

CHAPTER FIVE: NATURAL RESOURCES

This portion of the plan addresses the natural resources in Hart County. Knowledge regarding such resources is important to their protection and conservation. Awareness of the resources supporting natural systems allows future development to coexist with critical natural systems in a way which ensures the viability of resources in the county in years to come. The Natural Resources of Hart County are unique and have been an asset that has attracted significant development and investment in the County especially around Lake Hartwell.

5.1. Physiography and Topography.

It is important to consider the topography and slope of an area when planning development since these are crucial factors in determining the suitability of certain areas for development. Man-made additions to the environment can cause damage such as increased stormwater runoff and soil erosion, if not sited properly. Certain areas may be subject to flooding, while others may be too steep to be safely built upon.

Hart County is located in the Midland Georgia Subsection of the Southern Piedmont Section of Georgia. The Southern Piedmont is located within the Piedmont Province of the state. The terrain is characterized as gently rolling topography ranging from 1000 feet to 500 feet. Stream valleys are generally deep and narrow and have narrow, rounded stream divides.

The county is bounded to the north and the east by Lake Hartwell which covers approximately 17,000 acres of land area in Hart County. The Tugaloo and Savannah Rivers which are a part of Lake Hartwell form the eastern boundary of the county and state. No other major rivers pass through the county, although there are numerous small streams in the area. Shoal Creek and Little Shoal Creek bisect the northwestern portion of the county. On the southern section of the County, below the Hartwell dam, the Savannah River flows into Lake Russell.

Beaverdam and Pruitt Creeks are prominent in the southwestern portion of the county. Little Coldwater and Boyd's Creeks run in an easterly direction from a point south of U.S. 29, approximately four miles below Hartwell, into Elbert County. Slightly to the north, Cedar Creek flows easterly into the Savannah River.

Topography in the Hart County area is generally comprised of large mildly rolling expanses. Elevations range from 700 feet above sea level near Lake Hartwell to 900 feet in the western portion of the county. Steep slopes border the streams in the northwestern and northeastern parts of the county. By and large, however, slopes do not pose substantial limitations on development in Hart County.

MAP 5.1 Not Used

5.2. Geology and Mineral Resources.

Geologic formations in Hart County include several types of igneous and metamorphic rocks. A large portion of the northern section of the county, as well as an area in southwestern Hart County are composed of intermediate gneiss type formations. Sections of undifferentiated granite are located in the central portion of the county. The majority of the county, however, is underlain with aluminous schist type rocks. Geological processes have resulted in a fault line in the southeast corner of the county.

A variety of minerals are found in the county, including mica and sillimanite. Mica is located in the middle portion of Hart County, and is also indicated in several spots north of Hartwell, near the lake. It is actively mined in Hart County and used for pigments and fillers. Patches of sillimanite are found in central and southern Hart County.

It is also indicated in dispersed locations throughout the county including the vicinities of Vanna and Bowersville, as well as north of Hartwell near the lake. Other minerals include large sections of granite, scattered locations of gold, and iron.

5.3. Soils.

A variety of soils are found in Hart County. The most common soil type (Madison sandy loam, 2-10% slopes), which comprises 27.9% of all soils in the county, is suitable for septic tank use as well as for crop production. Table 5-1 indicates the soil types found in Hart County as well as their suitability for certain uses.

In the Comprehensive Plan, the purpose of soils analysis is to identify those soils which indicate where various types of activity should or should not occur. Certain soils have outstanding capacity for agricultural uses, while others may be unsuitable for crop production. In addition, other soil types can not be used for adequate disposal of sewage. Since over 95% of soils in the county are suitable for septic tank use, soils pose few restrictions on residential development using septic tanks.

Approximately 75% of land in the county is suitable for various types of crop production, excluding hay. In the soil survey for Hart County, soils are classified based upon general suitability for farming. For purposes of this plan, soils rated as a Class I or Class II are categorized as the prime agricultural soils in Table 5-1.

Class I soils have few limitations that restrict their use. Class II soils generally have moderate limitations that reduce the choice of plants or that require moderate conservation practices. Together, Class I and II soils comprise 48,123 acres or 33% of all soils countywide. Any proposed site is required by local ordinance to be carefully studied to determine that the soil can support the intended structure and sewer disposal.

Since few if any significant development limitations are posed by the soil characteristics in Hart County, no special measures are called for in this plan to address protection and conservation of soils.

TABLE 5-1: SOIL TYPES AND SELECTED CHARACTERISTICS

HART COUNTY SOIL ACRES PERCENT TOTAL LAND AREA ADVERSE FOR SEPTIC TANK USE PRIME AGRICULTURAL USE UNSUITABLE FOR CROP PRODUCTION (excluding hay)

TABLE 5-1
SOIL TYPES AND SELECTED CHARACTERISTICS
HART COUNTY

SOIL	ACRES	PERCENT TOTAL LAND AREA	ADVERSE FOR SEPTIC TANK USE	PRIME AGRICULTURAL USE	UNSUITABLE FOR CROP PRODUCTION (EXCLUDING HAY)
Alluvial land	1,687	1.3	X		
Alluvial land, wet	618	.4	X		
Altavista fine sandy loam, 2 to 6 percent slopes	170	.1		X	
Appling sandy loam, 2 to 6 percent slopes, eroded	5,787	3.9		X	
Appling sandy loam, 2 to 6 percent slopes	847	.6		X	
Appling sandy loam, 6 to 10 percent slopes, eroded	3,634	2.3			
Appling sandy clay loam, 2 to 6 percent slopes, severely eroded	267	.2			
Appling sandy clay loam, 6 to 10 percent slopes, severely eroded	681	.5			
Appling sandy clay loam, 10 to 15 percent slopes, severely eroded	677	.5			
Appling loamy coarse sand, thin solum, 2 to 6 percent slopes	768	.5		X	
Appling loamy coarse sand, thin solum, 6 to 10 percent slopes	191	.1			
Duncombe loamy sand	114	.1			
Cecil sandy loam, 2 to 6 percent slopes	1,144	.8		X	

SOIL	ACRES	PERCENT TOTAL LAND AREA	ADVERSE FOR SEPTIC TANK USE	PRIME AGRICULTURAL USE	UNSUITABLE FOR CROP PRODUCTION (excluding hay)
Cecil sandy loam, 2 to 6 percent slopes, eroded	11,608	7.9		X	
Cecil sandy loam, 6 to 10 percent slopes, eroded	9,735	6.6			
Cecil sandy loam, 10 to 25 percent slopes, eroded	5,809	3.9			
Cecil sandy clay loam, 2 to 6 percent slopes, severely eroded	1,510	1.0			
Cecil sandy clay loam, 6 to 10 percent slopes, severely eroded	5,251	3.6			
Cecil sandy clay loam, 10 to 15 percent slopes, severely eroded	7,233	4.9			X
Cecil sandy clay loam, 15 to 25 percent slopes, severely eroded	3,217	2.2			X
Chewacla soils	2,302	1.6	X		
Colfax sandy loam, 2 to 6 percent slopes	593	.4			
Congaree sandy loam, local alluvium	461	.3		X	
Congaree soils	1,835	1.2	X		
Durham loamy coarse sand, thin solum, 0 to 2 percent slopes	587	.4		X	
Durham loamy coarse sand, thin solum, 2 to 6 percent slopes	894	.6		X	
Grover sandy loam, 2 to 6 percent slopes, eroded	1,595	1.1		X	

SOIL	ACRES	PERCENT TOTAL LAND AREA	ADVERSE FOR SEPTIC TANK USE	PRIME AGRICULTURAL USE	UNSUITABLE FOR CROP PRODUCTION (excluding hay)
Grover sandy loam, 6 to 10 percent slopes, eroded	894	.6		X	
Gulfed land	38	.0			
Lloyd soils, 2 to 6 percent slopes, eroded	643	.4		X	
Lloyd soils, 6 to 10 percent slopes, eroded	456	.3			
Lloyd clay loam, 2 to 6 percent slopes, severely eroded	360	.2			
Lloyd clay loam, 6 to 10 percent slopes, severely eroded	412	.3			
Lloyd clay loam, 10 to 25 percent slopes, severely eroded	469	.3			X
Local alluvial land, wet	164	.1	X		X
Louise fine sandy loam, 6 to 15 percent slopes	780	.5			
Louisa fine sandy loam, 15 to 25 percent slopes	1,131	.8			X
Louisburg sandy loam, 6 to 15 percent slopes, eroded	709	.5			X
Louisburg sandy loam, 15 to 25 percent slopes, eroded	376	.3			X
Madison sandy loam, 2 to 6 percent slopes, eroded	20,930	14.2		X	
Madison sandy loam, 2 to 6 percent slopes	1,220	.8		X	
Madison sandy loam, 6 to 10 percent slopes, eroded	20,226	13.7			

SOIL	ACRES	PERCENT TOTAL LAND AREA	ADVERSE FOR SEPTIC TANK USE	PRIME AGRICULTURAL USE	UNSUITABLE FOR CROP PRODUCTION (excluding hay)
Madison sandy loam, 10 to 15 percent slopes, eroded	3,302	2.2			
Madison sandy loam, 15 to 25 percent slopes, eroded	973	.7			X
Madison gravelly sandy loam, thin solum, 2 to 6 percent slopes, eroded	258	.2		X	
Madison gravelly sandy loam, thin solum, 6 to 10 percent slopes, eroded	959	.7			
Madison gravelly sandy loam, thin solum, 10 to 15 percent slopes, eroded	609	.4			
Madison gravelly sandy loam, thin solum, 15 to 25 percent slopes, eroded	1,060	.7			X
Madison sandy loam, 2 to 6 percent slopes, severely eroded	1,239	.8			
Madison sandy loam, 6 to 10 percent slopes, severely eroded	8,364	5.7			
Madison sandy clay loam, 10 to 15 percent slopes, severely eroded	9,834	6.7			X
Madison sandy clay loam, 15 to 25 percent slopes, severely eroded	1,535	1.0			X
Mine pits and dumps	175	.1			X
Rock land	87	.1			X
Wehadkee soils	301	.2	X		X
Wickham fine sandy loam, 2 to 6 percent slopes, eroded	337	.2		X	

SOIL	ACRES	PERCENT TOTAL LAND AREA	ADVERSE FOR SEPTIC TANK USE	PRIME AGRICULTURAL USE	UNSUITABLE FOR CROP PRODUCTION (excluding hay)
Wickham clay loam, 6 to 10 percent slopes, severely eroded	193	.1			
Total acreage of soils mapped in county	147,480	100.0			
Hartwell reservoir acreage	17,000				
Total acreage in county	164,480				

Source: United States Department of Agriculture, Soil Conservation Service. Soil Survey, Hart County, Georgia. Issued November, 1963.

Source: United States Department of Agriculture, Soil Conservation Service. Soil Survey, Hart County, Georgia. Issued November, 1963.

5.4. Prime Agricultural and Forest Lands.

Studies by the Soil Conservation Service have identified areas of prime farmland as well as additional farmland of statewide importance. "Prime farmland" is defined as ...land best suited for producing food, feed, forage, fiber, and oilseed crops, and also available for these uses. It has the soil quality, growing season, and moisture supply needed to produce sustained good yields of crops economically if treated and managed, including water management, according to modern farming methods.

"Additional farmland of statewide importance" is defined as land...that is important for the production of food, feed, fiber, forage, and oilseed crops. It economically produces good yields if the soils are drained or are drained and protected against flooding, if erosion control practices are installed, or if additional water is applied to overcome droughts.

According to a generalized statewide map, prime farmland and additional farmland of statewide importance comprise approximately 50% to 100% of the land in Hart County. The remaining areas which have characteristics limiting usage as prime farmland, primarily a high seasonal water table, are located in the northern portion of the county.

As mentioned previously the local soil survey indicates that the prime agricultural soils comprise over one-third of the soils (and land area) in Hart County. Prime agricultural lands should be preserved to the greatest extent possible. Certain programs such as soil conservation tax exemptions are heavily utilized in Hart County. These programs encourage conservation of agricultural lands.

In the late 1990's a zoning land use control ordinance was presented. This effort was overwhelming defeated. One of the natural assets that many residents of the County have indicated is important for preservation is the open space and agricultural lands. However without land use controls, protection of agricultural lands can only be accomplished through voluntary programs that are available to protect this resource.

5.5. Wetlands.

Wetlands are those areas that are inundated or saturated by surface or groundwater at a 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 swamps, marshes, bogs and similar areas. The ecological parameters for designating wetlands include hydric soils, hydrophytic vegetation and hydrological conditions that involve a temporary or permanent source of water to cause soil saturation. Fresh water wetlands and aquatic habitats are classified by the Georgia Department of Natural Resources into the following categories:

- Open Water - Areas of open water, primarily reservoirs, ponds, lakes, rivers, and estuaries.
- Non-Forested Emergent Wetlands - freshwater marshes dominated by a variety of grasses, sedges, rushes, and broad leaved aquatic associated with streams, ponded areas, and tidally-influenced non-saline waters.

- Scrub/Shrub Wetlands - non-forested areas dominated by woody shrubs, seedlings, and saplings averaging less than 20 feet in height; these wetlands may intergrade with forested wetlands, non-forested emergent wetlands, and open water.
- Forested Wetlands - natural or planted forested areas having a dominant tree crown closure or hardwoods, pines, gums, cypress, or any combination of these types. These areas are usually in stream or river floodplains, isolated depressions, and drainways, and contain standing or flowing water for a portion of the year.

Subcategories:

- Hardwood floodplain forests
- Coniferous floodplain forests
- Mixed floodplain forests
- Non-alluvial forested wetlands
- Altered Wetlands - areas with hydric soils that have been denuded of natural vegetation and put to other uses, such as pastures, row crops, etc., but that otherwise retain certain wetland functions and values.

Table 5-2 indicates important values that wetlands provide, while Table 5-3 provides typical vegetation found in different types of wetlands.

TABLE 5-2: MAJOR WETLAND VALUES

SOCIOECONOMIC VALUES	ENVIRONMENTAL QUALITY VALUES
<ul style="list-style-type: none"> ° Flood Control ° Wave Damage Protection ° Erosion Control ° Groundwater Recharge & Water Supply ° Timber & Other Natural Resources ° Energy Source (peak) ° Livestock Grazing ° Fishing & Shellfishing ° Hunting & Trapping ° Recreation ° Aesthetics ° Education & Scientific Research 	<ul style="list-style-type: none"> ° Water Quality Maintenance ° Pollution Filter ° Sediment Removal ° Oxygen Production ° Nutrient Recycling ° Chemical & Nutrient Absorption ° Aquatic Productivity ° Microclimate Regulator ° World Climate (Ozone layer)
FISH AND WILDLIFE VALUES	
<ul style="list-style-type: none"> ° Fish & Shellfish Habitat ° Waterfowl & Other Bird Habitat ° Forbearer & Other Wildlife Habitats 	

Source: American Planning Association, Planning Advisory Service. 1988. *Protection of Non-Tidal Wetlands*. (Report Number 412/413).

TABLE 5-3: VEGETATION COMMON TO NON-TIDAL WETLANDS TYPE OF WETLAND VEGETATION

Emergent Wetlands:

Freshwater Cattails, wild rice, sedges, rushes, bulrushes, spikerushes, burreeds, rice cutgrass, maidencane, reed, arrowheads, pickerelweed, smartweeds, bluejoint, whitetop, reed, canary grass, manna grass, asters, goldenrods, marsh fern,

Pocosins

Pond pine, sweet bay, inkberry, fetterbush, titi, red bay, wax myrtle

Others

Buttonbush, alders, willows, dogwoods, red maple sapplings, cottonwood sapplings

Source: American Planning Association, Planning Advisory Services. 1988.

Protection of Non-Tidal Wetlands. (Report Number 412/413).

The probable existence of wetlands can be identified by the existence of hydric soils, as well as by analysis of land cover data available from the Georgia Department of Natural Resources. Table 5-4 lists the hydric soils found in Hart County.

TABLE 5-4: HYDRIC SOILS - HART COUNTY

MAP SYMBOL	SOIL NAME	COMMON LOCATION(S)
AVP	Alluvial land, wet	Along small streams
CFS	Chewacla soils	Pastures, mixed hardwoods
LCN	Local alluvial land, wet	Base of slopes, low areas at head of intermittent drainageways

Source: USDA. Soil Survey Hart County, Georgia, 1963.

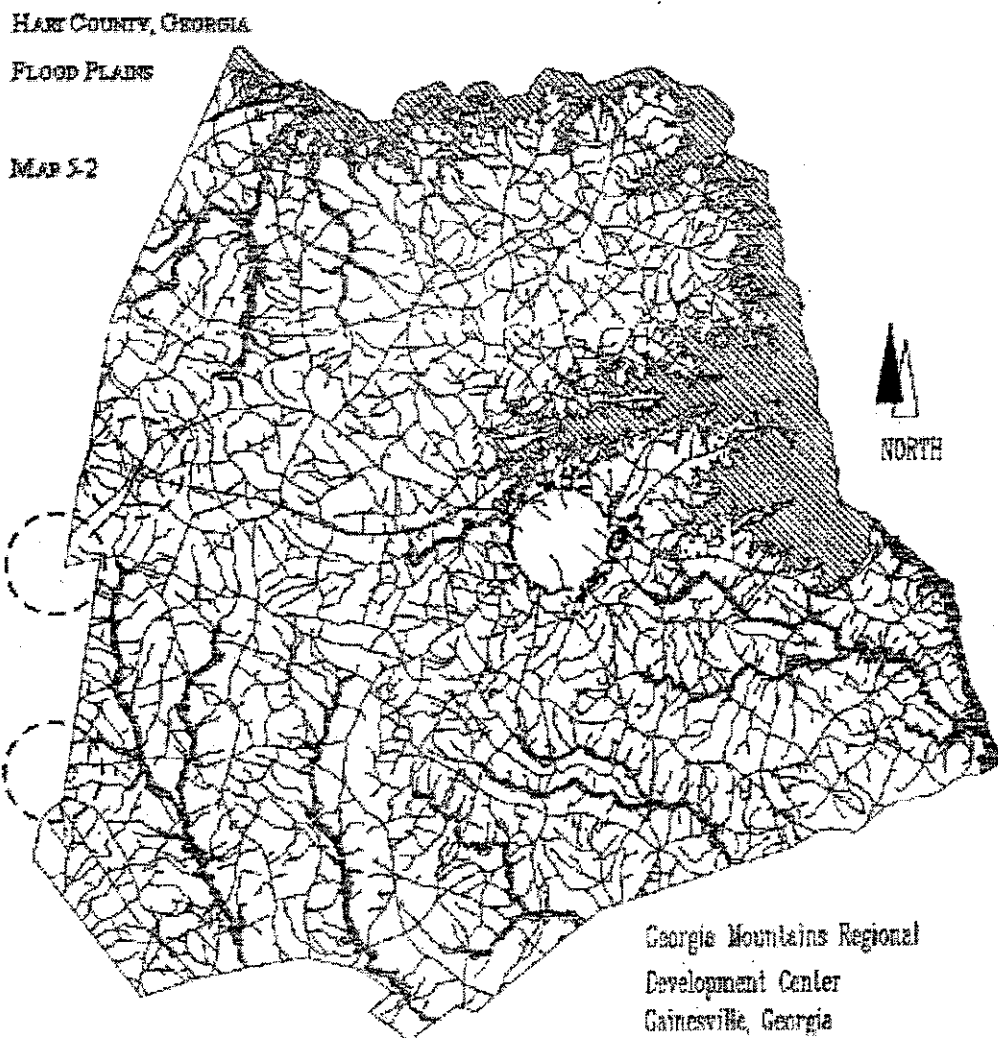
Activities in wetlands are controlled by a federal permitting process which includes a public interest review. Most development in wetlands requires a Section 404 (of the Clean Water Act) permit, which is obtained from the U.S. Army Corps of Engineers. Current federal regulations aim to avoid alterations or degradations of wetlands. The future land use plans delineate major known wetlands as "conservation."

If the wetlands identified in the future land use plans are retained as conservation areas proposed in these plans, then no adverse effects are anticipated on the public health, safety and welfare, or the property of others; no known unique or significant flora or fauna will be impacted; no adverse effects will occur on the flow or quality of water or cause substantial additional soil erosion; no adverse effects are expected to occur that

would affect fishing or the recreational use of wetlands; no significant impact is anticipated on significant historical and archaeological resources; and since the plan discourages alteration of identified wetlands, no adverse impacts on adjacent natural areas are likely to occur. The plan also supports the preservation of any wetlands created for mitigation purposes under Section 404 of the Clean Water Act.

