

# Long County - City of Ludowici

## Solid Waste Management Plan 2005 - 2014



***Prepared for:***

*Long County /  
City of Ludowici*

***Prepared by:***



*Coastal Georgia*  
Regional Development Center

# Long County – City of Ludowici

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## Solid Waste Management Plan 2005-2014

PREPARED BY

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Prepared For

Long County/City of Ludowici

December 2005

## **Acknowledgement**

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The Coastal Georgia Regional Development Center (CGRDC) received valuable assistance from various federal, state, and local agency officials and representatives of the private sector for the Long County / City of Ludowici Joint Solid Waste Management Plan. The CGRDC acknowledges and thanks all those who have provided assistance for this project. The project was concluded in December 2005.

Special thanks to Project Steering Committee members Joseph Hughes, Long County Solid Waste Coordinator; Cindy McClelland, Ludowici Clerk of Court; Lori Cloninger, City Water Clerk; Darrell Balance, Emergency Management Director; Nancy Fuller, City Water Clerk; Tara Warren, Ludowici City Clerk; Donald Combs, Mayor Pro Tem; and James Fuller, City Water Superintendent.

## **Long County/City of Ludowici Officials**

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### **County Commission**

Chairman Randall T. Wilson

Mike McGowan, Vice Chair

Clifton DeLoach

Charles Reddish, Sr.

### **CITY COUNCIL**

Mayor Myrtice Warren

Frank A. McClelland, Jr.

James F. Fuller, Jr.

Willie T. Glover, Sr.

Donald Combs

A.A. Billings

## **Project Steering Committee**

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1. Joseph Hughes, Long County Solid Waste Coordinator
2. Cindy McClelland, Ludowici Clerk of Court
3. Lori Cloninger, City Water Clerk
4. Darrell Balance, Emergency Management Director
5. Nancy Fuller, City Water Clerk
6. Tara Warren, Ludowici City Clerk
7. Donald Combs, Mayor Pro Tem
8. James Fuller, City Water Superintendent

## **CGRDC Project Staff**

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### **Secretarial Support Provided by:**

Rachel Green, Secretary  
Beth Kersey, Administrative Secretary

## **Public Participation**

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Long County officials held two public meetings. The first public meeting took place at 4:00 pm on August 16, 2004. The second public meeting took place at 4:00 pm on September 20, 2004. Meeting participants discussed the Long County-City of Ludowici Joint Solid Waste Management Plan and the Long County-City of Ludowici Comprehensive Plan. For more details concerning the public meetings, contact Mr. Randall T. Wilson, Chairman, Long County Board of Commissioners at (912) 545-2143.

The City of Ludowici held four public hearings: March 24, 2005, 9:30 a.m. to announce the update and detail the process; March 31, 2005 at 9:30 a.m.; April 21, 2005 at 9:30 a.m.; and April 28, 2005 at 9:30 a.m., at which the final project recommendations were discussed. All meetings took place in Ludowici City Hall, located at 23 Main Street, Ludowici, Georgia in Ludowici, Georgia.

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## Executive Summary

### Collection

Currently, Southland Waste Systems provides weekly curbside service to the unincorporated parts of Long County. The cost of this service is thirteen (\$13) dollars per month. The County incorporates billing into annual property tax bills.

The City of Ludowici has contracted with Sullivan Waste, Inc., to provide weekly curbside service for residences, and dumpsters for commercial customers. Each household within the city limits of Ludowici pays fourteen (\$14) dollars per cart. Commercial customers requiring a dumpster must contract directly with the private hauler. The City provides curbside service for yard waste by appointment only. The City maintains a composting center.

Private haulers or the Long County Service Center may collect old boxboard (OBB), old corrugated cardboard (OCC), old newspapers (ONP) and mixed paper. These recyclable materials are usually baled and recycled.

### Disposal

Long County and the City of Ludowici dispose of all municipal solid waste (MSW) at the Wayne County-Broadhurst Environmental Landfill, located in Screven (Wayne County), Georgia. Long County and the City of Ludowici have a ten (10) year agreement (to 2014) for continued use of this facility. Broadhurst Environmental has supplied a Capacity Assurance Letter (see appendix 1) in which 10 years of landfill space is confirmed.

For the removal of MSW, Long County and the City of Ludowici contracts with Southland Waste Systems (County) and Sullivan Waste Inc (City). Long County's contract for the removal of MSW ends in 2007; Ludowici contracts from year to year.

### Recycling

Recycling is gaining support in Long County. While residents generally support efforts to reduce the solid waste production, there is evidence of short-term counter effects. Each year, the per capita amount of solid waste collected increases. Once, much of the solid waste stream was burned or disposed of at illegal dumpsites. Now, more households are arranging for collection by local government units.

Some of the recycling activities and efforts:

- a) The Long County Service Center collects and recycles scrap metal (ferrous and non-ferrous metals) and white goods, ONP, OCC, OBB and aluminum cans.
- b) Long County is using the earnings from recycling metals to pay for scrap tire disposal
- c) Private companies as well as local governments are composting yard waste.
- d) Local government, schools and civic groups are working on litter clean-up, public education and recycling.

The community is making progress in both litter control and recycling, and will eventually be able to reduce the waste stream.

## Chapter – 1

# Introduction

### 1-1 Location

In February 1995, Long County and the City of Ludowici adopted their first Ten-Year Solid Waste Plan. This document, which covers the years 2005-2014, is the first major update of that plan, and it focuses on population and employment projections to the year 2025. The Short Term Work Program (STWP) updates on a 5-year cycle.

Long County is located in the coastal region of southeast Georgia. The County spans approximately 403.5 square miles (256,700 acres); 90 percent of which is in forestry. This plan is a joint document, covering both the City of Ludowici and Long County.

**Figure 1**  
**Location of Long County (State Context)**



Source: <http://www.dca.state.ga.us/snapshots/PDF/Long.pdf>

The purpose of this update of the Long County Solid Waste Management Plan is to provide a tool to measure and manage their solid waste needs during the next ten-year period. This plan meets minimum standards and procedures authorized pursuant to O.C.G.A. 12-8-31.1, relating to solid

## Long County / City of Ludowici Joint Solid Waste Management Plan

waste management planning established by the Department of Community Affairs (DCA) on January 1, 2004.

The original Solid Waste Management Plan (SWMP) was prepared in 1993 and adopted in 1995. In 1999, a new 5-year Short Term Work Program (STWP) was prepared. At this time (2005), updates to both the SWMP and STWP are being prepared. This revision will correct errors in the data presentation, explain some significant changes that have occurred since the original plan and make a more realistic forecast of the future needs and plans.

Long County is a rural county surrounded by other rural counties. Liberty County is located to the east; Tattnall County lies on the northern border; Appling and Wayne Counties share the western border; and, McIntosh County is located on the southern border. The County's seat is centrally located in Ludowici.

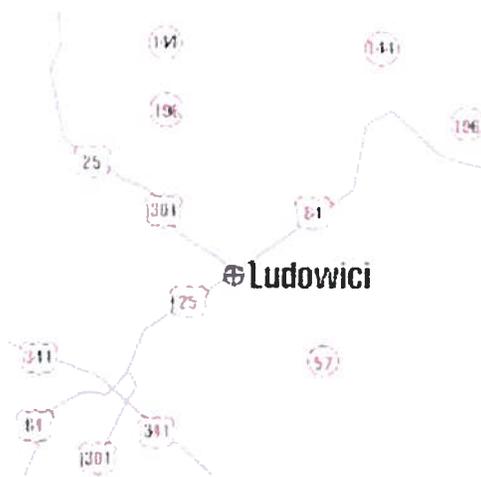
**Figure 2**  
**Location of Long County (Regional Context)**



Source: <http://www.dca.state.ga.us/snapshots/PDF/Long.pdf>

Highway infrastructure serving the area includes U.S. 301, which connects Ludowici to Jesup (west) and Glenville (north). U.S. 84 connects Ludowici to Hinesville (east) and Jesup (west). Georgia Highway 57 connects Ludowici to Darien (southeast).

**Figure 3**  
**Highway Infrastructure serving Long County**



Source: <http://www.dca.state.ga.us/snapshots/PDF/Long.pdf>

## 1-2 Topography<sup>1</sup>

Long County's topography is relatively flat, except for the wide sweeping sand bars and river bluffs along the Altamaha River. Most of the land has poor drainage, but it is well suited for forestry uses. The county is home to wetland depressions ranging in size from less than an acre to one thousand acres or more.

Shallow ponds, swamps, and wetlands are common throughout the county. Due primarily to a high water table, most of the soils have severe to very restrictive limitations for development. For the most part, woodlands line the creeks draining the area and, consequently, act as buffer zones between potential sources of non-point water pollution and siltation from urban lands and farmlands and from contiguous water bodies.

Forest topsoil and leaf litter reduce the speed of urban and rural runoff to creeks. At the same time, runoff nutrients (dissolved as well as particulate detritus from such sources as fertilizers and farm animal wastes) are incorporated into the nutrient cycles of the forest fringe communities for production and maintenance. The importance of maintaining the viability of these wooded farm fringe areas cannot be overestimated. These peripheral uncut strips of forest account, in large part, for the generally good visual quality of surface waters as well as the abundance of "farm game." Where these fringe areas are greatly diminished or absent, algae blooms and subsequent anaerobic conditions and odor problems testify to eutrophication.

<sup>1</sup> United States Department of Agriculture

Also of great ecological importance are the swamplands and wetlands within and surrounding the county. These swamplands and wetlands provide valuable wildlife habitat and nesting areas for migratory and indigenous waterfowl and other bird species. Deer, turkeys, quail, squirrels, opossums, rabbits, raccoons, mourning doves, marsh hens, herons, hawks (a protected species) and turkey vultures are among the wildlife species dependent upon these marshes for habitat and final retreat from human encroachment.

Because of the unusual ecological systems present in the area, it is likely that protected plant and animal habitats can occur anywhere in Long County.

A review of the county's wetlands coverage (see Figure 4 – Wetlands, following page 10), illustrates the extent of wetlands coverage in Ludowici and Long County. The majority of wetlands are comprised of marsh and swampland, small farm ponds, and the flood prone areas of the perennial creeks. Most of the wetlands are located in the western and southern portions of the county. These wetlands are primarily associated with the flood plains of the Altamaha River and the numerous creeks that meander throughout the county.

1-3 Growth & Population

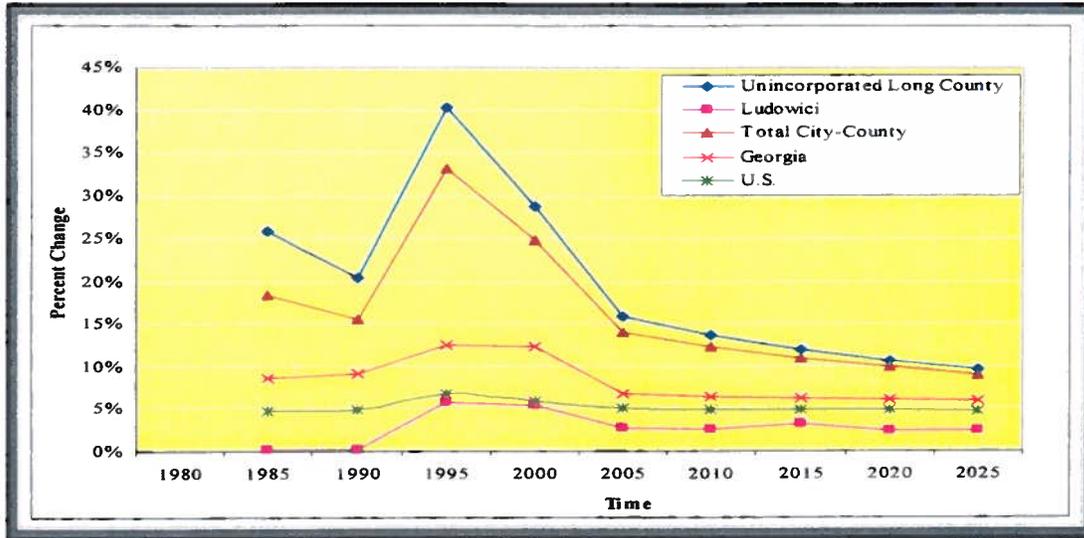
**Table 1**  
**Population Growth Rates (1980-2025)**

| Year               | Unincorporated Long County | % Change | Ludowici | % Change | Total City-County | % Change | Georgia % change | U.S. % Change |
|--------------------|----------------------------|----------|----------|----------|-------------------|----------|------------------|---------------|
| 1980               | 3,238                      | N/A      | 1,286    | N/A      | 4,524             | N/A      | N/A              | N/A           |
| 1985               | 4,074                      | 25.8     | 1,289    | 0.2      | 5,363             | 18.5     | 8.7              | 4.7           |
| 1990               | 4,911                      | 20.5     | 1,291    | 0.2      | 6,202             | 15.6     | 9.1              | 4.9           |
| 1995               | 6,887                      | 40.2     | 1,366    | 5.8      | 8,253             | 33.1     | 12.6             | 6.7           |
| 2000               | 8,864                      | 28.7     | 1,440    | 5.4      | 10,304            | 24.9     | 12.4             | 6.0           |
| <b>Projections</b> |                            |          |          |          |                   |          |                  |               |
| 2005               | 10,270                     | 15.9     | 1,479    | 2.7      | 11,749            | 14.0     | 6.7              | 5.0           |
| 2010               | 11,677                     | 13.7     | 1,517    | 2.6      | 13,194            | 12.3     | 6.4              | 4.9           |
| 2015               | 13,083                     | 12.0     | 1,556    | 3.2      | 14,639            | 11.0     | 6.3              | 4.9           |
| 2020               | 14,490                     | 10.7     | 1,594    | 2.4      | 16,084            | 9.9      | 6.1              | 4.9           |
| 2025               | 15,896                     | 9.7      | 1,633    | 2.4      | 17,529            | 9.0      | 6.0              | 4.8           |

Source: Georgia Department of Community Affairs: [www.georgiaplanning.com/dataviews/census2/](http://www.georgiaplanning.com/dataviews/census2/)

The population in unincorporated Long County grew at a rate of more than 25% during each 5-year census period (see Table 1), compared to single to low double digit rates at the state level, and single digit rates at the national level. The unincorporated area is projected to continue to gain new residents at a slower rate from 2005-2025, but will still surpass both the state and national growth averages.

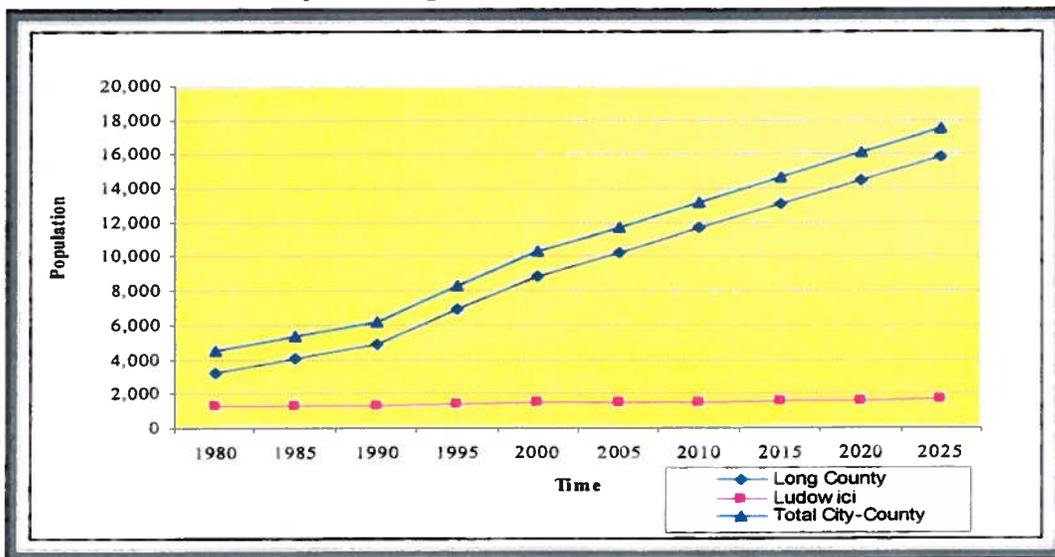
**Figure 5**  
**Population Percentage Change (1980 – 2025)**



Source: Georgia Department of Community Affairs: [www.georgiaplanning.com/dataviews/census2/](http://www.georgiaplanning.com/dataviews/census2/)

Figure 5 shows that the population of Ludowici grew slowly from 1980-1990, but then the rate escalated (5% growth) through the 1990s. Ludowici's growth is expected to continue at the low but steady rate of around 2% during the 2005-2025 period, compared with a statewide rate of around 6% and a national rate just below 5%. Population throughout the county as a whole grew rapidly in the period between 1980 and 2000. From 2000, growth is projected to slow in Long County, but will still exceed state and national growth rates. Note: Approximately 86 percent of the population of Long County resides in the unincorporated areas of the county.

**Figure 6**  
**Projected Population Growth 2005 – 2025**



Source: Georgia Department of Community Affairs: [www.georgiaplanning.com/dataviews/census2/](http://www.georgiaplanning.com/dataviews/census2/)

The accelerated growth projection for the county as compared to Ludowici’s low but stable growth projection (see Figure 6) is probably due the housing needs of Fort Stewart’s military population, and to the unincorporated county’s large areas of accessible land, lack of development regulations, low tax base and low cost of housing.

