

# **SHELBY COUNTY WATER STUDY**

**JULY 1997**

**PREPARED BY:**

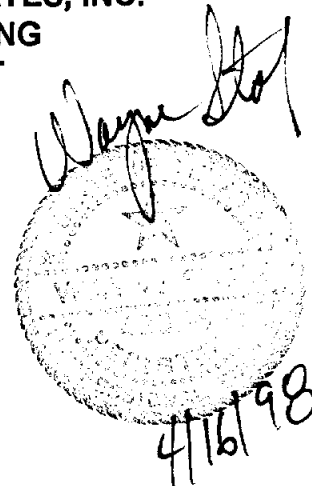
**EVERETT GRIFFITH, JR. & ASSOCIATES, INC.  
ENGINEERING AND SURVEYING  
408 NORTH THIRD STREET  
LUFKIN, TEXAS 75902**

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# EXECUTIVE SUMMARY

## 1.0 INTRODUCTION

There are eighteen water suppliers in Shelby County who service a combined total of over 8,000 connections. These suppliers petitioned the Texas Water Development Board (TWDB) for funding to conduct a feasibility study for a regional water supply system for the entire county. These funds were granted on a 50% match basis. The engineering firm of Everett Griffith, Jr., & Associates Inc. was selected to do the regional water study.

An executive summary of the regional water study is presented below, along with relevant comments and recommendations. The options considered were made in context of the present and future needs of the local entities. The present needs were analyzed based on current and historical records of the entities. Future needs were estimated by applying a linear regression to the historical records, with the assumption that the entities will continue to grow in the future at the same rate as they grew in the past. This data was used in an analysis of the storage, pressure, and delivery systems of each entity, since (1) they must have enough water for their users and (2) be able to provide this water at pressure even during periods of high demand. This information was then applied to various options to determine the most feasible option for supplying those needs.

## 2.0 EXISTING WATER SOURCES

There are several sources for water supply within Shelby County. The primary sources addressed in this report deal with treated water from surface water supplies, or purchased treated surface water from other entities. Surface water supplies provide the majority of the water that is currently used in the County (including the water purchased from the City of Logansport, Louisiana). These sources were considered in terms of availability versus the needs of the customers and cost of delivery of treated water to each customer.

### 2.1 GROUNDWATER

Most of the water supply corporations, and two of the municipalities in Shelby County obtain their water solely from the sands of the Carrizo-Wilcox Aquifer. While groundwater is sometimes adequate for small systems, it is not feasible where demands are higher. In terms of quantity, groundwater accounts for about 36% of the total water supplied in Shelby County. In addition, there are some notable drawbacks to using ground water, some of which are summarized below:

1. As a rule, aquifers are recharged primarily due to the infiltration of precipitation on the outcrop area. Since most of Shelby County lies within the outcrop area of the Carrizo-Wilcox Aquifer, the groundwater levels are likely to respond to seasonal variations in precipitation. Prolonged drought conditions could have an adverse effect on both water quantity and quality, especially in the area of larger well fields.
2. Small systems that depend on several wells can be greatly impaired if one or all of their wells become inoperative due to a drop in pumping levels, contamination or failure. In addition, the Texas Natural Resource Conservation Commission (TNRCC) has minimum requirements regarding well capacity for systems that is based upon the total number of connections. This means that well failure can not only cause loss of capacity, it can also cause a violation of state requirements. The problem can be further compounded by the fact that construction of a new well requires considerable time, effort, and cost on the part of the entity. Unless other sources of supply are accessible, the system may be out of compliance for quite a while. The reduction in the system's well capacity can also put an increased burden on the remaining wells in service.
2. Only limited well production estimates are available for Shelby County because no groundwater studies have been done for the area. However, some studies have been done for the Neches and Sabine River Basins, both of which contain portions of Shelby County. According to the Texas Water Commission Bulletin 6307, Reconnaissance of the Ground Water Resources of the Sabine River Basin, dated August 1963, "production from the major wells" in the Wilcox aquifer "range from

less than 90 to 700 gpm." The Texas Water Commission Bulletin 6308, Reconnaissance of the Ground Water Resources of the Neches River Basin, dated August 1963, states that "the quantity of water produced by the municipal and industrial wells" in the Wilcox Aquifer of the upper Neches River Basin "ranges between 100 and 1,200 gpm." From this data, it is a logical assumption that the maximum production for wells in the area to range between the two values listed above, probably nearer to the 700 gpm production rate with an upper maximum of no more than 1,200.

3. There is no guarantee that a new well will provide usable water or that the water quality in an existing well will remain a constant. Water that is relatively low in mineral content and suitable for most purposes is found in and near the outcrop areas. The water from the Carrizo-Wilcox aquifer is high in bicarbonates and locally has objectionable amounts of iron. The Wilcox sands have lignite stringers in some places that may impart an undesirable color to the water. The water from the aquifer is generally soft. In general, the water in the aquifer becomes more mineralized downdip from the outcrop, and also with depth. Water of usable quality may be expected throughout the entire thickness of the aquifer north and northwest of central Shelby County. South of central Shelby County, the basal Wilcox sands contain water exceeding 3,000 ppm dissolved solids and further downdip the upper part of the aquifer becomes progressively more mineralized until the entire thickness contains water which exceeds 3,000 ppm dissolved solids.
4. The water obtained from Shelby County wells is relatively high in sodium. Ground water information obtained from the TWDB showed chemical analysis of twenty-eight wells in the County. The average sodium concentration of these wells was 308 mg/l. The minimum concentration noted was 54 mg/l and the maximum concentration was over 500 mg/l. The presence of sodium in the water supply is significant because it can adversely affect persons suffering from heart, kidney, or circulatory ailments. Due to the fact that each person's daily sodium intake varies, no recommended limit for sodium has been established in TAC 290. However, the American Heart Association's 500-mg and 1000-mg-sodium-per-day diet recommends that distilled water be used if the water supply contains more than 20 mg/l of sodium. Water containing more than 270 mg/l of sodium should not be used for drinking by those on a moderately restricted sodium diet.

For these reasons, well water was not considered to be a viable source of water for the county-wide system. Because of the nearness of extensive high quality surface water sources, the report primarily focuses on these options.

## **2.2 SURFACE WATER**

Approximately 63.65% of the total water supplied in the County originates from a surface water source. Of this, approximately 58.86% is produced by the Cities of Center and Huxley, which operate and maintain their own surface water treatment plants. The remaining 4.79% is used by the City of Joaquin, which must purchase its water from the City of Logansport, Louisiana. A short description of the available sources for surface water is as follows:

### **2.2.1 TOLEDO BEND**

The entire eastern boundary of Shelby County is marked by Toledo Bend Reservoir. Toledo Bend has a total capacity of 4.477 million acre-feet or 1.45 trillion gallons. The reservoir is jointly owned and operated by the Sabine River Authorities of Texas and Louisiana. According to Water for Texas, the existing permit issued to the Sabine River Authority of Texas annually provides 100,000 acre-feet of water for municipal uses, 600,000 acre-feet for industrial purposes, and 50,000 acre-feet for irrigation use. Presently, the only cities in Texas that obtain municipal supplies from the reservoir are Hemphill, located in Sabine County, and Huxley, located in Shelby County. In addition, several private water companies have contracted with the Authority for water from the reservoir.

### **2.2.2 LAKE PINKSTON AND LAKE CENTER**

Information regarding Lake Pinkston was obtained from the TNRCC. The information received was a copy of the Certificate of Adjudication of Water Rights for the lake. Therein, it is stated that the City of Center is authorized to maintain an existing dam and reservoir and impound water therein not to exceed 7,380 acre-feet (2,404.79 million gallons) of water. The City is further authorized to divert and use an amount of water

not to exceed 3,800 acre-feet/year (1,238.24 million gallons/year) at a maximum rate of 2,250 gpm.

Information regarding Lake Center was obtained from the TNRCC. The information received was a copy of the Certificate of Adjudication of Water Rights for the lake. Therein, it is stated that the City of Center is authorized to maintain an existing dam and reservoir and impound water therein not to exceed 446 acre-feet (145.33 million gallons) of water. The City is further authorized to divert and use an amount of water not to exceed 1,460 acre-feet/year (475.74 million gallons/year) at a maximum rate of 1,200 gpm.

### **3.0 PROPOSED OPTIONS**

Organizational options hinge upon the willingness of various entities to cooperate and their ability to borrow the necessary capital to carry out the plan of action. All options consider the formation of a regional entity of some type to oversee the policies, operation, and maintenance of the system. The two options initially considered in the preliminary report consisted of (1) constructing a county-wide distribution system and purchasing water from the surface water treatment plant in Logansport, Louisiana, and (2) constructing a county-wide distribution system and a regionally owned water treatment plant located on Toledo Bend Reservoir near the City of Huxley.

After distribution of the draft report, another option was also suggested for consideration. This option consists of constructing a distribution system to interested participants of the project with the City of Center's Water Treatment Plants supplying water to the system. Discussion of this particular option came about after the draft report was distributed.

#### **3.1 WATER SUPPLIED BY A REGIONAL PLANT NEAR THE CITY OF HUXLEY**

The City of Huxley has its own surface water treatment plant located on Toledo Bend Reservoir. One of the options considered was to construct a county-wide distribution system and to build a new surface water treatment plant near the City of Huxley to provide water for the system.

This option was conceived with the assumption that all of the county water suppliers would participate in the project. The debt would be retired by the sale of water. The proposed system would consist of an intake structure, water treatment plant, storage facilities, and pump station on Toledo Bend Reservoir near the City of Huxley. Water would be distributed throughout the system by the construction of PVC pipelines tied into the water systems of every water supply system in the County. Pressure within the system would be maintained with pump stations located in Shelbyville and Center. The total cost for the construction of the system is estimated at just over \$33 million.

The estimated cost of water from this option is \$1.55 per thousand gallons. This was based on the design assumption of a future demand of 5 million gallons per day. The cost of water is based on all factors including the debt amortization, pumping costs, operation and maintenance, cost of raw water, and energy charge by the Sabine River Authority. These costs divided by the water demand provided an estimated cost per thousand gallons.

#### **3.2 WATER PURCHASED FROM LOGANSFORT, LOUISIANA**

One of the options considered was to construct a county-wide distribution system and acquire the water supply from Logansport. Due to the inferior quality of groundwater in the northeastern corner of the County, the City of Joaquin currently purchases all of its water from the City of Logansport, Louisiana. This water is delivered through a six inch transmission line to a booster station near downtown Joaquin. Water is then distributed throughout the city's system through direct pressure, with additional water being passed along to Paxton Water Supply Corporation. The water in question is treated surface water from Toledo Bend Reservoir.

This option was also conceived with the assumption that all of the county water suppliers would participate in the project. The debt would be retired by the sale of water. The proposed system would obtain its water from the existing water treatment plant of Logansport. This option would require Logansport to make any plant improvements necessary to meet the increased demand and to supply a pipeline for transport to the Texas/Louisiana border. A county wide distribution system similar to the one described above would also need to be constructed, operated, and maintained by the regional entity. Every water supply system in the

County would be tied into this system. Pressure within the system would be maintained with a pump station located in Center. The total cost for the construction of the system is estimated at \$22.6 million.

The estimated cost of water from this option is \$2.10 per thousand gallons. This was based on the design assumption of a future demand of 5 million gallons per day. It considered all costs such as the debt amortization, pumping costs, operation and maintenance, and the purchase of treated water from Logansport.

### 3.3 WATER FROM CENTER'S PLANTS (LAKE PINKSTON AND LAKE CENTER)

This option was conceived based upon a phased approach of county participants, with distribution lines only going to those initially involved. It also considers the possibility of a portion of these participants purchasing all of their water from the regional entity, while the others only purchase a limited amount while still relying on their existing wells.

The most recent water system data obtained from two Texas Department of Health reports dated September and October 1991 which indicates that the city operates two surface water treatment plants, one located on Pinkston Reservoir near the Aiken community and one located on Lake Center at Mill Creek. According to the Health Department reports, the Aiken facility has total treatment plant capacity of 3.158 MGD and the Mill Creek facility has a total plant capacity of 1.30 MGD, based on the clarifier as being the limiting factor. These reports therefore assign the City's combined plants a total capacity of 4.458 MGD (3,095 gpm).

The option considered herein would consist of the City of Center using its water treatment plants to supply water to the regional system. The system would service a limited number of participants, but would also provide the basis for the construction of a county wide system in the future. The option considers a number of county participants purchasing 100% of the water supply from the regional system. Revenue through the sale of water would be paid to Center for the treated water and debt retirement for the water distribution system. Any remainder needed for debt retirement would be paid for by the other participating entities on a "per connection" basis.

Since it was not addressed in the draft water study, a brief description of the proposed system elements is as follows:

1. *Surface Water Treatment Plants* - This project considers the use of the City of Center's existing facilities.
2. *Distribution System* - Different scenarios require different combinations of this system (as addressed below), however, the required lines were generally classified as follows:

- Line A Is a 24" diameter C-900 DR18 water line from the City of Center's Aiken Facility to the existing line at the City's one million gallon ground storage tank on Highway 7.
- Line B Is an 18" diameter C-900 DR18 water line from the City of Center to the City of Timpson, with two 12" diameter lines extending on to the Tennessee WSC and the Timpson Rural WSC.
- Line C Is an 18" diameter C-900 DR18 water line from the City of Center to the City of Tenaha, extending on to the Paxton WSC.
- Line C-1 Is a 12" diameter C-900 DR18 water line from the Paxton to the City of Joaquin.
- Line D Is a 24" diameter C-900 DR18 water line from the City of Center to the Shelbyville WSC.

In order to accurately represent this option, several scenarios were considered. The different scenarios have differing participants and require different combinations of line construction. Each scenario was considered based on the estimated year 2000 demands and connections. The debt retirement was figured on a 40 year loan at 5% interest, for a monthly payment of \$482.20 per \$100,000 borrowed, as is typical for a Rural Economic and Community Development loan. These are summarized below, in the same basic order as

presented at previous meetings following the submittal of the draft water study:

**SCENARIO 1** - This scenario would only require the construction of Lines A, C, and D. It considers the Sand Hills WSC, Shelbyville WSC, City of Tenaha, Paxton WSC, and City of Joaquin to be purchasing 100% of their water supply from the regional system. It assumes that water is supplied to the City of Joaquin via the existing 6" water line that is currently being used to deliver water from Joaquin to the Paxton WSC. The set cost of water for this scenario is \$1.75 per thousand gallons, of which \$1.00 is paid to the City of Center and \$0.75 goes toward debt retirement.

The remainder needed to retire the debt will be paid by the all of the county suppliers on a "per connection" basis. This cost will be distributed among all the county participants. These are the City of Huxley, Five Way WSC, McClelland WSC, Buena Vista WSC, Choice WSC, Sand Hills WSC, Shelbyville WSC, City of Tenaha, Paxton WSC, City of Joaquin, City of Timpson, Huber WSC, Tennessee WSC, Timpson Rural WSC, East Lamar WSC, and Flat Fork WSC. Based on this scenario, the additional monthly cost that each of the participants would need to pay is \$0.68 per connection.

**SCENARIO 2** - This scenario would require the construction of Lines A, B, C, and D. It considers the Sand Hills WSC, Shelbyville WSC, City of Tenaha, Paxton WSC, City of Joaquin, City of Timpson, Huber WSC, Tennessee WSC, Timpson Rural WSC, Five Way WSC, and East Lamar WSC to be purchasing 100% of their water supply from the regional system. The set cost of water for this scenario is \$1.75 per thousand gallons, of which \$1.00 is paid to the City of Center and \$0.75 goes toward debt retirement. The remainder needed to retire the debt will be paid by the all of the county suppliers on a "per connection" basis.

The cost of repaying the remainder of the debt will be distributed among all the county participants. These are the City of Huxley, Five Way WSC, McClelland WSC, Buena Vista WSC, Choice WSC, Sand Hills WSC, Shelbyville WSC, City of Tenaha, Paxton WSC, City of Joaquin, City of Timpson, Huber WSC, Tennessee WSC, Timpson Rural WSC, East Lamar WSC, and Flat Fork WSC. Based on this scenario, the additional monthly cost that each of the participants would need to pay is \$0.42 per connection.

**SCENARIO 3** - This scenario would require the construction of Lines A, C and D. It considers the Sand Hills WSC, Shelbyville WSC, and Paxton WSC to be purchasing 100% of their water supply from the regional system. The City of Tenaha is considered to be purchasing 50% of its supply from the system. The set cost of water for this scenario is \$1.75 per thousand gallons, of which \$1.00 is paid to the City of Center and \$0.75 goes toward debt retirement. The remainder needed to retire the debt will be paid by the all of the county suppliers on a "per connection" basis.

The cost of repaying the remainder of the debt will be distributed among all the county participants. These are the City of Huxley, Five Way WSC, McClelland WSC, Buena Vista WSC, Choice WSC, Sand Hills WSC, Shelbyville WSC, City of Tenaha, Paxton WSC, City of Joaquin, City of Timpson, Huber WSC, Tennessee WSC, Timpson Rural WSC, East Lamar WSC, and Flat Fork WSC. Based on this scenario, the additional monthly cost that each of the participants would need to pay is \$1.57 per connection.

**SCENARIO 4** - This scenario is identical to Scenario 5 above, except that the East Lamar WSC is also included among the entities purchasing 100% of their water supply from the regional entity. Based on this scenario, the additional monthly cost that each of the county participants would need to pay in order to retire the debt is \$1.21 per connection.

**SCENARIO 5** - This scenario is identical to Scenario 1 above, except that it assumes that the existing 6" water line has been replaced by Line C-1. Based on this scenario, the additional monthly cost that each of the participants would need to pay is \$1.17 per connection.

#### **4.0 RECOMMENDATIONS**

Based on the findings of this study, our primary recommendation is for a phased approach to regional water needs. We feel that this would be best accomplished by the construction of a regional water system in the following stages.

**Phase 1** - This would consist of the construction of a localized distribution system with the City of Center as its hub. This regional system would be limited in the sense that the distribution lines would extend only to

those entities that are initially involved with the project. The system would be supplied with water from the City of Center's existing surface water treatment plants. In addition, the system would also serve as the foundation for the construction of a county wide system in the future.

Revenue from the sale of water would go towards (1) debt retirement for the water distribution system, and (2) paying the City of Center for the treated water. Any remainder needed for debt retirement would be paid for by the participating entities on a "per connection" basis.

Phase 2 - This phase would consist of the construction of a new regional surface water treatment plant on Toledo Bend Reservoir. Construction should take place when demand reaches the City of Center's recommended sale of water to the participating entities. New water lines would also be constructed to tie the new plant into the existing distribution system. This expansion of the system would allow for more entities to be serviced.

Phase 3 - The final phase of the project would expand the distribution system so that all of the entities could be serviced. The water treatment plant would also be expanded accordingly to meet the increased demand. In addition, future expansion may make it feasible to sell water to customers outside of the county, which would bring in additional revenue for the regional system.



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**SECTION 1**  
**INTRODUCTION**

# SECTION 1 INTRODUCTION

## 1.1 BACKGROUND

Over the past several years the water purveying entities of Shelby County have become increasingly aware of the need for a long range plan of action to address future water supply needs. Due to their concern over shrinking ground water supplies, poor water quality, and statewide interest in acquiring local surface water supplies, the local water suppliers of Shelby County have, by majority vote, approved the concept of a regional water plan for Shelby County. Everett Griffith, Jr. & Associates, Inc. has been selected to prepare this study.

## 1.2 SCOPE OF WORK

The scope of the work can be followed in the Table of Contents. Essentially, it is the logical step-by-step approach to (1) formulating the water supply needs of each County entity and (2) determining the best feasible option for supplying those needs. The best option for supplying water to these entities may also address some storage, pressure, or distribution problems within the systems. Since each individual system must have enough water for their users and be able to provide this water at pressure even during periods of high demand, the study also analyzes (on a general basis) the storage, pressure, and delivery systems of each entity. Additionally, since costs are a very important part of the decision-making process, each entity must be aware if any additional costs will be incurred in order to tie into the regional system.

There are eighteen water suppliers in Shelby County, including cities and water supply corporations, with a combined total of over 8,000 connections. This study discusses several options, including the used of existing and new treatment facilities, ground water, and purchased water from Logansport. The study also discusses several options for a county-wide distribution system to serve the water suppliers. This is undertaken with the goal of reducing or completely eliminating the need for current water sources. Costs of treatment and delivery have been determined using various options and phasing plans. Organizational options hinge upon the willingness of various entities to cooperate and their ability to borrow the necessary capital to carry out the plan of action. Other considerations such as permits and agency interaction, archaeological and historical reviews, environmental analysis, and the formulation of a water conservation plan have been addressed generally as well.

## 1.3 APPROACH

A group of water supplying entities in Shelby County decided to make application to the Texas Water Development Board (TWDB) and the Rural Economic Community Development Agency (formerly the Farmer's Home Administration or FmHA) to discuss funding for a planning grant. The purpose of this grant was to address long range planning for water supply, treatment, and delivery for the entire county. Generally there was a recognition of the difficulty of a number of different entities working together in such an effort, but the feeling was that the potential economies and relative ability to establish a regional entity might more than offset some loss of independence and flexibility of options.

Various alternatives of water were considered from all available water sources, with special emphasis on surface water from Toledo Bend Reservoir. These alternatives were considered in terms of availability versus needs of the customers and cost of delivery of treated water to each customer. Other potential customers were also considered, including non-participating entities and industries.

**SECTION 2**  
**PROJECT AREA AND**  
**STUDY PARTICIPANTS**

## SECTION 2 PROJECT AREA AND STUDY PARTICIPANTS

### 2.1 LISTING OF PARTICIPANTS

The following entities have participated in the study.

Buena Vista Water Supply Corporation  
City of Center  
Choice Water Supply Corporation  
East Lamar Water Supply Corporation  
Five Way Water Supply Corporation  
Flat Fork Water Supply Corporation  
Huber Water Supply Corporation  
City of Huxley  
City of Joaquin  
McClelland Water Supply Corporation  
Old Center Water Supply Corporation  
Paxton Water Supply Corporation  
Sand Hills Water Supply Corporation  
Shelbyville Water Supply Corporation  
City of Tenaha  
Tennessee Water Supply Corporation  
City of Timpson  
Shelby County  
Timpson Rural Water Supply Corporation  
Warr Water Supply Corporation (please refer to the note on Table 2-1)

### 2.2 COMMITTEE COMPOSITION

In order for each of the participating entities to be accurately represented, an executive committee composed of duly selected representatives from each of the Shelby County Water Suppliers should be formed. To this end, letters and questionnaires were initially sent out to each water entity requesting the name and address of the representative so appointed. A listing of these representatives is shown in Table 2-1.

Please note that some of the names in Table 2-1 are written in italics. This is intended to indicate that no representatives have been submitted by that particular entity at the time of this writing. In these cases, the names of the president of the water board or mayor of the municipality was inserted.

TABLE 2-1 EXECUTIVE COMMITTEE	
ENTITY REPRESENTED	INDIVIDUAL REPRESENTATIVE*
Buena Vista WSC	Jim Holley, President
City of Center	<i>John D. Windham, Mayor</i>
Choice WSC	Joe West
East Lamar WSC	Peaches Conway, President
Five Way WSC	<i>Milton Cooper, President</i>
Flat Fork WSC	<i>Roy Masterson, President</i>
Huber WSC	<i>John Henry Edens, President</i>
City of Huxley	Larry Vaughn, Mayor
City of Joaquin	<i>Steve Hughes, Mayor</i>
McClelland WSC	C.R. Jones, President
Paxton WSC	Floyd Watson, President
Sand Hills WSC	<i>L. D. Eddings, President</i>
Shelbyville WSC	<i>Duane Lott</i>
City of Tenaha	<i>George Bowers, Mayor</i>
Tennessee WSC	<i>Ben Goolsby, President</i>
City of Timpson	<i>Ross Graves, Mayor</i>
Timpson Rural WSC	<i>John Tyson, President</i>
Warr WSC**	Sam Dillon**

\* Italics indicate corporations for whom no representative's names have been submitted at the time of this writing. In these instances, the names on the list are the board presidents of water corporations or mayors of municipalities, where applicable.

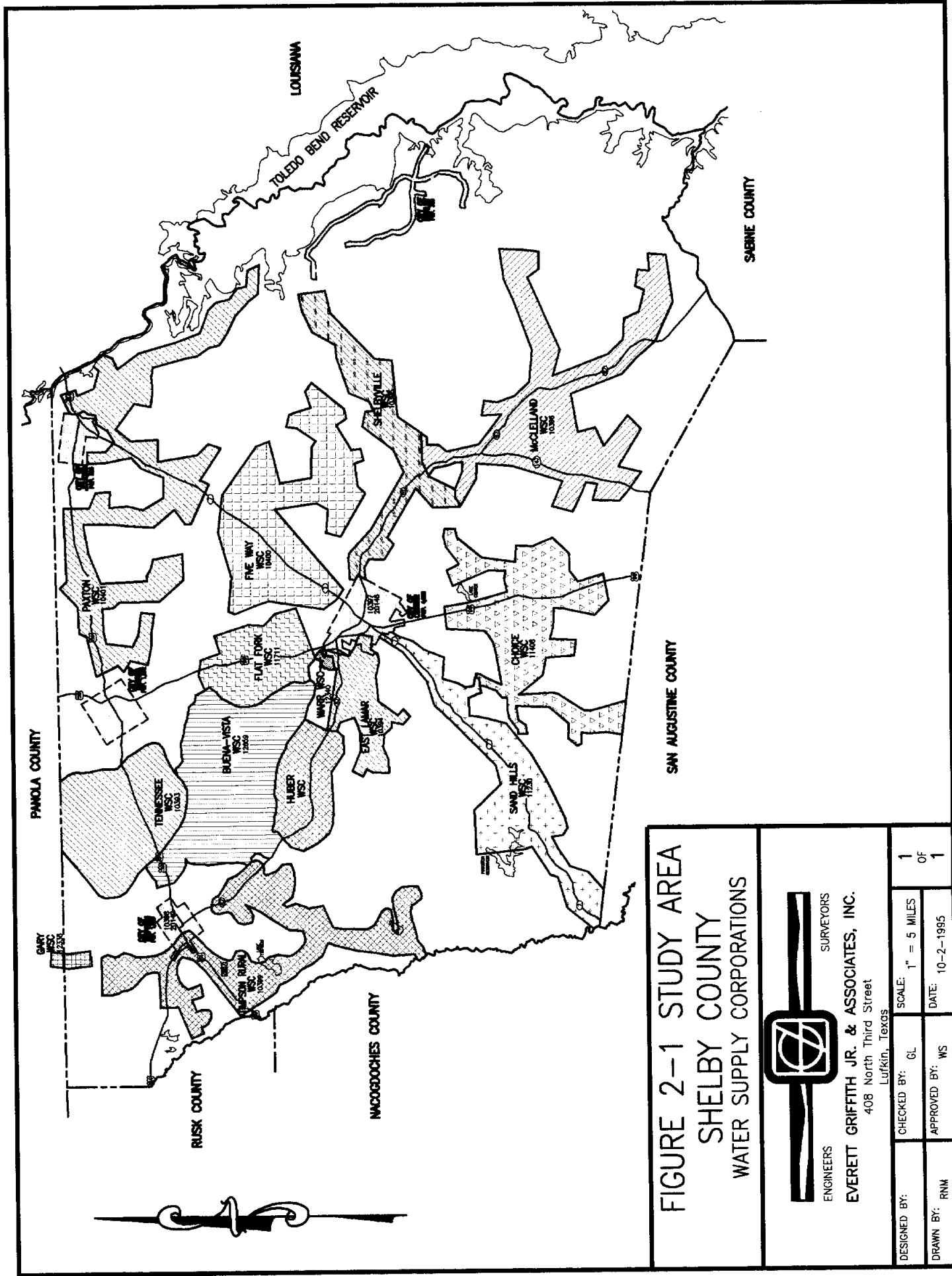
\*\* Shortly before the printing of the final revision of this study, a telephone call was made to Ms. Vickie Warr of the Warr WSC. Ms. Warr stated that the Warr WSC had been recently sold to Mr. Sam Dillon. She said that this happened very recently, and that the final paper work had just been finished. She also said that she believed that he had changed the name to "On-Site Waterworks." For the purposes of this study, the name Warr WSC has been retained in the previous and following sections. Please note that Mr. Sam Dillon was unable to be reached for comment prior to the printing of the final revised study. For the purposes of this table, Mr. Dillon's name was inserted as Warr's representative.

In order for the development of this project to develop smoothly, the establishment of additional committees is recommended.

### 2.3 MAP OF STUDY AREA

The study area corresponds generally with the boundaries of Shelby County. Figure 2-1 shows the study area.





**FIGURE 2-1 STUDY AREA**  
**SHELBY COUNTY**  
**WATER SUPPLY CORPORATIONS**



ENGINEERS  
**EVERETT GRIFFITH JR. & ASSOCIATES, INC.**  
 408 North Third Street  
 Lufkin, Texas

DESIGNED BY:	GL	SCALE: 1" = 5 MILES	1
DRAWN BY:	RNM	DATE: 10-2-1995	OF 1
CHECKED BY:	GL		1
APPROVED BY:	WS		1

**SECTION 3**  
**PLANNING PROJECTIONS**

## SECTION 3 PLANNING PROJECTIONS

### 3.1 GENERAL METHODOLOGY

Population and per capita water usage are the primary components in determining future water needs. Large segments of the population of Shelby County live in unincorporated areas for which little or no census data is available. Therefore, this study bases the population as identified by meter connections. The planning horizon for this project was 2050 with intermediate projections for 2010 and 2030. This study considers both normal weather and drought weather conditions.

### 3.2 DATA GATHERING AND EVALUATION

Population and water demand projections were derived from data gathered from the following sources:

1. Questionnaires sent to the various water distributing entities
2. Census of population and housing
3. Water for Texas, the water planning document for the state of Texas produced in November 1984
4. *Updated information currently being developed by the Texas Water Development Board for updates of the Water Plan and other publications*
5. *Information already contained in the files of Everett Griffith, Jr. & Associates, Inc. from past work with many of the entities involved in the study.*

All participating water suppliers filled out questionnaires. In addition, other water using entities provided information on questionnaires even though not participating directly in the study. Individual interviews were conducted in some cases in order to confirm information and to gain additional data. These questionnaires and interviews helped establish the goals and needs of each entity and how they might be addressed through a common effort. A listing of sources is included in Appendix A.

### 3.3 POPULATION PROJECTIONS

Historical census data is available for the municipalities of Shelby county. However, a large segment of the population lies in unincorporated areas. Much of this unincorporated area is served by non-profit water supply corporations. In most instances the historical number of meter connections in these rural areas was more readily available than the population. In addition, most of the guidelines of the Texas Natural Resource Conservation Commission (TNRCC) are based on meter connections. Therefore, most of the projections and accompanying tables are based on metered water connections. The assumption is made that if there are dramatic changes in the capita per residence in the future, there will also be corresponding changes in regulatory requirements for water supply and other facility requirements.

#### 3.3.1 HISTORICAL TRENDS

For the purposes of analyzing growth data in the County we have categorized the population into four distinct groups. These groupings are primarily for ease of reference, and are referred to herein as the City, Eastern, Central, and Western Groups. All of the Shelby County municipalities are grouped into the City Group, while the remaining water suppliers are grouped according to their geographical location in the County. Table 3-1 contains a listing of the individual entities that are included in each of these groups.

TABLE 3-1 WATER SUPPLIER GROUPINGS			
CITY	WESTERN	CENTRAL	EASTERN
City of Center	Buena Vista WSC	Choice WSC	Five Way WSC
City of Huxley	Huber WSC	East Lamar WSC	McClelland WSC
City of Joaquin	Sand Hills WSC	Flat Fork WSC	Paxton WSC
City of Tenaha	Tennessee WSC	Warr WSC	Shelbyville WSC
City of Timpson	Timpson Rural WSC	---	---

Distribution of the population being served by organized water systems based on total connections is illustrated in Figure 3-1 for the year 1991. During the past twenty year interval, both the Central and Western groups demonstrated the greatest growth rates, both increasing their percentage of the total connections in excess of 4% each. The eastern region also showed an increase of 1.28% over this same interval. In comparison, the City's percentage declined by 10.13% overall. Analysis of the total connections reveals that all the regions demonstrated net growth over the twenty year interval. The drop in the percentage served by the City Entities resulted because the cities grew at a notably slower rate than the rural water supply corporations. For instance, the Central and Western groups total number of connections increased by 162% and 142% respectively while the City's only increased by 39%.

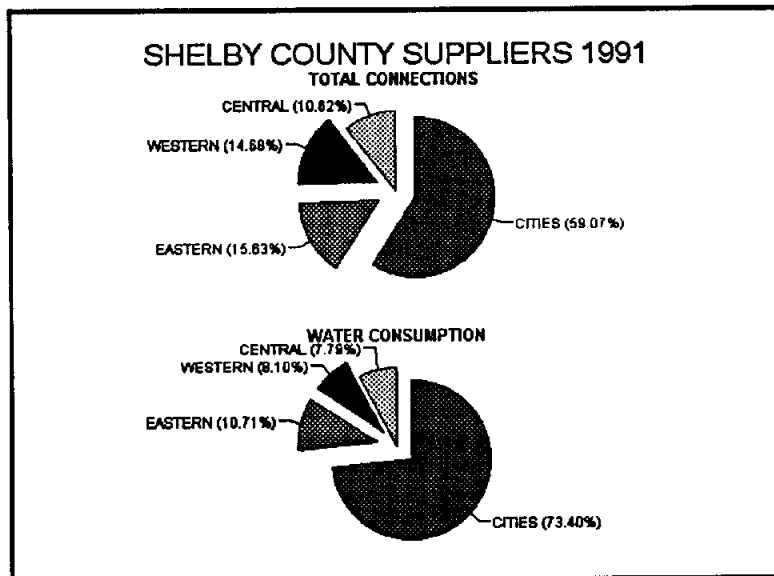


FIGURE 3-1

### 3.3.1.1 CITIES

The cities are the most dominant water supplying entities in Shelby County. In 1991 the City Group of water suppliers had 59.07% of the total connections for Shelby County and 73.4% of the total county water consumption. Figure 3-2 shows a breakdown of the percentage of total connections and water consumption used by each city during 1991. A brief summary of each follows:

**City of Center** The City of Center is located in central Shelby County and is the largest single water using entity present. As can be seen from Figure 3-2, Center accounts for over 50% of the total City connections and over 70% of the total water consumed by

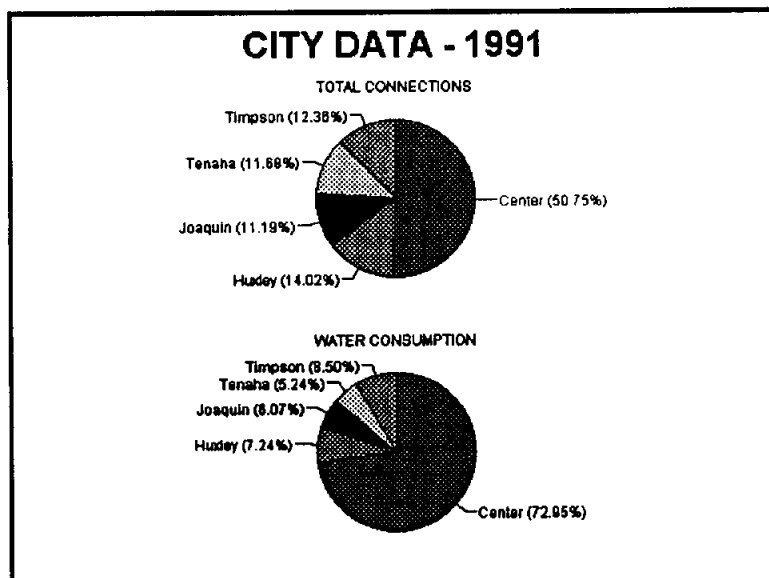
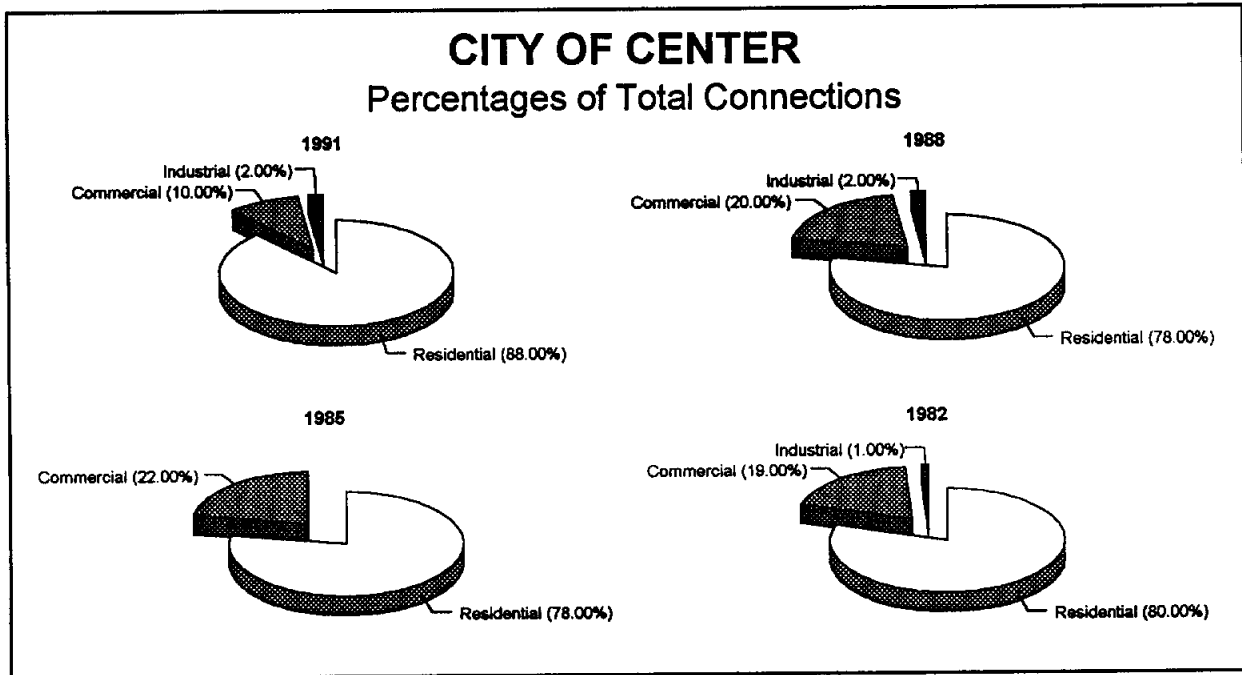


FIGURE 3-2

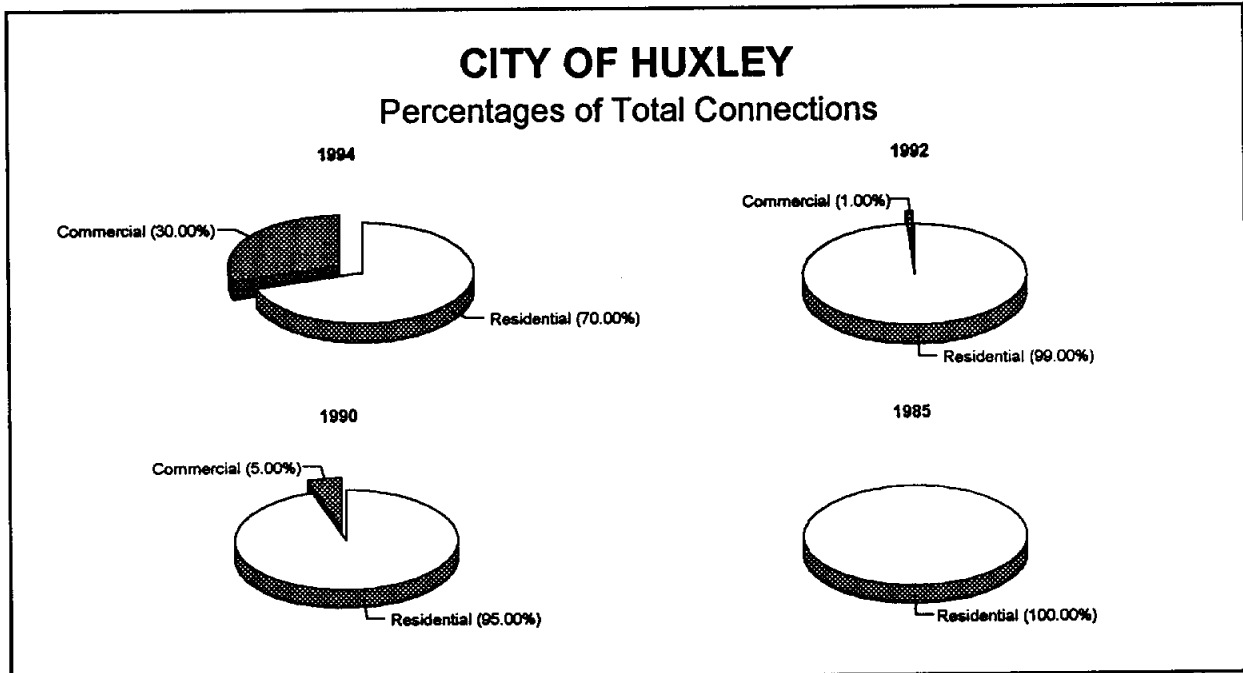
the City Group. This roughly corresponds to almost 30% of the total county connections and over 50% of the total water usage for the entire county.

The high water usage reflects the operation of various industries within the city. Figure 3-3 shows a breakdown of the percentage of total connections for Center in three year increments beginning in 1982 and ending in 1991. In 1991, industrial connections accounted for 2% of the total connections in the city. The water demand for industrial connections vary from industry to industry, but is almost always greater than demands for residential or commercial connections: For example, Tyson Foods maintains a facility within the city limits which uses over one million gallons of water each day.

The City of Center utilizes surface water in its system. This water is obtained from Pinkston Reservoir and Lake Center.



**FIGURE 3-3**

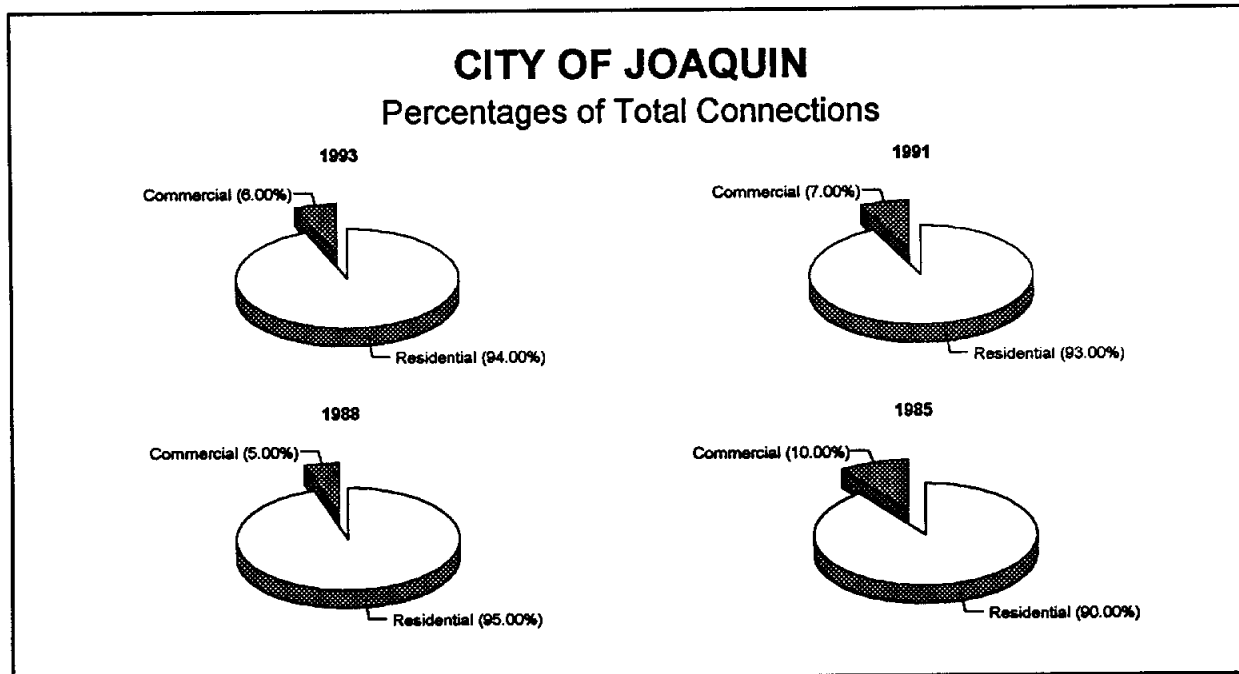


**FIGURE 3-4**

**City of Huxley** The City of Huxley is located in eastern Shelby County on the shores of Toledo Bend Reservoir. Figure 3-2 indicates that Huxley accounted for approximately 14% of the total City connections and over 7% of the total City water consumption in 1991. This corresponds to approximately 8% of the total county connections and 5% of the total county water consumption. Huxley's total number of connections has grown approximately 42% since 1977. No data was available from the TWDB for the city of Huxley prior to 1977.

Figure 3-4 shows a breakdown for the total connections for the City of Huxley. The most recent data from 1994 indicates that 30% of Huxley's connections were commercial with the remainder being strictly residential. Records indicate that the total percentage of commercial connections have increased drastically over the last ten years. No industrial connections have been recorded in any of the available records.

Huxley utilizes surface water in its operation. This water is obtained from Toledo Bend Reservoir.



**FIGURE 3-5**

**City of Joaquin** The City of Joaquin is located in northeastern Shelby County near the Texas/Louisiana Border. Figure 3-2 indicates that Joaquin accounted for approximately 11% of the total City connections and about 6% of the total City water consumption. This corresponds to over 6% of the total county connections and over 4% of the total county water consumption. Joaquin's total number of connections increased by approximately 66% since 1971.

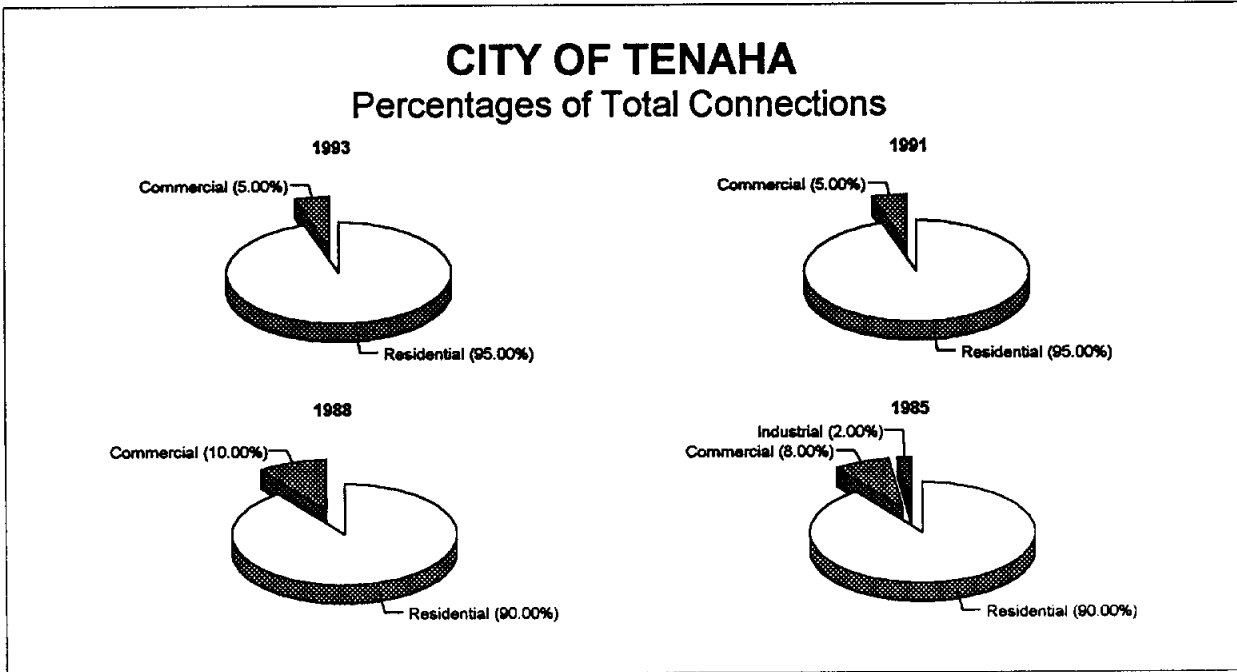
Figure 3-5 shows a breakdown for the total connections for the City of Joaquin. The most recent data from 1993 indicates that the city had 6% commercial connections and 94% residential connections at that time. The percentage of commercial connections have fluctuated from 5% to 10% over the past 10 years.

No industrial connections have been recorded in any of the available records.

Joaquin buys its water from the City of Logansport, Louisiana. Logansport obtains this water from Toledo Bend Reservoir and is delivered to Joaquin via a six inch transmission line.

**City of Tenaha** The City of Tenaha is located in northern Shelby County near the Shelby/Panola County Line. Figure 3-2 indicates that Tenaha accounted for almost 12% of the City Group's total connections and over 5% of the total City water consumption in 1991. This corresponds to approximately 7% of the total county connections, but less than 4% of the total county water consumption. Tenaha's total number of

connections has increased by 30% since 1971.

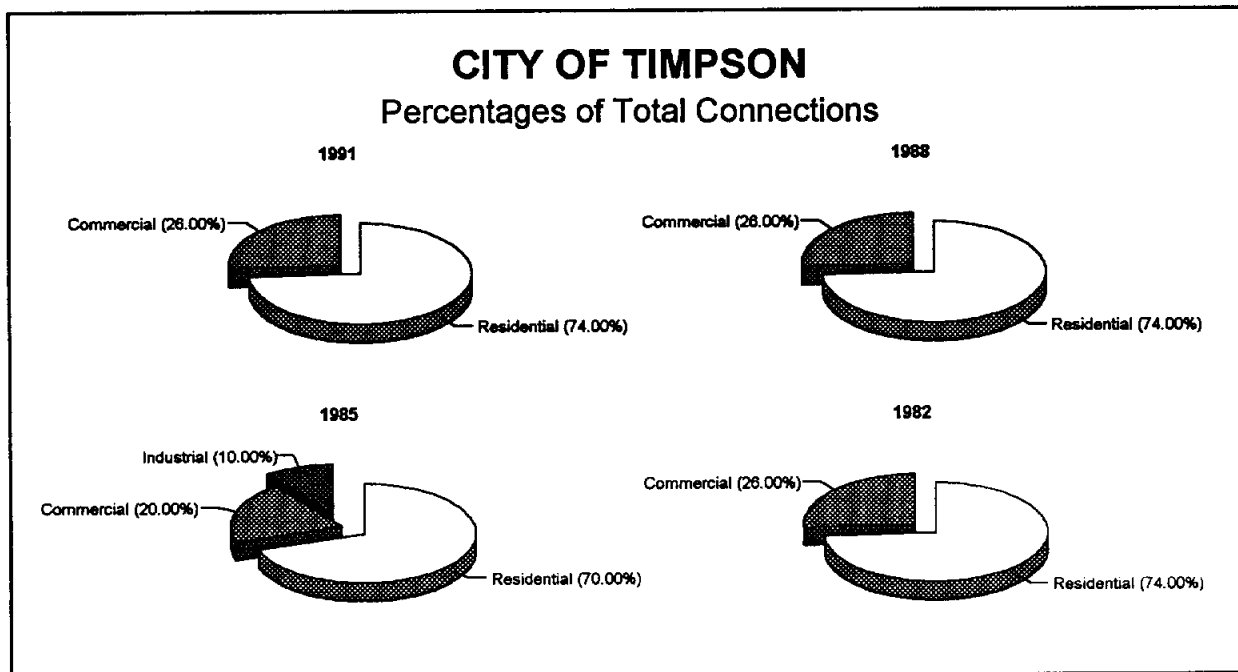


**FIGURE 3-6**

Figure 3-6 shows a breakdown for the total connections for the City of Tenaha. The most recent data from 1993 indicates that the City of Tenaha had 5% commercial connections and 95% residential connections at that time. The records indicate that the city had lost all its industrial connections by the year 1988.

