CHAPTER THREE: NATURAL AND CULTURAL RESOURCES

NATURAL RESOURCES

Consideration of natural resources is an important item in planning future growth patterns for any community. For Greater Lanier County, the characteristics of the natural environment including soils, topography, climate, water supply, and wildlife habitats is essential information in defining the county's existing attributes and potential areas of improvements. An understanding of these will guide county and city leaders in maintaining a high quality of life and protecting the community's future. Numerous times in this chapter the community will be advised to consult the enclosed maps for making basic determinations about land uses and location of developments relative to the boundaries of environmentally sensitive areas. To assist the community with making more accurate determinations at more reasonable scales, this data has been integrated into the community's Geographic Information System (GIS) housed at South Georgia Regional Development Center (SGRDC). This data is also available for viewing and query at numerous GIS-capable terminals throughout the city and county.

Lanier County is located in south-central Georgia and has a total area of approximately 127,700 acres, or about 200 square miles. It is within the Alapaha Soil and Water Conservation District as well as the Atlantic Coast Flatwoods Major Land Resource Area. Most of the land is well-drained and most of the county is well-suited for agriculture and commercial timber production. The physical landscape is fairly homogenous with no outstanding physical features. Much of the land is used for agricultural purposes, including commercial timber production. The following natural resource areas have been examined and surveyed as they pertain to Lanier County.

PHYSICAL ENVIRONMENT

Lanier County is located within the physiographic Tifton Upland District of the Atlantic Plain Major Division (Coastal Plain Province). The county's land surface is mostly level to gently sloping in some areas. It is dissected by numerous shallow rivers and streams which generally flow from north to south. The largest of these by far is the Alapaha River which flows north to south through the center of the county. The county also contains several large depressional areas which include Banks Lake, Ray's Millpond, and Steve Bay.

Approximately one-half of Lanier County's land area is more than 200 feet above sea level. The county's lowest elevation is about 110 feet at the extreme southern part of the county where the Alapaha River enters neighboring Echols County. The highest elevations are a little greater than 250 feet along a few hilltops in the northwestern part of the county between County Roads 83 and 93. Other elevations worthy of note include: Stockton at 190 feet, Banks Lake 191 feet, Ray's Millpond 204 feet, and Steve Bay 188 feet.

Most of the City of Lakeland is above 190 feet. The downtown United States Geological Survey (USGS) benchmark depicts 199 feet with much of the downtown area averaging close to 200 feet. The city's lowest elevation is about 155 feet where Big Creek exits the far southeastern portion of the city. The highest elevation is near 210 feet in the northwestern part of the city. Other elevations of note include Lake Irma which is about 175 feet.

The county's topography and forest cover is such that notable views and vistas are not present. The most pronounced topography is where the floodplain of the Alapaha River cuts through the center of the county. Here, total elevation changes can range 30-50 feet over a fairly short distance. The flat floodplain ranges from approximately 4,000 to 8,000 feet wide and is typically bounded by short, steep banks. Like other major rivers in South Georgia, the Alapaha River is a designated protected river corridor that consists of a dense tree canopy and broad floodplain, but is navigable by canoe only part of the year.

Lanier County's bedrock is composed of Pliocene-Miocene-Oligocene sedimentary rocks which were formed mostly during the Cenozoic Era (up to 70 million years ago). Below this, the rocks are Eocene and Paleocene sedimentary

rocks. The sediments which formed these rocks originated in the "ancient" Appalachian Mountains which have been eroded to form the present day Piedmont and remnant mountains.

Lanier County's climate is classified as humid-mesothermal (Cfa) according to the Köppen climate classification system. Winters are short and mildly cool with periodic cold spells moderating in 1-2 days. Summers are hot and humid. Annual precipitation typically ranges from 45 to 50 inches and is spread evenly throughout the year (2-5 inches each month). Measurable snowfalls are very rare with a less than 5% probability each year. When they occur, snowfall amounts are most always less than one inch and melt quickly. In winter, the average minimum daily temperature is 39 degrees. In summer, the average maximum daily temperature is 90 degrees. Lanier County's growing season ranges from 8-9 months with an average of 260 days that have daily minimum temperatures greater than 32 degrees. The first winter freeze typically occurs in early November and the last freeze typically occurs in mid-March.

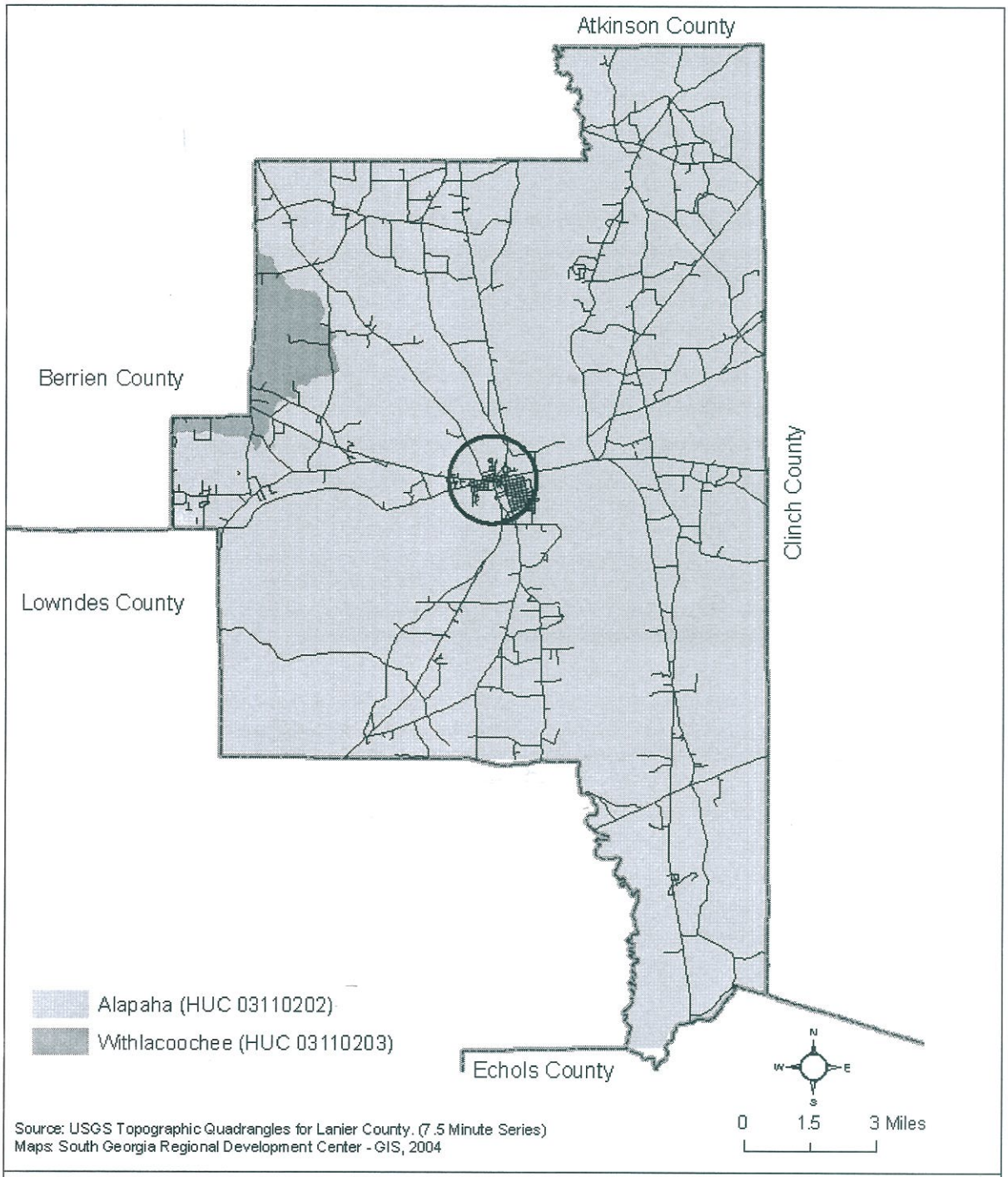
WATER RESOURCES

Annual precipitation runoff for Lanier County is about 10 inches, which equals approximately 4.64 billion cubic feet (33.36 billion gallons) of water. This represents the volume of water directly entering the county's ponds, rivers and streams. The remaining water either evaporates or is absorbed by the ground. Surface drainage within Lanier County is directed by a dendritic (branching tree-like) pattern which flows generally southward. The entire county is located within the Suwannee River Basin, which is one of the last large (9,950 square miles), intact river drainage basins remaining in the U.S. and eventually drains into the Gulf of Mexico. In Lanier County, the Suwannee River Basin can be subdivided into two (2) sub-watersheds (smaller drainage basins, the Alapaha (HUC 03110202) and the Willacoochee (HUC 03110203). Map 3-1 depicts these drainage basins within Lanier County. The Withlacoochee subwatershed (drainage basin) encompasses only a small area (about 5% of the total land area) in the extreme western part of the county. This is generally the area to the west and northwest of Banks Lake and includes Ray's Millpond. It is drained by tributaries of Cat Creek which is a major tributary of the Withlacoochee River. The remaining portion (95%) is in the Alapaha subwatershed (drainage basin). This includes Banks Lake and the entire City of Lakeland. Major tributaries here include: Grand Bay Creek which flows southward through Lowndes County to the Alapaha River, Big Creek and Mill Creek which flow through the City of Lakeland, Cross Creek, Moore Branch, Dixon Mill Creek, and Cow Creek. Both the Alapaha and Withlacoochee Rivers flow southward to the Suwannee River (in Florida) which empties into the Gulf of Mexico.

PUBLIC WATER SUPPLY SOURCES

Typical of coastal plain areas, most of Lanier County's consumer water comes from underground aquifers which are porous underground rock layers containing water. The main aquifer beneath Lanier County is the Floridian aquifer which consists of confined limestone, dolostone, and calcarious sand. This aquifer serves as the water supply watershed for Lakeland's municipal water systems as well as many agricultural irrigation systems. Beneath the Floridian aquifer are the Claiborne and Clayton aquifers. The Floridian aquifer is principally recharged immediately south of the Fall Line which stretches across central Georgia from Columbus to Macon to Augusta. This is the point at which streams from harder rock formations of the Piedmont cross into softer rock formations of the Coastal Plain. Most sedimentary rock formations of the Coastal Plain begin at the ground surface just south of the Fall Line; therefore this is where most aquifer water originates.

Total water consumption in Lanier County averages approximately 2,760,000 gallons per day. Approximately 2.3 million gallons (84%) of this comes from groundwater and the remaining 440,000 gallons (16%) is from surface water. Irrigated acres have decreased by 78.6% between 1982 and 1997. Table 3-1 (next page) depicts the breakdown of water consumption in Lanier County.



MAP 3-1 LANIER COUNTY
DRAINAGE BASINS

TABLE 3-1
GREATER LANIER AVERAGE DAILY WATER CONSUMPTION
(Number of gallons)

User Category	Groundwater number	%	Surface Water number	%	Total Consumption number	%
crop irrigation	1,400,000	60.4%	420,000	95.5%	**1,820,000**	65.9%
livestock	10,000	0.4%	20,000	4.5%	**30,000**	1.1%
public water supply --- domestic	560,000	24.1%	----	---	**560,000**	20.3
public water supply --- other	20,000	0.9%	----	---	**20,000**	0.7%
self-supplied --- domestic/commercial	330,000	14.2%	----	---	**330,000**	12.0%
self-supplied --- industrial	----	---	----	---	----	---
TOTAL CONSUMPTION	2,320,000	100%	440,000	100%	**2,760,000**	100%

Source: Georgia Water Use by County, 2000. (Numbers are translated from "millions of gallons per day (mgd)" calculations).

The vertical distance from the ground surface to the top of the first major subterranean reservoir is approximately 250 feet. Most wells in the county range from 200-500 feet deep. Groundwater throughout the county is typically hard. Surface water in Lanier County is only used for irrigation and livestock, and this practice is becoming increasingly popular. Many farm fields contain small ponds which result from dammed up local streams.