**Table 2**  
**Households in Long County-City of Ludowici (1980-2025)**

| Year               | Unincorporated Long County |                | Ludowici     |                |
|--------------------|----------------------------|----------------|--------------|----------------|
|                    | # Households               | Household Size | # Households | Household Size |
| 1980               | 1,536                      | 2.94           | 482          | 2.66           |
| 1985               | 1,866                      | 2.86           | 482          | 2.67           |
| 1990               | 2,196                      | 2.79           | 481          | 2.68           |
| 1995               | 2,885                      | 2.83           | 504          | 2.71           |
| 2000               | 3,570                      | 2.88           | 526          | 2.74           |
| <b>Projections</b> |                            |                |              |                |
| 2005               | 4,084                      | 2.87           | 537          | 2.74           |
| 2010               | 4,593                      | 2.85           | 539          | 2.78           |
| 2015               | 5,103                      | 2.84           | 541          | 2.80           |
| 2020               | 5,612                      | 2.82           | 543          | 2.82           |
| 2025               | 6,122                      | 2.81           | 545          | 2.84           |

Source: Georgia Department of Community Affairs, [www.georgiaplanning.com/dataviews/census2/](http://www.georgiaplanning.com/dataviews/census2/)

Due primarily to activities associated with Fort Stewart, the number of households in unincorporated Long County has increased steadily, peaking in 1995 (see Table 2). Growth in households is projected to continue at a rate of approximately 500 every five years until 2025. Growth in the number of households in Ludowici remained stagnant from 1980-1985, but grew steadily from 1985-2000. Projected growth of households in Ludowici shows a slowdown in growth through the end of the reporting period.

#### 1-4 Commercial, Manufacturing, & Industrial Businesses in Long County

Largest employers located in Long County:

- Creamers Contracting
- Dairy Queen
- DeLoach Building Components
- GHM Rock & Sand Inc.
- Huddle House

Source: <http://explorer.dol.state.ga.us/mis/profiles/Counties/long.pdf>

## **Long County / City of Ludowici Joint Solid Waste Management Plan**

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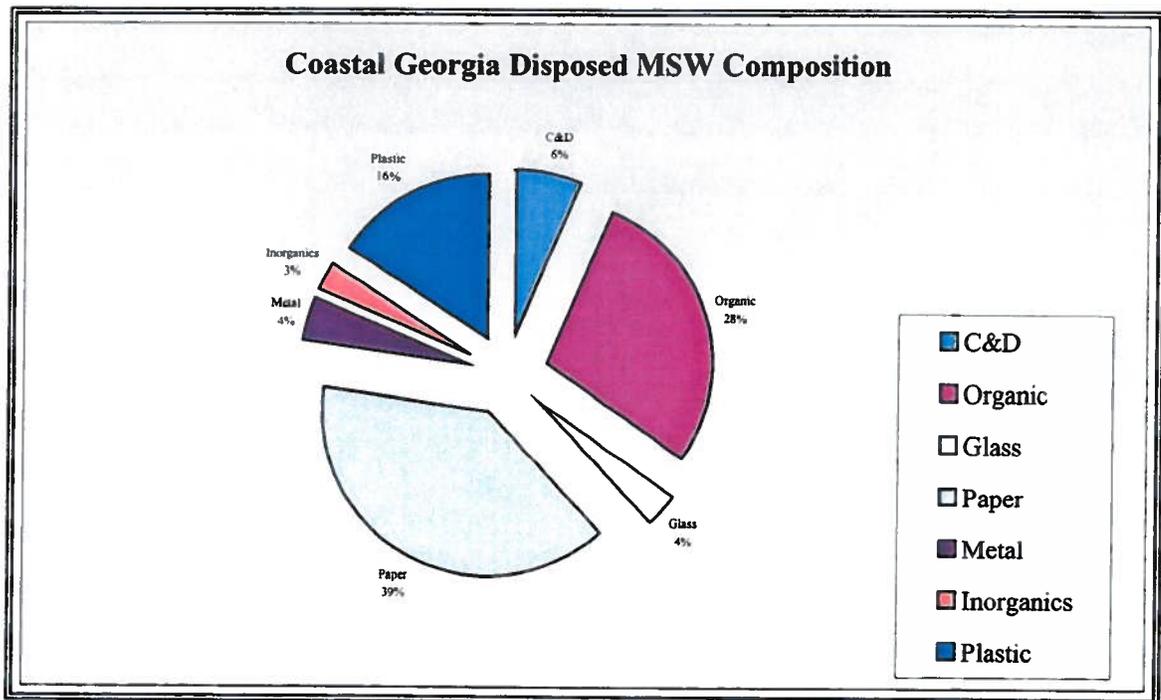
Long County is extremely rural and has a limited economic base. Money spent in the local community is recycled. More than likely, this trend will continue for the next ten-year planning period. No major development or expansion of industries is anticipated. Current solid waste generators will continue to generate the same amount of waste unless production increases or manufacturing facilities expand. The only foreseen disruption to the current waste stream would be an increase in population, manufacturing output or new industries.

## Chapter – 2

### Waste Stream Analysis

#### 2-1 Inventory

**Figure 7**  
**Four-Season Sort of Coastal Region Waste Stream**



Source: DCA, *Georgia Statewide Waste Characterization Study*, 2005

#### 2-2 Adjusted Waste Disposed of in Coastal Georgia

Tons of Municipal Solid Waste Reported by 10 coastal region counties: 682,326

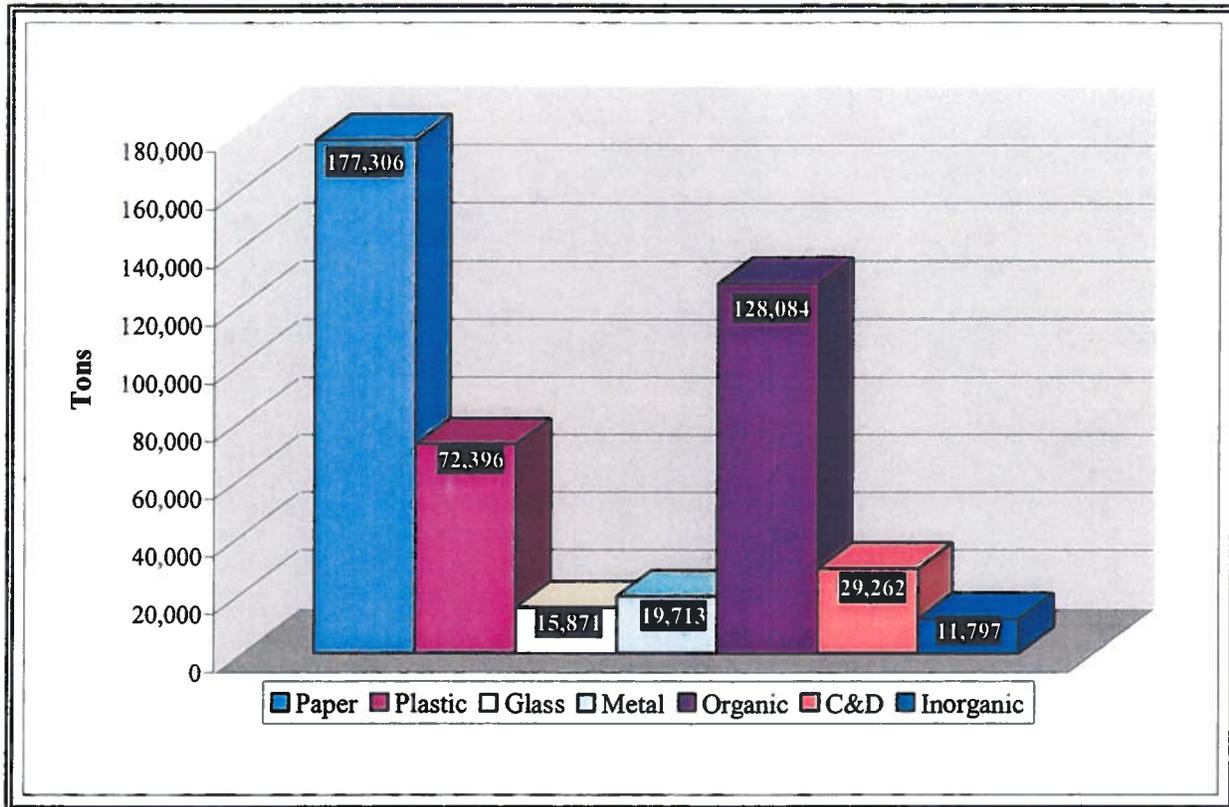
Adjusted<sup>2</sup> tons of Municipal Solid Waste: 454,429

Figure 7 depicts the composition and quantity of waste disposed of in the Coastal Region. As shown, paper (39%) and organics (28.2%) make up the largest portions of the waste stream, followed by plastics ((15.9%). C&D (6.4%) and metals (4.3%) make up the fourth and fifth largest segments of

<sup>2</sup> Adjusted annual disposal tonnage derived by applying the weighted average percentage of Municipal Solid Waste (MSW) actually being disposed at MSW landfills throughout the state. The adjusted figures are used throughout Georgia Department of Community Affairs, Final Report: *Georgia Statewide Waste Characterization Study*, RW Beck, June 22, 2005.

the waste stream, while glass (3.5%) and inorganics (2.6%) comprise the smallest portion of the waste stream.

**Figure 8**  
**Coastal Georgia MSW Tons Disposed**



Source: DCA, *Georgia Statewide Waste Characterization Study*, 2005

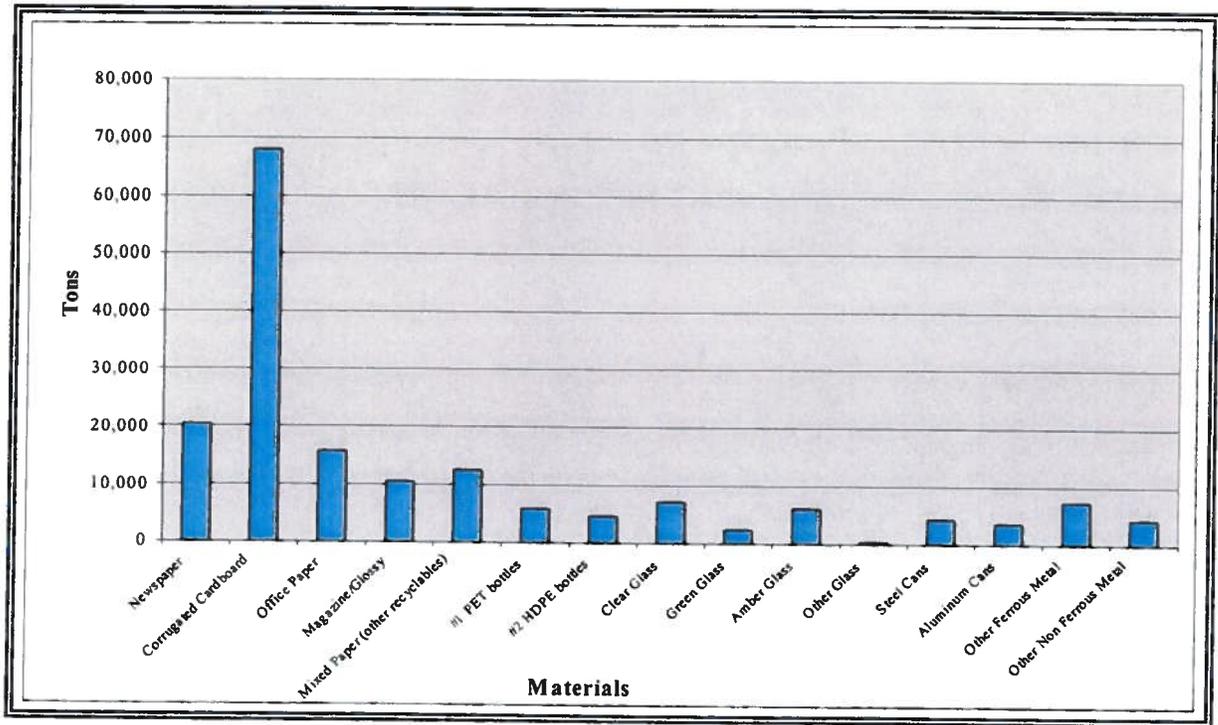
The Figure 8 illustrates the actual tonnage of waste, by type, disposed of in the coastal region. Close to 180,000 tons of paper and over 128,000 tons of organics were disposed of during the 2003-04 waste stream analysis.

**Table 3**  
**Solid Waste Disposed of by Long County Residents**

| FY   | Quantity   |
|------|------------|
| 1995 | 3,813 tons |
| 2004 | 8,764 tons |

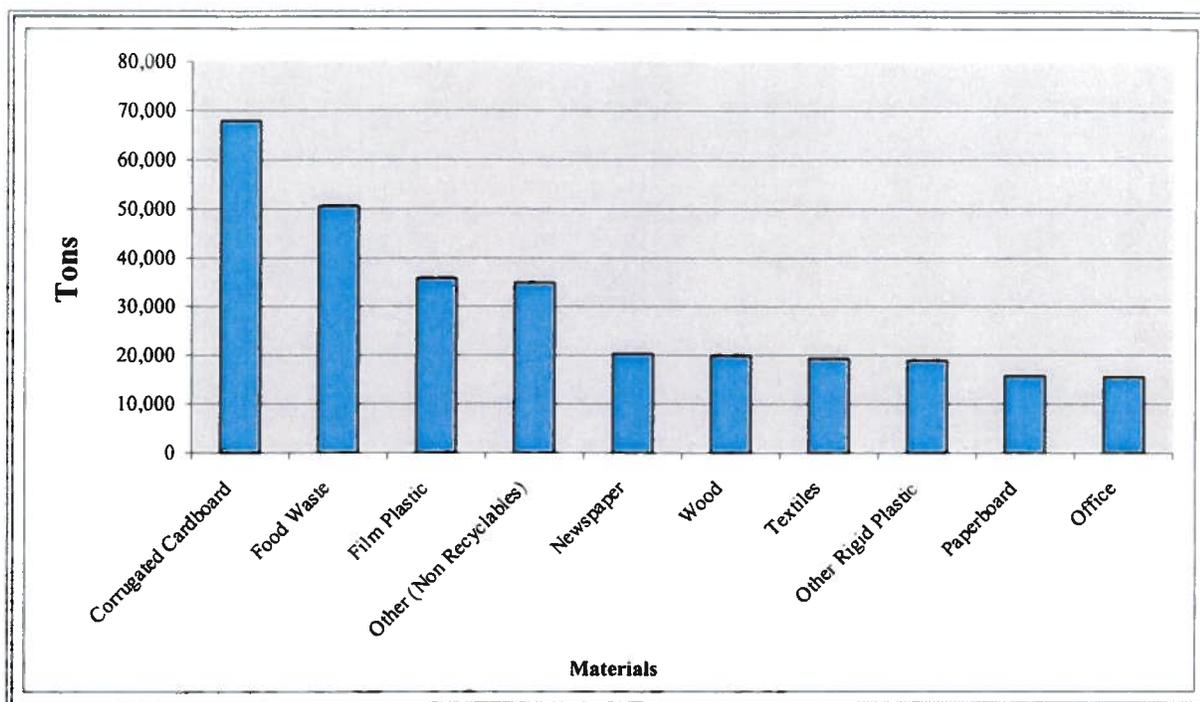
Source: DCA, *Georgia Statewide Waste Characterization Study, 2005*

**Figure 9**  
**Disposal of Commonly Recycled Materials**



Source: DCA, *Georgia Statewide Waste Characterization Study, 2005*

**Figure 10**  
**Top 10 Materials (by weight) Disposed Of in Coastal Region**



Source: DCA, *Georgia Statewide Waste Characterization Study, 2005*

Overall, paper was disposed of in significant quantities (see Figure 10). Nearly 28% (by weight) of all waste disposed of in the coastal region is recyclable paper. Other recyclable materials were found at much lower rates: metals – 4%, glass – 4% and plastics – 2% of the waste stream. Clearly much work remains in the realm of paper recycling.

The 1995 Long County-Ludowici SWMP indicated that the average person in Long County produced 2.53 pounds of MSW per day or 0.46 tons annually<sup>3</sup>. In 2005, the average person in Long County contributes approximately 4.09 pounds of MSW each day, for a total of 0.73 tons annually. The average Georgian produces 6.05 pounds of MSW daily or approximately 2,208 lbs annually. Long County residents produce approximately 32.4 percent less MSW (by weight) annually than other Georgians. (Source: Wayne-Broadhurst Landfill).

From 1995 to 2005, the amount of MSW generated in Long County increased by 130 percent. That represents an average 13 percent increase annually, or 0.16 pounds increase per person annually. Projections for 2005-2013 indicate that the MSW poundage generated per person will increase by 2.2 percent. After 2013, the MSW poundage generated per person should decrease due to better MSW management. Long County and the City of Ludowici plan to have their Solid Waste Management Plan fully implemented by 2009.

<sup>3</sup> Long County Solid Waste Plan, Including the City of Ludowici (Revised: November 26, 1996), p. 4.

Assuming expansion of Fort Stewart, the need for housing will extend to Long County. A number of new soldiers and their families will settle in Long County and Ludowici because of affordable land and the low cost of housing. The growth of Fort Stewart will affect Long County and the City of Ludowici's ability to manage its solid waste program through 2013. In 2013, the program will become stable. The poundage and tonnage will start to decrease in 2014 because of the effectiveness of the solid waste management plan.

It may be necessary for the City and County to make adjustments to their Comprehensive Solid Waste Management Plan during the next short term work program update cycle (2010-2014).