Tenaha obtains its water from its own wells.

City of Timpson The City of Timpson is located in northwestern Shelby County. Figure 3-2 indicates that the City of Timpson accounted for over 12% of the City Group's total connections and almost 9% of the total City water consumption in 1991. This corresponds to approximately 7% of the total county connections and about 6 % of the total county water consumption. Tenaha's total number of connections increased by only 9% since 1971, showing the lowest growth rate of all the cities.



**FIGURE 3-7**

Figure 3-7 shows a breakdown for the total connections for the City of Timpson. The most recent data from 1991 indicates that the Timpson had 26% commercial connections and 74% residential connections at that time. The records indicate that the city developed and lost industrial connections between the years of 1982 and 1988.

Timpson obtains its water from its own wells.

#### **3.3.1.2 WESTERN WATER SUPPLY CORPORATIONS**

As shown in Figure 3-1, the Western Group of water suppliers had 14.68% of the total connections for Shelby County and 8.1% of the total county water consumption in 1991. Figure 3-8 shows a breakdown of the percentage of total connections and water consumption used by each corporation at this time. A brief summary of each follows:

**Buena Vista WSC** This Corporation has a service area of approximately 31 square miles and is located northwest of the City of Center. Buena Vista went into operation in mid-1994 and no historical data was available during the writing of the draft study. However, some historical data was available for the Buena Vista WSC for the years 1994-1996. The projections presented herein were updated to reflect this information and inserted into the final report. Please note that the projections were made with very limited data could have a direct impact upon their accuracy.

**Huber Water Supply Corporation** Figure 3-8 indicates that Huber accounted for approximately 10.4% of the total Western connections and about 7.2% of the total Western water consumption. This corresponds to about 1.5% of the total county connections and less than 1% of the total county water consumption. Huber's total number of connections increased by approximately 64% since 1971.

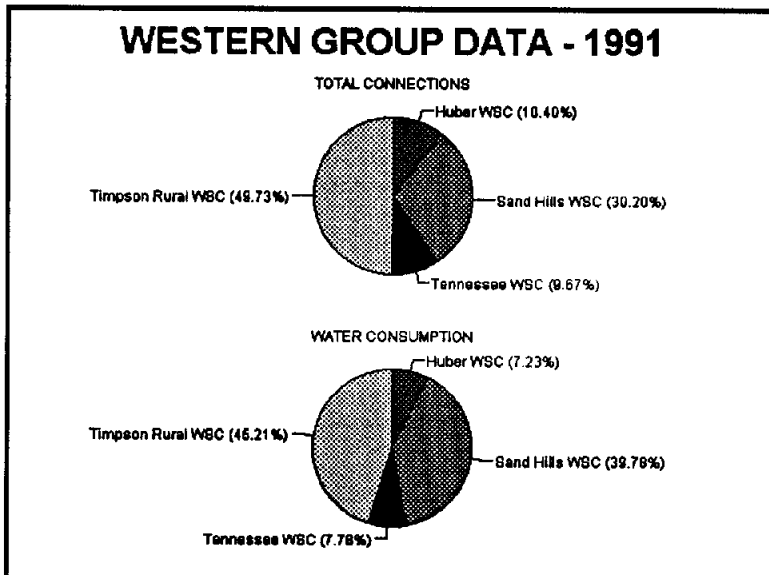
The available records indicate that Huber serves only residential customers. No industrial or commercial connections have been recorded in any of the available records. The Huber WSC obtains water from its own wells.



**Sand Hills Water Supply Corporation**

The Sand Hills WSC is located in southwestern Shelby County and has a service area of approximately 23 square miles. Figure 3-8 indicates that this corporation accounted for approximately 30.2% of the total Western connections and almost 40% of the total Western water consumption. This corresponds to roughly 4.4% of the total county connections and 3.2% of the total county water consumption. Sand Hills' total number of connections increased by approximately 84% since 1971.

The available records indicate that the Sand Hills WSC serves only residential customers. No industrial or commercial connections have been recorded in any of the available records. The Sand Hills WSC obtains water from its own wells.



**FIGURE 3-8**

**Tennessee Water Supply Corporation**

The Tennessee WSC is located in the northern part of Shelby County and has a service area of almost 23 square miles. Figure 3-8 indicates that the Tennessee WSC accounted for almost 10% of the total Western connections and almost 8% of the total Western water consumption. This corresponds roughly to 1.4% of the total county connections and less than 1% of the total county water consumption. Tennessee's total number of connections increased by approximately 35% since 1971.

The available records indicate that the Tennessee WSC serves only residential customers. No industrial or commercial connections have been recorded in any of the available records. The corporation obtains water from its own wells.

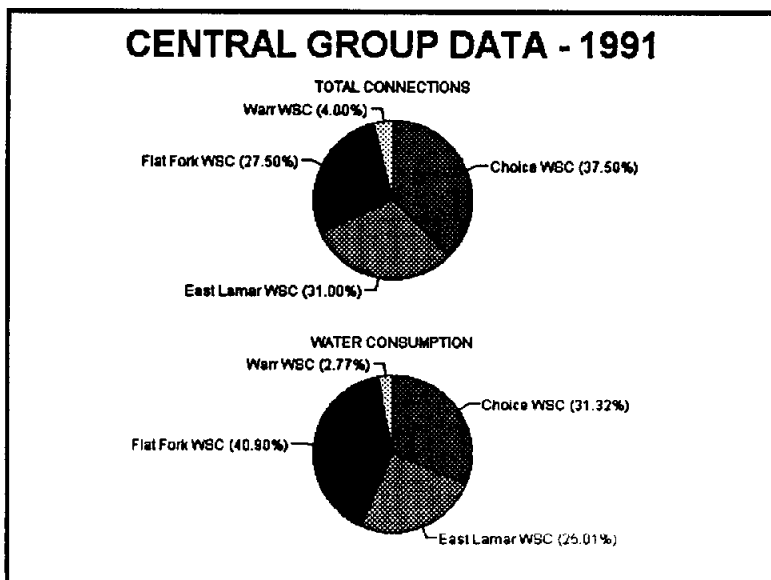
**Timpson Rural Water Supply Corporation**

The Timpson Rural WSC is located in northwestern Shelby County and has a service area of approximately 30 square miles. Figure 3-8 indicates that the Timpson Rural WSC accounted for almost half of the total Western connections and over 45% of the total Western water consumption. This corresponds roughly to 7.3% of the total county connections and 3.7% of the total county water consumption. This corporation's total number of connections have increased by approximately 81% since 1971.

The available records indicate that the 99% of the Timpson Rural WSC's customers are residential with the remainder being commercial. No industrial connections have been recorded in any of the available records. The corporation obtains water from its own wells.

**3.3.1.3 CENTRAL WATER SUPPLY CORPORATIONS**

As seen in Figure 3-1, the Central Group of water suppliers had 10.62% of the total connections for Shelby County and 7.79% of the total county



**FIGURE 3-9**

water consumption in 1991. Figure 3-9 shows a breakdown of the percentage of total connections and water consumption used by each corporation at that time. A brief summary of each follows:

Choice Water Supply Corporation The Choice WSC is located in southwestern Shelby County and has a service area of approximately 28 square miles. Figure 3-9 indicates that the Choice WSC accounted for over 37% of the total Central connections and over 31% of the total Central water consumption. This corresponds roughly to almost 4% of the total county connections and almost 2.5% of the total county water consumption. The Choice WSC has shown a tremendous amount of growth, with its total number of connections having quadrupled since 1971.

The available records indicate that over 95% of the Choice WSC's customers are residential with the remainder being commercial. No industrial connections have been recorded in any of the available records. The corporation obtains water from its own wells.

East Lamar Water Supply Corporation The East Lamar WSC is located east of the City of Center and has a service area of approximately 9 square miles. Figure 3-9 indicates that the East Lamar WSC accounted for over 31% of the total Central connections and over 25% of the total Central water consumption. This corresponds roughly to 3.3% of the total county connections and almost 2% of the total county water consumption. The East Lamar WSC has more than doubled its total number of connections since 1971.

The available records over the last twenty years indicate that historically over 90% of the East Lamar WSC's customers are residential with the remainder being commercial. No industrial connections have been recorded in any of the available records. The corporation obtains water from its own wells.

Flat Fork Water Supply Corporation The Flat Fork WSC is located northwest of the City of Center and has a service area of almost 13 square miles. Figure 3-9 indicates that the Flat Fork WSC accounted for 27.5% of the total Central connections and over 40% of the total Central water consumption. This corresponds to roughly 3% of the total county connections and about 3.2% of the total county water consumption. The Flat Fork WSC has almost doubled its total number of connections since 1971.

The available historical records indicate that the majority of customers served by the Flat Fork WSC over the last twenty years have been residential. However, commercial and industrial connections have also been served as well. The corporation obtains water from its own wells.

Warr Water System The Warr Water System is located northwest of the City of Center and has a service area of less than 1 square mile. Figure 3-9 indicates that the system accounted for 4% of the total Central connections and about 3% of the total Central water consumption. This corresponds to less than 1% of the total county connections and water consumption. The Warr system has doubled its total number of connections since 1971. The historical records indicate that only residential customers are served by the corporation. The corporation obtains water from its own wells.

NOTE: Shortly before the printing of the final revision of this study, a telephone call was made to Ms. Vickie Warr of the Warr WSC to update data. Ms. Warr said that the Warr WSC had been recently sold to Sam Dillon. She said that this happened very recently, and that the final paper work had just been finished. She also said that she believed that he had changed the name to "On-Site Waterworks." For the purposes of this study, the name Warr WSC has been retained in the previous and following sections.

Please note that Mr. Sam Dillon was unable to be reached for comment prior to the printing of the final revised study.

### 3.3.1.4 EASTERN WATER SUPPLY CORPORATIONS

As seen in Figure 3-1, the Eastern Group of water suppliers had 15.63% of the total connections and 10.71% of the total water consumption of Shelby County in 1991. Figure 3-10 shows a breakdown of the percentage of total connections and water consumption used by each corporation at that time. A brief summary of each follows:

Five Way Water Supply Corporation The Five Way WSC is located northeast of the City of Center and has

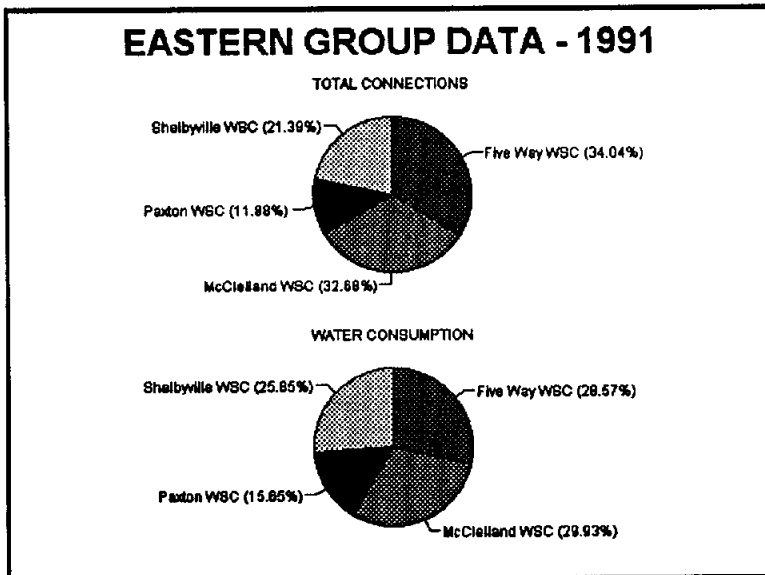
a service area of almost 31 square miles. Figure 3-10 indicates that the Five Way WSC accounted for over 34% of the total Eastern connections and almost 29% of the total Eastern water consumption. This corresponds roughly to over 5% of the total county connections and over 3% of the total county water consumption. The Five Way WSC has almost doubled its total number of connections since 1971.

The available records indicate that historically about 90% of the Five Way WSC's customers are residential with the remainder being commercial. No industrial connections have been recorded in any of the available records. The corporation obtains water from its own wells.

**McClelland Water Supply Corporation**

The McClelland WSC is located in southern Shelby County and has a service area of approximately 37 square miles. Figure 3-10 indicates that the McClelland WSC accounted for almost 33% of the total Eastern connections and almost 30% of the total Eastern water consumption. This corresponds to roughly 5% of the total county connections and over 3% of the total county water consumption. The McClelland WSC has almost doubled its total number of connections since 1971.

The available records indicate that historically about 95% of the McClelland WSC's customers are residential with the remainder being commercial and industrial. The most recent available records indicates that 95% of the corporation's connections were residential, 4% were industrial, and 1% were commercial. The corporation obtains water from its own wells.



**FIGURE 3-10**

**Paxton Water Supply Corporation** The Paxton WSC is located in northeastern Shelby County and has a service area of approximately 35 square miles. Figure 3-10 indicates that the Paxton WSC accounted for about 12% of the total Eastern connections and almost 16% of the total Eastern water consumption. This corresponds to almost 2% of the total county connections and water consumption. The Paxton WSC has increased its number of connections by more than 50% since 1971.

The available records indicate that all of the Paxton WSC's customers are historically residential. The corporation obtains water from its own wells and from water purchased from the City of Joaquin (which purchases its water from the City of Logansport, Louisiana).

**Shelbyville Water Supply Corporation** The Shelbyville WSC is located in eastern Shelby County between the cities of Huxley and Center, and has a service area of approximately 17 square miles. Figure 3-10 indicates that the Shelbyville WSC accounted for about 21% of the total Eastern connections and over 25% of the total Eastern water consumption. This corresponds to 3.3% of the total county connections and 2.8% of the total county water consumption. The Shelbyville WSC has increased its number of connections by more than 60% since 1971.

The available records provided no indication of the raw percentages of residential, commercial and industrial connections among the Shelbyville WSC's customers. The corporation obtains water from its own wells.

**3.3.2 PROJECTIONS**

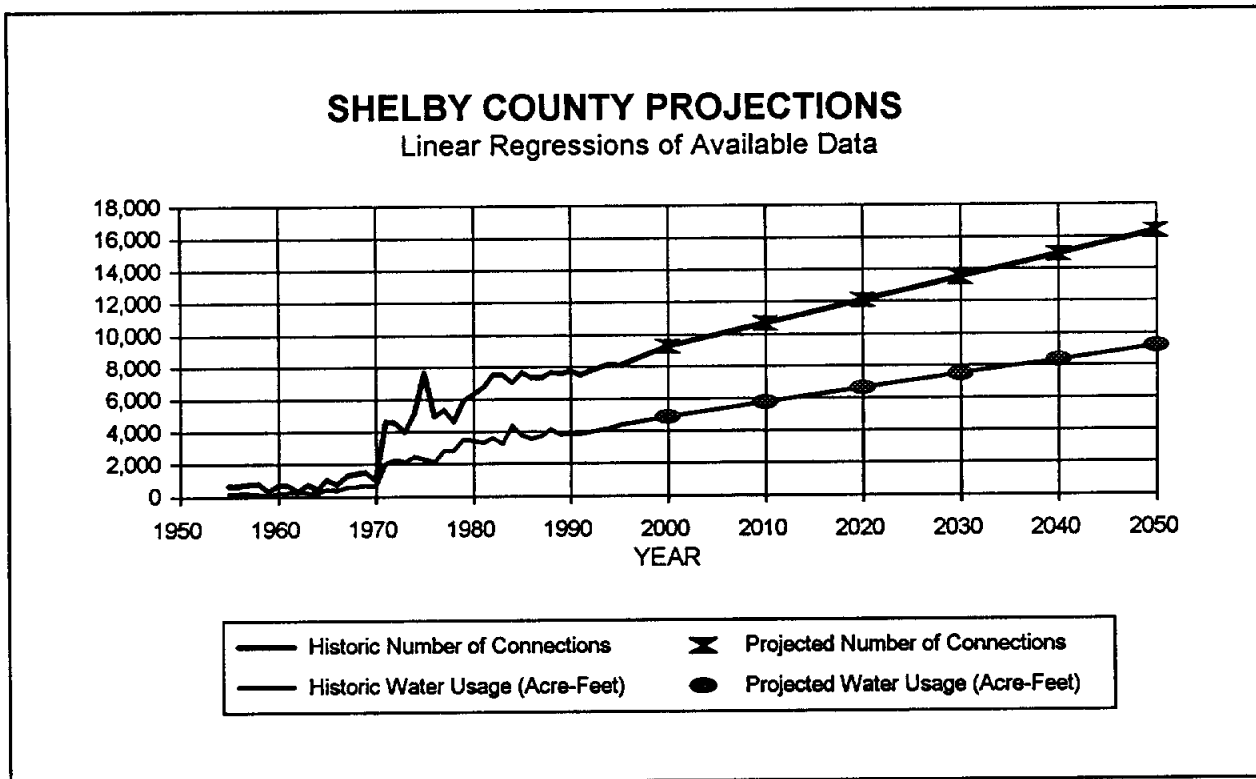
Table 3-2 indicates projected number of water connections by entity for the next fifty years. These projections were used throughout this study. It is likely that these projections will be more accurate for the next 10 years than for more distant years. However, the table does give some indication of probable growth

rates.

Historic water use records were obtained from the TWDB for each of the water supplying entities participating in this study. The future projections were made by using a linear regression of this historical data. A regression analysis shows the relationship between a set of independent variables and one dependent variable. It basically defines the extent that the dependent variable can be explained and predicted by the independent variable(s). In this case, separate analyses were performed for the number of active connections and for the total water usage for each participating entity. The independent variable in each case was time, while the dependent variables were the number of active connections and the total water usage, respectively. The relationship between dependent and independent variables in a regression analysis is a linear estimate, which results with a "best fit" line through the scattered plot of each independent-dependent data pair. Because regressions assume a linear relationship, the results are most accurate when the data closely matches a linear model.

Historical water records obtained from the TWDB were used as the basis for all future predictions made in this report. Please refer to Appendix C for a copy of this data. Information regarding the regression analysis for each individual County Entity can be found in Appendix G. Once a linear relationship was established for the given data, it was then projected into the future in 10 year increments to extrapolate values at those times. Extrapolation is the process of estimating the value of a function that lies outside the range of the existing data. As can be seen from the graphs in Appendix G, the most of the Shelby County water supplying entities have historically grown at rates that are very close to linear. This seems to indicate a reasonable degree of accuracy can be expected for most of the projections.

The projections are based upon the assumption that future growth will continue at the same rate as past growth. This does not seem to be an unreasonable expectation, especially if the proposed Interstate 69 becomes a reality. Figure 3-11 shows a graphical representation of the historic number of connections and the future projections. Please note that historical data is missing for several of the County entities prior to 1970. That is the reason for the fairly low County totals shown in Figure 3-11 for that period of time.



**FIGURE 3-11**

Prior to the printing of the final copy of this study, several draft copies were sent to the TWDB for review and comment. In their comments on the draft copy, the TWDB noted that the study indicated a substantial

growth in the number of connections in the County. Their comment stated that while the study indicated an annual growth in the number of connections approaching 1.4% through the Year 2050, while the Census records indicated less vigorous growth in population. They noted that previous Census counts for the population of Shelby County indicates that the population increased by 0.2% per year from 1960 to 1990 and 0.6% per year from 1970 to 1990. From 1980 to 1990 the County's population decreased from 23,084 to 22,034 residents. The population growth exceeded 1.0% per year in the period from 1970 to 1980. Please refer to Figure 3-11, which provides a graphical representation of the total number of connections during this historical period.

The following are some general comments on population growth in the system. It is intended that these provide some clarification as to the assumptions made in the study. In regard to the TWDB comments, the future population projections were generated based on a linear regression of historical data. As stated above, the assumption was made that the entities will continue to grow in the future at the same rate as they grew in the past. Some possible reasons that an apparent discrepancy exists between the future projections and the census data are addressed below.

1. It should be noted that the number of connections in the historical data does not necessarily have a direct correlation to the population. The population refers to the total number of people living in the county whereas the total number of connections refers to the total number of metered connections that are serviced by the individual water systems. Undoubtedly, a large number of these connections can be attributed to commercial businesses, industries, schools, farms, etc. rather than to an individual person.
2. Since the range of the study extends over 50 years into the future, as much historical data was used in the regression as possible. Much of the regression used data on a yearly interval, whereas the Census uses data on a ten year interval. It was felt that a more accurate estimate of the total number of connections could be estimated from several years' worth of data over a decade rather than from only one year's worth of data over a decade.
3. It should again be noted that the historic records used as a basis for the future estimate was obtained from the TWDB. These historic values were used because they generally provided a great deal of information on each of the individual systems participating in the study. While it is true that the census information also contains a great deal of information about the county, it does not provide very much insight as to the total number of people served by each individual water system. Therefore, the historic data appeared to be the obvious choice to be used as the basis for the future estimates.

As an addition note, discrepancies with the population growth rate of the County was referenced in the Application for State Grant Assistance. As noted Section II - Planning Information, "There was a decline in population from 1980 to 1990 based on actual census data however there is dispute over the actual census and the City of Center has determined that all persons were not counted."

4. It was noted early on that some of the values indicated in the historical data fluctuate from year to year. In order to verify the accuracy of the historic data, copies of all the data used in the study were mailed to each of the County water suppliers so that they could check it against their records. Some minor changes were noted; however, the majority of those who responded indicated no change from the values listed. Therefore, the values indicated were considered valid.

### **3.4 WATER DEMAND PROJECTIONS**

Table 3-3 indicates projected water consumption by entity for the next fifty years. As noted previously, the accuracy of the these projections are likely to decrease the further in the future that they are projected. However, the table does give some indication of probable future consumption rates. As was mentioned above, these projections were made by using a linear regression of historical data provided by the TWDB. Figure 3-11 shows a graphical representation of these projections.

Water demands include both water used by domestic consumption as well as industrial and commercial usage. Normally, the domestic usage is subject to a much greater fluctuation on a daily and seasonal basis than commercial and industrial usage. Also, future industrial usage could be greatly influenced by the

location of one very large water user, but such an occurrence is extremely difficult to predict with any certainty.

It should also be noted that poultry production is the largest single industry in Shelby County. During the writing of the study, several meetings were held with residents of Shelby County. A recurring theme expressed at these meetings was the desire of many farmers for additional water supply so that they could expand their chicken operations. Many more expressed an interest in entering the industry if more water was made available. Please note that many of the chicken farmers in the County operate several chicken houses and that many of these houses can hold 30,000 birds at one time. The water needed for these animals is profound, especially in the summer time. Tyson maintains a large processing plant in Center and Pilgrim's Pride has recently built a feed mill in Tenaha. In addition, Pilgrim's Pride is also expanding a plant in Nacogdoches which will require an additional 300 poultry houses in Shelby and Nacogdoches Counties to supply birds for the facility.

We have taken the liberty of attaching some rough spreadsheet calculations regarding the water consumption required for chickens. These calculations are found in Appendix H. Please note that at an average house temperature of 100°F, approximately 2,280 gallons of water per day is consumed by 10,000 eight-week old broiler chickens. It is conceivable that a farm operating three chicken houses with 30,000 birds each would consume around 20,520 gpd. If an average water demand of 100 gpd per person is assumed, that farm has a population equivalent of over 205 people. This provides an illustration of how much variation in water demand is possible due to poultry production.

### **3.5 INDUSTRIAL AND COMMERCIAL NEEDS**

Some allowance has been made for growth in industrial and commercial demands. No allowance has been made directly for the future inclusion of a large industrial user because its location would be difficult to determine. Currently, Tyson Food is the largest single user of water in the county with over 1 MGD of consumption. As noted above, the poultry industry is a major constituent of the economy of Shelby County. By its very nature, the poultry industry requires large amounts of water. Development of this industry will require significant amounts of water.

TABLE 3-2 PROJECTED NUMBER OF CONNECTIONS						
WATER ENTITY	YEAR					
	2000	2010	2020	2030	2040	2050
Buena Vista WSC	207	238	270	301	326	357
City of Center	2,679	2,918	3,157	3,396	3,635	3,875
Choice WSC	353	448	544	639	734	830
East Lamar WSC	315	384	452	521	590	659
Five Way WSC	503	601	699	797	895	993
Flat Fork WSC	268	323	377	432	486	541
Huber WSC	152	183	213	244	274	305
City of Huxley	738	875	1,012	1,148	1,285	1,422
City of Joaquin	569	691	814	937	1,060	1,183
McClelland WSC	475	567	658	750	841	932
Paxton WSC	245	277	310	342	375	407
Sand Hills WSC	414	497	580	663	746	828
Shelbyville WSC	318	378	438	498	558	618
City of Tenaha	582	651	719	788	857	925
Tennessee WSC	128	143	157	172	186	201
City of Timpson	605	635	664	693	723	752
Timpson Rural WSC	686	837	988	1,138	1,289	1,440
Warr WSC	40	46	52	58	63	69

NOTE: The above projections were based on linear regressions of the historic number of connections. The "best fit" line found by the regression was then projected into the future at ten year intervals in order to estimate the number of connections at those times. Prior to the submittal of this final report, updated historical data was obtained from the TWDB and from County participants (when possible). New regressions were then performed for each of the Shelby County entities with the updated data incorporated. The numbers above represent the most recent future projections as refined by the updated data. Because of this, some of the values Table 3-2 have been modified from those originally presented in the draft copy of this study. Please refer to APPENDIX G: *Notes Regarding Population/Water Use Projections* for more information regarding the most recent projections.

Also, please note that an in-depth discussion was made in regard to the future projections for the City of Center, the City of Timpson, the Tennessee WSC, and the Paxton WSC. Those projections were made in response to the TWDB comments on the draft study. Please refer to APPENDIX I: *Executive Administrator's Comments* and APPENDIX J: *Replies to Executive Administrator's Comments*. Also, please note that the above projections have been updated since the reply to the TWDB comments was made. Therefore, the above values have been modified from those originally submitted in that reply. However, the same conventions used to make the regressions discussed in the reply were also used to make the regressions shown above.

TABLE 3-3 PROJECTED WATER CONSUMPTION (acre-feet)						
WATER ENTITY	YEAR					
	2000	2010	2020	2030	2040	2050
Buena Vista WSC	44.8 (44.8)	51.1 (48.8)	58.1 (53.0)	66.2 (57.7)	75.3 (62.8)	85.8 (68.6)
City of Center	2,614.3 (2,614.3)	2,964.9 (2,916.9)	3,315.5 (3,236.8)	3,666.0 (3,552.7)	4,016.6 (3,864.7)	4,367.2 (4,172.8)
Choice WSC	166.5 (155.5)	205.0 (201.2)	254.5 (245.3)	304.0 (287.8)	353.5 (328.8)	403.1 (368.1)
East Lamar WSC	116.5 (116.5)	148.2 (144.9)	179.9 (171.9)	211.6 (198.1)	243.3 (223.0)	275.0 (246.6)
Five Way WSC	166.1 (166.1)	207.8 (202.5)	249.4 (237.0)	291.1 (269.9)	332.7 (300.9)	374.4 (330.3)
Flat Fork WSC	87.6 (87.6)	104.2 (101.6)	120.7 (114.7)	137.3 (126.9)	153.9 (138.4)	170.5 (148.9)
Huber WSC	37.7 (37.7)	47.5 (45.9)	57.4 (53.6)	67.3 (60.8)	77.2 (67.5)	87.1 (73.6)
City of Huxley	276.7 (276.7)	354.4 (341.4)	432.0 (410.9)	509.6 (479.0)	587.3 (545.7)	664.9 (610.8)
City of Joaquin	183.5 (183.5)	230.9 (222.5)	278.4 (261.5)	325.9 (298.5)	373.4 (333.4)	420.8 (366.1)
McClelland WSC	145.5 (145.5)	179.1 (166.6)	212.6 (192.3)	246.2 (216.6)	279.7 (239.2)	313.3 (260.4)
Paxton WSC	85.8 (85.8)	105.9 (103.4)	126.0 (120.5)	146.1 (137.0)	166.2 (152.9)	186.2 (168.1)
Sand Hills WSC	164.7 (164.7)	207.7 (203.3)	250.6 (240.3)	293.5 (275.8)	336.5 (310.0)	379.4 (342.7)
Shelbyville WSC	107.5 (107.5)	130.9 (127.5)	154.2 (146.4)	177.6 (164.3)	200.9 (181.1)	224.3 (196.9)
City of Tenaha	226.2 (226.2)	264.0 (258.2)	301.7 (289.0)	339.5 (318.6)	377.3 (347.0)	415.0 (374.1)
Tennessee WSC	29.1 (29.1)	33.0 (30.9)	36.8 (33.1)	40.6 (35.0)	44.5 (36.8)	48.3 (38.2)
City of Timpson	246.6 (246.6)	277.1 (224.1)	307.6 (244.6)	338.1 (246.6)	368.6 (284.2)	399.1 (303.4)
Timpson Rural WSC	177.5 (177.5)	218.5 (211.1)	259.5 (242.1)	300.4 (270.4)	341.4 (296.1)	382.3 (319.0)
Warr WSC	11.8 (11.8)	15.2 (14.8)	18.7 (17.8)	22.2 (20.7)	25.6 (23.4)	29.1 (26.0)

NOTE: The above projections were based on linear regressions of the historic water usage. The "best fit" line found by the regression was then projected into the future at ten year intervals in order to estimate the water usage at those times. Prior to the submittal of this final report, updated historical



data was obtained from the TWDB and from County participants (when possible). New regressions were then performed for each of the Shelby County entities with the updated data incorporated. The numbers above represent the most recent future projections as refined by the updated data. Because of this, some of the values Table 3-2 have been modified from those originally presented in the draft copy of this study. Please refer to APPENDIX G: *Notes Regarding Population/Water Use Projections* for more information regarding the most recent projections.

The regular numbers in the above table are the raw numbers generated by the regression estimates. The italic numbers in parenthesis in Table 3-3 are modified to reflect the impact of new standards regarding plumbing fixtures. This was done in reply to the comment submitted by Mr. Bill Hoffman of the TWDB. Please refer to Appendix I and Appendix J for more information regarding this. Information supplied by Mr. Hoffman revealed that the TWDB estimates that the current plumbing code will reduce the amount of water used in Shelby county by as much as 19.5 gallons per person per day in fifty years' time. This assumes a 100% replacement rate of old plumbing fixtures by the Year 2050. The numbers above were estimated by incorporating this data as a straight line estimate beginning at 0 gal/person/day in the Year 2000 and reaching 19.5 gal/person/day in the Year 2050. Some additional assumptions had to be made due to the fact that the TWDB's estimates are based on population and the estimates in this study are based on historical connections and historical water usage. The most recent information was obtained for the county entities (refer to Appendix C). This data provided the current percentage of residential connections. These percentages were applied through the 50 year future estimating period to determine the approximate number of residential connections in those years. It was basically assumed that each connection accounted for a household. The census records for Shelby County were then consulted to determine a ratio of people to houses. This ratio was used to estimate the population at the projected time, and then the straight line estimate for water savings was applied. Please refer to Appendix G for more information regarding this process.

In addition, Mr. Hoffman said that the TWDB estimates expected the amount of unaccounted for water to be reduced in the future by the all systems to less than 10% of the total. To modify the numbers in respect to this, the most recent information was used for each system (where available) to calculate the most recent percentage of unaccounted for water for each system. Where such information was not available, this amount was estimated to be 10%. This amount in excess of 10% was subtracted from the straight regression estimate. Please refer to Appendix G for more information regarding this process.

Also, please note that an in-depth discussion was made in regard to the future projections for the City of Center, the City of Timpson, the Tennessee WSC, and the Paxton WSC. Those projections were made in response to the TWDB comments on the draft study. Please refer to APPENDIX I: *Executive Administrator's Comments* and APPENDIX J: *Replies to Executive Administrator's Comments*. Also, please note that the above projections have been updated since the reply to the TWDB comments was made. Therefore, the above values have been modified from those originally submitted in that reply. However, the same conventions used to make the regressions discussed in the reply were also used to make the regressions shown above.

As stated previously, the Buena Vista WSC began operation in mid-1994 and the most recent data obtained for the Buena Vista WSC only covered the years of 1994-1996. In addition, the data for 1994 only represents water usage from the date of the facility's initial start-up, not a full year's worth of water usage. Two projections were performed using this information: one using all three data points and one using only data points from 1995 and 1996. However, both regressions seemed to suggest large increases in water consumption over the next 50 years. The limited amount of data points makes it impossible to determine if this trend would be representational of what could be expected in the future. Therefore, since only three data points exist for the WSC it was decided not to use a regression to estimate the future usage for this entity. Instead, regressions were done for all of the other county entities and their average rate of growth was applied to that of the Buena Vista WSC. As can be seen from Table 3-3, the projected future water usage of the Buena Vista WSC closely matches that of the Huber WSC, its neighbor to the south.

**SECTION 4**  
**INVENTORY OF EXISTING FACILITIES**

## SECTION 4 INVENTORY OF EXISTING FACILITIES

The following sections provide an outline of existing facilities being used by the entities participating in this study. This assessment of existing capabilities is made for comparison with the current and projected needs of the Shelby County water suppliers.

### 4.1 WATER SOURCES

Currently, surface water is utilized by the City of Center, the City of Huxley, the City of Joaquin, and the Paxton Water Supply Corporation for their water supply. All of remaining Shelby County water systems utilize groundwater sources for their supply. A summary of information regarding these water sources is provided below.

#### 4.1.1 AQUIFERS

Approximately 79% of Shelby County lies within the Sabine River Basin with the remainder lying within the Neches River Basin. No ground water studies have been performed by the Texas Water Development Board (TWDB) for Shelby County proper, but detailed studies have been performed for both the Sabine and Neches River Basins. These reports indicate that Shelby County occupies a region of these basins where the Carrizo Formation and Wilcox Group constitute the only aquifer which is classified as primary.

The Carrizo Formation and Wilcox Group are two separate geologic units, having their own distinct geologic and hydrologic characteristics. The sand of the Carrizo Formation overlies the sands and shales of the Wilcox Group. However, the shale is missing in some places, which allows the sand of the Carrizo to come into direct contact with the upper sand beds of the Wilcox. Therefore, the two units are hydraulically connected, and can be considered as one aquifer. The majority of Shelby County lies within the outcrop area of the Carrizo-Wilcox Aquifer where water levels are likely to respond to seasonal variations in precipitation. Most of the wells in the outcrop area take water only from the sands of the Wilcox Group.

The chemical quality of water in the Carrizo-Wilcox aquifer varies from place to place and with depth. Water that is relatively low in mineral content and suitable for most purposes is found in and near the outcrop areas. The water from the Carrizo-Wilcox aquifer is high in bicarbonates and locally has objectionable amounts of iron. The Wilcox sands have lignite stringers in some places which may impart an undesirable color to the water. The water from the aquifer is generally soft. In general, the water in the aquifer becomes more mineralized downdip from the outcrop, and also with depth. Water of usable quality may be expected throughout the entire thickness of the aquifer north and northwest of central Shelby County. South of central Shelby County, the basal Wilcox sands contain water exceeding 3,000 ppm dissolved solids and further downdip the upper part of the aquifer becomes progressively more mineralized until the entire thickness contains water which exceeds 3,000 ppm dissolved solids.

Most of the municipalities and industries of Shelby County obtain their water from the Carrizo-Wilcox aquifer. The sizes of the wells vary according to need. Table 4-1 summarizes the ranges of well records obtained from the TWDB and lists the wells in use for those entities for whom data was available. As mentioned above, approximately 79% of Shelby County lies within the Sabine River Basin with the remainder lying within the Neches River Basin. The approximate annual ground-water yield for the Carrizo-Wilcox within the entire Sabine River basin to the year 2030 is 45,200 acre-feet as estimated by the TWDB document, Water for Texas, Planning for the Future, published in 1983. Similarly, the approximate annual ground-water yield for the Carrizo-Wilcox within the Neches River basin to the year 2030 is 154,100 acre feet. However, no firm estimate was provided for the groundwater beneath Shelby County proper.

NOTE: Several copies of the final draft of this study were sent to the TWDB for review and comment. One of their comments was in regard to work that they had completed in connection with the update of the State Water Plan. This work involved the development and application of a regional computer flow model for the Carrizo-Wilcox aquifer. Based on their most recent work, they felt that groundwater resources available for future development are underestimated in this study. They understood that this information was not available at the time the Shelby County study was conducted and therefore was not presented as a strong, viable future option in the final recommendations. They also stated that this information "does not diminish

the feasibility of the study's recommended options, however, it may be wise and important to the individual participants to have the newest information incorporated into the results and be available to help guide making future planning decisions." To this end, several telephone calls were made to the TWDB to acquire their most current work regarding the regional computer flow model for the Carrizo-Wilcox Aquifer. We were referred to Mr. David Thorkildsen of the Water Supplies Section of the TWDB. Mr. Thorkildsen stated that an effort was being made to write-up the results of the model, but that nothing was available at the present time. He said that an effort was likely to be made to publish before the year was over and that some form of notice would go out to inform interested parties of its availability. The final copy of this study was submitted before this additional information was available.

TABLE 4-1 EXISTING WELL DATA						
WATER AGENCY	NUMBER OF WELLS	RANGE OF DEPTHS TO TOP OF WELL SCREEN (ft)	RANGE OF TOTAL SCREEN (ft)	RANGE OF STATIC WATER LEVEL DEPTHS (ft)	RANGE OF WELL AGES (Years)	NAME OF FORMATION
Choice WSC	3	350-1,350	30-50	225.0-240.4	3-16	Wilcox
East Lamar WSC	2	470-590	55-60	Not Available	14-30	Wilcox
Five Way WSC	3	320-400	50-55	80-100	14-28	Wilcox
Flat Fork WSC	2	270-324	84	53.52-102	15-30	Wilcox
Huber WSC	1	461	40	147	25	Wilcox
Joaquin, City of	1	211	75	Not Available	31	Wilcox
McClelland WSC	2	318	100	Not Available	26-29	Wilcox
Paxton WSC	3	300-355	40	165-172	13-26	Wilcox
Sandhills WSC	1	848-996	90	280-320	29	Wilcox
Shelbyville WSC	1	Not Available	N/A	Not Available	31	Wilcox
Tenaha, City of	3	406-505	80-108	147	3-54	Wilcox
Tennessee Rural WSC	1	303	42	Not Available	25	Wilcox
Timpson, City of	5	358-634	62-92	131.37-192.82	9-55	Wilcox
Timpson Rural WSC	2	650-700	50-72	120-152.6	14-29	Wilcox
Warr Water System	2	Not Available	N/A	80	15-18	Wilcox

#### 4.1.2. TOLEDO BEND RESERVOIR

Toledo Bend Reservoir is the fifth largest reservoir in the United States and has a total capacity of 4.477 million acre-feet. The reservoir is owned by the Sabine River Authorities of Texas and Louisiana, who operate it jointly in accordance with the terms of the Sabine River Compact between the two states. The reservoir provides water for municipal, manufacturing, irrigation, hydroelectric power generation, and recreational purposes. According to Water for Texas, the existing permit issued to the Sabine Rive Authority of Texas by the Texas Water Rights Commission annually provides for use of 100,000 acre-feet for municipal uses, 600,000 acre-feet for industrial purposes, and 50,000 acre-feet for irrigation use. The only Texas cities obtaining municipal supplies from the reservoir are Hemphill, located in Sabine County, and Huxley, located in Shelby County. In addition, several private water companies have contracted with the Authority for water from the reservoir and there are several plans that propose to divert as much as 600

million gallons a day to serve Houston and other South Texas cities.

In accordance with a contract between the two Authorities and several utility companies in both Louisiana and Texas, the Authorities are compensated by the payment of an aggregate sum of money each year for hydroelectric power generated through releases of water through the dam between elevations 172.0 and 162.2 ft MSL. Subject to the availability of water in storage, releases are made through the two turbines sufficient to produce 65.7 million kilowatt hours of electricity during the period May-September each year.

Table 4-2 lists the water rate schedule published by the Sabine River Authority. These rates apply to untreated water that is to be used for municipal and industrial purposes. Please note that an amount to be determined will also be added per 1,000 gallons for any water acquired directly from Toledo Bend Reservoir: this cost pertains to payments lost from the reduction in the amount of water available for power generation.

TABLE 4-2 SABINE RIVER AUTHORITY WATER RATE SCHEDULE		
SCHEDULE DESIGNATION	WATER COST PER 1,000 GALLONS	MINIMUM TAKE OR PAY (gallons/day)
A	\$0.125 to \$0.25*	Less than 250,000
B	\$0.124	250,000
C	\$0.114	500,000
D	\$0.104	1,000,000
E	\$0.096	2,000,000
F	\$0.089	4,000,000
G	\$0.084	7,000,000
H	\$0.079	11,000,000
I	\$0.076	16,000,000
J	\$0.075	22,000,000

\* Cost as negotiated and according to such factors as duration, quantity, location, etc.

#### 4.1.3 PINKSTON RESERVOIR

Information regarding Lake Pinkston was obtained from the TNRCC. The information received was a copy of the Certificate of Adjudication of Water Rights for the lake. Therein, it is stated that the City of Center is authorized to maintain an existing dam and reservoir and impound water therein not to exceed 7,380 acre-feet (2,404.79 million gallons) of water. The City is further authorized to divert and use an amount of water not to exceed 3,800 acre-feet/year (1,238.24 million gallons/year) at a maximum rate of 2,250 gpm.

#### 4.1.4 LAKE CENTER

Information regarding Lake Center was obtained from the TNRCC. The information received was a copy of the Certificate of Adjudication of Water Rights for the lake. Therein, it is stated that the City of Center is authorized to maintain an existing dam and reservoir and impound water therein not to exceed 446 acre-feet (145.33 million gallons) of water. The City is further authorized to divert and use an amount of water not to exceed 1,460 acre-feet/year (475.74 million gallons/year) at a maximum rate of 1,200 gpm.

#### 4.2 ELEVATED, STORAGE, AND PUMPING FACILITIES

The elevated, storage, and pumping facilities of the local water suppliers are important factors to be considered in the total assessment of the County's needs. These facilities affect the ability of an entity to provide water. It also influences how water from a regional entity can be delivered to the system. The following Tables 4-3 and 4-4 summarize the various system capabilities for systems within the county for

whom data was supplied. These capabilities will be further analyzed in Chapter 5. The Cities of Center, Huxley, Joaquin, Timpson, and Tenaha operate using elevated storage type systems. The other systems have pressure maintained by hydro-pneumatic pressure tanks or standpipes.

#### 4.3 SUPPLY AND DISTRIBUTION LINES

The scope of this report does not allow for a full mapping of all the systems in Shelby County. However, Figure 8-3 shows an illustration of the proposed system designed to distribute water from Toledo Bend Reservoir throughout the county.

TABLE 4-3 EXISTING STORAGE FACILITIES					
WATER AGENCY	PLANT I.D.	TOTAL GROUND STORAGE (gal)	TOTAL PRESSURE TANK CAPACITY (gal)	TOTAL ELEVATED TANK CAPACITY (gal)	TOTAL STANDPIPE CAPACITY (gal)
Buena Vista WSC	Water Plant	0	0	0	100,000
Center, City of	Aiken Plant	1,000,000	0	1,000,000	0
	Mill Creek	436,000	0	0	0
Choice WSC	Jericho Plant	25,000	2,500	0	0
	Neuville Plant	0	0	0	150,000
East Lamar WSC	Water Plant #1	30,000	3,000	0	0
	Water Plant #2	40,000	3,000	0	0
Five Way WSC	Water Plant #1	45,000	5,000	0	0
	Water Plant #2	20,000	1,500	0	0
	Water Plant #3	65,000	5,000	0	0
Flat Fork WSC	Water Plant	44,000	5,200	0	0
Huber WSC	Water Plant	15,000	1,500	0	0
Huxley, City of	Water Plant	80,000	2,000	0	76,000
Joaquin, City of	Water Plant	80,000	0	50,000	0
McClelland WSC	Water Plant	147,000	4,000	0	0
Paxton WSC	Water Plant	38,000	3,000	0	0
Sand Hills WSC	Water Plant	50,000	3,500	0	0
Shelbyville WSC	Water Plant	60,000	0	30,000	0
Tenaha, City of	Water Plant	80,000	0	50,000	0
Tennessee WSC	Water Plant	30,000	3,000	0	0
Timpson, City of	Water Plant	50,000	0	70,000	0
Timpson Rural WSC	Water Plant #1	50,000	5,000	0	0
	Water Plant #2	20,000	2,000	0	0
	Water Plant #3*	5,000	500	0	0
	Water Plant #4	10,000	1,000	0	0
Warr Water System	Water Plant #1	0	1,050	0	0
	Water Plant #2	0	1,050	0	0

\*Listed as not currently in use.

**TABLE 4-4 DISTRIBUTION DATA**

<b>WATER AGENCY</b>	<b>TOTAL WELL CAPACITY (gpm)</b>	<b>TOTAL SERVICE PUMP CAPACITY (gpm)</b>	<b>MAXIMUM DAILY USAGE (MGD)</b>	<b>AVERAGE DAILY USAGE (MGD)</b>	<b>RANGE OF DISTRIBUTION SYSTEM PRESSURES (psi)</b>
Center, City of	1,653*	7,860	7.04	2.49	47-110
Choice WSC	311	340	N/A	N/A	N/A
East Lamar WSC	200	730	0.320	0.076	40-68
Five Way WSC	268	950	0.175	0.150	45-82
Flat Fork WSC	220	1,040	N/A	N/A	45-60
Huxley, City of	450*	1,200	0.290	0.188	42-72
Joaquin, City of	32	1,200	0.065	0.046	48-62
McClelland WSC	340	870	0.190	0.120	45-62
Paxton WSC	80	400	N/A	N/A	50-100
Sand Hills WSC	75	550	0.160	0.120	38-58
Shelbyville WSC	200	600	0.500	0.095	55-75
Tenaha, City of	560	1,200	0.230	0.189	42-60
Tennessee Rural WSC	80	300	N/A	N/A	60-74
Timpson, City of	575	1,200	0.215	0.160	52-68
Timpson Rural WSC	445	840	1.500	0.900	36-75
Warr Water System	42	N/A	N/A	0.011	52-68

\* This refers to the maximum capacity of treated water from the City's surface water treatment plants.

**SECTION 5**  
**DETERMINATION OF NEEDS**



## SECTION 5

# DETERMINATION OF NEEDS

The primary purpose of this report is to determine the extent of needs for sources of water supply and which solutions would provide the most cost-efficient benefits. As a secondary concern, the study also addresses needs in pressure, storage, and in supply and distribution.

The design parameters used to determine needs are in most instances drawn from Texas Administrative Code (TAC), Chapter 290, Water Hygiene as adopted by the Texas Natural Resource Conservation Commission (TNRCC). Relevant excerpts from TAC 290.45, Minimum Water System Capacity Requirements, are listed below.

For systems having less than 50 connections:

*If fewer than 50 connections without ground storage, the system must have the following:*

- (i). a well capacity of 1.5 gallons per minute per connection; and*
- (ii). a pressure tank capacity of 50 gallons per connection.*

*If fewer than 50 connections with ground storage, the system must have the following:*

- (i). a well capacity of 0.6 gallons per minute per connection;*
- (ii). a total storage capacity of 200 gallons per connection;*
- (iii). a service pump capacity of 2.0 gallons per minute per connection; and*
- (iv). a pressure tank capacity of 20 gallons per connection.*

For systems having 50 to 250 connections:

*For 50 to 250 connections, the system must meet the following requirements.*

- (i). A well capacity of 0.6 gallons per minute per connection must be provided.*
- (ii). A total storage capacity of 200 gallons per connection.*
- (iii). Each pump station or pressure plane shall have two or more pumps having a total capacity of 2.0 gallons per minute per connection. For systems which provide an elevated storage capacity of 200 gallons per connection, two service pumps with a minimum combined capacity of 0.6 gallons per minute per connection are required at each pump station or pressure plane. If only wells and elevated storage are provided, service pumps are not required.*
- (iv). An elevated storage capacity of 100 gallons per connection or a pressure tank capacity of 20 gallons per connection must be provided.*

For systems having over 250 connections:

*For more than 250 connections, the system must meet the following requirements.*

- (i). Two or more wells having a total capacity of 0.6 gallons per minute per connection must be provided. Where an interconnection is provided with another acceptable water system capable of supplying at least 0.35 gallons per minute for each connection in the combined system under emergency conditions, an additional well will not be required as long as the 0.6 gallons per minute per connection requirement is met for each system on an individual basis. Each water system must still meet the storage and pressure maintenance requirements on an individual basis unless the interconnection is permanently open; in this case, the systems' capacities will be rated as though a single system existed.*
- (ii). A total storage capacity of 200 gallons per connection must be provided.*
- (iii). Each pump station or pressure plane shall have two or more pumps that have a total capacity of 2.0 gallons per minute per connection or that have a total capacity of at least 1,000 gallons per minute and the ability to meet peak hourly demands with the largest pump out of service, whichever is less. For systems which provide an elevated storage capacity of 200 gallons per connection, two service pumps with a minimum combined capacity of 0.6 gallons per minute per connection are required*

- at each pump station or pressure plane. If only wells and elevated storage are provided, service pumps are not required.*
- (iv). *An elevated storage capacity of 100 gallons per connection or a pressure tank capacity of 20 gallons per connection must be provided. If pressure tanks are used, a maximum capacity of 30,000 gallons is required. An elevated storage capacity of 100 gallons per connection is required for systems with more than 2,500 connections. Systems with more than 50,000 connections which utilize multiple production plants may, with the executive director's approval, substitute additional ground storage capacity, service pumping capacity, and auxiliary power for elevated storage in excess of five million gallons. Pressure tank installations are not recommended for systems serving between 1,000 and 2,500 connections and serious consideration should be given to the provision of elevated storage.*
- (v). *Auxiliary power is required for systems which serve more than 250 connections and do not meet the elevated storage requirement. Sufficient auxiliary power must be provided to deliver a minimum of 0.35 gallons per minute per connection to the distribution systems in the event of the loss of normal power supply. Alternately, an emergency interconnection can be provided with another public water system that has auxiliary power and is able to supply at least 0.35 gallons per minute for each connection in the combined system.*

## **5.1 NEEDS IN SOURCES OF WATER**

The need for water sources is examined from the perspective of the individual entities as well as from the perspective of a regional group. In the following sections, the current number of connections is based on the most recent data obtained from the TWDB. The future estimated number of connections are based on a linear regression of the historical number of connections, also obtained from the TWDB. This new information has been incorporated into the updated regression estimates for each entity. Because of this, the numbers presented have changed slightly from those originally presented in the draft copy of this study. Please refer to Appendix G for more information.