5.6. Floodplains.

Floodplains north of Bowersville include narrow land areas along Wrights Branch, Pooles, Shoal, and Little Shoal Creeks. Floodplains in the southwestern portion of the county are located along Beaverdam, Little Beaverdam, and Pruitt Creeks. Areas of floodplains in the southern middle section of unincorporated Hart County include corridors along Boyds, Coldwater, Little Coldwater, and Robinson Branch Creeks. Finally, floodplains along Little Cedar and Cedar Creeks can be found in the southeast portion of the county. Floodplains in Hart County are indicated on Map 5-2. Hart County now participates in the National Flood Insurance Program.



5.7. Water Supply Watersheds.

Concern regarding the quality of public water supplies prompted the state to develop land management measures to protect water sources.

Man's Impact on Water Quality

Human activities on water supply watersheds often disrupt natural processes that help maintain water quality. Frequently human activities involve clearing of vegetation, soil disturbance, alteration of floodplains, or some combination of these impacts. Loss of vegetation can increase the rate at which stormwater runs across the ground surface. Rapid runoff increases the amount of pollution in transport and also increases the ability of water to dislodge additional contaminants. In addition to moderating runoff rate undisturbed vegetation also traps sediment and other contaminants.

Undisturbed soils and vegetation can encourage movement of water into the soil (infiltration). Water that infiltrates into the ground, rather than running off across the soil surface, comes in contact with chemical and biological processes that hold and break down pollutants. Finally, as well as disrupting these natural processes that control water quality impacts, land disturbances and development create sources of water quality contaminants.

If human activities involve paving of parking areas and roads, or construction of buildings, water quantity as well as water quality can be affected. Paved or impervious surfaces decrease infiltration of water into the soil and cause precipitation to run off more rapidly. The net result is that after storms water quickly moves out of the drainage basin and does not contribute to stream baseflow. The supply of raw water for municipal systems can become less reliable. In addition, as described above, the increased rate of runoff increases movement of contaminants into streams and lakes.

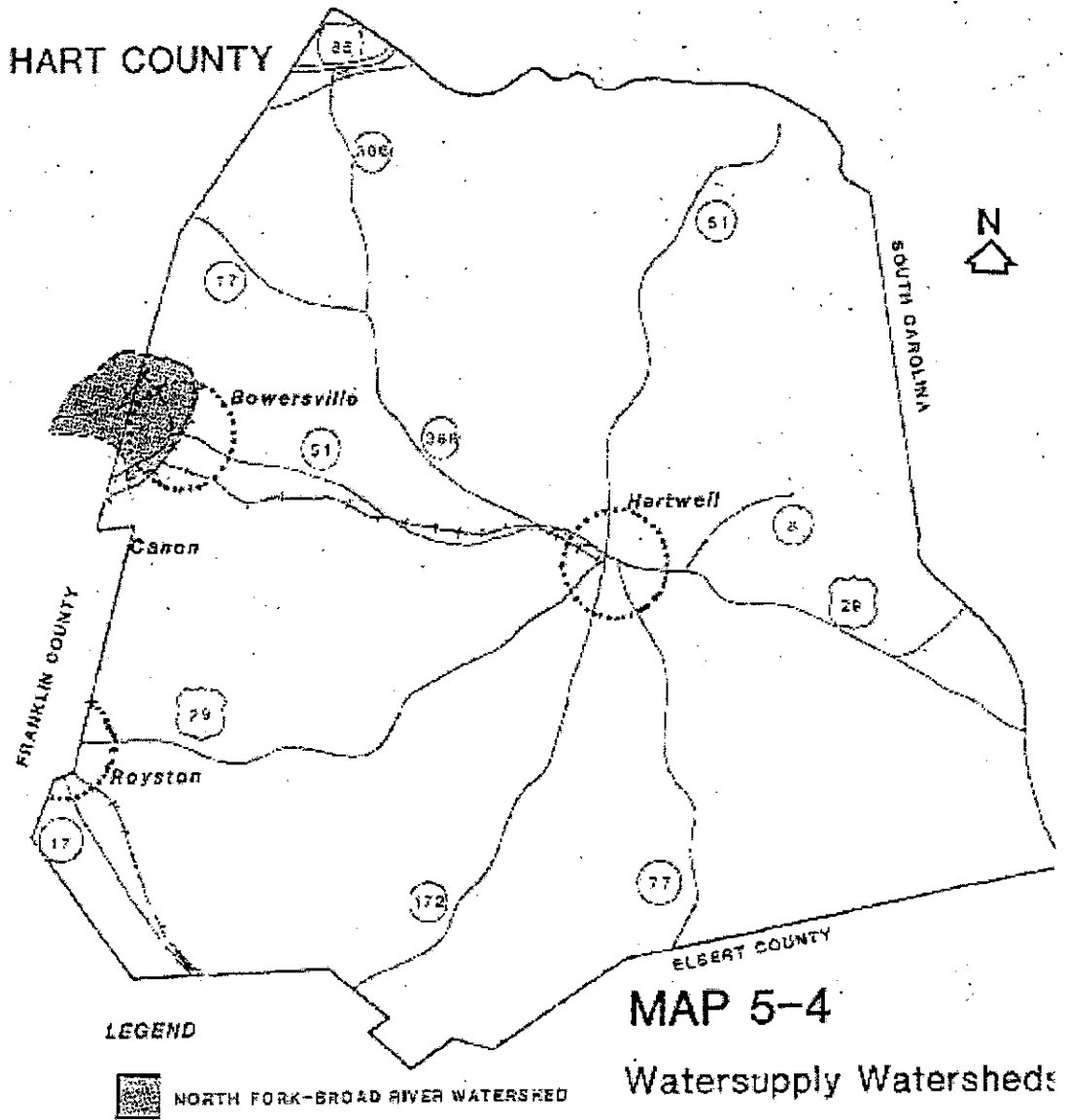
The Georgia Department of Natural Resources has developed standards for the protection of public water supply watersheds. Different criteria apply to large and small water-supply watersheds. Large watersheds are those 100 square miles or more in size, while small water-supply watersheds encompass less than 100 square miles.

The City of Hartwell utilizes water from an intake on Lake Hartwell. Public water supply intakes on Lake Hartwell are exempt from these standards because it is a reservoir owned/operated by the U.S. Army Corp of Engineers. Although there are no other public water intakes located in the county, the watershed that the City of Royston uses extends into Hart County. Therefore, portions of Hart County are subject to watershed protection requirements.

The City of Royston, located in Franklin and Hart Counties, has a water intake located in the North Fork Broad River Watershed. The Watershed extends into Hart County as

indicated on Map 5-4. Affected areas include portions of unincorporated Hart County. The North Fork Broad River Watershed is a large watershed with a drainage area of 139 square miles.

MAP 5-4 North Fork, Broad River Water Supply Watershed



The Watershed Protection Plan for the water-supply watersheds in Hart County is presented below.

North Fork Broad River Watershed Protection Plan

1. Applicability.

This plan shall apply to all properties located within the North Fork Broad River water

supply watershed, as generally indicated on Map 5-4.

2. Prohibited Uses.

2.1. Hazardous waste treatment and disposal facilities.

2.2. New sanitary landfills, unless provided with synthetic liners and leachate collection systems.

2.3. Hazardous materials handling facilities, unless operations are performed on impermeable surfaces having spill and leak collection systems prescribed by the Georgia Department of Natural Resources.

3. Uses Exempt From Stream Corridor Buffer and Setback Provisions.

3.1. Existing Uses.

Any land use within the North Fork Broad River water supply watershed existing prior to the adoption of regulations by affected municipalities implementing this plan is exempt.

3.2. Agriculture and Forestry.

Agricultural and forestry uses are exempt, provided such activities are consistent with best management practices established by the Georgia Forestry Commission or the Georgia Department of Agriculture, and provided such activities shall not impair the quality of the drinking water stream.

3.3. Mining.

Mining activities are exempt, if permitted by the Georgia Department of Natural Resources pursuant to the Georgia Surface Mining Act of 1968, as amended.

3.4. Utilities.

Public or private water or sewer piping systems, water or sewer pumping stations, electric power lines, fuel pipelines, telephone lines, roads, driveways, bridges, river/lake access facilities, storm water systems, railroads and other similar utilities and road crossings are exempt, if they cannot feasibly be located outside stream corridor buffer and setback areas, subject to the following conditions:

- 1) The utilities shall be located as far from the stream bank as reasonably possible.
- 2) The installation and maintenance of the utilities shall be such to protect the integrity of the buffer and setback areas as best as reasonably possible.
- 3) The utilities shall not impair the quality of the drinking water stream. Implementation of this watershed protection plan is proposed through regulations to be adopted by the participating local governments in 1996 (see the work programs).

5.8. Groundwater Recharge Areas.

The minimum planning standards for local plans require that local governments address protection of significant groundwater recharge areas. A recharge area is any portion of the earth's surface where water infiltrates into the ground to replenish an aquifer. The Georgia Department of Natural Resources and the United States Geologic Survey have identified and mapped "significant" groundwater recharge areas and promulgated standards for their protection based on their level of pollution susceptibility. Significant recharge areas are identified based generally on outcrop area, lithology soil type and thickness, slope, density of lithologic contacts, geologic structure, the presence of Karst, and potentiometric surfaces.

There are nine significant groundwater recharge areas in Hart County. All recharge areas in Hart County are in low pollution susceptibility areas. Map 5-5 indicates the

approximate location of the recharge areas. All except one recharge area are located entirely in unincorporated portions of the county; one recharge area falls in the northeast portion of Bowersville.

Protection measures identified by the Department of Natural Resources are based on pollution susceptibility, type of soils, and slope. The Comprehensive Plan supports the protection of these areas according to the stated criteria. State protection criteria applicable in the Hart County area are described briefly in Figure 5-1.

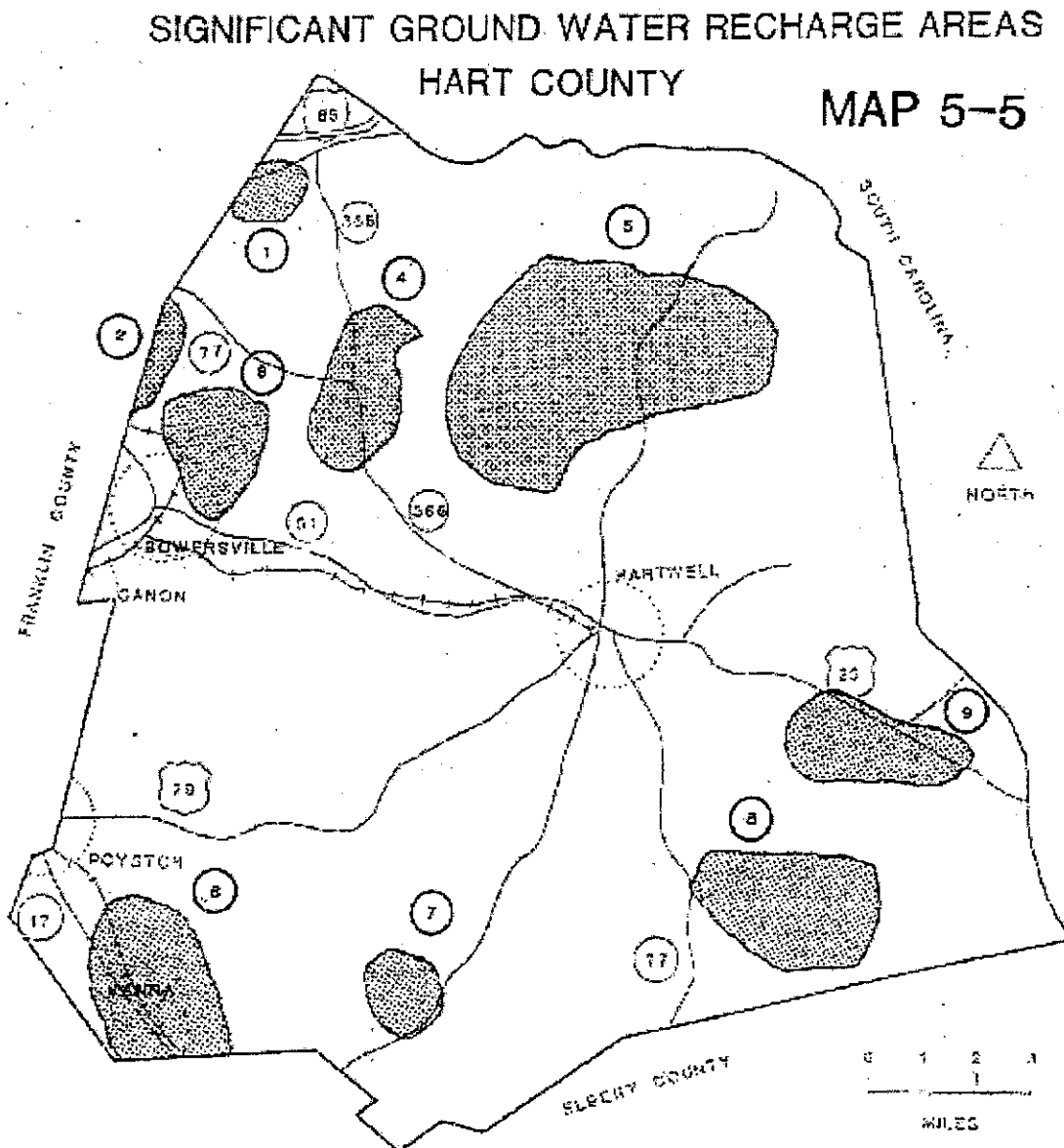


FIGURE 5-1: Criteria for Significant Groundwater Recharge Areas

- a. The Department of Natural Resources (DNR) shall not issue any permits for new sanitary landfills not having synthetic liners and leachate collection systems
- b. DNR shall not issue any new permits for the land disposal of hazardous wastes.
- c. DNR shall require all new facilities permitted or to be permitted to treat, store, or dispose of hazardous waste to perform such operations on an impermeable pad having a spill and leak collection system.
- d. New above-ground chemical or petroleum storage tanks, having a minimum volume of 660 gallons, shall have secondary containment for 110% of the volume of such tanks or 110% of the volume of the largest tank in a cluster of tanks. Such tanks used for agricultural purposes are exempt, provided they comply with all Federal requirements.
- e. New agricultural waste impoundment sites shall be lined if they are within a low pollution susceptibility area and exceed 50 acre-feet.
- f. New homes serviced by septic tank/drain field systems shall be on lots having the following minimum size limitations as identified on Table MT-1 of the Department of Human Resources' Manual for On-Site Sewage Management Systems.
- g. New mobile home parks served by septic tank/drain field systems shall have lots or spaces having the following size limitation as identified on Table MT-2 of the Department of Human Resources' Manual for On-Site Sewage Management Systems.
- h. If a local government requires a larger lot size than that required by (f) above for homes or by (g) above for mobile homes, the larger lot size shall be used.
- i. Local governments at their option may exempt from the requirement of (f) or (g) any lot of record on the date of their adoption of these lot size standards.
- j. No construction may proceed on a building or mobile home to be served by a septic tank unless the county health department first approves the proposed septic tank installation as meeting the requirements of the Department of Human Resources Manual and (f), (g), (h), and (i) above.
- l. New facilities which handle hazardous materials, of types and in amounts determined by DNR, shall perform their operations on impermeable surfaces having spill and leak collection systems, as prescribed by DNR.

Source: Georgia Department of Natural Resources, Rules for Environmental Planning Criteria.

An analysis of how the protection criteria apply to minimum lot sizes for homes utilizing septic systems in the nine groundwater recharge areas in Hart County is provided in Table 5-5.

TABLE 5-5 PROTECTION CRITERIA FOR LOW POLLUTION SUSCEPTIBILITY

TABLE 5-5

NUMBER ON MAP CORRESPONDING TO LOCATION	LOCATION OF AREA	PREDOMINANT SOIL TYPES (Symbols)	ESTIMATED DHR SOIL GROUPING ¹	PREDOMINANT SLOPE RANGE	SINGLE-FAMILY HOME MINIMUM LOT SIZE (Sq. Ft.) ^{2,4}	MOBILE HOME MINIMUM LOT SIZE (Sq. Ft.) ^{3,4}
1	northwest portion Hart County, south of I-85	CYB2, CYC2, MIB3, MIC3, MID3, CZC3, CZB3	6 (3)	2-25%	59,400	19,800
2	western border Hart County, south of SR 77	AmB2, AmC2, CZC3, CZD3	6 (3)	2-25%	59,400	19,800
3	western Hart County, north of Bowersville. Includes northeastern Flowersville	MgB2, MIC3, MID3, MIE3, CYC2, CZC3, MgC2	6 (3), 3	2-25%	59,400	19,800
4	western Hart County, traverses SR 366 and SR 77	LeC2, LeB3, CZC3, CZD3, CYB2, CYC2, LeB3, MgC2, MgB2	6 (3), 3	2-25%	59,400	19,800
5	northern Hart County, north of Hartwell	AmB2, CYB2, MIC3, AmC2, MgB2, CYC2, MgC2, MgB, CYB, MIC3	6 (3), 3	2-25%	59,400	19,800
6	southwestern Hart County, in SR 17 and Vanna area. Includes area within old Vanna limits	CYC2, CYB2, MgC2, AmB2, MgB2, DoB, CYE2, AoC, AoB	6 (3), 3	0-25%	59,400	19,800
7	southwestern Hart County, east of old Vanna limits	MgC2, B5, MgB2, MgB, MIC3, MID3	6(3), 3	0-25%	59,400	19,800
8	southeastern Hart County, east of old Vanna limits	MIC3, CYB2, MgB2, CYC2, LLYC2, MIC3, CYB, AmB2	6 (3), 3	2-25%	59,400	19,800
9	southeastern Hart County, at SR 129	MgC2, MgB2, CYH2, CZC3, CYB	6 (3), 3	2-25%	59,400	19,800

1. The Department of Human Resources "Soil Grouping for Use with Minimum Lot Size Table."

2. 100% of DHR minimum lot sizes based on "Part Five" standards, where served by on site septic tank systems. 3. In mobile home parks. Foot note number 2 also applies. 4. Due to variety of soils and frequency of class III soils (unsuitable for septic tank), site specific soil tests are necessary.

5.9. Protected River Corridors.

State defined standards indicate that rivers flowing continuously throughout the year with an average annual flow of at least 400 cubic feet per second are subject to provisions for river corridor protection. There are no rivers to be protected in Hart County.

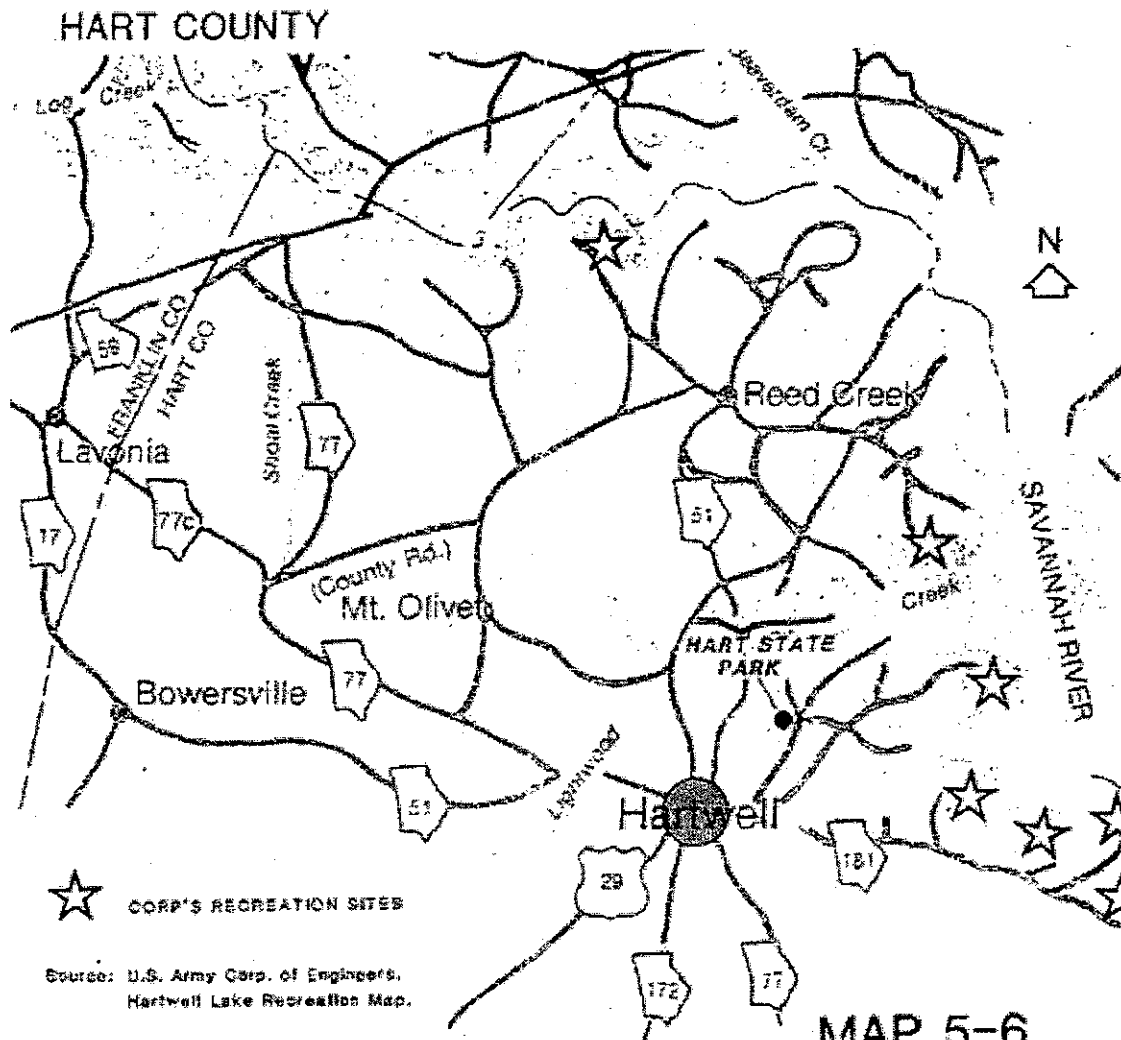
5.10. Plant and Animal Habitats.