### 2-3 Methodology

**Table 4**  
**Long County Projected MSW Short Tons and Pounds 1995-2004**

| Category                      | 1995  | 1996  | 1997  | 1998  | 1999  | 2000   | 2001   | 2002   | 2003   | 2004   |
|-------------------------------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
| Total Projected Population    | 8,253 | 8,663 | 9,073 | 9,484 | 9,894 | 10,304 | 10,593 | 10,882 | 11,171 | 11,460 |
| Pounds Per Person             | 2.53  | 2.72  | 2.90  | 3.06  | 3.21  | 3.34   | 3.51   | 3.66   | 3.81   | 4.13   |
| Annual Short Ton Per Person   | 0.46  | 0.50  | 0.53  | 0.56  | 0.59  | 0.61   | 0.64   | 0.67   | 0.70   | 0.75   |
| Annual County Short Ton Total | 3,813 | 4,308 | 4,803 | 5,298 | 5,793 | 6,288  | 6,783  | 7,278  | 7,773  | 8,628  |

Source: DCA, *Georgia Statewide Waste Characterization Study, 2005*

**Table 5**  
**Long County Projected MSW Short Tons and Pounds 2004-2014**

| Category                      | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   |
|-------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Total Projected Population    | 11,749 | 12,038 | 12,327 | 12,616 | 12,905 | 13,194 | 13,457 | 13,726 | 14,000 | 14,279 |
| Pounds Per Person             | 4.09   | 4.21   | 4.34   | 4.45   | 4.56   | 4.67   | 4.78   | 4.88   | 4.98   | 4.88   |
| Annual Short Ton Per Person   | 0.75   | 0.77   | 0.79   | 0.81   | 0.83   | 0.85   | 0.87   | 0.89   | 0.91   | 0.89   |
| Annual County Short Ton Total | 8,764  | 9,259  | 9,754  | 10,249 | 10,744 | 11,239 | 11,734 | 12,229 | 12,725 | 12,725 |

Source: DCA, *Georgia Statewide Waste Characterization Study, 2005*

**Table 6**  
**Long County Project MSW Composition and Waste Tonnage 1995-2005**  
**(Short Tons/Year)**

| Category     | 1995         | 1996         | 1997         | 1998         | 1999         | 2000         | 2001         | 2002         | 2003         | 2004         |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Inorganics   | 122          | 138          | 154          | 170          | 185          | 201          | 217          | 233          | 249          | 276          |
| C&D          | 240          | 271          | 303          | 334          | 365          | 396          | 427          | 459          | 490          | 544          |
| Organics     | 1,022        | 1,155        | 1,287        | 1,420        | 1,553        | 1,685        | 1,818        | 1,951        | 2,083        | 2,312        |
| Metal        | 221          | 250          | 279          | 307          | 336          | 365          | 393          | 422          | 451          | 500          |
| Glass        | 156          | 177          | 197          | 217          | 238          | 258          | 278          | 298          | 319          | 354          |
| Plastic      | 606          | 685          | 764          | 842          | 921          | 1,000        | 1,078        | 1,157        | 1,236        | 1,372        |
| Paper        | 1,449        | 1,637        | 1,825        | 2,013        | 2,201        | 2,389        | 2,578        | 2,766        | 2,954        | 3,279        |
| <b>Total</b> | <b>3,813</b> | <b>4,308</b> | <b>4,803</b> | <b>5,298</b> | <b>5,793</b> | <b>6,288</b> | <b>6,783</b> | <b>7,278</b> | <b>7,773</b> | <b>8,628</b> |

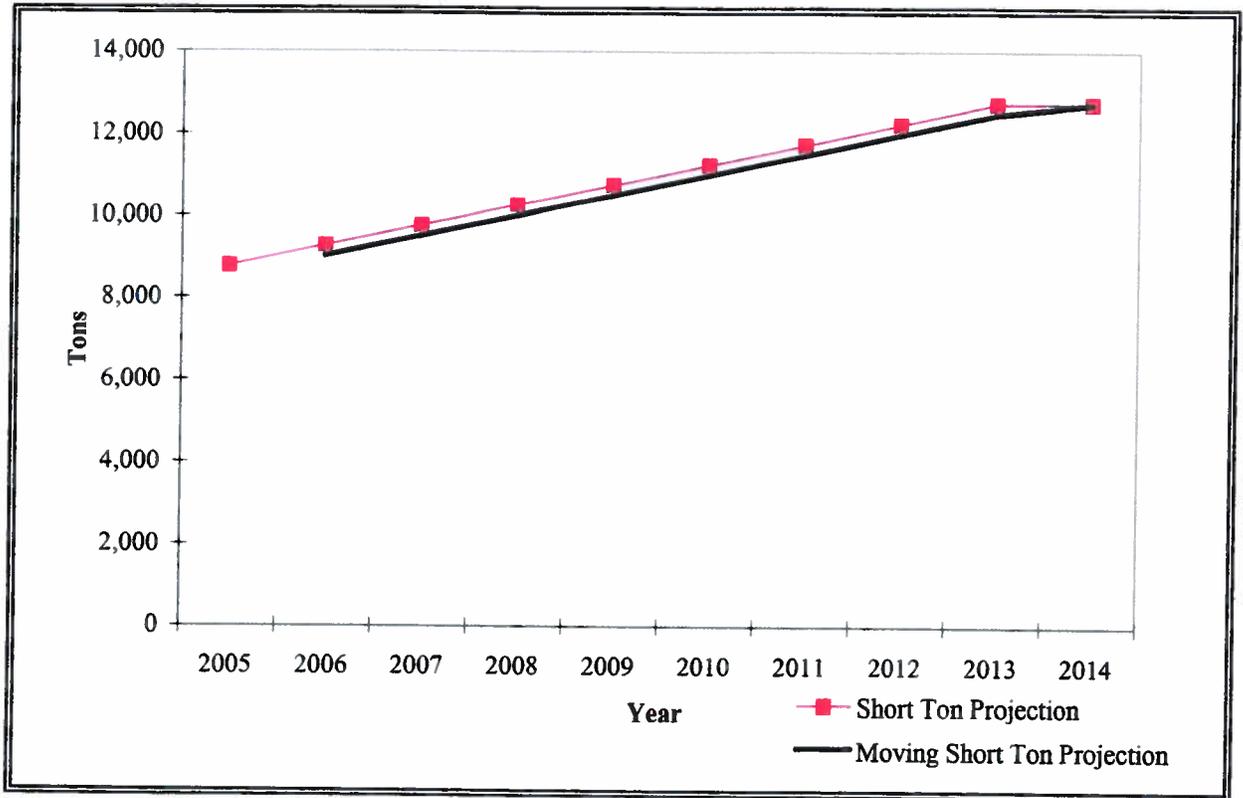
Source: DCA, *Georgia Statewide Waste Characterization Study, 2005*

**Table 7**  
**Long County Project MSW Composition and Waste Tonnage 2005-2014**  
**(Short Tons/Year)**

| Category     | 2005         | 2006         | 2007         | 2008          | 2009          | 2010          | 2011          | 2012          | 2013          | 2014          |
|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Inorganics   | 280          | 296          | 312          | 328           | 344           | 360           | 375           | 391           | 407           | 407           |
| C&D          | 552          | 583          | 615          | 646           | 677           | 708           | 739           | 770           | 802           | 802           |
| Organics     | 2,349        | 2,481        | 2,614        | 2,747         | 2,879         | 3,012         | 3,145         | 3,277         | 3,410         | 3,410         |
| Metal        | 508          | 537          | 566          | 594           | 623           | 652           | 681           | 709           | 738           | 738           |
| Glass        | 359          | 380          | 400          | 420           | 441           | 461           | 481           | 501           | 522           | 522           |
| Plastic      | 1,393        | 1,472        | 1,551        | 1,630         | 1,708         | 1,787         | 1,866         | 1,944         | 2,023         | 2,023         |
| Paper        | 3,330        | 3,518        | 3,707        | 3,895         | 4,083         | 4,271         | 4,459         | 4,647         | 4,836         | 4,836         |
| <b>Total</b> | <b>8,773</b> | <b>9,268</b> | <b>9,764</b> | <b>10,259</b> | <b>10,755</b> | <b>11,250</b> | <b>11,746</b> | <b>12,241</b> | <b>12,738</b> | <b>12,738</b> |

Source: DCA, *Georgia Statewide Waste Characterization Study, 2005*

**Figure 11**  
**2005-2014 Tonnage Projection**



Source: Wayne-Broadhurst Landfill, Wayne County

Combining the county's estimated population with the per capita waste generation rate yields a total waste stream forecast (Figure 11). The per capita waste generation rate for the county was calculated by taking the FY 2004 4<sup>th</sup> quarter report from Wayne-Broadhurst Landfill and extrapolating to a one-year period. Dividing the total calculated waste for FY 2004 by the County's total estimated 2004 population of 11,460 yields a per capita waste generation rate of 4.13 pounds per day.

## **2-4 Industries and Types of Waste Generated**

- Georgia Department of Corrections Probation/Detention Center: C&D, Inorganic, Paper, Organic and Plastics
- Long County School System: C&D, Inorganic, Paper, Organic, Metal, Glass, Plastics
- Coastal Manor Nursing Home: C&D, Inorganic, Paper, Organic and Plastics
- Local Government Units: C&D, Inorganic, Paper, Organic, Metal, Glass and Plastics
- Coastal Forklift: C&D, Inorganic, Paper, Organic, Metal, Glass, Plastics, Rubber and Oil-based fluids

Source: City of Ludowici and Long County Governments

## **2-5 Conclusion**

Presently, households are the largest contributors to the MSW stream in Long County. The county does not have a seasonal population fluctuation. As indicated in Table 1 (page 11), Long County's population will increase by approximately 14% from 2000-2005 and 12.3% from 2005-2010 (or, 24.6% overall).

During the next ten-year planning period, an industrial park will be developed on the outskirts of Ludowici. The types of industries that may locate to the newly developed park are unknown.

During the next ten-year planning period, conversion of land from forestry to residential uses will increase due to the expansion of Fort Stewart. The majority of land sold will be large tracts ranging in size from 25-100 acres; most will be used for the construction of single-family residential development. The City of Ludowici does not anticipate annexing land during the next twenty-year planning period.

## Chapter – 3

### Waste Reduction Element

In the 1990s, Georgia pursued a goal of a 25 percent reduction in waste disposal by 1996<sup>4</sup>. This goal was repealed in 2005. The average amount of waste disposed in Georgia is 8.25 pounds per person per day, including construction and demolition (C&D) materials. Excluding C&D materials, Georgians dispose of 6.05 pounds of solid waste each day. This average is several pounds above the national average waste generation of approximately 4.0 pounds per person per day.

At present, Long County's waste reduction effort involves the Long County Service Centers (LCSC), which collect and recycles old newspaper (ONP), old corrugated cardboard (OCC), old box board (OBB), aluminum cans, recyclable construction materials, large and bulky items, ferrous and non-ferrous metals, white goods and other recyclable goods that can easily be separated on-site. The LCSC do not accept C&D materials, oil or tires. Residents are encouraged to take those items either to the Liberty County Service Centers or to Wayne-Broadhurst Environment Landfill.

Long County does not have an inert landfill for the disposal of yard waste, tree limbs and soil. Residents of the unincorporated portion of Long County who wish to dispose of inert waste must take it to the Broadhurst Inert Landfill. Ludowici collects yard waste as part of its curbside collection program. The inert waste is taken to the City's composting area.

The local government units of Long and Ludowici recycle all mixed paper, office paper, cardboard, magazines and phone books. Because both local governments are small and produce a small amount of sensitive materials yearly, they are stored on site.

To reduce solid waste generation, residents need information on alternatives such as recycling, as well as the importance of protecting natural resources. Public education programs can also include information for businesses regarding source reduction and recycling. Currently, the City, County and County Extension Service provide such information.

Staff at Wayne-Broadhurst landfill and the LCSCs generates the data on MSW and recyclables collected in Long County. This data can be helpful for identifying where improvement is necessary. However, the data is incomplete, as private haulers collecting solid waste are not required to report the amount of waste or recycled materials they collect from Long County residents.

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<sup>4</sup> 2002 Georgia Solid Waste Management Update

### **3-1 Needs and Goals**

To ensure a steady reduction in solid waste generated by residents (i.e. reduce, reuse and recycle) through the year 2014 for MSW collected in Long County.

### **3-2 Source and Waste Reduction**

Source reduction is the most effective and environmentally sound way to reduce the solid waste stream.

#### **Increase Public Awareness**

- 1) Expand public information programs about solid waste, what it costs, who has to pay and how to reduce the volume as well as cost.
- 2) Reuse, rather than discard, products by donating, reselling or swapping appliances, clothing, etc., whenever possible. Churches, thrift shops and consignment stores are good alternatives to placing reusable goods in the waste disposal facilities.
- 3) Educate the public about product design/packing to reduce the demand for materials that are not recyclable. Encourage consumers and businesses to reduce the amount of waste through more conscientious purchasing and use of products with increased product life and reusability.
- 4) Encourage programs that reward individuals and organizations that are involved in voluntary waste reduction and recycling programs.
- 5) Expand public education programs for source reduction, using posters, media campaigns, weekly newspaper columns and radio announcements.

#### **Support the Long County Collection Centers**

City and County should encourage existing and new businesses to support the LCSC; educate business owners about source reduction and the benefits of recycling.

#### **Recycling Centers**

Support existing recycling centers. Funds earned from recycling should be used to support and develop more sophisticated recycling programs.

#### **Protect the Integrity of the Solid Waste Stream**

Support programs that encourage composting, recycling and reuse of durable goods.

#### **“Volume Based” Rate System**

Charging for waste disposal based on the volume generated can cause individuals to reduce the waste generated in order to be assessed lower waste disposal rates.

### **3-3 Recycling**

#### **Recycling Center**

Expand existing and construct new recycling facilities. There should be a recycling center convenient to each commissioner's district within the next ten-year planning period.

#### **Recycling Education**

Encourage business owners, public officials and teachers to inform the public about the benefits of recycling.

#### **Encourage the LCSC to Expand Services**

#### **Expand the List of Items Recycled at Recycling Centers**

#### **Expand County School Recycling Programs**

Continue partnership with Board of Education on recycling in the schools.

#### **Government Units Recycling Reduction Plan**

Continue to require the mandatory paper-recycling program in public buildings as an example for the citizens.

### **3-4 Yard Trimmings, Mulching, and Composting**

Yard trimmings have been banned from Georgia's landfills since 1996. Ludowici operates a composting program. Reducing yard waste and organic materials to rich humus results in reduction to the waste stream. In addition, compost provides beneficial soil amendments for gardens and lawns.<sup>5</sup>

#### **Mulching**

- 1) The County should acquire a large chipper or tub grinder and use it to divert non-compostable yard waste from the waste stream.
- 2) The County can provide the mulch to residents for use in gardens.

#### **Home Composting**

- 1) Encourage residents to produce their own compost.
- 2) Instructions on home composting are readily available from the County extension agent's office.

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<sup>5</sup> See DCA publication "Composting at Home in Georgia" at <http://www.dca.state.ga.us/development/EnvironmentalManagement/publications/composting.pdf>

## Chapter – 4

### Waste Collection Element

#### **4-1 Yard Trimmings, Mulching, and Composting**

At present, there is one (1) private hauler collecting throughout the county and one (1) private hauler in the City of Ludowici collecting solid waste.

#### **4-2 Recycling**

Long County has two (staffed) recycling centers, which are available to all Long County residents. The LCSCs are not full service-recycling centers, but they do accept recyclable paper, cardboard and aluminum cans. All recyclable materials are transported to private recovery and processing facilities.

In 2003, the LCRCs collected approximately 220 tons (440,000 pounds) of recyclable metals and 26 tons of white goods. The County's newly developed Solid Waste Department started collecting white goods, household waste and yard waste and metal in 2002.

In May 2003, Long County eliminated green boxes and mandated that all citizens in the county would receive curbside service. Billing for the services is included in the annual property tax bill.

Within the City of Ludowici yard trimmings are collected as needed. This is a service provided by the City of Ludowici. Residents of the unincorporated areas wishing to dispose of yard trimmings and waste must take that waste either to the Wayne-Broadhurst Environmental Landfill or to the Liberty County Inert Landfill.

The volume of all recyclables collected is unknown. Long County, during the next ten-year planning period, will consider a program to accurately account for all collected recyclables.

The collection programs are adequate for Long County. The full impact of their efforts will not be realized until 2013.

To facilitate solid waste collection efforts, Long County should remain progressive in its methods and utilize funding from current solid waste collection efforts to support new programs.

The City of Ludowici and Long County utilize a private hauler for the collection of solid waste. The County's agreement is in year three of a five-year contract and the City's contract is year to year.

If no private hauler were available to perform the collection of solid waste for the county, it would take approximately 30 days to hire another private hauler. The City could collect and dispose of MSW at the Wayne-Broadhurst Environmental Landfill. The City has in its inventory system one (1) garbage truck and trailer.

#### **4-3 Needs and Goals**

To ensure the efficient and effective collection of solid waste and recyclable materials, for the 2004-2014 planning period. There is a need in Long County for both waste collection and recycling pickup at individual residences. The current system must continue to be progressive, and to operate in an efficient manner countywide. Constant vigilance will keep the community free from roadside litter and illegal dumping.

#### **4-4 Reduce/Prevent Illegal Dumping**

##### **Level of Service**

Improve the level of service (LOS) by providing recycling centers in each district by the end of the 2004-2014 planning period.

##### **Collect more Types of Recyclables**

The County and City may consider expanding the types of special waste collected if supported by the citizens.