### **5.1.1 INDIVIDUAL ENTITIES**

Generally, the design parameters for sources of water are identified in the excerpt from TAC 290 above. The general rule is that each system must have 0.6 gpm capacity per connection.

#### **5.1.1.1 CITY GROUP**

Water production needs for the cities of Shelby County are shown in Table 5-1. This table summarizes the current well capacity of each municipality based upon the most recent data available. The current need is based on the 0.6 gallon per minute per connection requirement as set forth in TAC 290 (relative excerpts above). Future needs are based on the 0.6 gpm per connection using the future connection projections for each municipality for the stated year.

City of Center - The term "well capacity" used in Table 5-1 is somewhat misleading when read in regard to Center, due to the fact that this city obtains all of its water from surface sources rather than from wells. In this case, the term is used to refer to amount of water available from its surface water treatment plant.

The most recent water system data as obtained from two Texas Department of Health reports dated September and October 1991 indicates that the city operates a two surface water treatment plants, one located on Pinkston Reservoir near the Aiken community and one located on Lake Center at Mill Creek. According to the Health Department reports, the Aiken facility has total treatment plant capacity of 3.158 MGD and the Mill Creek facility has a total plant capacity of 1.30 MGD, based on the clarifier as being the limiting factor. According to a plan submitted to the Texas Water Commission by Stokes & Associates in 1992, the Aiken Plant is rated at 1.7 MGD (based on a six hour detention time) with a maximum operating rate as high as 4.0 MGD if the raw water turbidity is low. The Stokes & Associates plan also rates that the Mill Creek Plant (which was out of production at the time of the plan) at approximately 0.68 MGD. These reports therefore give the City's combined plants a total plant capacity of either 4.458 MGD or 2.38 MGD respectively. Dividing these capacities by a 1,440 minute day yields capacities of 3,095 gpm and 1,653 gpm, respectively.

The most recent available information regarding Center indicates that the city had 2,259 total connections in 1991. Under the TAC requirements, this would entail a minimum water capacity of 1,355 gpm. In terms of historical demand, the highest number of connections for the city occurred in 1982-1983 with the total number of connections being 2,830 at that time. Under the TAC guidelines, this would require a total water capacity of 1,698 gpm. The above data indicates the city is presently operating in compliance with the current regulations.

The future water capacity requirements shown in Table 5-1 are based upon the projected number of connections. The future connection estimate was based upon a linear regression of past data for the city since 1971. Please note that Tyson Foods operates a facility in the city that currently consumes water at a rate of over 1 MGD (over 695 gallons per minute). Incorporating similar facilities into the city's distribution system in the future could radically affect the water city's total water consumption.

The TDH reports also show that the Aiken facility has three 2,000 gpm service pumps for a total service pump capacity of 6,000 gpm. The reports also show and that the Mill Creek facility has one 750 gpm service pump and one 1,100 gpm service pump, for a total service pump capacity of 1,860 gpm. This would give the City of Center a total service pump capacity of 7,860 gpm. According to the current TAC requirements, each pump station or pressure plane in a system with more than 250 connections must have a total capacity of 2.0 gallons per minute per connection or two or more pumps with a minimum capacity of 1,000 gpm and the ability to meet peak hourly demands with the largest pump out of service, whichever is less. The maximum daily usage at the plants, as referenced in the TDH reports, is 3.02 MGD at the Aiken facility and 4.02 MGD at the Mill Creek facility. This gives a combined total maximum daily usage of 7.04 MGD or 4,889 gpm. The total service pump capacity is 7,860 gpm, which indicates that the system currently is able to handle the peak demand.

City of Huxley - The term "well capacity" used in Table 5-1 may be misleading when read in regard to Huxley due to the fact that this City obtains all of its water from Toledo Bend Reservoir rather than from a well. In this case, the term is used to refer to the amount of water available from its surface water treatment plant.

The most recent available information regarding Huxley indicates that the City had 642 total connections in 1994. Under the TAC requirements, this would entail a minimum water capacity of 385 gpm. Huxley's Water Plant #1 is rated at a maximum capacity of 150 gpm while the new Water Plant #2 is rated at a maximum capacity of 300 gpm. With both plants in operation, the City has a production capacity of 450 gpm which satisfies the current requirements as set forth in TAC 290.45.

The future water capacity requirements are based upon the future projected number of connections for the City of Huxley. This future connection estimate is based upon a linear regression of past data for the City from 1977 to the present. These projections indicate that by the year 2000, the City's existing water plants will not be able to supply the required amount of water per connection as set forth in TAC 290.45.

City of Joaquin - Once again, the term "well capacity" may be misleading when read regarding Joaquin. The City does have two wells, but these are noted in the TNRCC inspection reports as being for fire use only. The City of Joaquin currently purchases its potable water from the City of Logansport, Louisiana via a six-inch water line. Therefore, the term "well capacity" as read in Table 5-1 is used to refer to the amount of water that is available to the City from the line.

The most recent available information regarding Joaquin indicates that the City had 520 total connections in 1997. Under the TAC requirements, this would entail a minimum water capacity of 312 gpm. The maximum recorded number of connections occurred in 1989 with 542 total connections in all, or a required capacity of 325 gpm. The most recent water system data as obtained from a Texas Department of Health report dated February 1991 indicates that the City operates two 600 gpm service pumps, giving the City a total production capacity of 1,200 gpm with both pumps running. The use of one 600 gpm pump satisfies the requirements as set forth in TAC 290.45 (as long as the amount of water supplied from Logansport remains adequate).

The future water capacity requirements are based upon the future projected number of connections for the City of Joaquin. This future connection estimate is based upon a linear regression of past data for the City from 1971 to 1997. These projections indicate that the operation of one 600 gpm service pump should be

adequate to provide the required amount well capacity up through the year 2030.

City of Tenaha - The most recent available information from the TWDB regarding Tenaha indicates that the City had 493 total connections in 1995. A phone call placed to the Mayor of Tenaha on July 8, 1997 revealed that the City served "approximately 600 connections" at that time. Under the TAC requirements, 600 connections would require a minimum water capacity of 360 gpm. Otherwise, the maximum recorded connections occurred in 1992 with 523 total connections or a required capacity of 314 gpm. The most recent water system data as obtained from a Texas Water Commission report dated June 1993 indicates that the City operates a total of three wells. Well #1 is equipped with a vertical turbine pump tested at 90 gpm located near the City's elevated tank and listed as being "stand-by only". Well #2 is equipped with a vertical turbine pump tested at 190 gpm and located near the junction of Hwy 96 and Hwy 84. Well #3 is equipped with a submersible pump tested at 280 gpm and located on Main Street south of US Hwy 84. This gives the City a total production capability of 560 gpm with all the wells operating, or 470 gpm with only Well #2 and #3 in operation. The system is served by two 600 gpm service pumps. This data indicates that the City's current system meets both the present and historical requirements as set forth in TAC 290.45.

The future water capacity requirements are based upon the projected number of connections for the City of Tenaha. The future connection estimate is based upon a linear regression of past data for the City from 1971 to 1997. These projections indicate that the current well capacity of 470 gpm (i.e. with Well #1 on stand-by status) should prove sufficient to fulfill the requirements set forth in TAC 290 up through the year 2050.

City of Timpson - The most recent available information regarding Timpson indicates that the City had 548 total connections in 1996. Under the TAC requirements, this would entail a minimum water capacity of 329 gpm. The maximum recorded connections occurred in 1981 and 1982 with 657 total connections or a required capacity of 394 gpm. The most recent analysis of the water system data as obtained from a Texas Department of Health report dated October 1991 indicates that the City operates a total of two wells. Both wells are equipped with vertical turbine pumps and are located behind the Timpson City Hall. Well #2 is tested at 300 gpm and Well #3 is tested at 275 gpm, giving the City a total production capability of 575 gpm with both wells operating. The system is also served by two 600 gpm service pumps. The above data indicates that the City's current system meets both the present and historical requirements as set forth in TAC 290.45. However, it should be noted that the City's water wells are located in very close proximity to one another. The nearness of the wells greatly increases the possibility of cross contamination and the effect of the drawdown.

The future water capacity requirements are based upon the future projected number of connections for the City of Timpson. This future connection estimate is based upon a linear regression of past data for the City from 1971 to 1996. These projections indicate that the City's existing water wells should be able to supply the required amount of water per connection as set forth in TAC 290.45 until the year 2050 (assuming no loss of capacity occurs in the wells).

**TABLE 5-1 NEEDED WATER SOURCES**  
Current and Projected Needs for the City Group

PARAMETER	YEAR	CENTER	HUXLEY	JOAQUIN	TENAHA	TIMPSON
Required Well Capacity (gpm)	Current Actual Capacity *	AikenWTP=3,095 Mill Crk.=1,653	450 **	600 ***	560****	575
	Current Required Capacity*	1,584	385	312	360	329
	2000	1,607	443	341	349	363
	2010	1,751	525	415	391	381
	2020	1,894	607	488	431	398
	2030	2,038	689	562	473	416
	2040	2,181	771	636	514	434
	2050	2,325	853	710	550	452
Required Service Pump Capacity (gpm)	Current Actual Capacity*	7,860	1,200	1,200	1,200	1,200
	Current Required Capacity	1,000*****	1,000*****	1,000*****	1,000*****	1,000*****
	2000	1,000*****	1,000*****	1,000*****	1,000*****	1,000*****
	2010	1,000*****	1,000*****	1,000*****	1,000*****	1,000*****
	2020	1,000*****	1,000*****	1,000*****	1,000*****	1,000*****
	2030	1,000*****	1,000*****	1,000*****	1,000*****	1,000*****
	2040	1,000*****	1,000*****	1,000*****	1,000*****	1,000*****
	2050	1,000*****	1,000*****	1,000*****	1,000*****	1,000*****

- \* Based on the most recent information available.
- \*\* This water is not drawn from a well but rather comes from Huxley's Surface Water Treatment Plant. This value is based on the maximum capacity of the city's plants, assuming that both are in operation.
- \*\*\* Please note that the City of Joaquin does not use its wells for water supply but rather purchases its water from the City of Logansport, Louisiana. This value represents the pump capacity of the system as tied to waterline.
- \*\*\*\* This assumes all three city wells are in operation. If Well #1 is retained on standby, Well #2 and Well #3 only produce a total of 470 gpm.
- \*\*\*\*\* Must have two or more pumps with a minimum capacity of 1,000 gpm and the ability to meet peak hourly demands with the largest pump out of service.

**5.1.1.2 WESTERN GROUP**

Water production needs for the water supplying entities of the Western Group of Shelby County (as classified in Section 3) are shown in Table 5-2. This table summarizes the current well capacity of each municipality based upon the most recent available data. The current need is based on the 0.6 gallon per minute per connection requirement as set forth in TAC 290 (relative excerpts above). Future needs are based the 0.6 gpm per connection using the future connection projections for each municipality for the stated year.

Buena Vista WSC - The Buena Vista WSC went into operation in early to mid 1994. Limited water production began around March 1994 and the first water bills were issued in May of 1994. As such, no

historical data was available this corporation. At the time of the writing of the draft study, review of the corporation's water reports and conversations with (then) President Wayne Harris indicated that (1) little growth was expected for the system in the future and (2) the number of connections for the WSC in 1995 was 189. However, the most recent information obtained from the TWDB regarding Buena Vista provided connection data for the Corporation for 1994, 1995, and 1996. For the purposes of this report, the average total growth rate of the other county water entities was used as a factor to estimate the future growth of the Buena Vista WSC. These projected values were used to determine the TAC 290.45 requirements shown in Table 5-2.

Huber WSC - The most recent available information regarding the Huber Rural Water Supply Corporation indicates that the corporation served 123 total connections in 1993. A telephone call to Mr. Billy Askins, the operator of the system, revealed that the Huber WSC served 133 connections as of July 1997. Under the TAC requirements, 133 connections would require a minimum water capacity of 80 gpm. The corporation initially operated two wells; however, Well #1 went dry in August 1993 leaving only Well #2 in production. Well #2 only produces water at a capacity of 38 gpm. The above data indicates that the corporation's current system does not meet the present requirements as set forth in TAC 290.45. However, it should be noted that Shelby County is in the process of securing a TCDP grant for the installation of a new 100 gpm water well in Huber.

The future analysis is based on the assumption that the new 100 gpm well is installed and that the currently existing Well #2 continues to operate at its present capacity thus giving the corporation a total well capacity of 138 gpm. The future water capacity requirements are based upon the future projected number of connections for Huber and the future connection estimate is based upon a linear regression of past data for the corporation from 1972 to 1997. These projections indicate that the corporation's water wells will be able to match the required amount of water per connection as set forth in TAC 290.45 through the Year 2020, after which additional sources of water will be needed.

The most recent available information indicates that the Huber WSC water plant currently has a total service pump capacity of 300 gpm. According to TAC 290, a service pump capacity of at least 266 gpm is required for the present number of connections. However, the projections of future growth indicate that additional service pump capacity will be required after the year 2000.

Sand Hills WSC - The most recent available information obtained from the TWDB regarding the Sand Hills Water Supply Corporation indicates that the corporation served 387 total connections in 1996. Under the TAC requirements, this would entail a minimum water capacity of 232 gpm. The most recent analysis of the water system data as obtained from a Texas Department of Health report dated March 1991 indicates that the corporation operates one well. The well is equipped with a submersible pump and has a rated water capacity of 75 gpm, which is not enough to place the system into compliance. It should also be noted that the Health Department report indicates that there are pumps that transfer water from the City of Center to the Sand Hills distribution system as needed.

The system is also served by one 250 gpm and two 300 gpm service pumps, which supplies 850 gpm of pump capacity. The present requirements as set forth in TAC 290.45 require a minimum of 774 gpm of pump capacity. According to the future projections, these pumps will no longer be able to keep the facility in compliance past the Year 2002.

Tennessee WSC - The most recent available information obtained from the TWDB regarding the Tennessee Water Supply Corporation indicates that the corporation served 125 total connections in 1993. In addition, a telephone call placed to Mr. Billy Askins, the system operator, revealed that the system served 121 connections as of July 1997. Under the TAC requirements, this would entail a minimum water capacity of 73 gpm. The most recent analysis of the water system data as obtained from a Texas Department of Health report dated November 1990 indicates that the corporation operates one well. The well is equipped with a submersible pump and has a rated water capacity of 75 gpm and a tested capacity of 80 gpm. The future water capacity requirements are based upon the future projected number of connections for Tennessee WSC and the future connection estimate is based upon a linear regression of past data for the corporation from 1971 to 1997. These projections indicate that the corporation's water wells will be able to match the required amount of water per connection as set forth in TAC 290.45 until the shortly after the Year 2000, when additional sources of water will be needed.

The system is also served by two 150 gpm service pumps, which gives the facility 300 gpm of total capacity while the present requirements as set forth in TAC 290.45 requires a minimum service pump capacity of only 242 gpm for the current number of connections. However, future projections indicate that the pumps will be out of compliance by the year 2015, and will then need to be upgraded or replaced with larger ones.

Timpson Rural WSC - The most recent available information regarding the Timpson Rural Water Supply Corporation indicates that the corporation served 565 total connections in 1996. In addition, a telephone call to Mr. Billy Askins, the system operator, revealed that the system serviced 574 connections as of July 1997. Under the TAC requirements, this would entail a minimum water capacity of 344 gpm. The most recent analysis of the water system data as obtained from a Texas Department of Health report dated November 1991 indicates that the corporation operates three separate water plants. These plants are summarized below:

- Plant #1 has two water wells. Well #1 has a rated capacity of 120 gpm and a tested capacity of 125 gpm. Well #1A has a rated capacity of 160 gpm and a tested capacity of 160 gpm. Both wells are equipped with a submersible pump. The plant is also equipped with two 250 gpm service pumps.
- Plant #2 also has two water wells. Well #2 has a rated capacity of 90 gpm and a tested capacity of 75 gpm. Well #2A has a rated capacity of 60 gpm and a tested capacity of 60 gpm. Both wells are equipped with a submersible pump. The plant is also equipped with two 90 gpm service pumps.
- Plant #3 is a booster station with two 30 gpm service pumps. This plant is bypassed the majority of the year.
- Plant #4 has only one water well and is not currently listed as being in service. Well #3 has a rated capacity of 30 gpm and a tested capacity of 25 gpm. The well is equipped with a submersible pump. The plant is also equipped with two 50 gpm service pumps.

This gives the Timpson RWSC a combined total well capacity of 445 gpm with all plants operating. The above data indicates that the corporation's current system meets the present well requirements as set forth in TAC 290.45. The future water capacity requirements are based upon the projected number of connections for Timpson RWSC and the future connection estimate is based upon a linear regression of past data for the corporation from 1970 to 1997. These projections indicate that with all the plants in use, the corporation's water wells will not be able to match the required amount of water per connection after the Year 2005, necessitating the development of additional sources of water.

The above information regarding the corporation indicates that the corporation has a total service pump capacity of 840 gpm. The current TAC requirements state that the facility needs at least 1,000 gpm of capacity and the ability to meet peak hourly demands with the largest pump out of service.

**TABLE 5-2 NEEDED WATER SOURCES**  
Current and Projected Needs for the Eastern Group

PARAMETER	YEAR	BUENA VISTA	HUBER	SAND HILLS	TENNESSEE	TIMPSON RURAL
Required Well Capacity (gpm)	Current Actual Capacity *	-?-	38	75***	80	445
	Current Required Capacity	118	80	232	69	344
	2000	207	91	248	77	412
	2010	238	110	298	86	502
	2020	270	128	348	94	593
	2030	301	146	398	103	683
	2040	326	164	448	112	773
	2050	357	183	497	121	864
Required Service Pump Capacity (gpm)	Current Actual Capacity *	-?-	300	850	300	840
	Current Required Capacity	392	266	774	242	1,000**
	2000	414	304	828	256	1,000**
	2010	476	366	994	286	1,000**
	2020	540	426	1,000**	314	1,000**
	2030	602	488	1,000**	344	1,000**
	2040	652	548	1,000**	372	1,000**
	2050	714	610	1,000**	402	1,000**

\* Based on the most recent data.

\*\* Requires two or more pumps with a total capacity of 1,000 gpm and the ability to meet peak hourly demands with the largest pump out of service.

\*\*\* In addition to its own well, this facility also acquires water from the City of Center.

### 5.1.1.3 CENTRAL GROUP

**Choice WSC** - The most recent available information regarding the Choice Water Supply Corporation indicates that the corporation served 300 total connections in 1995. Under the TAC requirements, this would entail a minimum water capacity of 180 gpm. The most recent analysis of the water system data as obtained from a TNRCC Public Water Supply Regulatory Program report dated October 1994 indicates that the corporation currently operates two water plants. One plant is located near the Jericho community and is equipped with a 88 gpm water well. The other plant is located near the Neuville community and is equipped with a 223 gpm water well. This gives the Choice WSC a total well capacity of 311 gpm, which is well in excess of the 180 gpm required. The future water capacity requirements shown in Table 5-3 are based upon the projected number of connections for the corporation through the year 2050. These indicate that the corporation's current well capacity will be exceeded by the year 2017, at which time addition water capacity will be needed. It should also be noted that a link exists from the Choice distribution system to the City of Center, so that water could be obtained from that source if necessary.



In addition, the TNRCC report indicates the pressure plane served by the Jericho Plant has currently has 120 connections, which requires a total service pump capacity of 240 gpm under the TAC requirements. The report also indicates that the Jericho Plant is equipped with two 170 gpm service pumps, giving it a total service pump capacity of 340 gpm, which is well in excess of the minimum required. The Neuville Plant has no service pumps listed, but is equipped with a 150,000 gallon standpipe and serves 180 connections. The TAC requirements for systems serving less than 250 connections states that no service pumps are required if only wells and elevated storage are supplied. Therefore, it appears that the system is currently in compliance with the TNRCC regulations. Additionally, since only 120 of the 300 total connections (approximately 40%) are served by a plant with required service pumps, the future projections shown in Table 5-3 reflect that proportion of the total connections. These projections indicate additional pump capacity will be needed by the year 2007.

East Lamar WSC - The most recent available information regarding the East Lamar Water Supply Corporation indicates that the corporation served 270 total connections in 1997. Under the TAC requirements, this would entail a minimum water capacity of 162 gpm. The most recent analysis of the water system data as obtained from a Texas Department of Health Report dated February 1991 indicates that the corporation operates two water plants. Both plants are equipped with water wells that each have a tested capacity of 100 gpm, giving the system a combined well capacity of 200 gpm. Both wells are equipped with submersible pumps. The above data indicates that the corporation's current system generally meets the present requirements set forth in TAC 290.45.

The future water capacity requirements are based upon the future projected number of connections for the East Lamar WSC and the future connection estimate is based upon a linear regression of past data for the corporation from 1970 to 1997. These projections indicate that the corporation's water wells will not be able to match the required amount of water per connection as set forth in TAC 290.45 past the year 2000. It should also be noted that a link exists from the East Lamar distribution system to the City of Center, so that water could be obtained from that source if necessary.

In addition, Plant #1 is equipped with two 200 gpm service pumps and Plant #2 is equipped with two 165 gpm service pumps, giving the facility a total service pump capacity of 730 gpm. Under TAC requirements, the current number of connections requires only 540 gpm of service pump capacity, indicating that the facility is currently in compliance with the TNRCC regulations. The future projections indicate that the pumps will need to be upgraded by the year 2007 to meet future growth.

Flat Fork WSC - The most recent available information regarding the Flat Fork Water Supply Corporation indicates that the corporation served 229 total connections in 1995. Under the TAC requirements, this would entail a minimum water capacity of 137 gpm. The most recent analysis of the water system data as obtained from a Texas Department of Health report dated February 1991 indicates that the corporation operates two wells. Well #1 has a rated capacity of 125 gpm and Well #2 has a rated capacity of 100 gpm. Both wells are equipped with submersible pumps and have a total tested capacity of 220 gpm. The above data indicates that the corporation's current system meets the present requirements as set forth in TAC 290.45. The future water capacity requirements are based upon the future projected number of connections for Flat Fork and the future connection estimate is based upon a linear regression of past data for the corporation from 1970 to 1995. These projections indicate that the corporation's water wells will be able to match the required amount of water per connection as set forth in TAC 290.45 until the year 2018, after which additional sources of water will be needed.

The system is also served by two 320 gpm service pumps, giving the facility a combined service pump capacity of 640 gpm. The TAC 290 requires only 458 gpm for the current number of connections. The future projections indicate that the pumps will need to be upgraded by the year 2009 to keep up with growth.

Warr WSC - The most recent available information regarding the Warr Water System indicates that the corporation served 31 total connections in 1996. Under the TAC requirements, this would entail a minimum water capacity of 46.5 gpm. The maximum recorded connections for the system occurred in during the 1980's with 36 total connections or a required capacity of 54 gpm. The most recent analysis of the water system data as obtained from a Texas Department of Health report dated August 1991 indicates that the system operates two water plants. Plant # 1 has one water well with a rated capacity of 20 gpm and a test capacity of 18 gpm. Plant #2 has one well with a rated capacity of 25 gpm and a tested capacity of 24 gallons per minute. Both wells are equipped with submersible pumps and have a combined capacity 42

gpm. The Warr system currently has less than 50 connections. This makes the system qualified to operate without ground storage or service pumps. The system is now operating with pressure tanks only, as detailed in TAC 290 (see relevant excerpt at the beginning of Section 5, above). The question of storage and pressure tanks will be further addressed in Section 5.2.1.3 below.

The above data indicates that the system's current set-up has a maximum well capacity of 42 gpm. Under the requirements set forth in TAC 290.45, at least 46.5 gpm are required for the system's current number of connections. Therefore, the system is currently in need of expanded well capacity. However, it should also be noted that if the system had ground storage and service pump capacity, the well capacity requirement would drop from 1.5 gallons per connection to 0.6 gallons per connection. This would require a well capacity of only 18.6 gpm for the system's current number of connections. Therefore, bringing the system into compliance with present requirements would most likely be a question of pricing the cost of installing a new well (or similar source of water) versus the cost of installing service pump and ground storage capacity. Future growth would figure prominently into this analysis.

The future water capacity requirements are based upon the future projected number of connections for the Warr Water System. The future connection estimate is based upon a linear regression of past data for the system from 1976 to 1996. These projections are based on the assumption that development within the service area that is served by the system will continue to grow at the same rate that it has over the past two decades. The projections indicate that total number of connections served will exceed 50 by the year 2020. As noted above, systems having more than 50 connections are required to have service pump and storage capacity. This will drop the overall all well capacity requirements. Assuming that the system is outfitted with storage and service pump capacities, the current well capacity of 42 gpm will be adequate to serve the system past the year 2050.

**TABLE 5-3 NEEDED WATER SOURCES**  
Current and Projected Needs for the Central Group

PARAMETER	YEAR	CHOICE	EAST LAMAR	FLAT FORK	WARR
Required Well Capacity (gpm)	Current Actual Capacity *	311	200	220	42
	Currently Required Capacity	180	270	137	47
	2000	212	315	161	60
	2010	269	384	194	69
	2020	326	452	226	31
	2030	383	521	259	35
	2040	440	590	292	38
	2050	498	659	325	41
Required Service Pump Capacity (gpm)	Current Actual Capacity (gpm)	340	730	640	N/A
	Required Actual Capacity (gpm)	240	540	458	62
	2000	282	630	536	80
	2010	358	768	646	92
	2020	435	904	754	104
	2030	511	1,000**	864	116
	2040	587	1,000**	972	126
	2050	664	1,000**	1,000**	138

\* Based on the most recent data available.

\*\* Must have two or more pumps with a minimum capacity of 1,000 gpm and the ability to meet peak hourly demands with the largest pump out of service.

#### 5.1.1.4 EASTERN GROUP

**Five Way WSC** - The most recent available information regarding the Five Way Water Supply Corporation indicates that the corporation served 416 total connections in 1995. Under the TAC requirements, this would entail a minimum water well capacity of 250 gpm. The most recent analysis of the water system data as obtained from a Texas Water Commission report (dated September 1992) indicates that the corporation operates three water plants: Plant #1 has a rated well capacity of 88 gpm and is equipped with two 125 gpm service pumps; Plant #2 has a rated well capacity of 90 gpm and is equipped with two 100 gpm service pumps; and Plant #3 has a rated well capacity of 90 gpm and is equipped with two 250 gpm service pumps. The combined well capacity of the entire system is 268 gpm, which is in excess of the minimum amount required. From this data, it appears that the corporation's current system generally meets the requirements of TAC 290.45. It should be noted that a link also exists between the Five Way WSC distribution system to the City of Center, which would allow water to be purchased from that source if necessary.

The future water capacity requirements are based upon the future projected number of connections for Five

Way WSC and the future connection estimate is based upon a linear regression of past data for the corporation from 1970 to 1995. These projections indicate that the corporation's water wells will not be able to match the required amount of water per connection as set forth in TAC 290.45 past the year 2000, after which additional sources of water will be needed. The total service pump capacity for the corporation is 950 gpm. Current TAC regulations require only 832 gpm for the corporation's number of connections. However, increasing the number of connections by 59 will require the pumps to be upgraded.

McClelland WSC - The most recent available information regarding the McClelland Water Supply Corporation indicates that the corporation served 497 total connections in 1996. Under the TAC requirements, this would entail a minimum water capacity of 298 gpm. The most recent analysis of the water system data as obtained from a Texas Water Commission report (dated September 1992) indicates that the corporation operates one water plant with two wells. Well #1 is equipped with a submersible pump and has a rated water capacity of 150 gpm. Well #2 is also equipped with a submersible pump and has a rated water capacity of 190 gpm. The system has a total well capacity of 340 gpm and is served by three 290 gpm service pumps. The above data indicates that the corporation's system currently does not meet the requirements set forth in TAC 290.45.

The future water capacity requirements are based upon the future projected number of connections for McClelland WSC and the future connection estimate is based upon a linear regression of past data for the corporation from 1970 to 1996. The projections indicate that the corporation's water wells will be able to match the required amount of water per connection as set forth in TAC 290.45 until the year 2010, assuming no degeneration of well quality occurs. After this occurs, additional sources of water will be needed. The total service pump capacity of the corporation at the present time is 870 gpm. The required capacity for the current number of connections is 994 gpm.

Paxton WSC - The most recent available information regarding the Paxton Water Supply Corporation indicates that the corporation served 189 total connections in 1995, which requires a minimum water capacity of 113 gpm under the current TAC requirements. The most recent analysis of the water system data as obtained from a Texas Department of Health report dated July 1991 indicates that the corporation operates one well that is equipped with a submersible pump and has a rated water capacity of 90 gpm and a tested capacity of 80 gpm. The well alone does not supply enough water to meet the current requirements; however, the corporation is equipped with a booster plant that can deliver water from the City of Joaquin.

The corporation's distribution system is currently served by two 200 gpm service pumps and the booster station that delivers water from the City of Joaquin is also equipped with two 125 gpm service pumps. Therefore, the system has a total service pump capacity of 650 gpm at the present time. The TAC regulations for a system of this size requires a capacity of at least 378 gpm. The above data indicates that the corporation's current system meets the present requirements as set forth in TAC 290.45 with both the plant and booster station in operation.

The future water capacity requirements are based upon the projected number of connections for the Paxton WSC. The future connection estimate is based upon a linear regression of past data for the corporation from 1969 to 1995. These projections indicate that the corporation's water well alone does not have enough capacity to supply the required amount of water per connection as set forth in TAC 290.45, which calls for the usage of additional sources of water. At the present time, this additional water is purchased from the City of Joaquin, who in turn purchases it from the City of Logansport, Louisiana. Any factor affecting the availability or quality of water from either of these sources could have an impact on the Paxton WSC.

Shelbyville WSC - The most recent available information regarding the Shelbyville Water Supply Corporation indicates that the corporation served 262 total connections in 1995. Under the TAC requirements, this would entail a minimum water capacity of 157 gpm. The maximum recorded connections for the city occurred in 1988 with 272 total connections or a required capacity of 163 gpm. The most recent analysis of the water system data as obtained from a Texas Water Commission report dated September 1992 indicates that the corporation operates one well. The well is located in Shelbyville and is equipped with a submersible pump. The well has a tested capacity of 200 gpm. The water plant is also served by two 300 gpm service pumps. The above data indicates that the corporation's current system meets both the present and historical requirements as per connection as detailed in TAC 290.45.

The future water capacity requirements are based upon the future projected number of connections for the

corporation and the future connection estimate is based upon a linear regression of past data for the corporation from 1970 to 1995. These projections indicate that the corporation's water wells will not be able to match the required amount of water per connection as set forth in TAC 290.45 past the year 2000, after which additional wells or other sources of water will be needed. It should also be noted that a link exists from the Shelbyville distribution system to the City of Center, so that water could be obtained from that source if necessary.

The total service pump capacity of the corporation is 600 gpm. Under the current TAC requirements, a system with 266 connections requires a capacity of only 532 gpm, indicating that the current system is in compliance with the requirements. However, the addition of 34 more connections will require an upgrade of the pumps. The future projections indicate that this could occur before the year 2000.

<b>TABLE 5-4 NEEDED WATER SOURCES</b>					
Current and Projected Needs for the Eastern Group					
PARAMETER	YEAR	FIVE WAY	McCLELLAND	PAXTON	SHELBYVILLE
Required Well Capacity (gpm)	Current Actual Capacity *	268	340	80 + Purchased from Joaquin	200
	Currently Required Capacity	250	298	113	157
	2000	302	285	147	191
	2010	361	340	166	227
	2020	419	395	186	263
	2030	478	450	205	299
	2040	537	505	225	335
	2050	596	559	244	371
Service Pump Capacity (gpm)	Current Actual Capacity*	950	870	650	600
	Currently Required Capacity	832	994	378	524
	2000	1,000**	950	490	636
	2010	1,000**	1,000**	554	756
	2020	1,000**	1,000**	620	876
	2030	1,000**	1,000**	684	998
	2040	1,000**	1,000**	750	1,000**
	2050	1,000**	1,000**	814	1,000**

\* Based on the most recent data available.

\*\* Must have two or more pumps with a minimum capacity of 1,000 gpm and the ability to meet peak hourly demands with the largest pump out of service.

### 5.1.2 REGIONAL ENTITY

A regional entity would be required to best address the water production needs in the most economical and beneficial manner. With a surface water option, the minimum cost-effective sizes of treatment plants

becomes a major consideration. In addition, great lengths of pipe would be required to bring water from a surface water source. Significant economies of scale can be recognized by a regionally operated system.

## **5.2 NEEDS IN ELEVATED, STORAGE, AND PUMPING**

The TNRCC has general guidelines as outlined above in section 5.0. These parameters must be considered in conjunction with a consideration of fire flows, actual flow conditions, and computer modeling of the systems. However, they do serve a valid function of providing a rule against which each system's existing capacities can be measured.

The needs of each system may be met either through facilities constructed by individual entities or through those constructed by the regional system. Because of this dual possibility, this report looks at both the individual needs as well as the overall requirements for the regional system.

### **5.2.1 INDIVIDUAL ENTITIES**

#### **5.2.1.1 CITY GROUP**

City of Center - The most recent available information regarding Center indicates that the city served 2,640 total connections in 1997. The most recent data obtained from two Texas Department of Health reports (dated September and October 1991) indicates that the city currently has a total of 1,436,000 gallons of ground storage capacity at its water plants, with an additional 1,000,000 gallons of elevated storage. With the present number of connections, the system is required to have at least 451,800 gallons of total storage capacity and 225,900 gallons of elevated tank capacity. From this information, it appears that the system is currently well in compliance with the requirements set forth in TAC 290.45.

The future water storage and pressure tank capacity requirements are based upon the projected number of connections for the City of Center. The future connection estimate is based upon a linear regression of past data for the system from 1971 to 1997. The projections and accompanying storage and elevated tank requirements are shown in Table 5-5.

City of Huxley - The most recent available information regarding Huxley indicates that the city served 642 total connections in 1997. The most recent data obtained from a Texas Department of Health report (dated May 1991) indicates that the city currently has 130,000 gallons of ground storage capacity and 76,000 gallons of elevated storage. With the present number of connections, the system is required to have at least 128,400 gallons of total storage capacity and 64,200 gallons of elevated tank capacity. From this information, it appears that the system is currently in compliance with the requirements set forth in TAC 290.45.

The future water storage and pressure tank capacity requirements are based upon the projected number of connections for the City of Huxley. The future connection estimate is based upon a linear regression of past data for the system from 1977 to 1997. The projections and accompanying storage and pressure tank requirements are shown in Table 5-5.

City of Joaquin The most recent available information regarding Joaquin indicates that the city served 520 total connections in 1997. The most recent data obtained from a Texas Department of Health report (dated March 1991) indicates that the city currently has 80,000 gallons of ground storage capacity and 50,000 gallons of elevated storage. With the present number of connections, the system is required to have at least 104,000 gallons of total storage capacity and 52,000 gallons of elevated tank capacity. From this information, it appears that the system is currently in compliance with the requirements set forth in TAC 290.45 and needs additional elevated storage or pressure tanks capacity.

The future water storage requirements are based upon the projected number of connections for the City of Joaquin. The future connection estimate is based upon a linear regression of past data for the system from 1955 to 1997. The projections and accompanying storage and elevated tank requirements are shown in Table 5-5.

City of Tenaha - The most recent available information regarding Tenaha indicates that the city served 600 total connections in 1997. The most recent data obtained from a Texas Water Commission report (dated

June 1993) indicates that the city currently has 80,000 gallons of ground storage capacity and 50,000 gallons of elevated storage. With the present number of connections, the system is required to have at least 120,000 gallons of total storage capacity and 60,000 gallons of elevated tank capacity. From this information, it appears that the system is currently in compliance with the requirements set forth in TAC 290.45.

The future water storage and pressure tank capacity requirements are based upon the projected number of connections for the City of Tenaha. The future connection estimate is based upon a linear regression of past data for the system from 1955 to 1997. The projections and accompanying storage and pressure tank requirements are shown in Table 5-5.

City of Timpson - The most recent available information regarding Timpson indicates that the city served 548 total connections in 1996. The most recent data obtained from a Texas Department of Health report (dated October 1991) indicates that the city currently has 50,000 gallons of ground storage capacity and 70,000 gallons of elevated storage. With the present number of connections, the system is required to have at least 109,600 gallons of total storage capacity and 54,800 gallons of elevated tank capacity. From this information, it appears that the system is currently deficient in regard to the elevated tank capacity requirements set forth in TAC 290.45.

The future water storage and pressure tank capacity requirements are based upon the projected number of connections for the City of Timpson. The future connection estimate is based upon a linear regression of past data for the system from 1955 to 1996. The projections and accompanying storage and pressure tank requirements are shown in Table 5-5.

**TABLE 5-5 NEEDS IN ELEVATED STORAGE AND TOTAL STORAGE**  
Current and Projected Needs for the City Group

PARAMETER	YEAR	CENTER	HUXLEY	JOAQUIN	TENAHA	TIMPSON
Required Elevated Tank Capacity (gallons)	Current Actual Capacity *	1,000,000	76,000**	50,000	50,000	70,000
	Current Required Capacity	264,000	64,200	52,000	60,000	54,800
	2000	267,900	73,800	56,900	58,200	60,500
	2010	291,800	87,500	69,100	65,100	63,500
	2020	315,700	101,200	81,400	71,900	66,400
	2030	339,600	114,800	93,700	78,800	69,300
	2040	363,500	128,500	106,000	85,700	72,300
	2050	387,500	142,200	118,300	92,500	75,200
Required Total Storage Capacity (gallons)	Current Actual Capacity*	2,436,000	200,000	130,000	130,000	120,000
	Current Required Capacity	528,000	128,400	104,000	120,000	109,600
	2000	535,800	147,600	113,800	116,400	121,000
	2010	583,600	175,000	138,200	130,200	127,000
	2020	631,400	202,400	162,800	143,800	132,800
	2030	679,200	229,600	187,400	157,600	138,600
	2040	729,000	257,000	212,000	171,400	144,600
	2050	775,000	284,400	236,600	185,000	150,400

\* Based on the most recent information available.

\*\* Standpipe.

### 5.2.1.2 WESTERN GROUP

**Buena Vista WSC** - The Buena Vista WSC went into operation in 1994. Due to this, practically no historical data was available for the corporation during the writing of the draft report. Review of corporation's water reports for 1994 and conversations with Mr. Wayne Harris, President of the Buena Vista WSC, revealed that the corporation was equipped with a 100,000 gallon standpipe and currently serves 189 connections. For the purposes of this analysis, the average total growth rate of the other county water entities was used in the draft report as a factor to estimate the future growth of the Buena Vista WSC. However, historical data up to 1996 was available by the time of the writing of the final. That information has been used herein to provide a more detailed analysis. The projected values were used to determine the TAC 290.45 requirements shown in Table 5-6. According to these projections, the corporation's standpipe should provide adequate storage through the year 2050.

**Huber WSC** - The most recent available information regarding the Huber WSC indicates that the corporation served 133 total connections in 1997. The most recent data obtained from a Texas Department of Health report (dated November 1991) indicates that the corporation currently has only 15,000 gallons of ground storage capacity and 1,500 gallons of pressure tank capacity. With the present number of connections, the system is required to have at least 26,600 gallons of total storage capacity and 2,660 gallons of total pressure tank capacity. From this information, it appears that the system is currently deficient in regard to the requirements set forth in TAC 290.45 and needs additional ground storage, pressure and/or elevated



storage tanks.

The future water storage and pressure tank capacity requirements are based upon the future projected number of connections for the Huber WSC. The future connection estimate is based upon a linear regression of past data for the system from 1972 to 1997. The projections and accompanying storage and pressure tank requirements are shown in Table 5-6.

Sand Hills WSC - The most recent available information regarding the Sand Hills WSC indicates that the corporation served 387 total connections in 1997. The most recent analysis of the water system data obtained from a Texas Department of Health Report (dated February 1991) indicates that the system currently operates one water plant that is equipped with a 50,000 gallon ground storage tank and 3,500 gallon pressure tank. With the present number of connections, the system is required to have at least 77,400 gallons of total storage capacity and 7,740 gallons of total pressure tank capacity. From this information, it appears that the system is not currently operating within the requirements for pressure tank capacity as set forth in TAC 290.45. The future water storage and pressure tank capacity requirements shown in Table 5-6 are based upon the future projected number of connections for the Sand Hills WSC. The future connection estimate is based upon a linear regression of past data for the system from 1971 to 1997.

Tennessee WSC - The most recent available information regarding the Tennessee WSC system indicates that the corporation served 121 total connections in 1997. The most recent analysis of the water system data obtained from a Texas Department of Health report (dated February 1991) indicates that the system currently operates one water plant that is equipped with two 44,000 gallon ground storage tanks, a 1,900 gallon pressure tank and a 3,300 gallon pressure tank. This corresponds to 88,000 gallons of combined ground storage capacity and 5,200 gallons of combined pressure tank capacity for the total system. With the present number of connections, the system is required to have at least 24,200 gallons of total storage capacity and 2,420 gallons of total pressure tank capacity. From this information, it appears that the system is currently operating within the requirements for pressure tank capacity as set forth in TAC 290.45.

The future water storage and pressure tank capacity requirements are based upon the future projected number of connections for the Tennessee WSC. The future connection estimate is based upon a linear regression of past data for the system from 1970 to 1997. The projections indicate that the system's total storage and pressure tank capacity should remain in compliance with TAC 290.45 requirements through the year 2050.

Timpson Rural WSC - The most recent available information regarding the Timpson Rural WSC indicates that the corporation served 574 total connections in 1997. The most recent analysis of the water system data obtained from a Texas Department of Health report (dated November 1991) indicates that the system currently operates three water plants and one booster plant: Plant #1 is equipped with 50,000 gallon ground storage tank and a 5,000 gallon pressure tank; Plant #2 is equipped with a 20,000 gallon ground storage tank and a 2,000 gallon pressure tank; Plant #3 is a booster plant is equipped with 5,000 gallon ground storage tank and 500 gallon pressure tank; and Plant #4 is equipped with 10,000 gallon ground storage tank and 1,000 gallon pressure tank. Booster Plant #3 is bypassed for the majority of the year. This corresponds to 80,000 gallons of combined ground storage capacity (85,000 gallons with the booster plant in operation) and 8,000 gallons of combined pressure tank capacity (8,500 gallons with the booster plant in operation) for the entire system. With the present number of connections, the system is required to have at least 114,800 gallons of total storage capacity and 11,480 gallons of total pressure tank capacity. From this information, it appears that the system is not currently operating within the requirements for pressure tank capacity as set forth in TAC 290.45. More storage and pressure tank and/or elevated storage is needed.

The future water storage and pressure tank capacity requirements are based upon the future projected number of connections for the East Lamar WSC. The future connection estimate is based upon a linear regression of past data for the system from 1970 to 1997. The total required capacities are shown in Table 5-6.

**TABLE 5-6 NEEDS IN ELEVATED STORAGE AND TOTAL STORAGE**  
Current and Projected Needs for the Western Group

PARAMETER	YEAR	BUENA VISTA	HUBER	SAND HILLS	TENNESSEE	TIMPSON RURAL
Required Pressure Tank Capacity (gallons)	Current Actual Capacity*	N/A	1,500	3,500	5,200	8,500
	Current Required Capacity	N/A	2,660	7,740	2,420	11,480
	2000	N/A	3,040	8,280	2,560	13,720
	2010	N/A	3,660	9,940	2,860	16,740
	2020	N/A	4,260	11,600	3,140	19,760
	2030	N/A	4,880	13,260	3,440	22,760
	2040	N/A	5,480	14,920	3,720	25,780
	2050	N/A	6,100	16,560	4,020	28,800
Required Total Storage Capacity (gallons)	Current Actual Capacity*	100,000**	15,000	50,000	88,000	85,000
	Current Required Capacity	39,200	26,600	77,400	24,200	114,800
	2000	41,400	30,400	82,800	25,600	137,200
	2010	47,600	26,600	99,400	28,600	167,400
	2020	54,000	42,600	116,000	31,400	197,600
	2030	60,200	48,800	132,600	34,400	227,600
	2040	65,200	54,800	149,200	37,200	257,800
	2050	71,400	61,000	165,600	40,200	288,000

\* Based on the most recent information available.

\*\* Standpipe

### 5.2.1.3 CENTRAL GROUP

**Choice WSC** - The most recent available information regarding the Choice system indicates that the corporation served 300 total connections in 1995. The most recent analysis of the water system data obtained from a TNRCC Public Water supply Regulatory report (dated October 1994) indicates that the system currently operates two water plants. A breakdown of these plants is as follows:

- Choice's Jericho Plant is equipped with a 25,000 gallon ground storage tank and 2,500 gallon pressure tank. The plant serves approximately 120 connections, which requires 24,000 gallons of total storage and 2,400 gallons of pressure tank capacity. This part of the system is currently in compliance with the requirements set forth in TAC 290.45. However, the addition of 5 more connections will bring it out of compliance.
- Choice's Neville Plant is equipped with a 150,000 gallon standpipe. The plant serves approximately 180 connections, which requires 36,000 gallons of total storage. The available data indicates that this part of the system is currently in compliance with the requirements set forth in TAC 290.45.

Projected future requirements for the Choice WSC are shown in Table 5-7. Please note that the pressure tank capacity listed corresponds only to the Jericho Plant. As can be seen from the above data, the Neville Plant services about 60% of the total connections while the Jericho Plant services the other 40%. These same proportions were applied to the projected future number of connections to determine the

capacities in Table 5-7.

East Lamar WSC - The most recent available information regarding the East Lamar Water System indicates that the corporation served 270 total connections in 1997. The most recent analysis of the water system data obtained from a Texas Department of Health report (dated February 1991) indicates that the system currently operates two water plants: Plant #1 is equipped with 30,000 gallon ground storage tank and 3,000 gallon pressure tank; Plant #2 is equipped with a 40,000 gallon ground storage tank and a 3,000 gallon pressure tank. This corresponds to 70,000 gallons of combined ground storage capacity and 6,000 gallons of combined pressure tank capacity for the combined system. With the present number of connections, the system is required to have at least 54,000 gallons of total storage capacity and 5,400 gallons of total pressure tank capacity. From this information, it appears that the system is currently operating within the requirements for pressure tank and storage capacity as set forth in TAC 290.45.

The future water storage and pressure tank capacity requirements are based upon the future projected number of connections for the East Lamar WSC. The future connection estimate is based upon a linear regression of past data for the system from 1970 to 1997. The projections indicate that the system's total storage capacity of 70,000 gallons will be out of compliance with TAC 290.45 requirements by the year 2005. The projections also indicate that the system's total pressure tank capacity will be out of compliance even sooner. The total required capacities are shown in Table 5-7 in the listed storage and pressure tank capacities.

Flat Fork WSC - The most recent available information regarding the Flat Fork WSC indicates that the corporation served 229 total connections in 1995. The most recent analysis of the water system data obtained from a Health Department report (dated February 1991) indicates that the system currently operates one water plant equipped with two 44,000 gallon ground storage tanks, a 3,300 gallon pressure tank, and a 1,900 gallon pressure tank. This corresponds to 88,000 gallons of combined ground storage capacity and 5,200 gallons of combined pressure tank capacity for the combined system. With the present number of connections, the system is required to have at least 45,800 gallons of total storage capacity and 4,580 gallons of total pressure tank capacity. From this information, it appears that the system is currently operating within the requirements for storage and pressure tank capacity as set forth in TAC 290.45.

The future water storage and pressure tank capacity requirements are based upon the future projected number of connections for the Flat Fork WSC. The future connection estimate is based upon a linear regression of past data for the system from 1970 to 1995. The projections indicate that the system's total storage capacity of 88,000 gallons will be out of compliance with TAC 290.45 requirements by the year 2031. However, the projections also indicate that the system's total pressure tank capacity will be out of compliance by the year 2000. The total required capacities are shown in Table 5-7 in the listed storage and pressure tank capacities.

Warr WSC - The most recent available information regarding the Warr Water System indicates that the corporation served 31 total connections in 1996. The maximum recorded connections for the system is 36 which occurred in the 1980's. Under present TAC requirements, systems with less than 50 connections have two options: they may (1) meet a higher well capacity and utilize only pressure tanks, or (2) meet a lower well capacity and conform to service pump and storage requirements. The system currently operates under the first option.

The most recent analysis of the water system data obtained from a Texas Department of Health report (dated August 1991) indicates that the system currently operates two water plants and that each plant is equipped with two 525 gallon pressure tanks. This corresponds to 1,050 gallons of total pressure tank capacity for each water plant or a combined system-wide total pressure tank capacity of 2,100 gallons. With the present number of connections, the system is required to have at least 1,550 gallons of pressure tank capacity. From this information, it appears that the system is currently operating within the requirements for pressure tank capacity as set forth in TAC 290.45.

The future water storage and pressure tank capacity requirements are based upon the future projected number of connections for the Warr Water System. The future connection estimate is based upon a linear regression of past data for the system from 1976 to 1996. These projections are based on the assumption that development within the area served by the system will continue to grow at the same rate that it has over the past two decades. The projections indicate that total number of connections served will exceed 50 by

the year 2020. TAC 290.45 requires systems having more than 50 to have service pump and storage capacity. This is reflected in Table 5-7 in the listed storage and pressure tank capacities.

TABLE 5-7 NEEDS IN ELEVATED STORAGE AND TOTAL STORAGE					
Current and Projected Needs for the Central Group					
PARAMETER	YEAR	CHOICE	EAST LAMAR	FLAT FORK	WARR
Required Elevated Tank Capacity (gallons)	Current Actual Capacity *	N/A	N/A	N/A	0
	Current Required Capacity	N/A	N/A	N/A	0
	2000	N/A	N/A	N/A	0
	2010	N/A	N/A	N/A	0
	2020	N/A	N/A	N/A	5,200
	2030	N/A	N/A	N/A	5,800
	2040	N/A	N/A	N/A	6,300
	2050	N/A	N/A	N/A	6,900
Required Pressure Tank Capacity (gallons)	Current Actual Capacity*	2,500	6,000	5,200	2,100
	Current Required Capacity	2,400	5,400	4,580	1,550
	2000	2,824	6,300	5,360	2,000
	2010	3,584	7,680	6,460	2,300
	2020	4,352	9,040	7,540	1,040
	2030	5,112	10,420	8,640	1,160
	2040	5,872	11,800	9,720	1,260
	2050	6,640	13,180	10,820	1,380
Required Total Storage Capacity (gallons)	Current Actual Capacity*	175,000	70,000	88,000	N/A
	Current Required Capacity	60,000	54,000	45,800	N/A
	2000	70,600	63,000	53,600	N/A
	2010	89,600	76,800	64,600	N/A
	2020	108,800	90,400	75,400	10,400
	2030	127,800	104,200	86,400	11,600
	2040	146,800	118,000	97,200	12,600
	2050	166,000	131,800	108,200	13,800

\* Based on the most recent information available.  
 N/A Not applicable to this system configuration.