There are no endangered plants in Hart County identified by the Georgia Department of Natural Resources. However, GA DNR has identified "Georgia Plume" (*Elliottia Ralemosa*) to be a threatened plant species. Several types of wildlife and fish are found in the Hart County area.

Bobwhites, mourning doves, rabbits, squirrels, and non-game birds of many kinds are common throughout the county. Deer and wild turkey require extensive areas of well-watered woodland, such as the area surrounding the Hartwell Reservoir. The long, narrow bottom lands along the streams are well suited to wild ducks and beavers. The Hartwell Reservoir and farm ponds provide excellent fishing.

The principal game fish in the farm ponds and streams are bass, bluegill, and channel catfish. (Soil Conservation Service, 1963 pp 24-25) Bream, Largemouth Bass, Striped Bass, Hybrid Bass, Crappie Bass and Walleye are fish commonly found in Lake Hartwell. Both the Hybrid Bass and the Walleye are not native to the area and are stocked by the South Carolina Wildlife and Marine Resources Department and the Georgia Department of Natural Resources.

The goal of the Wildlife Management Program operated by the U.S. Army Corps of Engineers is to ensure a variety of habitats suitable for a variety of wildlife. Major efforts include a forest management program, the location of nesting boxes for birds and mammals, and planting of food plots. Community education programs have been initiated by the local Soil Conservation Service Office. Other groups including Ducks Unlimited and 4-H are actively educating the community on awareness and protection of sensitive plant and animal habitat as well as threatened and protected species. Future land use strategies will need to pay attention to this issue as Hart County develops, especially areas in the vicinity of Lake Hartwell. Protected wildlife which may be found in the Hart County area include the Red-cockaded woodpecker (*Picoides borealis*) which are found primarily in older pine forests and the Southern Bald Eagle (*Haliaeetus loucocephalus*) which hunt in wetland areas and roost in undisturbed lakeshore areas with large trees.



MAP 5-6

State Parks and Recreation Areas

5.11. Major Park, Recreation and Conservation Areas.

Lake Hartwell, controlled by the Corps of Engineers, is comprised of 55,000 acres of water. The 17,000 acres of water and 215 miles of shoreline which are contained in Hart County provide numerous recreational opportunities. Three recreation areas operated by the Corps of Engineers are located on the lake in Hart County. All have boat ramps, picnic shelters, and playgrounds. One site has a beach.

There are nine public access points to the lake, in addition to access provided at full recreation areas and state park facilities. Five campgrounds operated by the Corps are located in Hart County. There are also two marinas lessee operated in Hart County. Three boat access points are operated by the County. The Hartwell Lake Natural Resources Management Center (and Visitor Center) is located at the Hartwell Dam, seven miles east of Hartwell off U.S. 29. Tours of the dam are also available. Hart State Park, located 1.4

miles north of Hartwell off U.S. 29, offers a variety of facilities and activities.

The park, located at the edge of Lake Hartwell, has camping sites, cottages, picnic sites, and a beach. In addition to a boat ramp and dock, fishing boat rentals are available at the park. The Hart County Wildlife Management Area is a 1,000 acre state-owned preserve located in the southeast portion of the county, just north of SR 77. The area is managed for small game and non-game animal species. In addition, limited planting of seed-bearing type plants are made. This state-owned property is popular for hunting. Horseback riding and primitive camping are also allowed in the area. Map 5-6 indicates the location of Hart State Park, as well as Corps of Engineers' recreation sites in Georgia on Lake Hartwell.

Other recreational areas in close to Hart County include Tugaloo and Victoria Bryant State Parks in Franklin County and Traveler's Rest State Park in Stephens County. Watson Mill Bridge State Park and Bobby Brown State Park in Elbert County are also quite accessible from the southern portion of Hart County. A number of Corps of Engineers and South Carolina state facilities are found on the South Carolina side of Lake Hartwell.

5.12. Scenic Views and Sites

An inventory of scenic views and sites was taken during the land use inventory prepared in the summer of 1991. Such areas are indicated on the Existing Land Use Map. In general, these scenic views consisted of wide expanses of rolling farmlands. The comprehensive plan supports the preservation of these areas whenever possible, but no specific measures are called for in the plan to preserve these views.

CHAPTER SIX: HISTORIC RESOURCES

Historic resources include structures and sites, rural resources, archaeological and cultural sites, and the historic environment in which they exist. They serve as visual reminders of Hart County's past, providing a link to its heritage and a better understanding of the people and events which shaped the patterns of development. Preservation of these resources makes it possible for them to continue to play an integral, vital role in the community. Because historic resources are irreplaceable, they should be protected from deterioration and the intrusion of incompatible uses. The preservation and the reuse of historic structures can attract tourism and promotes a quality of life that industry, new business, and residents find attractive in communities.

6.1. Historical Narrative.

6.1.1. Hart County

The area which is now Hart County was part of the Cherokee Nation before white settlement in the mid 1700s. Little is known about the appearance of this area during Cherokee habitation, but it is assumed that it was dominated by the natural landscape. The Indians relinquished their lands to the state through various treaties and, in turn, the state gave these lands, through a land lottery system, to veterans of the Revolutionary War. The Treaty of 1773 and the Treaty of 1783 provided the lands which formed Franklin County in 1784 and Elbert County in 1790. Portions of these two counties were used to create Hart County in 1853.

Following these treaties and the Revolutionary War, this territory was opened for colonization. Settlers, primarily from Virginia, North Carolina, and South Carolina of English, Scottish, Irish, and Welsh descent, moved into the area, obtained title to the land and began clearing the land for homesites and cultivation, in many instances with the help of their slaves. The first settlements were made adjacent to major waterways, the Savannah and Tugaloo Rivers and smaller creeks, to take advantage of the rich bottomland, the most suitable area for farming.

Adapted from Jaeger, Dale and Sybil Bowers, "National Register of Historic Places, City of Hartwell Multiple Resource Nomination," Georgia Mountains Area Planning and Development Commission, 1985: These settlers built substantial homes among their plantation holdings and some of these structures survive into the present in remote sections of the county. The less desirable back country was thinly settled and where more modest residences were built. All of these early structures were undoubtedly frame and log which utilized the available materials. According to Historical Investigations of the Richard B. Russell Multiple Resources Area, the disposal of surplus farm products became a problem as the population increased. "To minimize the difficulties and expense arising from the primitive transportation system (pole boats on the Savannah River and wagons to markets in Augusta, Athens, Atlanta, and Savannah, Georgia and Charleston, South Carolina), farmers experimented with lightweight staples - tobacco, hemp, and flax. Tobacco became the main staple crop in 1799, but due to its inferior grade it was quickly abandoned in the early 1800s. Following a diversified farm economy which produced corn, wheat, and grain for cattle, sheep and hogs, cotton began to be grown reaching a high point for the antebellum period in 1850."

On December 7, 1853, Hart County, named for Revolutionary War heroine, Nancy Hart, was created by Act of the Legislature. This Act provided for the election of five Justices of the Inferior Court who were instructed to "select and locate a site for public buildings in said new county, to purchase a tract of land for location of the county site, to divide same into lots and sell each at public sale for the benefit of said new county. . . ." A local controversy ensued over the location of the county seat town. One group favored the central point of the county identified through the survey, while another group wanted an area known as "The Center of the World," a former Cherokee Indian assembly ground. The group wanting the county seat at "The Center of the World" filed a quo warranto proceedings against the Justices of the Inferior Court and hired T.R.R. Cobb, an attorney from Athens to represent them. The Judges hired Howell Cobb, brother of T.R.R. Cobb also of Athens, as their lawyer and after a legal battle the question was decided in favor of the present location.

In May 1854 land was purchased by the Judges for the establishment of the county seat of Hart County. The first county courthouse was a two-story frame building located on Lot 1 on the northeastern side of the square in Hartwell. It was the first structure built in the new town. A two-story frame jail was built on Lot 6 and was replaced by the structure now used as the District Attorney's office in the 1890s. In 1856 a new two-story brick courthouse was constructed to replace the original. This courthouse was destroyed by fire in 1900 and was replaced in 1901 with a two-story Neoclassical style building designed by Atlanta architect J. W. Golucke. Unfortunately, this courthouse was lost to fire as well in the 1960s and was replaced by the current one-story courthouse.

As in many counties of northeast Georgia, farming was the primary way of life for most Hart County residents. This is reflected in existing historic resources such as homesteads and crossroads communities found throughout the county. Early in Hart County's history agricultural activities mostly consisted of subsistence farming. These crops included corn, oats, wheat, tobacco, vegetables, and some fruits. Livestock was also raised. Eventually, cotton became the major cash crop. Developments in agricultural practices such as the "introduction and popularization of fertilizers, the solution of labor problems through a share crop arrangement, and the solution of credit problems through a crop lien system resulted in a boom of cotton and cotton-related businesses." Cotton's popularity in Hart County remained even after the coming of the boll weevil in the 1920s. Cotton continued to be a significant part of the local agricultural economy up until 1955, and some cotton gins were in operation through the 1960s.

As mentioned above, the most popular method of transporting crops during the early to mid 1800s was by pole boat on the Tugaloo or Savannah Rivers. Roads were also used such as the Red Hollow Road which ran through Hart County from Toccoa to Augusta. The railroad arrived in Hart County in 1879, although it had been in the works since before the Civil War. The Hartwell Railroad was a spur running from Hartwell to Bowersville. From Bowersville it joined with the Elberton Air Line Railroad which connected with Atlanta, Washington, and New York via Toccoa, Georgia. The railroad made regional and national markets more accessible to Hart County and its communities. Later, U.S. Highway 29 would become a major transportation route for both trade and tourism. The highway was known as the "Main Street of the South" after it was paved in 1933 linking the North with Florida. A few commercial businesses, such as gas stations and country stores, remain along this historic transportation corridor.

The history of the educational system in Hart County closely parallels those in surrounding counties. Prior to the establishment of the Hart County Board of Education in 1871, private schools, or academies, provided education to the county's children. However, the parents of many children were unable to pay the tuition and board. In 1858 a Poor School Fund was established for this purpose. Following the organization of the county educational system in 1871, both white and black children were given the opportunity for education. In the 1920s, the educational system was consolidated, which led to the creation of several more schools throughout the county. The only high school available in the county was Hartwell High School. In the 1950s, the City and County schools consolidated and by 1970-1 were desegregated.

Prior to 1920, black children were educated in schools provided by area churches. Many black children only received an elementary education, however some received scholarships to continue their education at the Savannah River Academy in Hartwell. The Hart County Training School was established in the late 1920s and early 1930s on Richardson Street in the Rome Street community in Hartwell for the continued education of black students. Following the integration of Hart County schools in 1970, the Hart County Training School was used as the Hart County Junior High School. Some black schools that existed in Hart County included: Flat Rock, Sander's Grove, Shiloh, Sardis, New Light, Harmony Grove, Teasley's Grove, St. James, Brown's Grove, Vanna, Mountain View, and New Hope.

Schools in Hart County were oftentimes located in crossroads communities which typically included a church and sometimes a general store, mill, or cotton gin and served the commercial and social needs of the surrounding farms and homesteads. Some of these crossroad communities include Shoal Creek, Reed Creek, Mt. Olivet, Air Line, Goldmine, Bio, Flat Rock, and Sardis. Only the church and school remain in many of these communities. Some other communities, both existing and non-extant, include: Parkertown, King's Bench, Maretts, Nuberg, and Montevideo.

Until recently, the town of Vanna had been one of the few incorporated communities in Hart County. The village was originally known as "Friendship," but the post office name was changed to "Vanna," after Miss Savannah Ballenger, by Ezra Bowers who was a mail agent on the Elberton Air Line Railroad. The town of Vanna was incorporated in 1912 and had a city limit with a one-half mile radius, which was centered on the depot. The first mayor of Vanna was D.M. Denny, depot agent and owner of a general merchandise store. Some of the businesses and services once available in Vanna included a depot, school, ice house, gin, blacksmith shop, barber shop/soda fountain, garage, and various stores and warehouses. Few of these exist today.

During the 1920s, the cotton industry began to slow down as a result of the spread of the boll weevil, a severe drought in 1925, and a downturn in the competitive cotton markets throughout the nation, which signaled an end to the cotton industry in Hart County. In 1929, the stock market crashed, which resulted in the Depression experienced throughout the country in the 1930s.

As a result of the Depression, several recovery programs were initiated by the government. The government provided such New Deal programs as the Seed Loan Program, which helped farmers, and the Works Progress Administration (WPA), which aided unemployed workers. In Hart County, a few schools were constructed by the WPA including the Mt. Olivet Gym and the Air Line School. WPA also helped construct Hartwell Elementary Gym. During and following World War II, the economy in Hart County and its communities began to diversify.

Although industry became more important in and around the outskirts of Hartwell, agriculture was still an important factor in Hart County. However, the number of farms decreased from 2,593 farms in 1930 to 2,413 farms in 1950 and down to 507 farms in 1987. Although farm acreage increased slightly from 134,863 in 1930 to 144,495 in 1950, farm acreage dramatically decreased to 62,286 acres in 1987. Part of the significant drop in agricultural land may be attributed to the development of Lake Hartwell. In 1950 Congress authorized the construction of Hartwell Dam. By 1961, Lake Hartwell was completed and full and is now maintained at approximately a mean sea level of 660 feet.

6.2. Historic Properties.

Hart County's historic properties have been categorized according to property type to help identify them more clearly. These categories include: residential resources, commercial resources, institutional resources, industrial resources, rural resources, and historic, archaeological and cultural resources (see Map 6-1). It is important to emphasize that the exclusion of some historic resources from the following sections does not necessarily indicate that they are not significant or worthy of preservation.

6.3. Residential Resources.

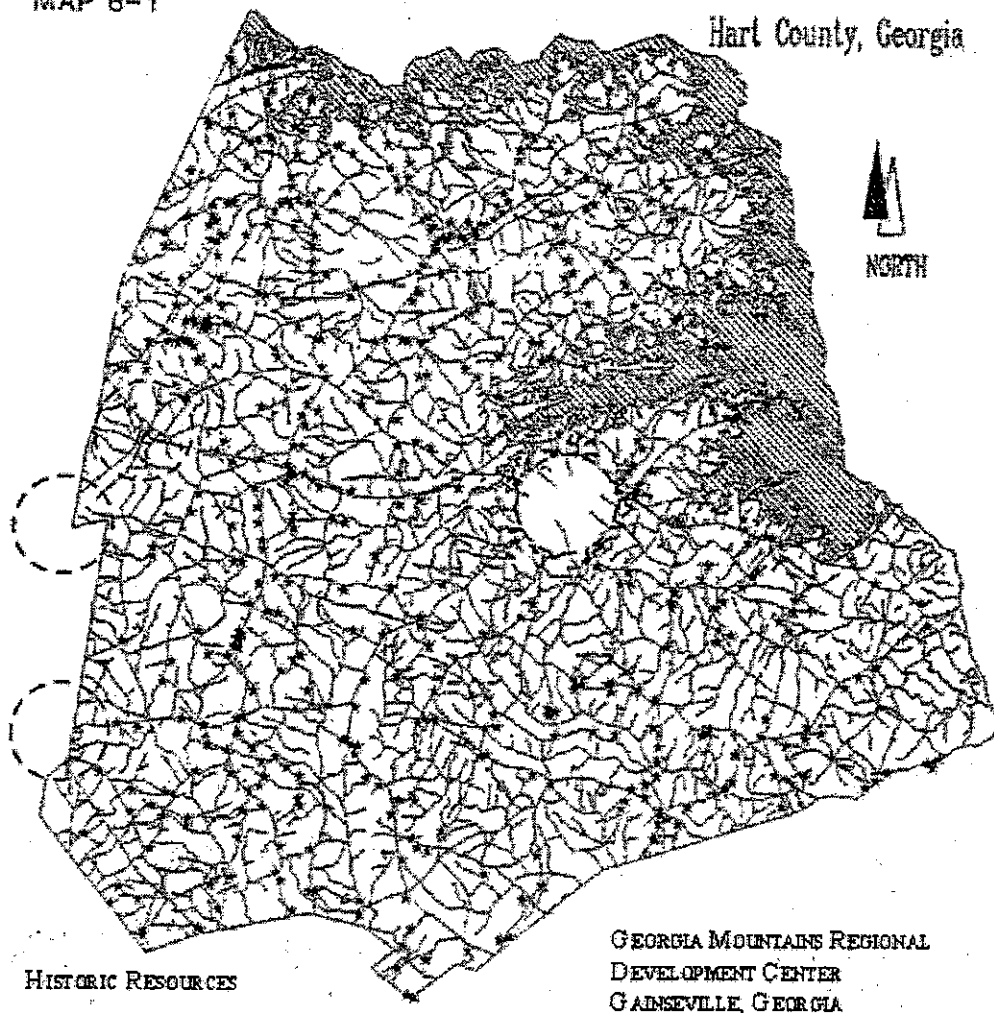
6.3.1. Hart County.

The greatest majority of historic building stock in Hart County are residential structures. The historic residential buildings are primarily of simple, common (vernacular) designs with the majority dating from the late 19th century to 1940. There are some antebellum houses remaining, however, many of these have been altered over the years, or have been abandoned and are suffering from demolition by neglect.

Many of the vernacular historic structures in Hart County exhibit restrained stylistic elements, but most lack a great deal of ornamentation. Those houses that do possess stylistic elements exhibit primarily Greek Revival (entranceways, massing), Victorian-era (porch posts, trim, roof lines), or Craftsman (brackets, porch piers/posts) stylistic features. The infrequency of high style structures may be attributed to the rural agricultural nature of Hart County. Examples of structures exhibiting high style influences include the Patterson-Turner House on State Route, the Teasley-Norman-Bosley House off State Route 77 near Nuberg, the Thornton Homeplace off Flat Rock Road near the Elbert County line, and the McMullan House near New Prospect Church. Styles and types of residential structures in Hart County remain fairly consistent with its rural heritage, exhibiting local craftsmanship and the utilization of local materials.

Almost all of the historic residential structures are wood frame houses and most have brick chimneys, although several houses with stone chimneys remain.

MAP 6-1



Log construction still exists in Hart County, however, many of these structures have been added onto or covered by clapboards (a common practice), abandoned, moved, or are suffering from demolition by neglect. An example of log house construction the Mewborn-Phillips House in southern Hart County off Highway 172. This house is an excellent example of log structures which have been added onto and sided with clapboard siding. The Mewborn-Phillips property has recently been restored and is being nominated to the National Register of Historic Places by the owner. Another example of a log house which has been added onto is the Higgenbotham-Norman House in the Nuberg community.

This evolution was a typical historical treatment of log houses and should also be respected and preserved. The most commonly represented house types in Hart County are central halls, hall and parlors, gabled ells, pyramidal cottages, Queen Anne cottages, and bungalows. Central hall and hall and parlor types both tend to be two rooms wide with differences being in their floor plan. The central hall consists of two rooms separated by a hallway and is usually side gabled. The main body of the house is one room deep and frequently has one or two exterior chimneys. The McMullan House and the Partain-Senkbeil House, both in the New Prospect Community, are excellent examples of this type. The hall and parlor type also tends to be side gabled, one room deep, and consists of two rooms unequal in size with the entrance leading into the

larger of the two rooms. Both of these types can be found intact, or with various additions either to the front, rear, or side of the structure.

