

## Limestone County Water & Sewer Authority



At LCWSA we are committed to providing our customers with quality drinking water & sewer services.



## LCWSA Facts

- LCWSA was formed in 1980 from 4 small water systems.
- LCWSA has 17,478 Water Customers
- LCWSA has 334 Sewer Customers
- LCWSA has 8 sewer plants and a large transfer station. Gravity systems are currently being designed and built to take advantage of these resources.
- The plants and transfer station combined offer 5 million gallons per day of treatment capacity.



## LCWSA Infrastructure

- LCWSA has **1,070** miles of water Line.
- LCWSA has approximately 49.58 miles of sewer line.

## Current System Inventory

We are currently in the process of performing a County wide water and wastewater inventory to ensure we have the most up to date GIS system.

**Water Valves: 426 (100)**  
**Water Infrastructure Numbers**

**Water Line: 5,652,501.06 (5,347,982.86) Feet or 1070 (1,013) Miles**  
**Fire Hydrants: 1497 (1260)**

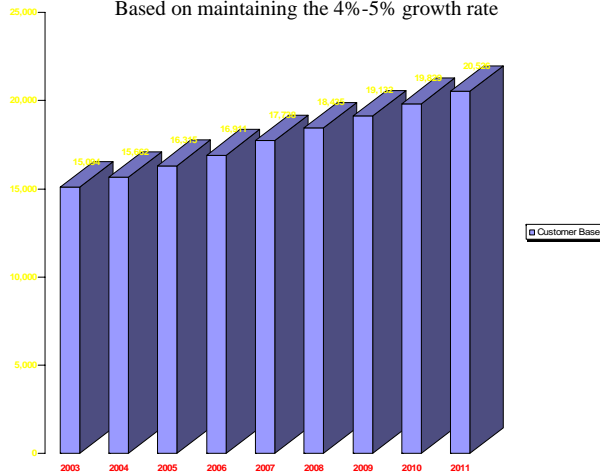
|         |              |                     |    |           |      |
|---------|--------------|---------------------|----|-----------|------|
| 1 Inch: | 3,780.46     | ( 1,212.70) Feet    | +  | 2,567.76  | Feet |
| 2 Inch: | 39,755.35    | (31,723.18) Feet    | +  | 8,032.17  | Feet |
| 3 Inch: | 1,402,674.56 | (1,468,899.60) Feet | -- | 66,255.04 | Feet |
| 4 Inch: | 209,140.04   | (174,821.02) Feet   | +  | 34,319.02 | Feet |
| 6 Inch: | 2,608,924.93 | (2,569,140.80) Feet | +  | 39,784.13 | Feet |

## Volume of Water in Pipe Alone

|              |                      |                   |
|--------------|----------------------|-------------------|
| 1 Inch Pipe  | 154,242.07           | US Gallons        |
| 2 Inch Pipe  | 6,488.06             | US Gallons        |
| 3 Inch Pipe  | 515,060.89           | US Gallons        |
| 4 Inch Pipe  | 136,526.30           | US Gallons        |
| 6 Inch Pipe  | 3,831,979.98         | US Gallons        |
| 8 Inch Pipe  | 1,816,136.11         | US Gallons        |
| 10 Inch Pipe | 543,156.48           | US Gallons        |
| 12 Inch Pipe | 2,168,351.76         | US Gallons        |
| 16 Inch Pipe | 1,436,760.25         | US Gallons        |
| 20 Inch Pipe | 77,270.94            | US Gallons        |
| 24 Inch Pipe | 15,363.14            | US Gallons        |
| <b>Total</b> | <b>10,547,248.15</b> | <b>US Gallons</b> |