#### 5.2.1.4 EASTERN GROUP

Five Way WSC - The most recent available information regarding the Five Way WSC indicates that the corporation served 416 total connections in 1995. The most recent analysis of the water system data obtained from a Texas Water Commission report (dated September 1992) indicates that the system currently operates three water plants: Plant #1 is equipped with a 45,000 gallon ground storage tank and 5,000 gallon

pressure tank; Plant #2 is equipped with a 20,000 gallon ground storage tank and 1,500 gallon pressure tank; and Plant #3 is equipped with a 65,000 gallon ground storage tank and 5,000 pressure tank. This corresponds to 130,000 gallons of combined ground storage capacity and 11,500 gallons of combined pressure tank capacity for the total system. With the present number of connections, the system is required to have at least 83,200 gallons of total storage capacity and 8,320 gallons of total pressure tank capacity. From this information, it appears that the system is generally operating within the requirements for pressure tank capacity as set forth in TAC 290.45.

The future water storage and pressure tank capacity requirements are based upon the future projected number of connections for the Five Way WSC. The future connection estimate is based upon a linear regression of past data for the system from 1970 to 1995. The projections indicate that the system's total storage capacity of 130,000 gallons will be out of compliance TAC 290.45 requirements by the year 2015. The projections also indicate that the system's total pressure tank capacity will be out of compliance by the year 2007. The total required capacities are shown in Table 5-8.

McClelland WSC - The most recent available information regarding the McClelland WSC indicates that the corporation served 497 total connections in 1996. The most recent analysis of the water system data obtained from a Texas Water Commission report (dated September 1992) indicates that the system currently operates one water plant equipped with one 50,000 gallon ground storage tank, one 97,000 gallon ground storage tank, and one 4,000 gallon pressure tank. This corresponds to 147,000 gallons of combined ground storage capacity and 4,000 gallons of total pressure tank capacity. With the present number of connections, the system is required to have at least 99,400 gallons of total storage capacity and 9,940 gallons of total pressure tank capacity. From this information, it appears that the system currently operating within the TAC 290 requirements for total storage but is deficient in total pressure tank capacity.

The future water storage and pressure tank capacity requirements are based upon the future projected number of connections for the McClelland WSC. The future connection estimate is based upon a linear regression of past data for the system from 1970 to 1996. The projections indicate that the system's total storage capacity of 147,000 gallons will also be out of compliance TAC 290.45 requirements prior to the year 2030. The total required capacities are shown in Table 5-8 below.

Paxton WSC - The most recent available information regarding the Paxton WSC indicates that the corporation served 189 total connections in 1995. The most recent analysis of the water system data obtained from a Texas Department of Health (dated July 1991) indicates that the system currently operates one water plant equipped with a 38,000 gallon ground storage tank and 3,000 gallon pressure tank. With the present number of connections, the system is required to have at least 37,800 gallons of total storage capacity and 3,780 gallons of total pressure tank capacity. From this information, it appears that the system is not currently operating within the requirements for pressure tank capacity as set forth in TAC 290.45.

The future water storage and pressure tank capacity requirements are based upon the future projected number of connections for the Paxton WSC. The projections indicate that the system's total storage and pressure tank capacity could both be out of compliance TAC 290.45 requirements before the year 2000. The total required capacities are shown in Table 5-8 in the listed storage and pressure tank capacities.

Shelbyville WSC - The most recent available information regarding the Shelbyville Hills WSC indicates that the corporation served 262 total connections in 1995. The most recent analysis of the water system data obtained from a Texas Water Commission report (dated September 1992) indicates that the system currently operates one water plant that is equipped with one 50,000 gallon ground storage tank and one 30,000 gallon elevated tank. This corresponds to 80,000 gallons of combined storage capacity. With the present number of connections, the system is required to have a minimum of 52,400 gallons of total storage with at least 26,200 gallons as elevated storage. From this information, it appears that the system is currently operating within the requirements set forth in TAC 290.45 for elevated and total storage capacities.

The future water storage and pressure tank capacity requirements are based upon the future projected number of connections for the Shelbyville WSC. The future connection estimate is based upon a linear regression of past data for the system from 1970 to 1995. The projections indicate that the system's total storage capacity of 80,000 gallons will be out of compliance TAC 290.45 requirements by the year 2013. However, the projections indicate that the system's total elevated storage capacity will be out of compliance by the year 2000. The required capacities are shown in Table 5-8 below.

**TABLE 5-8 NEEDS IN ELEVATED STORAGE AND TOTAL STORAGE**  
Current and Projected Needs for the Eastern Group

PARAMETER	YEAR	FIVE WAY	McCLELLAND	PAXTON	SHELBYVILLE
Required Elevated Tank Capacity (gallons)	Current Actual Capacity *	N/A	N/A	N/A	30,000
	Current Required Capacity	N/A	N/A	N/A	26,200
	2000	N/A	N/A	N/A	31,800
	2010	N/A	N/A	N/A	37,800
	2020	N/A	N/A	N/A	43,800
	2030	N/A	N/A	N/A	49,800
	2040	N/A	N/A	N/A	55,800
	2050	N/A	N/A	N/A	61,800
Required Pressure Tank Capacity (gallons)	Current Actual Capacity*	11,500	4,000	3,000	N/A
	Current Required Capacity	8,320	9,940	3,780	N/A
	2000	10,060	9,500	4,900	N/A
	2010	12,020	11,340	5,540	N/A
	2020	13,980	13,160	6,200	N/A
	2030	15,940	15,000	6,840	N/A
	2040	17,900	16,820	7,500	N/A
	2050	19,860	18,640	8,140	N/A
Required Total Storage Capacity (gallons)	Current Actual Capacity	130,000	147,000	38,000	80,000
	Current Required Capacity	83,200	99,400	37,800	52,400
	2000	100,600	95,000	49,000	63,600
	2010	120,200	113,400	55,400	75,600
	2020	139,800	131,600	62,000	87,600
	2030	159,400	150,000	68,400	99,600
	2040	179,000	168,200	75,000	111,600
	2050	198,600	186,400	81,400	123,600

\* Based on the most recent information available.

### 5.2.2 REGIONAL SYSTEM

The water plant and supply line requirements of a regional system will depend upon the source of water. The requirements of the TNRCC of a supply of 0.6 gpm per connection must be met. In the case of a surface water solution, a plant is normally operated 24 hours per day. However, the 0.6 gpm parameter is such that a water well supplying the required minimum 0.6 gpm will operate only about 7 hours per day to meet normal daily demands.

**SECTION 6**  
**WATER SUPPLY ALTERNATIVES**

## SECTION 6 WATER SUPPLY ALTERNATIVES

### 6.1 GENERAL

There are several alternatives for sources of water supply within Shelby County. The primary options addressed in this report deal with obtaining and treating water from groundwater or surface water supplies, or by purchasing treated water from other entities.

Figure 6-1 shows a rough approximation of the current distribution of water sources used in the County. As can be seen from this figure, the majority of water used originates from surface water supplies. It should also be noted that the purchased water referred to in the graph is also treated surface water which is bought from the City of Logansport, Louisiana.

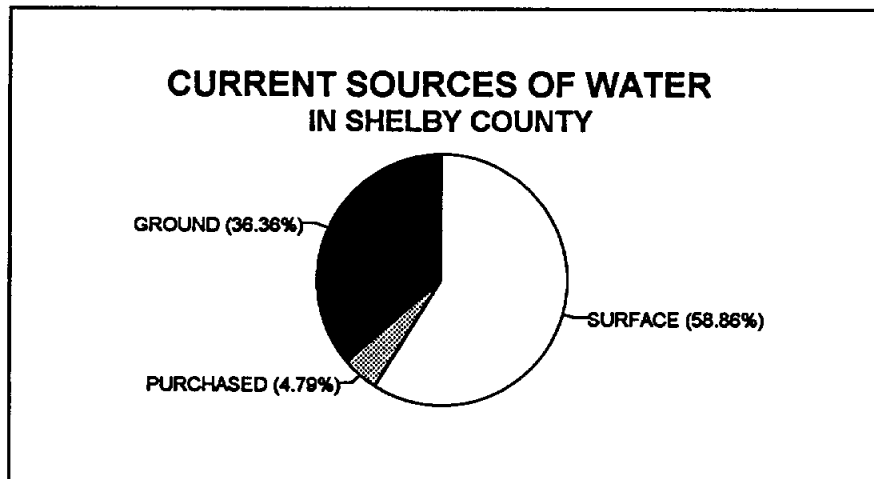


FIGURE 6-1

### 6.2 GROUNDWATER SUPPLY SOURCES

#### 6.2.1 CARRIZO-WILCOX FORMATIONS

In general, the Carrizo Formation and Wilcox Group are two separate geologic units having their own distinct geologic and hydrologic characteristics, with the sand of the Carrizo Formation overlying the sands and shales of the Wilcox Group. However, the shale is missing in some places, which allows the sand of the Carrizo to come directly in contact with the upper sand beds of the Wilcox. Therefore, the two units are hydraulically connected, and can be considered to act together as a single aquifer.

The majority of Shelby County lies within the outcrop area of the Carrizo-Wilcox Aquifer where water levels are likely to respond to seasonal variations in precipitation. Most of the private wells, water supply corporations, and two of the municipalities obtain their water solely from the sands of the Wilcox Group.

### 6.3 SURFACE WATER SOURCES

#### 6.3.1 TOLEDO BEND

The eastern boundary of Shelby County is marked by Toledo Bend Reservoir. Toledo Bend has a total capacity of 4.477 million acre-feet or 1.45 trillion gallons. It is the largest manmade body of water in the South, and the fifth largest in the United States. The reservoir is jointly owned and operated by the Sabine River Authorities of Texas and Louisiana.

Toledo Bend was constructed primarily for the purposes of water supply, hydroelectric power generation, and recreation. It provides a dependable yield of 1,430 million gallons per day (MGD) which is shared jointly between Texas and Louisiana. Most of this water is allowed to flow through the turbines located in the dam in order to generate electricity. Water is also available for municipal, industrial, and agricultural purposes. According to Water for Texas, the existing permit issued to the Sabine River Authority of Texas annually provides 100,000 acre-feet of water for municipal uses, 600,000 acre-feet for industrial purposes, and 50,000 acre-feet for irrigation use. Presently, the only cities that obtain municipal supplies from the reservoir are Hemphill, located in Sabine County, and Huxley, located in Shelby County. In addition, several private water



companies have contracted with the Authority for water from the reservoir.

### **6.3.2 LAKE PINKSTON**

The City of Center maintains a surface water treatment plant at Pinkston Reservoir. The facility is located about a quarter of a mile north of the Aiken community and approximately 14 miles west of the City of Center just north of State Highway 7. This plant underwent major renovations and additions in 1988. According to a report by Stokes & Associates, Inc. dated August 4, 1992, the original plant was a Neptune Microfloc Tube Settler plant rated and operated at 2.0 MGD. The older plant was renovated to provide at least two hours sedimentation ahead of the old filters and reduce the flow rate to 1.5 MGD. The new flocculator-clarifier was constructed and a new parallel treatment train was constructed which included flocculation, sedimentation, filtration and chlorination. This new facility is rated at 1.7 MGD, based on six hours detention time in the sedimentation basin. An additional 0.5 MGD ground storage tank was constructed giving a total ground storage capacity at the plant of 1.0 million gallons. Each train of treatment has the same filter area, 320 square feet, and both filter systems have dual media. At 5 gpm/square foot, the filter capacity is 4.6 MGD. The raw water turbidity is low and the plant can be operated at a rate of 4.0 MGD. Free chlorine is injected ahead of the filters at the plant.

The report also states that water is pumped from the Akin Plant to the City of Center, a distance of approximately 14 miles. A 1.0 million gallon tank, which functions as elevated storage, is located on the line between the plant and the City.

### **6.3.3 LAKE CENTER**

The City of Center also operates a surface water treatment plant on Lake Center at Mill Creek. According to the Stokes & Associates report, the Mill Creek WP consists of conventional sedimentation basins, mixed media filters, and clearwell storage. The plant has a clarifier capacity of 1.3 MGD based on six hours of detention time, and the filters are rated at 4.4 MGD with an application rate of 5 gallons per minute per square foot. Free chlorine is injected ahead of the filters at this plant. At the time of the Stokes & Associates report, the plant was out of service due to a failure of the Mill Creek Dam, although it was expected to be operational again by May 1993. The plant was anticipated to operate at a rate of 0.68 MGD.

### **6.4 PURCHASED WATER**

The City of Joaquin purchases treated surface water from the City of Logansport, Louisiana. This water is delivered through a six inch transmission line to a booster station near downtown Joaquin. Water is then distributed throughout the City's system through direct pressure, with additional water being passed along to Paxton Water Supply Corporation.

**SECTION 7**  
**RAW WATER QUALITY AND TREATMENT**

## SECTION 7 RAW WATER QUALITY AND TREATMENT

### 7.1 RAW WATER QUALITY

#### 7.1.1 RAW WATER QUALITY - CARRIZO-WILCOX AQUIFER

Shelby County occupies a region where the Carrizo Formation and Wilcox Group constitute the only aquifer which is classified as primary. These two units are hydraulically connected, and can be considered as one aquifer. The majority of Shelby County lies within the outcrop area of the Wilcox Aquifer. Data obtained from the Texas Water Development Board (TWDB) indicates that all of the wells in the county draw water only from the sands of the Wilcox Group.

The chemical quality of water in the Carrizo-Wilcox aquifer varies from place to place and with depth. Water that is relatively low in mineral content and suitable for most purposes is found in and near the outcrop areas. The water from the Carrizo-Wilcox aquifer is high in bicarbonates and locally has objectionable amounts of iron. The Wilcox sands have lignite stringers in some places which may impart an undesirable color to the water. The water from the aquifer is generally soft. In general, the water in the aquifer becomes more mineralized downdip from the outcrop, and also with depth. Water of usable quality may be expected throughout the entire thickness of the aquifer north and northwest of central Shelby County. South of central Shelby County, the basal Wilcox sands contain water exceeding 3,000 ppm dissolved solids and further downdip the upper part of the aquifer becomes progressively more mineralized until the entire thickness contains water which exceeds 3,000 ppm dissolved solids.

Table 7-1 lists the results of the most recent ground water quality testing (performed within the last 10 years) for the available water supplying entities of the county. Table 7-2 lists the results of the most recent infrequent constituent report (if any) from each available water well. The original data as obtained from the TWDB can be found in the appendices. Please note that many of the sample results were noted as contained "less than" the amount listed; in these cases, the value indicated was used. Therefore, the values indicated on the tables often reflect a more conservative number than actually exists. A brief discussion of relevant parameters follows:

**pH** - pH is a measure of acidity or alkalinity, using a scale 0.0 to 14.0, with 7.0 being the neutral point. Specifically, pH is the reciprocal of the logarithm of the hydrogen ion concentration of a solution in gram moles per liter. Therefore, neutral water has a pH of 7, while an acidic solution has a pH value that is less than 7 and basic solutions have pH values greater than 7. The recommended constituent levels as set forth in Texas Administrative Code 290.13 recommends a pH level of greater than 7 for public water systems.

In general, the pH values of natural waters range from about 5.0 to 8.5. It should be noted that the minimum pH value of the monitored wells was 7.2 which places all of the above mentioned wells above the recommended minimum of 7. However, it should also be noted that several systems have relatively high pH values, although none exceeded a value of 8.9. The secondary maximum contaminant levels as set forth in the Safe Drinking Water Act provides for pH levels of 6.5 to 8.5.

**Silica** - Silicon and oxygen are the two most abundant elements in the earth's crust. Silicon in combination with oxygen is called silica. Even though silica is not readily dissolved by water, warm ground waters sometimes contain as much as 100 mg/l of silica, although a range of 1 to 30 mg/l is more common. Silica does not contribute to water hardness but it is an important constituent of the encrusting material formed by many ground waters.

Even though silica has been known to inhibit corrosion of iron pipes by forming protective coatings, it is generally undesirable in industrial water supplies. Silica may form hard scale in boilers and pipes or deposit in the tubes of heaters and on steam turbine blades. Silicate scale cannot be dissolved by acids or other chemicals that are used for chemical treatment of wells.

**Calcium and Magnesium** - The sum of the calcium and magnesium concentrations in water, expressed as calcium carbonate (CaCO<sub>3</sub>), is referred to as the total hardness of the water. See below.

**Sodium** - Aside from natural concentrations in groundwater, sodium may also be introduced into a water supply by ion-exchange water softening units, oilfield brines, de-icing salts and water treatment chemicals. Sodium is undesirable in boiler feedwaters due to the fact that it may cause foaming. Large concentrations of sodium are toxic to most plants, and a large ratio of sodium to total cations in irrigation waters may decrease the permeability of the soil, increase the pH of the soil solution thereby impairing drainage. Additionally, high concentrations of sodium in drinking water may impart a salty taste.

The presence of sodium in the water supply is significant because it can adversely affect persons suffering from heart, kidney, or circulatory ailments. Due to the fact that each person's daily sodium intake varies, no recommended limit for sodium has been established in TAC 290. However, the American Heart Association's 500-mg and 1000-mg-sodium-per-day diet recommends that distilled water be used if the water supply contains more than 20 mg/l of sodium. Water containing more than 270 mg/l of sodium should not be used for drinking by those on a moderately restricted sodium diet.

The water obtained from Shelby County wells is relatively high in sodium. The average sodium concentration of the twenty-eight sampled wells was 308 mg/l. The minimum concentration noted was 54 mg/l and the maximum concentration was over 500 mg/l. This indicates that the groundwater in Shelby County is fairly high in sodium.

**Potassium** - The concentration of potassium in natural waters is usually much smaller than the concentration of sodium. Potassium concentrations of more than 20 mg/l are unusual in most natural waters, but much larger concentrations are not uncommon in brines or in water from hot springs. Large concentrations of potassium in drinking water may cause a salty taste and can act as a cathartic. Potassium is undesirable in boiler feedwaters due to the fact that it may cause foaming. Potassium in irrigation water affects soil in a manner similar to sodium, although it is generally considered to be less harmful.

The average concentration of potassium from the sampled wells was 2 mg/l. The maximum recorded concentration was only 4 mg/l. From the available data, the concentration of potassium in the groundwaters of Shelby County does not appear to be problematic at this time.

**Sulfate** - Natural waters may have a sulfate concentration ranging from zero to several thousand mg/l. Waters containing high concentrations of sulfate, caused by the leaching of natural deposits of magnesium sulfate (Epsom salts) or sodium sulfate (Glauber's Salt), may be undesirable due to their laxative effects and bitter taste. High sulfate concentrations are also undesirable in industrial waters, especially when used in high pressure boilers or in the production of concrete, ice, sugar, or carbonated beverages.

The TAC 290 recommended secondary constituent level for sulfate concentration is 300 mg/l. It should be noted that of the twenty-eight water wells for which data is available, none have a sulfate concentration higher than 170 mg/l. Therefore, the concentration of sulfates in the groundwater of Shelby County does not appear to be problematic at this time.

**Chloride** - Most waters contain some chloride due to leaching of marine sedimentary deposits or by pollution from sea water, brine, or domestic/industrial wastes. Water that contains less than 150 mg/l of chloride is generally satisfactory for most purposes. Waters containing chloride concentrations in excess of 250 mg/l produce a noticeable salty taste and thus are usually objectionable for municipal uses. Water containing more than 350 mg/l is not fit for most irrigation and industrial uses. Sulfate is undesirable in some industrial uses, particularly brewing, food processing, paper production, textile processing, and steel production.

The recommended maximum chloride concentration recommended by TAC 290.13 is 300 mg/l. The average chloride level for the sampled wells was 88 mg/l. Only two exceptions of the recommended 300 mg/l standard were noted out of twenty-eight sampled wells. The highest concentration was 407 mg/l which occurred in a well operated by the City of Joaquin. It should be noted that Joaquin does not use well water, but rather purchases water from the City of Logansport, Louisiana. The other exception was a well owned by the Paxton WSC. Data was available for two of Paxton's wells, one of which had a chloride concentration of 368 mg/l. It should be noted that the Paxton WSC does not derive its water solely from wells, but also purchases water from the City of Joaquin.

**Fluoride** - Fluoride is found as a natural constituent in many groundwaters. Drinking water containing 0.8 to 1.7 mg/l of natural or added fluoride has been found to be beneficial to children as they are developing

permanent teeth. However, fluoride in concentrations of greater than 3 mg/l can cause the teeth of children to become mottled, discolored or even brittle depending on the amount of water consumed. TAC 290.3 lists the maximum allowable level for fluoride in community type water systems as being 4.0 mg/l and TAC 290.13 establishes a recommended secondary constituent level for fluoride concentration in public water systems as 2.0 mg/l.

Fluoride removal methods include ion exchange, reverse osmosis, lime softening, and activated alumina and tricalcium phosphate adsorption. It is not possible to reduce the fluoride level to 1.0 mg/l using lime only. Four wells out of the 28 sampled had fluoride levels in excess of the recommended 2.0 mg/l, but all were well below the required limit of 4.0 mg/l.

**Nitrate** - Nitrates represent the final product of the biochemical oxidation of ammonia. Its presence is probably due to the presence of nitrogenous organic matter. Septic tank systems, feedlots, and fertilized fields may contribute nitrates to groundwater. The presence of more than 10 mg/l of nitrate expressed as nitrogen appears to be the cause of methemoglobinemia or "blue babies." Methemoglobinemia is largely a disease confined to infants less than three months old, but may affect children up to age six. Nitrates also stimulate the growth of water plants (especially algae) if other nutrients are present.

TAC 290.3 lists the maximum constituent level for nitrate (expressed as nitrogen) to be 10.0 mg/l. Nitrate levels not to exceed 20 mg/l may be allowed at the discretion of the TNRCC if this water is not made available to children under six months of age, if continuous postings are made warning of the high nitrate concentration and possible effects, if state and local authorities are notified of the high concentration, and if no adverse health effects result.

The average nitrate concentration in the twenty-eight sampled wells was 0.1 mg/l. The maximum detected concentration was 0.6 mg/l nitrate nitrogen as listed under the infrequent constituent reports for Timpson Rural Water Supply Corporation. These low values would seem to indicate little or no trouble in regard to nitrate concentration is to be expected in the groundwater of Shelby County at the present time.

**Total Dissolved Solids** - Total Dissolve Solids (TDS) is a parameter that quantifies the amount of dissolved substances present in a water. In most waters the predominant dissolved solids are silica, calcium, magnesium, sodium, potassium, carbonate, bicarbonate, chloride, and sulfate. The following table shows classifications commonly used to describe waters:

CLASSIFICATION	TDS CONCENTRATION (mg/l)
Fresh	< 1,000
Slightly Saline	1,000 - 3,000
Moderately Saline	3,000 - 10,000
Very Saline	10,000 - 35,000
Brine	> 35,000

The TAC 290 recommended secondary constituent level for TDS is 1,000 mg/l. Concentrations in excess of 500 mg/l may cause physiological effects and taste in drinking water. Concentrations in excess of 1,000 mg/l are classified as "saline" irrespective of the nature of the minerals present. The average TDS concentration of the sampled wells was found to be 759 mg/l, which is less than the required limit of 1,000 mg/l. However, five of the sampled wells sampled in the TWDB data contained TDS concentrations in excess of 1,000 mg/l.

**Specific Conductivity** - Specific conductivity is a measure of the ability of a water to conduct an electrical current and depends on the concentrations of ionized constituents dissolved in the water. Specific conductance is normally expressed in micromhos per centimeter at 25°C and can be used to approximate the dissolved solids content in the water, particularly if mineral salts are present in solution. The amount of dissolved solids (in mg/l) is usually estimated to be 65% of the specific conductance. However, it should be noted that this relationship is not a constant and can vary between waters. Specific conductance is also

**TABLE 7-1 MOST RECENT WELL TESTINGS**  
For Water Supply Corporations and Municipalities within the Last 10 Years

WATER AGENCY	WELL ID	SAMPLE DATE	pH	SILICA SiO2 mg/l	CALCIUM Ca mg/l	MAGNESIUM Mg mg/l	SODIUM Na mg/l	POTASSIUM K mg/l	CARBONATE CO3 mg/l	BICARB HCO3 mg/l	SULFATE SO4 mg/l	CHLORIDE Cl mg/l	FLUORIDE F mg/l	NITRATE NO3 mg/l	TOTAL DIS. SOLIDS mg/l	SPECIFIC CONDUCT. micromhos	HARDNESS as CaCO3 mg/l
Choice WSC	37 23 401	11/17/93	8.8	13	0	0	126	2	7	267	17	3	0.2	0.0	299	466	1
Choice WSC	37 23 501	11/17/93	8.7	14	1	0	465	3	30	824	6	140	2.0	0.0	1,065	1,680	2
Choice WSC	37 23 602	7/20/89	8.7	12	1	0	288	2	24	700	18	13	0.4	0.2	703	1,050	3
East Lamar WSC	37 15 402	7/19/89	8.5	12	1	0	256	2	17	523	45	19	0.3	0.2	608	1,020	2
East Lamar WSC	37 15 502	7/19/89	8.7	12	1	0	345	2	42	761	9	29	1.0	0.2	815	1,190	2
Five Way WSC	37 15 301	7/21/89	8.8	11	1	0	362	2	36	755	9	51	1.2	0.2	847	1,400	3
Five Way WSC	37 15 601	4/26/86	8.9	11	1	1	332	1	41	732	8	43	1.1	0.0	798	1,430	6
Five Way WSC	37 15 501	7/21/89	8.7	11	1	0	434	2	30	950	8	62	2.2	0.1	1,017	1,550	2
Flat Fork WSC	37 15 106	11/18/93	8.8	12	1	0	307	2	31	686	19	25	0.7	0.0	736	1,255	4
Flat Fork WSC	37 15 502	7/19/89	8.6	11	1	0	328	2	20	720	34	29	0.7	0.1	780	1,380	2
Huber WSC	37 14 502	7/18/89	8.7	12	1	0	228	2	14	424	41	20	0.3	0.1	524	560	2
Huber WSC	37 14 201	4/24/86	8.0	10	2	1	566	2	0	799	5	407	2.4	0.0	1,388	2,709	9
Joekufin, City of	37 42 602	4/26/86	7.9	27	28	6	54	3	0	244	1	13	0.1	0.0	253	432	87
McClelland WSC	37 42 603	11/17/93	7.7	22	24	5	64	4	0	243	2	11	0.1	0.0	251	373	80
Paxton WSC	37 07 601	4/24/86	8.6	11	1	1	436	1	23	724	4	218	1.8	0.0	1,052	1,968	6
Paxton WSC	37 08 802	4/24/86	8.2	10	1	1	588	2	0	915	5	368	3.0	0.0	1,428	2,793	8
Sand Hills WSC	37 22 301	7/18/89	8.5	13	1	0	365	2	14	900	10	35	1.1	0.1	884	1,575	3
Shelbyville WSC	37 16 801	11/17/93	8.9	12	1	1	328	2	46	754	7	7	0.9	0.0	775	1,246	4
Tenaha, City of	37 07 401	4/24/86	8.2	11	1	1	390	1	0	733	7	182	1.4	0.0	955	1,771	6
Tenaha, City of	37 07 402	6/28/89	8.8	11	1	0	411	3	25	709	5	172	1.5	0.0	878	1,720	3
Tenaha, City of	37 07 403	11/18/93	8.7	12	1	1	395	3	28	693	6	174	1.4	0.0	861	1,561	4
Tennessee WSC	37 06 501	7/18/89	7.2	22	54	12	72	3	0	322	18	44	0.1	0.2	383	740	184
Tennessee WSC	37 13 604	7/18/89	8.7	12	1	0	234	1	17	239	11	11	0.4	0.3	404	890	1
Timpeon Rural WSC	37 05 802	4/29/86	8.5	12	1	1	320	1	10	690	6	77	1.1	0.0	767	1,377	6
Timpeon, City of	37 05 904	4/30/86	8.8	12	1	1	324	1	32	666	7	78	1.1	0.0	785	1,430	6
Timpeon, City of	37 05 905	11/18/93	8.7	13	1	1	322	2	29	666	5	75	1.1	0.0	776	1,353	4
Warr WSC	37 15 403	6/30/86	7.7	13	21	5	133	2	0	282	60	52	0.2	0.0	424	760	72
Warr WSC	37 15 504	6/30/86	7.2	19	41	16	141	4	0	209	170	102	0.1	0.4	559	1,085	168
AVERAGE			8.4	13	7	2	308	2	19	612	15	88	1.0	0.1	759	1,332	25
MINIMUM			7.2	10	0	0	54	1	0	209	1	3	0.1	0.0	251	373	1
MAXIMUM			8.9	27	54	16	588	4	46	950	170	407	3.0	0.4	1,428	2,793	184

used to classify irrigation waters. Generally, waters with less than 200 micromhos/cm are considered to be acceptable for irrigation while waters with over 300 micromhos/cm are considered to be unsuitable. Also, good fresh water for fish is considered to be under 1,100 micromhos/cm.

Table 7-1 shows the results of the most recent well analysis as determined from the available data. The average value of specific conductance is 1,332 micromhos. This would seem to indicate that the ground water has a fairly high in dissolved solids. By applying the 65% approximation mentioned above, the specific conductivity would indicate that the TDS concentration of the water would average approximately 865.8 mg/l, which is less than the 1,000 mg/l limit imposed by the TNRCC.

**Hardness** - Hardness is the ability of water to consume excessive amounts of soap prior to forming a lather. It is also a measure of a water's ability to produce scale in hot water heaters, boilers, and other units in which the temperature of water is significantly increased. Hardness occurs due to the presence of polyvalent metallic ions (mainly calcium and magnesium) and is usually expressed as mg/l of equivalent calcium carbonate (CaCO<sub>3</sub>).

Hardness of water may be divided into two types: (1) Carbonate hardness, which includes the portion of the calcium and magnesium that combines with bicarbonate and the small amount of carbonate present. This is also referred to as "temporary hardness" because it can be removed by boiling, which precipitates calcium and magnesium carbonate and sulfate minerals, and (2) Non-Carbonate hardness, which is the difference between total hardness and carbonate hardness. It is caused by those amounts of calcium and magnesium that combine normally with the sulfate, chloride, and nitrate ions, plus the slight hardness contributed by minor constituents such as iron. Non-carbonate hardness cannot be removed by boiling. The table below lists the classifications commonly used to describe water hardness:

CLASSIFICATION	HARDNESS (mg/l as CaCO <sub>3</sub> )
Soft	0 - 60
Moderately Hard	61 - 120
Hard	121 - 180
Very Hard	> 180

Lead, cadmium, zinc, and copper in solution are associated with soft water. A hardness of 50 to 150 mg/l is not objectionable for most purposes, but the amount of soap needed to reduce the calcium and magnesium increases with the mineral content. Water having 100 to 150 mg/l hardness will deposit considerable scale in steam boilers. Hardness of more than 150 mg/l is very noticeable due to scale buildup and staining. At concentrations of greater than 200 mg/l, water is commonly softened for household uses. When municipal water supplies are softened, the 85 mg/l is usually the most economical level of softness to reach. Desirable hardness values, therefore, should be 50 to 80 mg/l, with 80 to 150 mg/l as passable, and over 150 mg/l as undesirable.

The average hardness of the most recently sampled wells was 25 mg/l, which indicates that the groundwater from the Shelby County wells is of good quality in regard to hardness. Only two wells showed hardnesses of over 150; one operated by the Tennessee WSC and one operated by the Warr Water System. These hardness values were slightly over 150 mg/l, indicating the tendency to generate excessive scale and staining could exist within the groundwater of Shelby County.

**Alkalinity** - Alkalinity is the ability of a water to neutralize an acid. It is due to the presence of bicarbonate, carbonate, and hydroxide ions, although occasionally it is caused by the presence of borate, silicate, and phosphate ions. It is usually expressed as mg/l of CaCO<sub>3</sub>.

There is no consensus on a single numerical value that is applicable throughout the country in regard to alkalinity. The American Water Works Association maintains that the alkalinity of water passing through iron distribution systems should be in the range of 30 to 100 mg/l (expressed as CaCO<sub>3</sub>) to prevent serious corrosion; up to 500 mg/l is acceptable, although this factor must be appraised from the standpoint of pH,

hardness, carbon dioxide, and dissolved oxygen content. Corrosion of iron pipe is prevented by the maintenance of calcium-carbonate stability.

Potassium carbonate, potassium bicarbonate, sodium carbonate, sodium bicarbonate, phosphates, and hydroxides cause alkalinity in natural water. Calcium carbonate, calcium bicarbonate, magnesium carbonate, and magnesium bicarbonate cause hardness as well as alkalinity. Sufficient alkalinity is needed in water to react with added alum to form a floc in water coagulation. Insufficient alkalinity will cause alum to remain in solution. Bathing or washing in water of excessive alkalinity can change the pH of the lacrimal fluid around the eye, causing eye irritation.

The average alkalinity of the sampled wells was found to be 25.5 mg/l. The maximum value found was 42 mg/l. The average value is slightly lower than the value recommended by the AWWA, but the maximum value is within the parameters.

Ammonia - Ammonia as listed in Table 7-2 is expressed as nitrogen. The presence of free ammonia represents the first product of the decomposition of organic matter; thus appreciable concentrations of free ammonia usually indicate "fresh pollution" of sanitary significance. The exception is when ammonium sulphate of mineral origin is involved.

Nitrite - Nitrites represent the first product of the oxidation of free ammonia by biochemical activity. This is expressed in mg/l as nitrogen. Unpolluted natural waters contain practically no nitrites, so concentrations exceeding the very low value of 0.001 mg/l are of sanitary significance, indicating that the water is subject to pollution that is in the process of change associated with natural purification. In the case of groundwater, the nitrite concentration is due to the organic matter in the soil through which the water passes. Nitrites in concentrations greater than 1 mg/l in drinking water are hazardous to infants and should not be used for infant feeding.

The maximum value of nitrite found in the sampled wells was found to be less than 0.01 mg/l. This indicates that no adverse health effects are to be expected at the present time due to the presence of nitrites in the groundwater of Shelby County. However, the maximum detectible limit of the testing was 0.01 mg/l, which was not accurate enough measure lower concentrations that could indicate if the presence of nitrite poses any sanitary significance.

Kjeldahl Nitrogen - Also referred to as TKN. This is a measure of the total organic and ammonia nitrogen in water.

Iron - The total concentration of iron, as listed in the most recent infrequent constituent reports, is shown in Table 7-2 under Fe, the chemical symbol for iron. Most water supplies contain some iron, because some amount of iron is found in practically all sedimentary and igneous rocks. Water may also dissolve iron upon contact with metal well casing, pump parts, and piping. In other words, large amounts of iron in a distribution system may not be completely due to earth materials.

The form that iron takes in water depends on the amount of oxygen in the water and the pH. In natural ground water where oxygen concentrations are low and the pH is from 6.5 to 7.5, iron occurs primarily as dissolved ferrous ions ( $Fe^{+2}$ ). However, ferrous ions are unstable when in contact with oxygen, in which case they change to ferric ions ( $Fe^{+3}$ ). Ferric ions precipitate out of water as ferric oxide or oxyhydroxides. Ferric iron is almost completely insoluble in alkaline or weakly acidic waters. When water with a pH of 7 to 8.5 is aerated, almost all of the iron becomes insoluble. Most water problems resulting from high iron content are associated with the sudden change from ferrous (dissolved) to ferric (semisolid) iron when ferric oxides and oxyhydroxides come out of solution and coat surfaces. For instance, groundwater containing several mg/l of iron may be completely clear and colorless when first pumped, but become cloudy with rust colored deposits after sitting in contact with air.

Iron-bearing waters also favor the growth of iron bacteria. These growths can grow abundantly in water wells and distribution systems and have a pronounced clogging effect. Their growth rate in wells may be so rapid that the water supply may be nearly shut off within months after a well is first put into operation.

Ideally, water should have a soluble iron content of less than 0.1 mg/l to prevent reddish-brown staining of laundry, fountains, and plumbing fixtures. Iron in excess of 1.0 mg/l is noticeable in the taste of coffee or



**TABLE 7-2 MOST RECENT INFREQUENT CONSTITUENT REPORTS**

For Water Supply Corporations and Municipalities within the Last 10 Years

WATER AGENCY	WELL ID	DISSOLVED AMMONIA mg/l as N	NITRITE-NITROGEN mg/l as N	NITRATE-NITROGEN mg/l as N	KJELDAHL NITROGEN mg/l as N	DISSOLVED Mn ug/l	TOTAL Mn ug/l	DISSOLVED As ug/l	DISSOLVED Ba ug/l	DISSOLVED Cd ug/l	DISSOLVED Cr ug/l
Choice WSC	37 23 401	0.46	0.01	0.01	0.70	2.00		2.00	6.70	2.00	4.00
Choice WSC	37 23 501	0.69	0.01	0.01	1.00	0.50		1.00	28.00	2.00	4.00
Choice WSC	37 23 602			0.04			20.00				
East Lamar WSC	37 15 402					20.00					
Five Way WSC	37 15 301					20.00					
Five Way WSC	37 16 501			0.03		20.00					
Flat Fork WSC	37 15 108		0.01	0.01	1.00	2.00		2.00	28.10	2.00	4.00
Flat Fork WSC	37 15 502	0.72				20.00					
Huber WSC	37 14 502					20.00					
Paxton WSC	37 07 601				80.00		20.00				
Paxton WSC	37 08 802				50.00						
Sand Hills WSC	37 22 301						20.00				
Shelbyville WSC	37 16 801	0.70		0.03	1.10	20.00		2.00	51.10	2.00	20.00
Tenaha, City of	37 07 402			0.01		20.00					
Tenaha, City of	37 07 403	0.82	0.01	0.01	1.20	20.00		2.00	39.20	2.00	20.00
Tennessee WSC	37 06 501			0.04		39.00					
Timpson Rural WSC	37 13 604			0.06		20.00					
Timpson, City of	37 05 905	0.62	0.01	0.01	1.00	20.00		2.00	21.60	2.00	20.00
AVERAGE		0.67	0.01	0.02	17.00	17.39		1.83	28.12	2.00	12.00
MINIMUM		0.46	0.01	0.01	0.70	0.50		1.00	6.70	2.00	4.00
MAXIMUM		0.82	0.01	0.06	80.00	39.00		2.00	51.10	2.00	20.00

WATER AGENCY	WELL ID	DISSOLVED Cu ug/l	DISSOLVED Pb ug/l	DISSOLVED Ag ug/l	DISSOLVED Zn ug/l	DISSOLVED Se ug/l	DISSOLVED Hg ug/l	DISSOLVED Fe ug/l	TOTAL Fe ug/l	ALKALINITY mg/l
Choice WSC	37 23 401	2.00	5.00	10.00	5.00	2.00	0.13	10.10		16.00
Choice WSC	37 23 501	2.00	5.00	10.00	9.10	2.00	0.13	33.50		20.00
Choice WSC	37 23 602							52.00	270.00	
East Lamar WSC	37 15 402							29.00		
East Lamar WSC	37 15 502							20.00	40.00	
Five Way WSC	37 15 301							32.00	50.00	
Five Way WSC	37 16 501							20.00		
Flat Fork WSC	37 15 108	2.00	5.00	10.00	5.00	2.00	0.13	13.30		31.00
Flat Fork WSC	37 15 502							20.00		
Huber WSC	37 14 502							20.00	40.00	
Sand Hills WSC	37 22 301							34.00	100.00	
Shelbyville WSC	37 16 801	20.00	5.00	10.00	27.00	2.00	0.13	168.00	40.00	42.00
Tenaha, City of	37 07 401									
Tenaha, City of	37 07 402									
Tenaha, City of	37 07 403	20.00	5.00	10.00	20.00	2.60	0.13	48.60		20.00
Tennessee WSC	37 06 501							49.00		
Timpson Rural WSC	37 13 604							20.00		
Timpson, City of	37 05 904									
Timpson, City of	37 05 905	20.00	5.00	10.00	20.00	4.00	0.13	25.20	40.00	
AVERAGE		11.00	5.00	10.00	14.35	2.43	0.13	36.16	120.00	24.00
MINIMUM		2.00	5.00	10.00	5.00	2.00	0.13	10.10	89.22	25.50
MAXIMUM		20.00	5.00	10.00	27.00	4.00	0.13	168.00	270.00	42.00

tea. The recommended maximum concentration of iron in potable water, as listed in TAC 290.13, is 0.3 mg/l (300 µg/l). The average concentration of dissolved iron in the sampled wells was 36.16 µg/l while the average total iron concentration was 92.15 µg/l. The highest total concentration of iron was listed in the infrequent constituent reports as being 270 µg/l. This is below the standards set by the TNRCC.

**Manganese** - The total manganese concentration for the sampled wells, as determined from the infrequent constituent reports, are presented in Table 7-2 under Mn, the chemical symbol for manganese. Manganese resembles iron in its chemical behavior and occurrence, although it generally appears in smaller concentrations.

Manganese is objectionable in water in the same way as iron. It occurs as soluble manganous bicarbonate which changes to insoluble manganese hydroxide when it reacts with atmospheric oxygen. Stains caused by manganese are more objectionable and harder to remove than those from iron. Manganese bicarbonate precipitates out of solution as a black, sooty deposit when carbon dioxide is liberated from water near a well. The bicarbonates can cement a well screen into the ground, making removal and replacement very difficult. Slime-forming bacteria may also cause oxidation of manganese compounds, forming an insoluble residue.

According to TAC 290.13, the maximum recommended concentration of manganese in public water systems is 0.05 mg/l (50 µg/l). Manganese concentrations should be less than 0.05 mg/l to avoid the black-brown staining of plumbing and clothes, although soluble manganese bound to organic matter may be present in higher concentrations without producing difficulties. Concentrations greater than 0.5 to 1.0 mg/l may give a metallic taste to water. Concentrations above 0.05 mg/l can sometimes build up a coating in pipes that can slough off and cause staining of laundry and blackish colored precipitate.

The average manganese concentration found in the sampled wells was 17.39 µg/l. The maximum concentration noted in the infrequent constituent reports was 39 µg/l. These values are all less than the maximum recommended concentration of 50 µg/l as set forth by the TNRCC in TAC 290. Therefore, it appears that high manganese concentrations in the groundwater of Shelby County does not presently pose a problem.

**Arsenic** - The total arsenic concentrations recorded from the infrequent constituent reports are shown in Table 7-2 under the chemical symbol for arsenic, As. Sources of arsenic in water include industrial wastes, natural rock formations, arsenic pesticides, fertilizers, and possibly from some detergents. There appears to be a connection between skin cancer and high levels of arsenic in drinking water. Arsenic in elemental form is not considered particularly toxic although continual ingestion of 0.3 mg/l increased the incidence of skin cancer. Arsenic can also be converted to dimethylarsin by anaerobic organisms and accumulate in fish in much the same fashion as mercury.

TAC 290.3 states that arsenic should not occur in drinking water in concentrations over 0.05 mg/l (50 µg/l). The maximum concentration noted in Table 7-2 is 2.0 µg/l and the average concentration is 1.83 µg/l. These values are all well within the acceptable guidelines as set forth by the TNRCC indicating that the arsenic contamination of the groundwater is not currently a problem for Shelby County.

**Barium** - The total barium concentration is shown in Table 7-2 under the chemical symbol for barium, Ba. It may be found naturally in groundwater as well as in surface water receiving industrial wastes. Barium is a muscle stimulant and can be harmful to the heart and nervous system in large quantities. Generally, 550 to 600 mg of barium constitutes a fatal dosage. TAC 290.3 lists 1.0 mg/l (1,000 µg/l) as being the maximum concentration allowable in drinking water.

The highest concentration of barium as listed in the infrequent constituent reports is 51.1 µg/l and the average value of all the recorded concentrations is 29.12 µg/l. This is well below the maximum allowable concentration of 1,000 µg/l as stated in TAC 290. Therefore, this indicates that barium contamination of wells is not currently a problem in Shelby County.

**Cadmium** - The total cadmium concentrations, as identified in the infrequent constituent reports, are listed in Table 7-2 under Cd, the chemical symbol for cadmium. Cadmium vaporizes when burned and cadmium salts readily dissolve in water and can therefore be found in both air and water pollution. Common sources of cadmium are water mains and galvanized iron pipes, tanks, metal roofs where cistern water is collected, pesticides, zinc and lead ores, and various industrial wastes. Cadmium builds up in the human body and

large concentrations may cause kidney damage, high blood pressure, chronic bronchitis, and emphysema. The direct relationship between cardiovascular death rates in the US, Great Britain, Sweden, Canada, and Japan and the degree of softness or acidity of water points to cadmium as the suspect. In 1972 the World Health Organization set a provisional tolerable weekly intake of 400 to 500 µg. TAC 290.3 sets the maximum allowable concentration of cadmium in drinking water at 0.01 mg/l (10 µg/l).

The highest concentration of cadmium as listed in the infrequent constituent reports is 2 µg/l. The average value as listed is also 2 µg/l. Therefore, contamination of groundwater by cadmium does not appear to be a problem for Shelby County.

**Chromium** - The total concentrations of chromium, as recorded in the infrequent constituent reports, are recorded in Table 7-2 under Cr, the chemical symbol for chromium. Chromium is found in industrial wastes. Chromium deficiency in humans is associated with atherosclerosis, a chronic disease characterized by the deposition of fatty substances in and fibrosis of the inner layer of the arteries. TAC 290.3 lists 0.05 mg/l (50 µg/l) as being the maximum allowable concentration of chromium in drinking water.

The average concentration of chromium as identified by the infrequent constituents reports was 12 µg/l. The maximum concentration of chromium was 20 µg/l. These are well below the 50 µg/l limit as set forth by the TNRCC. Therefore, it appears that groundwater contamination by chromium is not a problem for Shelby County.

**Copper** - The total concentration of copper, as obtained from the infrequent constituent reports, is shown in Table 7-2 under Cu, the chemical symbol for copper. The recommended secondary constituent level for copper is listed in TAC 290.13 as being 1.0 mg/l (1,000 µg/l). Concentrations of this magnitude are not present in natural waters but may occur in drinking water due to the corrosion of copper or brass pipe. Copper salts are also used to control algal growths in reservoirs and slime growths in water systems.

The average concentration of copper in the infrequent constituent reports was 11 µg/l. The maximum value found was 20 µg/l. These values are well below the established maximum of 1,000 µg/l. Therefore, copper contamination of the wells in Shelby County does not appear to be a problem at this time.

**Lead** - The total concentrations of lead, as determined from the available infrequent constituent reports, are shown in Table 7-2 under Pb, the chemical symbol for lead. The presence of lead in drinking water may come from natural sources, such as limestone and galena, or from manmade sources, such industrial wastes, agricultural sprays, mines and smelters. Fallout from airborne pollutants may also contribute sizeable concentrations of lead to water supply reservoirs and drainage basins. However, the most common source of lead in potable water comes from the use of lead pipe.

Lead is a cumulative poison, although only about ten percent of the lead ingested in water is actually absorbed by the body. According to the TAC 290.3, the maximum concentration of lead allowable in drinking water is 0.05 mg/l (50 µg/l). The most infrequent constituent reports indicates that no lead concentrations higher than 5 µg/l have been identified in the sampled wells. Therefore, lead contamination of the aquifers underlying Shelby County does not appear to be a problem at this time.

**Silver** - The total concentrations of silver, as determined from the available infrequent constituent reports, are shown in Table 7-2 under Ag, the chemical symbol for silver. Silver is sometimes used to disinfect small quantities of water and in home faucet "purifiers". Colloidal silver may cause permanent discoloration of the eyes, skin, and mucous membranes, but the precise concentration needed to cause these effects is not known. The maximum concentration of silver in drinking water, as set forth in TAC 290.3, is 0.05 mg/l (50 µg/l).

The highest concentration of silver as noted in the available infrequent constituent reports was 10 µg/l. This is well below the level of 50 µg/l as set forth by the TNRCC.

**Zinc** - The total concentration of zinc, as determined from the infrequent constituent reports for the available wells, is shown in Table 7-2 under Zn, the chemical symbol for zinc. Common sources of zinc in drinking water are brass and galvanized iron pipe. Zinc is dissolved by surface water and zinc oxide in automobile tires is a significant pollutant in urban runoff. In addition, zinc may contribute to the corrosiveness of water.

A greasy film forms in surface water containing 0.5 mg/l or more zinc and more than 5.0 mg/l causes a metallic bitter taste. Concentrations of 25 to 40 mg/l can cause nausea and vomiting. The average concentration for the sampled wells was 14.35 µg/l and the maximum concentration was found to be 27 µg/l. The recommended maximum concentration for zinc is listed in TAC 290.13 as being 5.0 mg/l (5,000 µg/l). Therefore, the levels of zinc in the ground water of Shelby County all appear to be well within the guidelines set forth by the TNRCC.

**Selenium** - The total selenium as listed in the infrequent constituents reports is listed in Table 7-2 under its chemical symbol, Se. Selenium is associated with industrial pollution (such as from copper smelting) and vegetation grown in soils containing selenium. Selenium causes cancers and sarcomas in rats fed heavy doses. Chronic exposure to excess selenium results in gastroenteritis, dermatitis, and central nervous system disturbance. However, selenium is also considered to be an essential nutrient and may actually provide some protection against certain kinds of cancer. TAC 290.3 lists 0.01 mg/l (10 µg/l) as being the maximum allowable concentration of selenium in drinking water.

The average concentration of selenium observed in the infrequent constituent reports is 2.43 µg/l. The maximum concentration noted was 4.0 µg/l. This is below the 10 µg/l limit as set forth above. This indicates that selenium contamination of groundwater is not a problem in Shelby County.

**Mercury** - Mercury is expressed in Table 7-2 under its chemical symbol, Hg. Mercury is found in nature in the elemental and organic form. Concentrations in unpolluted waters are normally less than 1.0 µg/l. The organic methylmercury and other alkylmercury compounds are highly toxic, affecting the central nervous system and kidneys. The maximum permissible contaminant level in drinking water is 2.0 µg/l (0.002 mg/l) as total mercury.

The highest recorded concentration of mercury was 0.13 µg/l. This is well below the limit of 2.0 µg/l as stated in TAC 290.3. Mercury contamination does not appear to be a problem for the groundwater of Shelby County.