WATER SUPPLY WATERSHEDS

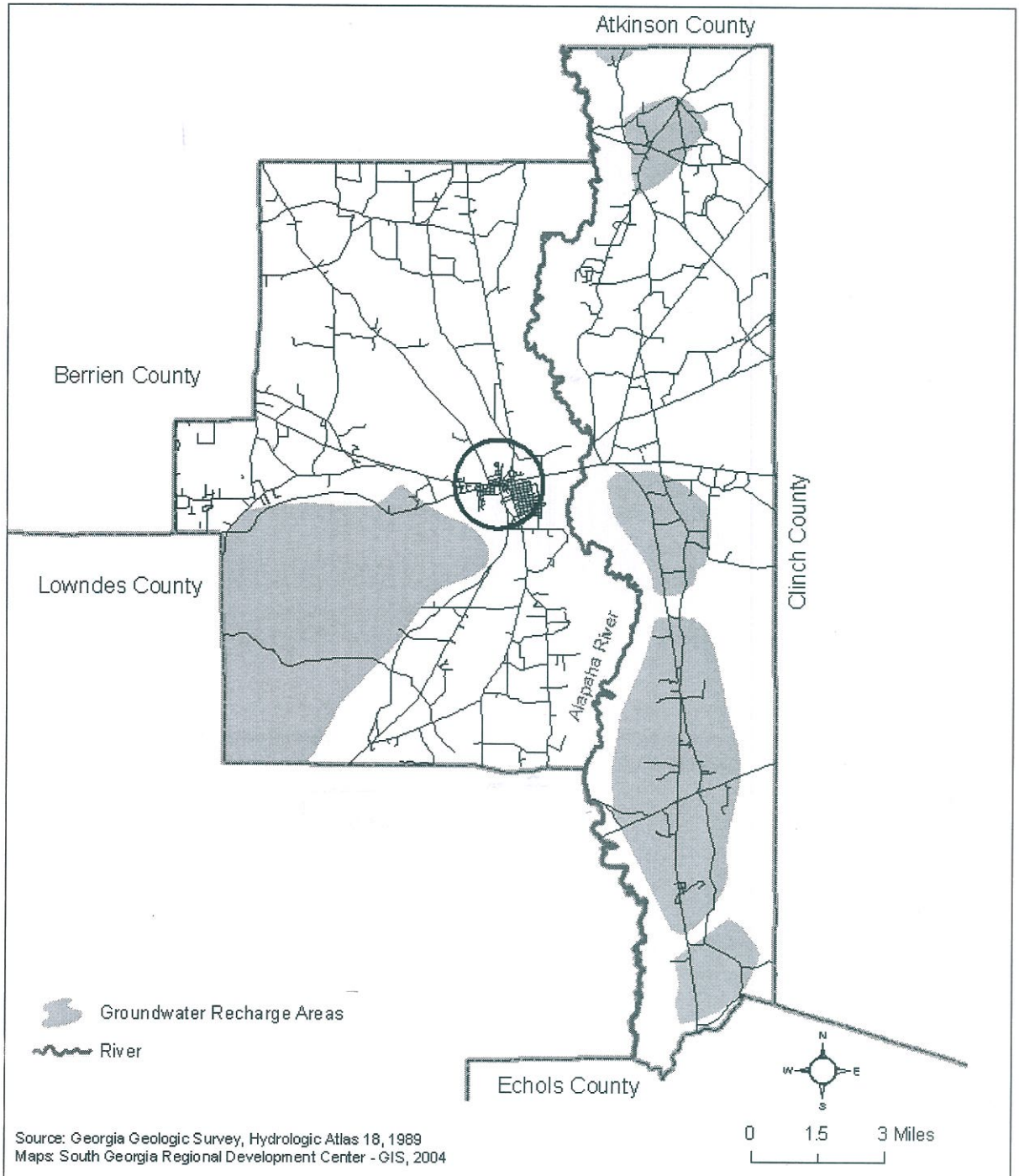
Not applicable.

ENVIRONMENTAL SENSITIVE AREAS

In 1989, the Georgia Planning Act encouraged each local government to develop a comprehensive plan to guide its activities. In order to provide the local governments with a guideline so that they could prepare their comprehensive plan, the Department of Community Affairs (DCA) developed a set of minimum requirements that each local plan must meet known as the "Minimum Planning Standards." Part of the Minimum Planning Standards is the Part V Environmental Planning Criteria that specifically deal with the protection of water supply watersheds, groundwater recharge areas and wetlands. River corridors and mountains were added through a separate act in 1991. In order for a comprehensive plan to meet the Minimum Planning Standards, it must identify whether any of these environmentally sensitive areas exist with the local government's jurisdiction and must prepare local regulations to protect the resources.

GROUNDWATER RECHARGE AREAS

A groundwater recharge area is any portion of the earth's surface where water infiltrates into the ground to replenish an aquifer. Groundwater recharge areas can occur at any point where the aquifer updips to become closer to the surface allowing water from streams, sink holes, and ponds to permeate through more shallow ground into the aquifer. According to state geologic data, groundwater recharge areas in Lanier County are mostly limited to Banks Lake and Grand Bay, as well as a few mile-wide strips running parallel to the east side of the Alapaha River floodplain. Map 3-2 depicts the groundwater recharge areas within Lanier County. All aquifer recharge areas are vulnerable to both urban and agricultural development. Pollutants from stormwater runoff in urban areas and excess



Source: Georgia Geologic Survey, Hydrologic Atlas 18, 1989
Maps: South Georgia Regional Development Center - GIS, 2004

MAP 3-2 LANIER COUNTY GROUNDWATER RECHARGE AREAS

pesticides and fertilizers in agricultural areas can access a groundwater aquifer more easily through these recharge areas. Once in the aquifer, pollutants can spread uncontrollably to other parts of the aquifer thereby decreasing or endangering water quality for an entire region. Therefore, development of any kind in these areas, including installation of septic tanks, should be restricted.

Lanier County and the City of Lakeland adopted the Groundwater Recharge Area Ordinance in 2002. The Groundwater Recharge Area polygons were provided by the Hydrologic Atlas 18, 1989 Edition "Most Significant Groundwater Recharge Areas of Georgia". Groundwater pollution susceptibility rating for Lanier County is predominately "High" based on the "Groundwater Pollution Susceptibility Map of Georgia", Hydrologic Atlas 20, 1992 Edition.

WETLANDS

Freshwater wetlands are defined by federal law to be "those areas that are inundated or saturated by surface or ground water at frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Wetlands generally include bogs, marshes, wet prairies, and swamps of all kinds. Under natural conditions, wetlands help maintain and enhance water quality by filtering out sediments and certain pollutants from adjacent land uses. They also store water, reduce the speed and magnitude of flood waters, and serve as an important and viable habitat for plant and animal species.

Wetlands play an important role in mankind's environment and should be preserved for this purpose. A National Wetland Inventory (NWI) database for the geographic extent of Lanier County has been constructed by the U.S. Department of the Interior, Fish and Wildlife Service and integrated into the county's Geographic Information System (GIS). Map 3-3 depicts the location of generalized wetland areas for all of Lanier County. Map 3-4 depicts the location of generalized wetland areas for the City of Lakeland. Developing parcels that are within depicted wetlands areas, or suspected of having wetlands, should have a detailed wetlands survey and follow all applicable requirements under Section 404 of the Federal Clean Water Act.

Over the past several decades, expansion of both agricultural and urban development has caused a steady reduction of wetlands acreage. This has resulted in the destruction of valuable plant and animal habitats, increased magnitude of flood waters, and the removal of natural filters for surface water drainage thereby endangering water quality throughout the county. To ensure the protection of the wetlands in Lanier County and the City of Lakeland, both governments adopted the Local Wetlands Policy Ordinance in 2002.

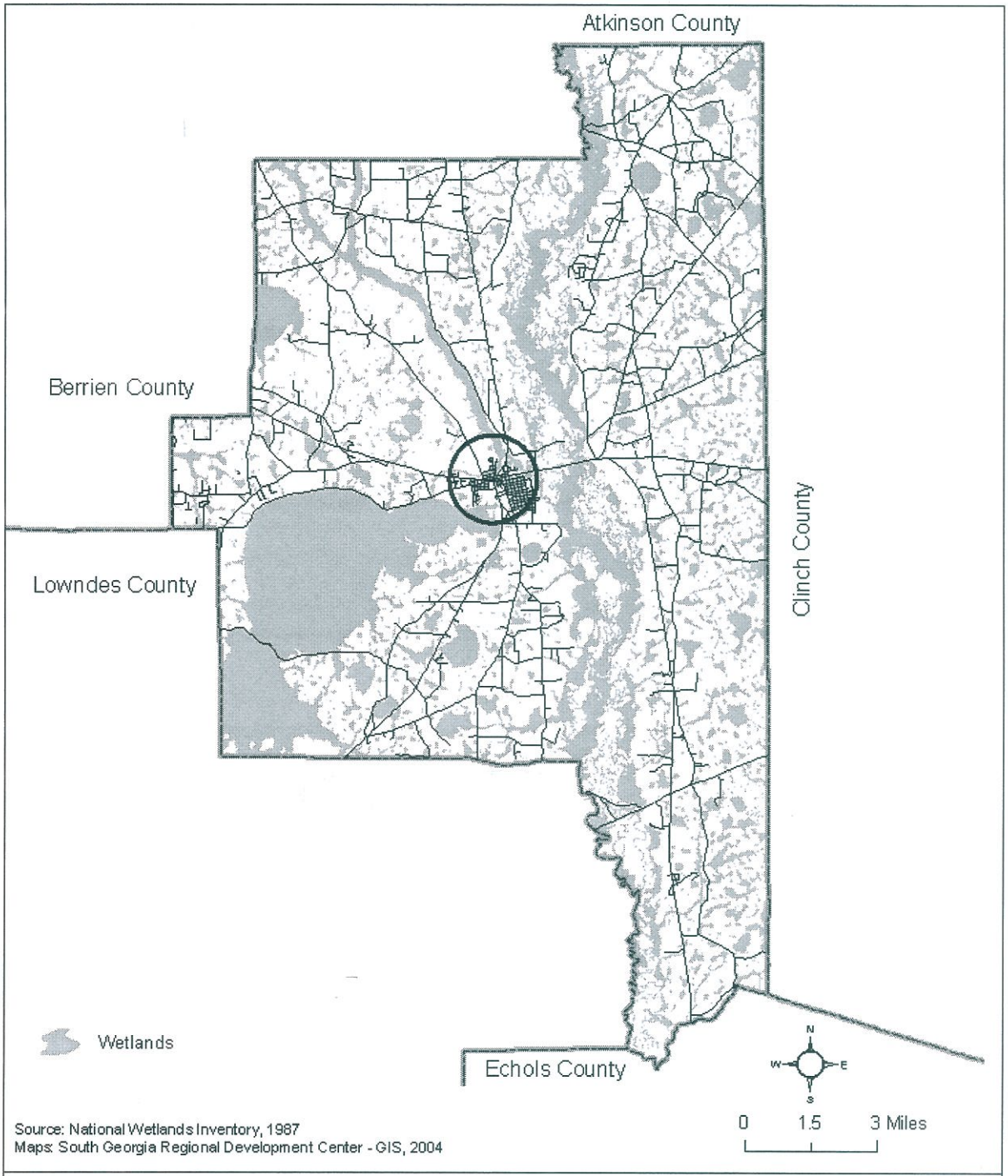
PROTECTED MOUNTAINS

Not applicable.