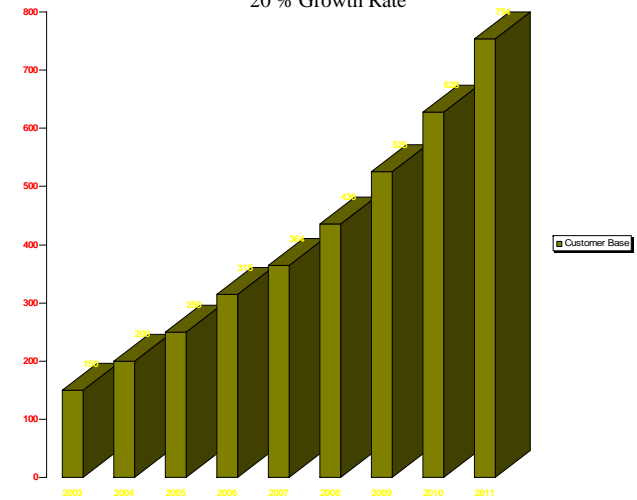
## Water Customer Information

Based on maintaining the 4%-5% growth rate



## Sewer Customers

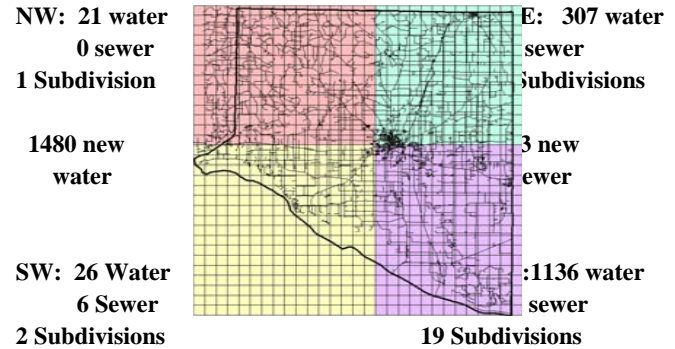
20 % Growth Rate



## Subdivisions Since July '06

- **433** Lots Constructed with LC Water & Sewer
  - 29% OF TOTAL
- **515** Lots Constructed with LC Water & Huntsville Sewer
  - 35% of Total
- **532** Lots Constructed with LC Water Only
  - 36% of Total

## Developments 7/06 – 7/07 Completed and Platted Lots

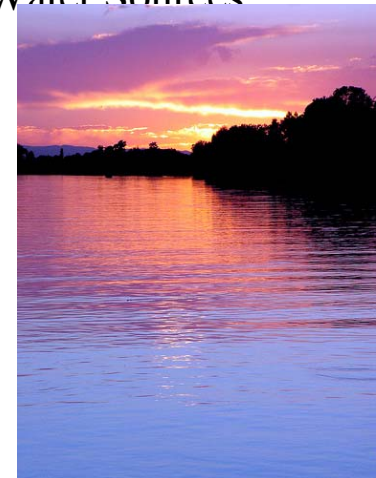


## FY 08 Developments

- **1130** Lots to be Constructed with LC Water & Sewer
  - 50%
- **834** Lots Constructed with LC Water & Huntsville Sewer
  - 37%
- **200** Lots Constructed with LC Water & City of Madison Sewer
  - 9%
- **111** Lots to be Constructed with LC Water Only
  - 5%

## LCWSA Water Sources

- LCWSA produces water from several sources.
- Elk River
- 1 Underground Spring
- 2 Wells
- We also purchase water from other sources.



## Future Water Sources (Demand Driven)

- 1. Add 4 MGD expandable to 8 MGD using Mix pretreatment and Pall microfiltration at NLTF. Total cost \$6 million.
- 2. Convert BTWTF to surface water treatment and increase capacity with pretreatment & microfiltration. Water from Tennessee River.
- 3. Surface water plant at Little Elk with pretreatment and membrane filtration.
- 4. Currently researching cost estimates and a feasibility study.

## LCWSA has 74 Employees

- We have many jobs at LCWSA. Here are just some of the jobs:
- Accounting
- Laboratory
- Water/Sewer Utility Workers
- Water/Wastewater Plant Operators



## LCWSA Jobs

- Customer Service
- GIS Department
- Human Resources
- Management



## Planning and Construction Department

We plan, review, coordinate and inspect all engineering and construction projects affecting LCWSA. We strive to ensure all construction projects are planned and executed to a high standard. Our strong sense of purpose and duty will give Limestone County a superior water and sewer system.

## FY 2007 Projects

### Water Projects

- **Line A Water Transmission Line** – 56,000' of 16" water line and 11,000' of 12" water Line. Line A runs from TTF to the New Cut Tank.
- **Line C Water Transmission Line** – 25,000' of 16" water line. Line C runs from Mooresville Rd to Burgreen Rd.