## **7.1.2 RAW WATER QUALITY - TOLEDO BEND RESERVOIR**

### **7.1.2.1 SABINE RIVER AUTHORITY MONITORING DATA**

Extensive testing of raw water from the Sabine River and Toledo Bend Reservoir has been performed by the Sabine River Authority of Texas (SRA). The SRA maintains 30 active monitoring stations along the Sabine River from the Gulf of Mexico to the river's headwaters. Of particular interest in this study is the testing data gathered from the stations in or near Shelby County. A summary of these test results from 1994 is presented in Table 7-3 with a brief discussion of each of the parameters following.

The names and locations of the monitoring stations are as follows:

- Station SR10 - Located on the Sabine River at FM 2517, near Deadwood, Texas. The station is approximately 7 miles north of the Shelby county line and 5 miles upstream of Toledo Bend Reservoir.
- Station TB8 - Located at Toledo Bend Reservoir headwaters at US 84, near Logansport, Louisiana.
- Station TB6H - On Toledo Bend Reservoir at State Highway 21 (Pendleton Bridge) over old river channel.
- Station TB6F - On Toledo Bend Reservoir in Sunshine Bay at FM 3121.
- Station TB6A - On Toledo Bend Reservoir in main lake above the dam over the old river channel.
- Station TB6S - Located on the Sabine River just below the spillway, near Burkeville, Texas.
- Station TB6 - Located near Burkeville, Texas, on the Sabine River just below the power plant at the FM 692 bridge.

TABLE 7-3 RAW WATER QUALITY							
PARAMETER	MONITORING STATION IDENTIFICATION						
	SR10	TB8	TB6H	TB6F	TB6A	TB6S	TB6
Chlorophyll $\alpha$ ( $\mu\text{g/l}$ )	19	18	10	10	5	<1	6
30Pheophytin $\alpha$ ( $\mu\text{g/l}$ )	2	3	<1	<1	<1	<1	3
Ammonia-Nitrogen (mg/l)	0.08	0.18	<0.05	<0.05	<0.05	0.06	<0.05
Nitrate-Nitrite (mg/l)	0.27	0.36	<0.05	<0.05	<0.05	<0.05	<0.05
Ortho-Phosphate (mg/l)	0.08	0.08	0.01	0.01	0	0.01	0.01
Total Phosphate (mg/l)	0.15	0.21	0.03	0.02	0.02	0.04	0.02
Total Hardness (mg/l)	45	44	37	26	37	43	37
Total Alkalinity (mg/l)	30	40	29	21	23	28	24
pH (Standard Units)	7.05	7.04	7.85	7.61	7.58	7.1	8.93
Dissolved Oxygen (mg/l)	5.95	4.89	6.8	7.09	6.24	8.44	4.77
% Saturation	73.2	61	89.6	94.8	80.8	86	52.9
Conductivity ( $\mu\text{S}$ )	164	182	161	131	146	155	151
Fecal Coliform (# / 100 ml)	277	2,940	88	1,619	17	42	1,832
Fecal Strep (# / 100ml)	347	N/A	N/A	N/A	N/A	N/A	N/A
Turbidity (NTU)	56.4	56.3	1.4	2.8	1.4	1.3	1.6

All surface water supplies should be considered to be of doubtful sanitary quality unless given adequate treatment. When picking a source of surface water for public supply, several considerations must be considered. Water for drinking and cooking purposes must be made free from disease producing organisms such as bacteria, protozoa, virus, and worms. Certain forms of aquatic vegetation and microscopic animal life in natural water may be either stimulated or retarded in their growth cycles by physical, chemical, or biological factors, such as pollution. Also, continuous cycles of growth and decay by algae, microcrustaceans, and certain forms of nonpathogenic bacteria may result in the production of noxious byproducts which may adversely affect the quality of the water supply. Several tests have been performed by the SRA to analyze the quality of water present in the Sabine River and Toledo Bend Reservoir. A brief discussion of these relevant parameters follows:

Chlorophyll  $\alpha$  ( $\mu\text{g/l}$ ) - Chlorophyll is the green photosynthetic pigment found in plant and can be used to determine the biomass of algae.

30 Pheophytin  $\alpha$  ( $\mu\text{g/l}$ ) - A byproduct of chlorophyll  $\alpha$  degradation and can be used to determine whether an algal population is growing or dying.

Ortho-Phosphate (phosphorus) (mg/l) - A necessary nutrient containing an ionized form of phosphorus combined with oxygen.

Total Phosphate (mg/l) - The sum of all forms of phosphorus. Uncontaminated waters usually contain about 10 to 30  $\mu\text{g/l}$  total phosphorus, and concentrations in excess of 100  $\mu\text{g/l}$  (0.10 mg/l) interferes with coagulation during water treatment. High phosphorus concentrations together with nitrates and organic

carbon are sometimes associated with heavy aquatic plant growth. Most waterways naturally contain sufficient nitrogen and phosphorus to support massive algal blooms. However, it should also be noted that concentrations associated with nuisances in lakes would not normally cause problems in flowing streams.

According to the SRA sampling data shown in Table 7-3, the total phosphorus concentration exceeded 0.10 mg/l at sampling Stations SR10 and TB8. These stations are located on the Sabine River upstream and immediately at the headwaters of Toledo Bend Reservoir. This indicates that surface water obtained from these locations contains a high concentration of phosphate that might interfere with treatment at a water plant. However, the concentrations drop off significantly in the lake and river downstream from these locations. This indicates that the intake for a surface water treatment plant would be best located downstream from the headwaters of the lake.

Dissolved Oxygen (mg/l) - This refers to the amount of oxygen dissolved in water. Generally, water devoid of dissolved oxygen frequently has a "flat" taste. A dissolved oxygen content exceeding 3.0 mg/l is desirable in order to keep secondary tastes and odors from developing. Dissolved oxygen is also an indication of water pollution due to the fact that aerobic bacteria must consume oxygen in order to stabilize decomposable organic matter.

Table 7-3 shows that all of the sampling stations had a dissolved oxygen content in excess of 3.0 mg/l recommended above. The dissolved oxygen concentration at the headwaters of the lake (near the northeastern corner of Shelby County) was 4.89 mg/l while the concentration at the State Highway 21 Bridge (approximately 12 miles downstream of the southern border of Shelby County) is 6.8 mg/l. This would seem to indicate that the average dissolved oxygen content along the shores of Shelby County could reasonably be expected to meet or exceed these values.

Conductivity ( $\mu$ S) - The measure of the ability of water to conduct electricity. Same as discussed above, except here it is measured in microsiemens per centimeter, the SI (metric) unit of measure.

Fecal Coliform (# / 100 ml) - Some organisms that produce diseases in people originate with the fecal discharges of infected individuals. However, the specific disease causing organisms present in water are not easily identified and the techniques for a comprehensive bacterial examination are very complex and time consuming. Testing for fecal coliform provides an indication of the relative degree of contamination in terms of an easily defined quantity.

Fecal coliforms are a group of bacteria which are found in the intestinal tract of warm-blooded animals. They are always present in fecal wastes where they also outnumber disease producing organisms (pathogens). The presence of fecal coliform does not necessarily guarantee the presence of pathogens; however, it does indicate the existence of conditions that make the presence of pathogens highly likely. As a rule, pathogens are not able to survive in conditions that do not support coliforms, making their absence a good indication of the absence of pathogens.

Surface-Water Criteria for Public Water Supplies-Sources as referenced in Environmental Engineering and Sanitation, 3rd Edition by Joseph Salvato states that *permissible* criteria for fecal coliforms surface water sources is 2,000 per 100 ml. while *desirable* criteria is less than 20 per 100 ml. As can be seen from Table 7-3, all the sampling stations showed concentrations less than the maximum permissible criteria except for Station TB8 at the headwaters of Toledo Bend Reservoir. The only station with a concentration below the desirable criteria is Station TB6A located at the reservoir dam above the old river channel. This would seem to indicate that the water from the reservoir is generally suitable to be used for domestic consumption with proper treatment.

Fecal Streptococci (# / 100ml) - Bacteria found in the intestinal tract of warm-blooded animals, in much greater numbers than fecal coliform in animals other than man.

Fecal Coliform/Fecal Streptococci Ratio - This is the ratio of fecal coliform to fecal streptococci bacteria in a water sample. The ratio is 4.33 in human feces and never greater than 0.7 in other animals. Table 7-3 shows that only Station SR10 tested for both types of bacteria. At SR10, the concentration of fecal coliform was 2.77 per 100 ml and the concentration of fecal streptococci was 347 per 100 ml. Therefore, the ratio of coliform to streptococci is 0.79, which is very close to the 0.7 ratio quoted above for animal feces. This would seem to indicate that the number of bacteria in the river at this point is not the result of human

sewage.

**Turbidity** - Turbidity describes the optical property of water that causes light to be scattered rather than transmitted in straight lines. The standard measure of turbidity is the Nephelometric Turbidity Unit, which requires the use of a nephelometer, a device that measures the amount of light scattered by suspended particles in the water test sample. Table 7-3 shows that Stations SR10 and TB8 both have high turbidities. However, the turbidities decrease significantly further down stream from the headwaters of the lake. The turbidity was low enough at the other stations as to cause little or no difficulty during treatment.

### 7.1.2.2 CITY OF HUXLEY WATER TREATMENT PLANT DATA

The City of Huxley operates a surface water treatment plant that processes raw water from Toledo Bend Reservoir. The plant intake is located at 31°45'48" latitude and 93°50'30" longitude, which is approximately 9.3 miles east of the City of Center and 9.1 miles southeast of the City of Joaquin. This is approximately half way between the Sabine River Authority monitoring stations TB8 and TB6F. Standard procedure at the facility is to monitor the raw water quality, which provides an excellent record of conditions for this section of the reservoir. A summary of this data for the past year is shown in Table 7-4.

<b>TABLE 7-4 AVERAGE RAW WATER QUALITY AT HUXLEY WTP</b>			
<b>MONTH</b>	<b>RAW WATER ANALYSIS</b>		
	<b>AVERAGE NTU</b>	<b>AVERAGE pH</b>	<b>AVERAGE ALKALINITY</b>
July 1995	7	7.0	25.1
August 1995	8	7.0	25.7
September 1995	7	6.8	25.8
October 1995	9	6.8	27.0
November 1995	12	6.7	27.3
December 1995	16	6.7	27.4
January 1996	21	6.7	27.5
February 1996	23	6.7	26.1
March 1996	21	7.0	27.5
April 1996	15	8.9	28.0
May 1996	17	6.8	30.9
June 1996	7	7.1	30.6
<b>AVERAGES</b>	<b>13.6</b>	<b>7.0</b>	<b>27.4</b>

Table 7-3 reveals that the turbidity at Monitoring Station TB8, located approximately 16 miles upstream of Huxley, to be 56.3 NTU. Table 7-3 also shows the turbidity at Monitoring Station TB6F, located approximately 27 miles down stream from Huxley, to be 2.8 NTU. Please note that the Sabine River Authority took these samples on August 10, 1994 and that the records from the Huxley WTP shows that the raw water turbidity for that day was 8 NTU. This demonstrates the significant decrease in turbidity as the water progresses downstream from the headwaters. Additionally, the records from the Huxley WTP also reflects the seasonal changes in the turbidity of the water. The highest turbidity recorded at the facility was 33 NTU on March 15, 1995. Standard water treatment at the facility reduced this level turbidity down to 0.5 NTU, which is below the level required by the TNRCC.

Further reference to Table 7-3 shows that the total alkalinity at Monitoring Station TB8 on March 15, 1994

was 40 mg/l, while the total alkalinity at Monitoring Station TB6F was 21 mg/l. Records also reveal that the total alkalinity of raw water at the Huxley WTP for the same day was 24 mg/l.

## **7.2 WATER TREATMENT**

### **7.2.1 GROUND WATER TREATMENT**

As mentioned in Section 7.1 above, the quality of the groundwater from the Carrizo-Wilcox Aquifer is generally good. Experience with local wells indicates that aeration may be required for hydrogen sulfide removal. Other than that, chlorination and fluoridation are the only treatments considered for this water.

### **7.2.2 SURFACE WATER TREATMENT**

The surface water quality is such that it should be treatable with conventional methods discussed in Chapter 8 of this report.



**SECTION 8**  
**SURFACE WATER TREATMENT OPTION**

## **SECTION 8**

# **SURFACE WATER TREATMENT OPTIONS**

There are several promising sources of surface water for Shelby County. The most prominent being Toledo Bend Reservoir, which marks the eastern boundary of the County. Several municipalities along the Toledo Bend already operate surface water plants that provide potable water to their residents. There is also a well publicized plan aimed at diverting as much as 600 MGD from the reservoir in order to serve the City of Houston. There are also several smaller reservoirs within the interior of Shelby County. Of these, Lake Pinkston and Lake Center are currently being used to supply surface water to the City of Center. In fact, Center maintains surface water treatment plants at each of those reservoirs.

The options detailed in this section were considered in the context of the needs of the local water supplying entities. The present needs were analyzed based on current and historical records (where available) of the entities. Future needs were estimated by applying a linear regression to the historical records, applying the assumption that the entities will continue to grow in the future at the same rate as they grew in the past. This data was then applied to an analysis of the storage, pressure, and delivery systems of each entity. This analysis was of primary importance, since the water suppliers must have enough water for their users and be able to provide this water at pressure even during the periods of high demand. Various regional system configurations were then compared in order to determine the most feasible option for supplying those needs.

The two options considered in the initial draft of this report consisted of (1) constructing a county-wide distribution system and a regionally owned water treatment plant located on Toledo Bend Reservoir, and (2) constructing a county-wide distribution system and purchasing water from the existing surface water treatment plant in Logansport, Louisiana. After the initial draft report was submitted, another option was suggested for consideration. This option consists of constructing a localized distribution system only to participants interested in purchasing large quantities of water from the system. Water would then be purchased from the City of Center, who would supply water to the system from its existing water treatment plants. A discussion of this particular option has also been included in this report, following those previously mentioned. The general configuration of these options remains the same as in the draft report.

Organizational options for the regional system hinge upon the willingness of various entities to cooperate with each other and their ability to borrow the necessary capital to carry out the plan of action. All of the options considered herein assume the formation of a regional entity of some type to oversee the policies, operation, and maintenance of the system.

### **8.1 OPTION 1: SHELBY COUNTY PLANT**

A hydraulic analysis using the EPANET program was performed for the distribution system for a regional water surface water treatment plant located in Shelby County. The model was run with the projected year 2050 demands in order to estimate the required line sizes through that date. A diagram of this system layout is shown in Figure 8-3 and Table 8-1 lists the nodes shown on the map and used in the model. The major segments of the system are also briefly discussed in the subsections below.

TABLE 8-1 NODE DESCRIPTIONS FOR OPTION 1	
NODE NO.	NODE DESCRIPTION
51	Intake structure and pump station for the Shelby County Regional Surface Water Treatment Plant
1	Shelby County Regional Surface Water Treatment Plant
3	Pump Station #3, located in Shelbyville
4	Pump Station #4, located in the City of Center at Tyson facility
5	Demand node for the City of Center
6	Demand node for the Flat Fork WSC
7	Demand node for the City of Tenaha
8	Demand node for Paxton WSC
9	Demand node for the City of Joaquin
10	Demand node for Five Way WSC
12	Demand node for Sand Hills WSC
13	Demand node for Choice WSC
14	Demand node for McClelland WSC
15	Demand node for the Warr WS
17	Demand node for the City of Timpson
18	Demand node for Tennessee WSC
19	Demand node for Timpson Rural WSC
20	Demand node for Huber WSC
21	Demand node for McClelland WSC
22	Demand node for Five Way WSC
23	Demand node for East Lamar WSC
24	Demand node for Buena Vista WSC

### 8.1.1 NODE 51: INTAKE STRUCTURE AND PUMP STATION

**Location** - A potential site for an intake structure was selected based upon the depth of the water in Toledo Bend Reservoir in a near proximity to the shore. This site is indicated on Figure 8-3. This site is located at a point thought to be far enough downstream in the Lake to avoid significant impact from both point and non-point dischargers upstream, and yet at a point that is not too distant from the main population of the county.

**Intake Structure** - Figure 8-1 illustrates the general layout for the proposed intake structure. The intake structure envisioned is one capable of taking water at three different levels. It would be constructed so that four intake pumps could be mounted on top of the intake structure. A vehicular access bridge would be constructed from the shore to the intake structure and a raw water pipeline would be attached. This approach would require an approval process with the Corps of Engineers.

**Pump Station** - The pump station would consist of an intake piping and manifold arrangement anchored on the top slab of the intake structure. Several pumps with a capacity of 6,038 gpm with the largest unit out

would be enclosed in a small building located on the intake structure.

If difficulties are encountered with the Corps of Engineers in the approval process, the option would be to locate a pump station on the shore with a suction line running back out to the intake structure. The pumps would be of the same capacity but would require a greater suction lift capacity or the construction of a wet well/dry well structure.

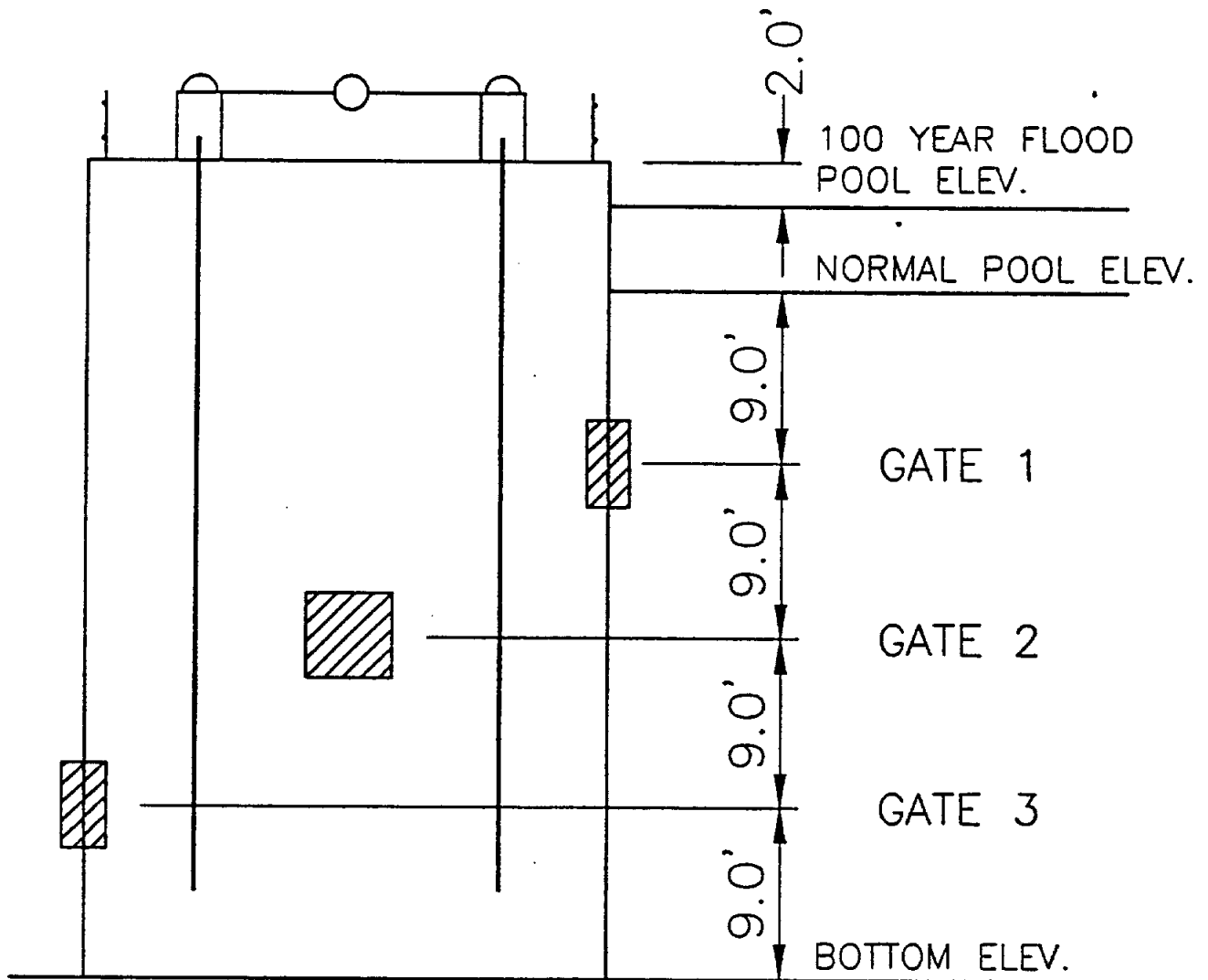
Table 8-2 provides a cost estimate for the Intake Structure, Raw Water Pump Station, and Raw Water Pipeline.

TABLE 8-2 COST ESTIMATE INTAKE STRUCTURE, RAW WATER PUMPS, AND WATER PIPELINE	
FACILITY	COST
Intake Structure (20 MGD capacity)	\$800,000
Pumps and Controls (10 MGD)	\$400,000
Raw Water Main (30 inch diameter, 12,144 linear feet)	\$589,000
Geotechnical	\$75,000
Engineering	\$255,000
Contingency	\$85,000
<b>TOTAL</b>	<b>\$2,204,000</b>

#### 8.1.2 NODE 2: SURFACE WATER TREATMENT PLANT AND PUMP STATION

Treatment Plant Facilities - The overall regional plan is based on a regional treatment facility. The cost estimates for construction and operations are included in the discussion below. However, individual plants or efforts are not envisioned under this plan.

Regional Treatment Plant - Figure 8-2 shows a schematic of the proposed water treatment plant. This is a conventional plant with a flash mixer, solids contact unit, and filter system. Treated water would flow to a ground storage reservoir for storage until it was pumped by the high service pump station into the supply line. Table 8-3 furnishes a cost estimate for Phase I for the Surface Water Treatment Plant, Ground Storage, and High Service Pump Station.



30' DIA. CIRCULAR INTAKE  
W/4 PUMPS ON TOP SLAB.

VEHICULAR ACCESS BRIDGE  
FROM SHORE TO INTAKE,  
WITH RAW WATER PIPELINE  
ATTACHED

FIGURE 8-1  
INTAKE STRUCTURE  
(IN-LAKE FACILITY)



ENGINEERS

SURVEYORS

EVERETT GRIFFITH JR. & ASSOCIATES, INC.

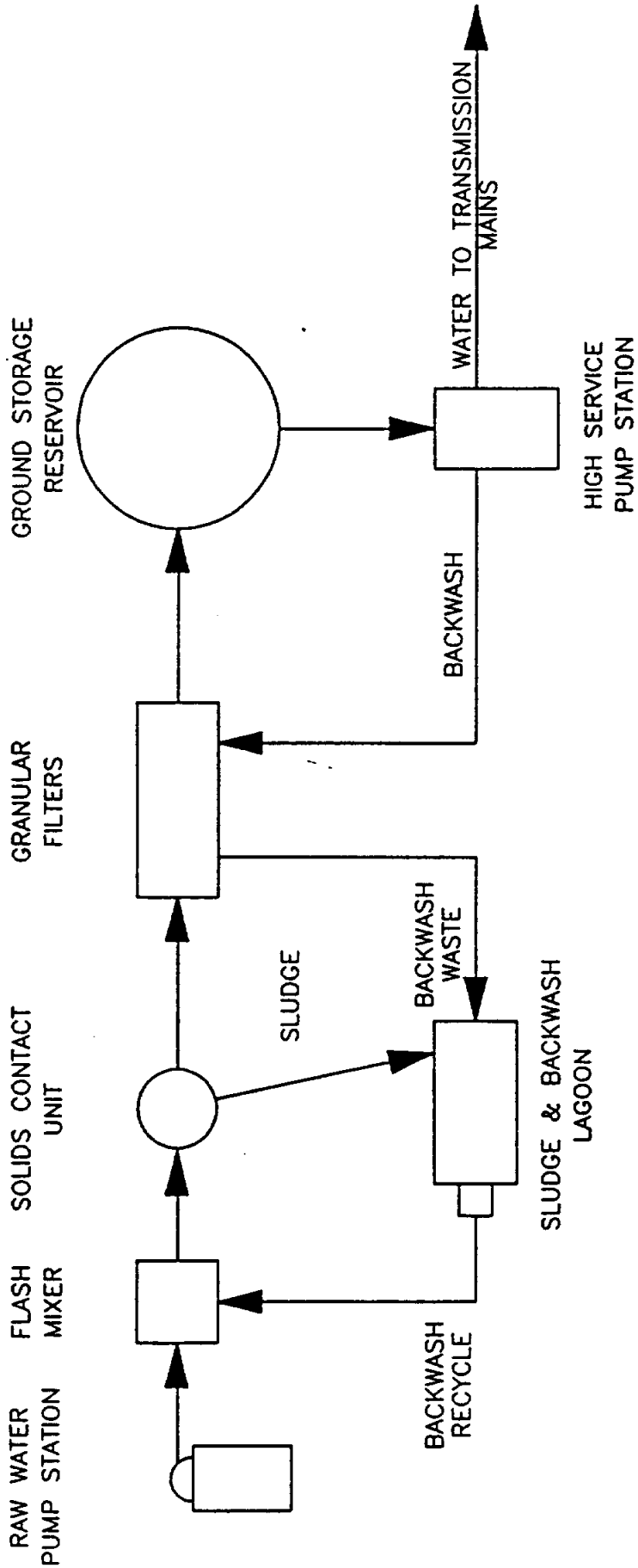
408 North Third Street  
Lufkin, Texas

DESIGNED BY:	TCL	CHECKED BY:	TCL	SCALE:	NONE	1 OF 1
DRAWN BY:	MEJ	APPROVED BY:	WS	DATE:	10-2-95	

<b>TABLE 8-3 COST ESTIMATE</b>	
<b>PHASE I WATER TREATMENT PLANT, GROUND STORAGE, AND HIGH SERVICE PUMP STATION</b>	
FACILITY	COST
Flash Mix	\$75,000
Chemical Building and Utilities	\$175,000
Solids Contact Units	\$1,000,000
Granular Filters	\$1,000,000
Sludge and Backwash Lagoons, with recycle pumps	\$100,000
Ground Storage Tank (4 MG)	\$1,500,000
High Service Pump Station	\$500,000
Administration/Laboratory Building	\$200,000
Site Work, Piping, Electrical	\$750,000
Geotechnical	\$100,000
Engineering	\$570,000
Contingency	\$380,000
<b>TOTAL</b>	<b>\$6,350,000</b>

Operational Considerations - As discussed in Chapter 7, the general raw water quality at the proposed site is very good. There is some slight turbidity, but most of the parameters of concern are at a reasonable level. Another important operational consideration is the remote location of the plant site. For example, it is over 20 miles from the City of Center to the plant site, meaning that staff and operators living in the larger population centers of the county will have a fairly long drive to and from work. This needs to be considered in the proper provision of facilities such as office space, showers and lockers, equipment storage rooms, etc.

It is proposed that a sludge and backwash lagoon be constructed at the plant site. Sufficient land should be acquired in order to provide a long life, at least until 2050. Approximately 25 acres would be needed for the surface water plant if sludge is disposed of on-site. Additional easements for the raw water and treated water lines would be needed. Table 8-4 includes first year operation and maintenance costs for the Phase I construction.



**FIGURE 8-2**  
**WATER TREATMENT PLANT**  
**FLOW DIAGRAM**



**ENGINEERS**  
**SURVEYORS**  
**EVERETT GRIFFITH JR. & ASSOCIATES, INC.**  
 406 North Third Street  
 Lufkin, Texas

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TABLE 8-4 COST ESTIMATE	
O&M COSTS AT WATER TREATMENT PLANT	
FACILITY	COST
Labor	\$175,000
Energy	\$300,000
Chemicals: Alum	\$40,000
Caustic	\$15,000
Chlorine	\$15,000
Maintenance and Repair	\$100,000
Miscellaneous Supplies	\$50,000
<b>TOTAL</b>	<b>\$695,000</b>

From the data above, operating the plant at a 2050 demand rate of 10 MGD, the cost of water is approximately \$0.1904 per 1,000 gallons.

The labor costs were determined as follows:

2 person day shift  
 1 person evening shift  
 1 person night shift  
 1 person fill-in  
 5 persons  
 10,500 man-hours

### 8.1.3 NODE 3: PUMP STATION AT SHELBYVILLE

The Shelbyville Pumping Station is designed to send enough water to the City of Center Pumping Station to serve the City of Center and surrounding entities and the south central and northwestern portion of Shelby County. The pumping station would be constructed to operate initially with several pumps having a minimum capacity of 5,568 gpm with the largest unit out of operation. The manifold and building would be arranged to allow for the installation of larger pumps in place of the initial pumps, and for the inclusion of additional pumps as well. Yard piping would be sized and constructed to allow for the easy tie-in of an additional supply line.

### 8.1.4 NODE 4: PUMP STATION LOCATED AT THE CITY OF CENTER

An elevated storage tank is to be located at this location that is capable of serving the north-central and north-eastern entities of the county. In specific, the City of Joaquin, the City of Tenaha, Paxton WSC, Flat Fork WSC, Warr WSC, Five Way WSC, and the City of Center.

A pump station will also be located at the site that is capable of supplying water to the remaining entities west and south of the City of Center. This station would be constructed to operate with several pumps with a minimum capacity of 1,391 gpm with the largest unit out of operation. The manifold and building would be arranged to allow for the installation of larger pumps in place of the initial pumps, and for the inclusion of additional pumps as well. Yard piping would be sized and constructed to allow for the easy tie-in of an additional supply line.

### 8.1.5 TRANSMISSION LINES

Figure 8-3 depicts the proposed water transmission system and the possible take point on Toledo Bend Reservoir for a regional surface water treatment plant located in Shelby County. The following is a short description of the transmission lines used in the EPANET model of the system.



### 8.1.6 PIPE MATERIALS

All of the transmission lines described herein are PVC type waterline. PVC was selected after an EPANET analysis was performed between PVC and Ductile Iron line to determine which was the most economical. As part of the analysis, the line segments from the intake to the pump station at Shelbyville were modeled using the friction coefficients and pipe diameters for both PVC and DI. The results are shown in Table 8-5.

Table 8-5 shows that even though the inside diameter of a "30 inch" DI pipe is actually larger than its PVC counterpart, there is very little difference between the flow characteristics of the two. Therefore, the determining factor regarding the use of the particular material is the price. The unit price of a 30 inch diameter PVC pipe is approximately \$38.49 while the cost of a similar sized ductile iron pipe is \$49.50. Therefore, the decision lies with utilizing PVC pipe whenever possible.

TABLE 8-5 DUCTILE IRON VS. PVC FOR PIPE LINE MATERIAL					
LINE SEGMENT	PIPE MATERIAL	DIAMETER (in)	FLOW (gpm)	VELOCITY (fps)	HEADLOSS PER 1000 ft
1	PVC	30.00	6,038.00	2.74	0.82
	DI	31.24	6,038.00	2.53	0.72
2	PVC	30.00	5,568.00	2.53	0.63
	DI	31.24	5,568.00	2.33	0.56
51	PVC	30.00	1,474.45	0.67	0.06
	DI	31.24	1,458.63	0.61	0.05
52	PVC	30.00	4,563.55	2.07	7.09
	DI	31.24	4,579.37	1.92	6.08

### 8.1.7 BRIEF DESCRIPTION OF TRANSMISSION LINE SEGMENTS

**Segment 51** - Segment 51 is the section of 30 inch water line that connects the surface water intake to the water treatment plant. It is approximately 12,144 feet (2.3 miles) in length.

**Segment 1** - Segment 1 is the 11,088 feet (2.1 mile) long section of 30 inch waterline that runs along FM 2694 and connects the Surface Water Treatment Plant to Node 2.

**Segment 2** - Segment 2 refers to the 30 inch pipeline section that connects Node 2 to Node 3, the Pump Station located in Shelbyville. This section of line is 55,440 ft (10.5 miles) long and runs west along FM 2694.

**Segment 3** - Segment 3 is the section of 30 inch water line that connects the Pumping Station at Node 3 to Node 24. This section of line runs parallel to State Highway 87 and is 14,800 feet (2.8 miles) in length.

**Segment 25** - Segment 25 is the section of 12 inch water line that connects the Pumping Station at Node 3 to Node 21, a demand node for the McClelland WSC. This section of line runs parallel to State Highway 87 and is 33,800 feet (6.4 miles) in length.

**Segment 29** - Segment 29 is the section of 30 inch water line that connects Node 24 to Node 4, the storage tank and pumping station located in the City of Center at the Tyson facility. This section of line runs parallel to State Highway 87 and is 13,200 feet (2.5 miles) in length.

**Segment 26** - Segment 26 is the section of 12 inch water line that connects Node 24 to Node 22, the demand node for the Five Way WSC. This section of line runs parallel to FM 414 and is 15,800 feet (3 miles) in length.

**Segment 4** - Segment 4 is the section of 24 inch water line that connects Node 4, the Tyson elevated storage tank, to Node 5, the demand node for the City of Center. The line is 7,930 feet (1.5 miles) long and runs east with Highway 87 until it ties into Center's distribution system.

**Segment 5** - Segment 5 is the section of 18 inch water line that connects Node 5 to Node 6, the demand node for the Flat Fork WSC. Segment 5 runs north along Hwy 96 for approximately 39,900 feet (7.6 miles) until it ties into the Flat Fork distribution system.

**Segment 6** - Segment 6 is the section of 18 inch water line that connects Node 6 to Node 7, the demand node for the City of Tenaha. Segment 6 runs north along Hwy 96 for approximately 31,680 feet (6 miles) until it ties into Tenaha's distribution system.

**Segment 7** - Segment 7 is the section of 12 inch water line that connects Node 7 to Node 8, the demand node for the Paxton WSC. Segment 7 runs east along Hwy 84 for 24,820 feet (4.7 miles) until it ties into the Paxton distribution system.

**Segment 8** - Segment 8 is the section of 12 inch water line that connects Node 8 to Node 9, the demand node for the City of Joaquin. Segment 8 runs east from Node 8 along Hwy 84 for 35,900 feet (6.8 miles) until it ties into the Joaquin distribution system.

**Segment 9** - Segment 9 is the section of 12 inch water line that connects Node 5, the demand node for Center, to Node 10, the demand node for the Five Way WSC. Segment 9 runs northeast from Center along Hwy 7 for 19,000 feet (3.6 miles) until it ties into the Five Way distribution system.

**Segment 10** - Segment 10 is the section of 30 inch water line that connects Node 4, the Pump Station located in Center at the Tyson facility, to Node 11, where the line splits into three different segments. Segment 10 is 7,920 feet (1.5 miles) long.

**Segment 11** - Segment 11 is the section of 18 inch water line that connects Node 11 to Node 12, the demand node for the Sand Hills WSC. Segment 11 runs southwest from Center along Hwy 7 for 38,000 feet (7.2 miles) until it ties into the Sand Hills distribution system.

**Segment 12** - Segment 12 is the section of 18 inch water line that connects Node 11 to Node 13, the demand node for the Choice WSC. Segment 12 runs south from Center along Hwy 96 for 35,380 feet (6.7 miles) until it ties into the Choice distribution system.

**Segment 13** - Segment 13 is the section of 12 inch water line that connects Node 13 to Node 14, the demand node for the McClelland WSC. Segment 13 is 26,400 feet (5 miles) long.

**Segment 14** - Segment 14 is the section of 24 inch water line that connects Node 11 to Node 15, the demand node for the Warr Water System. Segment 14 runs east from Center along Hwy 87 for 15,310 feet (2.9 miles) until it ties into the Warr system.

**Segment 15** - Segment 15 is the section of 24 inch water line that connects Node 15 to Node 20, the demand node for the Huber WSC. Segment 15 runs along Hwy 87 for 22,700 feet (4.3 miles) until it ties into the Huber distribution system.

**Segment 16** - Segment 16 is the section of 18 inch water line that connects Node 16 to Node 17, the demand node for the City of Timpson. Segment 16 runs along Hwy 87 for 30,600 feet (5.8 miles) until it ties into Timpson's distribution system.

**Segment 17** - Segment 17 is the section of 12 inch water line that connects Node 17 to Node 18, the demand node for the Tennessee WSC. Segment 17 runs east from Timpson along Hwy 84 for 23,200 feet (4.4 miles) until it ties into the Tennessee WSC distribution system.

**Segment 18** - Segment 18 is the section of 12 inch water line that connects Node 17 to Node 19, the demand node for the Timpson Rural WSC. Segment 18 runs west from Timpson along Hwy 59 for 12,150 (2.3 miles) until it ties into the Timpson Rural Water Supply Corporation distribution system.

**Segment 24** - Segment 24 is the section of 24 inch water line that connects Node 15 to Node 20, the demand node for the Huber WSC. Segment 18 runs northwest from Center along Hwy 87 for 20,300 (3.8 miles) until it ties into the Huber distribution system.

**Segment 27** - Segment 27 is the section of 12 inch water line that connects Node 11 to Node 23, the demand node for the East Lamar WSC. Segment 27 runs west from Center FM 2974 for 11,000 (2.1 miles) until it ties into the East Lamar distribution system.

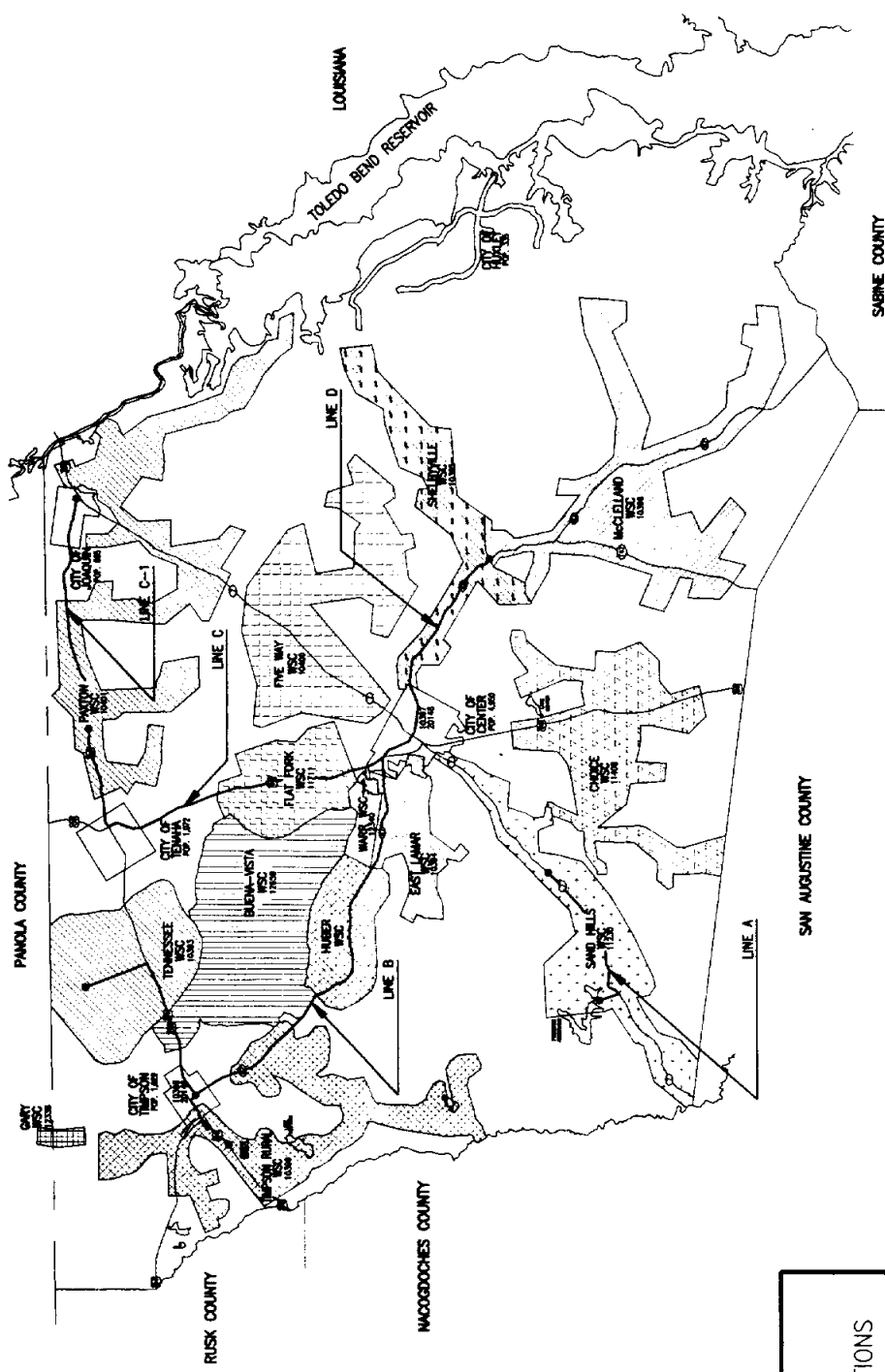
**Segment 28** - Segment 28 is the section of 12 inch water line that connects Node 16 to Node 24, the demand node for the Buena Vista WSC. Segment 28 runs north of Huber along FM 1645 for 9,500 feet 1.8 miles) until it ties into the Buena Vista system. The results of the EPANET run are shown in Tables 8-6 and 8-7.

<b>TABLE 8-6 NODE INFORMATION FOR SHELBY COUNTY WTP OPTION 1</b>			
<b>NODE NUMBER</b>	<b>NODE DESCRIPTION</b>	<b>ELEVATION (ft)</b>	<b>PRESSURE (psi)</b>
51	Intake	172	0.00
1	Water Treatment Plant	310	56.02
2	City of Huxley	279	65.52
3	Shelbyville Pump Station	295	43.38
4	City of Center/Tyson Pump Station	350	51.64
5	City of Center	372	38.88
6	Flat Fork WSC	280	73.68
7	City of Tenaha	350	40.89
8	Paxton WSC	300	54.64
9	City of Joaquin	230	79.37
10	Five Way WSC	320	60.99
11	Line Junction, in Center	372	68.26
12	Sand Hills WSC	439	38.90
13	Choice WSC	465	27.34
14	McClelland WSC	425	71.52
15	East Lamar WSC	350	77.48
16	Buena Vista WSC	405	52.89
17	City of Timpson	405	51.11
18	Tennessee WSC	320	87.87
19	Timpson Rural WSC	395	54.77
20	Huber WSC	410	51.10
21	McClelland WSC	284	87.49
22	Five Way WSC	260	94.17
23	East Lamar WSC	360	73.07
24	Buena Vista WSC	445	35.53

TABLE 8-7 LINE SEGMENT DATA FOR SHELBY COUNTY WTP - OPTION 1					
LINE SEGMENT	LENGTH (ft)	DIAMETER (in)	FLOW (gpm)	VELOCITY (fps)	HEADLOSS PER 1,000 ft
51	12,144	30	1,474.45	0.67	0.06
52	100	30	4,563.55	2.07	7.09
1	11,088	30	6,038.00	2.74	0.32
2	55,440	30	5,568.00	2.53	0.63
3	14,800	30	5,380.00	2.44	0.64
4	7,930	24	3,801.00	2.70	1.04
5	39,900	18	962.00	1.21	0.29
6	31,680	18	735.00	0.93	0.18
7	24,820	12	544.00	1.54	0.74
8	35,900	12	371.00	1.05	0.36
9	19,000	12	130.00	0.37	0.05
10	7,920	30	1,458.00	0.66	0.06
11	38,000	18	224.00	0.28	0.02
12	35,380	18	328.00	0.41	0.04
13	32,700	12	100.00	0.28	0.03
14	15,310	24	742.00	0.53	0.05
15	22,700	24	674.00	0.48	0.04
16	30,600	18	629.00	0.79	0.13
17	23,200	12	43.00	0.12	0.01
18	12,150	12	210.00	0.60	0.13
24	20,300	24	720.00	0.51	0.04
25	33,800	12	101.00	0.29	0.03
26	15,800	12	60.00	0.17	0.01
27	11,000	12	164.00	0.47	0.08
28	9,500	12	45.00	0.13	0.01
29	13,200	30	5,320.00	2.41	0.63

## 8.2 OPTION 2: PURCHASED SURFACE WATER FROM LOGANSFORT, LOUISIANA

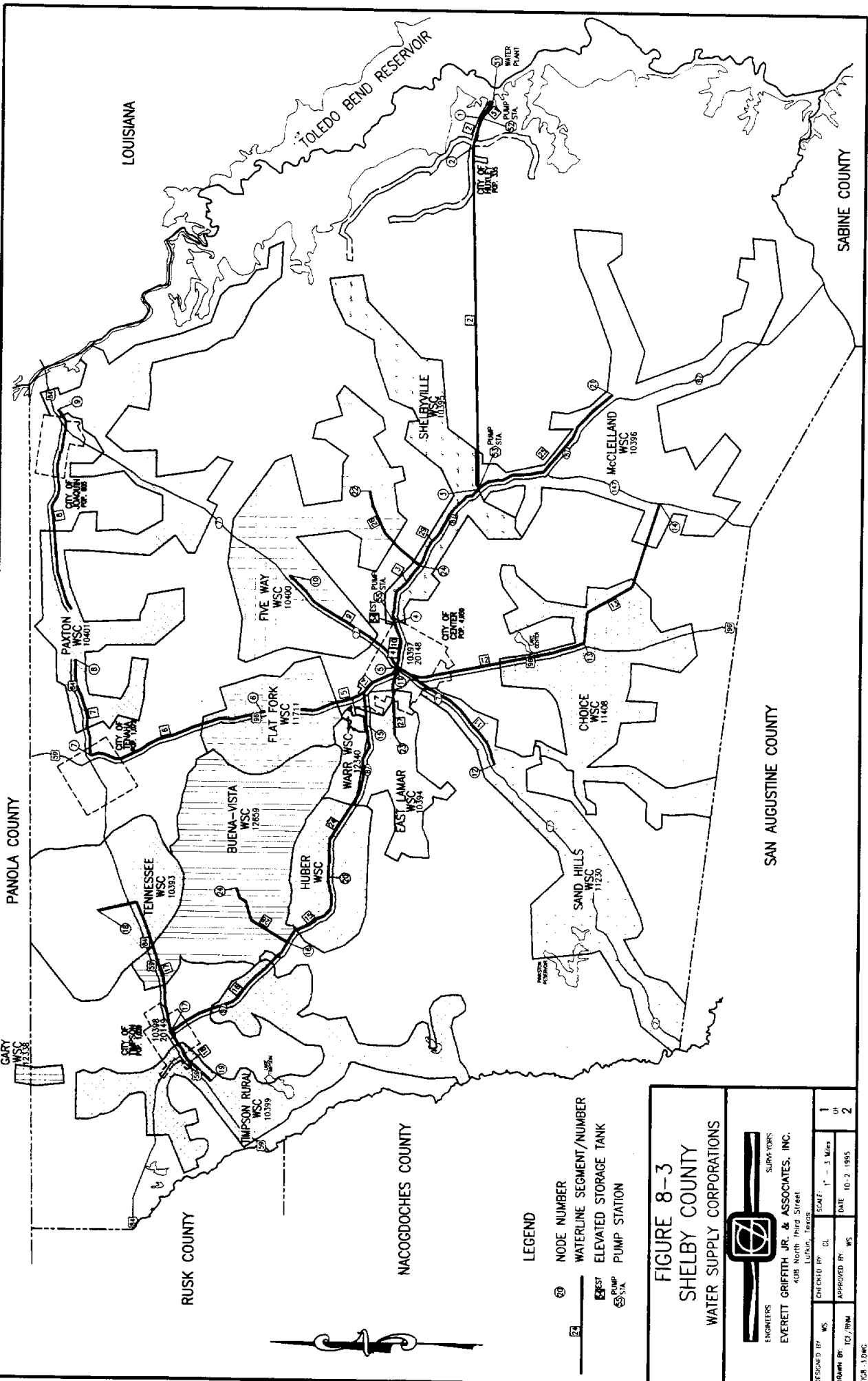
Option 2 to be considered is the purchase of water from an existing facility outside of the county. The City of Logansport, Louisiana, currently operates such a facility and already sells treated water to the City of Joaquin in Shelby County. This option would require Logansport to make any plant improvements necessary to treat the additional quantity of water (if any) and supply a pipeline for transporting the water at least as far as the Texas/Louisiana border (i.e. the Highway 84 bridge). A county-wide distribution system, similar to the one described above, would also need to be constructed, operated, and maintained by the regional



**FIGURE 8-5**  
**SHELBY COUNTY**  
**WATER SUPPLY CORPORATIONS**

**EVERETT GRIFFITH JR. & ASSOCIATES, INC.**  
 ENGINEERS  
 SURVEYORS  
 408 North Third Street  
 Lubbock, Texas

DESIGNED BY:	INS	CHECKED BY:	WS	SCALE:	1" = 4 MILES	3
DRAWN BY:	CL	APPROVED BY:	WS	DATE:	10/13/98	3
						OF
						3



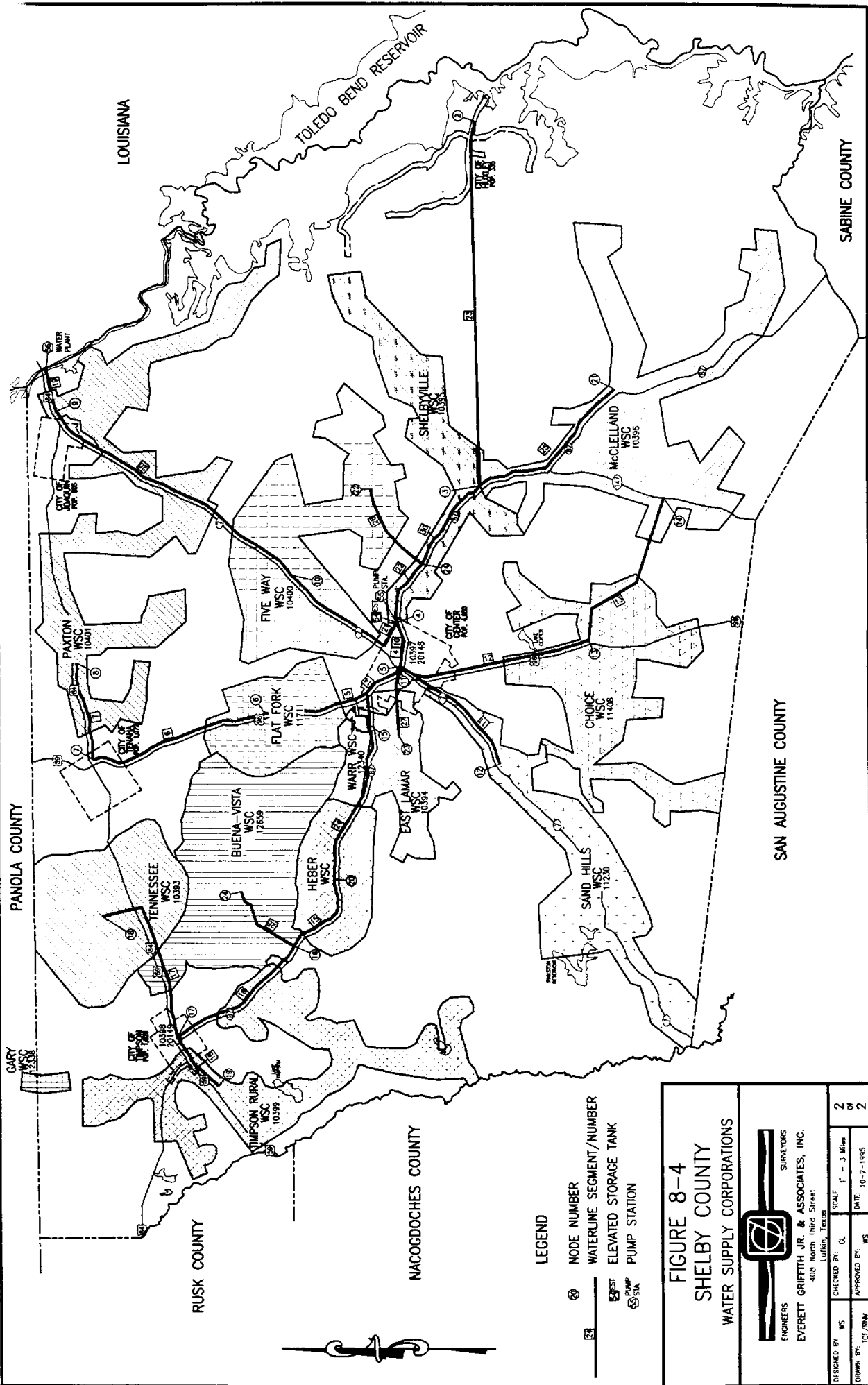
**LEGEND**

- ② NODE NUMBER
- WATERLINE SEGMENT/NUMBER
- ⬆ ELEVATED STORAGE TANK
- ⊕ PUMP STATION

**FIGURE 8-3**  
**SHELBY COUNTY**  
**WATER SUPPLY CORPORATIONS**

  
 ENGINEERS  
**EVERETT GRIFFITH JR. & ASSOCIATES, INC.**  
 408 North Third Street  
 Lufkin, Texas

DESIGNED BY	WS	CHECKED BY	CL	SCALE	1" = 3 Miles
DRAWN BY	TCJ/RNM	APPROVED BY	WS	DATE	10-2-1995
					2



**LEGEND**

- ① NODE NUMBER
- WATERLINE SEGMENT/NUMBER
- ⬆ ELEVATED STORAGE TANK
- ⊡ PUMP STATION

**FIGURE 8-4**  
**SHELBY COUNTY**  
**WATER SUPPLY CORPORATIONS**



ENGINEERS  
**EVERETT GRIFFITH JR. & ASSOCIATES, INC.**  
 408 North Third Street  
 Lubbock, Texas

DESIGNED BY	WS	CHECKED BY	GL	SCALE	1" = 3 Miles
DRAWN BY	TCJ/RMA	APPROVED BY	WS	DATE	10-2-1985
					2
					2



entity. A short summary of the proposed distribution system for this option is detailed below. Since the treatment plant will be owned and operated by Logansport, only the distribution system is herein addressed. This model also assumes that the water supplied from Logansport is delivered at sufficient pressure for the City of Joaquin only. A pump station will be required to pump to Center.

