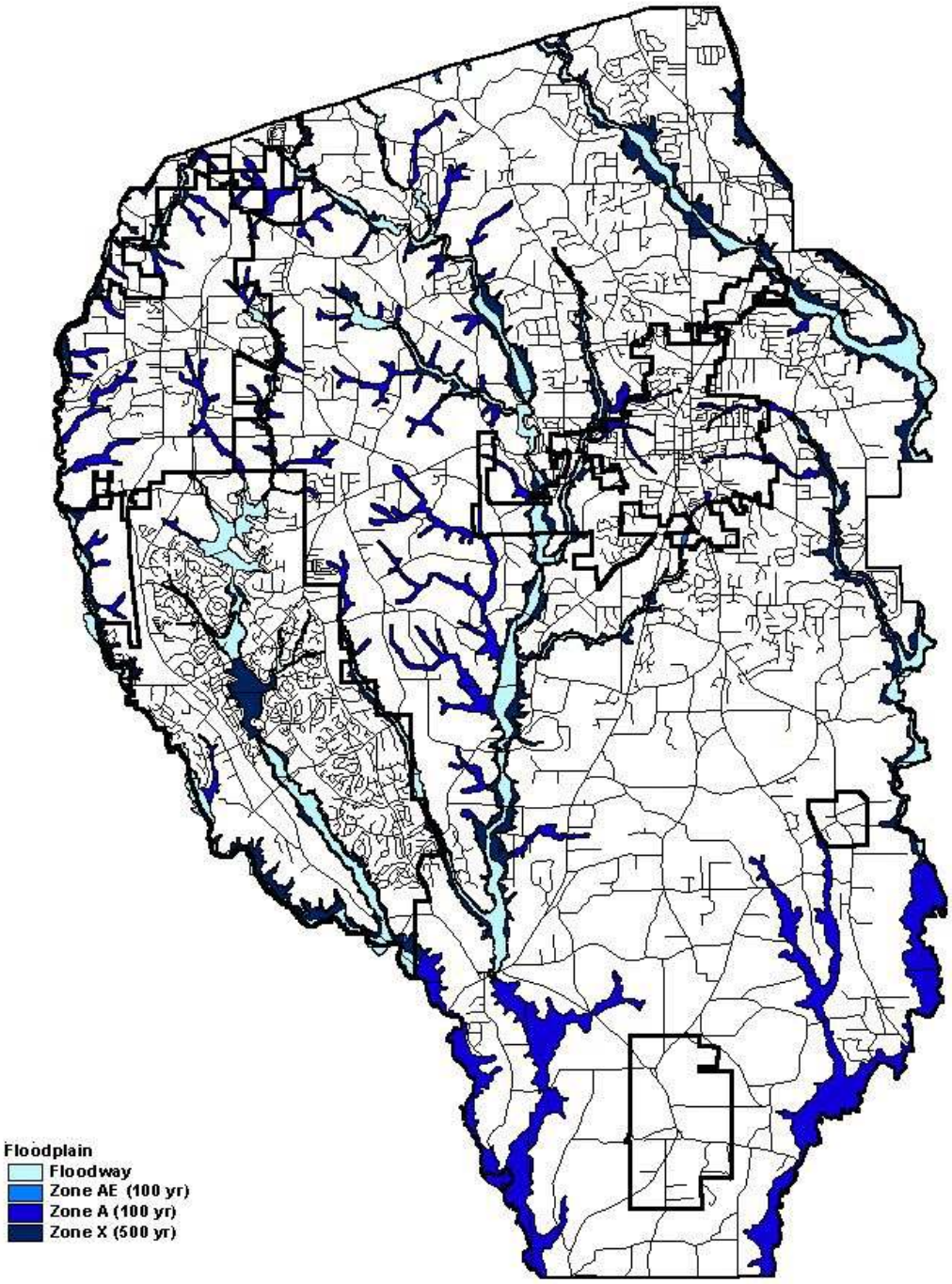
Currently, there are no protected rivers within Fayette County's jurisdiction. While the Flint River is a protected river, the Georgia Department of Community Affairs has determined that its protected status begins south of Fayette County.

## FLOOD PLAINS

Flooding is the temporary covering of soil with water from overflowing streams. Water standing for short periods after a rainfall is not considered flooding, nor is water in swamps. Flooding is rated in general terms which describe the frequency and duration of floods and the time of year when flooding is most likely to occur.

A flood plain is any normally dry land area that is susceptible to being inundated by waters of a 100 year flood. It consists of the floodway and the flood fringe areas. Floodway refers to the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than