##### **Code Enforcement**

The Code Enforcement Officer will remain vigilant and issue citations to individuals violating city and county ordinances.

#### **4-5 Solid Waste Collection Options**

##### **Privatization**

Long County wishes to leave collecting for “open market competition” to private collection companies. Currently, private waste handlers provide solid waste collection services in the unincorporated areas, assuring a low cost service.

##### **Public Sector Service**

The City of Ludowici will continue to provide curbside service to its residents.

## Chapter – 5

### Waste Disposal Element

#### **5-1 Inventory and Assessment of Existing Programs**

The City of Ludowici maintains the Hill Street Compost/Inert facility for composting and the disposal of yard trimmings and waste. C&D waste can be accepted at MSW waste disposal facilities, but MSW is not allowed in C&D waste disposal facilities. Builders are encouraged to haul C&D to waste disposal facilities outside of the county. The nearest C&D waste disposal facilities are in Liberty County or the Broadhurst Environmental Landfill in Wayne County.

The current operational contractor of the Wayne-Broadhurst Landfill is under contract to accept Long County's and Ludowici's MSW for ten years. In the event of a contract breach, Long County and the City of Ludowici may have the option of contracting with the Camden County Landfill or the Liberty County Landfill located on Fort Stewart.

#### **5-2 Man-Made and Natural Disasters**

The Long County Emergency Management Agency (EMA) is prepared to handle a wide variety of natural and manmade emergencies. Previous experiences with natural disasters have shown the value of advance planning and preparation. In 1994, a tornado ripped through Long County and the City of Ludowici causing considerable damage. The EMA was prepared to handle the broken and damaged materials left behind by the tornado. The main thoroughfares were cleared of storm debris by city and county employees. The debris was burned onsite or disposed of at the Hill Street Inert/Compost site.

Long County and the City of Ludowici Hazard Mitigation Plan contains a listing of private companies that will work with the City and County to remove debris and dispose of it in accordance with local, state and federal regulations. According to the Long County Hazard Mitigation Plan, storm debris and other materials will either be stored at the Hill Street compost/inert site or burned on site using a blower and burn shield.

**5-3 Needs and Goals**

To ensure that solid waste disposal handlers and facilities meet regulatory requirements. The City and County will work to ensure that these providers will be in place when needed to support and facilitate effective solid waste handling programs throughout the 2004-2014 planning period. Efficient and effective solid waste disposal services enhance the quality of life of the citizens of Long County.

**5-4 Disposal**

**Disposal of MSW**

All MSW collected in Long County and the City of Ludowici is disposed of in the Wayne-Broadhurst Landfill. Builders are encouraged to take C&D outside of the county for disposal.

**Disposal of Recyclables**

Recyclables are collected at the LCSCs (two sites) and sold to private recyclers.

## Chapter – 6

### **Land Limitation Element**

#### **6-1 Inventory and Assessment of Existing Programs**

#### **6-2 Natural Environmental Limitations**

Long County and the City of Ludowici have no state conservation areas or parks located within jurisdictional boundaries. However, both the City and County have implemented environmental regulations for the protection of Wetlands, River Corridors and Groundwater Recharge Areas consistent with DNR's Rules for Environmental Planning. These criteria act as an overlay district that increases buffering and impervious surface setbacks in wetland and recharge areas, as well as along river corridors. In addition, the Georgia Forestry Commission has established Streamside Management Zones to prevent sediment loading of streams and creeks due to forestry operations.

Based on the existing regulations and topography, the majority of Long County is unsuitable for solid waste management facilities. Limitations due to wetlands (see Figure 4, Chapter 1), groundwater recharge areas, soil type, and floodplains are depicted on the maps (see Figures 12, 13 and 14) following page 30.

Neither Long County nor the City of Ludowici has implemented Land Development Codes, with the exception of subdivision and mobile home regulations. Nonetheless, Long County does have a very aggressive Code Enforcement and Building Permit System and enforces environmental regulations for the protection of Wetlands, River Corridors and Groundwater Recharge Areas. All of these factors help to limit the inappropriate placement of waste disposal facilities.

### 6-3 Groundwater

Approximately 86 percent of the water supply in Long County comes from groundwater sources. The balance (14%) is surface water, which is mainly used for irrigation and other agricultural purposes. The Floridan Aquifer serves Long County's public water supply. However, due to Georgia Environmental Protection Division (EPD) limits on permits, the Miocene Aquifer has become a popular source for withdrawal.<sup>6</sup>

### 6-4 Soils

Currently, there are no waste disposal facilities, such as landfills, in Long County. According to the USDA Natural Resource Conservation Service, the county has some areas with moderately well drained soils not subject to flooding that would be suitable for the siting of waste disposal facilities. These soils include the Dothan, Lucy and Lee field series. The characteristics of these soils make them desirable for all construction projects requiring stable and drainable soils. However, these soils comprise no more than 15-20 percent of the total land in Long County.<sup>7</sup>

#### **Animal and Plant Habitat**

All of the county's recycling centers (LCSCs) are fenced, and the collection boxes secured at close of business to prevent wild animals from scavenging for food. No LCSC site is known to threaten any endangered animal or plant habitat.

#### **Environmental Concerns**

No LCSC site is known to contain any historical or archaeological areas.

### 6-5 Plan Consistency

To determine if a new siting is consistent with the Long County Solid Waste Management Plan, the Long County Commission should:

- Notify the public in accordance with the Zoning Procedure Act
- Require an Impact Analysis (developer responsibility) to determine if the proposed new facility would have an impact on the environment and/or current collection and disposal systems
- Require evidence that the proposed new facility will contribute toward per capita waste reduction
- In addition, the City and County should assess whether the proposed new facility meets the conditions set forth by DNR-EPD for the protection of the environment

<sup>6</sup> Georgia Department of Natural Resources, Environmental Protection Division

<sup>7</sup> USDA, Natural Resources Conservation Service, Soil Survey of Liberty & Long Counties, Georgia  
<http://websoilsurvey.nrcs.usda.gov/app/>

## 6-6 Natural Environmental Limitations<sup>8</sup>

- Groundwater Recharge areas: DNR Rule 391-3-16-.02(3)(a)
- Wetlands: DNR Rule 391-3-16-.03(3)(e)
- River corridors: DNR Rule 391-3-16-.04(4)(h)

## 6-7 Criteria for Siting<sup>9</sup>

- Airport safety: DNR Rule 391-3-4-.05(1)(c)
- Flood plains: DNR Rule 391-3-4-.05(1)(d)
- Wetlands: DNR Rule 391-3-4-.05(1)(e)
- Fault areas: DNR Rule 391-3-4-.05(1)(f)
- Seismic impact zones: DNR Rule 391-3-4-.05(1)(g)
- Unstable areas: DNR Rule 391-3-4-.05(1)(h)
- Significant groundwater recharge areas: DNR Rule 391-3-4-.05(1)(j)

## 6-8 Other Limitations

### Military Flight Zones<sup>10</sup>

Airports and aircraft bombing-ranges are a site-limiting factor for municipal solid waste landfill (MSWLF). MSWLF's tend to draw large flocks of scavenging birds to the site. Birds traveling to and from a MSWLF site (a food source) can cause a serious flight hazard to aircraft. "Bird hazard" is defined as "an increase in the likelihood of bird/aircraft collisions that may cause damage to the aircraft or injury to its occupants."

Birds attracted to a MSWLF can create a grave hazard to public health and safety, both in the air and on the ground. Birds ingested into turbojet engines and bird strikes to airframes can damage or destroy engines and equipment and impair the aircrew to control the aircraft in flight. Penetrations from bird strikes through aircraft canopies can injure or kill aircrew, and increase the chance of aircraft crashing to the ground, thus subjecting citizens and property to the risk of serious injury or damage.

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<sup>8</sup> Georgia Department of Community Affairs: "Local Planning Requirements"; Georgia Department of Natural Resources: EPD Rules

<sup>9</sup> Georgia Department of Community Affairs: "Local Planning Requirements"; Georgia Department of Natural Resources: EPD Rules

<sup>10</sup> Georgia Department of Community Affairs: "Local Planning Requirements"; Department of Defense, Air National Guard of Georgia

In the interest of public safety, any proposal for a new MSWLF, or any plan to vertically or laterally expand an existing MSWLF must comply with O.C.G.A. 12-8-25.3 and must demonstrate that the proposed facility is not located within 10,000 feet of any public or private-use airport runway intended for only piston-type aircraft.

A facility in such proximity to the aforementioned runways must also demonstrate that it will be designed and operated so that it does not pose a "bird hazard" to aircraft. Such a demonstration must be published in the site permit request and the permit application. The Federal Aviation Administration, the Department of Defense and the Air National Guard of Georgia shall be notified and be given the opportunity to both review and make comment on the proposed MSWLF plan.

There are currently no airports in Long County, and a Liberty County airport located adjacent to the Long County line is now closed. The Fort Stewart Flight Center is located in the northernmost part of Liberty County.

Much of Long County is located under the military restricted airspace of the Townsend bombing range located in McIntosh County. This airspace (R-3007), indicated on the FAA "Jacksonville Sectional Aeronautical Map" published by the U.S. Department of Commerce, is used by military aircraft making high speed, low altitude approaches over Long County to the Townsend bombing range. This bombing range is used by all air units being trained in the Southeast by the Navy, Air Force, Army and Marines, and therefore is of great strategic importance.

**Borders around areas of significance importance<sup>11</sup>**

All areas of significant importance to local, federal and state governments are required to have at least a 3 mile border from the edge of the area of significant importance. A greater distance can be established if the area of importance is more significant and the impact from the location of a waste disposal facility is greater than would be otherwise anticipated.

No waste disposal facility will be placed within 3 miles of the city limits of Ludowici. The following sections of the Code of Georgia (O.C.G.A.) must be referenced before siting of a waste disposal facility:

- O.C.G.A. 12-3-50
- O.C.G.A. 12-3-620
- O.C.G.A. 12-3-72
- O.C.G.A. 12-3-30
- O.C.G.A. 12-3-90
- O.C.G.A. 12-3-110
- O.C.G.A. 12-3-150
- O.C.G.A. 12-3-640

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<sup>11</sup> Georgia Department of Community Affairs: "Local Planning Requirements"; Georgia Department of Natural Resources: EPD Rules

**Required Applicant Action Relating to Waste Disposal Facility Siting<sup>12</sup>**

Disposal facility siting decision: DNR Rule 391-3-4-.05(1)(b)

Hydrological assessment: DNR Rule 391-3-4-.05(1)(k)

**Criteria for Imposing Conditions on Waste Disposal Facilities**

The Long County Commission and Ludowici City Council may impose conditions on the siting of waste disposal facilities. Evidence presented to, and gathered by, the board will determine conditions. In reviewing evidences, the panel should consider the following criteria:

- 1) The proposed use will not have a significant adverse effect on the health, safety and general welfare and character of adjacent land uses or the general area
- 2) The physical conditions of the site, including size, shape, topography and drainage, are suitable for the proposed development
- 3) The proposed use is consistent with the goals and objectives of the Solid Waste Comprehensive Plan
- 4) Whether or not all pertinent and applicable state and federal laws have been met
- 5) If development is permanent or temporary
- 6) Any other factors deemed relevant to the representative body

**6-9 Needs and Goals**

To prevent solid waste disposal activities in environmentally protected areas or areas that have land use limitations.

**Ordinance**

The County should consider an ordinance that would develop a process by which waste disposal facilities and solid waste activities could be brought before a technical board for review. The technical board may recommend to the County commission conditions that may need to be imposed to ensure that the waste disposal facility is operated in a safe and effective manner, and meet all state and federal regulatory requirements.

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<sup>12</sup> Georgia Department of Community Affairs: "Local Planning Requirements"; Georgia Department of Natural Resources: EPD Rules; City and County Governments

## Chapter – 7

### **Education/Public Involvement Element**

Like many rural counties, Long County faces a significant challenge in meeting the goals of O.C.G.A. §12-8-31.1. In order for the county to succeed in reducing solid waste generated locally, public participation is critical. Fortunately, the public's interest in solid waste management issues and recycling is at an all-time high. However, there is also much misunderstanding about recycling among the general public.

In its public education programs, the County stresses that recycling is actually a three-step process. First, potential recyclables must be removed from the waste stream. Secondly, new products must be developed from the recycled materials. Finally, a market for recycled materials must be identified, and the public must accept recycled products. Unfortunately, many local recycling programs concentrate only on the first phase of this cycle. The County and City administration will also stimulate the markets for recycled products by purchasing recycled products whenever possible.

#### **7-1 School System Programs**

Keep Georgia Beautiful (KGB) offers training in a curriculum developed by Keep America Beautiful (KAB). *Waste in Place*, designed for grades kindergarten through six, and *Waste: A Hidden Resource*, for grades seven through twelve. Using a hands-on approach, the workshops offer interdisciplinary instruction for teachers to educate their students about solid waste problems and solutions. Each participant receives a copy of the curriculum notebook. When at least twenty educators attend, the workshops are conducted at no charge to communities in Georgia. Participants may include teachers, curriculum directors, principals, media and educational specialists, as well as teachers from other school systems. In addition, local public officials regularly visit schools, talk about recycling, illegal dumping and littering.

#### **7-2 School System Programs**

The City and County governments will coordinate the dissemination of information about waste reduction and recycling, and organize media events. This normally includes writing and obtaining sponsorship for public service announcements, hosting press conferences, buying paid advertising, having the local officials comment about recycling and encouraging the media to cover stories about recycling.

### **7-3 Media Relations**

Long County encourages contests between civic organizations and school groups. Winners are interviewed and placed in the local newspaper. Community billboards in government buildings, schools, churches, civic meeting rooms and the City and County offices also promote recycling.

### **7-4 Special Promotions**

The Citizens' Beautification Committee (CBC) will continue to coordinate the use of local volunteers interested in beautification, waste reduction and recycling issues. The CBC depends on scouting groups, 4-H participants, church groups, chamber of commerce and community organizations to get the message out.

### **7-5 Local Volunteer Base**

Source reduction is the least expensive and perhaps the most important component of any recycling strategy. When you reduce the waste stream the volume of materials to be recycled or disposed of decreases. Unfortunately, source reduction is also the most difficult strategy to implement.

The source reduction programs target the largest generators of MSW and recyclable waste: the citizens of Long County. Industries and businesses are secondary contributors to the MSW stream. The Long County Service Centers (LCSCs) coordinate removal of recyclables from the solid waste stream.

The key to source reduction is informing citizens of the high costs associated with disposal of convenience-based products and encouraging them to find new and innovative ways of reusing materials. Reuse extends the life of the product and reduces the total waste stream.

The County's recycling education programs stress waste reduction. By communicating to school students, civic groups and private enterprises the benefits of source reduction to taxpayers, the county can further reduce the amount of waste entering the waste stream.

### **7-6 Costs for Public Education Programs**

Most of the components of Long County's recycling strategy are in place. County employees coordinate the logistics, planning, and publicity efforts for recycling events with city officials, community groups and the chamber of commerce.

## **7-7 Needs and Goals**

To help residents understand the importance of solid waste management in terms of collection, reduction, recycling, environmental issues and conservation.

### **Keep Long County Beautiful (KLB)**

The establishment of a Long County affiliate of Keep Georgia Beautiful (KGB) would be helpful for the effort to increase public awareness of environmental and solid waste issues. In addition, education programs targeted towards schools have proven to be successful and efforts to engage business and civic groups to participate in these programs have increased.

### **Membership**

A KLB program would provide the framework for a volunteer clean-up program. A program to encourage business and corporate sponsorship will kick off in 2005. Giving sponsors public recognition through event flyers, promotional materials and other special event activities can increase business and corporate sponsorship. Giving annual awards to those members and sponsors who participate in all KLB activities will energize the general public. KGB and KLB can provide assistance and information to county residents.

### **Education Programming**

Long County schools do not have a science program that supports recycling programs. However, local public officials regularly visit schools, talk about recycling, illegal dumping and littering.

### **Environmental Enforcement**

City and County Code Enforcement should be expanded to include more aggressive enforcement of litter ordinances, programs to point out the seriousness of illegal dumping and the importance of litter prevention and how littering effects the environment.

### **Recycling**

Currently Long County schools have active newspaper and mixed paper recycling programs. Plans exist to begin an aluminum can recycling program in all three Long County schools over the next year. There is a need to have aluminum can and plastic bottle community drop off recycling receptacles at the schools, to encourage recycling by the entire community. With relatively few recycling drop-off centers countywide, school-based recycling receptacles would provide improve opportunities for recycling.

### **Waste in the Workplace**

City and County administration should continue to support recycling in all government units.

**Adopt-A-Road**

The Long County 4H club sponsors (1) mile of road in the Adopt-A-Road program. The 1-mile stretch is located on GA 57, between mile markers 15-16. Long County will continue to support this program and implement a program to award these individuals for their efforts.