The gabled ell house type is characterized by a T- or L-shaped plan and is typically gabled with an entry into the recessed wing parallel with the facade. Interior chimneys are most common. The pyramidal cottage was a simple, common house form of the early 20th century. It is characterized by a square main mass with four principal rooms and no hallway. The steeply pitched pyramid-shaped roof is the most recognizable aspect of this house type.

Queen Anne cottages, not to be confused with highly ornamented Queen Anne high styles, have a square main mass with projecting gables on the front and side. The rooms are arranged asymmetrically and the roof is either pyramidal or hipped. The bungalow house type was also found in Hart County. It is characterized by its overall rectangular shape and irregular floor plan with four possible roof forms: side gable, front gable, hip, and cross gable. Other characteristics include an integral porch, low pitched roof, and wide roof overhangs. Two common historic residential house forms were found in Hart County. One form includes a two-story, side-gabled hall and parlor or central hall plan with end chimneys and two wall dormers, or gablets, on the front facade. Another type common to Hart County is a Queen Anne cottage with two front gables and, frequently, a small gable dormer and a two- or three-sided porch. Two examples are the Bailey-Wilson-Jenkins House near Maretts and the Gurley-Lawson House on Lou Gurley Road off State Route 77.

Several properties were found that would qualify as eligible for listing in the National Register of Historic Places, however, few potentially eligible districts were found. Typically, historic districts contain a number of historic structures which relate to one another historically, geographically, and/or architecturally. Historic districts include landmark quality structures as well as less significant structures. Due to Hart County's rural nature, the majority of historic resources are spread fairly consistently throughout the county. Many of these resources, however, suffer from demolition by neglect, which occurs when a property is abandoned and then deteriorates or when a property owner allows a structure to go unmaintained until it becomes derelict beyond repair. This results in an otherwise potential district lacking a sense of cohesion. A few exceptions include: part of the community of Vanna; Nuberg; a collection of rural residences and outbuildings located along Mouchet, Reed, and Lankford Roads; the Sharon Church/New Prospect Church community; and the area along Beacon Light Road above Maretts. These districts have the potential for listing in the National Register and possible tax incentives for substantial rehabilitation as a result of listing in the National Register. Other potential rural districts may exist and can be pinpointed by a comprehensive survey of the County's historic resources.

6.4. Commercial Resources.

6.4.1. Hart County.

Few historic commercial buildings remain standing in unincorporated Hart County. Many of the commercial buildings that remain are in poor condition and in danger of being lost to demolition by neglect. Those remaining that are still recognizable as commercial buildings take various forms, but the most common form is a front gabled, wood frame building that is two or three rooms deep. Usually the front entrance is flanked on either side by a window. An example of this can be seen in Vanna in the center of town. A rural example can be seen in the Mt. Harmony Church area near Bailey Road. An unusual example is located at the intersection of State Route 59 and Shirley Road. This old store is sided with molded concrete and has a hipped roof. This commercial building, as well as the old farmstead across from it may be eligible for listing in the National Register. A rare example of a rural brick store is located in Goldmine.

The remaining historic commercial buildings are significant as they are representative of all small Hart County communities, many of which are no longer recognized as such today. The rural and small community commercial buildings are also significant as examples of vernacular commercial building design. Most of the remaining structures date from around the turn of the century to circa 1925.

6.5. Institutional Resources.

Institutional resources in Hart County include structures such as schools, churches, and government buildings. A few historic schools still exist, although many have been altered or abandoned and are being lost to demolition by neglect. Early in Hart County's history, schools were primarily one room wood frame structures, sometimes associated with a nearby church. Few if any of these types exist, however, two wood frame schools believed to have been constructed around the turn of the century and the early 1900s respectively exist in the Flat Rock Community. The older one has been totally abandoned and is being lost to neglect, but the other is being used as a community building. Many school buildings were constructed in Hart County (typically of brick) in the 1920s and 1930s. An example of one of these is Shoal Creek School.

Historically, the local church in Hart County was very important to communities not only as spiritual centers, but also as a meeting place for an area. Many of these churches started out as simple brush arbors or log structures, but eventually most were of basic clapboard design with rectangular plans. The only example of such a church, which has not been significantly remodeled, is Mt. Harmony Church located in the northern part of the County. There are a few historic churches in Hart County constructed of brick. Two good examples are the Cross Roads Baptist Church completed in 1920, and the Redwine Church, built in 1906. Religious campgrounds also served as both spiritual and social centers for area residents. The Hartwell Campground, located off U.S. 29/S.R. 8 on Elrod Ferry Road, remains as an active campground consisting of a historic arbor and "tents" or crude cottages. Traditionally, worshipers spent a week during the summer at the campground.

6.6. Industrial Resources.

Industrial resources may include historic railroad structures, mills, and factories. Few historic industrial resources were noted in unincorporated Hart County, which may be attributed to its largely agricultural past. At one time, mills and cotton gins were scattered throughout the county and played an important role in the districts or communities where they were located. A few cotton gins and grain mills may still be found such as those located at Marets and Hickory Crossing.

The old mill at Parkertown, though deteriorated, still stands off State Route 77/366, although the water wheel is gone. Parkertown, originally settled in 1832 by Joseph Parker, was once the site of a wool factory, a stone dam, a grist mill, and a flour mill. Little remains of this historic commercial enterprise. The historic Gaines Mill, located south of the Flat Rock Community near the Elbert County line, is still intact except for the wooden water wheel which was replaced by a metal wheel. Historic railroad buildings, including storage/warehouse facilities, can be found in Bowersville and Vanna.

An old depot or railroad storage facility is also located in Air Line.

6.7. Rural Resources.

Rural resources can include numerous aspects of a county or community. These resources include, but are not limited to, barns and outbuildings associated with agricultural activity, open space such as pastures and fields, agricultural landscapes such as pecan groves, abandoned rail beds, covered bridges, and scenic byways. Hart County's history, for the most part, is centered around its rural heritage. Its landscape reflects this heritage and should be preserved as much as possible.

Since Hart County was historically made up of agrarian communities, there are a number of agricultural outbuildings throughout the county. These farm buildings can be found either clustered together or alone in the field of an old farmstead. Unfortunately, many of these buildings are no longer in use and are being lost to demolition by neglect.

There are many areas in Hart County exhibiting outstanding scenic views, as well as picturesque countryside, agricultural landscapes, and river corridors. Important agricultural elements in Hart County are

the numerous pecan groves. Historically, grafted pecan trees from throughout the county's nurseries were shipped to South Georgia. Some pecan groves can still be seen at the Kay Nursery, in Vanna and Bowersville, and Northeast of Hartwell south of Hart State Park.

With the establishment of the large recreational lake, Lake Hartwell, and the major highway, Interstate 85, Hart County is likely to see continuing residential growth and an increase in the local economy. The potential for negative impacts on existing rural resources is great; thus, proper planning for growth and economic development should be a priority.

6.8. Historic, Archaeological, and Cultural Sites.

A variety of historic, archaeological, and cultural resources exist in Hart County. Among them are the many historic cemeteries associated with churches, communities or individual families. These old cemeteries are excellent sources of historical information and should be protected in accordance with the Georgia Abandoned Cemeteries and Burial Grounds Act of 1991.

A few examples of extremely historic cemeteries include: the Old Reed Creek Church Cemetery in which is buried Revolutionary War soldier Moses Ayers; Redwine Church Cemetery; Providence Church Cemetery; family cemeteries, several of which are located in the northern part of the County, such as the Johnson, Poole, Pinson, Crocker, Fleming, Byrum, Mewborn, etc. Cultural sites such as memorials can be found in Hart County and include: the Cherokee "Center of the World" Memorial erected by the Benson Chapter of the D.A.R. in 1923; the Nancy Hart Monument dedicated on November 11, 1931 and erected by the Benson Chapter, D.A.R.; and Hendry's Church Monument.

A formal countywide survey of Hart County's archaeological resources has not been undertaken. Knowledge of such resources consists of information gathered by a variety of means. They range from surveys and investigations of varying scale, such as those conducted by the Corps of Engineers, to reported sightings by individual collectors and professionals. These archaeological sites, most specifically the prehistoric, are susceptible to damage caused by development or collection by non-professionals who do not properly record the site information and location.

Archaeological sites need not be prehistoric to be significant. There are a few sites in Hart County that relate to events ranging from the early settlement period to the early 20th century. For instance, remnants of old mills, such as the one at Parkertown or Gaines Mill below Flat Rock Community near Elbert County, provide valuable information on early grist mills and the developmental history of local technology. Since Hart County was at the center of much Native American activity, the archaeological potential in this area is very promising and should be further investigated.

The Tugaloo and Savannah Rivers and various major creeks exhibit a great deal of potential for containing both prehistoric and historic archaeological resources. They are archaeologically and historically sensitive areas and may be irrevocably damaged by insensitive development and despoliation. Resources present in and along other water resources are similarly sensitive to damage and should be protected and guarded against any further damage. Appropriate management should incorporate an archaeological survey of the properties as an initial stage of resource planning. Such an inventory would provide a basis on which to plan development and evaluate research potential for addressing questions about the past.

6.9. Impacts on Historic Resources.

A loss of historic resources in Hart County was experienced during the construction and subsequent development of Lake Hartwell. Currently, there are many historic resources in Hart County which have remained relatively intact and were found to be evenly dispersed. However, many historic resources have been lost and are being lost to demolition by neglect, which occurs when property is abandoned and deteriorates, or when a property owner allows a structure to go unmaintained until the structure becomes derelict beyond repair. Demolition by neglect is the primary negative impact on historic resources in Bowersville and Hart County, as well as in the community of Vanna. Many of these resources will be lost if not maintained on a regular basis or restored within the next few years.

Several historic commercial buildings in Vanna are being lost to neglect. Also, there are many historic residences that have sustained inappropriate remodeling or require extensive repairs. Most of the historic resources in Vanna that are in good to excellent condition are located at the south end of town. The permanent loss of historic and cultural resources would be detrimental to the County. Only by informing the residents of the County of the economic and cultural benefits historic resources provide will the problem of demolition by neglect decrease.

These benefits include an increase in heritage tourism, economic development, and an understanding and appreciation of Hart County's rural past. Two other impacts which may affect historic resources in Hart County are the development of land on or near historic or cultural sites and alterations or remodeling which drastically alters the architectural integrity of historic resources. Although incompatible development on or near historic resources is not yet a significant problem in Hart County, increased development along the Interstate 85 corridor, development adjacent to the lake, as well as the possible construction of a four lane route to I-85 and the proposed by-pass around Hartwell may, in the future, impact those historic resources located along the routes. However, if properly planned, potential development and construction in these areas could directly and indirectly benefit historic and cultural sites by attracting both tourist and business dollars to additional parts of the County not located along the corridor.

6.10. Analysis and Recognition of Historic Resources.

Once a community or county knows what and where its historic resources are, then it can begin to recognize these resources and bring community attention to their significance. One tool a community can use to achieve this is the National Register of Historic Places. The National Register of Historic Places is the nation's list of historic buildings, structures, sites, objects, and districts worthy of preservation.

Although listing in the National Register does not protect properties from alteration or demolition, it serves as a good way to bring recognition of and pride in a community's historic properties. National Register landmarks and districts also serve to pinpoint areas in a community where preservation and local protection can be implemented. Current National Register listings in Hart County include: the Multiple Resource Nomination of Hartwell (1984); Bowersville Historic District (1985); Patterson-Turner House (1990) and several others. Properties in the process of being nominated include the Mewborn-Phillips Property, Gurley-Lawson House, and the Bailey-Wilson-Jenkins House.

Some potential National Register nominations include those already mentioned above in previous sections, as well as a rehabilitated Queen Anne cottage located on State Route 172 and County Road 60, the Thornton Homeplace, the Caudell House on State Route 172 and Eagle Grove Road, the Teasley-Norman-Bosley House, and the Ayers-Payne House in Reed Creek.

Once all of the county's resources have been determined, the community needs to decide which of these resources are most important to preserve, usually those deemed worthy of National Register recognition, and they should be informed of the benefits of preservation including: Historic resources are top tourist destinations. Revitalized buildings and historic districts attract new business and tourists, stimulating retail sales and increasing sales tax revenue. Historic rehabilitation creates new jobs during construction and later in new offices, shops and restaurants. Property values tend to improve in revitalized areas. Investment Tax Credit programs are available for certified rehabilitation. Less energy is required to rehabilitate old buildings than to demolish and replace them with new construction.

6.11. Heritage Tourism.

Tourism is playing an increasing role in both the U.S. and Georgia economy. A large part of the tourism market involves historic sites as destinations. Hart County could be able to capitalize on the tourism industry because of its many attributes such as its historic sites, its proximity to Lake Hartwell, state and local parks, and its proximity to Interstate 85, a major transportation route.

Heritage tourism can play an integral role in Hart County's economic development as a component of

tourism related economic development. The development of a county-wide heritage tourism plan in partnership with the Cities of Bowersville and Hartwell would provide the County with an analysis of tourism potential in the area, a set of objectives, as well as tools and techniques to implement a heritage tourism strategy. Coordination between Hart County, the Hart County Chamber of Commerce, the Cities of Bowersville and Hartwell, Parks and Recreation Departments, and the Hart County Historical Society could be an integral part of any tourism planning process, as well as the marketing and promotion of heritage tourism.

An important factor in this process would be increasing the visibility of the Hart County Chamber of Commerce. Finally, coordination with other communities and counties in the region should also be considered while developing a heritage tourism plan. The National Trust suggests five principles to follow when considering heritage tourism in your community:

1. Authenticity and Quality: Tell the true stories of historic sites. The specific development of an area and the contributions made by previous generations are what distinguish one place from another.
2. Education and Interpretation: History can be fun. Names and dates don't bring a place or an event alive, but human drama and history does. The interpretation of historic sites should be creative and exciting.
3. Preservation and Protection: Take care of maintaining historic places, and the historic buildings of neighborhoods and towns for residents and visitors both now and in the future. A community wanting to attract tourists must safeguard the future by establishing measures to protect the very elements that attract visitors.
4. Local Priorities and Capability: Build strong, comprehensive tourism programs, directed toward local priorities and ensure that tourism is of economic and social benefit to the community and its heritage.
5. Partnership: Cooperation among business people in tourism, operators of historic sites, local governments and many others is important to enhance tourism activities. Historic sites and districts deserve special funding consideration for operations and maintenance since they are often the reasons why people wish to visit a community.

Several funding sources exist for heritage tourism plans and some eligible activities. These sources may include the Office of Historic Preservation's Survey and Planning Grant, the Department of Community Affairs' Local Development Fund, and the Transportation Enhancement funds through the Intermodal Surface Transportation Efficiency Act (ISTEA).

6.12. Conclusion.

Goals and priorities could be set for the preservation of historic resources in Hart County. These goals might include preserving specific rural areas of the county and making the community aware of their importance, protecting the most important historic resources in the county from demolition or demolition-by-neglect, or implementing a heritage education program based on the county's archaeological and architectural resources.

CHAPTER SEVEN: LAND USE ELEMENT

The 1995 comprehensive land use plan included a map with an estimate of existing land uses in Hart County. In addition an estimate of future land use was included. This updated plan includes an update to the existing land use plans.

7.1. Classification of Land Uses.

Agriculture/Forestry:

The agricultural land use category includes all farms and existing land devoted to growth of field crops or plants, vegetation, and trees, the raising of livestock, poultry houses, and other similar operations. In general, very small plots for gardens were not included in this category because such gardens are considered accessory to the residential uses of the property. Lands were also classified as agricultural if they contained fencing along the property line, or if the land was substantially cleared for pasture. Also, those areas not visible or accessible from public roads were classified as agricultural if a poultry house existed or if it was evident that the land was substantially cleared. Areas of land that are clearly in active forest production (i.e., planted with young pines) are also included in this category.

Residential:

This category includes all detached single-family dwellings, along with their customary accessory structures and uses. It also includes single-wide and double-wide mobile and manufactured homes on individual lots, or mobile home parks.

Public/Institutional:

The public/institutional land use category consists of all lands used for government purposes such as schools and fire stations, plus churches, cemeteries, and clubs, private/public colleges, schools, training facilities, hospitals, and sanitary landfills.

Transportation/Communications/Utilities (TCU):

This category includes such uses as power generation plants such as the 600 acre "Hartwell Energy Limited Partnership" Power Plant located in Hart County, radio towers, communications towers, electricity, telephone and other transmission substations, telephone switching stations, airports and landing strips, and similar uses.

Commercial:

This land use category includes all property of retail business and trade, consumer services such as motels, restaurants, banks, commercial and professional services, and wholesale activities; as well as accessory use areas such as parking and storage. Small-scale retail sales or personal service establishments operated within (or in conjunction with) a residence on the same lot were considered accessory to residential use (a home

occupation) and were not included in the commercial classification.

Industrial:

The industrial category includes land occupied for the purpose of extracting, fabricating, assembling, and/or refining raw or semi-finished materials.

Undeveloped:

This category is for land that is vacant, and not developed for a specific use. This category consists of nonagricultural and non-forested lands.

7.2. General Land Use Descriptions (Quadrants).

7.2.1. Northwestern Hart County (Census Tract 9602)

The northwest portion of the County, is bordered by Interstate 85 and Lake Hartwell to the north and Franklin County to the west. S.R. 77 runs east-west through the area, and crosses Shoal Creek, whose course runs from Lake Hartwell south to the City of Bowersville. The Town of Bowersville is located in the southwest corner of the division, along with a portion of the City of Canon. This Division has been partitioned into two areas for land use discussion purposes; the Lake Area, and the Shoal Creek Area.

Lake Area:

The lake area in the northern portion of this division is characterized by subdivisions that border the lake. Primarily single-family residences on small lots occupy this land, with a small number of mobile homes scattered along the lake. Some of the subdivisions include Arrowhead, Tugaloo Bay, Knox Bridge Crossing, Parkertown Heights, and Tugaloo Heights. For the most part, lots fronting the lake are occupied by such residences, while many interior lots remain vacant.

Construction of new residences has increased in recent years. The Tugaloo Bay subdivision had numerous undeveloped interior lots that have recently had entry level homes constructed on them. Additionally, several older homes surrounding lake Hartwell have been remodeled, rebuilt or removed due to the increased demand for lake property. A new marina has been constructed on the end of Knox Bridge Crossing road.

The undeveloped land, in general, is heavily wooded. Agricultural land does exist in the lake area, but is limited and is mostly pasture type agriculture. Public and commercial uses in the lake area include churches and cemeteries, the Clem's Music Park facility on S.R. 77 near the Parkertown intersection, and Harbor Light Marina located in the northwest and the new marina described above.

The only other commercial developments in the lake area are a gas stations and a restaurant. Moreover, the I-85 exit contains a vacant commercial spot, gas stations, and a convenience store/restaurant. TCU uses are limited to a power substation in the

Parkertown Heights subdivision.

The County has recently developed the Gateway Industrial park on I-85 adjacent to the 177 interchange. This 150 acre industrial park has all utilities in place. TI automotive, a large high tech automotive manufacturer has recently been constructed and is slated to start operations.

The installation of sewer and water infrastructure to this area has poised the County for tremendous growth over the planning period. Several larger private tracts of undeveloped land are now being marketed as industrial/commercial property. Commercial development is expected around the interstate interchange and along the major State highways (77 and 59) as well as other tracts adjacent to I-85 between I-85 and Knox Bridge Crossing.

Commercial and industrial development on the north side of I-85 is expected to be limited during the planning period unless sewer and water is expanded to the other side of I-85 (northern side). However this would most likely be a costly endeavor and make not take place during this planning period.

There also exists a large tract of land on Lake Hartwell north of the interstate. This undeveloped tract is very valuable and may see some type of mixed use development over the planning period.

Shoal Creek Area:

The Shoal Creek Area encompasses the remaining portion of the land in this division. It extends south of the lake area down to the southern portion of the Canon city limits. The majority of land in this area is agricultural, with many large open fields. A large area of forested land is located south of the lake area and west of S.R. 77. Poultry farms are prevalent, and seem to be concentrated primarily just north of the Town of Bowersville. Dairy farms exist east of Bowersville, and an orchard is located between Bowersville and Canon on S.R. 51. Undeveloped land occurs in patches throughout the division.

Residential uses consist of conventional single-family and mobile homes that are located on large agricultural tracts. Housing is fairly dispersed but is more concentrated around several major intersections. Commercial and public uses are also concentrated at these areas. These intersections are known locally as the Shoal Creek, Cross Roads, Maretts, and Airline communities.

The Shoal Creek community, located at the intersection of S.R. 77 and Shoal Creek Road, is primarily residential, with a large number of mobile homes. The community is characterized by Providence Church and a fire station. The Cross Roads community is located at the intersections of S.R. 77, Lou Gurley Road, Will Bailey Rd., and Airline School Road. The Cross Roads and Union Hill Church are also located in this area. The Maretts community is located along the border of the division, at the intersection of County Route 503, Walt Wilson Road, and S.R. 77 Connector. This community has a small grocery and an auto repair shop. Single-family residences comprise the primary

land use along these roads.