PROTECTED RIVERS

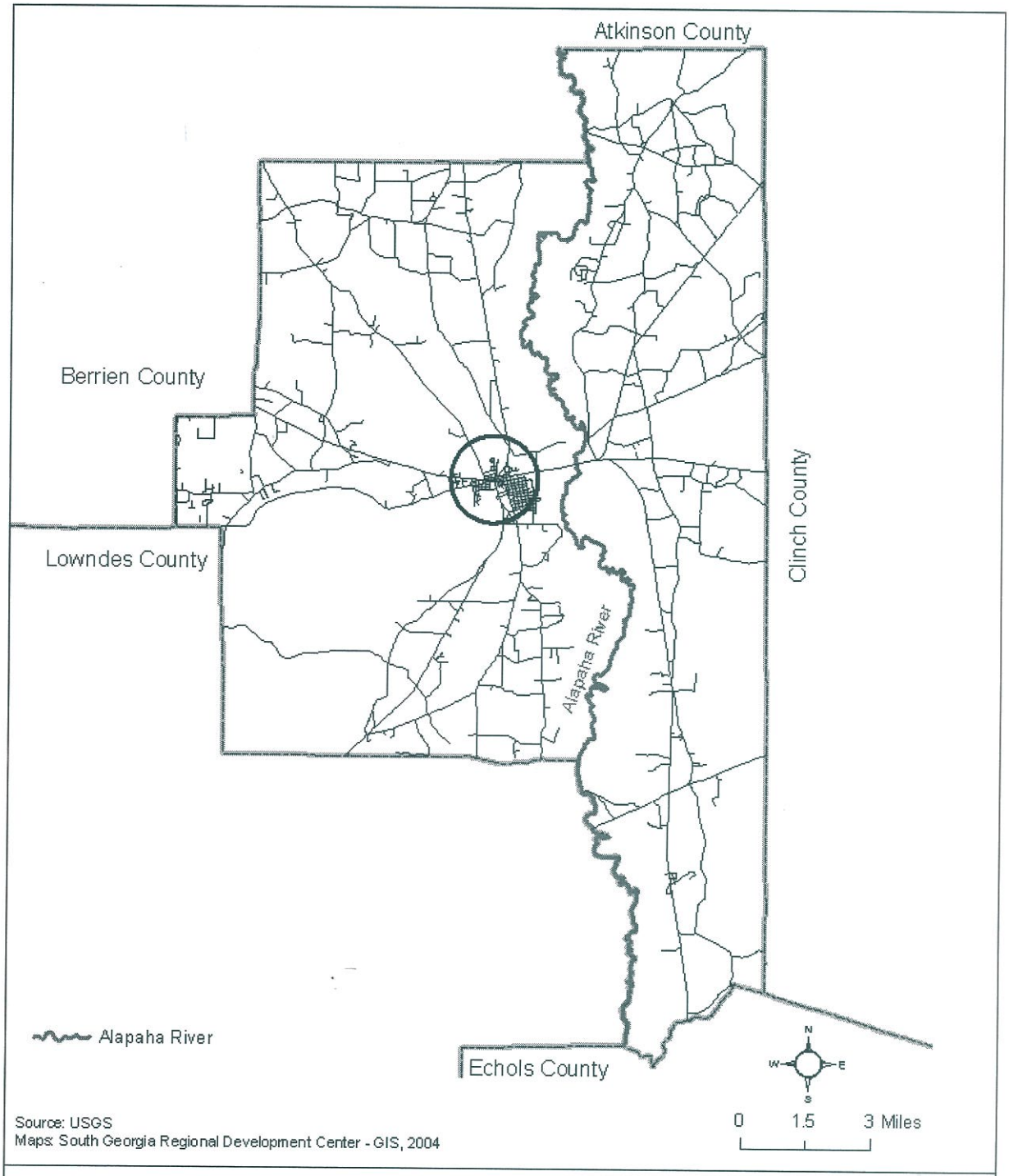
The Georgia General Assembly passed the "Mountain and River Corridor Protection Act" in 1991 which requires local governments to adopt corridor protection plans for certain designated rivers affecting or bordering their jurisdiction. In Lanier County, the only river affected by this Act is the Alapaha River. Map 3-5 depicts this protected river corridor within Lanier County. When following the generally winding stream channel, the total length of the corridor is approximately 37 miles.

Under the Act, Lanier County is required to adopt a "Corridor Protection Plan" for the Alapaha River in accordance with the minimum criteria contained in the Act and as adopted by the Georgia Department of Natural Resources. With only a very few exceptions, field surveys in Lanier County indicate only natural (mostly riverine wetlands) vegetation associated with river floodplains to be located within 100 feet of the river banks which is the state's minimum corridor width. The exceptions to this include three road bridges, one railroad bridge, part of Camp Patten



MAP 3-3 LANIER COUNTY WETLANDS

MAP 3-4 CITY OF LAKELAND
WETLANDS



MAP 3-5 LANIER COUNTY
PROTECTED RIVER CORRIDOR

(Boy Scouts), and an isolated homesite (possibly recreational) well to the south of Lakeland. There are no other land uses currently within this area along the Alapaha River. Lanier County reviewed the provisions of the Act and proposes implementation of its provisions by adoption of building codes, erosion and sedimentation control ordinances, subdivision regulations, a zoning ordinance and a septic tank permitting program, as appropriate. In 2002, Lanier County and the City of Lakeland adopted the Protected River Corridor Ordinance to further protect the Alapaha River corridor.

TOTAL MAXIMUM DAILY LOAD (TMDL) IMPLEMENTATION PLANS

In 1994, a lawsuit was filed in the United States District Court against the United States Environmental Protection Agency (U.S. EPA) by the Sierra Club, Georgia Environmental Organization, Inc., Coosa River Basin Initiative Inc., Trout Unlimited, and Ogeechee River Valley Association for the failure to prepare Total Maximum Daily Loads (TMDLs), under provisions under the Clean Water Act, for the State of Georgia.

A TMDL is a calculation of the maximum amount of a pollutant that a river, stream or lake can receive and still be considered safe and healthy. A TMDL is a means for recommending controls need to meet water quality standards, which are set by the state and determine how much of a pollutant can be present in a waterbody. If the pollutant is over the set limit, a water quality violation has occurred. If a stream is polluted to the extent that there is a water quality standard violation, there cannot be any new additions (or "loadings") of the pollutant to the stream until a TMDL is developed. Pollutants can come from point source and nonpoint source pollution. Examples of "pollutants" include, but are not limited to: Point Source Pollution- wastewater treatment plant discharges and Nonpoint Source Pollution- runoff from urban, agricultural, and forested area such as animal waste, litter, antifreeze, gasoline, motor oil, pesticides, metals, sediment; et al.

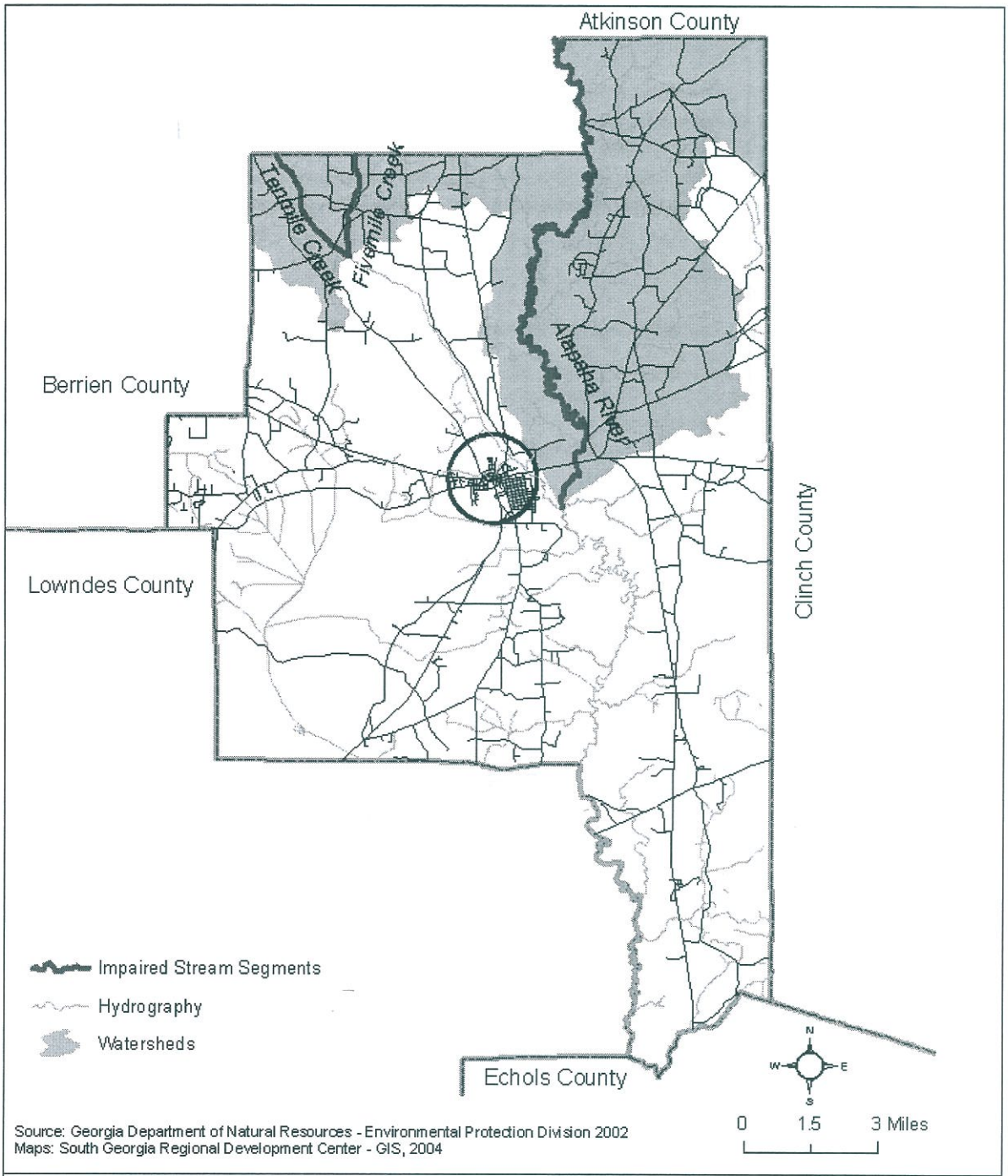
In August 2002, the SGRDC received and accepted a contract with the Georgia Department of Natural Resources – Environmental Protection Division (EPD) in the amount of $87,500 to prepare 35 local Total Maximum Daily Load (TMDL) Implementation Plans for stream segments that had been identified as impaired water bodies due to high fecal coliform (FC) and/or low dissolved oxygen (DO). The SGRDC also had to identify and advise local governments, stakeholders and any other interested parties of the water bodies within their jurisdictions, which have or will require the preparation and implementation of TMDLs and provide outreach and education to local/county governments, school systems, and citizens within the SGRDC region. Of the 35 TMDL Implementation Plans, only three (3) stream segments were located within Lanier County, which were the Alapaha River, Five Mile Creek and Ten Mile Creek[1]. Map 3-6 depicts the location of the impaired stream segments. Table 3-2 list the impaired waterbodies, impairment(s), and number of miles impacted:

TABLE 3-2
STREAM SEGMENTS WITH TMDL IMPLEMENTATION PLANS FOR 2002

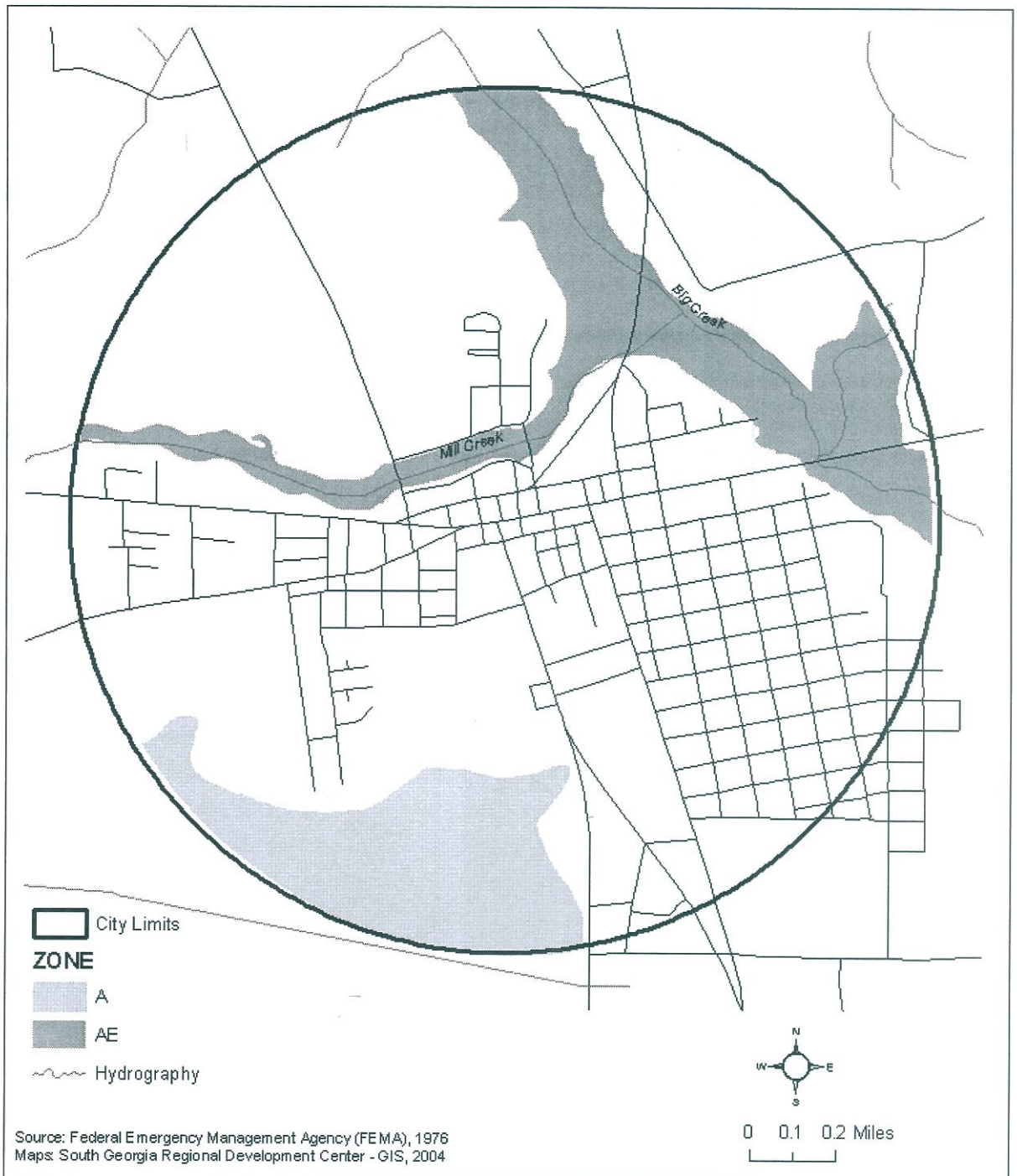
Waterbody Name	Location	County	Impairment	Miles Impacted
Alapaha River	Sand Creek to U.S. Hwy 129 and GA Hwy 11	Atkinson, Berrien, and Lanier	Dissolved Oxygen (DO)	16
Five Mile Creek	Downstream Gaskins Pond to Big Creek near Nashville	Berrien and Lanier	Dissolved Oxygen (DO)	10
Ten Mile Creek	Avery's Millpond to Big Creek near Nashville	Berrien and Lanier	Dissolved Oxygen (DO)	9

Source: GA DNR EPD, *2002 Rivers/Streams Not Supporting Designated Uses.*

[1] The Alapaha River, from U.S. Highway 129 and GA Highway 11 to Stateline, and Banks Lake were also listed for high mercury (Hg) levels by the Georgia Department of Natural Resources.



MAP 3-6 LANIER COUNTY
2002 IMPAIRED STREAM SEGMENTS



Source: Federal Emergency Management Agency (FEMA), 1976
Maps: South Georgia Regional Development Center - GIS, 2004

MAP 3-7 CITY OF LAKELAND
FLOOD INSURANCE RATE MAP (FIRM)

FLOODPLAINS

Flood hazards along the major rivers and streams typically occur in late winter and early spring. Within Lanier County, only the City of Lakeland has official flood hazard area maps, known as a Flood Insurance Rate Maps (FIRM), which are prepared by the Federal Insurance Administration, Department of Housing and Urban Development. Map 3-7 depicts these flood hazard areas in the City of Lakeland based off of the Federal Emergency Management Agency (FEMA) FIRM maps. Flood maps have not yet been prepared for the unincorporated areas of Lanier County. The flood maps for Lakeland were prepared in 1976. Due to annexations, development in the past 30 years, and improved standards for flood mapping, these maps are in definite need of an update. Based on the county's topography and abundance of rivers and streams, flood hazards do exist in all parts of the county and these should be considered when making development decisions.

SOILS TYPES

Soils in Lanier County have been identified and grouped into 26 different soil names (group types) with varying degrees of occurrence throughout the county. Individual soil types are typically found in smaller pockets and usually located near other specific soil types. For ease of description and analysis, the various soil types have been grouped into the following ten (10) major soil associations. The location of these soil associations is shown on Map 3-8.

1. **Johnston-Osier-Bibb Association**

   These are very poorly drained and poorly drained soils found in floodplains of the larger rivers and streams. Due to wetness and flooding, the major soils of this association are not suited for cultivation. This association is best suited for woodland production, particularly hardwoods, and has severe limitations for non-farm uses.

2. **Angie-Chipley-Rains Association**

   These are moderately well drained and poorly drained soils found on low stream terraces adjacent to the Alapaha River. If protected from flooding, the soils in this association are well suited for cultivation but they are more typically used for woodland production. Due to wetness and potential flooding, this association has severe limitations for non-farm uses.

3. **Swamp-Itokpoga Association**

   These are large areas of ponded soils found in the Banks Lake - Grand Bay area. None of these soils are in cultivation or pasture and are not well-suited for such unless they are extensively drained. Due to profound wetness, they are also not well-suited for most non-farm uses.

4. **Mascotte-Rutledge-Pelham Association**

   These are poorly drained and very poorly drained soils found in the extreme northeastern corner of the county. This association is poorly suited for cultivation and requires some drainage for woodland production. It is also poorly suited for all non-farm uses.

5. **Lakeland-Pelham-Alapaha Association**

   These are excessively drained, sandy soils found on broad upland ridges as well as poorly drained soils found in depressions along drainageways parallel to the east side of the Alapaha River floodplain in the northeastern and southeastern parts of the county, as well as the eastern part of Lakeland. This association

is generally poorly suited for cultivation and pasture. Drier areas of the association consist of scrub oaks with a sparse understory of wiregrass and shrubs, and wetter areas consist of water-tolerant hardwoods such as cypress and tupelo.

6. **Tifton-Fuquay-Pelham Association**

These are well drained soils on broad interstream divides as well as poorly drained soils of intermittently ponded flats and drainageways. This association is generally found in the higher areas in the western half of the county, and includes the western part of Lakeland. It is well-suited for row crops and pasture, and responds well to good management. Outside of drainageways, it is also well-suited for non-farm uses.

7. **Leefield-Pelham-Alapaha Association**

These are somewhat poorly drained and poorly drained soils found on broads flats, immediately east and north of Banks Lake. Much of this association is used for woodland production. However, if adequate drainage and good management practices are used, the less wet parts of this association could be used for cultivation and pasture. Due to internal wetness and flooding, this association has moderate to severe limitations for non-farm uses.

8. **Fuquay-Cowarts-Pelham Association**

These are well-drained soils on narrow upland ridges and knolls as well as poorly drained soils along drainageways, and found only in a small area parallel to the east side of the Alapaha River floodplain in the northeastern part of the county. Due to slopes and erosion hazards, most of this association is not well-suited to cultivation. Only the flatter areas are effectively used for cultivation and here the acreages are limited. This association has mainly slight to moderate limitations for non-farm uses.

9. **Fuquay-Leefield-Pelham Association**

These are well drained to poorly drained soils on broad interstream divides and along drainageways in the far northern part of the county. Most of this association (the drier parts) is well-suited for cultivation and pasture with only slight to moderate limitations for non-farm uses.

10. **Irvington-Leefield-Pelham Association**

These are moderately well drained to poorly drained soils found on broad flats, in low areas, and along drainageways. The association is found in the vicinity of Ray's Millpond and to the east of the Alapaha River floodplain, northeast of Lakeland. The better drained parts of this association are well-suited for cultivation and all of the association is well-suited for woodland production. Due to seasonal high water table, the association has moderate to severe limitations for non-farm uses.

STEEP SLOPES

Not applicable.

PRIME AGRICULTURAL AND FOREST LAND

For purposes of this Comprehensive Plan, the ten general soil associations have been arbitrarily classified in terms of land development capability for both agricultural and urban uses. Table 3-3 (next page) depicts these classifications. The terms "good", "fair", and "poor" have been used to describe their relative capabilities. Agricultural yields per acre for major crops were used in determining agricultural capability. Limitations on building site development,

roadways, and septic tank drainage fields were all used in determining urban capability. Map 3-9 depicts the county's land capability for agriculture, and Map 3-10 depicts the county's land capability for general urban development.

TABLE 3-3
SUMMARIZED LAND CAPABILITY FOR GREATER LANIER COUNTY

Soil Type Association	Agricultural Uses			Urban Uses		
	Good	Fair	Poor	Good	Fair	Poor
Johnston - Osier - Bibb			X			X
Angie - Chipley - Rains			X			X
Swamp - Itokpoga			X			X
Mascotte - Rutledge - Pelham			X			X
Lakeland - Pelham - Alapaha		X			X	
Tifton - Fuquay - Pelham	X			X		
Leefield - Pelham - Alapaha			X			X
Fuquay - Cowarts - Pelham		X		X		
Fuquay - Leefield - Pelham		X			X	
Irvington - Leefield - Pelham	X				X	

Source: Soil Survey of Berrien and Lanier Counties, Georgia, 1973; U.S. Department of Agriculture (USDA) Soil Conservation Service.

As can be seen by these maps, the only good areas for both agricultural and urban uses are generally located in a narrow band in the western part of the county circumscribing the Banks Lake area. Poor soils for these uses are generally limited to the floodplains of the Alapaha River and Big Creek, the Banks Lake Area, and along the county's entire eastern boundary.

It should be noted that each soil association consists of individual soil types with varying degrees of capability for agricultural or urban uses. For example, a soil association containing soil types with a particularly high agricultural production may also contain soil types with a particularly low production. Therefore, the land capability ratings are generalized based on the total composition of the soil association.

Consideration of septic tank drainage/percolation fields was included in the determination of land capability for urban uses. However, when considering only septic tanks, none of the county's associations are considered "good". Only two (2) of the associations are considered "fair" and it should be noted that these really have a borderline fair/poor rating. Therefore generally speaking, all of Lanier County is fairly poor for septic tank usage. Table 3-4 (next page) depicts these soil association ratings and Map 3-11 depicts the land capability for septic tank usage.

TABLE 3-4
LAND CAPABILITY FOR SEPTIC TANK DRAINAGE FIELDS

Soil Type Association	Septic Tank Absorption Fields		
	Good	Fair	Poor
Johnston - Osier - Bibb			X
Angie - Chipley - Rains			X
Swamp – Itokpoga			X
Mascotte - Rutledge - Pelham			X
Lakeland - Pelham - Alapaha		X	
Tifton - Fuquay - Pelham		X	
Leefield - Pelham - Alapaha			X
Fuquay - Cowarts - Pelham			X
Fuquay - Leefield - Pelham			X
Irvington - Leefield - Pelham			X

Source: Soil Survey of Berrien and Lanier Counties, Georgia 1973; U. S. Department of Agriculture (USDA) Soil Conservation Service.

When evaluating by individual soil types, **none** have a "good" rating (slight limitations) for septic tank drain fields. Only Barth, Lakeland, Stilson, and Tifton soils have a "fair" rating (moderate limitations) and these comprise only 18% of the county. All other soils (82%) have a "poor" rating (severe limitations). The use of septic tanks in "fair" soils requires expensive modifications to the drain field. The use of septic tanks in "poor" soils is cost prohibitive. Therefore, the effective use of septic tanks in Lanier County is not compatible with natural soil conditions and the use of municipal sewers should be required in developing areas.