**Long County Commission and Ludowici City Council**

To monitor and evaluate this ten-year plan it is necessary that the Long County Commission and the Ludowici City Council support the following:

- 7) A local affiliate of the Keep Georgia Beautiful program
- 8) State and federal programs
- 9) Composting programs and educational programs
- 10) Develop and support a Solid Waste Committee with a Board of Directors to provide an annual review of this plan and recommend modifications as necessary

## Chapter – 8

### Implementation Strategy

#### 8-1 1999 – 2003 Report of Accomplishments

**Table 8**  
**Long County Waste Collection Element**

| Project | Activity   | Status  | Explanation  |
|---------|--|---------|--|
| 1       | Continue using green boxes throughout county for commercial establishments and where appropriate   | Ongoing | Carried over, language changed to better reflect current conditions-listed as Project #2 <sup>13</sup> . Commercial Waste is collected by private waste haulers by individual contract |
| 2       | Continue efforts to establish “Solid Waste Convenience Centers” throughout county. Continue to investigate sources of funds to support this service. | Ongoing | Project has been split into three new projects that reflect current conditions: 5,10 and 11. <sup>14</sup>   |

**Table 9**  
**City of Ludowici Waste Collection Element**

| Project | Activity                      | Status    | Explanation |
|---------|-------------------------------|-----------|-------------|
| 1       | Privatize curbside collection | Completed |             |

<sup>13</sup> see Short Term Work Program, Table 16, Project # 2, page 44

<sup>14</sup> see Short Term Work Program, Table 16, Project #s 5, 10, and 11, pages 45 & 46

**Table 10**  
**Long County Waste Reduction Element**

| Project | Activity  | Status           | Explanation  |
|---------|---|------------------|--|
| 1       | Continue to stress voluntary source reduction.  | Ongoing          | Language changed to reflect current conditions: Project # 10 <sup>15</sup> - Stress voluntary source reduction |
| 2       | Investigate methods to carry out a mixed paper-recycling program using Fort Stewart.  | Not Accomplished | Fort Stewart's recycling program was not cost effective  |
| 3       | Investigate methods to install a composting demonstration bin.                        | Completed        |  |
| 4       | Investigate methods to establish recycling bins at "Solid Waste Convenience Centers." | Completed        |  |

**Table 11**  
**City of Ludowici Waste Reduction Element**

| Project | Activity   | Status           | Explanation  |
|---------|--|------------------|--|
| 1       | Continue to stress voluntary source reduction.                                       | Ongoing          | Language changed to reflect current conditions: Project # 10 <sup>16</sup> - Stress voluntary source reduction |
| 2       | Investigate methods to carry out a mixed paper-recycling program using Fort Stewart. | Not Accomplished | Fort Stewart's recycling program was not cost effective  |
| 3       | Investigate methods to install a composting demonstration bin.                       | Completed        |  |

<sup>15</sup> see Short Term Work Program, Table 17, Project # 10, page 47

<sup>16</sup> see Short Term Work Program, Table 17, Project # 10, page 47

**Table 12**  
**Long County Education & Public Involvement Element**

| Project | Activity   | Status  | Explanation  |
|---------|--|---------|--|
| 1       | Continue to stress voluntary source reduction  | Ongoing | Project has been split into several different projects to reflect current conditions: Project #s 1, 2, 3 and 6 <sup>17</sup> |
| 2       | Distribute waste reduction public education material through various means, such as utility bills. | Ongoing | Distribute waste reduction public education material through various means, such as utility bills.                           |

**Table 13**  
**City of Ludowici Education & Public Involvement Element**

| Project | Activity   | Status        | Explanation  |
|---------|--|---------------|--|
| 1       | Continue to stress voluntary source reduction  | Ongoing       |  |
| 2       | Distribute waste reduction public education material through various means, such as utility bills. | Not Completed | The City will contact Mary Harrington, DCA's Solid Waste Program Coordinator, for materials to mail out with the waste bill. |

<sup>17</sup> see Short Term Work Program, Table 21, Project #s 1, 2, 3 & 6, page 51

**Table 14**  
**Long County Waste Disposal Element**

| Project | Activity                                     | Status  | Explanation |
|---------|--|---------|-------------|
| 1       | Dispose of putrescible waste at Wayne County | Ongoing |             |

**Table 15**  
**City of Ludowici Waste Disposal Element**

| Project | Activity                                     | Status  | Explanation |
|---------|--|---------|-------------|
| 1       | Dispose of putrescible waste at Wayne County | Ongoing |             |

**8-2 2004 – 2014 Short Term Work Program**

The 2004 – 2014 Short Term Work Program for the City of Ludowici and Long County is presented on pages 43 through 50.

**Table 16**  
**2004 – 2014 Short Term Work Program: Collection**

| Project No. | Program Description  | Years |      |      |      |      |      |      |      |      |      | Responsible Agency | Annual Cost | Revenue Source           |  |  |
|-------------|--|-------|------|------|------|------|------|------|------|------|------|--------------------|-------------|--------------------------|--|--|
|             |  | 2005  | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |                    |             |                          |  |  |
| 1           | Continue to perform weekly curbside collection of MSW/household waste through agreement/contract with commercial waste haulers | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | X           | Long County and Ludowici | Long: \$13.00 per household/per month<br>Ludowici: \$14.00 per household/per month | User Fees  |
| 2           | Commercial Waste is collected by commercial waste haulers by individual contract   | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | X           | Long County and Ludowici | Long: \$13.00 per household/per month<br>Ludowici: \$14.00 per household/per month | User Fees  |
| 3           | All county residents can bring recyclables and all other solid waste items not allowed in MSW/household waste stream           | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | X           | Long County and Ludowici | \$120,000  | General Revenues and monies collected from recycling |
| 4           | The Long County Service Center will continue to provide service regularly  | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | X           | Long County              | \$120,000  | General Funds and funds from recyclable materials    |

**Table 16 (Con't.)  
2004 – 2014 Short Term Work Program: Collection**

| Project No. | Program Description  | Years |      |      |      |      |      |      |      |      |      | Responsible Agency | Annual Cost                      | Revenue Source           |   |
|-------------|--|-------|------|------|------|------|------|------|------|------|------|--------------------|----------------------------------|--------------------------|---|
|             |  | 2005  | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |                    |                                  |                          |   |
| 5           | Continue maintenance of Solid Waste Enterprise Fund to support various collection activities                                 | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | \$300                            | Long County              | Long Funds  |
| 6           | The Long County Convenience Center will maintain cardboard and newspaper drop off bins                                       | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | \$15,000                         | Long County              | General Revenue Funds and funds from recyclable materials |
| 7           | City will continue to collect yard waste once per week by appointment. Yard waste is taken to the city's inert landfill site | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | \$500                            | Ludowici                 | General Funds   |
| 8           | Conduct an evaluation of collection costs and methods on an annual basis as well as prior to any major equipment purchase    | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | Ludowici: \$500<br>Long: \$1,500 | Ludowici and Long County | General Funds   |

**Table 16 (Con't.)  
2004 – 2014 Short Term Work Program: Collection**

| Project No. | Program Description  | Years |      |      |      |      |      |      |      |      |      | Responsible Agency | Annual Cost                | Revenue Source        |   |
|-------------|--|-------|------|------|------|------|------|------|------|------|------|--------------------|----------------------------|-----------------------|---|
|             |  | 2005  | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |                    |                            |                       |   |
| 9           | Continue curbside collection of white goods by appointment   | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | Ludowici                   | \$500                 | General Funds   |
| 10          | Develop a schedule for a trailer or rollback to be available for the collection of Special Waste on Saturday's at a different location throughout the county | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | Long County                | \$12,000              | General Revenue Funds and funds from recyclable materials |
| 11          | Support the in the creation of a recycling center in each commissioner's district  | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | Long County                | \$5,000               | General Revenue Funds and funds from recyclable materials |
| 12          | Consider collection of confidential paper from banks, businesses   | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | Individual Business Owners | Contractual Agreement | User Fees   |

Source: City of Ludowici and Long County Governments

**Table 17**  
**2004 – 2014 Short Term Work Program: Waste Reduction**

| Project No. | Program Description   | Years |      |      |      |      |      |      |      |      |      | Responsible Agency | Annual Cost              | Revenue Source                     |   |
|-------------|---|-------|------|------|------|------|------|------|------|------|------|--------------------|--------------------------|------------------------------------|---|
|             |   | 2005  | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |                    |                          |                                    |   |
| 1           | Conduct annual review of waste reduction methods and costs  | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | Long County and Ludowici | \$200/ea                           | City and County Fees                                      |
| 2           | Long County Convenience Center capabilities for receiving and processing have been expanded and are expected to continue to do so throughout the next ten years | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | Long County              | \$100,000                          | Grants: State, GEFA, EPD, DNR                             |
| 3           | Start recycling program for government offices to reduce paper waste in solid waste stream  | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | Long County and Ludowici | Long: \$2,500<br>Ludowici: \$1,250 | General Revenue Funds and funds from recyclable materials |
| 4           | Due to the rural nature of the county, low-tech yard waste composting is allowed  | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | Long County and Ludowici | \$0                                | N/A   |

Table 17 (Con't.)

2004 – 2014 Short Term Work Program: Waste Reduction

| Project No. | Program Description   | Years |      |      |      |      |      |      |      |      |      | Responsible Agency | Annual Cost              | Revenue Source                 |   |
|-------------|---|-------|------|------|------|------|------|------|------|------|------|--------------------|--------------------------|--------------------------------|---|
|             |   | 2005  | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |                    |                          |                                |   |
| 5           | Conduct weekly commercial pickup of recyclables through the Long County Service Center                          | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | Long County              | \$95,000                       | General Revenue Funds and funds from recyclable materials |
| 6           | Continue to collect and process yard waste  | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | Ludowici                 | \$500                          | General Funds   |
| 7           | Continue to separate white goods and other metals from solid waste stream and sell these items to scrap dealers | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | Long County              | \$5,000                        | General Revenue Funds and funds from recyclable materials |
| 8           | Encourage citizens to compost   | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | Ludowici and Long County | Ludowici: \$200<br>Long: \$200 | General Funds   |

Source: City of Ludowici and Long County Governments

**Table 18**  
**2004 – 2014 Short Term Work Program: Waste Disposal**

| Project No. | Program Description  | Years |      |      |      |      |      |      |      |      |      | Responsible Agency | Annual Cost | Revenue Source           |          |                       |
|-------------|--|-------|------|------|------|------|------|------|------|------|------|--------------------|-------------|--------------------------|----------|-----------------------|
|             |  | 2005  | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |                    |             |                          |          |                       |
| 1           | Conduct annual review of waste disposal methods and costs  | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | X           | Long County and Ludowici | \$200/ea | County and City Funds |
| 2           | Consider operating an inert landfill for the disposal of yard waste, concrete, bricks, white goods, etc. | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | X           | Long County              | \$45,000 | General Funds         |
| 3           | Continue to review the contractual agreement with private haulers annually for disposal of solid waste   | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | X           | Long County and Ludowici | \$500    | General Funds         |
| 4           | Encourage the development of a countywide yard waste-composting site                                     | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | X           | Long County              | \$5,000  | General Funds         |

Source: City of Ludowici and Long County Governments

**Table 19**  
**2004 – 2014 Short Term Work Program: Land Limitations**

| Project No. | Program Description  | Years |      |      |      |      |      |      |      |      |      | Responsible Agency | Annual Cost | Revenue Source |       |              |
|-------------|--|-------|------|------|------|------|------|------|------|------|------|--------------------|-------------|----------------|-------|--------------|
|             |  | 2005  | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |                    |             |                |       |              |
| 1           | Review the map for areas most suitable and unsuitable for placement of an inert landfill and recycling centers | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | X           | Long County    | \$200 | County Funds |

Source: City of Ludowici and Long County Governments

**Table 20**  
**2004 – 2014 Short Term Work Program: Implementation and Financing**

| Project No. | Program Description   | Years |      |      |      |      |      |      |      |      |      | Responsible Agency | Annual Cost | Revenue Source |   |
|-------------|---|-------|------|------|------|------|------|------|------|------|------|--------------------|-------------|----------------|---|
|             |   | 2005  | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |                    |             |                |   |
| 1           | Utilize inmate detail to collect and dispose of solid waste on or near county roads | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | Long County | \$5,000        | County Funds                                      |
| 2           | Seek grants for the purchase of a large chipper or tub grinder to mulch materials   | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | Long County | \$75,000       | Grants  |
| 3           | Continue solid waste collection contract  | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | Long County | \$550,000      | User Fees   |
| 4           | Continue solid waste collection contract  | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | Ludowici    | \$90,000       | User Fees   |
| 5           | Continue to fund the Solid Waste Department   | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | Long County | \$160,000      | Revenue Funds and funds from recyclable materials |
| 6           | Continue to fund the Solid Waste Department   | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | Ludowici    | \$5,000        | General Funds                                     |

Source: City of Ludowici and Long County Governments

**Table 21**  
**2004 – 2014 Short Term Work Program: Education and Public Involvement**

| Project No. | Program Description  | Years |      |      |      |      |      |      |      |      |      | Responsible Agency | Annual Cost | Revenue Source           |          |                                  |
|-------------|--|-------|------|------|------|------|------|------|------|------|------|--------------------|-------------|--------------------------|----------|----------------------------------|
|             |  | 2005  | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |                    |             |                          |          |                                  |
| 1           | Develop a local Keep Georgia Beautiful affiliate, and continue to support the Adopt-A-Highway Program                          | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | X           | Long County and Ludowici | \$1,500  | County and City Funds            |
| 2           | Local media will continue to provide a series of public service announcements concerning all aspects of solid waste management | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | X           | Long County and Ludowici | N/A      | N/A                              |
| 3           | Encourage new citizens to pick up brochures on the management of yard waste at the Long County Extension Office                | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | X           | Long County and Ludowici | N/A      | N/A                              |
| 4           | Refer all "trouble calls" to appropriate departments   | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | X           | Long County and Ludowici | N/A      | Calls referred to private hauler |
| 5           | City and County personnel will be available to speak upon request  | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | X           | Long County and Ludowici | N/A      | N/A                              |
| 6           | Brochures and pamphlets on solid waste issues are generated as needed  | X     | X    | X    | X    | X    | X    | X    | X    | X    | X    | X                  | X           | Long County and Ludowici | \$200/ea | General Fund                     |

Source: City of Ludowici and Long County Governments

**LONG COUNTY**  
**RESOLUTION OF ADOPTION**

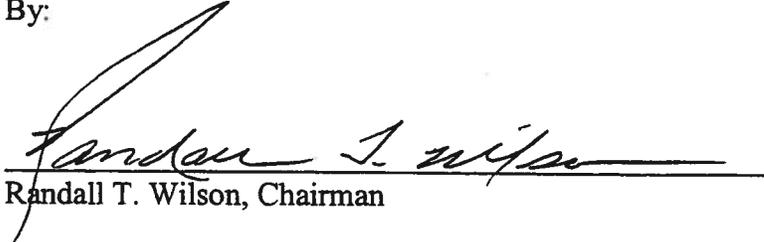
WHEREAS, Long County has completed a Solid Waste Management Plan Update for the period 2005 to 2014; and

WHEREAS, the Solid Waste Management Plan has been approved by the Georgia Department of Community Affairs per the Solid Waste Planning Act of 1990; and

BE IT THEREFORE RESOLVED, that the Long County Board of Commissioners does hereby adopt the Solid Waste Management Plan, as per the requirements of the Georgia Solid Waste Management Act of 1990.

Adopted this 6<sup>th</sup> day of September, 2005.

By:

  
\_\_\_\_\_  
Randall T. Wilson, Chairman

ATTEST:

  
\_\_\_\_\_  
Mary Ann Odum, Clerk

*Coastal Georgia*  
Regional Development Center

RECEIVED

JAN 24 2006

January 19, 2006

Mr. Mike Beatty, Commissioner  
Department of Community Affairs  
60 Executive Park, South, N.E.  
Atlanta, GA 30329-2231

**RE: Long County/City of Ludowici Solid Waste Management Plan Update**

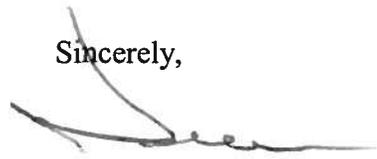
Dear Mike:

On November 3, 2005, you copied me on a letter sent to Mayor Myrtice Warren, City of Ludowici and Chairman Randall T. Wilson, Long County Commission, stating that you determined that the Long County/City of Ludowici Solid Waste Management Plan 2005-2014 update meets the Minimum Planning Standards and Procedures for Solid Waste Management compliance requirements.

The Solid Waste Management Plan was adopted by the Long County Commission on September 6, 2005, and Ludowici City Council on October 11, 2005. A copy of the final version of the Plan and a Resolution of Adoption are enclosed.

Thank you for your support.

Sincerely,



Vernon D. Martin, AICP  
Executive Director

VDM/bk

Enclosures

- c: Randall Hartmann, Director, Environmental Management  
Mary Harrington, Coordinator, Environmental Management  
Chairman Randall T. Wilson, Long County Commission  
Mayor Myrtice Warren, City of Ludowici  
Members of Ludowici City Council  
Members of Long County Commission  
Members of Solid Waste Management Plan Steering Committee

*Serving the cities and counties of Coastal Georgia*

**AMENDMENT TO SOLID WASTE ORDINANCE  
Long County, Georgia**

Be it ordained by the Long County Board of Commissioners that the Long County Solid Waste Ordinance, adopted November 6, 2001, is hereby amended as follows (Note: deleted text is indicated with a strikethrough; added text is indicated with italics):

1. Add the following definitions to Section 3. Definitions:

*County-approved containers mean the 96-gallon container distributed by a franchised vendor for the collection of residential and/or commercial solid waste.*

*Franchise means a person, persons, or entity granted a franchise by the county governing authority, who, under written agreements for compensation by those receiving services, collects and transports solid waste from commercial and non-residential establishments and residential dwellings, excluding an individual collecting and transporting waste from his or her own residential dwelling.*

*Franchise area means all unincorporated areas of Long County, Georgia, unless specifically excluded or included in a franchise agreement or contract.*

2. Amend Section 4(3) as follows:

The Commission ~~shall~~ *may* designate areas in the county where dumpsters intended to be for public use may be located and maintained. These dumpsters shall be located on public property, along the right-of-way of public roads or streets, or on private property with the express written consent of the owner and tenant in legal possession of the property.