The Airline Community, which is the most densely developed community in this division, is located east of Bowersville, along S.R. 51 and the Southern Rail Line. Commercial uses in this community include a convenience store and a gas station. The former Airline Elementary School is also located here. Several TCU uses include a rail lookout tower, Hart County Telephone switching station, and two electric substations. Residential development, in the form of single-family dwellings, is dense along S.R. 51.

Commercial uses outside of these communities include the Lavonia Speedway, on S.R. 77, an auto repair shop and used car lot, a feed store, gas stations, a van conversion business, an electric company, and a small junk yard.

Industrial uses consist of Misty Mills on S.R. 77 just east of Lavonia. One other small industrial facility is located just north of the Town of Bowersville. Public uses in the Shoal Creek Area are comprised primarily of churches and cemeteries. TCU land uses include a radio antenna. Scenic views of rolling agricultural fields exist in the Shoal Creek Area just north of the Airline Community, off Martin Dairy Rd., and near the Cross Roads community seen from Will Bailey Rd. 7.2.2.

A new elementary school has been constructed in this area on State 77 a few miles north of Hartwell. The Airline School was closed and is now vacant. The North Hart Elementary School may also be a magnet for increased residential growth in this area.

7.2.2. Northeastern Hart County (Census Tract 9601)

The northeast portion of the County, is bordered by Lake Hartwell to the north, east, and southeast, by Lightwood Log Creek to the south, and by Census Tract 9602 to the west. This tract saw the second largest percent population growth rate at 22% change in the 1990 decade.

This section of the County has been divided into the Lake Area (which includes all of the land fronting the lake to the north, east, and south), and the non lake area "Reed Creek" for purposes of description.

Lake Area:

The lake area in this division is characterized by subdivisions that border the lake. This area is heavily developed with conventional single-family residences, located primarily in subdivisions. Many of these subdivisions are only strips of land immediately adjacent to the lake, one lot deep. There are a few subdivisions with interior lots but these are primarily newer subdivisions.

Similar to other lake area, the lakefront land is in high demand. Most vacant lots have been developed in recent years or are slated for development soon. There are few interior lots in these subdivisions especially the older lakefront subdivisions where the prior farmland was kept and only the lakefront property sold one lot deep from the lakefront.

There exists numerous forested undeveloped areas owned by the Corp of Engineers in reserved lands directly on the lake mostly on lower lying points or pieces of land that have low lying land connecting them to the rest of the County. In addition to these reserved lands, Corp of Engineers parks noted in this area include a boat ramp, located far east along the lake in the Hatton Ford Road area, a campground and boat ramp facility near the Paradise Point subdivision, and New Prospect Park boat ramp. Other recreational areas include the Lake Hartwell Yacht Club in the southern portion of the lake area off Yacht Club Drive.

Located near Hatton Ford Road is a small, private air field, accessible from Mustang Drive. Another private air strip is located in the southern lake area where County Route 503 meets S.R. 51. Public uses include several churches located along the main roads. No industrial uses are present in the lake area. Scenic views of the lake are abundant.

Reed Creek Area:

The remaining area of this tract is primarily referred to as the "Reed Creek Area". This area was primarily agricultural and forested lands but has been developing more residential uses.

This area is characterized by several small communities, located at intersections of two or more roads. These include the Reed Creek community, located in the northeastern portion of the Division, at Country Route 301 and S.R. 51; and the Mount Olivet community at the intersection of County Route 503, Beacon Light Road, and Morris Road. Poultry farming is present, but is not particularly concentrated in this division. Vacant, undeveloped land is dispersed throughout.

Residential development consists mostly of conventional single-family homes, with mobile homes dispersed throughout. The residences usually front large agricultural tracts of land. While subdivisions predominate in the lake area, the remaining residential land use within this division is mostly linear in nature, located along the roadways.

There are exceptions to the linear residential development and more traditional developments have been developed in recent years. There has been increased development adjacent to Mt. Olivet Road and adjacent to Will Bailey Road.

There are mobile homes and mobile home parks located near a private air landing strip off of County Route 503 just before it crosses S.R. 51 over the lake.

Commercial developments at the Reed Creek intersection consist of a gas station, restaurant and gift shop. Along S.R. 51 as it approaches the Hartwell City limits, are garage, gas station, and auto sales establishments.

Other commercial uses in the Reed Creek Area include auto repair, a veterinary facility with kennels, gas stations/convenience stores, two private boat storage facilities, a nursery, a gas tank sales business, and several other single unit commercial structures.

Limited industrial exists including Turner Concrete and private recycling are located on S.R. 51 near the Hartwell City limits. Public uses in the Reed Creek Area include a generous scattering of churches and cemeteries. In addition, the former Mount Olivet Elementary School (now closed and consolidated with the North Hart Elementary School) is located at the Mount Olivet intersection, and a fire station is located in the Reed Creek community. Park and recreational areas not directly located along the lake include ball fields near Mount Olivet Elementary School on Beacon Light Road.

Transportation, communication and utilities land uses are limited to a radio/cell towers, telephone switching stations, and power substations.

7.2.3. Southeastern Hart County (Census Tracts 9604 & 9605).

The southeastern portion of the county is bounded by Lightwood Log Creek to the north, and Elbert County to the south. The eastern boundary is Lake Hartwell and the Savannah River. The western border is primarily Eagle Grove School Road. The City of Hartwell is included in this division, but has been excluded from this land use description except the influence on the unincorporated sections of the county adjacent to the City. These tracts have seen the slowest population growth rates at about 11% over the 1990s decade.

City of Hartwell Area:

The Hartwell Area is comprised of land located in the vicinity of the Hartwell City limits. It contains little agricultural land as many other land uses are present. Undeveloped forested land is abundant in the vicinity of Lightwood Log Creek. Dense single-family residential areas and subdivisions are concentrated near the city limit along U.S. 29, and along S.R. 172.

Commercial uses are more prevalent near the Hartwell City limit and consist of gas stations/convenience stores, restaurants, car sales and repair, and other retail establishments. The commercial growth corridor has been moving down Highway 29 towards the dam, although most of the commercial establishments on this corridor have annexed into the City.

Industrial uses are also abundant, and include the Hart Industrial Park (containing Springs and others), Monroe Manufacturing, Milliken and other Industrial establishments. A large strip mine operation is located off of S.R. 172.

Public uses consist of several churches and cemeteries, and a youth center located on U.S. 29. The Hartwell Sewage Plant is located off of S.R. 77 near the city limit. Other TCU land uses include a Georgia Power office and an adjacent electrical transmission tower on Zion Church Rd., as well as a water tower near the Hart Industrial Park. Park and recreational uses in this area include the Hartwell Golf Club off of U.S. 29, and the Hart Memorial Park Cemetery also on U.S. 29 near the city limit. The Cherokee Memorial is found at U.S. 29 and Zion Church Road which a memorial dedicating what was believed to be the location of the center of the Cherokee Nation (called "center of the

world"). The highest point in Hart County is located in this tract on Blackmon Road near State 51.

Cateechee golf course and conference center is located on Elberton highway south of the City of Hartwell. A few small tracts of vacant land surrounding this golf course have recently been developed into residential subdivisions. The remaining vacant land around the golf course especially on the east side is expected to undergo high end residential development over the planning period.

Bio Area:

The Bio Area is less densely developed than the other areas in this division. Agricultural and undeveloped forested land are prevalent. Residential development is mostly single-family fronting large agricultural tracts. Few single-family subdivisions exist in this area. Mobile homes are scattered, although there are concentrations at the intersection of Thornton Road and Liberty Church Road and on Allen and Orsley Roads.

The main commercial use in this area is the Hartwell Speedway. Other commercial businesses include gas stations, auto sales, a junk yard, and farm equipment sales. No industrial uses exist in this area. Public uses include several churches and the Bio Fire Department on Bio Church Road. TCU use includes a natural gas station. There are no designated park/recreational lands in the Bio Area. 7.2.5. The County public works facility and closed landfill is located in this area and the State of Georgia Whitworth Detention center is located adjacent to the County Public Works.

Lake Area:

The lake area in this division includes two primary "peninsulas" on Ridge Road and Old 29 highway. There is also development along Highway 29 from the City of Hartwell towards the Hartwell Dam. There is also a large section of lakefront near the dam that is redzone and has limited or no development. Hartwell Energy Limited Partnership power plant is located here.

There is a great amount of forested land, particularly near the City of Hartwell along U.S. 29, and in the vicinity of Hartwell Dam. There is also a substantial amount of forested lakefront land reserved by the Corp of Engineers in this area.

Commercial uses along the lake are also mostly located on U.S. 29. They include a boat storage facility, the Budget Inn, Jameson Inn, supermarkets, several mobile home sales businesses, a few retail stores, and a realty. In and near the Hartwell City limits are a Wal-Mart commercial retailer, gas stations, and other retail establishments. An industrial site is also located near the Hartwell City limit.

Public uses along the lake are limited to a few churches, and an office building near Hartwell. In addition, towards the dam are the Hartwell Lake Reservoir Management Offices and the Land Management Offices. TCU uses consist of a radio tower, gas line

station and a transmission station across the street from the Hartwell Lake Management Offices, as well as a power substation located where Lake Hartwell meets the Savannah River (by the dam).

Parks and recreation facilities are prevalent in this area, with the Hartwell Marina located where North Forest Avenue ends at the lake and Hart State Park at Ridge Road. In addition, in the Hartwell Dam area, a recreational park lies adjacent to the Hartwell Lake Management Offices, as well as the park surrounding Hartwell Dam.

Scenic views in this area include views of Lake Hartwell from U.S. 29. The park at Hartwell Dam is particularly scenic as a long paved walkway extends from a parking area, along the lake, to the dam.

Savannah River Area:

The area below the dam on the Savannah river is heavily forested and remote. This area has limited development although several large tracts of land have recently been sold. This area is very scenic with river vistas overlooking shoals. Smith McGee Highway has a park area that is accessible to the public. Otherwise this area remains relatively undeveloped.

Wildlife Management Area:

The Wildlife Management Area (980 acres) is located in the southeast portion of the division. It includes land extending south of U.S. 29, west of the Savannah River, north of the County line, and east from the Hart County Wildlife Management Area. In general, this area is more heavily wooded than any other section in the county. Several of the roads in the easternmost portion are blocked and impassible. Agricultural land exists mostly closer to U.S. 29, and to the south of the Hart County Wildlife Management Area, which is itself virtually all forested.

Commercial uses are limited to auto related businesses. There are no industrial uses in this area. Public uses include several churches. Residential development is concentrated primarily south of the dam near S.R. 181.

Housing is also more concentrated both north and south of the Hart County Wildlife Management Area, mostly with single-family residences. There are several views overlooking pasture lands.

The Nancy Hart Area:

The Nancy Hart Area includes all land in this division west of the Hart County Wildlife Management Area and south of U.S. 29 and the Hartwell City limits. The division boundary crosses the community of Nuberg where Coldwater Creek Road intersects S.R. 77 in the southern portion of the county. The Nancy Hart Area is developed areas with some residential development. There is also a good deal of agricultural land including poultry farming, dairy farming, and row crops.

The majority of the residential development is conventional single-family homes, located along most of the roadways. A particularly heavy concentration of conventional single-family residences occurs near the Hartwell City limit where S.R. 77 splits. Several concentrations of mobile homes are located where Liberty Hill Church Road forks with Page Road, and to the north and south of the landfill off S.R. 172.

Commercial uses in the Nancy Hart Area consist of a restaurant, auto repair and sales, junk yard, outdoor equipment sales, boat equipment sales, gas stations, and several other single unit businesses.

Public uses are also more prevalent in this area. In addition to the various churches, there are two schools. One is an old school house located across from Flat Rock Church on Flat Rock Road, and the other is the Nancy Hart School which has been converted into a special school with the opening and consolidation of the South Hart Elementary school. The Nancy Hart Volunteer Fire Department is located along the S.R. 77 Spur near Flat Rock Road.

The corridors leaving the City of Hartwell will expect new growth over the planning period. The Highway 29 corridor towards the Hartwell dam is expected to have continued commercial growth including a high probability of large retailers (big box type). Residential growth is expected in this same area including single family non-lake and intensive lake front development such as condominiums.

The Elberton highway corridor includes a new recreation park constructed by the County and the Cateechee Golf Course. This area is expected to grow over the planning period. Residential growth is expected to continue in this area especially higher priced residential development around the golf course. It is also expected that commercial growth will take place in this area.

Significant residential and commercial growth of the area not near the City of Hartwell is not expected to take place.

7.2.4. Southwestern Hart County (Census Tract 9603).

The southwestern portion includes the area near the City of Royston, Vanna area, and all land located to the west of North Beaverdam Creek and south of Carlton Brown Road. Madison and Elbert Counties border this division to the south. This area saw the third highest population growth change in the 1990 decade with 17% change.

Goldmine Area:

The Goldmine Area covers the northern and central portions of the division. This area is characterized primarily by the Goldmine community, located along U.S. 29 at Airline-Goldmine Road, and more concentrated residential, commercial, and industrial development on State Route 29 leading out of the City of Royston.

Commercial land use is prevalent at the intersection of U.S. 29, Airline-Goldmine Road, and Bonds Road. Commercial uses include gas stations, a convenience grocery, restaurants, auto repair, a junk yard, a beauty shop and shoe repair, a farm equipment supplier and several other single unit commercial structures.

Industrial uses include a lumber company located just outside Royston on U.S. 29, and another small industrial site at the Goldmine community intersection. Several churches and cemeteries dot the area and Eagle Grove School resides on the border of this division at the intersection of U.S. 29 and Eagle Grove School Rd. A fire station is located at the Goldmine intersection.

The Royston Bypass is between S.R. 17 and S.R. 122. This bypass allows the movement of traffic between the two thoroughfares without entering the Royston City limits. Next to Eagle Grove School is a telephone switching station. Some residential development includes a few subdivisions. Residences in the Goldmine Area, in general, are conventional single-family, with a few well-dispersed mobile homes. The single family homes typically front large agricultural fields.

Agricultural land is characterized primarily by large open fields and pastures and poultry farms. In addition, a large commercial nursery is located on Bonds Road, off of U.S. 29. Forested land exists in several areas including commercial forests. Several scenic views in the Goldmine area are of agricultural land.

Vanna Area:

Vanna, lies in the southwestern portion of the county. S.R. 17 and Southern Railway both run through the former Vanna city limits. While the land in this area is largely agricultural, residential population is concentrated where S.R. 17 and the railroad intersect. Residences consist largely of conventional single-family housing with only a few mobile homes in this area. Most of the homes, even in these denser areas, are abutted by agricultural land to the rear. Several small orchards are also located within the denser residential area.

Poultry and dairy farms exist in the outlying areas. There is very little forested or undeveloped land directly in Vanna; however, land to the east of Vanna is largely agricultural and forested. Commercial uses in the Vanna area include several gas stations, an auto repair shop, a small printing company, a poultry equipment business, and a restaurant.

Industrial uses include the former Johnson and Johnson plant located within the Royston city limits and Royston LLC in the unincorporated county.

Public uses include several churches, and a fire station located along the rail tracks. TCU uses are limited to a power generator and substation and the rail line. Scenic views are provided by orchards as well as agricultural lands.

Eagle Grove Area:

The Eagle Grove Area is located in the eastern portion of the division. The area is predominantly agricultural with undeveloped forested areas located along rivers, streams, and other bodies of water. Residential development is mostly conventional single-family, with mobile homes dispersed throughout the area. Subdivisions in this area include undeveloped sites on Eagle Lake at Eagle Lake Road, and the neighboring Eagle Heights subdivision.

Commercial uses in the Eagle Grove Area are limited to a few gas stations, a mini-storage business, and auto related businesses. Industrial uses are limited to a few small business scattered in the area.

In addition to churches, cemeteries and garbage disposal sites, other public uses include Eagle Grove School, located at the Eagle Grove community (intersection of U.S. 29 and County Route 505). A telephone switching station at the Eagle Grove intersection and a water tower, located along U.S. 29 near Kesler Road. constitute TCU land uses. In addition, a large power generator station is found on John W. Jordan Road.

The southwestern section of the County has been identified as an opportunity zone due to the census data where two or more adjacent blocks have more than 20% below the poverty level. This fact combined with other factors is expected to poise this section of the County for growth over the planning period as described in more detailed below.

7.3. Land Use Issues and Future Land Uses Speculation.

By analyzing the existing land uses, combined with growth pattern, infrastructure, planned infrastructure investments, and other issues that are or could affect growth, the future land uses can be speculated. This is a very important part of the planning process. Through this analysis the County can have a clearer picture of where growth can be expected and where infrastructure investments should take place.

On the other side of the development issue, through analyzing trends and issues of growth as well as future land use speculation the County can attempt to steer the type of growth that is desired and try to discourage the type of growth that is not desirable to the County.

One tool to steer land use is through regulations such as zoning. Zoning regulations were attempted in the late 1990's. Initially a simple land use control ordinance was presented based on the recommendations of a citizen advisory group. However this simple ordinance was redrafted into a much more detailed comprehensive ordinance which was thoroughly rejected by the public.

Hart County is the last Georgia County on the I-85 interstate from Atlanta that does not have zoning. As the Atlanta MSA influence has grown up the I-85 corridor the undesirable growth has been shifting further up the interstate through zoning. This has

shifted further and further away from Atlanta and just recently Franklin County has instituted zoning.

The population in Hart County continues to reject zoning. In general the population of the County does not want the local government to tell them what they can do with their own land. However as the County gets more developed, the impact of what a neighbor does on his property is affecting what happens on that persons property. Therefore land use controls such as zoning are not expected to have an influence on growth over the planning period unless the current atmosphere towards land use controls changes over the planning period.

Another avenue for "controlling" growth is through infrastructure investments. Water service, road improvements, and more importantly sewer service can provide services for growth. In general the cost of raw land is low enough that wells and septic tanks on one acre or larger lots is not a limiting factor in residential development. The road network is also sufficient to accommodate increase residential development.

However more intensive residential development, commercial and in particular industrial development depends on infrastructure investments. The County is currently in a mode of promoting growth rather than controlling growth especially industrial growth.

Future land use was delineated in the existing plan based on the speculative uses of parcels. The future land use map did not envision the changes that actually took place during the past 10 years. As a result of infrastructure investments over the past decade, the future land use speculation in the existing plan was not accurate in many areas.

The future land use speculation in this updated plan combines planned infrastructure investments with existing growth trends to create the speculative future land uses.

7.3.1. Northwestern Hart County (Census Tract 9602)

This section of the County witnessed the largest percent population growth in the 1990 decade. This area is poised for continued rapid growth over the planning period especially in the northern section near the interstate. Due to the fact that all other Georgia Counties on I-85 north of Atlanta now have zoning, this area could be most negatively impacted from the lack of land use controls.

The interstate allows rapid access to the metro Atlanta area and metro areas in South Carolina. Land uses that are more tightly controlled in other counties may seek to locate in this section of the County due to the lack of land use controls combined with ease of access to the metro areas. This should be closely monitored over the planning period to address future threats.

Additionally the ease of access to the interstate will increase the demand for residential housing. As adjacent metropolitan areas in South Carolina and Georgia become more crowded and expensive for residential development, individuals may seek this section of

the county as a lower cost, slower paced residential area. This may take place over the planning period but is not expected to have a large impact during this planning period.

The ease of interstate access combined with lower cost for land and low taxes has resulted in an increased interest in larger industrial and warehousing facilities to locate in this area. The new industrial park and recent investments in infrastructure will result in a change to the interstate area. Now that sewer and water are available to this area, the rural characteristic is expected to change as more commercial development takes place.

Sewer and water currently are available at the industrial park however more sewer expansion is expected outside the park especially fronting the State highways (77 & 59) and along Knox Bridge Crossing county road.

A 12 inch water line is now in place from the Gateway Industrial park south on State 77 to the City of Hartwell. This will also act as a catalyst for development along this corridor.

The Hart County Water and Sewer Utility Authority (HCWSUA) has a plan for a large water line on highway 51 from Hartwell to Bowersville. Installation of this line could also promote additional growth along the 51 corridor from Hartwell towards Bowersville.

An additional impact to this area is the State's plans to widen State 17. The widening of this highway to a 4-5 lane road will ease access to the interstate and result in increased growth to this area of Hart County.

7.3.2. Northeastern Hart County (Census Tract 9601)

The northeast portion of the County saw the second largest percent population growth rate at 22% change in the 1990 decade. This area too has ease of interstate access in the Northern section of this tract.

The most significant impact to this area over the planning period is expected to be residential development. The area is too vast for significant investment in sewer and water infrastructure so the development of industrial uses is expected to be non-existent over the planning period.