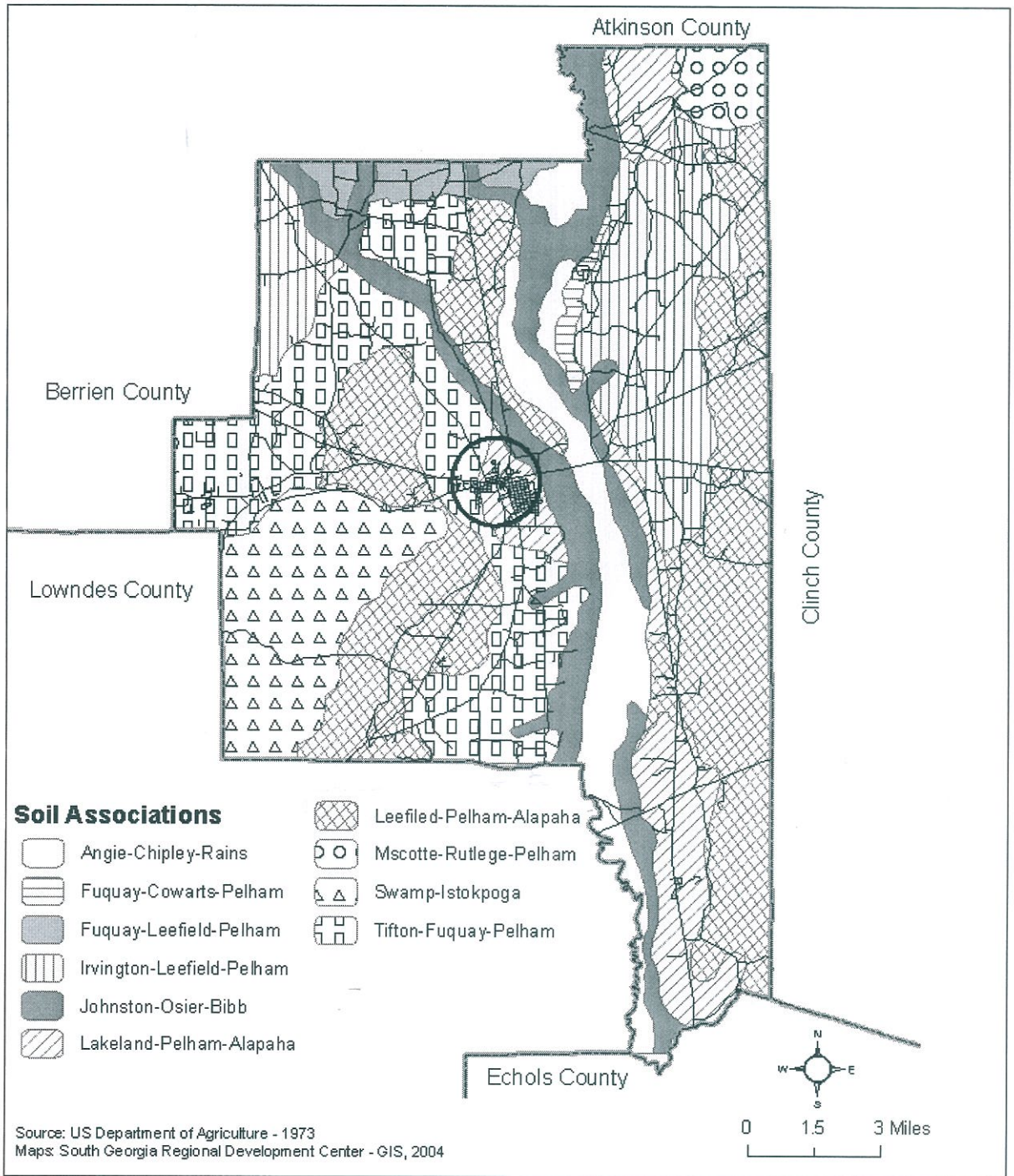
Table 3-5 (next page) depicts the various individual soil types and their proportionate share of the county (Table 3-5 does not include areas of water in the total acreage). It also depicts those soils identified by the USDA as being "prime farmland" or "farmland having statewide importance" which are based on underlying soil types. Prime farmland is defined as land that is best suited to producing food, feed, forage, fiber, and oilseed crops. It has the soil quality, growing season, and moisture supply needed to economically produce sustained high crop yields if acceptable farming methods are used. Prime farmland produces the highest yields with minimal inputs of energy and money. The use of prime farmland for agricultural purposes results in the least damage to the environment. The supply of high quality farmland is limited and should be used with wisdom and foresight. Farmland of "statewide importance" consists of soils that are nearly "prime farmland" in quality and are still important to agriculture in the county. They will economically produce high crop yields when treated and managed according to acceptable farming methods. Many of these soils are well-suited to commercial timber production and are often used as such.

TABLE 3-5
GREATER LANIER'S USDA FARMLAND CLASSIFICATION AND SOIL EXTENT

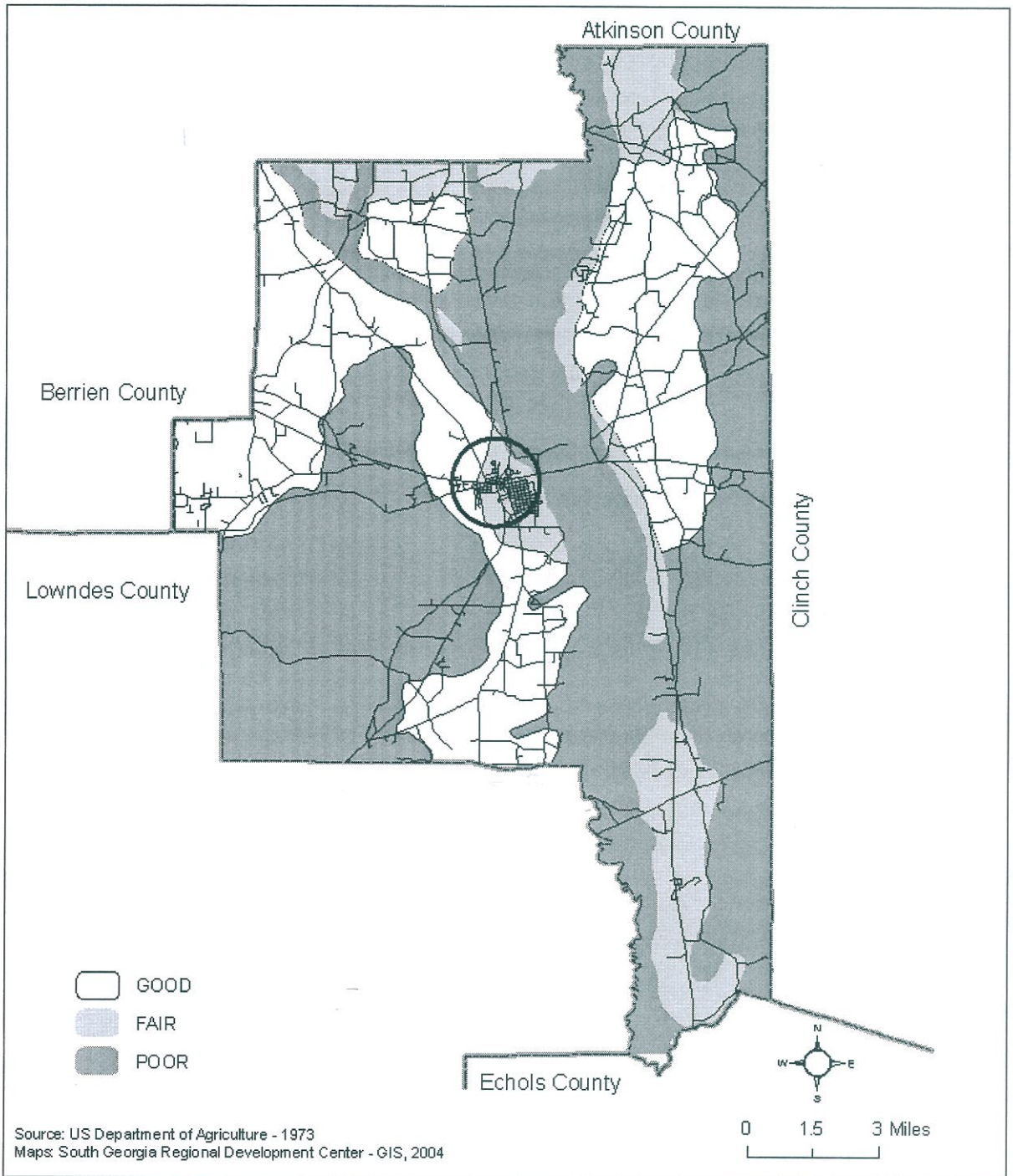
Soil Name (mapping symbols)	Farmland Classification Prime	Important	# Acres	% County
Alapaha (At)			10,571	9.2
Angie (Au)		X	7,183	6.3
Ardilla (AqA)		X	330	.3
Barth (Ba, Bb)		X	2,787	2.4
Carnegie (CoB)	X		80	.1
Carnegie (CoC2)		X	103	.1
Chipley (Cm)			1,261	1.1
Cowarts (CqB)	X		146	.1
Cowarts (CtC2)		X	200	.2
Dothan (DaB)	X		258	.2
Fuquay (FaC, FsB)		X	5,272	4.6
Grady (Grd)		X	464	.4
Irvington (IjA)	X		3,742	3.3
Itokpoga complex (Ist)			1,650	1.5
Johnston-Osier-Bibb Association (Job)			7,048	6.2
Lakeland (LwC)			8,605	7.5
Leefield (LsA)		X	16,551	14.5
Mascotte (Mn)		X	4,030	3.5
Olustee (Oa)		X	6,032	5.3
Osier-Johnston-Bibb Association (OjB)			763	.7
Pelham (Pl, Pls)		X	16,146	14.1
Portsmouth (Por)		X	1,086	.9
Rains (Ros)		X	795	.7
Robertsdale (R1A)		X	364	.3
Rutledge (Ro)			2.545	2.2
Stilson (SeB)		X	3,303	2.9
Swamp (Swa)			7,004	6.1
Tifton (TqA, TqB)	X		6,089	5.3
TOTAL ACREAGE	10,315	64,646	**114,408**	
TOTAL PERCENTAGE	9.0	56.5	100.0	**100.0**

Source: Soil Survey of Berrien and Lanier Counties, Georgia, 1973; U.S. Department of Agriculture (USDA) Soil Conservation Service – Prime Farmland Soils of Georgia, 1987, USDA Soil Conservation Service – Additional Lands of Statewide Importance, 1992, USDA Soil Conservation Service.