A hydraulic analysis using the EPANET program was performed for the distribution system required for this option. The model was run with the projected year 2050 demands in order to estimate the required line sizes through that date. A diagram of this system layout is shown in Figure 8-4 and Table 8-8 lists the nodes shown on the map and used in the model. The major segments of the system are also briefly discussed in the subsections below.

TABLE 8-8 NODE DESCRIPTIONS FOR OPTION 2	
NODE NO.	NODE DESCRIPTION
56	Surface Water Treatment Plant located in Logansport, Louisiana
2	Demand node for the City of Huxley
3	Demand node for the Shelbyville WSC
4	Pump Station #4, located in the City of Center at Tyson facility
5	Demand node for the City of Center
6	Demand node for the Flat Fork WSC
7	Demand node for the City of Tenaha
8	Demand node for Paxton WSC
9	Demand node for the City of Joaquin
10	Demand node for Five Way WSC
12	Demand node for Sand Hills WSC
13	Demand node for Choice WSC
14	Demand node for McClelland WSC
15	Demand node for Warr WSC
17	Demand node for the City of Timpson
18	Demand node for Tennessee WSC
19	Demand node for Timpson Rural WSC
20	Demand node for Huber WSC
21	Demand node for McClelland WSC
22	Demand node for Five Way WSC
23	Demand node for East Lamar WSC
24	Demand node for Buena Vista WSC

### 8.2.1 NODE 4: PUMP STATION LOCATED AT THE CITY OF CENTER

A 1 MG standpipe at this location has the capability of serving the north-central and north-eastern entities of the county. Specifically, the City of Tenaha, the City of Center, the City of Huxley, Paxton WSC, East Lamar WSC, Flat Fork WSC, Shelbyville WSC, and part of the McClelland WSC. A pump station will also

be located at the site that is capable of supplying water to the remaining entities west and south of the City of Center. This station would be constructed to operate with several pumps with a minimum capacity of 1,391 gpm with the largest unit out of operation. The manifold and building would be arranged to allow for the installation of larger pumps in place of the initial pumps, and for the inclusion of additional pumps as well. Yard piping would be sized and constructed to allow for the easy tie-in of an additional supply line.

### **8.2.2 TRANSMISSION LINES**

Figure 8-4 depicts the proposed water transmission system for the distribution of treated surface water purchased from Logansport, Louisiana. The following is a short description of the transmission lines used in the EPANET model of the system. Where possible, the designation of line segments was kept the same.

**Segment 19** - Segment 19 is the section of 30 inch water line that connects the surface water treatment plant in Logansport, Louisiana to Node 9, the demand node for the City of Joaquin. The segment runs west along Hwy 84 from Logansport and is 13,200 feet (2.5 miles) in length.

**Segment 20** - Segment 20 is the 63,400 feet (12 mile) long section of 30 inch waterline that runs along Hwy 7 and connects Node 9 to Node 10, the demand node for the Five Way WSC.

**Segment 21** - Segment 21 refers to the 30 inch pipeline section that connects Node 10 to Node 4, the storage tank and pumping station located in the City of Center at the Tyson facility. This section of line is 10,600 ft (2 miles) long and runs southwest along Hwy 7 until it reaches Center.

**Segment 4** - Segment 4 is the section of 24 inch water line that connects the storage tank at Node 4 to Node 5, the demand node for the City of Center. The line is 7,930 feet (1.5 miles) long and runs west with Highway 87 until it ties into Center's distribution system.

**Segment 5** - Segment 5 is the section of 18 inch water line that connects Node 5 to Node 6, the demand node for the Flat Fork WSC. Segment 5 runs north along Hwy 96 for approximately 39,900 feet (7.6 miles) until it ties into the Flat Fork distribution system.

**Segment 6** - Segment 6 is the section of 18 inch water line that connects Node 6 to Node 7, the demand node for the City of Tenaha. Segment 6 runs north along Hwy 96 for approximately 31,680 feet (6 miles) until it ties into Tenaha's distribution system.

**Segment 7** - Segment 7 is the section of 12 inch water line that connects Node 7 to Node 8, the demand node for the Paxton WSC. Segment 7 runs east along Hwy 84 for 24,820 feet (4.7 miles) until it ties into the Paxton distribution system.

**Segment 22** - Segment 22 is the section of 12 inch water line that connects Node 4 to Node 3, the demand node for the Shelbyville WSC. Segment 22 runs east along Hwy 87 from Center for 27,984 feet (5.3 miles) until it ties into the Shelbyville system.

**Segment 23** - Segment 23 is the section of 12 inch water line that connects Node 3 to Node 2, the demand node for the City of Huxley. Segment 22 runs east along FM 2694 from Shelbyville for 55,440 feet (10.5 miles) until it ties into the Huxley system.

**Segment 10** - Segment 10 is the section of 30 inch water line that connects Node 4, the Pump Station located in Center at the Tyson facility, to Node 11, where the line splits into three different segments. Segment 10 is 7,920 feet (1.5 miles) long.

**Segment 11** - Segment 11 is the section of 18 inch water line that connects Node 11 to Node 12, the demand node for the Sand Hills WSC. Segment 11 runs southwest from Center along Hwy 7 for 38,000 feet (7.2 miles) until it ties into the Sand Hills distribution system.

**Segment 12** - Segment 12 is the section of 18 inch water line that connects Node 11 to Node 13, the demand node for the Choice WSC. Segment 12 runs south from Center along 96 for 35,380 feet (6.7 miles) until it ties into the Choice distribution system.

**Segment 13** - Segment 13 is the section of 12 inch water line that connects Node 13 to Node 14, the demand node for the McClelland WSC. Segment 13 is 26,400 feet (5 miles) long.

**Segment 14** - Segment 14 is the section of 24 inch water line that connects Node 11 to Node 15. Segment 14 runs from Center along Hwy 87 for 15,310 feet (2.9 miles) northwest.

**Segment 15** - Segment 15 is the section of 18 inch water line that connects Node 20 to Node 16, the demand node for the Buena Vista WSC. Segment 15 runs along Hwy 87 for 22,700 feet (4.3 miles) until it ties into the Buena Vista distribution system.

**Segment 16** - Segment 16 is the section of 18 inch water line that connects Node 16 to Node 17, the demand node for the City of Timpson. Segment 16 runs along Hwy 87 for 30,600 feet (5.8 miles) until it ties into Timpson's distribution system.

**Segment 17** - Segment 17 is the section of 12 inch water line that connects Node 17 to Node 18, the demand node for the Tennessee WSC. Segment 17 runs along east from Timpson along Hwy 84 for 23,200 feet (4.4 miles) until it ties into the Tennessee WSC distribution system.

**Segment 18** - Segment 18 is the section of 12 inch water line that connects Node 17 to Node 19, the demand node for the Timpson Rural WSC. Segment 18 runs west from Timpson along Hwy 59 for 12,150 (2.3 miles) until it ties into the Timpson Rural Water Supply Corporation distribution system.

The results of the EPANET run are shown in Tables 8-9 and 8-10.

<b>TABLE 8-9 NODE INFORMATION FOR SHELBY COUNTY WTP OPTION 2</b>			
<b>NODE NUMBER</b>	<b>NODE DESCRIPTION</b>	<b>ELEVATION (ft)</b>	<b>PRESSURE (psi)</b>
56	Logansport WTP	532*	0.00
2	City of Huxley	279	53.09
3	Shelbyville Pump Station	295	59.49
4	City of Center/Tyson Pump Station	295	77.50
5	City of Center	372	39.72
6	Flat Fork WSC	280	77.52
7	City of Tenaha	350	46.52
8	Paxton WSC	300	67.24
9	City of Joaquin	230	126.35
10	Five Way WSC	320	70.34
11	Line Junction, in Center	372	68.26
12	Sand Hills WSC	439	38.92
13	Choice WSC	465	27.34
14	McClelland WSC	362	71.52
15	East Lamar WSC	350	77.48
16	Buena Vista WSC	405	52.89
17	City of Timpson	405	51.11
18	Tennessee WSC	320	87.87
19	Timpson Rural WSC	395	54.77
20	Huber WSC	410	51.10
21	McClelland WSC	284	63.80
22	Five Way WSC	260	82.58
23	East Lamar WSC	360	73.07
24	Buena Vista WSC	262	81.80

<b>TABLE 8-10 LINE SEGMENT DATA FOR SHELBY COUNTY WTP- OPTION 2</b>					
<b>LINE SEGMENT</b>	<b>LENGTH (ft)</b>	<b>DIAMETER (in)</b>	<b>FLOW (gpm)</b>	<b>VELOCITY (fps)</b>	<b>HEADLOSS PER 1,000 ft</b>
19	13,200	30	5,978.00	2.71	0.79
20	61,400	30	5,607.00	2.54	0.64
21	12,600	30	5,477.00	2.49	0.67
22	13,200	12	778.00	2.21	1.46
23	55,440	12	470.00	1.33	0.56
24	20,300	24	720.00	0.51	0.04
4	7,930	24	3,300.00	2.34	0.80
5	39,900	18	591.00	0.75	0.12
6	31,680	18	364.00	0.46	0.05
7	24,820	12	173.00	0.49	0.09
10	7,920	30	1,391.00	0.63	0.06
11	38,000	18	224.00	0.28	0.02
12	35,380	18	329.00	0.41	0.04
13	32,700	12	100.00	0.28	0.03
14	15,310	24	742.00	0.53	0.05
15	22,700	24	674.00	0.48	0.04
16	30,600	18	629.00	0.79	0.13
17	23,200	12	43.00	0.12	0.01
18	12,150	12	210.00	0.60	0.13
24	20,300	24	720.00	0.51	0.04
27	11,000	12	164.00	0.47	0.08
28	9,500	12	45.00	0.13	0.01

NOTE: Options 1 and 2 were formulated on the assumption that all of the water supplying entities in the County would purchase their water from the proposed county-wide system. The water wells of the individual systems could then act as emergency back-up, if necessary. This same option applies to the existing surface water plants operated by the City of Center and the City of Huxley. Options 1 and 2 were also formulated with the assumption that Center's plants will not be used to supply water to the County. There are several possibilities that could be used to incorporate Center's Water Plants into the various phases of system expansion. Some discussion has also been made in regard to the possibility of these plants being utilized to provide water to adjacent counties if Option 1 or 2 is implemented. However, that would require additional study to determine its actual feasibility.

Likewise, Option 1 presents the scenario of a surface water treatment plant being constructed in or near the City of Huxley. Under that scenario, use of Huxley's existing plant would probably be discontinued. However, some discussion has also been made in regard to the possibility of the plant providing water to entities in nearby San Augustine County if Option 1 or 2 is implemented.

However, that would require additional study to determine its actual feasibility.

### 8.3 OPTION 3: SYSTEM WITH WATER FROM CENTER'S PLANTS

This option was suggested after the publication of the original draft report. It is based upon a phased approach of county participants, with distribution lines only going to those initially involved. It also considers the possibility of a portion of these participants purchasing all of their water from the regional entity, while the others only purchase a limited amount while still relying on their existing wells.

The most recent water system data obtained from two Texas Department of Health reports dated September and October 1991 which indicates that the city operates two surface water treatment plants, one located on Pinkston Reservoir near the Aiken community and one located on Lake Center at Mill Creek. According to the Health Department reports, the Aiken facility has total treatment plant capacity of 3.158 MGD and the Mill Creek facility has a total plant capacity of 1.30 MGD, based on the clarifier as being the limiting factor. These reports therefore assign the City's combined plants a total capacity of 4.458 MGD (3,095 gpm). Option 3 would consist of the City of Center using its water treatment plants to supply water to the regional system. The distribution system would service a limited number of participants, but would provide the basis for the construction of a county wide system in the future (i.e. Option 1 or Option 2, as discussed previously).

Option 3 considers a number of county participants purchasing 100% of the water supply from the regional system. Revenue through the sale of water would be paid to Center for the treated water and debt retirement for the water distribution system. Any remainder needed for debt retirement would be paid for by the other participating entities on a "per connection" basis. Since it was not addressed in the draft water study, a brief description of the proposed system elements is given below. For simplicity, the general conventions held for the labeling of the respective lines has been retained from various meetings held after the publication of the draft report. The location of these lines is shown in Figure 8-5.

1. Surface Water Treatment Plants - This project considers the use of the City of Center's existing facilities.
2. Distribution System - Different scenarios require different combinations of this system (as addressed below), however, the required lines were generally classified as follows:
  - a. Line A - Is a 24" diameter C-900 DR18 water line from the City of Center's Aiken Facility to the existing line at the City's one million gallon ground storage tank on Highway 7.
  - b. Line B - Is an 18" diameter C-900 DR18 water line from the City of Center to the City of Timpson, with two 12" diameter lines extending on to the Tennessee WSC and the Timpson Rural WSC.
  - c. Line C - Is an 18" diameter C-900 DR18 water line from the City of Center to the City of Tenaha, extending on to the Paxton WSC.
  - d. Line C-1 - Is a 12" diameter C-900 DR18 water line from the Paxton to the City of Joaquin.
  - e. Line D - Is a 24" diameter C-900 DR18 water line from the City of Center to the Shelbyville WSC.

In order to accurately represent this option, several scenarios were considered. The different scenarios have differing participants and require different combinations of line construction. Each scenario was considered based on the estimated year 2000 demands and connections. The debt retirement was figured on a 40 year loan at 5% interest for a monthly payment of \$482.20 per \$100,000 borrowed, as is typical for a Rural Economic and Community Development loan. These are summarized below, in the same basic order as presented at previous meetings following the submittal of the draft water study.

NOTE: For the purpose of comparison, it was assumed that Center would charge \$1.00 per thousand gallons. This number was chosen based upon the input of Frank Simpson, the City Manager for the City of Center. It does not represent a legal binding agreement, it is merely a "best guess" used for the purposes of comparison to evaluate the feasibility of the option.

### **8.3.1 SCENARIO 1**

This scenario would only require the construction of Lines A, C, and D. It considers the Sand Hills WSC, Shelbyville WSC, City of Tenaha, Paxton WSC, and City of Joaquin to be purchasing 100% of their water supply from the regional system. It assumes that water is supplied to the City of Joaquin via the existing 6" water line that is currently being used to deliver water from Joaquin to the Paxton WSC. The set cost of water for this scenario is \$1.75 per thousand gallons, of which \$1.00 is paid to the City of Center and \$0.75 goes toward debt retirement.

The remainder needed to retire the debt will be paid by the all of the county suppliers on a "per connection" basis. This cost will be distributed among all the county participants. These are the City of Huxley, Five Way WSC, McClelland WSC, Buena Vista WSC, Choice WSC, Sand Hills WSC, Shelbyville WSC, City of Tenaha, Paxton WSC, City of Joaquin, City of Timpson, Huber WSC, Tennessee WSC, Timpson Rural WSC, East Lamar WSC, and Flat Fork WSC. Based on this scenario, the additional monthly cost that each of the participants would need to pay is \$0.68 per connection.

### **8.3.2 SCENARIO 2**

This scenario would require the construction of Lines A, B, C, and D. It considers the Sand Hills WSC, Shelbyville WSC, City of Tenaha, Paxton WSC, City of Joaquin, City of Timpson, Huber WSC, Tennessee WSC, Timpson Rural WSC, and East Lamar WSC to be purchasing 100% of their water supply from the regional system. The set cost of water for this scenario is \$1.75 per thousand gallons, of which \$1.00 is paid to the City of Center and \$0.75 goes toward debt retirement. The remainder needed to retire the debt will be paid by the all of the county suppliers on a "per connection" basis.

The cost of repaying the remainder of the debt will be distributed among all the county participants. These are the City of Huxley, Five Way WSC, McClelland WSC, Buena Vista WSC, Choice WSC, Sand Hills WSC, Shelbyville WSC, City of Tenaha, Paxton WSC, City of Joaquin, City of Timpson, Huber WSC, Tennessee WSC, Timpson Rural WSC, East Lamar WSC, and Flat Fork WSC. Based on this scenario, the additional monthly cost that each of the participants would need to pay is \$0.89 per connection.

### **8.3.3 SCENARIO 3**

This scenario would require the construction of Lines A, C and D. It considers the Sand Hills WSC, Shelbyville WSC, and Paxton WSC to be purchasing 100% of their water supply from the regional system. The City of Tenaha is considered to be purchasing 50% of its supply from the system. The set cost of water for this scenario is \$1.75 per thousand gallons, of which \$1.00 is paid to the City of Center and \$0.75 goes toward debt retirement. The remainder needed to retire the debt will be paid by the all of the county suppliers on a "per connection" basis.

The cost of repaying the remainder of the debt will be distributed among all the county participants. These are the City of Huxley, Five Way WSC, McClelland WSC, Buena Vista WSC, Choice WSC, Sand Hills WSC, Shelbyville WSC, City of Tenaha, Paxton WSC, City of Joaquin, City of Timpson, Huber WSC, Tennessee WSC, Timpson Rural WSC, East Lamar WSC, and Flat Fork WSC. Based on this scenario, the additional monthly cost that each of the participants would need to pay is \$1.57 per connection.

### **8.3.4 SCENARIO 4**

This scenario is identical to Scenario 5 above, except that the East Lamar WSC is also included among the entities purchasing 100% of their water supply from the regional entity. Based on this scenario, the additional monthly cost that each of the county participants would need to pay in order to retire the debt is \$1.21 per connection.

### **8.3.5 SCENARIO 5**

This scenario is identical to Scenario 1 above, except that it assumes that the existing 6" water line has been replaced by Line C-1. Based on this scenario, the additional monthly cost that each of the participants would need to pay is \$1.17 per connection.

### 8.3.6 EPANET MODEL ANALYSIS

The above mentioned scenarios all take into consideration the fact that new lines are constructed only where necessary to provide adequate water supply to the participating entities. However, it also takes into account that Option 3 would provide the basis of a county wide system as proposed under Option 1 or Option 2. Due to this, some of the lines will be larger than currently necessary in order to carry out their function in the future proposed system.

All of the scenarios of Option 3 are based on the premise that the 18" pipeline from the existing City of Center ground storage tank (located on Highway 7) is to remain in service. To verify the feasibility of this, an EPANET model of the proposed system was run on the system proposed under Scenario 2, because that particular set-up would service the most users. The model was based on the same information as used in Option 1 and Option 2. The results were as follows:

TABLE 8-11: EPANET ANALYSIS OF OPTION 3, SCENARIO 2	
NODE DESCRIPTION	PRESSURE IN PSI OF MODEL WITH 18" LINE AND PUMP TO PRESSURIZE THE SYSTEM
City of Center/Tyson	53.37
City of Center	43.84
Sand Hills WSC	3.74*
Shelbyville WSC	77.20
Flat Fork WSC	83.08
City of Joaquin	87.35
Buena Vista WSC	11.83*
City of Tenaha	52.25
Paxton WSC	73.12
City of Timpson	28.65*
Huber WSC	27.15*
Tennessee WSC	65.47
Timpson Rural WSC	32.77*
East Lamar WSC	53.27

The pressures marked with an asterisk (\*) indicate regions where the pressure was below the minimum 35 psi required. The low reading at the Sand Hills WSC take point is due to the fact that it is in extremely close proximity to Center's ground storage tank. The low pressure reading at the Buena Vista WSC take point indicates that a pump will be necessary there to fill their standpipe. Also note that this model was run assuming that the existing 6" waterline between Paxton and the City of Joaquin remains in use.

### 8.4 ECONOMIC COMPARISONS

#### 8.4.1 COMPARISON OF OPTION 1 VS. OPTION 2

This subsection deals with the economic comparison of a regional system with a water treatment plant in Shelby County versus a regional system in which water is purchased from Logansport. In order to select the most cost efficient alternative for treating surface water and distributing it throughout the County, the cost of purchasing water from Logansport must be compared to the cost of building and operating a new WTP



in Shelby County. Table 8-12 shows a summary of these individual costs. For ease of assessment, all costs were converted into cost of water per thousand gallons.

Please note that these costs were based on the assumption that treated water will not be delivered from Logansport to Center at sufficiently high pressure to service the standpipe without requiring an additional booster station. The cost of the Shelby County WTP option includes the price of delivering water only to the Shelbyville standpipe. Therefore, both options require an additional booster station to provide pressure in Center.

<b>TABLE 8-12 COST OF SHELBY WTP VS. PURCHASED WATER</b>		
<b>COST PARAMETER</b>	<b>LOGANSPORT</b>	<b>SHELBY REGIONAL WTP</b>
Purchase of Treated Water	\$ 1.25/thousand gallons	N/A
Debt retirement for the Construction of a 4.5 MGD Regional Water Plant	N/A	\$ 0.3954/thousand gallons
Cost for salaries for personnel, chemicals, operation and maintenance.	N/A	\$ 0.2453/thousand gallons
Purchase of Raw Water from the Sabine River Authority	N/A	\$ 0.0890/thousand gallons
Additional Charge for Potential Reduction in Power Generation by the Sabine River Authority (assumed)	N/A	\$ 0.0300/thousand gallons
Cost of electricity to pump from intake structure to the water treatment plant (4.49 MGD at 153 ft of head)	N/A	\$ 0.0366/thousand gallons
Cost of electricity to pump from the water treatment plant to the distribution system (4.22 MGD at 100 ft of head)	N/A	\$ 0.0260/thousand gallons
<b>TOTAL</b>	<b>\$ 1.2500/thousand gallons</b>	<b>\$ 0.8223/thousand gallons</b>

From a strictly numerical standpoint, the Shelby County Option appears to be the most economical choice. However, it should also be noted that there are many considerations related to each of these options to which monetary values can not be easily assigned. Table 8-13 provides a short listing of some of the major considerations related to each option. This is by no means an exhaustive list and many more concerns and considerations undoubtedly exist.

TABLE 8-13 ADVANTAGES AND DISADVANTAGES OF OPTIONS		
OPTION	ADVANTAGES	DISADVANTAGES
Purchasing water from Logansport, Louisiana	The City of Logansport is responsible for the construction of the water treatment plant	Relative high cost of water per thousand gallons is charged
	The City of Logansport is responsible for operation and maintenance of the plant	Local water plant operators may be put out of work.
Constructing a new surface water treatment plant in Shelby County	Locating the regional water treatment plant in Shelby County would provide the opportunity of hiring experienced personnel who currently operate the local plants	The regional entity will bear the cost and responsibility of constructing and maintaining the facility.
	Local control over the facility	Very little local control of facility and water costs

#### 8.4.2 NOTE REGARDING THE ECONOMICS OF OPTION 3

Various scenarios were discussed pertaining to Option 3. A quick reference to that section will show that the cost of water per thousand gallons in those scenarios is generally higher than that for either Option 1 or Option 2. This is due to the fact that both Option 1 and Option 2 consider all of the County entities as participating in the purchasing of water, thereby bringing the cost down by distributing it over a large number of participants .

However, in Option 3 only a limited number of participants actually purchase their total water supply from the system, with the rest of the county participants making up the difference by paying a "per connection" fee. The main reason for the increased cost is the fact that the City of Center will be providing water to the system, and therefore will not be purchasing its own water. Since Center currently uses over 50% of all the water consumed in Shelby County, this causes the overall price of water to go up because the cost is distributed over less users.

#### 8.5 PHASING

The following is intended only as a general discussion of the potential for phasing for this project. If Option 3 is chosen, please note that this would be used as the initial phase for the construction of a regional system as proposed for Option 1 or Option 2.

Since Option 1 seems to be the most economic choice for the county wide regional system, the phasing considerations listed below deal with that option. The following is intended only as a general discussion of the potential for phasing for this project. Certainly, as much as practicable, only work required now should be constructed initially. However, sometimes the economics are such that it's less expensive, even when considering the cost of interest, to build a larger facility now. Generally, in comparing the various phasing options, the component was amortized over its life at 5% interest to compare the feasibility of building a larger facility initially.

##### 8.5.1 INTAKE AND RAW WATER PUMPING STRUCTURE

Since the intake structure requires a major undertaking in an inundated area, the effort to construct the structure should include making it large enough for at least a fifty year time frame. The pumping station itself can be designed such that additional pumps could be added or the existing pumps upsized. This would include the provision of a proper foundation (the top of the intake structure) and good sizing and design of the manifolding and other piping and controls.

The raw water line should be sized sufficiently for the year 2050 capacity. The access bridge would be essentially the same for today's needs as well as those for the future.

## **8.5.2 SURFACE WATER TREATMENT PLANT**

### **8.5.2.1 WATER TREATMENT PLANT SIZING**

As discussed in Chapter 5, surface water demands must be based on the capacity to meet overall demands of the regional system. Since one of the TNRCC requirements is that each system have at least the ability to provide a source of water with a capacity of 0.6 gpm per connection, this parameter becomes the controlling factor in sizing a surface water treatment plant.

With a water well supply, an entity can simply go out and flip on the well when additional water is needed and then cut it off when demand is met. In this way the system may operate the well for as little as four hours a day or as much as twenty-four hours per day. Thus, the impact of the 0.6 gpm requirement, which effectively places the average operating time of a standard well at about seven hours per day, is not significant.

However, this parameter becomes critical when dealing with a surface water plant which cannot be readily turned on and off. With a surface water option, the regional entities will be required to commit for more water from the regional system than they would if the supply is from wells since the surface water plant must be sized to meet the 0.6 gpm parameter.

### **8.5.3 OTHER PHASING CONSIDERATIONS**

Certain elements of the plant cannot be efficiently phased for construction purposes. These include the chemical building and facilities, flash mix facility, and administration/laboratory building, and most of the site work, piping, and electrical.

Since the plant needs to have stand-by units in certain areas, these areas will begin with two units each sized to handle the initial phase loads. Expansion which would include adding one more unit of that size would effectively double capacity since only one stand-by unit is required.

Ground storage facilities can also be easily duplicated although close attention must be paid to the economics of various sized tanks. The pump station would be constructed with the capacity for expansion both by the addition of additional pumps and/or the replacement of the initial pumps with larger pumps.

**SECTION 9**  
**WATER WELL SOURCE**  
**SUPPLY SYSTEM**

## SECTION 9 WATER WELL SOURCE SUPPLY SYSTEM

In addition to using surface water for county-wide distribution, this study also considered the option of establishing a regional well field for water treatment and distribution. This would necessitate the development of a central water treatment plant and several large capacity water wells in a well defined field, all maintained and operated by the regional entity. It became evident fairly early that this option was not feasible for a variety of reasons. However, a brief analysis of the well option is summarized below.

It should be noted that several water supplying entities have chosen not to depend upon ground water but have instead chosen to either process surface water for their own use or to purchase treated surface water from others. Notable in this category are: (1) The City of Center, which uses surface water obtained from Pinkston Reservoir and Lake Center and treated in its own water plants; (2) The City of Huxley, which uses surface water obtained from Toledo Bend Reservoir and treated in its own plant; and, (3) The City of Joaquin, which uses treated surface water purchased from the City of Logansport, Louisiana. These three cities alone account for approximately 63% of the current water consumption and 45% of the total connections within the county.

### 9.1 WATER WELLS

There are several factors influence the use of well sources in the county. The most notable of these factors are listed below.

1. As mentioned previously in this report, Shelby County is located in the outcrop area of the Wilcox Aquifer. As a general rule, aquifers are recharged primarily due to the infiltration of precipitation on the outcrop area. This means that the water level and quantity in the section of the aquifer beneath the county is very sensitive to rainfall conditions. The most recent data obtained from the Texas Water Development Board indicates that all of the major wells in Shelby County draw their water solely from the Wilcox Aquifer. Therefore, the amount of groundwater available during severe droughts is likely to decrease drastically, especially in the area of a large well field.
2. Only limited well production estimates are available for Shelby County due to the fact that no groundwater studies have been performed for the area. However, some studies have been performed for the Neches and Sabine River Basins, both of which contain portions of Shelby County. According to the Texas Water Commission Bulletin 6307, Reconnaissance of the Ground Water Resources of the Sabine River Basin, dated August 1963, "production from the major wells" in the Wilcox aquifer "range from less than 90 to 700 gpm." The Texas Water Commission Bulletin 6308, Reconnaissance of the Ground Water Resources of the Neches River Basin, dated August 1963, states that "the quantity of water produced by the municipal and industrial wells" in the Wilcox Aquifer of the upper Neches River Basin "ranges between 100 and 1,200 gpm." From this data, it is a logical assumption that the maximum production for wells in the area to range between the two values listed above, probably nearer to the 700 gpm production rate with an upper maximum of no more than 1,200 gpm.
3. There is no guarantee that a new well will provide usable water or that the water quality in an existing well will remain a constant. Water that is relatively low in mineral content and suitable for most purposes is found in and near the outcrop areas. The water from the Carrizo-Wilcox aquifer is high in bicarbonates and locally has objectionable amounts of iron. The Wilcox sands have lignite stringers in some places that may impart an undesirable color to the water. The water from the aquifer is generally soft. In general, the water in the aquifer becomes more mineralized downdip from the outcrop, and also with depth. Water of usable quality may be expected throughout the entire thickness of the aquifer north and northwest of central Shelby County. South of central Shelby County, the basal Wilcox sands contain water exceeding 3,000 ppm dissolved solids and further downdip the upper part of the aquifer becomes progressively more mineralized until the entire thickness contains water which exceeds 3,000 ppm dissolved solids.
4. The water obtained from Shelby County wells is relatively high in sodium. Ground water information obtained from the TWDB showed chemical analysis of twenty-eight wells in the County. The

average sodium concentration of these wells was 308 mg/l. The minimum concentration noted was 54 mg/l and the maximum concentration was over 500 mg/l. The presence of sodium in the water supply is significant because it can adversely affect persons suffering from heart, kidney, or circulatory ailments. Due to the fact that each person's daily sodium intake varies, no recommended limit for sodium has been established in TAC 290. However, the American Heart Association's 500-mg and 1000-mg-sodium-per-day diet recommends that distilled water be used if the water supply contains more than 20 mg/l of sodium. Water containing more than 270 mg/l of sodium should not be used for drinking by those on a moderately restricted sodium diet.

For these reasons, well water was not considered to be a viable source of water for the county-wide system. Because of the nearness of extensive high quality surface water sources, the report primarily focuses on these options. However, as noted above, a brief analysis of the well option is summarized below.

## **9.2 WATER WELL COLLECTION SYSTEM**

Under current TAC requirements, public water suppliers are required to provide a well capacity of no less than 0.6 gpm per connection. The estimated number of county connections is 10,547 for the year 2010 and 13,238 for the year 2030. This would require total well capacities for these years to be at least 6,329 gpm and 7,943 gpm, respectively.

The well field would be most logically located near to the City of Center. The water could then be pumped to a central location in or near the city and treated. A pumping station would exist near to the plant and would include several ground storage tank, pumps, aeration facilities, fluoridation and chlorination equipment, and buildings and piping constructed to allow for further expansion. The existing distribution system of Center could then be used as a central hub to disperse the water throughout the county.

A radio control system would be needed to be able to properly utilize all of the wells and a radio control system linked with a PC would be placed at the water plant. Cost of this system could vary depending on a number of parameters and the degree of sophistication, but preliminary estimates would be that a good system might cost \$120,000. This would allow for full control and monitoring of the entire well field systems.

## **9.3 WATER TRANSMISSION LINES**

The water transmission lines would be in about the same locations as for the surface water options. This places the estimated installation price at that of the other options.

**SECTION 10**  
**DESCRIPTION OF**  
**RECOMMENDED FACILITIES**

## SECTION 10 DESCRIPTION OF RECOMMENDED FACILITIES

This section is intended to summarize and explain the recommended alternative for the regional water system. Due to its cost effectiveness and availability, the recommended option is surface water obtained from Toledo Bend Reservoir. Therefore, this chapter will of necessity duplicate somewhat the previous chapters. As detailed previously, the three surface water options where:

1. Option 1 - Constructing a surface water treatment plant within Shelby County on Toledo Bend Reservoir. The water treatment plant to be owned and operated by the Regional Entity. Also constructing a countywide distribution system to connect all the participants to the water treatment plant.
2. Option 2 - Constructing a countywide distribution system to connect all participants to the water source. Water for the system to be purchased from the City of Logansport, Louisiana.
3. Option 3 - Constructing a localized distribution system only to those participants initially participating. The City of Center will act as the "hub" of the system. Water supplied to the system will be purchased from the City of Center's existing surface water treatment plants.

However, only Option 1 and Option 2 are detailed in this section. Option 3 has not been immediately included herein because it could be considered as an initial phase of the other two options. Option 3 was also addressed in the context of five different scenarios. Since no particular scenario has been tied down it would be unwieldy to attempt to evaluate how the implementation of each scenario of Option 3 would affect the overall cost of Options 1 and 2. Therefore, it was omitted and emphasis instead was placed on the final countywide system.

Table 10-1 summarizes the major cost components for Option 1 and Option 2. Table 10-1 is also intended to demonstrate the relative cost benefits of the various surface water options. The cost per thousand gallons of water is based on an assumed future demand of 5 MGD. The demand of 5 MGD was estimated from the projected water consumption data presented previously in Table 3-3. Options 1 and 2 present scenarios that assume each county entity purchases its water from the regional system. The projected water consumption at the Year 2000 is as follows:

<u>Entity Name</u>	<u>Year 2000 Projected Water Consumption</u>
Buena Vista WSC .....	44.8 acre-feet
Center, City of .....	2,614.3 acre-feet
Choice WSC .....	155.5 acre-feet
East Lamar WSC .....	116.5 acre-feet
Five Way WSC .....	166.1 acre-feet
Fiat Fork WSC .....	87.6 acre-feet
Huber .....	37.7 acre-feet
Huxley, City of .....	276.7 acre-feet
Joaquin, City of .....	183.5 acre-feet
McClelland WSC .....	145.5 acre-feet
Paxton WSC .....	85.8 acre-feet
Sand Hills WSC .....	164.7 acre-feet
Shelbyville WSC .....	107.5 acre-feet
Tenaha, City of .....	226.2 acre-feet
Tennessee WSC .....	29.1 acre-feet
Timpson, City of .....	246.6 acre-feet
Timpson Rural WSC .....	177.5 acre-feet
Warr WSC .....	11.8 acre-feet
	<b>Total = 4,877.4 acre-feet</b>

The figures used in the study projected a Year 2000 water consumption of approximately 4,877.4 acre-feet or 1,589,314,115 gallons for that year. Dividing this by the number of days in a year (365.25 days) yields a county-wide demand of 13.4 acre-feet per day or 4,351,304 gallons per day. This average was rounded



to the nearest million gallons (i.e. from approximately 4.4 MGD to 5 MGD).

Please note that Options 1 and 2 were formulated on the assumption that all of the water supplying entities in the County would purchase their water from the proposed county-wide system. The water wells of the individual systems could then act as emergency back-up, if necessary. This same option applies to the existing surface water plants operated by the City of Center and the City of Huxley. It should also be noted that Options 1 and 2 were formulated with the assumption that Center's plants were not being used to supply water to the County. However, there are several possibilities in respect to incorporate Center's Water Plants into the various phases of system expansion. Some discussion has also been made in regard to the possibility of these plants being utilized to provide water to adjacent counties, if Option 1 or 2 is implemented. However, that would require additional study to determine its actual feasibility.

Likewise, Option 1 presents the scenario of a surface water treatment plant being constructed in or near the City of Huxley. Under that scenario, use of its existing plant would probably be discontinued. However, some discussion has also been made in regard to the possibility of the plant providing water to entities in nearby San Augustine County if Option 1 or 2 is implemented. However, that would require additional study to determine its actual feasibility.

<b>TABLE 10-1 COMPARATIVE COST SUMMARY</b>			
<b>COST</b>		<b>SURFACE WATER OPTION 1</b>	<b>SURFACE WATER OPTION 2</b>
<b>Construction Costs</b>	Intake Structure, pumps, water main, etc.	\$2,204,000	N/A
	Water Treatment Plant, Storage, & Pumping Station	\$6,350,000	N/A
	Pump Stations and storage	\$3,930,624	\$3,930,624
	Transmission Lines (PVC)	\$18,517,683	\$18,719,532
	<b>TOTAL</b>	<b>\$31,002,307</b>	<b>\$22,650,156</b>
<b>Annual Costs</b>	Construction Amortization	\$1,674,385	\$1,223,299
	Operation and Maintenance	\$811,000	\$216,000
	Pumping costs (cost for intake and plant included under O&M)	\$113,506	\$113,506
	<b>TOTAL</b>	<b>\$2,598,891</b>	<b>\$1,552,805</b>
<b>Cost per 1,000 gallons</b>	Construction Amortization	\$0.9175	\$0.6703
	Pumping costs	\$0.0622	\$0.0622
	Operation and Maintenance	\$0.4444	\$0.1184
	Cost of Purchased Water	N/A	\$1.2500
	Cost of Raw Water	\$0.0890	N/A
	Estimated added charge for reduction in power generation capacity by the Sabine River Authority	\$0.0300	N/A
	<b>TOTAL</b>	<b>\$1.5431</b>	<b>\$2.1009</b>

## 10.1 SURFACE WATER PLANT

Table 10-1 indicates that Option 1, the obtaining treated surface water from a regional facility located within Shelby County is the most viable option. An attractive benefit of this option is that the existing local water treatment plants already have a pool of highly experienced plant operators who would be able to operate the facility.

## 10.2 INTAKE STRUCTURE

The intake structure for the proposed facility would be located near the City of Huxley. The submerged river channel at this location comes within approximately 500 feet of the shore, and would allow the structure to draw water from as deep as 35 feet. Cost estimates for this facility were included in Table 8-2.

The thirty foot diameter circular intake structure will be equipped with three submerged gates at nine feet intervals to enable the structure to draw water from varying depths. A vehicular bridge will extend from the shore to the intake where several high capacity pumps will be located. Overall, the structure will have a maximum capacity of approximately 20 MGD.

## 10.3 PUMPING STATIONS AND STORAGE

The recommended option for this distribution system is Option 1, bringing water from a regional plant located in or near the City of Huxley. The location of the various pumping stations necessary for a project of this type are largely dependent upon the routing of the various distribution lines. Please note that the regional pumping stations and storage facilities will provide water to the participating entities at sufficient pressure to service those systems directly, thereby eliminating the individual entities' need for pressure tanks and storage at their own facilities. The pumping stations required by this option are detailed below.

Pump Station located at the Regional Water Treatment Plant - This station will be designed to deliver treated water from the WTP to the proposed 1 MG standpipe in Shelbyville. The pumps at this facility will be sized to deliver water to all of the water supplying entities with the exception of the City of Huxley, which will be able to tie in directly to the plant.

Pump Station located at Shelbyville - The Shelbyville Pumping Station is designed to send enough water to the City of Center Pumping Station to serve the City of Center and surrounding entities and the south central and northwestern portion of Shelby County. The pumping station would be constructed to operate initially with several pumps, having a minimum capacity of 5,568 gpm with the largest unit out of operation. The manifold and building would be arranged to allow for the installation of larger pumps in place of the initial pumps and for the inclusion of additional pumps as well. Yard piping would be sized and constructed to allow for the easy tie-in of an additional supply line.

Pump Station located at the City of Center/Tyson - The existing 1 MG standpipe at this location is capable of serving the north-central and north-eastern entities of the county. In specific, the City of Joaquin, the City of Tenaha, Paxton WSC, Flat Fork WSC, Warr WSC, Five Way WSC, and the City of Center.

A pump station will also be located at this site that is capable of supplying water to the remaining entities west and south of the City of Center. This station would be constructed to operate with several pumps, having a minimum capacity of 1,391 gpm with the largest unit out of operation. The manifold and building would be arranged to allow for the installation of larger pumps in place of the initial pumps. Yard piping would be sized and constructed to allow for the easy tie-in of an additional supply line.

Please note that in addition to the facilities noted above, a 1 MG storage tank will be constructed on a hill just off of Highway 87 near Huber. The tank will be constructed at a sufficient elevation to provide a system pressure from a short tank.

Analysis of System Storage - The total system storage will provide sufficient water supply to meet peak demands and maintain adequate pressures and available supplies for emergency needs should they arise. A summary of the locations and status of these storage facilities is detailed in Table 10-2.

<b>TABLE 10-2 ANALYSIS OF STORAGE CAPACITY</b>				
<b>LOCATION</b>	<b>CONDITION</b>	<b>TYPE OF STORAGE TANK(S)</b>	<b>TOTAL GROUND STORAGE CAPACITY (gal)</b>	<b>TOTAL ELEVATED STORAGE CAPACITY (gal)</b>
Regional Surface Water Treatment Plant	Proposed	Ground Storage	4,000,000	0
Shelbyville Pumping Station	Proposed	Standpipe*	600,000	400,000
City of Center/Tyson	Existing	Standpipe*	600,000	400,000
City of Center storage tank located on Highway 7	Existing	Elevated (ground storage tank elevated on hill)	0	1,000,000
Storage facility located on high hill off of Highway 87 between Huber and the City of Timpson	Proposed	Elevated (ground storage tank elevated on hill)	0	1,000,000
<b>TOTAL</b>			<b>5,200,000</b>	<b>2,800,000</b>

\* 60% of total standpipe capacity is considered to be ground storage, while the remaining 40% is counted as elevated storage.

The future projections for Shelby County indicate that 10,787 total connections will be served by the year 2010. Under current TAC requirements, by that year the regional system would require 2,160,000 gallons of ground storage capacity and 1,080,000 gallons of elevated storage capacity. As demonstrated in Table 10-2, the system would be provide more than enough storage to meet these requirements. The system described above would have sufficient capacity (by law) to meet the demands of the year 2050 projections, although it would probably need additional facilities in order to handle the fluctuations between peak demands at that time.

#### **10.4 TRANSMISSION LINES**

Figure 8-3 presents the proposed regional layout with the local surface water treatment plant alternative. The proposed system assumes Option 1 is used for the routing of the supply lines. Table 10-3 shows line types and sizes with estimates of costs and required lengths for each line type and size. The table also details the estimated price for right of way acquisition.

TABLE 10-3 ESTIMATED PIPELINE COSTS								
PIPELINE SEGMENT NUMBER	PIPELINE DATA				RIGHT-OF-WAY DATA			TOTAL COST
	PIPE DIA. (in)	COST PER LF	PIPE LENGTH (ft)	TOTAL PIPE COST	LENGTH IN CITY	LENGTH IN RURAL	TOTAL R.O.W COST	
1	30	\$48.49	11,088	\$537,657	0	11,088	\$11,421	\$549,078
2	30	\$48.49	55,440	\$2,688,288	0	55,440	\$57,103	\$2,745,389
3	30	\$48.49	14,800	\$717,652	0	14,800	\$15,244	\$732,896
4	24	\$38.49	7,930	\$305,226	7,930	0	\$16,415	\$321,641
5	18	\$26.15	39,900	\$1,043,385	2,640	37,260	\$43,843	\$1,087,228
6	18	\$26.15	31,680	\$828,432	5,280	26,400	\$38,122	\$866,554
7	12	\$17.94	24,820	\$445,271	3,168	21,652	\$28,859	\$474,130
8	12	\$17.94	35,900	\$644,046	10,560	25,340	\$47,959	\$692,005
9	12	\$17.94	19,000	\$340,860	0	19,000	\$19,570	\$360,430
10	30	\$48.49	7,920	\$384,041	7,920	0	\$16,394	\$400,435
11	18	\$26.15	38,000	\$993,700	0	38,000	\$39,140	\$1,032,840
12	18	\$26.15	35,380	\$925,187	0	35,380	\$366,441	\$961,628
13	12	\$17.94	32,700	\$586,638	0	32,700	\$33,681	\$620,319
14	24	\$38.49	15,310	\$589,282	7,920	7,390	\$24,006	\$613,288
15	24	\$38.49	22,700	\$873,723	0	22,700	\$23,381	\$897,104
16	12	\$17.94	30,600	\$800,190	2,640	27,960	\$34,264	\$834,454
17	12	\$17.94	23,200	\$416,208	5,280	17,920	\$29,387	\$445,595
18	12	\$17.94	12,150	\$217,971	5,280	6,870	\$18,006	\$235,977
24	24	\$38.49	20,300	\$781,347	2,640	17,660	\$23,655	\$805,002
25	12	\$17.94	33,800	\$606,372	0	33,800	\$34,814	\$641,186
26	12	\$17.94	15,800	\$283,452	0	15,800	\$16,274	\$299,726
27	12	\$17.94	11,000	\$197,340	0	11,000	\$11,330	\$208,670
28	12	\$17.94	9,500	\$170,430	0	9,500	\$9,785	\$180,215
29	30	\$48.49	13,200	\$640,068	0	13,200	\$13,596	\$653,664
51	30	\$48.49	12,144	\$588,863	0	12,144	\$12,508	\$601,371
52	30	\$48.49	100	\$4,849	0	100	\$103	\$4,952
TOTAL	N/A	N/A	574,362	\$16,610,474	61,258	513,104	\$655,301	\$17,265,776

### 10.5 SERVICE TO OTHER COUNTIES

Selling water to additional counties and municipalities is an attractive option that could potentially increase the revenues of the regional system. The proximity of the County to Toledo Bend Reservoir puts it in an excellent location to distribute water to counties to the west. However, it should be noted that in some cases high hills between the city and Shelby County could necessitate the installation of larger pumps or even an additional pump station in order to deliver the water to its intended destination, as is the case with the City

of San Augustine. These costs would need to be absorbed by the purchaser of the water.

## **10.6 TERMINATION FACILITIES**

In laying out the proposed regional system, the lines radiating out from the various pump stations would carry water to the plants of the entities being served. Some strong consideration was given to serving the systems on a floating basis whereby the tie in was made directly into their system. When complexities of the various operating pressure planes of each system are considered, along with the requirements of the TNRCC pertaining to water storage and pressure, the determination will be made providing the best option available to deliver water to each entity at its required pressure.

### **10.6.1 REGIONAL IMPROVEMENTS**

The regional system is laid out to include the costs of the line and tie-in's necessary to deliver water to each system. In this way responsibilities remain well defined. The system buys water delivered to its plant and maintains its independence fully in the operation of this delivery system.

One area requiring further consideration is the advisability of constructing fire hydrants along the regional transmission lines. Since most of the rural areas do not have true fire protection lines that are based on U.I.L fire-approved water line, construction of a regional system would be an opportunity to provide true fire protection in areas along the lines. Additionally, this would provide locations for refilling fire trucks for fighting fires in other rural areas.

### **10.6.2 IMPROVEMENTS REQUIRED BY INDIVIDUAL SYSTEMS**

Generally, no further improvements are required of individual entities in order to make the tie-in to the regional system. Certainly, the individual needs of the system must continue to be met by that system and the regional system will be used to meet requirements for storage, pressure, and service pump capacity depending on the particular layout of the system. This eliminates the need of each system to expand these facilities based on increased number of connections.

**SECTION 11**  
**PROPOSED PHASING**

## **SECTION 11 PROPOSED PHASING**

One of the dangers of planning is that it is often too short-sighted. This is particularly true when future water supplies are being determined. Therefore, it is critical for all the entities involved in this study to think seriously about both the short and long term needs of their systems. Water is currently plentiful in East Texas, but there is no guarantee that this will always be the case. Changes in water usage may have dramatic effects upon a system, and in fifty years most of the water now available will be owned by other entities. Anyone not owning sufficient water rights at that time will be in very bad shape.

Based on the findings of this study, our primary recommendation is for a phased approach to supplying regional water needs. We feel that this would be best accomplished by the construction of a regional water system in the following stages.

Phase 1 - This phase conforms to the implementation of a system as described under Option 3 in Section 8. In general, this phase would consist of the construction of a localized distribution system with the City of Center as its hub. The distribution lines would extend only to those entities that are initially involved with the project.

The system would be supplied with water from the City of Center's existing surface water treatment plants. Revenue from the sale of water would then go toward (1) debt retirement for the water distribution system, and (2) paying the City of Center for the treated water. Any remainder needed for debt retirement would be paid for by the participating entities on a "per connection" basis. In addition, the system would also serve as the foundation for the construction of a county wide system in the future.