There are plans for water investments in the southeastern sections of this tract but these multimillion dollar investments may take some time to implement. The highway 77 and highway 51 areas are expected to grow as more sewer and water capacity is extended in these areas especially near the intersection of these two state highways. The City of Hartwell has recently expanded sewer capacity on highway 51/77 and future extensions will occur over the planning period.

It is anticipated that as more residential development occurs in this tract the need for more commercial development will follow. Currently most of the commercial development is occurring in the 29 highway corridor (southeastern section of the County)

near the City of Hartwell however the difficulty of ease of access to this area may result in more commercial development in the Northeastern section of the County. Currently to access the commercial areas from the north, northeast and west, requires travel through downtown Hartwell.

Another expected change to this section of the County is the lakefront development. Traditionally, there has been a one house/one lot type of residential development however the limited supply of lakefront land combined with the increased demand for such land is expected to create more intensive lake front development.

A few of the remaining larger tracts have been recently subdivided into larger subdivisions that include lakefront and interior lots. Some of the remaining large tracts that front the lake remain undeveloped. Some smaller tracts that contained a few acres, a house, and lake frontage have been subdivided into several tracts of lakefront property.

Another interesting recent trend is for more intensive lakefront development. As undeveloped lakefront property becomes rarer, developers are seeking alternatives that intensify land use. One recent proposal is to subdivide slightly more than 3 acres into 11 tracts of land with a community dock.

The limiting factor is water and sewer capacity. No public water or sewer is yet in the lake area. Most newer developments are utilizing non-lakefront land for potable water wells. The traditional development more recently has included 0.5 acre lots that have a remote well serving multiple lots and individual septic tanks.

However developers are looking at more intensive developments utilizing larger onsite sewer treatment facilities. The exception to this is the lake area near the City of Hartwell. One section of the lake off highway 51/77 North of Hartwell is in this tract. Recently a condominium type complex with lake frontage was constructed and connected to the City of Hartwell's sewer. This type of development will most likely take place on other tracts of land near this site. In addition, intensively lakefront development on vacant land on 29 near the commercial corridor is expected to take place with connections to city sewer.

Other developments that will likely take place more intensely will include lakefront development with interior lots that have "lake access". These interior lots will have lake access through common area and community docks increasing the value and desirability of the interior lots.

During the planning period this section of the county should see continued residential growth both on the lake and off lake. There may be commercial growth on the highway 77 section of this area but there is no evidence of increased commercial growth at this point. There will be more intensive lakefront development other than the traditional one house per acre or half acre and may include group type housing.

In general, the lakefront land area residents desire more land use controls in contrast to the non-lake residents who want no land use controls. An expected challenge over this

planning period will be to overcome that difference in the desire for land use controls. If a lake front character area could be established with distinct land use controls then this area could potentially establish the land use controls they desire while not negatively impacting the non-lake character areas.

Without land use controls residential growth in this area is expected to continue to put pressure on the agricultural land uses especially poultry farming. As residential areas become more densely located they will seek to control agricultural uses especially uses that create odors. Land use controls that protect residential properties would also protect those agricultural uses as allowable land uses. Additionally, uncontrolled growth is expected over the planning period including more intensive lake front development.

7.3.3. Southeastern Hart County (Census Tracts 9604 & 9605).

The southeastern portion of the county has seen the slowest population growth rates at about 11% over the 1990s decade. Other than commercial development on the 29 corridor southeast of Hartwell, growth is expected to be primarily residential over the planning period.

Industrial growth in this area of the County is not expected to increase due to the lack of interest on the part of the current City of Hartwell for expanding industrial development. The older industrial sites will hopefully be redeveloped into new uses. Without sewer capacity and an atmosphere of promoting industrial growth from the City of Hartwell, this area will be limited in industrial growth over the planning period. This may change over the planning period if the City has an interest in promoting industrial growth.

The Savannah river area is currently remote and has limited development however the recent selling of large tracts of land may result in more residential development in this area.

Overall the growth of this area is expected to be slow over the planning period and minimal impacts are expected.

7.3.4. Southwestern Hart County (Census Tract 9603).

The southwestern portion saw the third highest population growth change in the 1990 decade with 17% change. This section of the county is expected to be impacted by growth over the planning period from the Athens area MSA.

The Athens MSA is impacting Madison County now with the current impacts on residential development about 10 minutes from Hart County. Over the planning period this impact is expected to be felt in Hart County. The expected impact is in the residential sector although commercial development may follow the residential development. Commercial development may take place over the planning period depending on the how fast the residential growth occurs.

An additional impact is expected in the industrial sector. This impact will be limited by sewer and water infrastructure however as described in the economic development section of this plan, there is a great potential for industrial growth. Currently the County is working with the City of Royston to put plans in place for expanding water service into Hart County through the HCWSUA.

However, the City of Royston is limited in sewer capacity. If the City of Royston was to plan any sewer capacity upgrades then there may exist the potential for a partnership with Royston for providing sewer capacity to Hart County in this section of the County near Royston. This could provide for expanded industrial growth.

7.4. Future Land Uses Speculative Categories

In review of the existing land use plan, the future land uses that were described in the plan were not encouraged through any type of planning or land use controls instituted over the past 10 years. Growth was essentially taking place unplanned and left solely to the market demands.

This plan update is more comprehensive and realistic. It identifies the expected growth patterns and marries those patterns with projected infrastructure investments and other influences. This plan update recognizes the realistic fact that land use controls are currently not in place and not currently planned for the immediate future.

Therefore unlike the current land use plan, it is unrealistic to propose that any land use controls will be implemented over the next 10 year planning period that will impact future land uses over the planning period. This does not diminish the need for these land use controls but recognizes that the current plans do not envision land use controls impacting future land uses during the next ten years unless the public decides that land use controls are needed.

What will impact future land uses over the planning period are infrastructure investments and market needs. Through proper planning and implementation wise growth is expected over the planning period through infrastructure investments combined with cross planning of all facets of the County's growth (trends, economic development, infrastructure etc.).

7.4.1. Residential Development.

Residential development is less impacted by planned infrastructure investments other than intensive residential development. Currently limiting growth is not a factor in Hart County and has not been delineated as a priority of the local government nor the residents of the County. This includes regulating or controlling intensive residential development.

Residential growth is impacted by market trends with the most significant market need based on access to Lake Hartwell. Over the planning period residential growth is

expected to continue as outlined in the previous sections. The delineation of residential growth corridors on the future land use map is based on those expected market trends.

Infrastructure investments are being planned based on the expected future land uses and market needs combined with the current trends and other expected influences on growth.

7.4.2. Commercial/Industrial Development.

As with residential development, the future land use plan recognizes that commercial and industrial development will take place based on market needs. However this type of development is more impacted by infrastructure needs. Commercial and industrial land use corridors are planned based on the planned infrastructure investments. However planned infrastructure investments are being planned based on desired growth.

Absent of land use controls, the most effective means the County has for impacting future land uses in commercial and industrial development is through infrastructure investments. There are no plans to limit commercial or industrial development. On the contrary the County intends to promote commercial and industrial growth in Hart County.

7.4.3. Agricultural Development.

Other than the residential, commercial and industrial growth corridors and subregions, the vast majority of the county land area is indicated as agricultural/forestry in the future land use. Other than minor scattered single residential structures this land use is expected to continue through the planning period. Residential land uses will continue to decrease the land use associated with agriculture. Currently, the County has no plans in place to promote the preservation of agricultural resources and none is expected over the planning period.

7.5.4. Environmentally Sensitive Areas.

The Future Land Use Plan indicates all known flood plains and wetlands (of approximately three acres or more) as conservation areas. Several significant groundwater recharge areas exist in Hart County and are identified on the future land use plan.

The water supply watershed has also been delineated in the North Fork, Broad River water supply watershed. Development along Lake Hartwell will continue to be regulated by the U.S. Army Corps of Engineers' Shoreline Management Plan, intended to protect this valuable natural resource.

7.5 Existing Land Use Regulations:

Table 7.1 lists the existing land use regulations. Although limited these regulations do apply some level of local control over some types of land uses.

Table 7.1 Existing Land Use Regulations.

Building Permit
Solid Waste Landfills
Mobile/Manufactured Homes Permitting
Sewage Disposal Requirements
Land Development / Subdivision Regulations
Alcoholic Beverages
Sexual Oriented Businesses Ordinance
Amusements and Entertainment Ordinance
Fortunetelling Business Ordinance
Floodplain Management Ordinance
Utility permitting for roads

CHAPTER EIGHT: COMMUNITY FACILITIES

This portion of the plan includes an inventory of public facilities and services. Without land use controls the government can have limited control over the type and quality of growth in the county other than through the provision of public services. Infrastructure investments are analyzed and planned based on the type and location of where growth is practical and desired. This section of the plan analyzes and plans for those community facilities and infrastructure.

8.1. General Government.

Hart County general government functions are located primarily in the City of Hartwell at the Hart County Courthouse, the Administrative Building on Chandler Street and other locations in Hartwell.

Space for administrative functions is considered inadequate. The facility at Chandler Street meets the existing needs but has no room for additional growth. Over the planning period alternative facilities for the offices located in this building may be needed.

The Courthouse was recently analyzed for the long term (25+ years) of space needs and found to be inadequate to meet the needs of the present. The potential to reuse the existing facility was also analyzed and determined to not be practical. Over the planning period an alternative must be pursued to meet the demands of this facility.

This will be a costly endeavor and is expected to take several years to plan and several more years to implement. The location of the facility is also critical. Traditionally the Courthouse and its functions have been located only at the present site. In addition, the City and the downtown merchants rely on the courthouse traffic to bring people into downtown. Relocation to another site may be detrimental to the downtown area.

Conversely relocation to another site may eliminate problems with congestion and parking in the downtown area. If the site was to be redeveloped it could potentially be an alternative draw to the downtown area.

Other alternatives that may be explored could include the relocation of some non-court functions to another facility.

8.2. Public Safety.

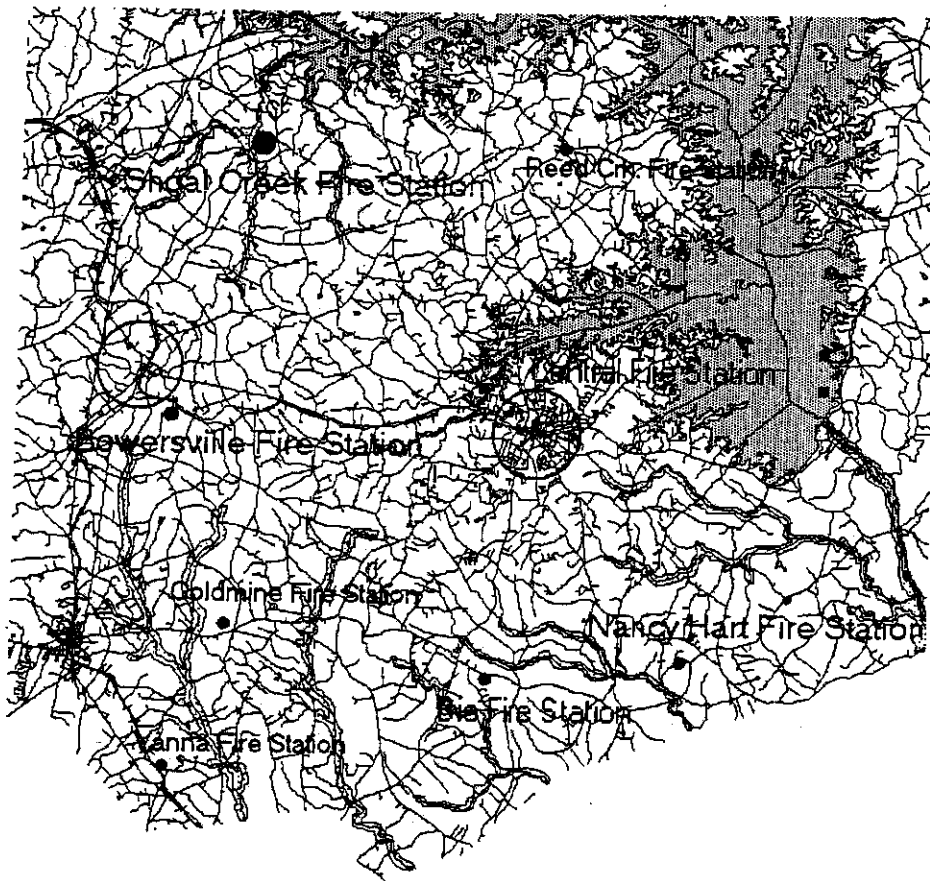
Operations of the Hart County Sheriff's Department are located on West Johnson Street in Hartwell. The department handles all sheriff dispatch services. The Sheriff operates a jail with a 52 person capacity also located on West Johnson Street.

The jail facility does not meet the current needs. The need for additional jail space will have to be addressed in the coming planning period. One option that is being explored is to expand the jail using the space currently occupied by the Sheriffs office administration and deputies. The administration and deputies would need a new facility located on the same property.

This would most likely be a shorter term solution but at a much lower cost than a brand new facility.

8.3. Fire Protection.

Fire protection in Hart County is provided by a volunteer fire force comprised of 2 full time firemen and approximately 150 volunteer firefighters. The volunteers staff eight fire departments dispersed throughout the county. A part-time fire chief provides organizational support to the fire force. Locations of fire stations are indicated on map 8.1. Table 8-1 presents fire call data for each of the stations.



Map 8.1 Fire Stations

TABLE 8-1: FIRE CALLS; 1993, 1994, and 2002/2003.

Station		Number of Calls		
Name	Location	1993	1994	2002/2003
Central	Carolina Street (Hartwell)	87	87	61
Reed Creek	Reed Creek Road	14	28	39
Goldmine	Goldmine/ Airline Road	23	12	25
Shoal Creek	Highway 336	23	17	36
Bowersville	Bowersville	27	16	27
Nancy Hart	Cokesbury Road	22	10	39
Bio	Bowman Highway	2	10	24
Vanna	Vanna	5	7	12
TOTAL		203	187	263

Source: Hart County, 1993, 2005.

The Insurance Services Organization (ISO) rating is 6/9 county-wide outside Hartwell. Soil Conservation Service has installed dry hydrants in the county. In addition the HCWSUA has installed water lines and hydrants in the County.

The County recently hired two full time firemen for fire calls during the day and to support the volunteer firemen. These full time firemen have been maintaining the existing and new fire hydrants in the County. Over the planning period the County may add additional full time firemen.

The County is also in the process of developing a training facility. A fire truck pump test pit has been constructed at the fire training facility located at the County public works complex on State 172. An addition live fire training unit is to be installed this year. Additional plans for other training facilities to be added to this facility over the planning period. The county intends to offer this facility for use of adjacent counties and municipalities.

An agreement has been entered into with the City of Lavonia for fire service for the Gateway industrial park. This has lowered the ISO rating to a 4 and is an extra incentive to locate businesses to this park. In addition, the City of Lavonia has a ladder truck which the County currently does not possess.

The County has been investing sales tax and insurance premium tax revenues on fire protection. A new fire truck pumper has been placed in all eight fire stations. Additional grass fire trucks, turn out gear, communication equipment and other equipment has been or will be purchased over the planning period.

The County is also investigating the existing stations to determine their long range needs. At least one station, Reed Creek will need to be replaced with a larger facility over the planning period. Additional expansions or replacements of the other fire stations may also be needed over the planning period.

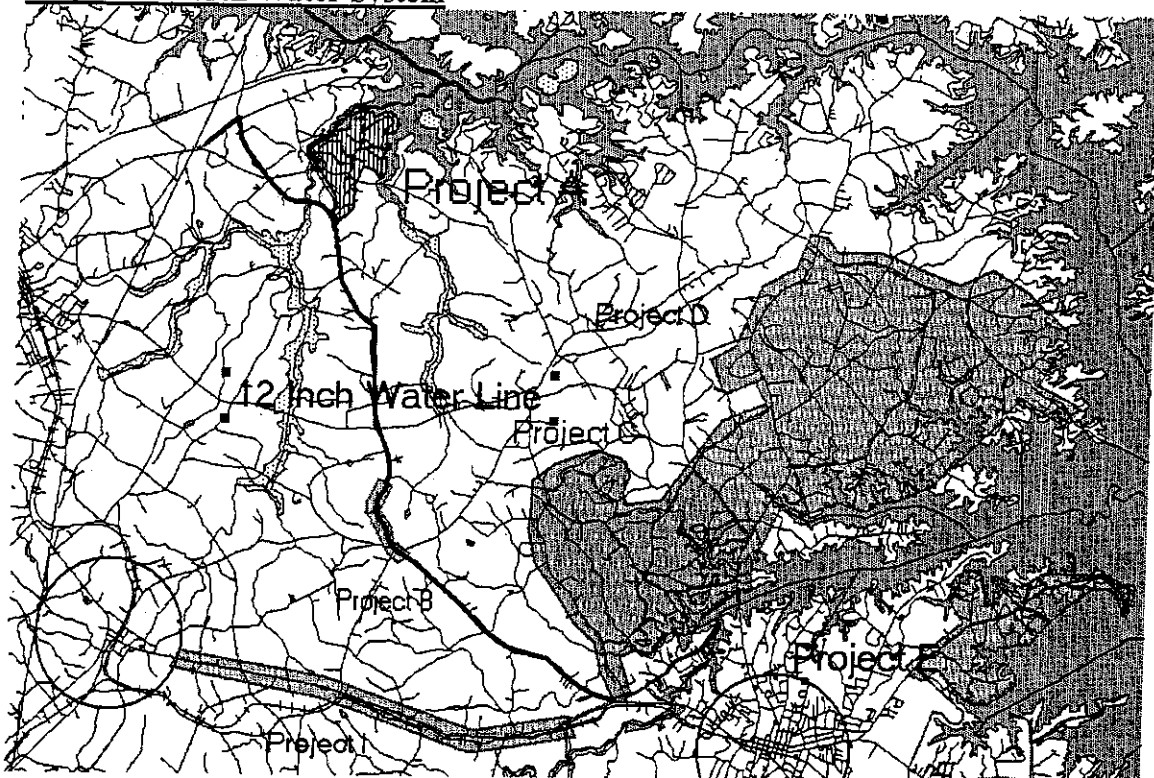
8.4. E-911 System.

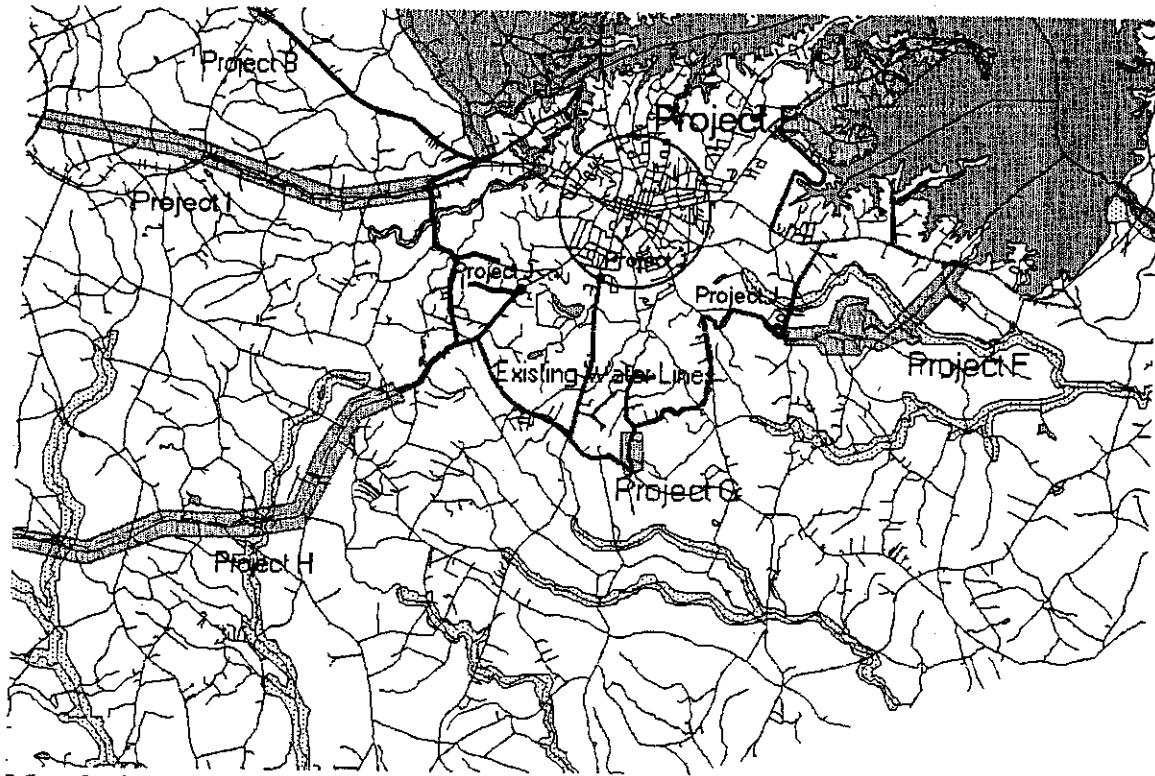
An enhanced 911 system is in place in the county which dispatches for fire and ambulance service in the county. Currently, the Sheriff's Department handles dispatch in-house for Sheriff's services. The County is investigating the consolidation of dispatch services for the centralized dispatch by the 911 system for Sheriff's Department service, as well as City of Hartwell police and fire services. Equipment and personnel are considered adequate for the planning horizon.