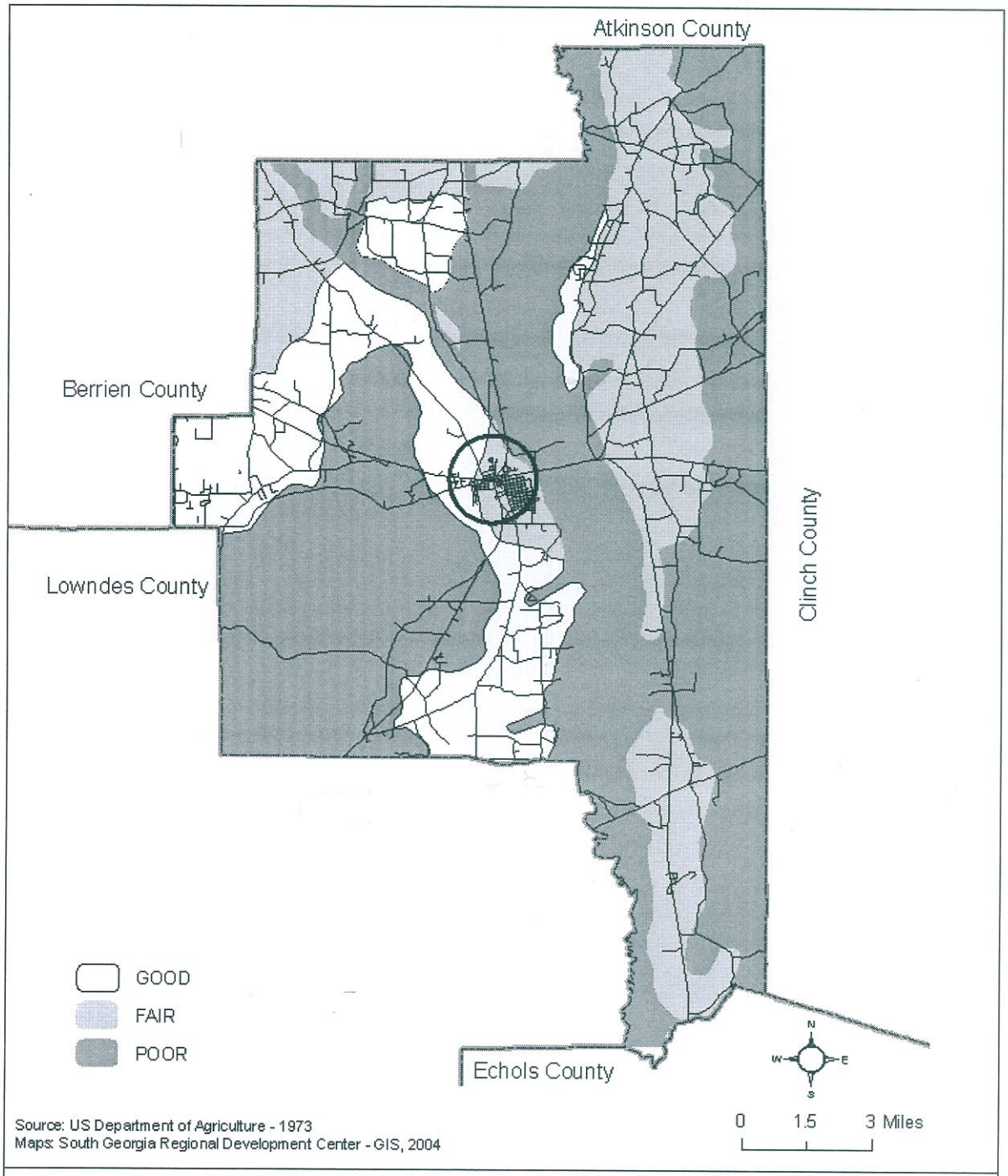
Note: This table does not include areas of water in the total acreage.



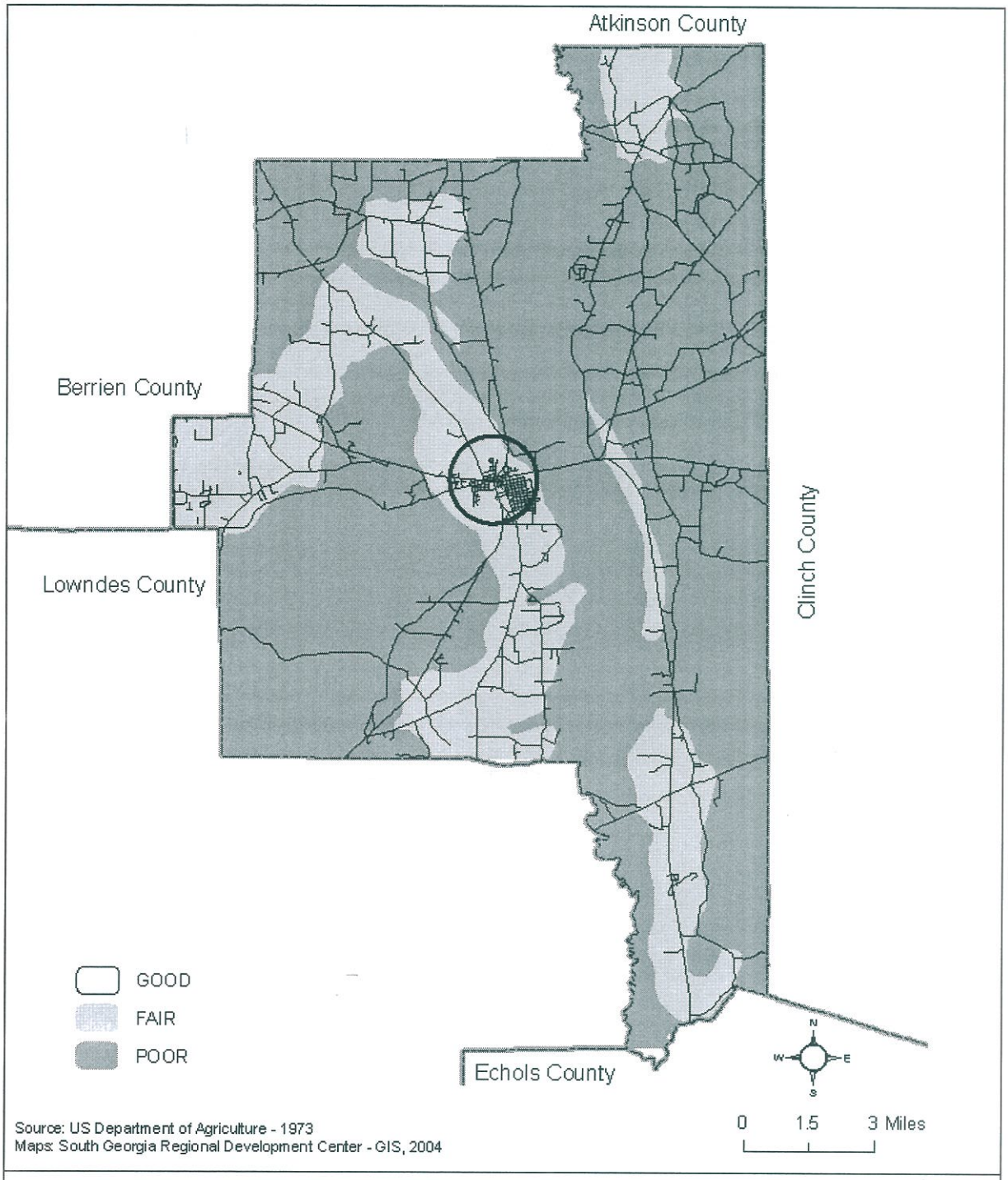
MAP 3-8 LANIER COUNTY
GENERALIZED SOIL ASSOCIATIONS



MAP 3-9 LANIER COUNTY
LAND CAPABILITY - AGRICULTURE



MAP 3-10 LANIER COUNTY
LAND CAPABILITY - URBAN



MAP 3-11 LANIER COUNTY
LAND CAPABILITY - SEPTIC TANKS

As shown in Table 3-5 only 9.0% of Lanier County is classified as "prime farmland" but another 56.5% is classified as having "statewide importance." Therefore, about 65% of Lanier County is recognized as being able to best support agricultural uses. Most of the county's 9% prime farmland soils can be found in these areas. A map showing "prime farmland" areas is unavailable as the detailed soil survey is currently unavailable in digital format. This map should be available by 2007.

PLANT AND ANIMAL HABITATS

Both the Georgia and U.S. Department of Natural Resources have inventoried plant and animal species in the State of Georgia. Table 3-6 (next page) depicts plants and animals that are on the "possible endangered" or "threatened" species lists for the State and Federal governments. Current local regulations should adequately protect habitats for these plant and animal species.

TABLE 3-6
ENDANGERED OR THREATENED PLANT AND ANIMAL SPECIES

SPECIES Common Name – (*Species Name*)	GEORGIA Threatened	 Endangered	FEDERAL Endangered
PLANTS			
Netleaf Pawpaw – (*Asimina reticulate*)	X		
Leconte Wild Indigo – (*Baptisia lecontei*)	X		
Green-fly Orchid – (*Epidendrum conopseum*)		X	
Yellow Flytrap – (*Sarracenia flava*)		X	
Hooded Pitcherplant – (*Sarracenia minor*)		X	
Parrot Pitcherplant – (*Sarracenia psittacina*)		X	
Harper Yellow-eyed Grass – (*Xyris scabrifolia*)	X		
SPECIES Common Name – (*Species Name*)	**GEORGIA** Threatened	 Endangered	**FEDERAL** Endangered
ANIMALS			
Mud Sunfish – (*Acantharchus pomotis*)	X		
Bachman's Sparrow – (*Aimophila aestivalis*)		X	
Flatwoods Salamander – (*Ambystoma cingulatum*)		X	X
Spotted Turtle – (*Clemmys guttata*)		X	
Shiner – (*Cyprinella callisema* Ocmulgee)	X		
Gopher Tortoise – (*Gopherus polyphemus*)		X	X
Florida Sandhill Crane – (*Grus canadensis pratensis*)		X	
Greater Sandhill Crane – (*Grus canadensis tabida*)		X	
Bald Eagle – (*Haliaeetus leucocephalus*)		X	X
Alligator Snapping Turtle – (*Macrochelys temminckii*)		X	
Striped Newt – (*Notophthalmus perstriatus*)		X	
Yellow-crowned Night-heron – (*Nyctanassa violacea*)	X		
Suwannee River Cooter – (*Pseudemys concinna suwanniensis*)	X		
Dwarf Siren – (*Pseudobranchus striatus*)	X		
Sailfin Shiner – (*Pteronotropis hypselopterus*)	X		
Florida Worm Lizard – (*Rhineura floridana*)	X		
Eastern Mudminnow – (*Umbra pygmaea*)	X		

Georgia Department of Natural Resources – Wildlife Resources Division – Georgia Natural Heritage Program, 2004.

MAJOR PARK, RECREATION AND CONSERVATION AREAS

The Banks Lake National Wildlife Refuge and the Grand Bay Public Hunting Area are the only officially designated conservation areas in Lanier County. They are located in the southwestern part of the county, total 16,000 acres, and are actively used by the public for recreational purposes. Moody Air Force Base is primarily located in neighboring Lowndes County and does extend part way into Lanier County with a total of approximately 2,020 acres. This is generally considered part of the Banks Lake - Grand Bay area.

SCENIC VIEWS AND SITES

See Cultural Resources Section.

NATURAL RESOURCES GOAL AND POLICIES

GOAL:

Identify, conserve and protect the broad range of natural resources in Greater Lanier County that could potentially be effected by growth and development (i.e. Floodplains, wetlands, groundwater recharge areas, etc).

POLICY:

All natural resources such as water resources, groundwater recharge areas, wetlands, and soil types that contribute to the current and future development of Greater Lanier County should be recognized and protected by appropriate county authorities. Examples include but are not limited to:

- Soil resources should be managed in a manner that is consistent with maintaining and enhancing water quality.
- An adequate minimum flow and water quality should be maintained in all rivers and streams to ensure a productive fish habitat and protection of aquatic life and scenic qualities.

POLICY:

State and/or Federal agency rules and regulations mandating local enforcement programs should be accompanied with adequate staff and financial assistance to help local units in their implementation programs. Examples include but are not limited to:

- These include rules and regulations on local floodplain management, erosion and sedimentation control, wetlands protection, river corridors, and similar laws designed to prevent degradation of the natural environment.
- Ongoing public awareness and education activities should also be developed to encourage participation in natural resource preservation and other related activities. Agencies that currently offer education material on the conservation and protection of natural resources are the U.S. Environmental Protection Agency (EPA), Georgia Department of Natural Resources Environmental Protection Division (EPD), Georgia Department of Natural Resources Pollution Prevention Assistance Division (P2AD), Georgia Department of Community Affairs (DCA), etc.

POLICY:

Appropriate funding source should be identified and utilized to encourage the continual use and protection of significant natural resources. Examples include but are not limited to:

- State and Federal natural resource programs such as the Georgia Department of Natural Resources Environmental Protection Division (GA DNR EPD), the U.S. Environmental Protection Agency (US EPA), United States Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS), and the Georgia Forestry Commission (GFC) are examples of funding sources that should be utilized to maintain and preserve all of the county's natural resources.