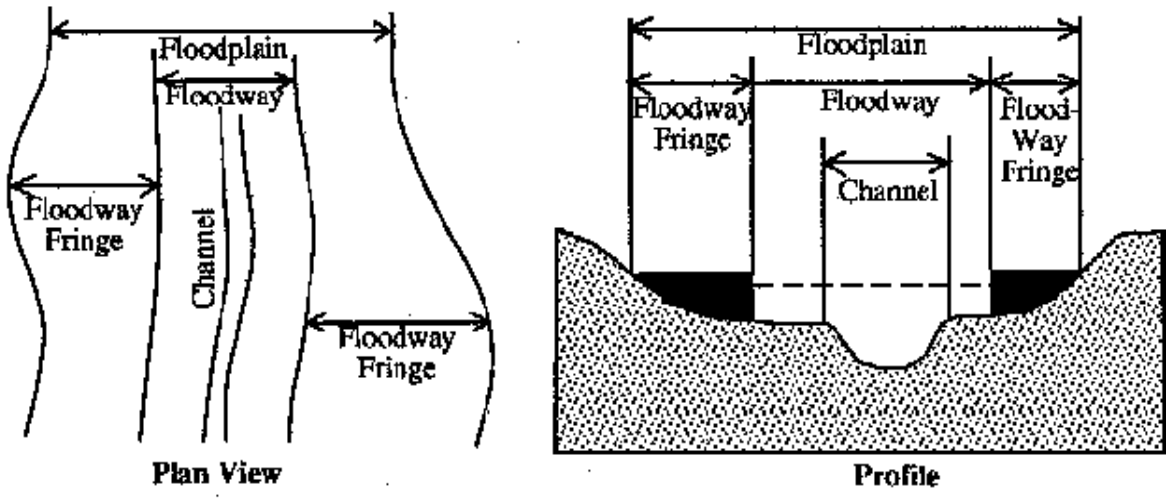
**MAP N-4**
**FLOOD PLAIN**




**Source: Federal Emergency Management Agency**

one foot. The flood fringe area is that area of the flood plain lying outside the floodway but still lying within the area of special flood hazard (Figure N-1).

FIGURE N-1
FLOOD PLAIN DIAGRAM




Source: Vision 2005, Forsyth County North Carolina

Flood plains in their natural or relatively undisturbed state are important water resource areas. They serve three major purposes: natural water storage and conveyance, water quality maintenance, and groundwater recharge. In their natural state, flood plains slow the rate at which the incoming overland flow reaches the stream, thus preventing increased flooding and flood damage downstream. Likewise, a vegetated flood plain slows surface water runoff, causing the flowing water to drop most of its sediment in the flood plain. This reduces erosion and muddy stream waters. It also decreases the amount of pathogens and toxic substances entering the stream. The slowing of runoff across the flood plain also allows additional time for the runoff to infiltrate and recharge groundwater aquifers.

**Inventory**

The Federal Emergency Management Agency (FEMA) has identified and mapped areas in Fayette County which are prone to flooding (Map N-4). These areas include lands adjacent to the county's major streams and tributaries and a number of minor streams as well. Approximately fourteen percent of Fayette County is affected by flood plain boundaries as delineated by FEMA.

**Assessment**

Development in these areas should be carefully monitored to protect the functional integrity of

flood plains as well as the health, safety, and property of the county's residents. Development in the flood plain has the potential of increasing channel water velocity and increased flood heights. For example, any fill material placed in the flood plain eliminates essential water storage capacity causing water elevation to rise, resulting in the flooding of previously dry land.

Fayette County's flood plain protection regulations were adopted to meet the eligibility requirements of the National Flood Insurance Program administered by FEMA. The flood plain regulations prohibit encroachment, including fill, new construction, substantial improvements and other developments within the floodway unless certification by a registered professional engineer is provided demonstrating that encroachment shall not result in any increase in flood levels. Development in flood fringes is subject to permitting to ensure that the rise in water surface elevation will not impact others (Development Regulations, Article IV, Flood Plain Regulations, §8-81 - 8-155).

## SOIL TYPES

Soil is the product of five factors: parent material (underlying geology), topography, climate, plant and animal life, and time. The nature of the soil at any given place depends on the combination of these five factors. Each factor acts on the soil and each modifies the effect of the other four. Because of this interaction, a knowledge of soil types in an area provides a good indication of topography (slope), erosion patterns, the presence and depth of rock, and the presence of water, as in wetland or flood plain areas. Soil types are also useful in estimating runoff from precipitation, which is essential in developing storm water management programs.

A knowledge of soil types has a direct relationship to development. While some soils are more conducive to development, others present poor conditions for construction or very slow water absorption characteristics. Although soils poorly suited for construction may not preclude building, they do exact higher building costs and impose long term handicaps. The critical aspects in evaluating soils in a built environment include the following:

- Bearing capacity - the ability of a soil to support weight;
- Erosion and stability - the susceptibility to erosion and failure in sloping terrain; and
- Permeability/drainage - the capacity of soils to receive and transmit water. This capacity directly relates to the soils' shrink-swell capacity and its ability to support septic systems. It also relates to the soils' runoff coefficient and potential flooding impacts

### Inventory

All pertinent information on soils in Fayette County can be found in the U.S. Department of Agriculture Soil Conservation Service's Soil Survey of Clayton, Fayette, and Henry Counties. The Soil Survey creates combined groupings for the purpose of general land use planning. These groupings convey information relevant to general topography (slope), erosion potential, depth to bedrock, depth to water, flood plains, and more importantly, development capability and limitations. There are four major soil categories present in Fayette County: (1) Cartecay-Wedakee, (2) Cecil-Appling, (3) Gwinnett-Davidson, and (4) Pacolet-Ashlar-Gwinnett. These

categories are described below and shown in Map N-5).

Cartecay-Wehadkee

This series consists of nearly level, poorly drained, and somewhat poorly drained soils that are predominantly loamy throughout; formed in alluvial sediment. Brief, frequent flooding is common. These soils lie along the narrow to wide flood plains of the Flint River and the county's named streams (Antioch, Camp, Flat, Gay, Gingercake, Haddock, Horton, Line, Morning, Murphy, Nash, Perry, Shoal, Tar, Trickum, Whitewater, and Woolsey). Because of the flooding hazard (less than two percent slope), these poorly drained soils have low potential for development and should be limited to a suitable wildlife habitat.

Cecil-Appling

Found in gently sloping and strongly sloping areas, these well-drained soils have a red or predominantly yellowish brown clayey subsoil. Covering approximately 78 percent of the county, this unit is used mainly for cultivated crops or pasture. Some areas have reverted to woodland. While these soils have potential for development, the clayey subsoil needs to be considered before installing most sanitary facilities and making shallow excavations. With slopes ranging from two to ten percent, protection from erosion is necessary regardless of whether the land is used for cultivation or development.