3. Add "Section 5. Franchises- Curbside Collection" and renumber existing sections 5 through 9:

*(1) No individual, partnership, corporation, or other entity shall collect and/or dispose of municipal solid waste for a fee without obtaining a franchise from the county governing authority.*

*(2) In the event that a county governing authority grants an exclusive franchise, through a contract or other means, to an individual, partnership, corporation, or other entity for the purpose of providing*

*curbside residential and/or commercial solid waste collection, all residents, either permanent or temporary, and commercial establishments within the unincorporated areas of the county must subscribe to the service. Mandatory subscription ensures that residential solid waste is properly collected and disposed of in a manner that protects the health and safety of the residents of the county. Likewise, the franchisee is required to provide curbside collection services to all county residents, both permanent and temporary. Tenants of approved mobile home parks may be exempt from the mandatory subscription requirement, if the mobile home park owner and franchisee mutually agree to utilize dumpsters within the mobile home park, subject to other county ordinances. In this event, the mobile home park owner will pay for dumpster service under the terms of the franchise agreement.*

- (3) In the event of an exclusive franchise, residents that do not compensate the franchisee for provided solid waste collection services are subject to termination of service. Because the county governing authority may be liable for outstanding subscriber collection fees, these fees may be collected through the county governing authority through the annual real property tax bill.*
- (4) All residential solid waste, less bulky waste, yard trash, and other items prohibited by the franchisee, shall be placed in county-approved containers provided by the franchisee.*
- (5) The county governing authority reserves the discretion and authority to grant, revoke, or rescind any franchise, in the interest of the health, safety, and welfare of the citizens of the county.*
- (6) Prior to engaging in solid waste handling in the county, a franchisee must have obtained a solid waste handling permit from the Director of the Environmental Protection Division of the Georgia Department of Natural Resources or any successor agency authorized to issue permits pursuant to State law.*
- (7) All franchisees must meet minimum insurance requirements as determined at the discretion of the county governing authority.*
- (8) The franchisee shall, at its sole cost and expense, fully indemnify, defend, and hold harmless the county, its officers, boards, commissions, employees, and agents, against any and all claims, suits, actions, liability, and judgments from third parties for damages which may be result of willful, negligent, or tortuous conduct arising out of the business of collection, transportation, or disposal of solid waste.*

- (9) *Franchisees shall provide an adequate number of vehicles for regular collection services, and these vehicles must conform to all applicable State laws and requirements of the Georgia Department of Transportation and Georgia Department of Natural Resources.*
- (10) *The franchisee shall maintain, at its place of business, records showing the names and addresses of all property owners and tenants with whom the franchisee contracted for solid waste collection services, including street addresses of properties served. The franchisee shall submit upon reasonable request of the county governing authority to a customer audit.*
- (11) *All franchisees shall dispose of collected solid waste only at an approved, state-permitted, disposal location.*
- (12) *In lieu of a franchise fee, the franchisee shall apply any ordinary annual fee payable to the county for any franchise granted, pursuant to this section, to reducing the cost of collection services for the residents of the county.*
- (13) *The county governing authority at all times reserves the right to direct and control the time, place, and manner of solid waste collection and handling.*
- (14) *The franchisee will be required to provide "backdoor" collection services for disabled and elderly customers under certain conditions. Any person who is incapable of moving his or her refuse to the curbside shall obtain a physician's certificate as to such disability. The physician's certificate must be presented to the Long County Clerk prior to the franchisee providing this service. "Backdoor" collection will only be provided if no other able-bodied adults reside with the disabled or elderly individuals requesting this service.*
4. Amend Section 6 (1) and Section 6 (2) (Solid Waste Drop-off Site and Convenience Centers – Requirements and Prohibited Acts), as follows:
- (1) Use by county residents only. It shall be unlawful for any person or persons ~~of the county~~ to place or deposit any garbage, refuse, litter, household trash, *bulky waste, yard trash, recyclable materials* or other material of any kind not generated within the boundaries of the county in these dumpsters *or refuse or recycling containers*.
- (2) Depositing trash outside of a dumpster or *convenience center*. It shall be unlawful to place or deposit garbage ~~or~~, household trash,

*bulky waste, yard trash, or recyclable materials on the ground adjacent to the dumpsters or refuse or recycling containers, or in any location other than the dumpsters, including outside the fence or gate of a convenience center. Any person using the dumpsters or refuse or recycling containers shall clean up any spills caused by his use of the dumpsters these containers and shall not drop or discard any garbage or household trash in the area surrounding the dumpsters.*

5. Add Section 6(11) (Solid Waste Drop-off Site and Convenience Centers – Requirements and Prohibited Acts):

*(11) In the event that curbside pickup of residential solid waste is provided either directly by the Board of Commissioners or through a franchise agreement, no residential solid waste, except for bulky waste, yard trash, and other items not acceptable for curbside pickup, will be accepted at the solid waste convenience centers. In addition, certain recyclable materials will be accepted at the convenience centers.*

Adopted this 5<sup>th</sup> day of November, 2002, by the Long County Board of Commissioners.

  
Randall T. Wilson, Chair

  
ATTEST: Mary Ann Odum, County Clerk



STATE OF GEORGIA  
COUNTY OF LONG

SOLID WASTE SERVICES, COLLECTION AND DISPOSAL

THIS CONTRACT FOR SOLID WASTE COLLECTION SERVICE (this "Agreement") is made and entered into on the 19<sup>th</sup> of September, 2002, by and between Long County, a political subdivision of the State of Georgia, by and through its Board of Commissioners, hereinafter referred to as "County," and Sullivan Environmental Services, a Georgia corporation, or its legal successors, acting by and through its duly authorized officers, hereinafter referred to as "Contractor." This Contract replaces the existing agreement between the Two Parties.

WHEREAS, it is necessary for County to promote, preserve and protect the public health of its citizens; and

WHEREAS, the removal of garbage, rubbish and other waste material generated by residential premises within the unincorporated areas of Long County is a valid exercise of County's police power; and

WHEREAS, the granting of a contract to a private corporation for the collection and disposal of solid waste is a valid function of County; and

WHEREAS, County and Contractor are desirous of entering into an agreement, under the terms of which Contractor shall provide for the collection and disposal of all residential, commercial, and industrial solid waste (as hereinafter defined) generated within the County for a specified period of time; and

WHEREAS, County and Contractor have agreed to the conditions, terms, rates, provisions and considerations under which Contractor shall perform such solid waste collection and disposal services as herein set out, and for the compensation as hereinafter provided; and

WHEREAS, it is the intent of the County that the owner or occupant of every residential and commercial premise in the unincorporated area of the County shall pay the Contractor for and utilize the solid waste collection and disposal services provided by Contractor; and

WHEREAS, Contractor shall bill and collect the fees for Contractor's services from Long County residents and the customers will compensate Contractor for solid waste collection and disposal services to all residential premises in the County; and

WHEREAS, the County has determined that it is in the best interest of the County and its residents to provide curbside solid waste collection service and is mandatory for all residential premises in the County and that this mandatory service is supported by County ordinance.

THEREFORE, County and Contractor agree as follows:

### LOCAL CONTRACTOR

It is understood by both parties that the Contractor has agreed in principle to terms with Jimmy Bynum of Rural Sanitation, a local Long County solid waste Contractor, currently providing residential services in the County to approximately 450 customers. While these terms remain confidential between the Contractor and Mr. Bynum/Rural Sanitation, this agreement came at the request of the County Commissioners to include the local Contractor in the scope of work to be carried out in this contract. Mr. Bynum shall act as an integral part of this contract and shall be deemed an employee of the Contractor and acting on the Contractor's behalf during the term of this contract.

### SCOPE OF WORK

The work under this Agreement shall consist of the work and services to be performed in the collection and disposal of solid waste generated by residential premises in the unincorporated areas of the County and the collection and disposal of commercial and industrial solid waste from those commercial and industrial premises designated by the County to receive Contractor's service, including all the supervision, materials, equipment, labor and all other items necessary to complete said work and services in accordance with the terms of this Agreement. Contractor will handle all billing directly to customer of services rendered. Contractor will also provide service for the County's two existing convenience centers and any future centers the County may open. Service at these centers will include collection and removal of various bulk waste, recyclables, and other materials deemed necessary by the County in open-top roll-off style containers.

### TERM

The term of this agreement shall begin on the date that Contractor first commences residential solid waste collection service and shall continue for a period of three (3) years thereafter. The County and Contractor shall agree on the date that the Contractor shall commence collection service hereunder, which date shall be no later than 150 days after September 3, 2002. At the conclusion of the three-year term hereof, this agreement shall be extended for an additional two-year term unless either party gives the other party one hundred - twenty (120) days notice in writing of its intention to terminate the agreement prior to the beginning of the renewal term. In the event the County does not elect to exercise the two year renewal, the County shall be required to pay the Contractor one half (1/2) the liquidated damages as stated later in this contract under the "termination" provision. The amount owed to the Contractor upon completion of the third year shall equal three (3) months of the most recent billing by the Contractor. This billing is recognized as the residential service billing by the Contractor and the roll off billing for the two convenience centers to the County. If the two year renewal is accepted by the County, the County and the Contractor may agree to future renewals if mutually agreed upon by both parties.

## ***COLLECTION SERVICE***

### **BASE SERVICE**

Contractor shall furnish one (1) 95 gallon, or more, cart to every residential premises suitable for occupancy in the unincorporated area of the County. It shall be the responsibility of the occupant of the residential premises and eligible commercial premises to properly use and safeguard the cart. Contractor shall maintain carts in reasonably good condition and collect household solid wastes placed in the carts from the residential premises once each week.

Mobile home trailer parks shall be handled on a case by case basis between the Contractor and the Landlord/Owner of the trailer park to determine the best means of service feasible (carts vs. dumpsters). Residential premises shall have the option to utilize dumpsters if they so choose providing the Contractor's trucks have safe access to service the dumpsters.

The Contractor shall have the right to charge occupants for the cost of repair or replacement of carts, if such repair or replacement is required as a result of abuse or damage, fires, or theft. The amount charged a resident for cart replacement shall not exceed Contractor's cost for the cart. Occupants of carts shall not be charged any repair or replacement cost for damage done by the Contractor's trucks during service of the carts, damage done by a roadside vehicle at no fault of the occupant, or for stolen carts at no fault of the occupant. The County shall act as arbitrator in any cases in dispute between the Contractor and customer. Occupants of residential premises may request additional carts for an additional volume of collection service. Residential premises and eligible commercial premises occupants shall place the carts within 3 feet of the roadway no later than 6:00 a.m. on the day of collection. The Contractor shall place containers back where it was placed for collection once emptied; containers shall not be placed in the street, gutter line, or in front of mailboxes. Users shall pay Contractor for collection and disposal service at the applicable charge designated by the Contractor as set forth in Exhibit "A".

### **COMMERCIAL SERVICE**

Contractor shall provide one cart and shall provide commercial solid waste collection and disposal service one (1) time per week at roadside on Contractor's scheduled collection day to eligible commercial premises that subscribe to the County for such service. To be eligible for Contractor's service, a commercial premise shall not generate more than an average of 100 pounds of commercial solid waste per cart per week, and all commercial solid waste must be suitable to be stored in a cart. Collection service to commercial premises shall not include collection of any items deemed unacceptable by the Contractor. These items could include yard trash, bulky waste, C&D materials, or hazardous waste. The County shall direct Contractor to provide the cart and collection service to eligible commercial premises and the commercial premise shall compensate Contractor by the applicable rate of compensation set forth in Exhibit "A". In addition, the County grants the Contractor exclusive rights to provide commercial dumpster service to all the businesses in the incorporated and unincorporated areas of Long County

that request such service. The Contractor shall bill and collect from these commercial dumpster customers. Pricing for dumpsters shall be done between the Contractor and the individual customer in accordance with the compensation schedule in Exhibit "A". No commercial dumpster customers shall be serviced without a signed service agreement between the customer and Contractor. Said service agreement shall be approved by the County Commissioners. Contractor agrees to purchase all dumpsters currently owned by the commercial customers in the County. This purchase shall be done in the form of either a direct purchase by the Contractor to the customer or a pro-rated 12 month credit on each customer's monthly bill. The pro-ration amount shall be based on the original purchase price of the container only for containers in current good working and serviceable condition. Customers shall provide some sort of proof of purchase of their containers from the County. Any containers deemed to be in unserviceable condition shall not be purchased by the Contractor.

#### SERVICE TO COUNTY OFFICES

The Contractor shall provide free dumpster service to the Courthouse, Senior Center, EMS, and Recreation Park. No other free services shall be provided.

#### ACCESS

Contractor shall provide collection services to all residential premises located on publicly owned, County maintained roadways. Such roadways shall be accessible to waste collection vehicles. The County shall maintain all publicly owned roads and bridges in a condition that affords access by Contractor's waste collection vehicles. Occupants of residential premises located on roadways inaccessible to Contractor's collection vehicles shall place residential solid waste in carts at an accessible location on a properly maintained roadway.

#### ELDERLY AND DISABLED.

Contractor shall provide side door or back door collection service to elderly or disabled residents as designated by the County who are physically unable to place the cart at roadside. The County shall maintain a specific policy in regards to how a user can be classified in this category. Such exceptions for elderly and disabled residents will be granted by the County only if there is no other occupant of the residential premises physically capable of placing the cart at roadside and the resident provides an affidavit or other documentation from a physician certifying the physical limitation or disability. In those events where side door or back door service is provided pursuant to this Section, the occupant may use the cart for storage of residential solid waste but must place the residential solid waste in bags.

#### INACCESSIBLE PREMISES

Contractor and the occupant of a residential premise not conveniently accessible to a public right of way or not having a suitable location at roadside for placement of carts or other residential solid waste shall agree on the manner and location for the collection of residential solid waste from such residential premises. Such agreement, for example, may require that Contractor collect residential solid waste in bags placed at a convenient location within 25 feet of roadside.

### LIMITATION ON NUMBER OF DISABLED & ELDERLY SERVICE LOCATIONS

The Contractor shall cooperate with the County and with the occupants of residential premises having exceptional collection service requirements described herein and shall provide such exceptional services as required, provided, however, that the total number of elderly and disabled receiving exceptional services shall not exceed a reasonable number of the total number of residential premises in the County.

### ***ROUTES AND HOURS OF COLLECTION OPERATION***

#### HOURS OF OPERATION

Collection of residential solid waste shall not start before 6:00 a.m.

#### ROUTES OF COLLECTION

The Contractor shall establish collection routes. Contractor shall submit a map designating the collection routes with days of collection to the County for its approval, which approval shall not be unreasonably withheld. Prior to commencement of collection services under this Agreement, the Contractor will, at its expense, notify each residential premise individually of the scheduled collection day or any changes thereto for the duration of this Agreement. The Contractor may from time to time request County approval of changes in routes or days of collection, which approval shall not be unreasonably withheld. Upon County approval of the proposed changes, Contractor shall promptly give written or published notice to the affected residential premises.

#### HOLIDAYS

The following shall be holidays for the purpose of this Agreement:

New Years' Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Contractor may elect to work or observe any of the above-designated holidays. If Contractor observes the holiday, Contractor shall remain obligated to provide collection service at least once per week. The Contractor will not be allowed Sunday collection except in emergency situations approved by County.

#### COMPLAINTS

Contractor shall furnish each residential premise with instructions for contacting the Contractor by telephone over a local line, for information or for service complaints. All complaints shall be made directly to the Contractor, and shall be given prompt and courteous attention. In the case of alleged missed scheduled collections, the Contractor shall investigate and, if such complaint is verified and valid, shall arrange for the collection of the residential solid waste not collected within 24 hours after the complaint is received.

### COLLECTION EQUIPMENT AND PERSONNEL

The Contractor shall provide an adequate number of vehicles for regular collection services. All vehicles and other equipment shall be kept in good repair, appearance and in a sanitary condition at all times. Each vehicle shall have clearly visible on each side the identity and telephone number of the Contractor. All solid waste hauled by the Contractor shall be so contained, tied, covered, or enclosed such that leaking, spilling, or blowing are prevented.

### OFFICE

Contractor shall maintain an office or other facilities through which it can be contacted. It shall be equipped with sufficient local service telephones and shall have a responsible person in charge. The Contractor shall designate a contact person who will be available at all times during office hours to answer the County's inquiries, respond to customer complaints, and direct the program. This person shall have ready access to crews throughout the collection day.

The Contractor shall provide a local or toll free telephone number which the County may call during regular business hours for customer assistance regarding missed collections, late set outs, or route completion status. The minimum hours during which this service must be available are 8:00 A.M. to 5:00 P.M. during designated collection days.

Contractor employees involved in collection activities shall wear proper attire clearly marked with company name/logo. The Contractor will operate a drug free workplace and maintain a formal Drug Free Workplace Program. The Contractor will be an Equal Opportunity Employer.

### DISPOSAL

Contractor shall be responsible for the proper disposal of Residential, Commercial, and Industrial Solid Waste.

## **COMPENSATION**

### RATES OF COMPENSATION FOR FIVE (5) YEAR TERM

Contractor shall be paid by the user of the residential and commercial premise for residential and commercial solid waste collection and disposal services provided hereunder by the rates of compensation and CPI rate adjustment procedure set forth in Exhibit "A", attached hereto and made a part hereof, during the five (5) year term of this Agreement. In the event that County and Contractor agree to extend or renew this Agreement for additional terms, the rates of compensation to be paid to Contractor during such terms shall be negotiated and agreed upon by the County and Contractor.