Phase 2 - The phase would be implemented when the system water demand reaches the City of Center's recommended sale of water to the participating entities. In order to meet the increased demands of the regional system, a new regional surface water treatment plant would be constructed on Toledo Bend Reservoir. New water lines would also be constructed to tie the new plant into the existing distribution system. This expansion of the system would also allow for more entities to be serviced. Revenue from the sale of water would go toward debt retirement, maintenance, and operation of the system.

Phase 3 - The final phase of the project would expand the distribution system so that all of the county entities could be serviced. The water treatment plant would also be expanded accordingly to meet the increased demand. In addition, future expansion may make it feasible to sell water to customers outside the county, which would bring in additional revenue for the regional system.

**SECTION 12**  
**FINANCIAL FEASIBILITY**



## SECTION 12 FINANCIAL FEASIBILITY

When different systems are asked if they wish to participate in a regional system, the most common question that they ask is "What will the costs be?" One of the primary thrusts of this report was to establish the possible water sources and to then estimate the cost factors involved in delivering treated water to each system. The assumption was made that the regional system would actually deliver treated water to an existing take point in each participating system so that the distribution entity could begin accepting water with no other construction costs required. If the system already has shortages, these would have to be addressed on an individual basis, although service pumps, storage, and pressure facilities might be addressed by the regional system to some degree.

### 12.1 ESTIMATED COSTS

Table 12-1 compares the cost of Option 1, the local WTP, with the cost of Option 2, purchasing water from Logansport. The table has been reduced to accommodate the format of this report and provides in spreadsheet format the estimated individual costs of delivering treated water to each individual water supply entity based on the future projections. These estimates are based on the cost per thousand gallons of water purchased, as found in Section 10 and the total water used as estimated for the given years. The total systems costs are summarized below. In general, Option 1 tends to be over a million dollars less expensive per year than Option 2.

TABLE 12-1 SUMMARY OF ESTIMATED COSTS				
YEAR	ESTIMATED WATER USAGE (MG/year)	OPTION 1 (Cost/year)	OPTION 2 (Cost/year)	DIFFERENCE
2005	1,822.29	\$2,811,976	\$3,828,449	\$1,016,473
2010	1,978.68	\$3,053,301	\$4,157,009	\$1,103,708
2015	2,135.07	\$3,294,627	\$4,485,569	\$1,190,942
2020	2,291.46	\$3,535,952	\$4,814,128	\$1,278,176

### 12.2 POTENTIAL FUNDING

#### 12.2.1 TEXAS WATER DEVELOPMENT BOARD

The reauthorization of the Safe Drinking Water Act was signed into law on August 8, 1996. Among the changes in the legislation was the establishment of state revolving funds to provide water systems with the financial assistance necessary for compliance with safe drinking water standards. It is well known that the Texas Water Development Board (TWDB) utilizes a State Revolving Fund (SRF) program to supply funding for deserving waste water projects. However, until recently, no such program has existed for water improvements.

Other TWDB programs also exist for water funding. These programs carry several requirements for applicants; such as the recipients being a political subdivision and passing a water conservation plan, etc. The interest rates for these loans is 6.25% and are usually carried over a 20 year period, although it is possible to extend it to 25 or 30 years.

#### 12.2.2 RURAL ECONOMIC AND COMMUNITY DEVELOPMENT

Potential funding is also available from Rural Economic and Community Development (RECD), a branch of the United States Department of Agriculture. Their loans are typically for 40 years and their interest rates as of October 1, 1996 are as follows:

1. **Poverty line = 4.5%.** This rate requires the following:
  - (a.) The system be in non-compliance with TNRCC regulations,
  - (b.) That the median service area, non-metropolitan household income be less than \$21,634.

In addition, recipients that meet the requirements of this level are eligible for RECD grants of up to 75%.
2. **Intermediate = 5.125%.** This requires that the median household income be between \$21,634 and \$27,043. This level is eligible for grants of up to 55%.
3. **Market = 5.75%.** This level is set for recipients having household incomes in excess of \$27,043. No grants are available for recipients of this rate.

**SECTION 13**  
**ORGANIZATIONAL OPTIONS**

## SECTION 13 ORGANIZATIONAL OPTIONS

### 13.1 GENERAL CONSIDERATIONS

A major factor involved in the operation of a regional water system is the organizational structure adopted by that system. The selection of a specific organizational structure for the proposed project is dependent on a number of critical issues. Before any option is selected, major consideration should be given to the following issues:

1. Control of the system - The organizational configuration of the system should be such that all of the participants have representation. The ideal organizational structure would provide a system of checks and balances so that no single entity would be able to dominate the organization.
2. Financing - Due to various legal requirements, different types of financing are available to different types of entities. Tax-free bonds and the accompanying lower interest rates can only be issued by tax-free type entities. For example, non-profit water supply corporations would not individually have access to tax-free bonds, but cities and districts would.

A concern in this area is that if more than 10% of the bond proceeds are used to provide for entities are not tax-free, then the issuance of the bonds in a tax free status is clouded. However, if 25% of the water is used for residential purposes, then the issue would normally be exempted from the 10% requirement. It is estimated that at least 80% of the water supplied by Shelby County entities is being used for residential purposes. Therefore, there are probably several different ways to structure the overall program in order to comply with these regulations and sell tax-free bonds.

3. Legal Requirements - In addition to the financing considerations outlined above, there are also legal restrictions as to the types of entities and the activities they can be involved in. A number of entities can provide water to an area, but the most likely candidates appear to be either a special utility district, a municipal utility district, or a water control and improvement district.

In each of these cases, financial arrangements will have some ramifications. For example, a special utility district has no tax base and cannot legally implement taxes, which means that revenue bonds would not have a cross-pledge of taxes. It should be noted that taxes have not been considered as a means of paying for improvements in any of the financing cases, although the cross-pledge security might provide a lower interest rate on bonds.

The means of formation for a district generally includes legislative action. Therefore, the timing of formation is dictated somewhat by legislative activity.

4. Public Acceptability - No matter how good a solution looks, it must be palatable to the general public. This probably includes all of the items above, although the actual impact on the pocket-book should be the greatest factor.
5. Operation of System - Much of the decision about the type of entity is dependent on how the system will be operated. Will the individual system have its own staff and do the operations of the regional system, or should they be contracted out to an entity?

### 13.2 PROPOSED ORGANIZATION OPTION

Based on discussion with various Shelby County water suppliers, it appears that the most favored option would be to organize the Regional Water Entity along the lines of a Water Supply Corporation or Water Conservation and Improvement District. Such an organization would be formed from all the participating entities, with representation from each entity or group of entities. The total number of board members will be determined at a later time. Identification of the participants who plan to proceed with the project could also have a strong impact upon what organizational option should be used. Additionally, a financial advisor should be included in consultations about possible financing mechanisms. An attorney should also be selected to provide consultation regarding organizational structures and bond requirements. As these items are tied down, the best option for organization will crystallize.

**SECTION 14**  
**OTHER CONSIDERATIONS**

## **SECTION 14 OTHER CONSIDERATIONS**

The process for determining the feasibility of a regional water supply plan should include a review of the requirements expected by the various regulatory or funding agencies that are most likely to be involved with the project. The following sections provide some general information regarding agencies that are likely to be involved with the project's execution. General information is also provided regarding various plans, analyses, and permits that are likely to be required.

### **14.1 PERMITS/AGENCIES**

#### **14.1.1 US ARMY CORPS OF ENGINEERS**

Under the provisions of Section 10 of the Rivers and Harbors Act of 1899, the Corps of Engineers has jurisdiction to regulate certain structures and/or work in or affecting navigable waters of the United States. In addition, the Corps of Engineers has jurisdiction to regulate the discharge of dredged or fill material into waters of the United States, including their adjacent wetlands, pursuant to Section 404 of the Clean Water Act. Any activities subject to Section 10 and/or Section 404 would warrant a permit from the Department of the Army.

#### **14.1.2 TEXAS NATURAL RESOURCE CONSERVATION COMMISSION**

All plans and specifications for construction of public water supply, treatment and distribution systems must be reviewed and approved by the TNRCC prior to construction.

#### **14.1.3 TEXAS DEPARTMENT OF TRANSPORTATION**

A permit must be obtained for any facilities proposed to be constructed in state highway right-of-ways.

#### **14.1.4 SHELBY COUNTY COMMISSIONERS COURT**

A permit must be obtained for any facilities proposed to be constructed in county road right-of-ways.

### **14.2 ENVIRONMENTAL ANALYSIS**

While it is beyond the scope of this study to prepare a detailed environmental assessment, a few comments can be made regarding potential benefits and problems anticipated if the water supply alternative recommended in this study is implemented. A full environmental assessment will be required prior to construction if any state or federal funds are to be used for the project.

Other than the normal, temporary effects of construction, such as increased noise and dust, no long term negative impacts are anticipated due to this project. The greatest potential environmental benefit expected from the recommended project is the management of surface water by a regionally responsible entity. Withdrawal of water from the local aquifer will be greatly reduced by the utilization of surface water to serve the County's needs.

At such time as the full environmental effects of the proposed project are analyzed, the assessment must conform to 30 TAC 363.15. Basically, this environmental assessment shall: (1) predict anticipated changes which are the result of a proposed action, and (2) determine magnitude and extent of the particular changes through research, professional judgement, and/or discussions. The assessment should demonstrate that a systematic interdisciplinary approach was used in addressing environmental, social and economic impacts; all reasonable alternatives were considered; and that the assessment was relied upon to support decisions made in planning the project.

As part of the environmental assessment procedures, the following agencies must be notified and asked to provide comments:

1. Texas Parks and Wildlife Department - Endangered species.

2. Texas Antiquities Committee - Sites of historical and cultural significance.
3. Historic Preservation Officer, Texas Historical Commission - Sites with historical or archaeological significance.

#### **14.3 ARCHEOLOGICAL AND HISTORICAL ANALYSIS**

While it is beyond the scope of this study to prepare a detailed archeological and historical analysis, some general comments are provided for consideration. A full archeological and historical study may be required if the recommendations of this study are implemented. Since sites of archeological significance are scattered over the East Texas area, it is advisable to have the project reviewed by a qualified person or entity in the very preliminary stages of design so that any known sites may be avoided. The following agencies must be notified and asked for comments:

1. Texas Antiquities Committee - Sites of historical and cultured significance
2. Historic Preservation Officer, Texas Historical Commission - Sites with historical or archeological significance.

#### **14.4 WATER CONSERVATION AND PLANNING**

It is beyond the scope of this study to prepare a detailed water conservation plan for Shelby County. However, such a plan will be necessary for the regional entity if the proposed project is implemented. Indications are that future growth in the area will lead to significant increases in demand for water resources and to more capital investment in the county's water utility systems. The increased expenditures will not only be in supply pipes, storage tanks and pumping facilities, but also in the actual acquisition of water sources. On the other hand, the anticipated growth will also provide opportunities to reduce demands on the local water utility systems through the adoption and implementation of water conservation strategies aimed specifically at residential, commercial and industrial development. These opportunities come from the ability to require improved water use efficiency in the planning, design, and construction of new development.

Adoption of a county-wide water conservation plan will require participating entities to set specific goals. Special emphasis should be placed on (1) establishing specific water conservation goals for industrial and commercial users, (2) reducing peak water demands, (3) reducing the amount of "unaccounted for" water, and (4) changing block rates to non-promotional rates. Since a significant amount of water usage is expected from commercial and industrial users, this sector of water use should be specifically considered in the formulation of a county-wide conservation plan. Special consideration should also be given to peak demands, placing an emphasis on reduction. For purposes of comparison, Table 14-1 lists the recorded maximum daily water usage against the average daily water usage for the listed Shelby County water suppliers. The ratio of peak to average flow is displayed in the last column of the table. It should be noted that the peak to maximum ratios are fairly high for some of the entities. The water conservation plan should specifically address these peak demands.

The information in Table 14-1 was obtained from TNRCC inspection reports and was presented in more detail in Section 4. However, information was not available for all of the county water suppliers, so the list is not complete.

<b>TABLE 14-1: MAXIMUM DAILY WATER USAGE VS. AVERAGE DAILY WATER USAGE</b>			
<b>WATER AGENCY</b>	<b>MAXIMUM DAILY USAGE (MGD)</b>	<b>AVERAGE DAILY USAGE (MGD)</b>	<b>PEAK/AVERAGE RATIO</b>
Center, City of	7.040	2.490	2.827
East Lamar WSC	0.320	0.076	4.211
Five Way WSC	0.175	0.150	1.167
Huxley, City of	0.290	0.188	1.543
Joaquin, City of	0.065	0.046	1.413
McClelland WSC	0.190	0.120	1.583
Sand Hills WSC	0.160	0.120	1.333
Shelbyville WSC	0.500	0.095	5.263
Tenaha, City of	0.230	0.189	1.217
Timpson, City of	0.215	0.160	1.344
Timpson Rural WSC	1.500	0.900	1.667

In addition to water conservation strategies directed at new development, there are many other conservation concepts that are aimed at improving the efficient use of water by existing customers. Some of these other water conservation concepts are:

1. Implementation of utility rate structures that promote conservation.
2. Implementation of programs for gradual replacement of wasteful water fixtures in existing homes, businesses and industry.
3. Continued customer education/information programs that instill the need for and provide practical applications for water conservation.
4. Water demand controls that place limits on non-essential water uses (i.e. car washing, landscape irrigation, washing down of driveways and sidewalks, etc.).
5. Water system monitoring plans to identify and replace leaking pipes and faulty meters.

The potential benefits of water conservation are significant. The reduction of water demands and wastewater flows by the implementation of water conservation measures should reduce costs to utilities and subsequently reduce future increases in utility rates for customers. In addition, the water conservation plan will have a positive impact on the environment by minimizing the water taken from underground and/or from surface reservoirs, and by limiting the discharges from wastewater treatment facilities. Another benefit of water conservation is the potential reduction in utility costs provided by more optimal sizing of new pipelines and facilities, and by providing a more favorable thumb and sizing of existing facilities and expansions.

For the Shelby County area, the water conservation techniques previously mentioned are applicable on a system by system basis. The actual application of these techniques is more suitably addressed once there is an agreement on a regional entity with the proper representation and authority.

This study involves various types of entities, such as municipalities, water supply corporations, and industries. Each entity will need to adopt and implement the special water conservation strategies that will best suit its type entity and its goals and objectives. In the interim, this study recommends the adoption of a water conservation resolution by each of the participating entities to demonstrate their determination to



implement a viable water conservation plan.

The TWDB has established regulations for financial assistance that include requirements for water conservation planning and drought contingency planning. All water conservation and drought contingency plans must address the water conservation measures specified in 31 TAC 363.52 and follow the TWDB's "Guidelines for Municipal Water Conservation Planning and Program Development." The following format must be used. Each plan elements should be addressed and if not applicable, a brief explanation should be presented and discussed.

- I. INTRODUCTION
  - A. Brief Description of Planning Area and Proposed Project (if applicable)
  - B. Utility Evaluation Data
  - C. Need for and Goals of the Program
  
- II. LONG TERM WATER CONSERVATION PLAN
  - A. Plan Elements
    - 1. Education and Information
      - a. First Year Program
      - b. Long Term Program
      - c. Information to Customers
    - 2. Water Conservation Plumbing Code
    - 3. Water Conservation Retrofit Program
    - 4. Conservation Oriented Water Rate Structure
    - 5. Universal Metering and Meter Checking, Repair and Replacement
    - 6. Water Conserving Landscaping
    - 7. Water Audits and Leak Detection
    - 8. Recycling and Reuse
    - 9. Means of Implementation and Enforcement
  - B. Annual Reporting
  - C. contracts with Other Political Entities
  
- III. DROUGHT CONTINGENCY PLAN
  - A. Trigger conditions
    - 1. Mild
    - 2. Moderate
    - 3. severe
  - B. Drought contingency measures
    - 1. Mild
    - 2. Moderate
    - 3. Severe
  - C. Information and Education
  - D. Initiation Procedures
  - E. Termination Notification Actions
  - F. Means of Implementation
  
- IV. LEGAL AND REGULATORY COMPONENTS
  - A. Plan Adoption Resolution (required)
  - B. Drought Contingencies Ordinance/Regulation (required)
  - C. Water Conservation Plumbing Code Regulation (optional)
  - D. Plumbing Fixture Retrofit Regulation (optional)
  - E. Conservation Oriented Rate Regulation (recommended)
  - F. Water Conservation Landscape Regulation (optional)

All measures discussed in the TWDB's regulations appear to be applicable for implementation somewhere in Shelby County. Due to the probable benefits resulting from water conservation measures, it is recommended that the regional system require all customer entities to adopt a water conservation program as a condition for service. The regional entity should assist in promoting conservation, developing guidelines, and providing example plans and ordinances. The regional agency should also provide example drought contingency plans.

It is also recommended that the future regional entity act as the water conservation education center for the County by:

1. Being responsible for developing specific water conservation information, brochures, advertising, and programs for the customer entities,
2. Being responsible for coordinating and reviewing water use audits and leak detection activities for the customer entities,
3. Being responsible for making a water conservation information/education program available to local schools for inclusion in their curriculum,
4. Being responsible for developing a yearly water conservation awareness program to tie into the "Earth Day" activities,
5. Being responsible for updating a water use record and projection each year for the customer entities.
6. Being responsible for evaluating and reporting on the effects of the water conservation program.

This study has a high priority objective to assist Shelby County in the implementation of an effective water conservation plan. One of the stated goals of the regional system should be to practice water conservation, thereby reducing demand and ultimately benefiting all water users both economically and environmentally.

#### **14.5 DROUGHT CONDITIONS PLANNING**

One of the criteria for developing a regional water plan is the provision for drought conditions in the determination of water demands. Water demand tends to increase during prolonged periods of hot, dry weather and experience in this region indicates that overall demand will increase 15 to 20 percent over normals demands. We recommend using a factor of 15 percent for drought impact on water demand. Therefore, total water supply needs should reflect a "drought demand" of 115 percent of normal demand.

Drought contingency planning is recommended to be included in the water conservation plans that must be adopted by customer entities. It is recommended that the regional entity make the initial determination of "drought conditions", recommend measures to be implemented by customer entities, and be responsible for making the general public aware of the drought conditions and efforts being taken to address the problem.

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**APPENDIX A**  
**BIBLIOGRAPHY**

# - APPENDIX A -

## BIBLIOGRAPHY

The following is a list of works consulted, either in part or in whole, during the preparation of this report. These works are listed in alphabetical order by title as a reference for more data.

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**APPENDIX B**  
**TWDB GROUNDWATER DATA FOR SHELBY COUNTY**

Apr 18, 1995

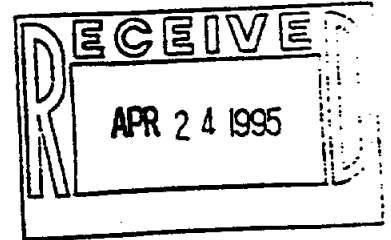
TEXAS WATER DEVELOPMENT BOARD  
GROUND WATER DATA SYSTEM

TABLE OF AQUIFER CODES AND AQUIFER NAMES USED  
COUNTY - Shelby

USGS CODE

AQUIFER NAME

-----  
124WLCX WILCOX GROUP  
NOT-APPL AQUIFER CODE IS NOT APPLICABLE TO THIS WELL



TEXAS WATER DEVELOPMENT BOARD  
GROUND WATER DATA SYSTEM

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WATER LEVEL MEASUREMENTS IN FEET ABOVE OR BELOW (-) LAND SURFACE

STATE WELL NUMBER	AQUIFER CODE	WELL DEPTH	ELEVATION OF LAND SURFACE	DATE OF VISIT OR MEASUREMENT	DEPTH TO WATER FROM LAND SURFACE	CHANGE IN LEVEL SINCE LAST STATIC MEASUREMENT	ELEVATION OF WATER LEVEL
36 01 402	124WLX	27	191	06/02/1971	-18.30		173
36 01 403	124WLX	47	193	06/02/1971	-22.33		171
36 01 801	124WLX	100	180	03/16/1979	-6.00		174
				07/01/1986	-5.63	0.37	174
36 09 601	124WLX	280	280	08/28/1980	-90.00		190
				07/01/1986	-85.82	4.18	194
36 10 701	124WLX	206	180	09/02/1972	-2.66		177
				02/09/1973	-2.11	0.55	178
				02/11/1975	-3.07	-0.96	177
				12/04/1975	-22.00	-18.93	158
				12/13/1976	-4.30	17.70	176
				12/15/1977	-4.35	-0.05	176
				12/13/1978	-4.03	0.32	176
				03/19/1981	-4.36Q		176
				11/18/1981	-3.95	0.08	176
				11/23/1982	-4.55	-0.60	175
				11/11/1983	-4.16	0.39	176
				11/07/1984	-3.77	0.39	176
				11/07/1985	-3.62	0.15	176
				11/08/1986	-3.83	-0.21	176
				01/15/1988	-3.40	0.43	177
				01/11/1989	-3.90	-0.50	176
				10/11/1989	-4.10	-0.20	176
				11/09/1990	-4.31	-0.21	176
				12/06/1991	-4.60	-0.29	175
				11/10/1992	-4.75	-0.15	175
				11/17/1993	-5.10	-0.35	175
				11/09/1994	-4.67	0.43	175
36 17 201	124WLX	162	270	05/14/1980	-85.00		185
				07/02/1986	-73.85	11.15	196
36 17 502	124WLX	31	260	09/01/1972	-9.32		251
				02/09/1973	-5.18	4.14	255
				02/05/1974	-5.02	0.16	255
				02/11/1975	-5.43	-0.41	255
				12/04/1975	-6.68	-1.25	253

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36 17 502	124WLCX	31	260	12/13/1976	-6.42	0.26	254
				12/15/1977	-7.35	-0.93	253
				12/13/1978	-6.30	1.05	254
				03/19/1981	-7.64Q		252
				11/18/1981	-6.32	-0.02	254
				11/23/1982	-5.04	1.28	255
				11/11/1983	-6.63	-1.59	253
				11/06/1984	-5.45	1.18	255
				11/07/1985	-5.72	-0.27	254
				11/08/1986	-6.03	-0.31	254
				01/14/1988	-4.70	1.33	255
				01/12/1989	-5.36	-0.66	255
				10/11/1989	-6.70	-1.34	253
36 17 601	124WLCX	127	273	08/02/1980	-76.00		197
				07/02/1986	-78.26	-2.26	195
				09/01/1972	-43.36		297
				02/09/1973	-44.63	-1.27	295
				02/05/1974	-47.50	-2.87	293
				02/11/1975	-35.21	12.29	305
				12/04/1975	-33.88	1.33	306
				12/13/1976	-35.57	-1.69	304
				12/15/1977	-39.78	-4.21	300
				12/13/1978	-41.64	-1.86	298
				11/18/1981	-39.64	2.00	300
				11/23/1982	-40.44	-0.80	300
				11/11/1983	-38.14	2.30	302
11/06/1984	-38.44	-0.30	302				
04/25/1986	-39.78	-1.34	300				
11/08/1986	-38.26	1.52	302				
01/14/1988	-36.80	1.46	303				
01/12/1989	-38.22	-1.42	302				
10/11/1989	-36.20	2.02	304				
11/09/1990	-36.38	-0.18	304				
12/06/1991	-34.15	2.23	306				
11/10/1992	-32.90	1.25	307				
11/17/1993	-32.10	0.80	308				
11/09/1994	-33.85	-1.75	306				

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36 17 803	124WLCK	143	312	07/05/1976	-31.00		281
36 26 101	124WLCK	229	238	04/20/1972	-92.00		146
				07/02/1986	-62.60	29.40	175
				11/08/1986	-63.39	-0.79	175
				01/14/1988	-63.80	-0.41	174
				01/12/1989	-65.40P		173
				10/11/1989	-64.62	-0.82	173
				11/09/1990	-64.63	-0.01	173
				12/06/1991	-64.20	0.43	174
				11/10/1992	-64.65	-0.45	173
				11/17/1993	-65.20	-0.55	173
				11/09/1994	-67.28P		171
37 04 602	124WLCK	100	365	03/30/1978	-50.00		315
37 05 101	124WLCK	55	450	06/24/1986	-26.93		423
37 05 301	124WLCK	350	440	02/02/1982	-210.00		230
37 05 701	124WLCK	59	380	08/29/1972	-41.23		339
				02/08/1973	-38.06	3.17	342
				02/06/1974	-30.57	7.49	349
				02/10/1975	-36.16	-5.59	344
				12/03/1975	-49.42	-13.26	331
				12/14/1976	-37.00	12.42	343
				12/13/1977	-30.35	6.65	350
				12/12/1978	-30.17	0.18	350
				03/19/1981	-30.78Q		349
				11/19/1981	-36.98	-6.81	343
				11/22/1982	-35.63	1.35	344
				11/11/1983	-29.84	5.79	350
				11/07/1984	-30.70	-0.86	349
				11/07/1985	-34.40	-3.70	346
				11/10/1986	-33.81	0.59	346
				01/15/1988	-27.90	5.91	352
				01/10/1989	-27.67	0.23	352
				10/12/1989	-27.35	0.32	353
				11/08/1990	-27.36	-0.01	353
				12/07/1991	-26.10	1.26	354
				11/11/1992	-27.25	-1.15	353
				11/17/1993	-24.50	2.75	356
				11/10/1994	-22.90	1.60	357

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37 05 702	124WLCK	100	392	03/05/1982	-40.00		352
37 05 703	124WLCK	260	392	08/02/1984	-70.00		322
				06/23/1986	-64.36	5.64	328
				11/10/1986	-63.86	0.50	328
				01/15/1988	-63.55	0.31	328
				01/10/1989	-64.45	-0.90	328
				10/12/1989	-66.84	-2.39	325
				11/08/1990	-67.20	-0.36	325
				12/07/1991	-66.45	0.75	326
				11/11/1992	-67.50	-1.05	325
				11/17/1993	-65.70	1.80	326
				11/10/1994	-67.14	-1.44	325
37 05 802	124WLCK	805	397	06/17/1966	-139.00		258
37 05 803	124WLCK	773	390	05/30/1981	-120.00		270
				04/29/1986	-152.60	-32.60	237
37 05 902	124WLCK	430	408	09/04/1972	-143.75		264
				02/08/1973	-144.02	-0.27	264
				06/28/1973	-146.65	-2.63	261
				07/17/1973	-145.46	1.19	263
				09/19/1973	-154.65	-9.19	253
				10/15/1973	-153.26	1.39	255
				11/14/1973	-154.72	-1.46	253
				02/06/1974	-153.29	1.43	255
				05/14/1974	-154.43	-1.14	254
				06/15/1974	-153.36	1.07	255
				07/15/1974	-158.38	-5.02	250
				08/15/1974	-157.09	1.29	251
				09/15/1974	-152.76	4.33	255
				10/15/1974	-148.39	4.37	260
				11/13/1974	-152.00	-3.61	256
				02/10/1975	-153.24	-1.24	255
				03/15/1975	-151.13	2.11	257
				04/15/1975	-145.31	5.82	263
				05/13/1975	-150.86	-5.55	257
08/14/1975	-157.63	-6.79	250				
09/15/1975	-155.00	2.65	253				
10/15/1975	-153.19	1.81	255				
11/15/1975	-152.01	1.18	256				
12/03/1975	-152.65	-0.64	255				

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37 05 902	124WLCK	430	408	03/23/1976	-151.71	0.94	256
				04/15/1976	-151.18	0.53	257
				05/15/1976	-150.80	0.38	257
				06/01/1976	-152.13	-1.33	256
				07/15/1976	-154.50	-2.37	254
				08/15/1976	-155.40	-0.90	253
				09/29/1976	-155.02	0.38	253
				10/15/1976	-152.94	2.08	255
				11/15/1976	-153.89	-0.95	254
				12/14/1976	-157.59	-3.70	250
				01/15/1977	-156.51	1.08	251
				02/15/1977	-154.11	2.40	254
				03/14/1977	-153.66	0.45	254
				04/15/1977	-153.03	0.63	255
				05/16/1977	-148.84	4.19	259
				06/15/1977	-154.80	-5.96	253
				07/15/1977	-158.01	-3.21	250
				08/08/1977	-156.69	1.32	251
				09/28/1977	-157.15	-0.46	251
				10/15/1977	-157.07	0.08	251
11/15/1977	-155.02	2.05	253				
12/13/1977	-155.48	-0.46	253				
01/15/1978	-156.12	-0.64	252				
02/15/1978	-154.57	1.55	253				
03/15/1978	-153.49	1.08	255				
04/15/1978	-152.27	1.22	256				
05/11/1978	-153.39	-1.12	255				
06/26/1978	-157.79	-4.40	250				
07/15/1978	-159.78	-1.99	248				
08/15/1978	-157.81	1.97	250				
09/15/1978	-155.19	2.62	253				
10/13/1978	-156.16	-0.97	252				
11/15/1978	-156.33	-0.17	252				
12/12/1978	-157.23	-0.90	251				
01/15/1979	-161.81	-4.58	246				
02/15/1979	-161.09	0.72	247				
03/15/1979	-157.74	3.35	250				
04/15/1979	-155.08	2.66	253				
05/15/1979	-154.16	0.92	254				
06/15/1979	-156.69	-2.53	251				
07/15/1979	-158.20	-1.51	250				
08/15/1979	-157.97	0.23	250				
09/15/1979	-158.23	-0.26	250				
10/15/1979	-158.90	-0.67	249				

P WATER LEVEL AFFECTED BY PUMPAGE OR RECHARGE AT THIS OR NEARBY WELL(S)  
 Q ACCURACY OF MEASUREMENT IS QUESTIONABLE

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WATER LEVEL MEASUREMENTS IN FEET ABOVE OR BELOW (-) LAND SURFACE

STATE WELL NUMBER	AQUIFER CODE	WELL DEPTH	ELEVATION OF LAND SURFACE	DATE OF VISIT OR MEASUREMENT	DEPTH TO WATER FROM LAND SURFACE	CHANGE IN LEVEL SINCE LAST STATIC MEASUREMENT	ELEVATION OF WATER LEVEL
37 05 902	124WLCK	430	408	11/15/1979	-157.22	1.68	251
				12/15/1979	-157.06	0.16	251
				01/15/1980	-158.27	-1.21	250
				02/15/1980	-159.62	-1.35	248
				03/15/1980	-157.06	2.56	251
				04/15/1980	-157.05	0.01	251
				05/15/1980	-152.66	4.39	255
				06/15/1980	-160.54	-7.88	247
				07/15/1980	-165.07	-4.53	243
				08/15/1980	-164.18	0.89	244
				09/15/1980	-164.64	-0.46	243
				10/15/1980	-162.70	1.94	245
				11/15/1980	-164.97	-2.27	243
				12/15/1980	-166.45	-1.48	242
				01/15/1981	-162.41	4.04	246
				02/15/1981	-156.18	6.23	252
				03/15/1981	-157.62	-1.44	250
				04/15/1981	-157.39	0.23	251
				05/15/1981	-158.99	-1.60	249
				06/15/1981	-160.30	-1.31	248
07/15/1981	-161.94	-1.64	246				
08/18/1981	-159.32	2.62	249				
09/15/1981	-161.68	-2.36	246				
11/09/1981	-170.38	-8.70	238				
37 05 903	124WLCK	774	390	09/04/1972	-131.37		259
				02/08/1973			
				02/11/1973			
				02/06/1974	-132.47	-1.10	258
				02/10/1975	-133.18	-0.71	257
				12/03/1975	-134.14	-0.96	256
				12/14/1976	-135.05	-0.91	255
				12/13/1977	-134.65	0.40	255
				12/12/1978	-135.59	-0.94	254
				11/18/1981	-140.27	-4.68	250
				11/22/1982	-139.94	0.33	250
				11/11/1983	-153.38	-13.44	237
				11/07/1985			
				11/10/1986			
02/22/1988	-151.13	2.25	239				
01/10/1989	-144.10	7.03	246				
10/12/1989							
11/08/1990							

P WATER LEVEL AFFECTED BY PUMPAGE OR RECHARGE AT THIS OR NEARBY WELL(S)  
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STATE WELL NUMBER	AQUIFER CODE	WELL DEPTH	ELEVATION OF LAND SURFACE	DATE OF VISIT OR MEASUREMENT	DEPTH TO WATER FROM LAND SURFACE	CHANGE IN LEVEL SINCE LAST STATIC MEASUREMENT	ELEVATION OF WATER LEVEL
37 05 904	124WLCK	757	405	04/10/1972	-155.00		250
37 05 905	124WLCK	737	405	04/30/1986	-192.82		212
				11/10/1986	-176.50P		229
				02/22/1988			
				01/10/1989	-174.75	18.07	230
				10/12/1989	-176.90	-2.15	228
				11/08/1990	-181.50	-4.60	224
				12/06/1991	-179.40	2.10	226
				11/11/1992	-174.80	4.60	230
				11/18/1993	-190.59P		214
				11/10/1994	-188.97	-14.17	216
37 06 101	124WLCK	263	370	03/21/1984	-74.00		296
				04/30/1986	-74.84	-0.84	295
				11/10/1986			
				02/22/1988	-74.50	0.34	296
				01/10/1989	-75.70	-1.20	294
				10/12/1989	-75.10	0.60	295
				11/08/1990	-74.90	0.20	295
				12/06/1991	-74.20	0.70	296
				11/11/1992	-74.70	-0.50	295
				11/17/1993	-74.20	0.50	296
				11/10/1994	-73.17Q	1.03	297
37 06 401	124WLCK	170	315	08/29/1972	-44.85		270
				02/08/1973	-43.84	1.01	271
				02/06/1974	-42.46	1.38	273
				02/10/1975	-42.28	0.18	273
				12/03/1975	-42.79	-0.51	272
				12/14/1976	-40.91	1.88	274
				12/13/1977	-44.92P		270
				12/12/1978	-43.93	-3.02	271
				03/19/1981	-45.09Q		270
				11/18/1981	-44.50	-0.57	271
				11/22/1982	-44.59	-0.09	270
				11/11/1983	-47.98P		267
				11/07/1984	-45.15	-0.56	270
				11/07/1985	-44.70	0.45	270
				11/10/1986	-45.47	-0.77	270
				01/15/1988	-61.52	-16.05	253
				01/10/1989	-47.50	14.02	268
				10/12/1989	-46.38	1.12	269
				11/08/1990	-46.15	0.23	269

P WATER LEVEL AFFECTED BY PUMPAGE OR RECHARGE AT THIS OR NEARBY WELL(S)  
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37 06 401	124WLCK	170	315	12/07/1991	-45.54	0.61	269
				11/11/1992	-46.90	-1.36	268
				11/17/1993	-46.20	0.70	269
				11/10/1994	-46.05	0.15	269
37 06 701	124WLCK	240	349	08/24/1984	-90.00		259
37 07 202	124WLCK	150	230	08/30/1972	-52.12		178
				02/10/1973	-50.36	1.76	180
				02/11/1975	-49.35	1.01	181
				12/03/1975	-50.22	-0.87	180
				12/14/1976	-50.01	0.21	180
				12/15/1977	-50.70	-0.69	179
				12/12/1978	-50.48	0.22	180
				11/18/1981	-50.98	-0.50	179
				11/23/1982			
				11/07/1984	-50.35	0.63	180
				11/07/1985	-50.07	0.28	180
				11/08/1986			
				01/15/1988	-49.72	0.35	180
				01/10/1989	-50.50	-0.78	180
10/12/1989	-50.61	-0.11	179				
11/09/1990	-50.54	0.07	179				
12/06/1991	-49.88	0.66	180				
11/11/1992	-51.05	-1.17	179				
11/17/1993	-50.80	0.25	179				
11/09/1994	-50.09	0.71	180				
37 07 403	124WLCK	504	340	01/05/1992	-147.00		193
37 07 601	124WLCK	404	337	02/26/1968	-172.00		165
37 08 301	124WLCK	208	192	09/04/1972	-14.19		178
				02/09/1973	-11.85	2.34	180
				02/05/1974	-7.62	4.23	184
				02/11/1975	-10.31	-2.69	182
				12/03/1975			
				12/13/1976			
				12/14/1977	-12.05	-1.74	180
				12/12/1978	-15.13	-3.08	177
				11/18/1981	-14.86	0.27	177
11/23/1982	-14.92	-0.06	177				
11/11/1983	-13.02	1.90	179				
11/07/1984							

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STATE WELL NUMBER	AQUIFER CODE	WELL DEPTH	ELEVATION OF LAND SURFACE	DATE OF VISIT OR MEASUREMENT	DEPTH TO WATER FROM LAND SURFACE	CHANGE IN LEVEL SINCE LAST STATIC MEASUREMENT	ELEVATION OF WATER LEVEL
37 08 301	124WLCX	208	192	11/11/1986	-12.27	0.75	180
				01/15/1988			
				01/10/1989	-13.40	-1.13	179
				10/11/1989	-10.00	3.40	182
				11/09/1990	-12.21	-2.21	180
37 08 302	124WLCX	196	185	12/06/1991			
				11/10/1992			
				09/04/1972	-18.92		166
				02/09/1973	-17.56	1.36	167
				02/05/1974	-15.33	2.23	170
				02/11/1975	-15.55	-0.22	169
				12/02/1975	-16.17	-0.62	169
				12/13/1976	-18.17	-2.00	167
				12/14/1977	-16.00	2.17	169
				12/12/1978	-15.88	0.12	169
				03/19/1981	-17.46Q		168
				11/18/1981	-15.66	0.22	169
				11/23/1982	-16.00	-0.34	169
				11/11/1983	-15.24	0.76	170
11/07/1984	-14.94	0.30	170				
11/07/1985	-14.85	0.09	170				
11/11/1986	-14.34	0.51	171				
01/15/1988							
37 08 501	124WLCX	100	285	07/22/1982	-30.00		255
37 08 601	124WLCX	330	250	09/03/1972	-81.30		169
				02/09/1973	-80.87	0.43	169
				02/05/1974	-80.08	0.79	170
				02/11/1975	-79.59	0.49	170
				12/03/1975	-77.57	2.02	172
				12/13/1976	-80.38	-2.81	170
				12/14/1977	-76.70	3.68	173
				12/12/1978	-76.73Q		173
				11/18/1981	-76.02	0.68	174
				11/23/1982	-76.70	-0.68	173
				11/11/1983	-78.46	-1.76	172
				11/07/1985			
				04/23/1986	-76.04	2.42	174
				11/11/1986	-75.10	0.94	175
01/15/1988	-75.75	-0.65	174				
01/10/1989	-75.00	0.75	175				

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37 08 603	124WLCK	22	204	06/02/1971	-16.25		188
37 08 604	124WLCK	39	220	09/01/1972	-14.40		206
				02/09/1973	-1.61	12.79	218
				02/05/1974	-1.54	0.07	218
				02/11/1975	-0.90	0.64	219
				12/03/1975	-5.53	-4.63	214
				12/13/1976	-6.55	-1.02	213
				12/14/1977	-8.49	-1.94	212
				12/12/1978	-1.53	6.96	218
				11/18/1981	-8.30	-6.77	212
				11/23/1982	-7.11	1.19	213
				11/11/1983	-3.14	3.97	217
				11/07/1984	-0.15	2.99	220
				04/23/1986	-0.47	-0.32	220
				11/11/1986	0.22	0.69	220
				01/15/1988	-0.25	-0.47	220
				01/10/1989	0.10	0.35	220
				10/11/1989	-1.96	-2.06	218
				11/09/1990	-2.20	-0.24	218
				12/06/1991	-2.15	0.05	218
				11/10/1992	-1.05	1.10	219
				11/17/1993	-1.30	-0.25	219
				11/09/1994	0.22	1.52	220
37 08 701	124WLCK	139	220	08/31/1972	-8.02		212
				02/09/1973	-6.96	1.06	213
				02/05/1974	-6.26	0.70	214
				02/11/1975	-5.64	0.62	214
				12/03/1975	-6.01	-0.37	214
				12/13/1976	-5.88	0.13	214
				12/14/1977	-7.85	-1.97	212
				12/12/1978	-10.66	-2.81	209
				03/20/1981	-10.81Q		209
				11/18/1981	-12.74	-2.08	207
				11/23/1982	-11.19	1.55	209
				11/11/1983	-12.45	-1.26	208
				11/07/1984	-13.71	-1.26	206
				11/07/1985	-13.37	0.34	207
				11/11/1986	-13.21	0.16	207
				01/15/1988	-13.25	-0.04	207
				01/10/1989	-14.80P		205
				10/11/1989	-13.85	-0.60	206
				11/09/1990	-13.79	0.06	206

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37 08 701	124WLCX	139	220	12/06/1991	-12.65	1.14	207
				11/10/1992	-13.95	-1.30	206
				11/17/1993	-14.40	-0.45	206
				11/09/1994	-12.97	1.43	207
37 08 801	124WLCX	39	200	09/30/1972	-18.65		181
				02/10/1973	-16.08	2.57	184
				02/05/1974	-8.73	7.35	191
				02/11/1975	-8.90	-0.17	191
				12/03/1975	-16.88	-7.98	183
				12/13/1976	-17.45	-0.57	183
				12/14/1977	-17.80	-0.35	182
				12/12/1978	-18.10	-0.30	182
				11/18/1981	-18.53	-0.43	181
				11/23/1982			
				11/11/1983	-16.61	1.92	183
				11/07/1984	-17.78	-1.17	182
				11/11/1986			
				01/15/1988	-16.45	1.33	184
				01/10/1989	-18.35	-1.90	182
				10/11/1989	-15.67	2.68	184
11/09/1990	-17.45	-1.78	183				
12/06/1991	-16.35	1.10	184				
11/10/1992	-17.03	-0.68	183				
11/17/1993	-17.30	-0.27	183				
11/09/1994	-15.03	2.27	185				
37 08 802	124WLCX	400	255	10/06/1975	-165.00		90
37 13 302	124WLCX	290	394	08/22/1984	-120.00		274
				06/26/1986	-87.45	32.55	307
				11/10/1986	-87.55	-0.10	306
				01/15/1988	-87.57	-0.02	306
				01/10/1989	-88.55	-0.98	305
				10/12/1989	-90.47	-1.92	304
				11/08/1990	-89.59	0.88	304
				12/07/1991	-88.64	0.95	305
				11/11/1992	-89.05	-0.41	305
				11/17/1993	-89.40	-0.35	305
11/10/1994	-89.14	0.26	305				
37 13 602	124WLCX	51	400	08/30/1972	-33.09		367
				02/08/1973	-28.52	4.57	371
				02/06/1974	-22.88	5.64	377

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37 13 602	124WLCK	51	400	02/11/1975	-22.69	0.19	377
				12/03/1975	-24.90	-2.21	375
				12/14/1976			
37 13 603	124WLCK	118	340	09/03/1972	-41.67		298
				02/09/1973	-39.32	2.35	301
				02/06/1974			
				02/11/1975	-36.46	2.86	304
				12/03/1975	-39.47P		301
				12/14/1976	-37.26	-0.80	303
				12/13/1977	-38.06	-0.80	302
				12/12/1978	-39.86	-1.80	300
				03/20/1981	-40.29Q		300
				11/19/1981	-39.13	0.73	301
				11/22/1982	-39.38	-0.25	301
				11/11/1983	-39.60	-0.22	300
				11/07/1984	-45.29P		295
				11/07/1985	-38.70	0.90	301
				11/10/1986	-38.79	-0.09	301
01/15/1988	-38.20	0.59	302				
01/11/1989	-40.25	-2.05	300				
10/12/1989	-44.57P		295				
			11/08/1990				
			12/07/1991				
37 13 604	124WLCK	487	402	10/28/1972	-118.00		284
37 14 201	124WLCK	55	335	08/29/1972	-20.17		315
				02/08/1973			
				02/06/1974			
37 14 501	124WLCK	58	435	09/01/1972	-42.58		392
				02/08/1973	-42.45	0.13	393
				02/06/1974	-40.79	1.66	394
				02/11/1975	-40.45	0.34	395
				12/03/1975	-40.15	0.30	395
				12/14/1976	-40.55	-0.40	394
				12/13/1977	-39.85	0.70	395
				12/12/1978	-40.80	-0.95	394
				03/20/1981	-41.13Q		394
				11/18/1981	-40.09	0.71	395
				11/22/1982	-40.52	-0.43	394
11/11/1983	-39.40	1.12	396				
11/07/1984	-39.29	0.11	396				

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37 14 501	124WLCK	58	435	05/01/1986	-38.52	0.77	396
				11/10/1986	-38.44	0.08	397
				01/15/1988	-35.30	3.14	400
				01/11/1989	-37.52	-2.22	397
				10/12/1989	-38.09	-0.57	397
				11/10/1990	-38.24	-0.15	397
				12/07/1991	-37.65	0.59	397
				11/11/1992	-36.65	1.00	398
				11/16/1993	-36.30	0.35	399
				11/10/1994	-36.48	-0.18	399
37 14 502	124WLCK	610	410	05/01/1986	-147.00		263
37 14 701	124WLCK	74	362	08/30/1972	-49.40		313
				02/09/1973	-28.20	21.20	334
				02/11/1975	-10.66	17.54	351
				12/03/1975	-35.59	-24.93	326
				12/14/1976	-37.32	-1.73	325
				12/13/1977	-47.31	-9.99	315
				12/12/1978	-50.02	-2.71	312
				11/19/1981	-54.45	-4.43	308
				11/22/1982	-50.68	3.77	311
				11/11/1983	-49.68	1.00	312
				11/07/1984	-43.34	6.34	319
				11/07/1985	-42.14	1.20	320
				11/10/1986	-40.16	1.98	322
				01/15/1988	-34.10	6.06	328
				01/11/1989	-55.30P		307
10/12/1989	-47.18	-13.08	315				
11/10/1990	-51.47	-4.29	311				
12/07/1991	-33.10	18.37	329				
11/11/1992	-42.85	-9.75	319				
11/16/1993	-41.10	1.75	321				
11/10/1994	-38.65	2.45	323				
37 14 702	124WLCK	226	351	09/12/1977	-64.00		287
37 14 703	124WLCK	255	388	03/11/1983	-130.00		258
37 14 802	124WLCK	288	555	07/13/1974	-197.00		358
37 14 803	124WLCK	235	480	03/22/1985	-135.00		345
37 14 901	124WLCK	174	383	05/31/1985	-90.00		293

P WATER LEVEL AFFECTED BY PUMPAGE OR RECHARGE AT THIS OR NEARBY WELL(S)  
Q ACCURACY OF MEASUREMENT IS QUESTIONABLE

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WATER LEVEL MEASUREMENTS IN FEET ABOVE OR BELOW (-) LAND SURFACE

STATE WELL NUMBER	AQUIFER CODE	WELL DEPTH	ELEVATION OF LAND SURFACE	DATE OF VISIT OR MEASUREMENT	DEPTH TO WATER FROM LAND SURFACE	CHANGE IN LEVEL SINCE LAST STATIC MEASUREMENT	ELEVATION OF WATER LEVEL
37 14 901	124WLCKX	174	383	06/27/1986	-85.11	4.89	298
				11/10/1986	-88.32	-3.21	295
				01/15/1988	-88.50	-0.18	295
				01/11/1989			
				10/12/1989	-89.80	-1.30	293
				11/10/1990	-90.87	-1.07	292
				12/07/1991	-88.60	2.27	294
				11/11/1992	-90.15	-1.55	293
37 15 103	124WLCKX	265	324	07/25/1980	-102.00		222
				04/29/1986	-52.36	49.64	272
				11/10/1986	-52.88	-0.52	271
				01/15/1988	-53.75	-0.87	270
				01/11/1989	-53.70	0.05	270
				10/12/1989	-53.52	0.18	270
37 15 104	124WLCKX	206	290	04/16/1982	-54.00		236
37 15 105	124WLCKX	230	295	07/18/1985	-68.00		227
				04/29/1986	-52.40	15.60	243
				11/11/1986	-51.35	1.05	244
				01/15/1988	-51.80	-0.45	243
				01/11/1989	-53.80	-2.00	241
				10/12/1989	-54.25	-0.45	241
				11/09/1990	-57.90	-3.65	237
				12/07/1991	-52.70	5.20	242
				11/11/1992	-53.30	-0.60	242
				11/17/1993	-56.40	-3.10	239
11/10/1994	-52.52	3.88	242				
37 15 301	124WLCKX	402	302	05/23/1967	-100.00		202
37 15 401	124WLCKX	48	382	08/29/1972	-40.65		341
				02/08/1973	-38.59	2.06	343
				02/05/1974	-37.05	1.54	345
				02/11/1975	-34.97	2.08	347
				12/03/1975	-36.49	-1.52	346
				12/14/1976	-36.80	-0.31	345
				12/16/1977	-37.13	-0.33	345
				12/12/1978	-37.86	-0.73	344
				11/17/1981	-37.95	-0.09	344

P WATER LEVEL AFFECTED BY PUMPAGE OR RECHARGE AT THIS OR NEARBY WELL(S)  
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WATER LEVEL MEASUREMENTS IN FEET ABOVE OR BELOW (-) LAND SURFACE

STATE WELL NUMBER	AQUIFER CODE	WELL DEPTH	ELEVATION OF LAND SURFACE	DATE OF VISIT OR MEASUREMENT	DEPTH TO WATER FROM LAND SURFACE	CHANGE IN LEVEL SINCE LAST STATIC MEASUREMENT	ELEVATION OF WATER LEVEL
37 15 401	124WLX	48	382	11/22/1982	-37.83	0.12	344
				11/11/1983	-36.83	1.00	345
				11/07/1984	-37.20	-0.37	345
				11/10/1986	-35.20	2.00	347
				01/15/1988	-35.00	0.20	347
				01/11/1989	-37.52	-2.52	344
				10/12/1989	-36.72	0.80	345
				11/10/1990	-37.18	-0.46	345
				12/07/1991	-35.85	1.33	346
				11/11/1992	-36.25	-0.40	346
37 15 403	124WLX	186	330	11/17/1993	-37.20	-0.95	345
				11/10/1994	-35.99	1.21	346
37 15 501	124WLX	35	340	05/04/1977	-80.00		250
				08/29/1972	-29.84		310
				02/09/1973	-23.30	6.54	317
				02/05/1974	-21.00	2.30	319
				02/11/1975	-16.37	4.63	324
				12/03/1975	-28.92	-12.55	311
				12/14/1976	-29.35	-0.43	311
				12/16/1977	-30.30	-0.95	310
				12/12/1978	-30.41	-0.11	310
				03/20/1981	-30.84Q		309
				11/17/1981	-27.20	3.21	313
				11/23/1982	-28.10	-0.90	312
				11/11/1983			
10/12/1989	-107.34	-79.24	233				
37 15 503	124WLX	340	368	11/11/1981	-120.00		248
				04/30/1986	-103.71	16.29	264
				11/10/1986			
				01/15/1988	-104.10	-0.39	264
				01/11/1989	-107.00	-2.90	261
				11/09/1990	-107.59	-0.59	260
				12/07/1991	-106.90	0.69	261
				11/11/1992	-107.55	-0.65	260
				11/16/1993			
11/10/1994	-108.25Q	-0.70	260				
37 15 601	124WLX	472	310	05/16/1981	-80.00		230
37 16 201	124WLX	59	260	08/31/1972	-13.52		246
				02/10/1973	-4.53	8.99	255