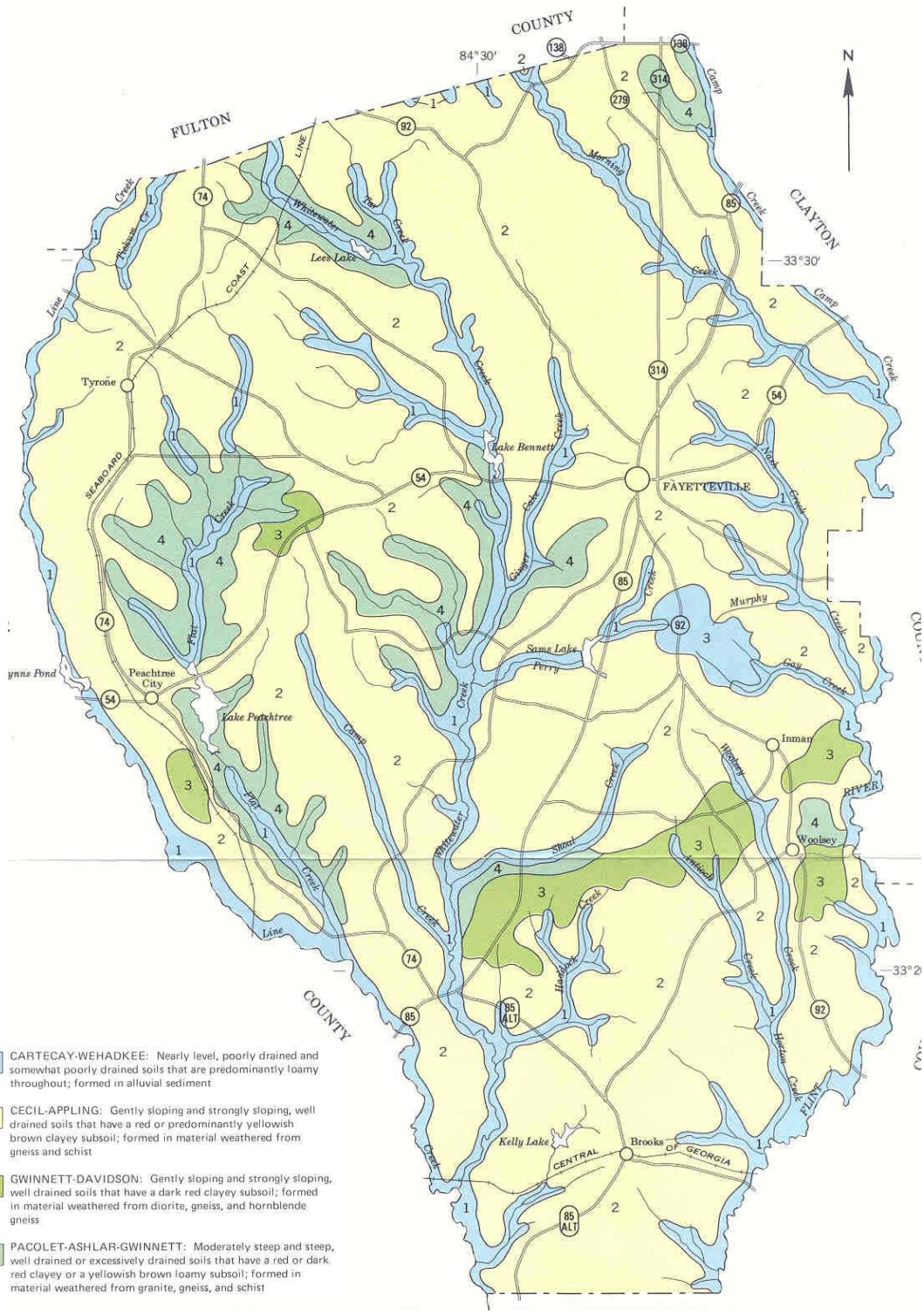
Gwinnett-Davidson

This unit consists of gently sloping and strongly sloping, well-drained soils that have a dark red clayey subsoil. These soils comprise approximately five percent of the county with slopes ranging from two to ten percent. Found in a few areas primarily in the southern half of the county, this unit is used mainly for cultivated crops and pasture, although some areas have reverted to woodland. The soils in this unit have a medium potential for most development purposes. As with the Cecil-Appling unit, consideration must be given to the clayey subsoil before installing most sanitary facilities and making shallow excavations. Shrinking and swelling of these soils needs attention in those areas used for the construction of roads and buildings.

Pacolet-Ashlar-Gwinnett

These are moderately steep and steep, well-drained or excessively drained soils that have red or dark red clayey or a yellowish brown loamy subsoil. Found primarily along the smaller, unnamed streams in the county, slopes in this unit range from 10 to 25 percent. The unit comprises about six percent of the county. This unit has low potential for farming, development, and most active recreational uses. Steep slope is the primary management concern. The potential for pasture and production of woodland is medium, mainly because of the erosion hazard and equipment limitation.

**MAP N-5**
**SOILS**




**Source: U.S. Department of Agricultural Soil Conservation Service**

**Assessment**

Soil limitations vary by type and degree. A slight limitation indicates that soil properties are generally favorable for the specified use; any limitation is minor and easily overcome. A moderate limitation indicates that soil properties and site features are unfavorable for the specified use, but that limitations can be overcome or minimized by special planning and design. A severe limitation indicates that one or more soil properties or site features are so unfavorable or difficult to overcome that a major increase in construction effort, special design, or intensive maintenance is required. For some soil limitations rated severe, such costly measures may not be feasible.

Soils in Georgia are erosion prone by their very nature. When the vegetation is removed, due to development, naturally this potential increases. With proper design and erosion control regulations soil erosion can be reduced. The problem of soil erosion is addressed state-wide by the Georgia Erosion and Sedimentation Act. Locally, Fayette County has its own soil erosion and sedimentation control regulations.