POLICY:

Special planning activities should be conducted to encourage sensible development that will enhance and protect all of the county's natural resources. Examples include but are not limited to:

- Development should not pollute, exhaust or interfere with the natural replenishment cycles of groundwater.
- Development should not grossly impair the function of vital natural systems.
- Land use should be primarily determined by natural characteristics, suitability of the land, and the availability of urban services.
- Lands that are not suitable for on-site absorption systems should not be subdivided/developed unless public sewers are available or other provisions are made for the handling of sewage.
- Treatment facilities should be available for the discharge of septic tank, holding tank, and recreational vehicle pumpage.
- Land management practices that minimize siltation and pollution should be utilized. These practices include, but are not limited to:
    (a) Approval of grading, filling, and excavation plans by the cities and county to ensure that erosion and siltation are minimized. (I.e. sodding, seeding, re-vegetation schedules, etc).
    (b) Provide and maintain strategically located settling basins to remove silt and debris from surface water runoff.

CULTURAL RESOURCES

The conservation of cultural, historic, and archaeological resources can have positive impacts on Lanier County's, visual appeal, tourism potential, downtown revitalization, and overall economic development potential. In addition, the preservation of historic properties and landscapes is an important aspect of maintaining a community's sense of place and pride. Continued interest in local heritage is essential in retaining a community vision with an understanding of its past.

HISTORY OF LANIER COUNTY

Originally inhabited by the Creek Indians, the land now known as Lanier County encompassed vast acres of virgin timber and many huntable animals. After the cession of land from the Creek Indians in 1814, South Georgia was surveyed and the counties of Early, Irwin, and Appling were laid out. Lanier County, created in 1920, was from parts of Berrien, Clinch, and Lowndes Counties, all originally part of Irwin County.

In response to the growing number of farms and industries, the area known today as Lanier prospered in the latter half of the nineteenth century. Some of the mostly forested land was cleared for farming and some were kept in pines and used for gum gathering to make turpentine. The raising of crops and cattle were the mainstay of farming. Corn was a major crop and later cotton became lucrative. With an influx of population, the town of Alapaha developed. Later renamed Milltown for the many cotton and gristmills, it had a Methodist Church, Baptist Church and a school. However, it did not have electricity, telephone, or even a newspaper. During this time, Milltown had the largest population in the area with approximately 795 people. In 1901, after seventy years into its existence, the town of Milltown was incorporated.

With the advent of the railroad shortly after the turn of the nineteenth century, Milltown flourished. The railroad ran from Milltown to Naylor where it connected with the Atlantic Coast Line. The train ran twice daily and carried people as well as products produced in the town and the county. The train increased the activity in this center and soon a group of local citizens formed a development company. This group, among other things, dammed up the Alapacoochee Creek, which formed a small lake. This lake was named Irma after Mr. Bostick's daughter. The group named the lake to honor Mr. Bostick because they felt that he had done a lot for Milltown.

By 1910, the Gress sawmill had grown to large proportions and the towns' population had grown to 1,835 people. Sometime between 1910 and 1914, the Gress Mill was sold to the Barney Smith Car Company, which developed the mill into the Milltown Manufacturing Company. This mill was operated by electricity that was produced by several huge boilers. In 1914, the city was granted a $25,000 bond to develop running water and electricity for the city. The city contracted with the Milltown Manufacturing Company to share its electricity from one of its boilers to run the water pump and for electricity for the town.

With its new water, lights, and bustling mills, Milltown was growing and prospering. By 1917, the possibility of the area becoming its own county became very real. At this time, the state offered to pay half of the cost to build highways in Berrien County if a bond election could raise the other half. Milltown was unanimously in favor of the idea. However, in 1918, the state failed to pass the bill, which would enable Lanier County to be formed. In addition to this disappointment, the huge lumber mill burned to the ground. Many people were left without jobs and the source of electricity for lights and water were destroyed. Some weeks after the fire, the company announced that they would not be able to rebuild the mill. However, Milltown was resilient and was able to purchase the huge boiler from the destroyed mill and continue its own water and electricity until late in the 1920's.

On July 18, 1919, the Senate voted to make Lanier a county. In August of that same year, the House passed the bill and the people of the state finalized the process in the election of 1920. During the 1920's, the strength of the county remained outside of the town in its agriculture. In 1925, the Farm Census report showed 575 farms in the county.

There 18,841 acres in crops and 30,000 acres in pastures. Woodlands covered 28,880 acres. There were approximately 5,000 head of cattle and 5,000 head of swine. The year 1929 brought with it the introduction of tobacco to Lanier County. This crop proved to be successful and lucrative. In 1929, Lanier farmers shipped 2,200,000 pounds of tobacco.

Despite some failures, the county and Milltown continued to grow and produce in the 1920's. In 1925, Eurith Rivers, a very prominent figure in Georgia and Lanier County, was instrumental in getting Milltown renamed Lakeland due to the fact that the town was no longer a mill village.

Although the importance of agriculture and timbering in Lanier County has diminished, the county consistently grows each year. With an increase in development throughout the county, attention to historic resources should be made in order to see that they are adaptively re-used and preserved. Without these resources, the physical ties to the events and people that shaped the county will be lost.

IDENTIFICATION OF RESOURCES

An initial inventory of historic resources was conducted. This inventory is a basis for a comprehensive survey and should assist in planning for new development, as well as determining areas for inclusion on the National Register of Historic Places or the development of local historic districts.

INVENTORY OF RESOURCE TYPES

Residential

Lanier County is scattered with historic residential resources. Of the residential structures, many are vernacular in nature with no particular style, but do have characteristics such as unusual decorative detailing. Some of the stylized houses found bore characteristics of the Craftsman style of houses building, which was a popular style from around 1900 to 1940. While many of these historic resources are important within the community, the Lovejoy house is a notable resource in the county. Built between 1870 and 1880, it is one of the largest two-story farmhouses that has had little exterior or interior changes to it within the county. However, the Lovejoy house is in severely deteriorated and is in dire need of rehabilitation. Map 3-12 provides the locations of these resources.

Unique to the region, Lanier County contains historic c. 1850 log structures. Although the numbers of log structures are diminishing, they can still be seen throughout the county.

Lakeland

Residential neighborhoods in Lakeland contain a variety of house types that were built between 1890 and 1930. These neighborhoods contain many examples of vernacular architecture, as well as defined types such as Folk Victorian, and Craftsman styles. Two areas of are of particular interest in the City of Lakeland. This first location is located west of the downtown along GA 122, US 129 and the area between out to Bank Street and the second area is roughly to the south of U.S. 129 and to the east of GA 135 east to Tenth Street and south to Jackson Avenue. Map 3-4 provides the locations of the historic residential resources in Lakeland.

Stockton

Although historic resources are scarce in Stockton, there is a small grouping of residential properties long U.S. 84, which contain examples of Folk Victorian, and Craftsman style architecture. Map 3-14 provides the locations these historic resources.

Commercial/ Industrial

Remnants of Lanier County's historic commercial and industrial resources are still evident within the county. An example is the Johnson's Turpentine Camp. Located on Johnson Road, south of Lakeland, this historic large naval camp still includes many buildings that were of importance with the operation of this industry. Refer to Map 3-12 for the location of this historic resource.

Lakeland

The City of Lakeland has a rich history and continues to remain active. The downtown area contains mostly masonry buildings built in the 1900s. In general, they have the traditional storefront display areas typical of this time period. In addition to these buildings, there are a few warehouses and smaller buildings that are wood framed with tin sheeting for wall coverings. Map 3-13 shows the locations of all historic resources in the City of Lakeland. In 1998, an extensive community enhancement program began and continues today by creating life-size images of local citizens as they appeared in 1925; the year Lakeland changed its name from Milltown.

Stockton

In the 1920s, Stockton was flourishing with businesses. There were at least two naval stores, three general stores, two grocery stores, two auto repair shops, and a variety of other business, however, today there are relatively few commercial or industrial resources remaining in Stockton. The resources that are still evident are along U.S. Highway 84 and are either vacant or are substantially deteriorated. Map 3-14 provides the locations of these historic resources.

Institutional

The Regional Historic Rural Schools Initiative has identified five existing historic school buildings in Lanier County as depicted on Map 3-12, 3-13, 3-14. Although many historic church buildings have been lost, a handful still exists in the city of Lakeland and unincorporated areas. See Maps 3-12, 3-13 and 3-14 for locations of historic churches.

The Lanier County Auditorium and Grammar School in the city of Lakeland is the only individually listed property on the National Register of Historic Places. Map 3-13 depicts the location of this historic resource.

Transportation-Related

The Atlantic Coast Line was the major railroad that ran through Lanier County. Similar to other areas in South Georgia, the railroad was important the development of Lanier County. The creation of the highway and later Interstate eventually decreased the need for the extensive railroad system and thus Lanier County's small towns fell into oblivion. Traces of these noteworthy transportation webs remain evident in Stockton, and are revealed by clusters of historic buildings.

Agricultural

Agricultural sites are patterns in the land and the related structures created by human activity. Although no landscapes appear exactly as they did in the past, they often retain significant characteristics. Agricultural sites in Lanier County typically have the following aspects: individual buildings for separate functions (dwelling, smokehouse, livestock barns, equipment buildings, etc.); paths for access, frequently shaded by trees; and fields that are irregularly arranged and follow natural topography. Lanier County's agricultural

resources are extensive and include numerous types of buildings and landscapes.

Archaeological Sites

The earliest known human inhabitants of the region now known as Lanier County came into the area approximately ten thousand years ago, at the end of the last Ice Age. European settlers began to enter the area in the early nineteenth century and were probably somewhat established in present-day Lanier County by the time the land was officially ceded by the Creek and Seminole Indians in 1814. Over the last ten thousand years, humans have left a substantial material record of their lives. The study of this material record forms the basis of archaeology and the basic unit of this record is the archaeological site.

To date, there have been only eight archaeological sites recorded in Lanier County; however, this likely reflects a lack of archaeological research, not a lack of sites. Archaeological sites in Lanier County range from locations where hunters manufactured stone tools 10,000 years ago to small late nineteenth/early twentieth century farmsteads.

Archaeological sites, like historic buildings, are considered cultural resources. However, unlike historic buildings, archaeological sites are not always evident to the untrained eye. While some archaeological sites have obvious above ground indicators such as earth mounds, or chimney remnants, most consist of artifacts (objects made or modified by humans such as stone tools, pottery, and bottle glass) and features (post holes, trash pits, stone hearths, human burials, etc.) that are underground.

The only sure way to know if an archaeological site exists is to have a professional archaeologist sample or survey the area. However, there are some general criteria you can apply to help prioritize areas. Prehistoric (Indian) sites are most commonly located near water sources such as streams, springs, or lime sinks. Historic (Euro/Afro-American) sites are commonly located close to old/historic roads. Both prehistoric and historic sites are generally located on level to gently sloping ground and on well-drained soils. Previous disturbance can also affect a location's potential to contain archaeological sites. For example, road or utility right-of-ways have usually been subjected to heavy disturbance and are not likely to contain any intact archaeological deposits. Cultivation, however, does not necessarily destroy archaeological sites and does not, by itself, indicate a low potential area. Such criteria, even when developed into a formal predictive model, should only be used as a tool at the most basic planning level. Hiring a professional archaeologist/consultant is an effective way of streamlining the compliance process and insuring that archaeological resources are being treated according to the law.

While cultural resources work is most often done in response to Section 106 of the National Historic Preservation Act (NHPA), meaning that there is some federal involvement (i.e. federal funds, permits, etc.), it is important to remember that there are also state laws to consider. Official Code of Georgia Annotated (OCGA) 12-3-621 states that a person who is not operating under Section 106 of the NHPA must have written landowner permission to conduct archaeology on private property and must provide written notification to the Georgia Department of Natural Resources (DNR) at least five (5) business days prior to excavation. Other code sections apply more generally to human remains, but are relevant because of the possibility of discovering such remains at archaeological sites. OCGA 31-21-6 requires notification of local law enforcement upon the disturbance of human remains. If law enforcement determines that it is not a crime scene, DNR is notified of the discovery.