### DELINQUENT AND CLOSED ACCOUNTS

The Contractor shall discontinue waste collection service at any residential premises and eligible commercial premises for outstanding balances reaching 60 days. This shall serve as a means of assisting the Contractor in the collections of delinquent accounts. Upon

receipt of payment from the user for past due amounts and any additional amounts due, the Contractor shall resume waste collection service on the next regularly scheduled collection day. Contractor shall be allowed to charge appropriate late fees or re-delivery fees necessary (this is currently set at \$25.00 redelivery, 1.5% late fees, and \$31.00 NSF check fee). If outstanding balances owed reach 90 days, the Contractor shall repossess the cart at these locations and discontinue billing these customers. The Contractor shall provide a listing of these customers to the County and it shall be the County's decision on how to try and enforce and collect these balances owed. This listing shall be provided quarterly to the County to allow for a means of monitoring and auditing the amount of bad debts incurred by the Contractor. The County shall indemnify and hold the Contractor harmless from any claims, suits, damages, liabilities or expenses (including but not limited to expenses of investigation and attorney's fees) resulting from the Contractor's discontinuing service at any location.

#### REPAYMENT OF BAD DEBT

Both the County and the Contractor acknowledge that there may be a high amount of delinquent accounts and bad debt in the beginning stages of this contract. Both agree that the success of the curbside program relies heavily on the County and the Contractor working together; therefore, the County shall guarantee payment to the Contractor of 90% of any and all residential bad debt incurred in each year of services by December 31<sup>st</sup> of each year. In the first year of service, bad debts incurred from January 1<sup>st</sup> – September 30<sup>th</sup> of 2003 will be reimbursed by the County to the Contractor. For each year thereafter, the previous 12 months bad debts will be reimbursed to the Contractor. Since neither the County nor the Contractor can possibly predict with any certainty what percentage of non-paying accounts there will be in the first year, should that percentage exceed 40% of the customer base, the Contractor shall have the right to petition the County for relief of any and all bad debt once per quarter.

#### CONTRACTOR BILLINGS TO COUNTY

The Contractor shall invoice the County each month for collection services rendered directly for the County. The County shall pay the Contractor within 20 days of the date of the invoice. Such billing and payment shall be based on the services rendered for the two existing convenience centers and any new centers the County opens during the life of this contract at the applicable rates of Compensation set forth in Exhibit A hereto. The Contractor shall be entitled to payment for services rendered irrespective of whether or not the County collects payment from the owner or occupant for such service.

#### NON-DISCRIMINATION

In the performance of the work and services to be performed under the terms hereof, the Contractor covenants and agrees not to discriminate against any person because of race, sex, creed, color, religion or national origin.

#### INDEMNITY

The Contractor shall indemnify and hold the County and its officers, agents and employees harmless from and against all claims, damages, losses, and expenses including

attorney's fees arising out of or resulting from the Contractor's providing or failure to provide any services required under the contract, including but not limited to any such claim, damage, loss or expense, that is attributable to bodily injury, sickness, disease or death, or injury to or destruction of tangible property, including the loss or use resulting therefrom, or to economic loss; provided, however, that the Contractor's indemnification obligation under the scope of service under any contract shall be limited to claims, damages, losses, and expenses caused in whole or in part by any act or omission of the Contractor, or any Subcontractor on work required by the Contractor's contract with the County, or anyone else directly or indirectly or indirectly employed by any of them or anyone whose acts the Contractor or any subcontractor may be liable, regardless of whether or not such claims, damages, losses, and expenses are caused in part by a party indemnified hereunder.

The Contractor's indemnification obligation with respect to any and all claims by any employee or statutory employee of the Contractor, or any subcontractor, or by anyone directly or indirectly employed by them, or anyone from whose acts the Contractor or Subcontractor may be liable, shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under Worker's Compensation Act, Disability Benefit Act, or other Employee Benefit Acts.

#### FORCE MAJEURE

Except for the obligation to pay for services rendered, neither party hereto shall be liable for failure to perform hereunder due to contingencies beyond its control, including, but not limited to strikes, riots, war, fire, acts of God (including without limitation flood, hurricane, tornado or storm), compliance with any law, regulation or order, whether valid or invalid, of the United States of America or any other governmental body or instrumentality thereof, whether now existing or hereafter created (collectively referred to as "Force Majeure Event"). In addition, the performance required under this Contract does not include the collection or disposal of any increased volume of solid wastes resulting from a Force Majeure Event. In the event of such Force Majeure Event, the Contractor will vary routes and schedule as may be deemed necessary. In addition, the County and Contractor shall negotiate the amounts to be paid Contractor for services to be performed as a result of increased volumes resulting from a Force Majeure Event or any other event over which Contractor has no control.

#### LICENSES AND TAXES

The Contractor shall obtain all licenses and permits and promptly pay all taxes required by the County and State. During the term of the agreement the Contractor is subject to all applicable taxes and surcharges in effect on commercial hauling businesses and establishments within the County.

#### OWNERSHIP OF WASTE

Ownership of residential, commercial, and industrial solid waste shall be deemed to be the property of Contractor upon the collection and placement of the all solid waste in Contractor's vehicle pursuant to this Agreement.

INSURANCE

The Contractor shall at all times during the Agreement maintain in full force and effect Employer's Liability, Workmen's Compensation, Public Liability, and Property Damage Insurance, including contractual liability coverage for the provisions of this Section.

INSURANCE INDEMNITY

All insurance shall be by insurers and for policy limits acceptable to the County and before commencement of work hereunder the Contractor agrees to furnish the County certificates of insurance or other evidence satisfactory to the County to effect that such insurance has been procured and is in force. All insurance contracts must specify that vehicles are for "solid waste collection." The certificates shall contain the following express obligation:

"This is to certify that the policies of insurance described herein have been issued to the insured for whom this certificate is executed and are in force at this time. In the event of cancellation or material change in a policy affecting the certificate holder, thirty (30) days prior written notice will be given the certificate holder. For the purpose of this Agreement, the Contractor shall carry the following types of insurance in at least the limits specified below:

COVERAGES AND LIMITS OF LIABILITY

WORKMENS' COMPENSATION - STATUTORY

|                            |                             |
|----------------------------|-----------------------------|
| Employer's Liability       | \$1,000,000                 |
| Bodily Injury Liability    | \$1,000,000 each occurrence |
| Except Automobile          | \$1,000,000 aggregate       |
| Property Damage Liability  | \$500,000 each occurrence   |
| Except Automobile          | \$500,000 each occurrence   |
| Automobile Bodily Injury   | \$1,000,000 each person     |
| Liability                  | \$1,000,000 each occurrence |
| Automobile Property Damage | \$500,000 each occurrence   |

LIABILITY

|                           |                             |
|---------------------------|-----------------------------|
| Excess Umbrella Liability | \$4,000,000 each occurrence |
|---------------------------|-----------------------------|

As an alternative to the above, Contractor may insure the above public liability and property coverages under a plan of self-insurance, subject to the approval of the County. Each insurance policy with respect to public liability insurance may provide for a self-insured retention of an amount of \$1,000,000, with the result that the Contractor is its own insurer to that extent. The coverages may be provided directly by the Contractor or an affiliated corporation.

#### POWER OF ATTORNEY

Attorneys in fact who sign performance bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

#### INCLUSION OF MUNICIPALITIES

Contractor agrees that each municipality in the County may elect to receive Contractor's residential solid waste collection and disposal service pursuant to a separate agreement between the municipality and Contractor.

#### COMPLIANCE WITH LAW

The Contractor shall conduct operations under this Agreement in compliance with all applicable laws, including without limitation, ordinances, laws and statutes of the County, state and federal governments; provided, however, that the Agreement shall govern the obligations of the Contractor where there exist conflicting ordinances of the County on the subject. In the event that the collection or disposal of any solid waste hereunder shall become restricted or prohibited by any applicable law, ordinance, rule or regulation, such type of waste shall be eliminated from the requirements and provisions of this Agreement.

#### ASSIGNMENT

Contractor's rights accruing under this Agreement may be assigned in whole or in part by the Contractor with the prior written approval or consent of the County. As a condition of such assignment, the assignee shall agree to assume the obligations of Contractor hereunder. Any subcontractor to be used by the Contractor shall be indemnified. Use of subcontractors other than those approved in the initial contract shall be used only with the approval of the County through the execution of an addendum to the contract. Subcontractors shall meet all requirements imposed on the Contractor and shall assume the liabilities of the Contractor.

#### EXCLUSIVE CONTRACT

The County agrees that so long as Contractor is not in default hereunder, it will not enter into any agreement with any other entity for performance of residential, commercial, and industrial solid waste collection and disposal services during the term hereof or any renewal terms.

#### AMENDMENTS AND ADJUSTMENTS

The County and Contractor agree that any amendments or modifications to this agreement shall be in writing and executed by both parties.

The County and Contractor further agree that the unit or residential premises charge of this agreement shall be adjusted pursuant to the schedule set forth in Exhibit "A" attached hereto. The Contractor further agrees that no increase in the price charged per residential unit shall take effect before three years from the commencement date of this Agreement. The Contractor shall submit any proposed adjustments to the County Administrator for consideration by the County thirty (30) days prior to any adjustments taking effect.

### TERMINATION

In the event of an alleged material breach of this Agreement, the County shall provide written notice of such breach to the Contractor; to be delivered by certified mail, return receipt requested. If within 20 days from receipt of such notice, the Contractor has either failed to correct the condition or reach an agreement with the County on a mutually satisfactory solution, then the County may, within 30 days, require the Contractor to appear before the Board of Commissioners, at either a regular or specially called meeting, to show cause why the Contractor should not be terminated. After such meeting the Board may elect to provide written notice to the Contractor that the Agreement will be terminated 30 days from the receipt of such notice or extend the time to allow Contractor to cure the breach, or impose sanctions or other remedies without terminating the Agreement. The County reserves the right to cancel the contract without penalty due to non-performance or default by the Contractor.

In the event the County should desire to cancel the contract without any alleged material breach of this Agreement as provided above, it is agreed that the County shall pay to the Contractor, as liquidated damages, a sum equal to six month's charge to be determined on the basis of the average of the latest six months invoices during the existence of this contract, or if the County has not been serviced for six months, the County's most recent monthly charge multiplied by six. This monthly charge is recognized as the residential service provided in the county and the roll-off service provided at the County's convenience centers. Commercial services billed directly to individual customers by the Contractor will not be part of this equation provided the Contractor is allowed to continue providing commercial services to these customers pursuant to the terms of the individual service agreements between those customers and the Contractor.

### ***MISCELLANEOUS PROVISIONS***

#### NOTICES

All notices and demands herein required shall be in writing. Whenever any notice, demand or request is required or permitted hereunder, such notice, demand or request shall be faxed, hand delivered personally, sent by express mail or courier service, or sent by United States Mail registered or certified, postage prepaid, to the address set forth below.

As to County:  
Long County Board of Commissioners  
Post Office Box 476

Ludowici, Georgia 31316  
Phone: (912) 545-2143  
Attention: Mr. Richard Douglas

As to Contractor:  
Sullivan Environmental Services  
425 Georgia Hwy 292  
Vidalia, Georgia 30474  
Phone: (912) 538-1616 / 800-611-9693  
Fax: (912) 538-1716  
Attention: Sam Sullivan

Any notice, demand or request which shall be served upon either of the parties in the manner aforesaid shall be deemed sufficiently given for all purposes hereunder (1) at the time such notices, demands or requests are hand delivered or (2) on the day such notices, demands or requests are posted, postage prepaid, in the United States Mail in accordance with the preceding portion of this Section; provided, however, the time for response to any notice, demand or request shall commence three days after such posting or upon actual receipt, whichever is later.

#### CHOICE OF LAW

This Agreement shall be construed in accordance with and governed for all purposes by the laws of the State of Georgia, excluding the laws applicable to conflicts or choice of law.

#### ENTIRE AGREEMENT

This Agreement contains the entire agreement between the parties relating to the rights herein granted and the obligations herein assumed. Any oral representation or modifications concerning this instrument shall be of no force or effect and this Agreement may not be amended except by a subsequent modification in writing, signed by the parties hereto.

#### SEVERABILITY

If any part of this Agreement for any reason is declared invalid, such decision shall not affect the validity of any remaining portion, which remaining portion shall remain in force and effect as if this contract had been executed with the invalid portion thereof eliminated. It is hereby declared the intention of the parties that they would have executed the remaining portion of this Agreement without including any such part, parts or portions that may, for any reason, be hereinafter declared invalid.

COUNTY'S AUTHORITY

The parties signing this Agreement on behalf of the County have been authorized to do so by specific action of the Long County Board of Commissioners adopted in open meeting and of record in its official minutes.

EXECUTED this 19<sup>th</sup> day of September, 2002.

LONG COUNTY, GEORGIA

[Signature]  
Chairman

[Signature]  
Attest



Signed, sealed and delivered on the 19<sup>th</sup> day of September, 2002,  
in the presence of:

[Signature]  
Notary Public  
COUNTY

My Comm. Exp.  
Sept. 3, 2003

SULLIVAN ENVIRONMENTAL SERVICES

[Signature]  
General Manager

Signed, sealed and delivered on the 10<sup>th</sup> day of September, 2002,  
in the presence of:

[Signature]  
Notary Public



# EXHIBIT A

Price Sheets with Service Add-ons  
and Options for the Unincorporated  
Area  
of Long County

I. The Unincorporated Area of Long County:

The Unincorporated Area of Long County is defined as all that area lying outside the boundaries of the incorporated municipalities of Ludowici.

First three years of the contract    /    / 2003 to    /    / 2006

- a. Base price for roll-out cart collection and disposal of solid waste once per week for one month from one residential unit, with billing by the Contractor, is based on the following quantities of customers in the unincorporated parts of Long County. The following are monthly charges:

\$12.00 – for 3500 customers and above\*  
\$12.25 – for 3000 to 3500 customers\*  
\$12.50 – for 2500 to 3000 customers\*  
\$13.00 – for 2000 to 2500 customers or less\*

\*with disposals at an appropriately permitted disposal facility of the Contractor's choosing for the first three (3) years of the contract. Additional carts for residents who desire more capacity will be charged at 50% of the above listed price. A maximum of three (3) carts will be allowed at a single premise. Twenty-five cents (\$0.25) of the above listed rates shall be paid by the Contractor to the County at the end of each quarter for all accounts fully collected. This money is to be placed in an enterprise fund to assist the County with repayment of any bad debts owed to the Contractor at the end of each year. Any money left in the enterprise fund at the termination of this Agreement shall remain the property of Long County.

- b. Base price for roll-out cart collection and disposal of solid waste once per week for one month from commercial customers shall be the residential rate listed in Section 1-a. Additional carts for commercial customers shall be charged at 100% of the same rate. A maximum of three carts will be allowed.
- c. Roll-off containers for use at County convenience centers, industrial accounts, or temporary constructions sites, will be charged at the following rates:

\$200 per pull + \$28.00 per ton landfill fees for County owned containers

\$50.00 monthly rent for Contractor owned/provided containers

- d. Commercial Customers in the incorporated and unincorporated parts of Long County needing dumpsters will be charged at \$2.85 per cubic yard. The Contractor will set up individual service and billing, requiring each customer to sign a service agreement. The following chart shows the various monthly rates for varying levels of service.

|       | <u>2 YARD</u> | <u>4 YARD</u> | <u>6 YARD</u> | <u>8 YARD</u> |
|-------|---------------|---------------|---------------|---------------|
| 1 X W | \$24.70       | \$49.40       | \$74.10       | \$98.80       |
| 2 X W | \$49.40       | \$98.80       | \$148.20      | \$197.60      |
| 3 X W | \$74.10       | \$148.20      | \$222.30      | \$296.40      |
| 4 X W | \$98.80       | \$197.60      | \$296.40      | \$395.20      |
| 5 X W | \$123.50      | \$247.00      | \$370.50      | \$494.00      |