**STEEP SLOPES**

Slope is measured by dividing the change in elevation by the horizontal distance. This results in a decimal that when multiplied by 100, yields the average percentage of slope between two points. For example: 100 feet (elevation) ÷ 1,000 feet (distance) = 0.10 or 10% slope. Slope analysis is important because it helps to determine suitable land uses and identifies potential environmental hazards, such as erosion, and safety hazards, such as slopes susceptible to sliding. The steeper the slope, the more expensive construction becomes and the more difficult it may be to provide a safe access road, sewers, and proper drainage and to stabilize the soil. Generally speaking, slopes over 10 percent may be considered to be steep. Lawns cannot be mowed on slopes in excess of 25 percent (Encyclopedia of Community Planning and Environmental Management).

**Inventory**

Slopes in Fayette County range from nearly level to steeply sloping. Steep slopes of 15 percent or greater generally occur in the Pacolet-Ashlar-Gwinnett soil category. These areas are located primarily along portions of major streambanks, such as Whitewater Creek, Flat Creek, and Camp Creek. Most of these sloping areas remain covered with protective vegetation due to their protection under various Fayette County ordinances.

**Assessment**

Due to the unstable nature of north Georgia soils, unregulated development can produce a variety of environmental problems. The Fayette County Watershed Protection Ordinance (Development Regulations, §8-201 - 8-205) requires significant natural, undisturbed buffers and setbacks from the stream bank or the 100-year flood plain, whichever is greater. On slopes outside the protection of the Watershed Protection Ordinance, the county's Soil Erosion and Sedimentation Control Ordinance (Development Regulations, §8-241 - 8-266) requires erosion control

measures, such as silt fences during construction, and vegetative cover upon completion of construction, to minimize adverse impacts of development.

## PRIME AGRICULTURAL AND FOREST LAND

**Agricultural Land.** Every five years, the U.S. Bureau of the Census conducts a Census of Agriculture. For census purposes, a farm is any place from which $1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the census year. The Census of Agriculture indicates that between 1987 and 1997, the number of farms decreased by 26 percent and the amount of acreage in farms decreased by 32 percent. While the value of land and buildings per farm increased 112 percent during this same period, the average production expenses per farm also increased by 122 percent. Those involved in agricultural endeavors usually rely on other occupations to supplement their incomes. In 1997, approximately 65 percent of farming operators had another occupation in addition to farming. The following table (Table N-1) summarizes the census data.

TABLE N–1
CENSUS OF AGRICULTURE: 1987, 1992, 1997
FAYETTE COUNTY

| | 1987 | 1992 | 1997 | Change 1987-1997 |
|---|---|---|---|---|
| Number of farms | 248 | 208 | 184 | -26% |
| Acreage in farms | 27,119 | 22,212 | 18,350 | -32% |
| Average size of farm in acres | 109 | 107 | 100 | -8% |
| Farming as a principal occupation | 31% | 38% | 35% | - |
| Average value of land and buildings | | | | |
| Per Farm | $191,587 | $319,373 | $405,526 | 112% |
| Per Acre | $2,330 | $3,457 | $4,117 | 77% |
| Market value of agricultural products sold (avg. per farm) | $6,968 | $9,199 | $21,898 | 214% |
| Average production expenses per farm | $7,646 | $10,867 | $17,002 | 122% |

Source: US Bureau of Census, 1987, 1992, 1997.

Farmland, whether in crop or livestock production, continues to disappear in Fayette County. Some of this disappearance can be attributed to the increased interest in large land holdings for a single family residence or the increased interest in recreational horse breeding activity. Taking land out of crop and livestock production is often a prelude to residential development; much of the loss in farmland is represented by subdivision development.

**Forest Land:** The natural forest cover in Fayette County generally consists of a mix of pines (Loblolly and Shortleaf) and hardwoods (Oak and Hickory). The Georgia County Guide reports that acres of timberland decreased by 11 percent from 67,159 acres in 1989 to 59,600 acres in

1997. In addition to its commercial value, forest land possesses visual quality, enhances water quality, and provides animal habitat.

**Assessment**

The county provides the opportunity for agricultural practices to continue through its Planned Entertainment Farming district as part of the Planned Unit Development zoning category. This district allows uses incidental to an active farming operation as a way to preserve agricultural areas. Incidental uses include a U-pick farmer's market, petting zoo, educational tours, and even restaurants, among others.

The county also recognizes the benefits of agricultural and forest lands by allowing property owners to put a conservation easement on their land to reduce their property taxes. As long as the property owner maintains an active agricultural and/or forestry use of the land, this conservation easement reduces taxes for ten years. The conservation easement is renewable indefinitely.

## PLANT AND ANIMAL HABITATS

The Georgia Department of Natural Resources (DNR) Heritage Inventory has mapped known occurrences of rare and threatened species of plants and animals. These are plants and animals which are rare enough to warrant state and federal protection. The species identified, all of which are designated endangered or threatened, are vulnerable to the impacts of rapid land use changes and population growth. Endangered species are those which are in danger of extinction throughout all or part of its range. Threatened species are those which are likely to become an endangered species in the foreseeable future throughout all or part of its range

**Inventory**

The Georgia DNR Heritage Inventory indicates there are five species in Fayette County that are listed either endangered or threatened. The endangered and threatened species in Fayette County are generally aquatic shellfish found in streams. They include:

Purple Bankclimber *(Elliptoideus sloatianus)*. Threatened. Habitat: Large rivers and creeks with some current in sand and limestone rock substrate.

Shiny-Rayed Pocketbook (*Lampsilis subangulata*). Endangered. Habitat: Sandy/rocky medium-sized rivers and creeks.