8.5. Water System.

The Hart County Water and Sewer Utility Authority (HCWSUA) currently provides water service to the unincorporated sections of the County. Sales tax revenues have been invested to install water lines. Map 8.2 shows the location of the existing water lines as well as proposed water lines over the planning period.

Map 8.2N North Water System





Map 8.2S South Water System

Water service is currently be negotiated as a part of the update to the County service delivery strategy. The potential for consolidation with the City of Hartwell has been explored and has been rejected by the County for several reasons.

Initially in the early 1990's the County sought the assistance of the City of Hartwell to run water to some new users in the County. The City rejected providing this service so the HCWSUA was established. The HCWSUA has grown over the period and now provides for a growing customer base.

Currently the HCWSUA purchases water in bulk from the City of Hartwell and the City of Lavonia. The County is pursuing an agreement with the City of Royston to purchase bulk water for this unincorporated section of the county.

The current negotiations surrounding the provision of water in Hart County are attempting to establish water service territories. This plan will refer to the service delivery strategy where the water service delivery territories will be established.

The long range plans for expansion of water service in the county as shown on map 8.2 will be obviously limited by funding. A new sales tax SPLOST has been passed by the voters and will place approximately \$3,000,000 into water infrastructure over the next 6 years. Other funding sources will be needed over the planning period to meet the current projection of \$15-20M for the total proposed water expansions.

More than likely these proposed water system expansions will not entirely occur over the planning period. The HCWSUA is prioritizing the projects to meet their needs as well as the needs of the County especially in terms of economic development.

The provision of water in the unincorporated sections of the County near the City of Royston will only be feasible over the planning period if bulk water can be purchased from Royston. Royston has indicated a willingness and capacity to provide bulk water. Expansion of the existing HCWSUA lines from their location on 29S towards the Royston area would be cost prohibitive at this point. Therefore the alternative being pursued is to get treated water in bulk from Royston and expand in that direction away from Royston.

Water infrastructure in Hart County in general will not be a limiting factor for growth needs over the planning period.

8.6. Sewerage System.

Sewer service is the limiting infrastructure need over the planning period. Sewer service for the recently developed Gateway Industrial Park is provided by the City of Lavonia for the HCWSUA. Expansion of this service outside of the park is currently being pursued. Expansion of this sewer service would allow for commercial and industrial growth along State 59, State 77, and Knox Bridge Crossing roads.

The only other public sewer service is provided near the City of Hartwell. Currently the City will only provide sewer service to those properties that annex into the City of Hartwell. Industrial and commercial growth outside the City of Hartwell will be limited over the planning period unless the property can be annexed into the City and/or the City allows alternative provisions for sewer service in the unincorporated section of the county near the City.

The City of Royston is at capacity with their sewer service. If Royston were to pursue upgrading their system over the planning period and could partner with the County then the potential for industrial and commercial growth near the City would be possible. Without expansion the industrial and commercial growth will be limited.

Residential growth relies primarily on septic tanks. As the demand for more intensive residential development increases especially around the lake, the ability to provide residential sewer service based solely on septic systems will be a limiting factor on continued residential growth. In addition, the ability of the systems to handle the existing and future needs without damaging natural resources such as the lake may become an issue over the planning period.

Other subsurface systems will most likely be an option that will be utilized more over the planning period. These larger subsurface systems will allow more intensive development especially near the lake where non-lake front property may be utilized for the subsurface disposal systems and pumped from the lakefront properties.

These systems may address the short term needs of sewer disposal however they may also create longer term problems. As these systems age the maintenance and regulation of their ability to perform as designed will be a burden of the private property owners. Additionally if the future standards are upgraded to more stringent requirements the systems may have to be upgraded. If these systems are not properly managed or if the property owners are not financially capable of maintaining the systems the burden may be shifted to the public. The County is currently exploring these systems to determine what potential options exist to circumvent any future potential problems.

Negotiations are currently underway for sewer service and will be finalized as part of the service delivery strategy. The service delivery strategy will be the guiding document for service delivery of sewer in Hart County.

8.7. Natural Gas Systems.

The City of Hartwell provides natural gas to 2,345 customers, up from 1,759 in 1994. Most of these customers are located outside the city limits. The gas is supplied via the Transcontinental Gas Pipe Line Corporation of Houston, Texas. There are no major system expansions or repairs anticipated throughout the planning horizon.

Toccoa Natural Gas also supplies gas service to sections of unincorporated Hart County. The territories for sewer service have been established in the service delivery strategy that is effective over the term of this planning period.

8.8. Parks and Recreation.

Hart County operates a park located in Hartwell, which contains a senior center and six lighted tennis courts. In addition, there are four lighted ballfields and an administrative building.

A privately-operated golf course, located south of Hartwell on 29S, is open to the public on a fee basis. Cateechee golf course on 77S is another golf facility. Additional recreational facilities (state and federal) in the county are discussed in the Natural Resources element.

A new Hart County Recreational Complex is currently under construction on 77S south of Hartwell. The first phase of this complex is scheduled to be opened in Spring of 2006 and will have 4 baseball fields. Future phases may have football/ soccer fields, tennis courts, basketball courts, volleyball, horseshoe pits, a shuffleboard court, playground, amphitheater, and picnic areas. In addition, a community center may be constructed. A 7 acre botanical garden has also been constructed with trails.

Because church facilities may not be available to the general public, they have not been included in the assessment of needs. Such facilities do, however, provide a greatly needed resource in Hart County. It is estimated that five to six basketball courts are available as well as some baseball fields.

The YMCA has additional recreational resources available to the public and is located near the City of Hartwell. The availability of Lake Hartwell for water recreation purposes is also available to the public.

Long term recreation programs and needs are currently being worked on. As the retirement community continues to grow in Hart County additional recreation opportunities for this population may be needed. Additionally other areas of the population may not have their recreation needs being met. The current recreation programs focusing on organized sports may need to be expanded to meet the needs of others in Hart County who may not participate in the traditional organized sports of baseball, basketball and football. These needs are anticipated to be explored over the planning period.

8.9. Hospitals and Other Public Health Facilities.

The Hart County Hospital is a 74 bed, full service facility, which includes a twenty-four hour emergency room and EMS services. As indicated in Table 8-2, the Hart County area contains the largest number of hospital beds of any of the four surrounding counties. The 3.57 beds per 1,000 persons in Hart County is higher than the state average of 2.87. Hart County Hospital has been leased to Ty Cobb foundation since 1995. The comprehensive plan supports the continued efforts at the Hart County hospital to improve.

TABLE 8-2: HOSPITAL AND NURSING HOME BEDS, 2002

County	Hospital Facilities	General Hospital Beds	Hospital Beds/1,000 Persons
Elbert	1	52	2.54
Franklin	1	71	3.5
Hart	1	82	3.57
Madison	0	0	0
Georgia	153	23,522	2.87

Source: Georgia Office of Planning and Budget, Georgia Descriptions in Data, Hospital Officials.

County	Nursing Homes	General Nursing Home Beds	Nursing Home Beds/1,000 Elderly	Pop. Over 65
Elbert	3	187	61.1	3,060
Franklin	1	144	46.3	3,108
Hart	2	209	55.04	3,797
Madison	1	116	41.03	2,827
Georgia	364	39,520	50.33	785,275

Source: Georgia Office of Planning and Budget, CountyGuide 2003, Nursing Home Officials.

As an integral part of the improvement of the hospital and health care provision in the county, three broad goals are recommended for the Hart County Hospital. These include increased sensitivity to the healthcare marketplace, continued efforts of physician and staff recruitment as needed, and the improvement of the physical facilities at the hospital. Facilities for physical therapy have recently been renovated. However, improvements to certain portions of the hospital are needed. These areas include the emergency room, surgery, outpatient, laboratory, radiology. Updated facilities for the emergency room and surgery are currently in the planning stages.

The Hart County Health Department, with support of the Georgia Department of Human Resources, offers a variety of medical services, some of which include well-children screenings, women's health services, infectious disease testing and treatment, and vision and hearing screenings. The 12 year old health department facility, located at 64 Reynolds Street in northeast Hartwell, is considered adequate throughout the planning horizon. The Hart-Franklin County Mental Health/Substance Abuse Center, located in Hartwell, provides counseling, referral, and rehabilitation services to area residents.

8.10. Emergency Medical Services (EMS).

EMS services are provided by the Hart County Board of Commissioners. The Board recently added an additional crew to handle the increased call volume. Currently all services are dispatched and house centrally on Reed Creek Highway in Hartwell.

The County is investigating the potential to decentralize this system and the potential benefits and negative effects that may result through decentralization. Response time to some areas of the County can be as high as 20 minutes. Decentralization would be implemented to reduce response times.

8.11. Nursing and Personal Care Homes.

There are no publicly sponsored nursing homes in Hart County. Two privately-operated nursing homes provide a total of 209 beds. In addition, a personal care home in Hartwell has a capacity for fifteen residents.

While the nursing home facilities are considered adequate in the short-term, local health care/social service professionals indicate that additional personal care home facilities would be well utilized. A market study is needed, however, to determine the exact need for such facilities.

The construction and operation of health facilities, including nursing and personal care homes must receive state approval. As such, proposed facilities are subject to the certificate-of-need rules of the State Health Planning Agency. This requirement exists to prevent an oversupply of health facilities/services since an oversupply tends to increase health care costs. The State Health Planning Agency calculates allowances based on population projections of the Georgia Office of Planning and Budget. Currently, Hart County nursing homes are at capacity and there is a waiting

list for entry into these facilities.

8.12. Libraries and Other Cultural Facilities.

The Hart County Library is partially funded by the City of Hartwell, Hart County, and the State of Georgia. The facility is open 53 hours per week and provides several community programs and activities.

Recent purging of collection has brought it down to around 40,000 volumes. The library facilities are adequate as far as floor space is concerned, but collections of books and media are lacking.

Nancy Hart Literacy Council considered a separate facility, was recently added onto the library. This facility provides GED, and computer training and has a large public conference room on the lower level.

The library, located in Hartwell, has 19,990 square feet of space and 40,000 circulating items. Library standards are pending an ongoing process of determining appropriate standards. Currently, meetings are being held with state library office to determine these standards, which when determined will determine how many volumes the Hart County Library will need to add in the future.

Currently the library operates out of a temporary facility due to mold contamination within the library. This problem will need to be addressed in the near future and will cost several hundred thousands of dollars to correct.

The Hart County Community Theater located in Hartwell produces live productions at their theater located on Depot Street in Hartwell. The Hart County Historical Society has restored the Teasley-Holland house, located at 31 East Howell Street, to be used as The Hart County Museum. The museum contains two permanent exhibits, one about the revolutionary heroine, Nancy Hart, and a second addressing Native American culture. Additional space will be utilized for revolving exhibit space. The Chamber of Commerce is also located in the museum.

8.13. Educational Facilities.

8.13.1. Public School System.

Public educational facilities are governed by the Hart County Board of Education. There are seven county public schools, three of which are elementary schools, one is a middle school, and one is a high school. Two elementary schools are located in the unincorporated portions of the county. The Hart County High School Five Year-Study and School Improvement Plan 2003-2008 provides additional information on student enrollment, completion rates, and other data.

TABLE 8-3: PROJECTED SCHOOL AGE POPULATION 1990-2015

HART COUNTY

AGE CATEGORY	1990	1995	2000	2005	2010	2015
5 - 9	1269	1254	1303	1248	1123	983
10 - 14	1391	1182	1167	1216	1161	1036
15 - 19	1437	1283	1074	1059	1108	1053
TOTAL	4097	3719	3544	3523	3392	3072

As indicated in Table 8-3, the school age population in Hart County is expected to decline through the year 2015. Based upon these projections, public educational facilities are considered adequate throughout the planning horizon, with the exception of the middle school where there is currently a need for additional space.

8.13.2. Colleges and Universities.

Although there are no colleges or universities based in Hartwell or Hart County, opportunities for higher education exists. Truett McConnell College offers courses at a satellite location in Hartwell. The University of Georgia at Athens and Clemson University in Clemson, South Carolina are both just over forty miles from the Hartwell. Emmanuel College at Franklin Springs is located approximately twenty miles from the Hartwell area. Brenau College, based in Gainesville, offers extension courses at several nearby locations. Anderson College in Anderson, South Carolina is located approximately twenty miles from Hartwell.

8.13.3. Vocational Schools.

Technical training is available at the Athens Area Vocational-Technical School which is thirty-five miles southwest of Hart County. Athens Tech also has a satellite campus in Elberton, approximately twenty miles south of Hartwell. Additional Vo-Tech training opportunities are available at Tri-County Technical School in Pendleton, South Carolina.

8.14. Transportation.

8.14.1. Roads.

As indicated in Table 8-4, there are approximately 718 miles of public roadways in Hart County. State routes comprise almost 93 public miles and county roads 550 miles of total roadways. There are approximately 92 miles of unpaved County public roadways in the County. There are numerous private roads that are unaccounted for in Hart County.

TABLE 8-4: ROADWAY MILEAGE HART COUNTY 1993

(In Miles)

Hart County	
Road Category	Miles
Interstates	2.25
State Routes	92.29
County Roads	550
City Streets	38.45
Unpaved County Roads	92
Daily Vehicle Miles Traveled	873,916

Source: The University of Georgia. The Georgia County Guide, 1993, P. 164 and local resources

The number of both passenger cars and trucks registered in the county has risen in the last two decades. Some of this growth may be due to registration on non-resident vehicles for tax purposes. However, this trend is expected to continue with the anticipated growth in county population.

A comprehensive study of the Hart County roads infrastructure was undertaken and a long range management plan adopted in 2003 to manage the counties roads infrastructure. More information is available through this plan.

TABLE 8-5: MOTOR VEHICLE REGISTRATIONS HART COUNTY

Hart County				
Vehicle Type	1982	1991	2000	Increase 1991-2000
Passenger Cars	9,772	11,207	17,008	51.8%
Trucks	3,649	6,054	7,375	21.8%
Trailers	1,003	2,138	3,388	58.5%
Motorcycles	388	203	306	50.7%
Buses	16	11	57	418.2%
Total	14,828	19,613	25,134	28.1%

Source: The University of Georgia. The Georgia County Guide, various years.

Traffic counts and roadway classifications are presented in Table 8-6. Arterial roads are utilized for the movement of through traffic and have a capacity of anywhere from 5,000

to 13,500 vehicles per day. Collector roads connect local roads to arterials and generally have a capacity of 7,500 vehicles per day. Local roads provide land access and are generally two lanes wide.

TABLE 8-6: TRAFFIC COUNTS HART COUNTY

Road Name and Segment (from/to)	Section Numbers	1986	1992	2003
S.R. 77 southern county line/southern Hartwell limit	101,103,105,107,109	13,732	15,606	22,045
S.R. 77&S.R.366 51 (west of H-well/I-85	118,121,169,172,174	8,980	12,131	19,077
S.R. 77 S.R. 366/western county line	123	2,143	2,796	3,461
County Road 503 southern county line/S.R. 29	127,129,134,136,141	688	5,314	8,021
S.R. 172 southern county line/Central Hartwell	143	6,623	3,468	3,936
S.R. 17 southern county line/western Royston boundary	147,149,158,161,163	5,565	8,348	11,958
County Road 508 Vanna/S.R.366	165,167	1,869	1,087	1,528
S.R. 8 western Royston limit/southern Hartwell limit	176,181,185,187	15,206	17,373	24,648
S.R. 29 eastern Hartwell limit/Svannah River	198,201,205,207	23,046	25,750	32,641
S.R. 181 S.R. 29/Savannah River	212,214,289	2,717	2,760	3,286
Connector S.R. 29/S.R. 181	209	501	769	602
County Road 538 S.R. 29/Lake Hartwell	216,227,229,232	1,150	1,355	14,470
S.R. 51 center Bowersville/western Hartwell limit	234	13,907	19,044	13,433

S.R. 51 northern Hartwell limit/Lake Hartwell	241,243,245,247,249	9,835	12,907	16,099
County Road 540 S.R. 51/Lake Hartwell	252	153	257	303
County Road 510 S.R. 8/S.R. 77sp	254,256	645	N/A	1,394
S.R. 77sp S.R. 77/S.R.181	258,261	1,984	2,604	1,711
County Road 507 S.R. 366/County Road 503	265,267,274,276	651	979	4,595
County Road 503 S.R. 51/County Road 245	278	3,528	4,244	564
S.R. 59 western county line.Lake Hartwell	281,283	1,493	1,793	2,258
I-85 within Hart County	285,287	40,405	71,389	81,048
County Road 509 S.R. 8/S.R. 77	292,294	1,284	1,478	1,121
County Road 504 S.R. 77/southern county line	296,298	1,923	1,432	1,974
County Road 503 Mt. Olivet Church/Lake Hartwell	269,272	3,260	3,776	4,796
S.R. 17 Bowersville/western county line	154	3,799	4,189	6,482
S.R. 28 southwestern county line	148	N/A	1,912	1,895

Source: Georgia Department of Transportation Road Counts.

Note: Road classifications based upon standards recommended by the Institute of Transportation Engineers. All state routes are classified as arterials. All remaining road segments are considered local.

A County Roads Department is responsible for roadwork and maintenance. In addition to ongoing maintenance, the department intends to continue the paving of currently unpaved roads.

The State DOT conducts road maintenance and improvement programs on State routes in Hart County. Currently no major long range improvement plans are proposed in Hart

County other than the widening of the interstate. It is critical that Hart County and its municipalities create a priority of projects for consideration from the GADOT for larger improvement projects.

These long term projects involve three primary phases and are very costly. The first phase is the preliminary ROW and engineering work. This is followed by more detailed engineering and ROW purchase prior to the final phase involving actual construction.

Without a plan in place Hart County is potentially losing State road improvement/construction money to other communities. By adopting local priorities, Hart County can push the State to pursue local road construction programs. These programs take years to implement and are very costly however without local priorities, the money is going to other communities.

8.14.2. Sidewalks.

Due to the rural nature of Hart County, sidewalks are not considered realistic or necessary infrastructure in most areas.

8.14.3. Railroads.

The Hartwell Railway provides rail service in Hart County. Some of these lines are inactive but remain for potential future use. Rail service is considered an important element for economic development and is discussed more further in the economic development section.

8.14.4. Airports.

The nearest commercial air service to Hartwell is located in Athens, GA and Greenville South Carolina. The nearest public airports are located in Franklin County (Hart/Franklin Airport) and Anderson County, South Carolina and several private airstrips are located in Hart County. In the economic development element, discussion was made of the need to improve the Hart/Franklin County Airport for corporate jet service.

8.14.5. Navigable Water.

The nearest navigable river is the Tennessee River with a nine foot channel depth. A public barge dock is located at Chattanooga, Tennessee, approximately 170 miles from Hartwell. Savannah, Georgia, approximately 229 miles away, provides the nearest seaport with a maintained channel depth of 38 feet.

8.15. Solid Waste Collection and Disposal.

The Hart County Landfill has been closed. A transfer station and recycle facilities have been constructed to serve in place of the landfill. Hart County is currently under contract

with a private disposal company for disposal of MSW. The greenbox system formally used in Hart County has been discontinued and replaced by seven staffed centers for garbage collection and recyclable recovery. Further details regarding sanitation are addressed in the Hart County Solid Waste Plan.

Hart County Comprehensive Land Use Plan Community Participation Program

The Hart County Board of Commissioners has a strong commitment to community participation in the development of the comprehensive land use plan. Accordingly the County held several meetings and opportunities for public review and participation.

In early January 2005 the Hart County Board of Commissioners established a proposed timeline in anticipation of meeting an October 1, 2005 deadline for the update of our comprehensive land use plan. A program was established and notices placed (see appendix A). These notices were posted on the County's website and in County facilities throughout the County. Additional notices were placed in the local paper (see appendix B).

A public meeting was held on February 8, 2005 at a regularly scheduled meeting of the Hart County Board of Commissioners (see appendix C). During that meeting the County Administrator, Jon Caime (who is drafting the comprehensive land use plan) gave an overview of the process, the timeline for completing the process, and presented a public petition. The public was encouraged to attend these meetings and be active in the drafting of the plan.