### Sewer Projects

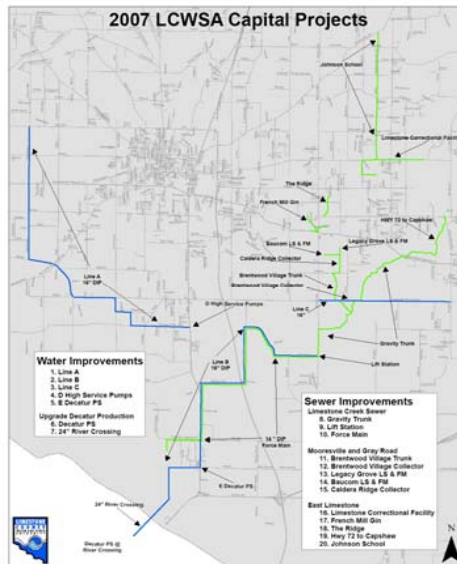
- **Limestone Creek Trunk Sewer** – 22,474 of sewer line. Project runs from Hwy 72 to Anderson Cemetery.
- **Limestone Creek Pump Station** – Pump Station at Anderson Creek and 3,000' of 14" Sewer line.

## 2007 Projects Continued

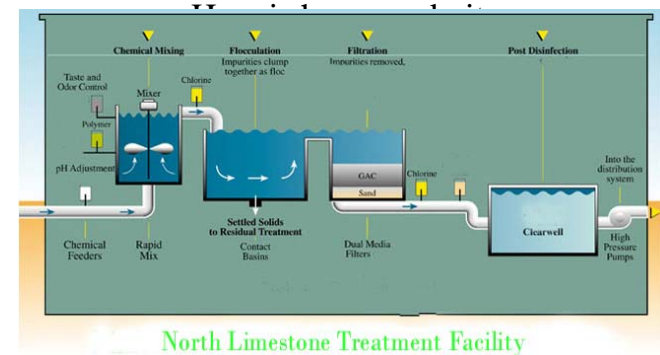
- **Contract B Limestone Creek Forced Main** – 57,000' of 14" forced main sewer and also 47,000' of 18" water line. This project begins at the Anderson Cemetery and travels to Hwy 31 at Saginaw.
- **Limestone County Schools Sewer** – Owens School, West Limestone High School and, Johnson Elementary have sewer plant projects currently underway.

### Facilities

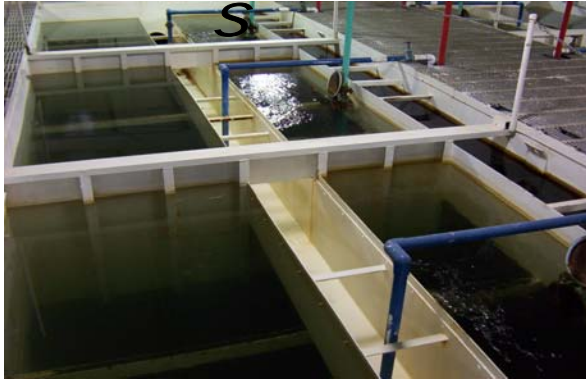
- **New Customer Service Facility** – LCWSA renovated the former bank built in 1961 to help serve our Customer's better.
- **Meter Service Facility** – LCWSA has purchased the house behind our new customer service building to house our Meter Service group. Renovations will occur as budget allows.



One of the really important jobs we do at LCWSA is make clean and safe drinking water.



# Filter



We continue to upgrade our system to keep up with the rapid growth of Limestone County.

Pinedale Road Water Tank



Pepper Road Water Tank



# More LCWSA Projects

Construction in progress for



# New State of the Art Turner Treatment Facility

Membranes units where water passes Front view of Turner Water



## Package Wastewater Plants at Limestone County Schools



## East Limestone Wastewater Treatment Facility



80,000 gpd current capacity

.96 MGD discharge permit



Capacity will need to be increased within 3 years.

## Construction of Owens W/W Plant



## Future Wastewater Treatment Options

*(Demand Driven)*

- 2 MGD Plant on Limestone Creek
- 2 MGD Plant South of Canebrake on Piney Creek
- Expansion of South Transfer Station
- Expansion Of East Limestone Plant
- Development of Partnerships with Other Agencies

## New Customer Service Building

- Our New Customer Service Building opened March 19, 2007. The Customer Service Building is located at 520 South Jefferson Street.



## Water Education Program

We will visit your school and discuss various water related topics  
some of the details:

Grades K-5

- Show a short video.
- Speaker from LCWSA will speak on topics from the video and answer any questions.
- Each child will receive an activity booklet and a goody bag.
- A special visit from the LCWSA Mascot.



Thank You