Gulf Moccasinshell *(Medionidus penicillatus)*. Endangered. Habitat: Sandy/rocky medium-sized rivers and creeks.

Highscale Shiner *(Notropis hypsilepis)*. Threatened. Habitat: Blackwater and brownwater streams.

Oval Pigtoe *(Pleurobema pyriforme)*. Endangered. Habitat: Sandy Medium sized rivers and creeks.

The species identified are vulnerable to the impacts of rapid land use changes and population growth and should be protected by the community to the extent possible.

**Assessment**

Fayette County has no ordinances or development regulations specifically addressing sensitive plant and animal habitat. However, the aforementioned environmental ordinances and regulations aid in preserving water quality and wildlife habitat through flood plain and watershed buffer regulations.

## MAJOR PARK, RECREATION, AND CONSERVATION AREAS

Currently, there are no major federal, state, or regional park and recreation areas in Fayette County. The county's existing parks are local in nature and are discussed in the Community Facilities and Services Element of this comprehensive plan.

## SCENIC VIEWS AND SITES

Portions of Fayette County are still rural in nature. A rural landscape is perceived as scenic to many. For this reason, much of rural Fayette County could be considered scenic. However, as more and more of Fayette County is developed, this scenic rural atmosphere is disappearing.

To aid in the preservation of scenic areas in Fayette County, the Board of Commissioners adopted the Fayette County Scenic Roads Procedure to assist citizens in the preservation of rural and scenic roads through the control of their own property. The procedure requires 100 percent of the affected property owners be in agreement with the Scenic Roads requirements before the road can be designated scenic.

Fayette County is participating in the Georgia Greenspace Program (see Community Facilities Element). The purpose of this program is to encourage rapidly developing counties to preserve a minimum of 20 percent of their entire area as green space. This program will aid in the preservation of scenic views and sites

## AIR QUALITY

Clean air is a vital and important resource. Prior to the adoption of the first Clean Air Act in 1970, clean air was often taken for granted. Since the passage of the revised Clean Air Act in 1990, which included major changes to the 1970 Act, more attention has been paid to ozone and its harmful affects on humans. Ozone, a colorless gas more commonly known as smog, is the

biggest threat to human safety. Ozone can destroy human lung and airway tissue. Symptoms associated with exposure include irritation of the eyes and throat, cough, chest pain, shortness of breath, wheezing, headache, fatigue and nausea. It especially affects the very young, the very old, and those with sensitive respiratory systems. Even moderate levels may impair the ability of individuals with asthma or respiratory disease to engage in normal daily outdoor activities. Long term exposure may lead to permanent scarring of lung tissue, loss of lung function, and reduced lung elasticity (Georgia Department of Natural Resources). Cars and trucks are responsible for more than 50 percent of the pollutants that form ground-level ozone (The Georgia Conservancy, Panorama, Sept.-Oct., 1999).

**Inventory**

Thirteen counties in the Atlanta area, Fayette among them, are classified as a "serious" ozone non-attainment area for not meeting federal air quality standards. The Atlanta region is in the top twenty percent of areas in the nation with the worst air quality. Information concerning ambient air quality is obtained through twelve monitoring sites located throughout the Atlanta area. These sites measure the daily ambient ozone concentration through the high ozone season which runs from May through September.

In 1998, the Georgia Department of Natural Resources(DNR), Environmental Protection Division, Air Protection Branch installed a monitoring site in Fayette County at the Georgia Department of Transportation (GDOT) construction site on McDonough Road at SR 54 East. Records indicate that in 1998, Fayette County had 34 days that exceeded the eight-hour average ambient air ozone concentration. In 1999, the number dropped to 27 noncompliance days. In 2000 and 2001 there were twelve and three days, respectively. Fayette County recorded six noncompliance days for the 2002 season.

**Assessment**

Locally, Fayette County is not involved in regulating, monitoring or enforcing air pollution activities. Under the provisions of the Federal Clean Air Act, counties in Georgia with more than 200,000 registered vehicles must require emissions inspections. The State, however, now requires annual automobile emission control testing for all automobiles licensed in the thirteen county metropolitan area because of the area's non-attainment status. In 1990, Fayette County had approximately 71,300 registered vehicles. By 1997 this number grew to 91,084 and by 2002 there were approximately 115,000 registered vehicles in Fayette County.

Existing and future sources of air pollution in Fayette County are most likely related to motor vehicle exhausts. The continuing growth in the county, coupled with increasing numbers of commuters, will exacerbate the problem. A recent survey conducted by the Clean Air Campaign found that more than 82 percent of Fayette County and other suburban Atlanta residents view metro Atlanta's smog as a serious problem. But the survey also indicated, however, that many Fayette County and suburban citizens in general do not believe that anything they do will help to improve metro Atlanta's air quality. With vehicles producing so much of the pollution, it is important for citizens to realize everyone is responsible for cleaning up the air. The Clean Air

Campaign lists several steps citizens can take to help improve the air such as refueling vehicles after 6 p.m., combining errands, car pooling, and purchasing items on-line.

The county currently does not have any air quality regulations except for outdoor burning. Since 1996, the county regulates the open burning of wood debris. Such burning is not allowed from May through September. Other months it is allowed by permit.

## SUMMARY

Fayette County has many regulations and policies designed to protect the environment and conserve our ecological resources. In the final analysis, an environmental policy or a regulation that applies to development will only achieve the desired effect if it is identified at the time of application review, enforced during development, maintained after development is over, and monitored for continued performance.