On February 17, 2005 (see appendix D) a second public meeting was held specifically for the purpose of further refining the proposed process and gathering public input on the plan and the public participation program. Annaka Woodruff, GA DCA Planning (Quality Growth Manager II) attended the meeting and participated in the program.

Several questionnaires (see appendix E) were distributed at this meeting. Only about 8 members of the public showed up for the meeting. A set of goals was drafted from the public participation meeting (see appendix F).

The County then began the process of developing the draft community assessment. As the County administrator completed a chapter (8 total chapters), an overview of the chapter was presented in a public meeting (regularly scheduled meeting of the Hart County Board of Commissioners). The draft chapter was then available for public review and input. This process took several months to complete. Each time the issue was published as a part of the agenda and public participation encouraged and sought.

The GA DCA has since extended the deadline for submittal to October 1, 2006.

A Public Hearing was held on ??????????/ to brief the community on the potential issues and opportunities identified through the Community Assessment, obtain input on the Community Participation Program, and to notify the community that these plan components will be transmitted to the RDC.

A resolution of transmittal was also prepared for transmittal of the document to the RDC. (see appendix G).

Existing Land Use Maps

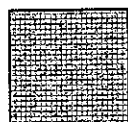
Key:



Agricultural/Forestry



Commercial



Parks/Recreation/Conservation



Public Institution



Residential



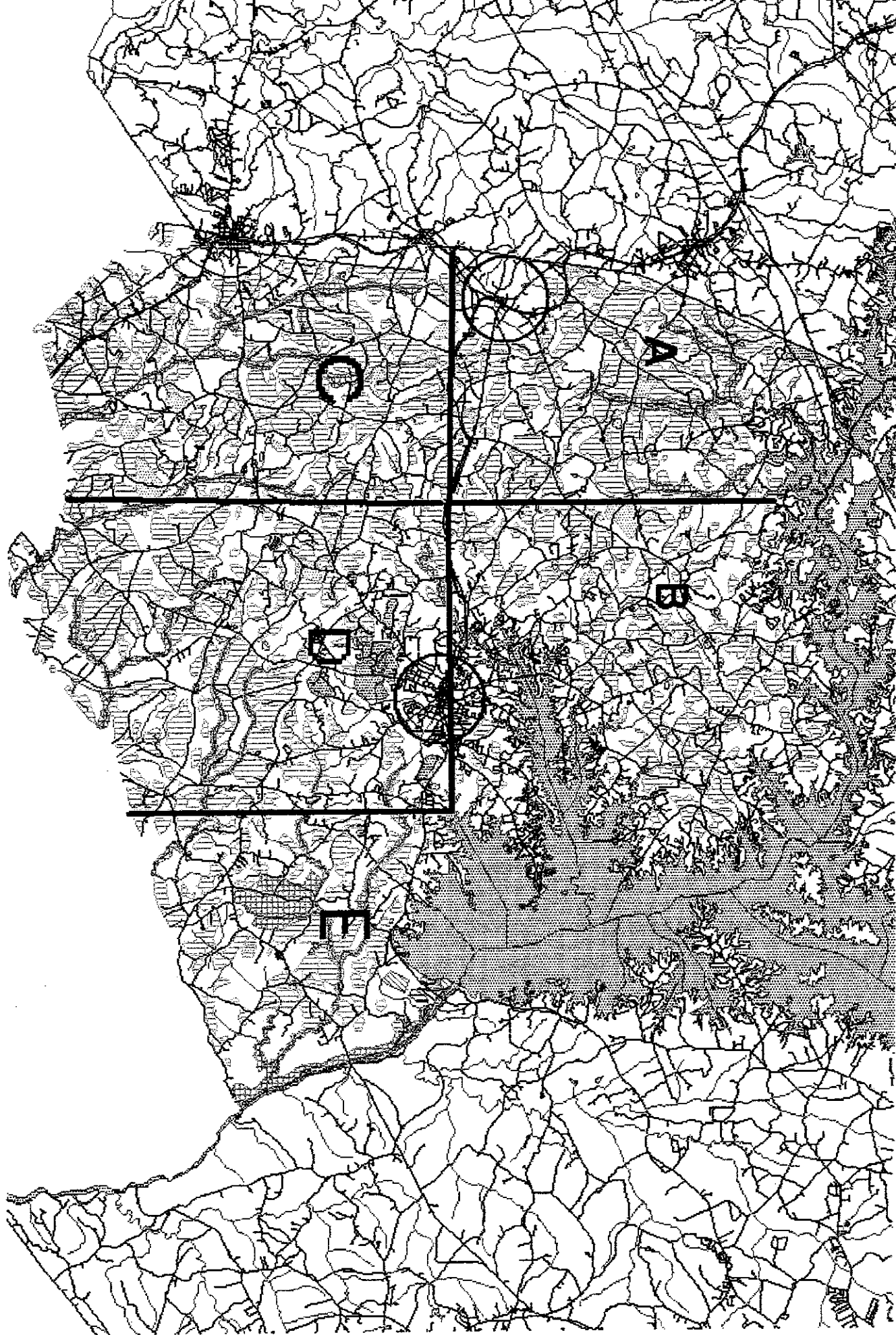
Special Use Agricultural

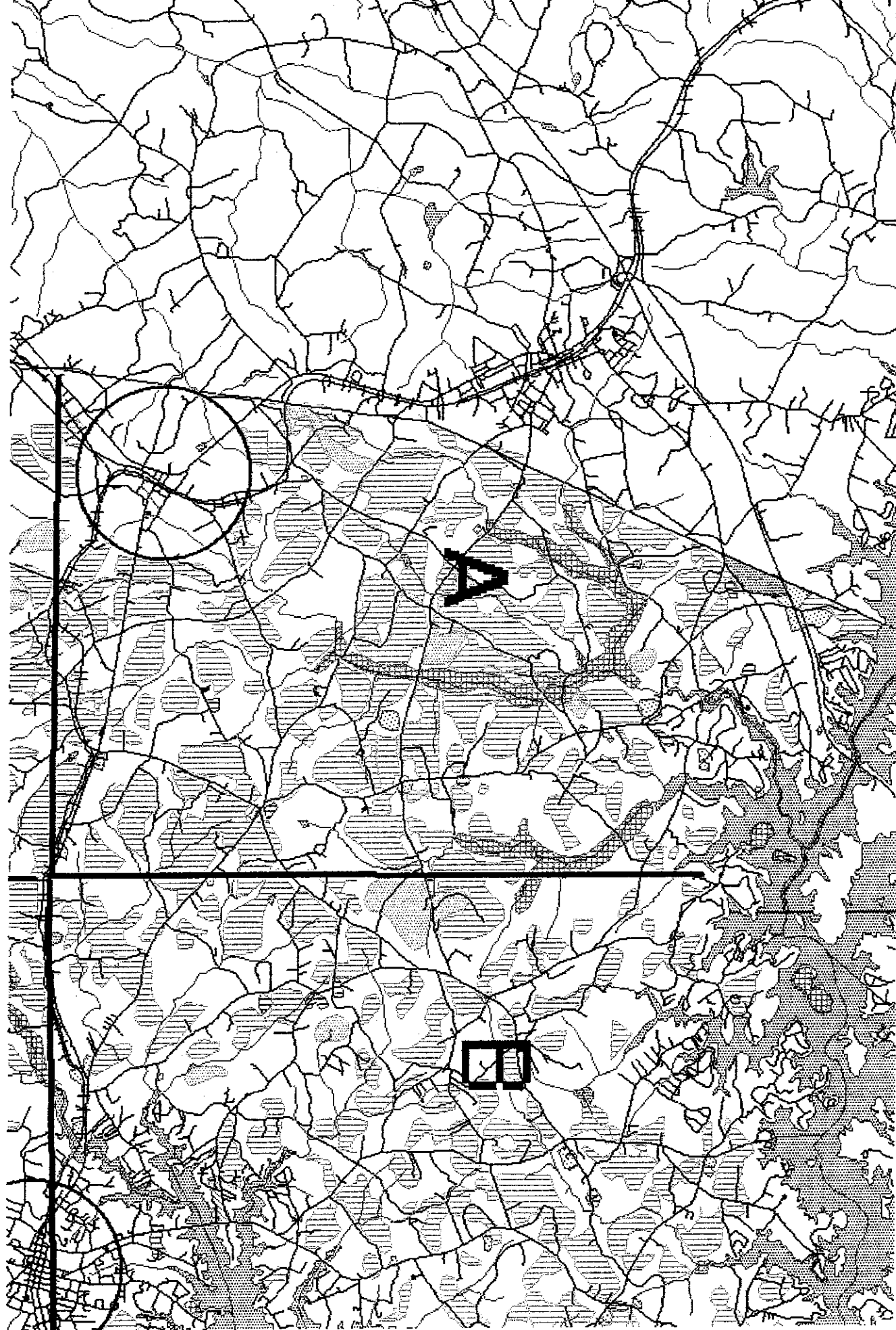


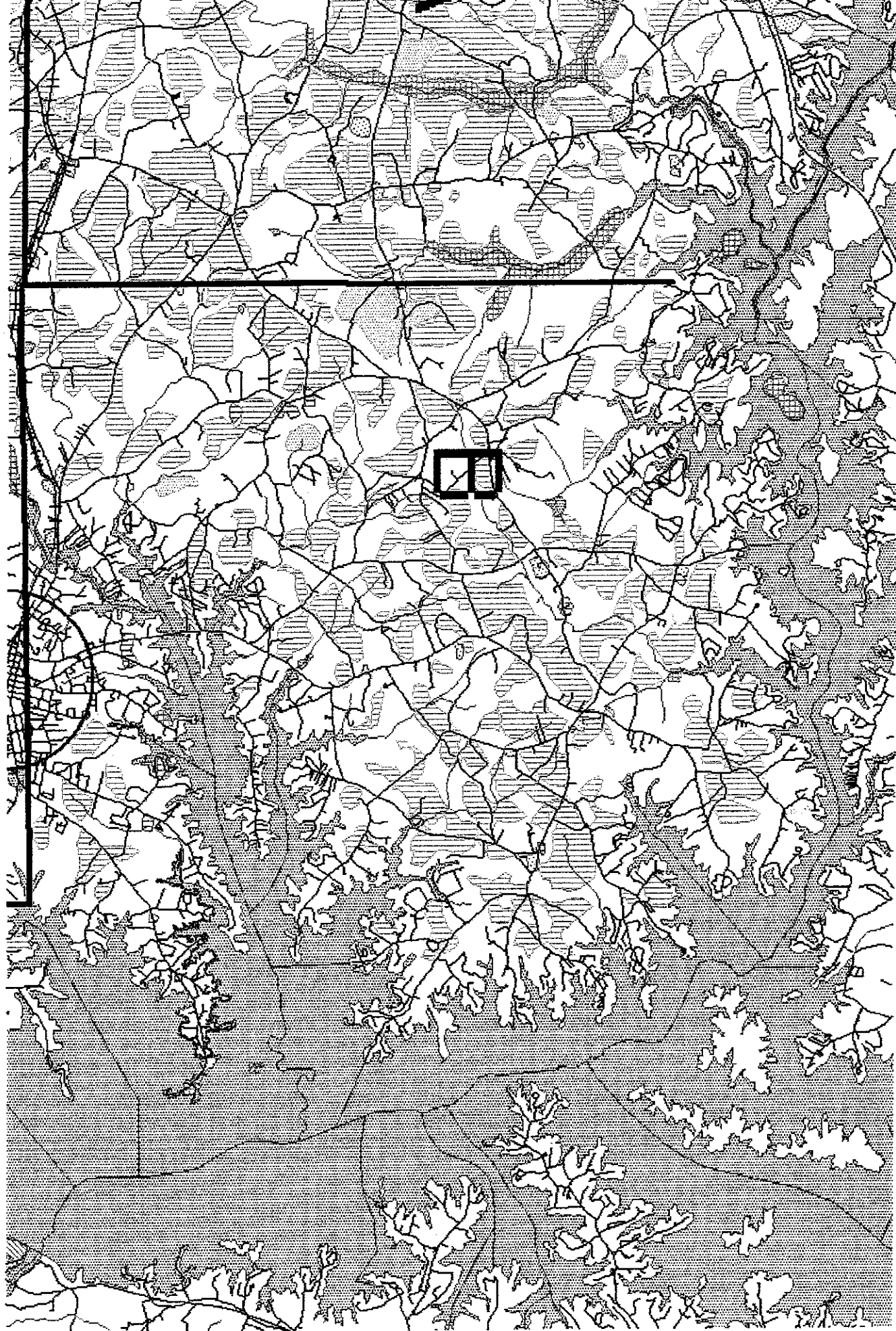
Transportation/Communication/Utility



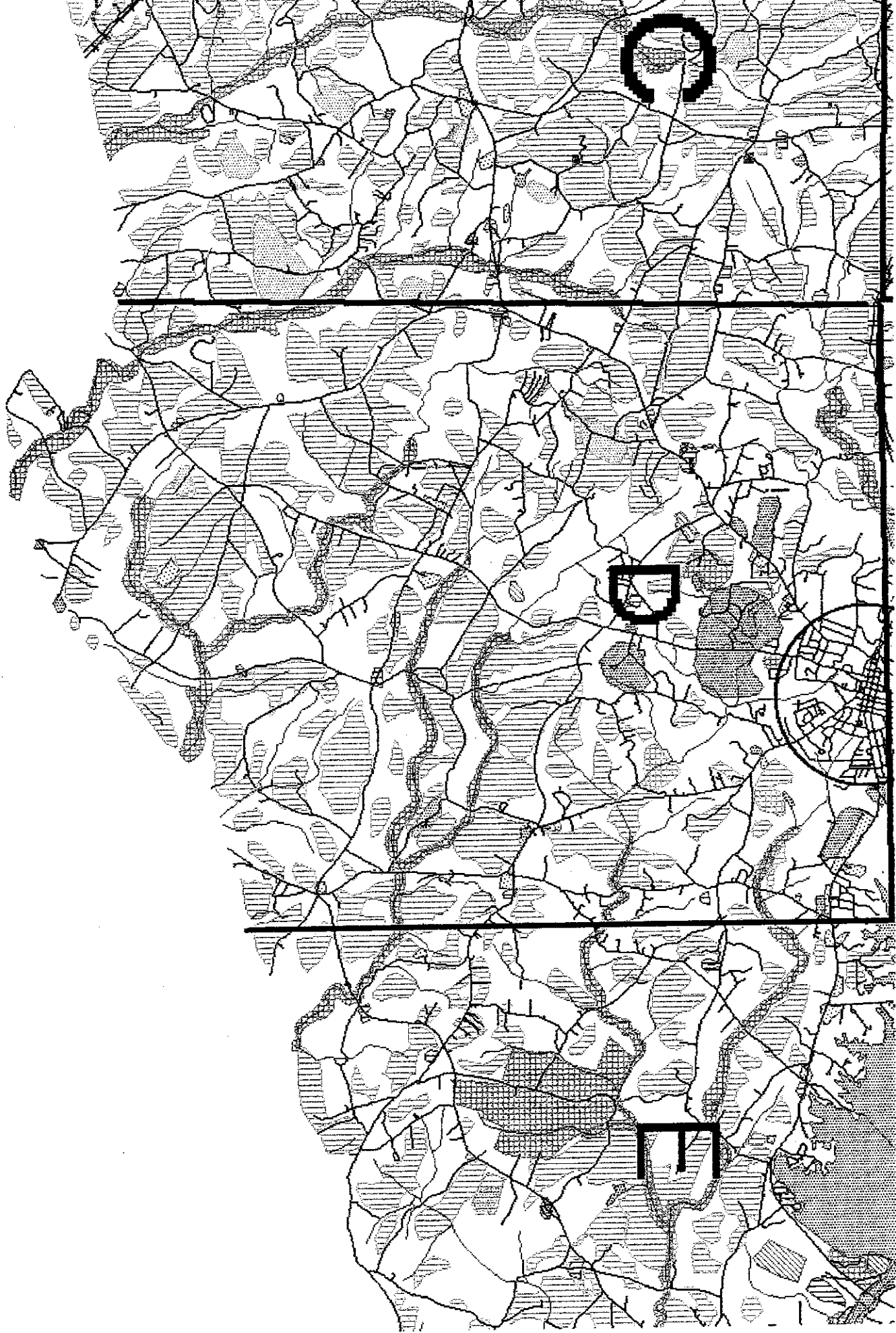
Industrial

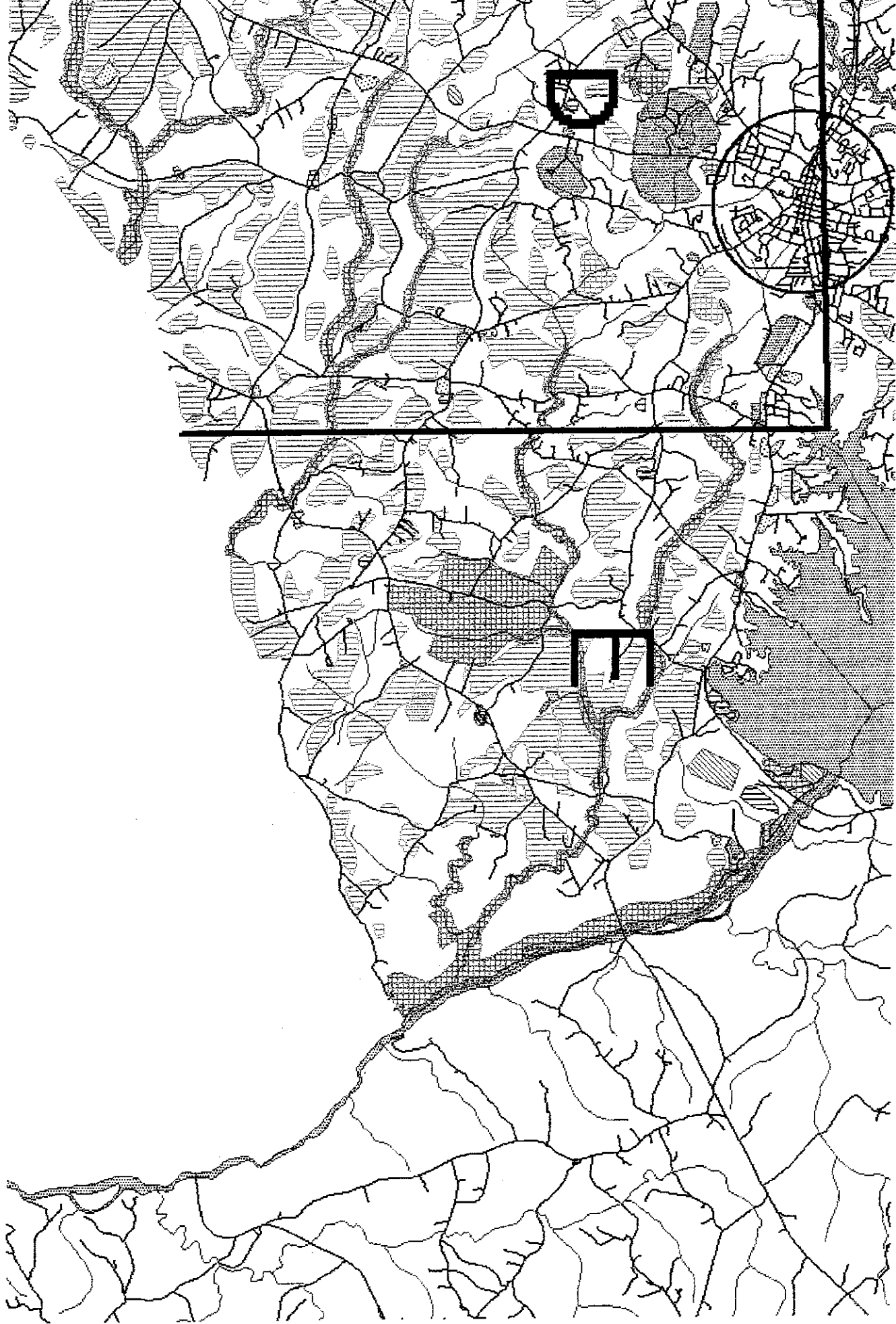










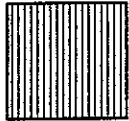


Future Land Use Maps

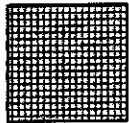
Key:



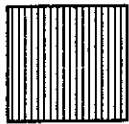
Agricultural/Forestry



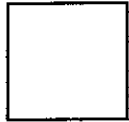
Commercial



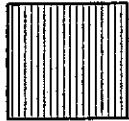
Parks/Recreation/Conservation



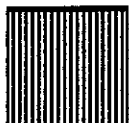
Public Institution



Residential



Special Use Agricultural



Transportation/Communication/Utility



Industrial