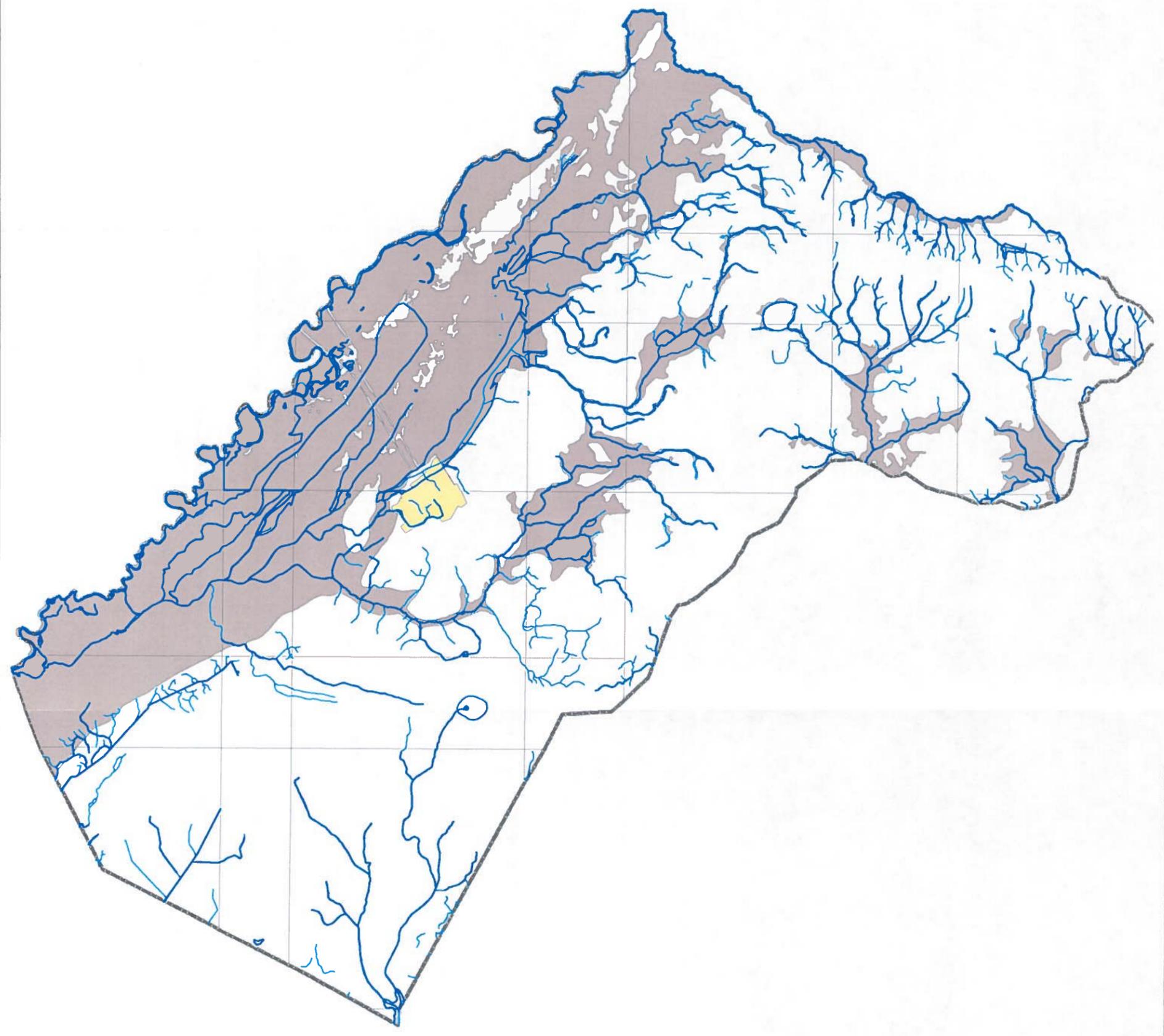
II. Adjustments to Rates

- a. The fees that may be charged by the Contractor for the first three years shall be constant. For the fourth and subsequent years, if any, fees may be adjusted upward or downward to reflect changes in the cost of operations, as reflected by fluctuations in the Consumer Price Index for All Urban Consumers, Selected Areas, All Items Index, South Urban Size D, Nonmetropolitan as published by the United States Department of Labor, Bureau of Labor Statistics. However, the net percentage increase shall not exceed 5% per annum.
- b. In addition to the above, the Contractor may petition the County for additional rate and price adjustments ninety (90) days prior to the anniversary date on the basis of unusual changes in its cost of operations, such as revised laws, ordinances, or regulations; and changes in location of disposal sites or changes in disposal charges. Such increases, if granted, shall become effective on the anniversary date. The County shall approve or reject the petition not later than forty-five (45) days prior to the renewal date. The petition for unusual change increase shall be granted if the County fails to reject the petition within the above mentioned forty-five (45) day period. If the County rejects any petition made for adjustments in rates and the Contractor determines it can no longer continue providing services due to the rejection by the County, the Contractor shall have the right to terminate services by giving the County 90 days notice of its intent to cease services.



**Long County / City of  
Ludowici Joint Solid  
Waste Management Plan**

**Figure 14  
FLOOD ZONE  
MAP**



**Legend**

- Streams
- Rivers
- Ludowici
- County Boundary

**Flood Zone**

- A No BFE determined
- X Outside 500 yr Flood Zone



**DISCLAIMER:** This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and it's accuracy is NOT warranted. CCRDC assumes no liability for the quality, content, accuracy or completeness of the information and other items contained in this map. Individuals are advised to independently verify information before use.

**Planning and Government Services**  
Date: December 2005

Source: FEMA Q3 Data  
Downloaded at: <https://gisl.state.ga.us/index.asp>

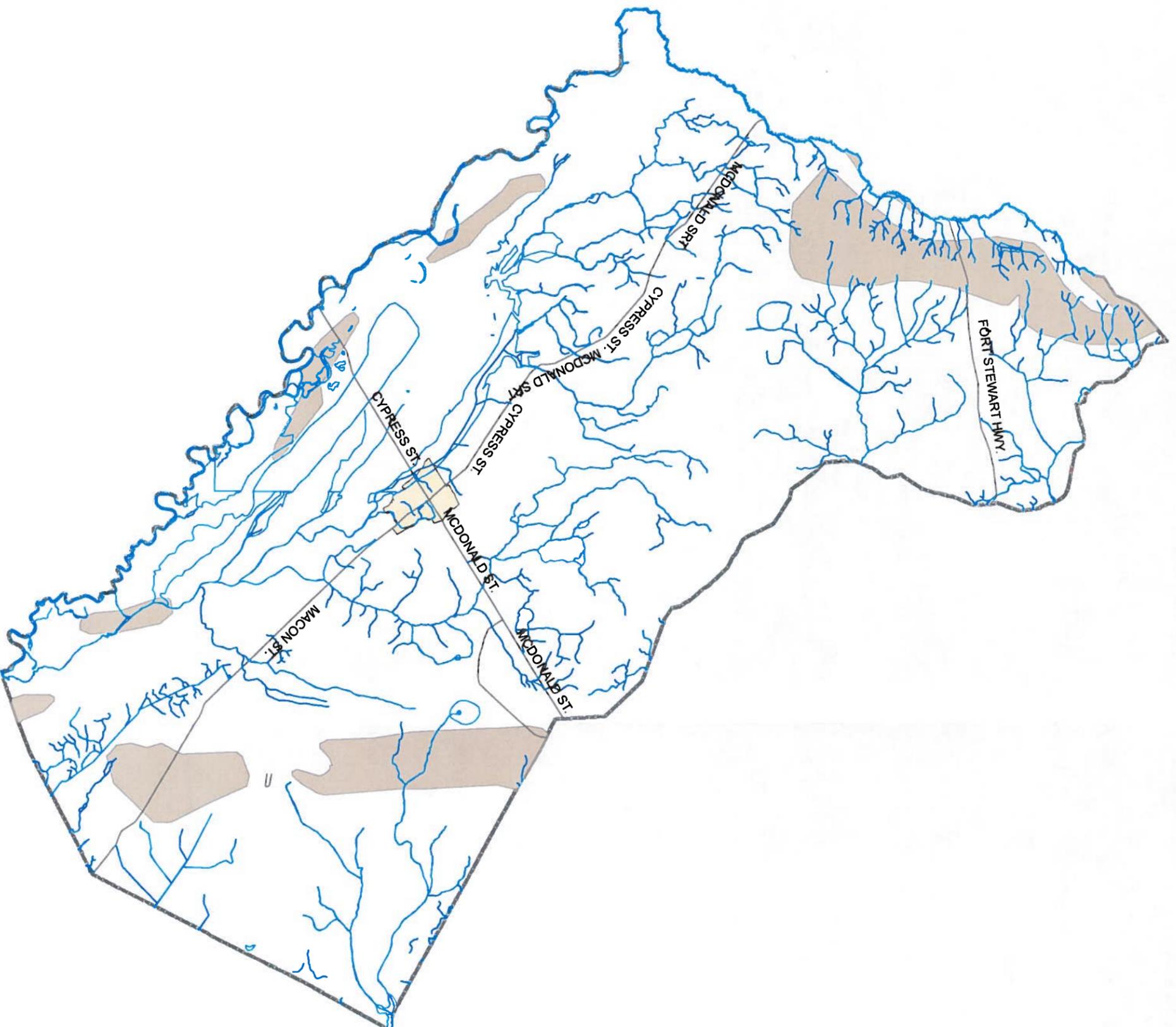
**Long County / City of  
Ludowici Joint Solid  
Waste Management Plan**

**Figure 12**

**GROUNDWATER  
RECHARGE AREAS  
MAP**

**Legend**

-  Ludowici
-  Groundwater Recharge Areas
-  County Boundary
-  Major Roads
-  Streams
-  Rivers



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**Planning and Government Services**

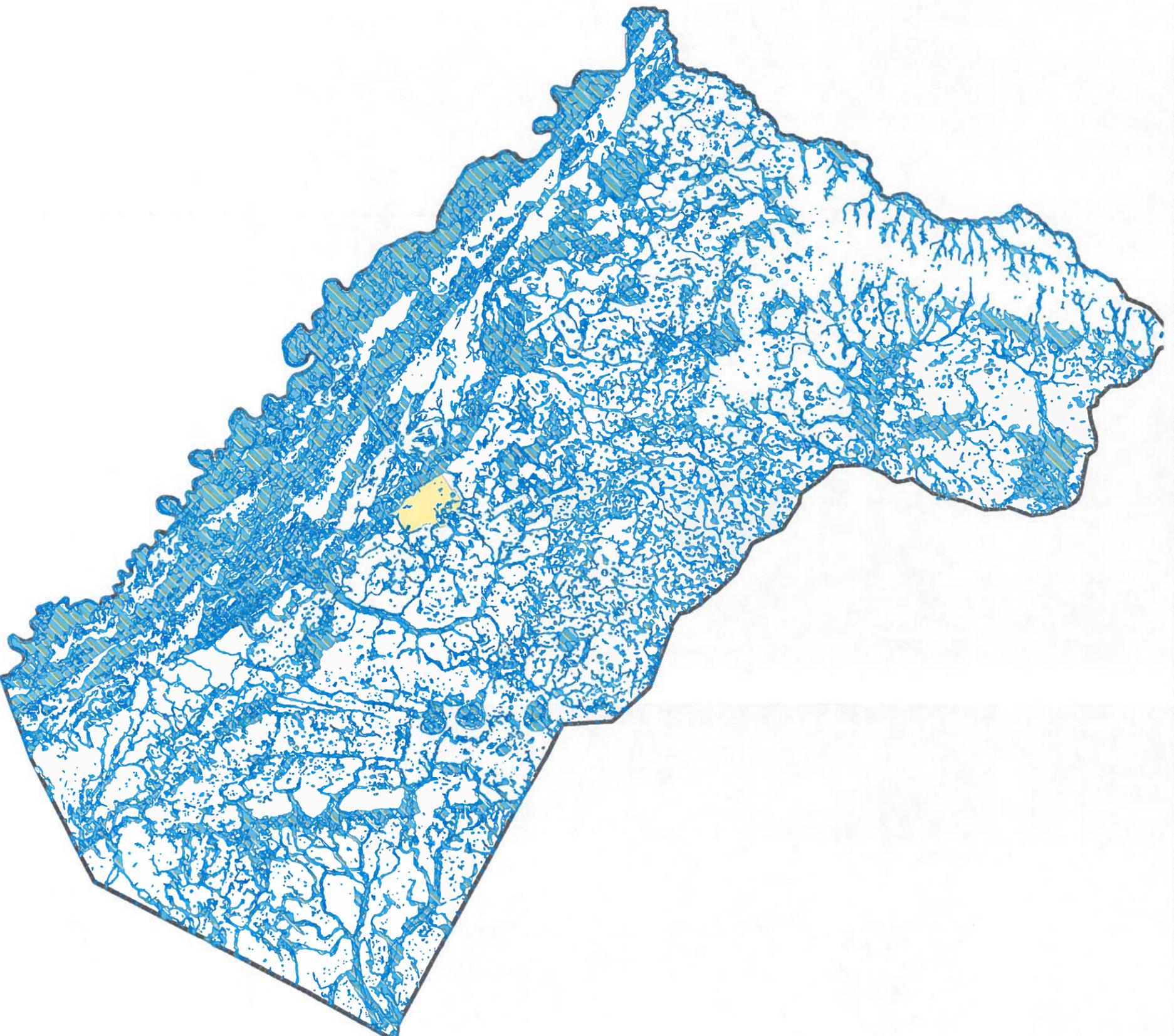
Date: December 2005

Source: DNR

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**Long County / City of  
Ludowici Joint Solid  
Waste Management Plan**

**Figure 4  
WETLANDS  
MAP**



- Legend**
-  Long County Wetlands
  -  Ludowici
  -  County Boundary



**Eastal Georgia**  
Regional Development Center

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**Planning and Government Services**

Date: December 2005

Source: DNR National Wetlands

Downloaded at: <https://gisl.state.ga.us/index.asp>

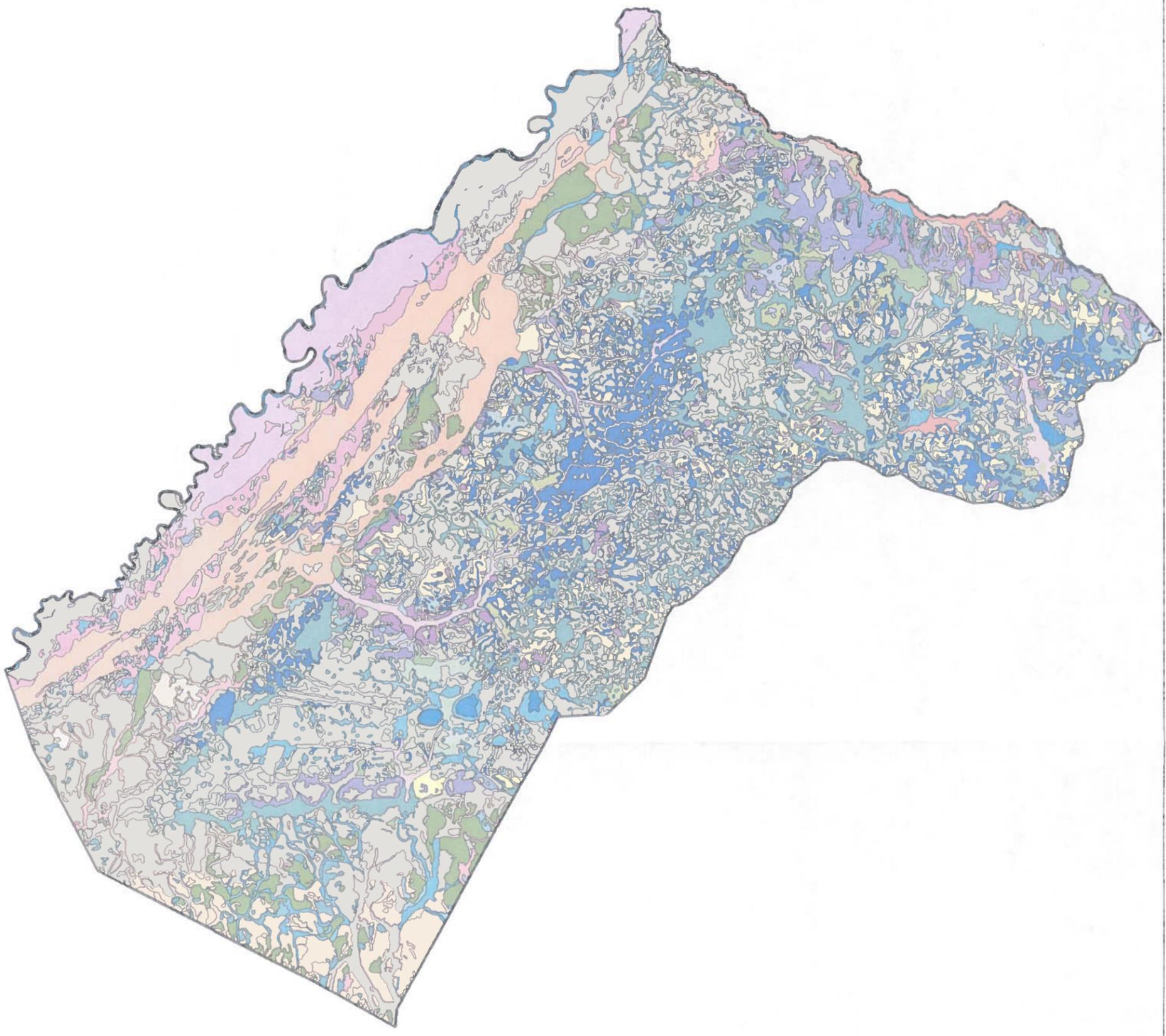
# Long County / City of Ludowici Joint Solid Waste Management Plan

Figure 13

## SOIL MAP

**Legend**

- |                        |                      |
|------------------------|----------------------|
| As = Albany Series     | Pe = Pelham Series   |
| Ba = Bayboro Series    | Pk = Pits            |
| Bd = Bladen Series     | Ph = Ponzer          |
| Bn = Blanton Series    | Po = Pooler Series   |
| Ca = Cape Fear Series  | Pr = Pooler Bladen   |
| Ch = Chipley Series    | Rb = Riceboro Series |
| Da = Dothan Series     | Ru = Rutledge Series |
| EC = Echaw Series      | St = Stilson Series  |
| Be = Ellabelle Series  | TC = Tawcaw-Chastain |
| Bu = Eulonia Series    | W = Water            |
| Fo = Foxworth Series   | Wa = Wahee           |
| FsB = Fuquay Series    | county boundary      |
| HO = Hydrants          |                      |
| JB = Johnston and Bibb |                      |
| Kec = Kershaw Series   |                      |
| LWC = Lucy Series      |                      |
| Le = Leefield Series   |                      |
| Ma = Mandarin Series   |                      |
| Me = Mascotte Series   |                      |
| Mt = Meggett Series    |                      |
| Oc = Ocala Series      |                      |
| Os = Osier and Bibb    |                      |



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Date: December 2005

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