## GOALS, OBJECTIVES, POLICIES, GUIDELINES

The following goal, objective, and policy statements provide the basis for addressing the growth and development issues which will impact the county over the next 20 years. Following the goal for Natural and Historical Resources is a listing of objectives and policies which address specific issues. Recommendations, or guidelines, which suggest courses of action for addressing these issues, are provided below. The objectives and policies listed below have been designed to help decision makers implement these policies and regulations regarding the use of land that will conserve and preserve natural resources.

**Goal for Natural Resources:** The amount and distribution of population density and land uses in the county should be consistent with environmental constraints which preserve natural resources and which meet or exceed federal, state, and local standards for water quality, ambient air quality, and other environmental standards. Development in the county should provide for the conservation and protection of the environment through the proper utilization and management of the county's natural resources. The County should support the conservation of appropriate land areas in a natural state to preserve, protect, and enhance stream valleys, woodlands, wetlands, farmland, and plant and animal life in conjunction with the Georgia Greenspace Program, creating a system of public open spaces.

**Objective N-1: Preserve and improve air quality.**

Policy a. Establish a base line of air quality data for Fayette County in accordance with the Georgia Department of Natural Resources.

Policy b. In cooperation with federal, state and regional agencies, consider endorsing their free ride-share programs for Fayette County. Design and implement traffic control devices to aid the flow of traffic and reduce the amount of

idling time.

Policy c. With assistance of the Georgia Clean Air Campaign, increase public awareness and investigate the establishment of an educational program to inform citizens about air quality problems and solutions.

**Objective N-2: Prevent and reduce pollution of surface and groundwater resources; protect and restore the ecological integrity of streams in Fayette County.**

Policy a. Maintain a list of Best Management Practices (BMPs) appropriate for Fayette County and ensure that development complies with these BMP requirements. Revise BMP requirements as newer, more effective strategies become available.

Policy b. Update soil erosion and sedimentation regulations and enforcement procedures as new technology becomes available.

Policy c. Continue to monitor Fayette County's surface and groundwater resources. Limit development in sensitive hydrological areas according to the following guidelines:

- Update rules and regulations for water supply watersheds, groundwater recharge areas, and wetland protection established by the Georgia Department of Natural Resources “Part V Environmental Standards” as necessary.

- Assess current regulations to ascertain their effectiveness in protecting the environment and draft new regulations if necessary.

Policy d. For new development, apply low-impact site design techniques such as those described below, and pursue commitments to reduce stormwater runoff volumes and peak flows, to increase groundwater recharge, and to increase preservation of undisturbed areas. In order to minimize the impacts that new development projects may have on the County's streams, some or all of the following practices should be considered:

- Minimize the amount of impervious surface created. Site buildings to minimize impervious cover associated with driveways and parking areas and to encourage tree preservation. Where feasible, convey drainage from impervious areas into pervious areas.

- Encourage cluster subdivision development, as detailed in the Conservation Subdivision Zoning District, when designed to maximize the protection of ecologically valuable land such as

wooded areas and stream corridors.

- Encourage fulfillment of tree cover requirements through tree preservation instead of replanting where existing tree cover permits.
- Investigate the feasibility of vegetated ditches and the reduction of street lengths and pavement widths.
- Encourage the use of BMPs and infiltration techniques of stormwater management where site conditions are appropriate, if consistent with County requirements.
- Encourage shared parking between adjacent land uses where permitted and the use of pervious parking surfaces in low-use parking areas.
- Minimize the application of fertilizers, pesticides, and herbicides to lawns and landscaped areas through, among other tools, public education programs provided through the County Extension Service.

**Objective N-3:** **Protect the County's surface waters from the avoidable impacts of land use activities in Fayette County**.

Policy a. Ensure that development complies with the County's Watershed Protection Ordinance.

Policy b. Continue enforcement of the county's Soil Erosion and Sedimentation Control Ordinance.

Policy c. Continue enforcement of the county's Flood plain Regulations (which includes regulating the filling of land within the 100 year flood plain).

**Objective N-4:** **Provide for a comprehensive drainage improvement and stormwater management program to maximize property protection and environmental benefits.**

Policy a. Identify and locate drainage structures and stormwater facilities. Utilize appropriate BMPs in conjunction with new development to minimize future problems.

Policy b. Create a drainage model for selected watersheds to determine the effect of development on flood plain and drainage structures.

Policy c. Comply with the Phase 2 Stormwater regulations for Small MS4s (Municipal Storm Sewer System).

**Objective N-5:** **Ensure that new development avoids unsuitable soil areas and implements appropriate engineering measures to protect new structures from unstable soils.**

Policy a. Limit development on unsuitable soils, and cluster development away from slopes and potential problem areas. Continue to require Level 3 Soil Surveys for the placement of septic systems.

**Objective N-6:** **Identify, protect, and enhance an integrated network of ecologically valuable land and surface waters for present and future residents of Fayette County.**

Policy a. Consider the purchase and protection of lands through the Governor's Greenspace Program that achieve any of the Program's following goals:

- Protection of water quality for rivers, streams, and lakes;
- Protection from flooding;
- Protection of wetlands;
- Reduction of erosion through the protection of steep slopes, areas with erodible soils, and stream banks;
- Protection of riparian buffers and other areas that serve as natural habitat and corridors for native plant and animal species;
- Protection of scenic views and areas;
- Protection of archaeological and historic resources;
- Provision of recreation in the form of boating, hiking, camping, fishing, hunting, running, jogging, biking, walking, and similar outdoor activities; and,
- Connection of existing or planned areas contributing to the goals set out in this paragraph.

## HISTORIC RESOURCES

Historic resources include significant or distinctive building traditions and styles, crossroad commercial districts, traditional occupations and skills, historic structures and sites, institutional districts and buildings, local transportation resources, historic rural resources, archaeological and cultural sites, and the historic environment in which they exist. They serve as visual reminders of a community's past, providing a link to its cultural heritage and a better understanding of the people and events which shaped the patterns of its development.