Key points to remember when considering archaeology in development and compliance:

- Humans have been in the area now known as Lanier County for at least 10,000 years, so the potential for finding evidence of past human activity (i.e., archaeological sites) is generally

high.

- Unlike historic buildings, archaeological sites often have no above ground components that would indicate their presence.
- While factors such as distance to water and/or old roads, slope, soil drainage, and previous disturbance can help prioritize areas of archaeological concern, the only sure way to know whether an area contains archaeological sites is to conduct an archaeological survey.
- Most archaeology is done in compliance with Section 106 of the National Historic Preservation Act (NHPA) and regulations implementing that act (36 CFR Part 800). These laws insure that projects receiving federal funds (CDBG/EIP grants, FDIC loans, etc) or requiring federal permits (e.g., Section 404 of Clean Water Act) take affects to archaeological resources into account.
- In addition to federal laws, there are state laws to consider as well. Official Code of Georgia Annotated (OCGA) 12-3-621 requires written landowner permission and DNR notification of intent to conduct non-Section 106 archaeology on private property. OCGA 31-21-6 requires notification of local law enforcement upon discovery or disturbance of human remains.

Other

Cemeteries are irreplaceable resources and are in need of preservation within Lanier County. Map 3-12 depicts approximately all the locations of historic cemeteries in Lanier County. These cemeteries range from small family plots and slightly larger church graveyards, to sizable city cemeteries

ASSESSMENT OF CURRENT AND FUTURE NEEDS

Today, Lanier County remains rich with natural resources in addition to abundant cultural, historic, and archaeological resources. While many of these resources are found within the cities, several resources exist in the unincorporated areas of the county. Map 3-12 depicts an initial inventory of resources in the unincorporated areas but it should be noted that a comprehensive survey of all cultural, historic, and archaeological resources is necessary.

Conservation of cultural, historic, and archaeological resources should begin with a comprehensive countywide survey. At this point, a partial inventory has been done, but it is incomplete. Funding is available through the Historic Preservation Division of the Georgia Department of Natural Resources to assist with the completion of a Historic Resources Survey.

Although the City of Lakeland is the only city to list a property on the National Register of Historic Places, there are additional buildings and districts that can be designated. Map 3-13 and 3-14 illustrates potential historic resources that can be nominated in the future. The National Register of Historic Places not only identifies significant properties and districts for general planning purposes, but it qualifies certain properties eligible to receive specific federal and state tax incentives for private property owners to rehabilitate historic buildings. The National Register also makes available historic preservation grants to assist local governments in accomplishing preservation projects.

GOALS AND POLICIES

GOAL:

Identify, conserve and protect the broad range of cultural resources in greater Lanier County.

POLICY:

Individual cultural resources, historic districts, and historic communities that contributed to the evolution and development of Lanier County should be formally identified and designated by appropriate city and county authorities. Encourage new programs that promote designated properties and support the creation of historic property owners associations.

POLICY:

An ongoing public awareness and education program, such as the Georgia Trust's Heritage Education Program, should be developed to encourage participation in historic preservation and cultural activities.

POLICY:

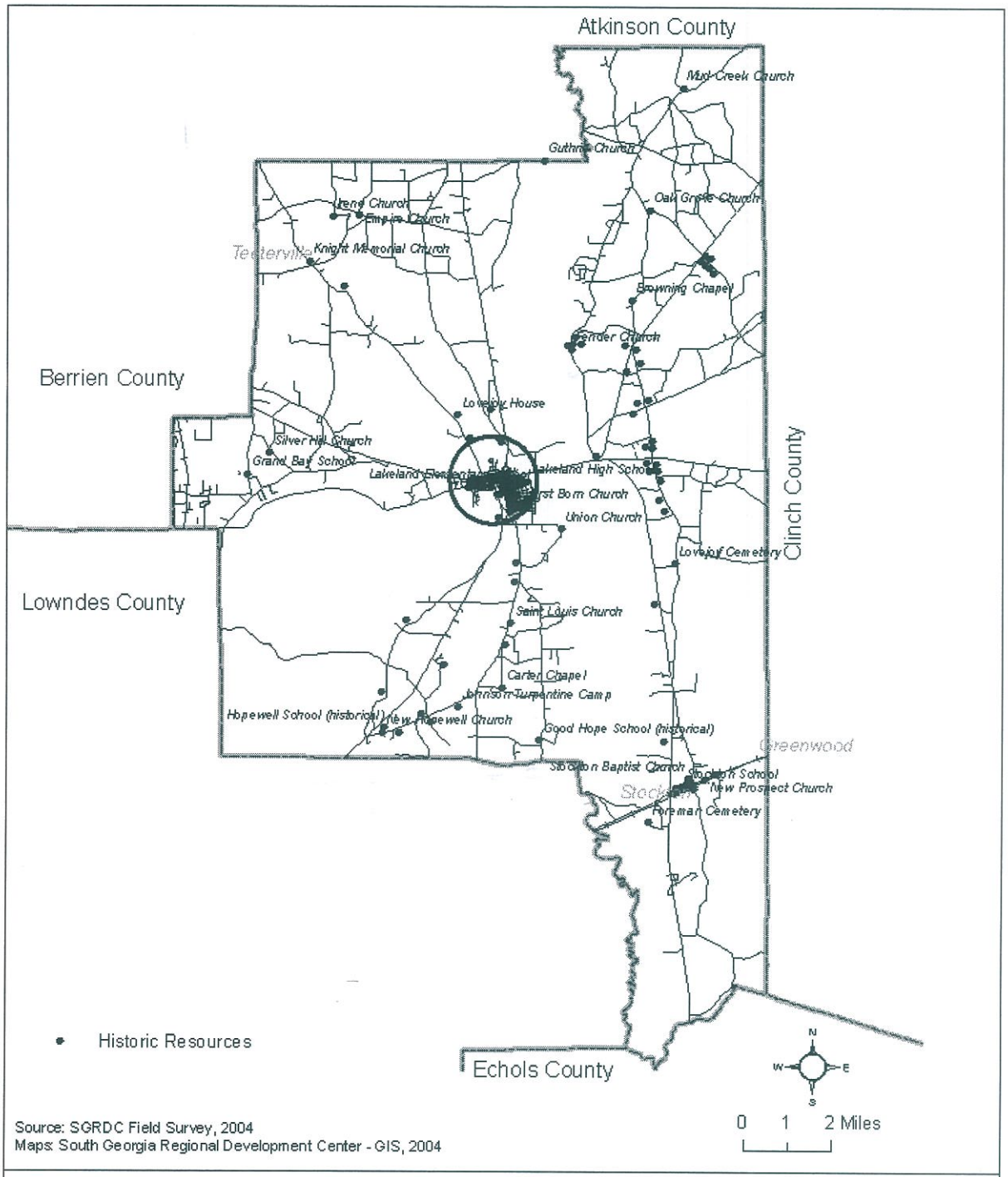
Appropriate funding sources should be identified and utilized to encourage the continual use and rehabilitation of significant cultural and historic resources. State and Federal historic preservation programs include Georgia Historic Resource Survey Funding, Georgia Heritage Grants, Historic Preservation Fund Grant, OneGeorgia Authority Grants, Rehabilitation Investment Tax Credit Program, Historic Landscape and Garden Grant Program, Transportation Equity Act for the 21st Century Program, Community Development Block Grant, and the Quality Growth Grant Program.

POLICY:

Special planning activities should be conducted to encourage sensible development that will enhance and protect the county's cultural, historic, and archeological resources.

POLICY:

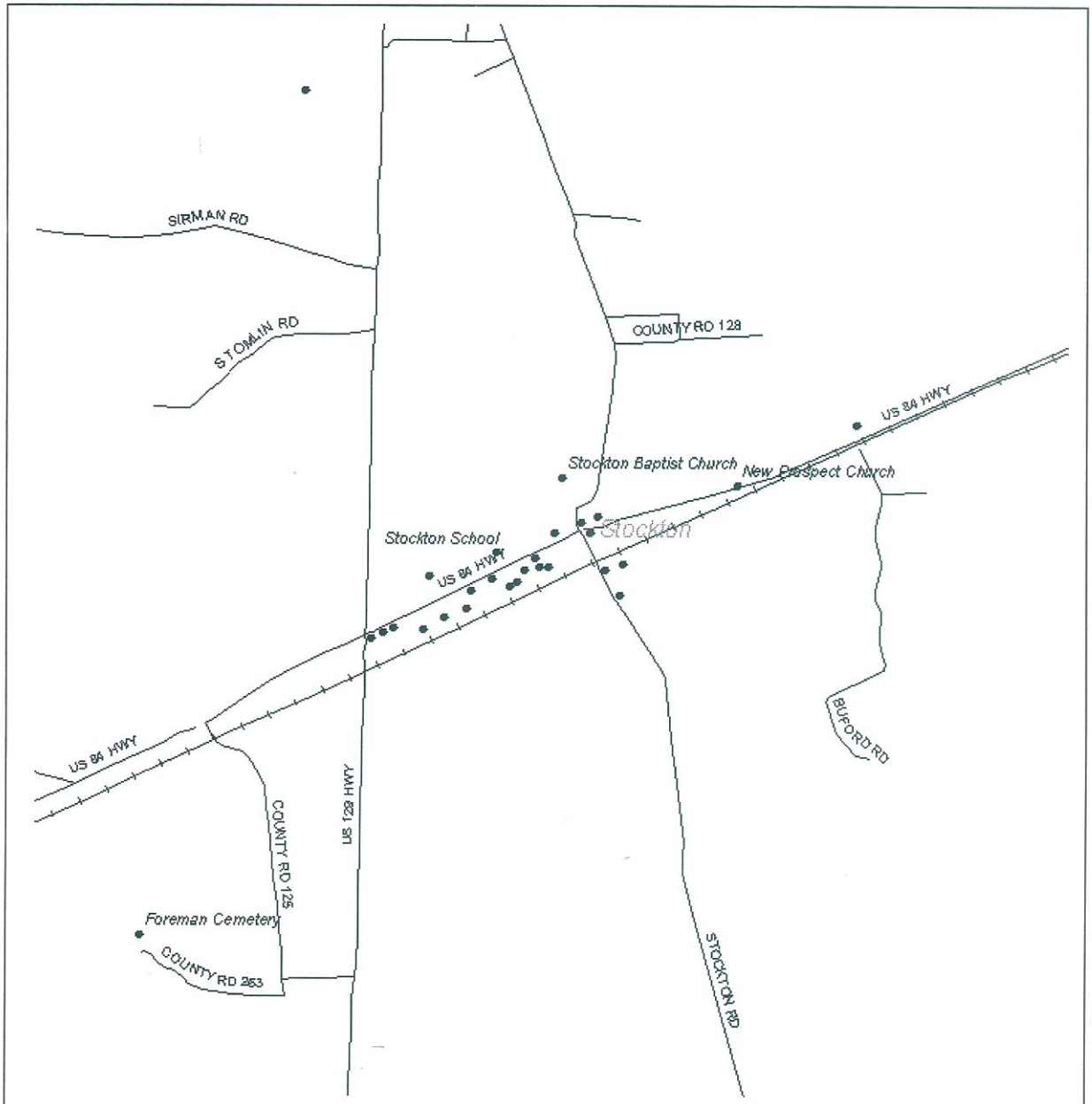
Encourage elected and appointed officials to be supportive of preservation in their decision-making. Develop and implement educational materials for new officials and routinely seek outside professional advice regarding preservation.



MAP 3-12 LANIER COUNTY HISTORIC RESOURCES

Source: SGRDC Field Survey, 2005
Maps: South Georgia Regional Development Center - GIS, 2005

MAP 3-13 CITY OF LAKELAND HISTORIC RESOURCES



Source: SGRDC Field Survey, 2004
Maps: South Georgia Regional Development Center - GIS, 2004

MAP 3-14 STOCKTON AREA HISTORIC RESOURCES