An Architectural Survey of Fayette County conducted by Historic Preservation Services, Inc. of Macon, Georgia, identified some 410 historic structures, based on age and/or architectural integrity. Historic building types include houses, churches, schools, commercial buildings, train

depots, a courthouse, and a mill. These structures are located both in the cities and the unincorporated county. Preservation of these important resources makes it possible for them to continue to play an integral, vital role in the community. However, the majority of these structures remain in private ownership, making their protection and preservation difficult.

The following section offers a brief history of Fayette County. Subsequent sections inventory the historic, archeological, and culturally significant resources in the county divided into the following sections: Residential Resources, Commercial Resources, Industrial Resources, Institutional Resources, Transportation Resources, Rural Resources, and Other Historic, Archaeological and Cultural Resources. Portions of the following sections have been taken from "The History of Fayette County, 1821-1971" which was published by the Fayette County Historical Society.

## HISTORY OF FAYETTE COUNTY

Fayette County was formed from lands ceded by Creek Indians in the Treaty of 1821. It was Chief William McIntosh of the Lower Creek Nation who signed the treaty at Indian Springs to cede the land which is now Fayette County. The county was named for the General Marquis de la Fayette, the French hero of the American Revolutionary War.

Fayetteville was the County seat and commerce center; the remainder of the county was principally small subsistence farms with villages formed at the juncture of crossroads and creeks with a mill and a merchant usually found in each. Before 1840, small villages existed at or near the present locations of Kenwood, Hopeful, Sandy Creek, Tyrone, Flat Creek, Cross Roads, Starr's Mill, Whitewater, Brooks, Inman, and Woolsey.

Though 46 percent of the county's wealth by 1860 was invested in slaves, there were only a few large landowners who owned numerous slaves, and none owned as many as 50. The slave population was about 25 percent of the total population. Though the county escaped the Civil War burning suffered in neighboring counties, looting took place and there was some military activity along the route of a supply train and in the southeast area around Inman. The far greater loss was men as the county sent six companies of infantry, two companies of cavalry, and several companies of state guards and suffered large numbers of casualties.

Despite the economic hardships following the war, most towns and villages survived and there was some population growth. Agriculture remained the mainstay of the economy with cotton as the principal crop. The crop lien system developed and there was considerable consolidation of land holdings.

In 1871, the Savannah, Griffin, and North Alabama Railroad built a depot in Sharon Grove at a stop called Brooks. The rail era had begun and new bustling towns sprang up along the routes and some of the earlier crossroads villages ceased to exist. Between 1880 and 1900, the Atlanta and Florida Railroad completed a line between Atlanta and Fort Valley. In 1907, the Atlanta, Birmingham, and Atlantic ran through the west side of the county.

The economy continued to prosper with agriculture as the mainstay until the boll weevil

infestation of 1921. This, along with other factors that brought on the farm depression of the 1920's, followed by the Great Depression, brought severe economic times. Farmers abandoned their farms and moved into nearby cities and towns seeking jobs. Banks closed in some of the towns and the railroads began cutting back on their routes.

The end of the depression and the general prosperity in the country following WWII, combined with roads and automobiles, brought the next significant changes. The first road was paved in the 1930s between Fayetteville and Jonesboro. When SR 85 was built in 1949, Fayette County was still rural with most farm land being in pasture for cattle. The automobile and the nearness to a major airport and the City of Atlanta began to bring suburban growth. In the 1950's, a community marked by planned growth and reserved green space and natural areas, was chartered on the west side of the county. It was called Peachtree City. This brought to six the number of incorporated towns in Fayette County - Fayetteville, Tyrone, Brooks, Woolsey, Inman, and Peachtree City. However, in 1971, Inman dropped their corporation charter.

The last 30 years have seen an influx of wealth into Fayette County, primarily from airport-related industries and employees. This growth has made Fayette County a “bedroom community” for the Atlanta metropolitan area, where over 60 percent of Fayette Countians commute to work. A population increase of over 700 percent since 1970 has created the need for new homes, schools, and shopping centers. While such growth caused many of the county’s historic building stock to be lost, many structures from Fayette County’s past still remain. These resources are discussed in the following sections.

## RESIDENTIAL RESOURCES

The vast majority of the 410 structures identified in the Architectural Survey of Fayette County are single family dwellings. These include examples of Greek Revival, Gothic Revival, Queen Anne, Folk Victorian, Colonial Revival, Neoclassical, Craftsman, and English Vernacular Revival styles. Structures range in age from circa 1830 to 1940. While some structures lie vacant, many have been restored to their original splendor and are still used as single family homes today.

## COMMERCIAL RESOURCES

The Kenwood Community (see Rural Resources) has remnants of a once prosperous commercial center. The structure that was Carnes Mercantile Store (1895-1904) although vacant, remains. The Inman Community (see Rural Resources) also has remnants of what was a thriving commercial center. The old Inman Store (1885-1894), now vacant, still remains in its original location on Hills Bridge Road.

Individual commercial enterprises were scattered around the county. An example is the general store (1914-1920) at SR 92 South and Goza Road. It still functions as a general (neighborhood) store today.

## INDUSTRIAL RESOURCES

Fayette County is home to Starr's Mill, one of the most photographed sites in Georgia. Built around 1900 on SR 85 South, this mill provided grain to the surrounding community. One of several mills located on Whitewater Creek, Starr's Mill, including the pond and surrounding area, was purchased by Fayette County in 1991. The pond is used as a water intake source by the Fayette County Water System. Favored by fishermen and picnickers, the mill and pond are also often the scene of weddings and movie sets (The War, Fried Green Tomatoes, Sweet Home Alabama). Although vacant, a cotton warehouse (circa 1910-1914) still stands at the corner of Tyrone and Castlewood Roads.

## INSTITUTIONAL RESOURCES

One of the best known and earliest structures, and the only one in Fayette County on the National Historic Register, is the Fayette County Courthouse. Located on the square in the county seat of Fayetteville, the courthouse was constructed in 1825 by Finley G. Stewart. Originally constructed of brick, the two and ½ story structure was stuccoed many years ago. Extensive repairs were made in 1858. The History of Fayette County relates the nature of the repairs: "The sum of $2,598 was given for a new roof, repairing the chimneys, and to give it three coats of paint. New glass panes were put in the windows, where needed, new blinds and catches where needed, and locks to be put on the doors." A tower was added in 1888 and the clock was installed on the tower in 1910. The building underwent extensive renovation in 1985 when it was changed from two stories to three stories. The courthouse is now the home of the Fayette County Chamber of Commerce and the Fayette County Development Authority.

Fayette County's growth has caused many of its historic church congregations to either replace their historic structures or alter their architectural integrity. Such changes include new windows, new facades, and expansions which alter the original configuration. However, there are some historic churches in the county which remain intact. These include: Old Rock Church (1880-1889), Hopeful Baptist Church (1905-1914), Ebenezer Church (1880-1889), New Hope Church (1880-1889), Starr's Mill Baptist Church (1887), Hartford Methodist Church (1935), and County Line Christian Church (1848).

The City of Fayetteville is home to the old Fayetteville Post Office (1920), now a retail store, and the Margaret Mitchell Library (1945), now home to the Fayette County Historical Society.

## TRANSPORTATION RESOURCES

Three historic depots remain - The Fayetteville Depot, the Kenwood Depot (1895-1905) and the Ackert Depot (1890-1899). All three depots were constructed of board and batten with metal roofs. With the removal of the tracks which served these depots, they all stand isolated from their original settings. The Kenwood Depot, located on the east side of Old Road south of Kenwood Road, is now vacant. The Fayetteville Depot is owned by the City of Fayetteville. The City refurbished the depot and it is used as a community center. The Ackert Depot, located on the

north side of Hills Bridge Road and John Street in Inman has been privately purchased and restored, using the original plans.

## RURAL RESOURCES

**Kenwood Community:** The Kenwood Community is located in the northeastern section of Fayette County, between SR 85 and SR 314 at Kenwood Road and Old Road. At one time, Kenwood was a lively business center with numerous stores, a gin house, blacksmith shop, a grist mill, post office, railway station, and a dairy. The earliest stores date from 1885; the dairy was started in 1921. Although vacant, the shells of the stores and railroad station remain to this day.

**Inman Community:** Located five miles south of Fayetteville, bordered on the east by the Flint River, on the south by the city limits of Woolsey, on the west by Woolsey-Brooks Road, and on the north by the settlement known as Harps, there are the twenty land lots that were formerly incorporated as Inman. Once a bustling center of farming and commercial activity, the community now has a general store and two churches as its centers of community life (The History of Fayette County, 1821-1971)

**Starr's Mill Community:** The boundaries of Staff's Mill Community are Jones Hill on the north to Line Creek on the south and from Flat Creek on the west to Haddock Creek on the east. In addition to the mill, the site also included a saw mill, a cotton gin, and a dynamo that produced electricity for nearby Senoia. At its height, the community also had a post office, a blacksmith shop, a church, and stores.

## OTHER HISTORIC, ARCHAEOLOGICAL AND CULTURAL RESOURCES

The only structure listed on the Historic Register in Fayette County is the old Fayette County Courthouse located on the square in the City of Fayetteville.

There are approximately 150 known cemeteries in Fayette County. The Fayette County Historical Society maintains cemetery records of engraved gravestones dating from 1821. While some cemeteries are a part of churches and are well kept, many of the oldest cemeteries in the county are in abandoned villages, abandoned churchyards or are family cemeteries on land that no longer belongs to those whose families are buried there.

Archaeological finds in the development of various county reservoirs include shards and pieces of pottery. Indian arrowheads were also recovered. These artifacts are curated by the Fayette County Water System. The development of Falcon Field in Peachtree City uncovered the same type of artifacts. Artifacts from this site are curated by the City of Peachtree City.

## GOALS, OBJECTIVES, POLICIES, GUIDELINES

The following goal, objective, and policy statements provide the basis for addressing the growth and development issues which will impact the county over the next 20 years. Recommendations, or guidelines, which suggest courses of action for addressing these issues, are also provided.

**Goal for Historical Resources:** The county should provide a healthful, safe, productive, culturally satisfying and aesthetically pleasing environment that conserves and protects the historic, archaeological, and cultural resources of the community and ensures a high quality of life for all the residents of the County.

**Objective N-7:** **Maintain an up-to-date data base of the County's historic resources.**

Policy a. Conduct systematic county-wide field surveys every ten years to locate and document unrecorded historic resources and to update information on resources identified in past surveys.

**Objective N-8:** **Promote and encourage the protection and preservation of significant historic resources.**

Policy a. Identify historic resources well in advance of potential damage or destruction.

Policy b. Provide regulatory assistance to encourage historic resource protection and preservation.

Policy c. Provide for the recognition of quality preservation projects and activities.

Policy d. Consider the acquisition of significant historic resources in conjunction with the development of other County facilities, when feasible.

Policy e. Notify owners of historic properties as to their property's significance and possible tax benefits.

**Objective N-9:** **Increase the levels of public awareness of and involvement in historic resource preservation.**

Policy a. Provide information on the County's historic resources and historic resource preservation activities for public education and enjoyment, through interpretive facilities, displays, publications, public presentations, the electronic media, and State and County historical site marker programs.

Policy b. Promote active public participation in historic resource preservation activities.