P WATER LEVEL AFFECTED BY PUMPAGE OR RECHARGE AT THIS OR NEARBY WELL(S)  
Q ACCURACY OF MEASUREMENT IS QUESTIONABLE

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WATER LEVEL MEASUREMENTS IN FEET ABOVE OR BELOW (-) LAND SURFACE

STATE WELL NUMBER	AQUIFER CODE	WELL DEPTH	ELEVATION OF LAND SURFACE	DATE OF VISIT OR MEASUREMENT	DEPTH TO WATER FROM LAND SURFACE	CHANGE IN LEVEL SINCE LAST STATIC MEASUREMENT	ELEVATION OF WATER LEVEL
37 16 201	124WLCK	59	260	02/05/1974	-4.29	0.24	256
				02/11/1975	-2.48	1.81	258
				12/03/1975	-17.36	-14.88	243
				12/13/1976	-11.50	5.86	249
				12/15/1977	-23.72	-12.22	236
				12/12/1978	-14.45	9.27	246
				11/18/1981	-22.74	-8.29	237
				11/23/1982			
				11/11/1983	-15.28	7.46	245
				11/07/1984	-14.11	1.17	246
				11/11/1986	-15.15	-1.04	245
				01/15/1988	-11.15	4.00	249
				01/10/1989	-19.94	-8.79	240
				10/11/1989	-12.60	7.34	247
				11/09/1990	-15.86	-3.26	244
				12/07/1991	-13.60	2.26	246
				11/10/1992	-13.85	-0.25	246
				11/17/1993	-13.90	-0.05	246
				11/09/1994	-7.91	5.99	252
				37 16 302	124WLCK	25	230
02/09/1973	-10.32	3.68	220				
02/11/1975	-10.50	-0.18	220				
12/03/1975	-12.84	-2.34	217				
12/13/1976	-11.52	1.32	218				
12/16/1977	-13.84	-2.32	216				
12/13/1978	-13.64	0.20	216				
11/18/1981	-15.71	-2.07	214				
11/23/1982	-13.48	2.23	217				
11/11/1983	-12.63	0.85	217				
11/07/1984	-11.68	0.95	218				
04/28/1986	-12.43	-0.75	218				
11/11/1986	-12.78	-0.35	217				
01/15/1988	-12.80	-0.02	217				
01/11/1989	-12.70	0.10	217				
10/11/1989	-12.94	-0.24	217				
11/09/1990	-14.25	-1.31	216				
12/06/1991	-10.25	4.00	220				
11/10/1992	-12.40	-2.15	218				
11/17/1993	-12.00	0.40	218				
11/09/1994	-10.92	1.08	219				
37 16 701	124WLCK	42	270	09/02/1972	-14.64		255
				02/09/1973	-5.27	9.37	265

P WATER LEVEL AFFECTED BY PUMPAGE OR RECHARGE AT THIS OR NEARBY WELL(S)  
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WATER LEVEL MEASUREMENTS IN FEET ABOVE OR BELOW (-) LAND SURFACE

STATE WELL NUMBER	AQUIFER CODE	WELL DEPTH	ELEVATION OF LAND SURFACE	DATE OF VISIT OR MEASUREMENT	DEPTH TO WATER FROM LAND SURFACE	CHANGE IN LEVEL SINCE LAST STATIC MEASUREMENT	ELEVATION OF WATER LEVEL											
37 16 701	124WLCX	42	270	02/05/1974	-5.92	-0.65	264											
				02/11/1975	-4.50	1.42	266											
				12/03/1975	-9.92	-5.42	260											
				12/13/1976	-6.46	3.46	264											
				12/16/1977	-9.50	-3.04	261											
				12/13/1978	-7.88	1.62	262											
				03/20/1981	-10.74Q		259											
				11/18/1981	-11.25	-3.37	259											
				11/23/1982	-8.05	3.20	262											
				11/11/1983	-12.17	-4.12	258											
				11/07/1984	-11.53	0.64	258											
				11/07/1985	-5.65	5.88	264											
				11/11/1986	-7.60	-1.95	262											
				01/15/1988	-4.40	3.20	266											
				01/11/1989	-8.38	-3.98	262											
37 21 301	124WLCX	344	425	11/30/1978	-150.00		275											
				37 21 903	124WLCX	286	390	03/14/1973	-160.00	230								
											37 22 301	124WLCX	1455	525	02/09/1967	-280.00	245	
															06/28/1986	-338.03P	187	
															06/29/1986	-309.59	-29.59	215
											37 22 501	124WLCX	155	451	11/10/1986			
															01/11/1989	-320.00	-10.41	205
															10/12/1989			
															07/10/1981	-97.00		354
											37 23 401	124WLCX	509	440	06/25/1979	-225.00		215
37 23 501	124WLCX	1400	468	01/15/1992	-231.00		237											
37 23 601	124WLCX	52	442	09/01/1972	-50.77		391											
				02/09/1973	-32.06	18.71	410											
				02/11/1975	-20.01	12.05	422											
				12/04/1975	-28.03	-8.02	414											
				12/14/1976	-33.00	-4.97	409											

P WATER LEVEL AFFECTED BY PUMPAGE OR RECHARGE AT THIS OR NEARBY WELL(S)  
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WATER LEVEL MEASUREMENTS IN FEET ABOVE OR BELOW (-) LAND SURFACE

STATE WELL NUMBER	AQUIFER CODE	WELL DEPTH	ELEVATION OF LAND SURFACE	DATE OF VISIT OR MEASUREMENT	DEPTH TO WATER FROM LAND SURFACE	CHANGE IN LEVEL SINCE LAST STATIC MEASUREMENT	ELEVATION OF WATER LEVEL
37 23 601	124WLX	52	442	12/15/1977			
				12/13/1978	-26.55	6.45	415
				11/17/1981			
37 23 602	124WLX	487	470	07/27/1979	-240.00		230
				04/30/1986	-240.40	-0.40	230
37 23 603	124WLX	170	328	06/10/1984	-80.00		248
37 23 802	124WLX	275	415	09/11/1979	-99.00		316
37 23 803	124WLX	214	400	04/20/1981	-120.00		280
37 24 601	124WLX	60	338	09/01/1972	-30.73		307
				02/09/1973	-29.00	1.73	309
				02/05/1974	-23.50	5.50	315
				02/11/1975	-23.22	0.28	315
				12/04/1975	-25.87	-2.65	312
				12/13/1976	-28.92	-3.05	309
				12/15/1977	-29.28	-0.36	309
				12/13/1978	-29.47	-0.19	309
				03/20/1981	-29.64Q		308
				11/18/1981	-30.11	-0.64	308
				11/23/1982	-30.68	-0.57	307
				11/11/1983	-28.39	2.29	310
				11/06/1984	-29.05	-0.66	309
				04/24/1986	-28.72	0.33	309
				11/08/1986	-28.76	-0.04	309
01/15/1988	-29.05	-0.29	309				
01/12/1989	-30.85	-1.80	307				
10/11/1989	-29.36	1.49	309				
11/09/1990	-29.94	-0.58	308				
12/07/1991	-27.55	2.39	310				
11/10/1992	-28.30	-0.75	310				
11/17/1993	-29.00	-0.70	309				
11/09/1994	-29.18	-0.18	309				
37 32 301	124WLX	50	290	09/02/1972	-24.93		265
				02/09/1973	-8.02	16.91	282
				02/05/1974	-13.00P		277
				02/11/1975	-6.71	1.31	283
				12/04/1975	-17.72	-11.01	272
				12/13/1976	-15.19	2.53	275
				12/15/1977	-14.69	0.50	275

P WATER LEVEL AFFECTED BY PUMPAGE OR RECHARGE AT THIS OR NEARBY WELL(S)

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WATER LEVEL MEASUREMENTS IN FEET ABOVE OR BELOW (-) LAND SURFACE

STATE WELL NUMBER	AQUIFER CODE	WELL DEPTH	ELEVATION OF LAND SURFACE	DATE OF VISIT OR MEASUREMENT	DEPTH TO WATER FROM LAND SURFACE	CHANGE IN LEVEL SINCE LAST STATIC MEASUREMENT	ELEVATION OF WATER LEVEL
37 32 301	124WLCX	50	290	12/13/1978	-14.90	-0.21	275
				11/18/1981	-15.91	-1.01	274
				11/23/1982	-16.33	-0.42	274
				11/11/1983	-17.60	-1.27	272
				11/06/1984	-16.28	1.32	274
				04/25/1986	-15.05	1.23	275
				11/08/1986	-15.54	-0.49	274
				01/14/1988	-7.65	7.89	282
				01/12/1989	-10.48	-2.83	280
				10/11/1989	-16.92	-6.44	273
				11/09/1990	-18.25	-1.33	272
				12/07/1991	-6.00	12.25	284
				11/10/1992	-17.83	-11.83	272
				11/17/1993	-17.00	0.83	273
11/09/1994	-11.35	5.65	279				
37 32 302	124WLCX	150	270	03/31/1980	-60.00		250

TOTAL WELLS: 77

P WATER LEVEL AFFECTED BY PUMPAGE OR RECHARGE AT THIS OR NEARBY WELL(S)  
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INFREQUENT CONSTITUENT REPORT COUNTY - Shelby

STATE WELL NUMBER	DATE	SAMPLE #	STORET CODE	DESCRIPTION	FLAG	VALUE	CONFIDENCE	
3705905	11/18/1993	1	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)		1.0		
	11/18/1993	1	01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	2.0		
	11/18/1993	1	01005	BARIUM, DISSOLVED (UG/L AS BA)		21.6		
	11/18/1993	1	01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	2.0		
	11/18/1993	1	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	20.		
	11/18/1993	1	01040	COPPER, DISSOLVED (UG/L AS CU)	<	20.		
	03/13/1986	1	01045	IRON, TOTAL (UG/L AS FE)		120		
	06/28/1989	1	01046	IRON, DISSOLVED (UG/L AS FE)		47		
	11/18/1993	1	01046	IRON, DISSOLVED (UG/L AS FE)		25.2		
	11/18/1993	1	01049	LEAD, DISSOLVED (UG/L AS PB)		5.0		
	03/13/1986	1	01055	MANGANESE, TOTAL (UG/L AS MN)	<	20		
	06/28/1989	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	20		
	11/18/1993	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	20.		
	11/18/1993	1	01075	SILVER, DISSOLVED (UG/L AS AG)	<	10.		
	11/18/1993	1	01090	ZINC, DISSOLVED (UG/L AS ZH)	<	20.		
	11/18/1993	1	01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	4.0		
	3706401	11/18/1993	1	01503	ALPHA, DISSOLVED, PC/L	<	5.0	
11/18/1993		1	03503	BETA, DISSOLVED, PC/L	<	6.0		
11/18/1993		1	39086	ALKALINITY, FIELD, DISSOLVED AS CaCO3		585.0		
06/28/1989		1	71865	ICODIDE (MG/L AS I)		0.2		
11/18/1993		1	71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.13		
11/18/1993		1	82244	ALKALINITY PHENOLPHTHALEIN FIELD DATA (MG/L)		24.0		
07/29/1977		1	01045	IRON, TOTAL (UG/L AS FE)		100.		
07/29/1977		1	01055	MANGANESE, TOTAL (UG/L AS MN)	<	50.		
3706501		04/29/1986	1	00010	TEMPERATURE, WATER (CELCIUS)		21	
		07/18/1989	1	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)		.04	
		07/18/1989	1	01046	IRON, DISSOLVED (UG/L AS FE)		49	
		07/18/1989	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)		39	
3707401	07/29/1977	1	01045	IRON, TOTAL (UG/L AS FE)	<	50.		
	04/24/1986	1	01045	IRON, TOTAL (UG/L AS FE)		130.		
	07/29/1977	1	01055	MANGANESE, TOTAL (UG/L AS MN)	<	50.		
3707402	10/30/1970	1	00010	TEMPERATURE, WATER (CELCIUS)		21		

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TEXAS WATER DEVELOPMENT BOARD  
GROUND WATER DATA SYSTEM

INFREQUENT CONSTITUENT REPORT COUNTY - Shelby

STATE WELL NUMBER	DATE	SAMPLE #	STORET CODE	DESCRIPTION	FLAG	VALUE	CONFIDENCE	OR-
3601405	02/15/1986	1	01045	IRON, TOTAL (UG/L AS FE)		30.		
	02/15/1986	1	01055	MANGANESE, TOTAL (UG/L AS MN)		20.		
3609701	05/11/1961	1	01045	IRON, TOTAL (UG/L AS FE)		220.		
	05/11/1961	1	01046	IRON, DISSOLVED (UG/L AS FE)		10		
3610701	07/28/1977	1	01045	IRON, TOTAL (UG/L AS FE)		120.		
	07/28/1977	1	01055	MANGANESE, TOTAL (UG/L AS MN)		60.		
3617501	05/11/1961	1	01045	IRON, TOTAL (UG/L AS FE)		30		
3617502	07/28/1977	1	01045	IRON, TOTAL (UG/L AS FE)		8700.		
	07/28/1977	1	01055	MANGANESE, TOTAL (UG/L AS MN)		160.		
3617802	07/28/1977	1	01045	IRON, TOTAL (UG/L AS FE)		390.		
	07/28/1977	1	01055	MANGANESE, TOTAL (UG/L AS MN)	<	50.		
3705701	07/29/1977	1	01045	IRON, TOTAL (UG/L AS FE)		960.		
	07/29/1977	1	01055	MANGANESE, TOTAL (UG/L AS MN)		150.		
3705901	07/21/1941	1	01046	IRON, DISSOLVED (UG/L AS FE)		60		
3705902	07/25/1941	1	01046	IRON, DISSOLVED (UG/L AS FE)		100		
3705903	06/00/1952	1	01045	IRON, TOTAL (UG/L AS FE)		1000.		
3705904	04/30/1986	1	01045	IRON, TOTAL (UG/L AS FE)		40.		
3705905	11/18/1993	1	00010	TEMPERATURE, WATER (CELCIUS)		25.3		
	11/18/1993	1	00090	OXIDATION REDUCTION POTENTIAL (ORP), MILLIVOLTS		-170.7		
	11/18/1993	1	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		0.62		
	11/18/1993	1	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	<	0.01		
	11/18/1993	1	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	<	0.01		

INFREQUENT CONSTITUENT REPORT COUNTY - Shelby

STATE WELL NUMBER	DATE	SAMPLE #	STORET CODE	DESCRIPTION	FLAG	VALUE	CONFIDENCE +OR-
3707402	04/24/1986	1	00010	TEMPERATURE, WATER (CELCIUS)		21	
	06/28/1989	1	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	<	.01	
	06/28/1989	1	01046	IRON, DISSOLVED (UG/L AS FE)	<	20	
	06/28/1989	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	20	
	06/28/1989	1	71865	IOOIDE (MG/L AS I)		.21	
	3707403	11/18/1993	1	00010	TEMPERATURE, WATER (CELCIUS)		23.6
11/18/1993		1	00090	OXIDATION REDUCTION POTENTIAL (ORP), MILLIVOLTS		-113.9	
11/18/1993		1	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		0.82	
11/18/1993		1	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	<	0.01	
11/18/1993		1	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	<	0.01	
11/18/1993		1	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)		1.2	
11/18/1993		1	01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	2.0	
11/18/1993		1	01005	BARIUM, DISSOLVED (UG/L AS BA)		39.2	
11/18/1993		1	01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	2.0	
11/18/1993		1	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	20.	
11/18/1993		1	01040	COPPER, DISSOLVED (UG/L AS CU)	<	20.	
11/18/1993		1	01046	IRON, DISSOLVED (UG/L AS FE)		48.6	
11/18/1993		1	01049	LEAD, DISSOLVED (UG/L AS PB)	<	5.0	
11/18/1993		1	01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	20.	
11/18/1993		1	01075	SILVER, DISSOLVED (UG/L AS AG)	<	10.	
11/18/1993		1	01090	ZINC, DISSOLVED (UG/L AS ZN)	<	20.	
11/18/1993		1	01145	SELENIUM, DISSOLVED (UG/L AS SE)		2.6	
11/18/1993		1	01503	ALPHA, DISSOLVED, PC/L	<	6.0	
11/18/1993		1	03503	BETA, DISSOLVED, PC/L	<	6.0	
3707601		11/18/1993	1	39086	ALKALINITY, FIELD, DISSOLVED AS CaCO3		598.0
	11/18/1993	1	71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.13	
	11/18/1993	1	82244	ALKALINITY PHENOLPHTHALEIN FIELD DATA (MG/L)		20.0	
	02/29/1968	1	01045	IRON, TOTAL (UG/L AS FE)		200.	
	04/24/1986	1	01045	IRON, TOTAL (UG/L AS FE)		80.	
	3708301	11/03/1955	1	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		2.3
11/03/1955		1	01020	BORON, DISSOLVED (UG/L AS B)		1000.	
11/03/1955		1	01045	IRON, TOTAL (UG/L AS FE)		430	
11/03/1955		1	01046	IRON, DISSOLVED (UG/L AS FE)		160	

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	11/03/1955	1	01055	MANGANESE, TOTAL (UG/L AS MN)		20	
3708302	11/03/1955	1	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		2.2	
	11/03/1955	1	01020	BORON, DISSOLVED (UG/L AS B)		1800	
	11/03/1955	1	01045	IRON, TOTAL (UG/L AS FE)		100	
	11/03/1955	1	01046	IRON, DISSOLVED (UG/L AS FE)		30	
	11/03/1955	1	01055	MANGANESE, TOTAL (UG/L AS MN)	<	20	
3708601	05/11/1961	1	01045	IRON, TOTAL (UG/L AS FE)		190	
3708604	07/28/1977	1	01045	IRON, TOTAL (UG/L AS FE)		2600.	
	07/28/1977	1	01055	MANGANESE, TOTAL (UG/L AS MN)		140.	
3708701	07/28/1977	1	01045	IRON, TOTAL (UG/L AS FE)		180.	
	07/28/1977	1	01055	MANGANESE, TOTAL (UG/L AS MN)	<	50.	
3708802	04/24/1986	1	01045	IRON, TOTAL (UG/L AS FE)		50.	
3713603	07/29/1977	1	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)		.84	
	07/29/1977	1	01045	IRON, TOTAL (UG/L AS FE)		80.	
	07/29/1977	1	01055	MANGANESE, TOTAL (UG/L AS MN)	<	50.	
3713604	07/18/1989	1	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)		.06	
	07/18/1989	1	01046	IRON, DISSOLVED (UG/L AS FE)	<	20	
	07/18/1989	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	20	
3714101	12/16/1975	1	00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)		0.2	
	12/16/1975	1	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		0.2	
	12/16/1975	1	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	<	.02	
	12/16/1975	1	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)		.07	
	12/16/1975	1	01045	IRON, TOTAL (UG/L AS FE)		800.	
3714201	07/29/1977	1	01045	IRON, TOTAL (UG/L AS FE)		150.	
	07/29/1977	1	01055	MANGANESE, TOTAL (UG/L AS MN)		150.	
3714501	07/29/1977	1	01045	IRON, TOTAL (UG/L AS FE)		240.	

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3715106	11/18/1993	1	01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	2.0	
	11/18/1993	1	01503	ALPHA, DISSOLVED, PC/L	<	5.0	
	11/18/1993	1	03503	BETA, DISSOLVED, PC/L	<	6.0	
	11/18/1993	1	39086	ALKALINITY, FIELD, DISSOLVED AS CAC03	<	606.0	
	11/18/1993	1	71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.13	
	11/18/1993	1	82244	ALKALINITY PHENOLPHTHALEIN FIELD DATA (MG/L)	<	31.0	
3715301	07/21/1989	1	00453	BICARBONATE, DISSOLVED AS HCOS, FIELD, MG/L		613.2	
	06/09/1967	1	01045	IRON, TOTAL (UG/L AS FE)		100.	
	04/26/1986	1	01045	IRON, TOTAL (UG/L AS FE)		50.	
	07/21/1989	1	01046	IRON, DISSOLVED (UG/L AS FE)		32	
	07/21/1989	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	20	
3715402	07/19/1989	1	01046	IRON, DISSOLVED (UG/L AS FE)		29	
	07/19/1989	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	20	
3715501	07/28/1977	1	01045	IRON, TOTAL (UG/L AS FE)		100.	
	07/28/1977	1	01055	MANGANESE, TOTAL (UG/L AS MN)	<	50.	
3715502	11/01/1965	1	01045	IRON, TOTAL (UG/L AS FE)		2500.	
	05/01/1986	1	01045	IRON, TOTAL (UG/L AS FE)		40.	
	07/19/1989	1	01046	IRON, DISSOLVED (UG/L AS FE)	<	20	
	07/19/1989	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	20	
3716201	07/28/1977	1	01045	IRON, TOTAL (UG/L AS FE)		120.	
	07/28/1977	1	01055	MANGANESE, TOTAL (UG/L AS MN)	<	50.	
3716302	07/28/1977	1	01045	IRON, TOTAL (UG/L AS FE)		140.	
	07/28/1977	1	01055	MANGANESE, TOTAL (UG/L AS MN)	<	50.	
3716501	07/21/1989	1	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)		.03	
	07/21/1989	1	01046	IRON, DISSOLVED (UG/L AS FE)	<	20	
	07/21/1989	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	20	
3716701	07/28/1977	1	01045	IRON, TOTAL (UG/L AS FE)		270.	
	07/28/1977	1	01055	MANGANESE, TOTAL (UG/L AS MN)		80.	

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	07/29/1977	1	01055	MANGANESE, TOTAL (UG/L AS MN)		80.	
3714502	03/30/1970	1	01045	IRON, TOTAL (UG/L AS FE)		300.	
	05/01/1986	1	01045	IRON, TOTAL (UG/L AS FE)		100.	
	07/18/1989	1	01046	IRON, DISSOLVED (UG/L AS FE)	<	20	
	03/30/1970	1	01055	MANGANESE, TOTAL (UG/L AS MN)		20.	
	07/18/1989	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	20	
3714701	07/29/1977	1	01045	IRON, TOTAL (UG/L AS FE)		60.	
	07/29/1977	1	01055	MANGANESE, TOTAL (UG/L AS MN)	<	50.	
3715101	04/05/1960	1	01020	BORON, DISSOLVED (UG/L AS B)		380	
	04/05/1960	1	01045	IRON, TOTAL (UG/L AS FE)		110	
	04/05/1960	1	01046	IRON, DISSOLVED (UG/L AS FE)		10	
3715102	07/19/1989	1	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)		.03	
	01/08/1966	1	01045	IRON, TOTAL (UG/L AS FE)		600.	
	07/19/1989	1	01046	IRON, DISSOLVED (UG/L AS FE)	<	20	
	07/19/1989	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	20	
3715106	11/18/1993	1	00010	TEMPERATURE, WATER (CELCIUS)		21.5	
	11/18/1993	1	00090	OXIDATION REDUCTION POTENTIAL (ORP), MILLIVOLTS		-67.4	
	11/18/1993	1	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		0.72	
	11/18/1993	1	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	<	0.01	
	11/18/1993	1	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	<	0.01	
	11/18/1993	1	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)		1.0	
	11/18/1993	1	01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	2.0	
	11/18/1993	1	01005	BARIUM, DISSOLVED (UG/L AS BA)		28.1	
	11/18/1993	1	01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	2.0	
	11/18/1993	1	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	4.0	
	11/18/1993	1	01040	COPPER, DISSOLVED (UG/L AS CU)	<	2.0	
	11/18/1993	1	01046	IRON, DISSOLVED (UG/L AS FE)		13.3	
	11/18/1993	1	01049	LEAD, DISSOLVED (UG/L AS PB)	<	5.0	
	11/18/1993	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)		2.0	
	11/18/1993	1	01075	SILVER, DISSOLVED (UG/L AS AG)	<	10.	
	11/18/1993	1	01090	ZINC, DISSOLVED (UG/L AS ZN)	<	5.0	



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STATE WELL NUMBER	DATE	SAMPLE #	STORET CODE	DESCRIPTION	FLAG	VALUE	CONFIDENCE
3716801	04/26/1986	1	00010	TEMPERATURE, WATER (CELCIUS)		21	
	11/17/1993	1	00010	TEMPERATURE, WATER (CELCIUS)		20.9	
	11/17/1993	1	00090	OXIDATION REDUCTION POTENTIAL (ORP), MILLIVOLTS		-43.0	
	11/17/1993	1	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		0.70	
	11/17/1993	1	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	<	0.01	
	07/21/1989	1	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)		.03	
	11/17/1993	1	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	<	0.01	
	11/17/1993	1	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)		1.1	
	11/17/1993	1	01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	2.0	
	11/17/1993	1	01005	BARIUM, DISSOLVED (UG/L AS BA)		51.1	
	11/17/1993	1	01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	2.0	
	11/17/1993	1	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	20.	
	11/17/1993	1	01040	COPPER, DISSOLVED (UG/L AS CU)	<	20.	
	07/21/1989	1	01046	IRON, DISSOLVED (UG/L AS FE)	<	20	
	11/17/1993	1	01046	IRON, DISSOLVED (UG/L AS FE)		168.	
	11/17/1993	1	01049	LEAD, DISSOLVED (UG/L AS PB)	<	5.0	
	07/21/1989	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	20	
	11/17/1993	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	20.	
	11/17/1993	1	01075	SILVER, DISSOLVED (UG/L AS AG)	<	10.	
	11/17/1993	1	01090	ZINC, DISSOLVED (UG/L AS ZN)	<	27.	
11/17/1993	1	01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	2.0		
11/17/1993	1	01503	ALPHA, DISSOLVED, PC/L	<	5.0		
11/17/1993	1	03503	BETA, DISSOLVED, PC/L	<	6.0		
11/17/1993	1	39086	ALKALINITY, FIELD, DISSOLVED AS CaCO3		676.0		
11/17/1993	1	71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.13		
11/17/1993	1	82244	ALKALINITY PHENOLPHTHALEIN FIELD DATA (MG/L)		42.0		
3721302	06/25/1986	1	01045	IRON, TOTAL (UG/L AS FE)		30.	
3723301	07/18/1989	1	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)		.03	
	06/28/1986	1	01045	IRON, TOTAL (UG/L AS FE)		40.	
	07/18/1989	1	01046	IRON, DISSOLVED (UG/L AS FE)		34	
	07/18/1989	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	20	
	09/22/1944	1	00900	HARDNESS, TOTAL (MG/L AS CaCO3)		8	

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	09/22/1944	2	00900	HARDNESS, TOTAL (MG/L AS CaCO3)		5	
3723401	04/30/1986	1	00010	TEMPERATURE, WATER (CELCIUS)		21	
	11/17/1993	1	00010	TEMPERATURE, WATER (CELCIUS)		22.5	
	11/17/1993	1	00090	OXIDATION REDUCTION POTENTIAL (ORP), MILLIVOLTS		1.9	
	11/17/1993	1	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		0.46	
	11/17/1993	1	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	<	0.01	
	11/17/1993	1	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	<	0.01	
	11/17/1993	1	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)		0.7	
	11/17/1993	1	01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	2.0	
	11/17/1993	1	01005	BARIUM, DISSOLVED (UG/L AS BA)		6.7	
	11/17/1993	1	01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	2.0	
	11/17/1993	1	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	4.0	
	11/17/1993	1	01040	COPPER, DISSOLVED (UG/L AS CU)	<	2.0	
	11/17/1993	1	01046	IRON, DISSOLVED (UG/L AS FE)		10.1	
	11/17/1993	1	01049	LEAD, DISSOLVED (UG/L AS PB)	<	5.0	
	11/17/1993	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	2.0	
	11/17/1993	1	01075	SILVER, DISSOLVED (UG/L AS AG)	<	10.	
	11/17/1993	1	01090	ZINC, DISSOLVED (UG/L AS ZN)	<	5.0	
	11/17/1993	1	01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	2.0	
	11/17/1993	1	01503	ALPHA, DISSOLVED, PC/L	<	4.0	
	11/17/1993	1	03503	BETA, DISSOLVED, PC/L	<	6.0	
11/17/1993	1	39086	ALKALINITY, FIELD, DISSOLVED AS CaCO3		224.0		
11/17/1993	1	71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.13		
11/17/1993	1	82244	ALKALINITY PHENOLPHTHALEIN FIELD DATA (MG/L)		16.0		
3723501	11/17/1993	1	00010	TEMPERATURE, WATER (CELCIUS)		31.3	
	11/17/1993	1	00090	OXIDATION REDUCTION POTENTIAL (ORP), MILLIVOLTS		-152.0	
	11/17/1993	1	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		0.69	
	11/17/1993	1	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	<	0.01	
	11/17/1993	1	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	<	0.01	
	11/17/1993	1	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)		1.0	
	11/17/1993	1	01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	1.0	
	11/17/1993	1	01005	BARIUM, DISSOLVED (UG/L AS BA)		28.0	
	11/17/1993	1	01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	2.0	
	11/17/1993	1	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	4.0	

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3723501	11/17/1993	1	01040	COPPER, DISSOLVED (UG/L AS CU)	<	2.0		
	11/17/1993	1	01046	IRON, DISSOLVED (UG/L AS FE)		33.5		
	11/17/1993	1	01049	LEAD, DISSOLVED (UG/L AS PB)	<	5.0		
	11/17/1993	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	0.5		
	11/17/1993	1	01075	SILVER, DISSOLVED (UG/L AS AG)	<	10.		
	11/17/1993	1	01090	ZINC, DISSOLVED (UG/L AS ZN)		9.1		
	11/17/1993	1	01145	SELENIUM, DISSOLVED (UG/L AS SE)		2.0		
	11/17/1993	1	01503	ALPHA, DISSOLVED, PC/L	<	6.0		
	11/17/1993	1	03503	BETA, DISSOLVED, PC/L	<	6.0		
	11/17/1993	1	39086	ALKALINITY, FIELD, DISSOLVED AS CaCO3		698.0		
3723601	11/17/1993	1	71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.13		
	11/17/1993	1	82244	ALKALINITY PHENOLPHTHALEIN FIELD DATA (MG/L)		20.0		
	07/28/1977	1	01045	IRON, TOTAL (UG/L AS FE)		5400.		
	07/28/1977	1	01055	MANGANESE, TOTAL (UG/L AS MN)	<	50.		
	3723602	07/20/1989	1	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)		.04	
		04/30/1986	1	01045	IRON, TOTAL (UG/L AS FE)		270	
		07/20/1989	1	01046	IRON, DISSOLVED (UG/L AS FE)		52	
		07/20/1989	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	20	
		07/28/1977	1	01045	IRON, TOTAL (UG/L AS FE)		8100.	
	3724601	07/28/1977	1	01055	MANGANESE, TOTAL (UG/L AS MN)		300.	
04/14/1966		1	01045	IRON, TOTAL (UG/L AS FE)		200.		
3724602	04/26/1986	1	01045	IRON, TOTAL (UG/L AS FE)		170.		
	11/17/1993	1	00010	TEMPERATURE, WATER (CELCIUS)		22.0		
3724603	11/17/1993	1	00090	OXIDATION REDUCTION POTENTIAL (ORP), MILLIVOLTS		-119.5		
	11/17/1993	1	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		0.88		
	11/17/1993	1	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	<	0.01		
	07/21/1989	1	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)		.04		
	11/17/1993	1	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	<	0.01		
	11/17/1993	1	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)		1.1		
	11/17/1993	1	01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	1.0		
	11/17/1993	1	01005	BARIUM, DISSOLVED (UG/L AS BA)		209.		

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3724603	11/17/1993	1	01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	2.0	
	11/17/1993	1	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	4.0	
	11/17/1993	1	01040	COPPER, DISSOLVED (UG/L AS CU)	<	2.0	
	07/21/1989	1	01046	IRON, DISSOLVED (UG/L AS FE)		123	
	11/17/1993	1	01046	IRON, DISSOLVED (UG/L AS FE)		109.	
	11/17/1993	1	01049	LEAD, DISSOLVED (UG/L AS PB)	<	5.0	
	07/21/1989	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)		58	
	11/17/1993	1	01056	MANGANESE, DISSOLVED (UG/L AS MN)		53.6	
	11/17/1993	1	01075	SILVER, DISSOLVED (UG/L AS AG)	<	10.	
	11/17/1993	1	01090	ZINC, DISSOLVED (UG/L AS ZN)	<	5.0	
	11/17/1993	1	01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	2.0	
	11/17/1993	1	01503	ALPHA, DISSOLVED, PC/L	<	4.0	
	11/17/1993	1	03503	BETA, DISSOLVED, PC/L	<	6.0	
	11/17/1993	1	39086	ALKALINITY, FIELD, DISSOLVED AS CAC03		195.0	
	11/17/1993	1	71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.13	
	3732301	07/28/1977	1	01045	IRON, TOTAL (UG/L AS FE)		80.
	07/28/1977	1	01055	MANGANESE, TOTAL (UG/L AS MN)	<	50.	

Apr 18 1995

TEXAS WATER DEVELOPMENT BOARD  
GROUND WATER DATA SYSTEM

GROUND WATER QUALITY SAMPLES  
COUNTY - Shelby

Well	Aquifer	Well Depth (feet)	Date of Collection	Agency Code	Lab Code	Reliability Code	Temp. Deg. C	pH	Silica (SiO2) MG/L	Calcium (Ca) MG/L	Magnesium (Mg) MG/L	Sodium (Na) MG/L	Potassium (K) MG/L	Carbonate (CO3) MG/L	Bicarb. (HCO3) MG/L	Sulfate (SO4) MG/L	Chloride (Cl) MG/L	Fluoride (F) MG/L	Nitrate (NO3) MG/L	Dissolved Solids MG/L	Spec. Cond. (microhmhos) as CaCO3	Hardness MG/L
36 01 404	124MLCX	216	04/23/1986	01	01	03	20	8.5	12	8	2	380	2	10	670	4	204	2.5	3.1	956	1793	28
36 01 405	124MLCX	200	02/15/1986	02	01	03	21	8.4	10	5	1	525	2	12	896	5	292	2.8	0.0	1283	2448	16
36 01 801	124MLCX	100	07/01/1986 U	01	01	03	20	5.7	12	2	1	2	2	0	6	6	5	<.1	0.7	33	48	9
36 09 601	124MLCX	280	07/01/1986	01	01	02	24	8.3	11	<.1	<.1	239	1	0	552	3	48	0.8	<.0	576	1001	6
36 09 701	124MLCX	353	05/11/1981	03	02	03	20	8.1	10	2	0	515	2	0	1190	0	97	4.4	0.2	1213	1970	4
36 10 701	124MLCX	206	09/02/1972	01	01	03	20	8.1	11	2	2	570	2	0	1062	<.4	276	4.0	<.4	1391	2544	13
36 17 201	124MLCX	162	07/02/1986	01	01	03	22	8.5	10	2	1	288	2	12	670	5	49	1.5	<.0	699	1242	9
36 17 501	124MLCX	200	05/11/1981	03	02	03	20	8.0	12	3	1	160	0	0	340	17	44	0.3	<.0	404	679	12
36 17 502	124MLCX	31	09/01/1972	01	01	02	20	7.2	46	13	4	28	0	0	113	6	8	0.2	<.4	161	213	48
36 17 601	124MLCX	127	07/02/1986	01	01	02	22	8.4	13	13	5	161	3	4	340	79	35	0.2	0.1	480	640	53
36 17 802	124MLCX	50	09/01/1972	01	01	02	20	6.6	76	9	2	21	0	0	52	5	18	0.1	2.0	158	158	30
36 25 102	124MLCX	163	04/25/1986	01	01	03	22	8.5	11	1	<.1	263	2	6	420	186	28	0.3	<.0	704	1240	6
36 26 101	124MLCX	229	07/02/1986	01	01	03	23	8.7	10	1	<.1	410	1	31	971	7	30	2.8	<.0	971	1683	6
37 04 602	124MLCX	100	06/23/1986	01	01	03	21	7.3	13	7	2	102	2	0	231	30	22	0.1	<.0	291	511	25
37 05 101	124MLCX	55	06/24/1986	01	01	03	23	5.7	59	1	<.1	8	1	0	22	1	4	<.1	2.1	88	56	6

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U after date of collection signifies unbalanced or partial chemical analysis

GROUND WATER QUALITY SAMPLES  
COUNTY - Shelby

Well	Aquifer	Well Depth (Feet)	Date of Collection	Agency Code	Lab Code	Reliability Code	Temp. Deg. C	pH	Silica (SiO2) MG/L	Calcium (Ca) MG/L	Magnesium (Mg) MG/L	Sodium (Na) MG/L	Potassium (K) MG/L	Carbonate (CO3) MG/L	Bicarb. (HCO3) MG/L	Sulfate (SO4) MG/L	Chloride (Cl) MG/L	Fluoride (F) MG/L	Nitrate (NO3) MG/L	Dissolved Solids MG/L	Spec. Cond. (micromhos) as CaCO3 MG/L	Hardness MG/L
37 05 301	124MLCX	350	06/25/1986	01	01	02	23	8.1	23	36	8	102	3	0	358	22	23	0.1	<.0	392	685	122
37 05 701	124MLCX	59	08/29/1972	01	01	03	26	7.2	39	48	24	78	0	0	261	50	90	0.4	<.4	458	825	218
	124MLCX	59	07/29/1977	01	01	02	20	7.3	44	37	22	79	0	0	222	47	91	0.3	<.4	429	786	182
	124MLCX	59	11/19/1981	01	01	02	20	7.6	43	29	22	74	0	0	217	44	76	0.3	0.1	395	730	162
	124MLCX	59	06/23/1986	01	01	02	26	6.8	31	36	17	78	3	0	220	36	68	0.4	0.8	370	679	159
37 05 703	124MLCX	260	06/23/1986	01	01	03	22	8.4	12	<1	<1	148	1	5	372	9	4	0.2	<.0	364	620	6
37 05 802	124MLCX	805	04/29/1986	01	01	03	27	8.5	12	<1	<1	320	1	10	690	6	77	1.1	<.0	767	1377	6
37 05 901	124MLCX	677	07/21/1941							6	2	176	0	0	397	38	28	0.6	0.5	446		23
37 05 902	124MLCX	430	07/25/1941							5	2	279	0	0	634	2	71	1.4	2.7	674		20
	124MLCX	430	02/08/1973	01	01	01	25	7.4	4	3	2	112	0	0	264	4	32	0.4	<.4	287	540	15
37 05 903	124MLCX	774	06/00/1952 U	20	97				16	53	10		0	0		10	124			904		173
37 05 904	124MLCX	757	04/30/1986	01	01	03	26	8.8	12	1	<1	324	1	32	666	7	78	1.1	0.0	785	1430	6
37 05 905	124MLCX	737	03/13/1986	08	06		8.8			2	1	316		46	628	6	75	1.0	<.0	751	1100	10
	124MLCX	737	06/28/1989	01	01	10	25	8.6	12	1	0	330	2	26	620	4	72	1.1	<.0	753	1500	2
	124MLCX	737	11/18/1993	01	01	10	25	8.7	13	<1	<1	322	2	29	666	5	75	1.1	<.0	776	1353	4
37 06 101	124MLCX	263	04/30/1986	01	01	03	22	7.9	41	101	29	46	3	0	362	91	69	0.2	<.0	558	1050	371
37 06 401	124MLCX	170	08/30/1972	01	01	02	23	8.4	12	5	1	164		1	415	15	11	0.2	2.5	415	705	16
	124MLCX	170	07/29/1977	01	01	02	22	8.4	16	3	<1	171		4	406	16	10	0.1	1.5	422	705	11
	124MLCX	170	11/18/1981	01	01	03	21	8.6	12	4	2	166	2	6	406	17	16	0.1	<.0	422	755	10
	124MLCX	170	04/30/1986	01	01	02	23	8.6	<1	3	1	165	1	7	395	21	12	<.1	1.0	406	745	11
37 06 501	124MLCX	348	10/16/1970		06		8.0			41	12	76		10	279	14	39	0.8	6.0	335	525	151
	124MLCX	348	11/05/1970		06		7.6			45	12	75		0	314	12	39	0.4	7.0	344	600	161
	124MLCX	348	04/29/1986	01	01	03	22	8.0	23	52	12	76	2	0	325	28	43	0.2	<.0	387	725	179
	124MLCX	348	07/18/1989	01	01	10	23	7.2	22	54	12	72	3	0	322	18	44	<.1	0.2	383	740	184
37 06 701	124MLCX	240	06/24/1986	01	01	03	22	7.2	13	10	2	122	2	0	299	37	17	0.1	0.3	350	608	33
37 06 801	124MLCX	385	06/26/1986	01	01	02	23	8.6	11	<1	<1	200	1	12	447	36	14	0.4	<.0	496	864	6
37 07 202	124MLCX	150	08/30/1972	01	01	02	26	8.0	20	48	20	102		0	406	30	45	0.3	2.0	467	852	202
	124MLCX	150	11/18/1981	01	01	02	21	8.3	41	41	19	101	0	0	406	20	41	0.2	0.2	422	864	180
	124MLCX	150	04/24/1986	01	01	02	21	8.2	22	42	18	108	3	0	403	26	41	0.2	1.4	459	858	178

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GROUND WATER QUALITY SAMPLES  
COUNTY - Shelby

Well	Aquifer	Well Depth (feet)	Date of Collection	Agency Code	Lab Code	Relia- bility Code	Temp. Deg. C	pH	Silica (SiO2) MG/L	Calcium (Ca) MG/L	Magnesium (Mg) MG/L	Sodium (Na) MG/L	Potassium (K) MG/L	Carbonate (CO3) MG/L	Bicarb. (HCO3) MG/L	Sulfate (SO4) MG/L	Chloride (Cl) MG/L	Fluoride (F) MG/L	Nitrate (NO3) MG/L	Dissolved Solids MG/L	Spec. Cond. (micromhos) as CaCO3	Hardness MG/L
37 07 401	124MLCX	519	06/26/1941	02	01	03	8.0	26	5	5	378	0	48	622	10	181	2.8	0.4	962	1688	33	
	124MLCX	519	04/04/1942	03	02				2	3	395	0	0	744	2	177	1.0	<.0	946		18	
	124MLCX	519	08/30/1972	01	01	03	24	7.5	12	2	382	0	0	732	-4	174	1.4	<.4	936	1688	9	
	124MLCX	519	07/29/1977	01	01	03	23	8.4	12	1	395	4	700	-4	207	1.4	<.4	969	1742	6		
	124MLCX	519	06/08/1982	01	01	03	19	8.7	11	1	403	16	685	4	191	1.5	<.0	964	1771	6		
	124MLCX	519	04/24/1986	01	01	03	25	8.2	11	1	390	0	733	7	182	1.4	0.0	955	1771	6		
37 07 402	124MLCX	525	05/06/1964		08		8.5	7	2	0	404	22	718	3	182				972	1645	5	
	124MLCX	525	10/30/1970 U		06		8.0		41	<.0	76	10	279	14	37				323	525	102	
	124MLCX	525	04/24/1986	01	01	03	24	8.6	11	<.1	394	1	17	713	7	177	1.4	<.0	960	1771	6	
	124MLCX	525	06/28/1989	01	01	10	24	8.8	11	1	411	3	25	709	5	172	1.5	<.0	978	1720	3	
37 07 403	124MLCX	504	11/21/1991 U	09	98		8.6	12	0	0	286	66	514	<.0	3				633	1550	1	
	124MLCX	504	11/18/1993	01	01	10	24	8.7	12	1	395	26	693	6	174	1.4	<.0	961	1561		4	
37 07 601	124MLCX	404	02/29/1968	08	06		8.9		2	2	428	62	649	0	216	1.0	0.2	1031	1500		10	
	124MLCX	404	04/24/1986	01	01	03	23	8.6	11	<.1	436	23	724	4	218	1.0	<.0	1052	1998		6	
37 07 701	124MLCX	2700	04/29/1986	01	01	03	22	8.9	11	1	304	48	626	16	40	0.5	<.0	730	1312		6	
37 08 201	124MLCX	266	04/24/1986	01	01	03	24	8.0	10	2	566	0	799	5	407	2.4	<.0	1388	2709		9	
37 08 301	124MLCX	208	11/03/1955	03	02	03	19	7.9	16	0	288	0	440	4	208	1.0	<.0	744	1300		23	
37 08 302	124MLCX	196	11/03/1955	03	02	03	21	8.0	12	3	546	0	775	2	410	3.6	<.0	1362	2400		12	
37 08 501	124MLCX	100	07/01/1986	01	01	02	21	5.0	61	3	14	0	29	4	10	0.1	<.0	108	93		11	
37 08 601	124MLCX	330	05/11/1961	03	02	03	8.0	12	3	3	802	0	894	1	720	2.8	0.8	1982	3450		12	
	124MLCX	330	08/31/1972	01	01	02	8.2	11	3	3	770	0	866	-4	720	3.2	<.4	1940	3770		19	
37 08 604	124MLCX	39	09/01/1972	01	01	02	7.2	39	22	2	12	0	93	-4	6	0.3	<.4	131	172		63	
	124MLCX	39	07/28/1977	01	01	02	7.6	41	30	2	12	0	116	3	6	0.2	<.4	151	209		83	
	124MLCX	39	11/18/1981	01	01	02	21	7.5	45	13	12	0	68	2	5	0.2	<.0	111	131		36	
37 08 701	124MLCX	139	08/31/1972	01	01	03	24	8.3	11	3	204	0	548	-4	11	0.3	2.5	506	870		11	
	124MLCX	139	07/28/1977	01	01	02	8.2	12	1	<.1	204	0	538	-4	11	0.3	<.4	498	846		6	
	124MLCX	139	11/18/1981	01	01	01	20	8.7	11	<.1	209	11	527	4	10	0.3	0.1	506	888		6	
	124MLCX	139	04/23/1986	01	01	03	21	8.7	11	<.1	208	18	506	5	10	0.3	<.0	504	888		6	
37 08 801	124MLCX	39	08/29/1972	01	01	03	21	7.5	35	26	1	7	0	81	4	11	0.1	<.4	124	167	68	

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GROUND WATER QUALITY SAMPLES  
COUNTY - Shelby

Well	Aquifer	Well Depth (feet)	Date of Collection	Agency Code	Lab Code	Relia- bility Code	Temp. Deg. C	pH	Silica (SiO2) MG/L	Calcium (Ca) MG/L	Magnesium (Mg) MG/L	Sodium (Na) MG/L	Potassium (K) MG/L	Carbonate (CO3) MG/L	Bicarb. (HCO3) MG/L	Sulfate (SO4) MG/L	Chloride (Cl) MG/L	Fluoride (F) MG/L	Nitrate (NO3) MG/L	Dissolved Solids MG/L	Spec. Cond. (microhm/cm) as CaCO3	Hardness MG/L
37 08 802	124M/CX	400	04/24/1996	01	01	03	22	8.2	10	1	<1	588	2	0	915	5	368	3.0	0.0	1428	2793	6
37 13 302	124M/CX	290	06/26/1996	01	01	03	28	7.4	18	123	31	82	6	0	314	281	57	0.1	1.8	754	1377	434
37 13 602	124M/CX	51	08/30/1972	01	01	03	7.2		36	159	305	190		0	287	1570	134	1.3	<4	2536	4816	1651
37 13 603	124M/CX	118	08/30/1972	01	01	03	7.2		16	9	4	129		0	299	49	18	0.1	<4	372	640	38
	124M/CX	118	07/29/1977	01	01	02	8.1		19	14	3	143		0	328	62	23	0.1	3.3	428	730	47
	124M/CX	118	11/19/1981	01	01	03	8.3		<1	14	4	149	4	0	359	65	22	<1	0.0	435	795	51
	124M/CX	118	05/01/1996	01	01	03	8.0		17	13	4	161	3	0	375	60	21	<1	0.0	463	816	48
37 13 604	124M/CX	487	04/29/1996	01	01	01	27	8.7	12	<1	<1	229	1	18	543	9	10	0.4	0.0	548	968	6
	124M/CX	487	07/18/1989	U	01	18	27	8.7	12	1	<0	234	1	17	239	11	11	0.4	0.3	404	990	1
37 14 101	124M/CX	48	12/16/1975	01	01	01	7.0		45	224	166	272		0	22	1370	245	0.6	<4	2333	4264	1241
37 14 201	124M/CX	55	08/29/1972	01	01	02	7.3		41	32	4	11		0	110	15	9	0.1	<4	166	240	96
	124M/CX	55	07/29/1977	01	01	02	7.3		48	26	3	10		0	84	17	9	0.1	<4	154	287	77
	124M/CX	55	06/08/1982	U	01	01	7.0		53	6	<1	10		0	26	10	20	<1	0.3	112	91	17
	124M/CX	55	05/01/1986	01	01	02	6.0		51	6	<1	9	1	0	23	11	7	<1	0.6	90	90	19
37 14 202	124M/CX	145	06/30/1986	01	01	03	22	8.3	13	6	1	142	2	0	286	65	24	0.1	0.1	393	690	19
37 14 203	124M/CX	150	06/30/1986	01	01	03	23	7.5	13	14	7	154	2	0	290	103	42	0.1	0.1	478	858	63
37 14 501	124M/CX	58	08/29/1972	01	01	02	7.3		55	43	11	36		0	105	6	92	0.3	5.5	300	510	152
	124M/CX	58	07/29/1977	01	01	03	7.0		62	27	10	36		0	68	11	66	0.2	41.3	281	420	108
	124M/CX	58	06/08/1982	01	01	03	7.3		65	17	7	33		0	61	11	45	0.3	26.9	235	330	71
	124M/CX	58	05/01/1986	01	01	03	6.3		64	14	7	33	1	0	68	14	32	0.3	27.4	226	310	63
37 14 502	124M/CX	610	03/30/1970	08	06		8.0		1	1	1	205		24	410	40	22	0.2	3.0	496	800	4
	124M/CX	610	05/01/1986	01	01	03	8.7		13	<1	<1	210	1	17	449	40	20	0.3	0.0	523	930	6
	124M/CX	610	07/18/1989	U	01	10	8.7		12	1	0	226	2	14	424	41	20	0.3	0.1	524	960	2
37 14 701	124M/CX	74	08/30/1972	01	01	03	7.7		46	64	26	150		0	489	55	92	0.7	<4	684	1216	266
	124M/CX	74	07/29/1977	01	01	02	7.9		41	54	19	178		0	466	27	127	0.8	0.9	676	1215	212
	124M/CX	74	06/08/1982	01	01	02	8.3		39	60	23	156	1	0	472	40	102	0.9	3.4	657	1192	244
	124M/CX	74	05/01/1986	01	01	02	8.0		38	60	26	119	1	0	415	24	104	0.7	3.0	579	1104	256
37 14 703	124M/CX	255	06/26/1986	01	01	03	7.8		14	2	<1	146	2	0	267	77	22	0.1	0.1	395	685	9
37 14 803	124M/CX	235	06/28/1986	01	01	02	7.4		51	6	5	14	2	0	57	10	9	0.1	<0	125	145	35

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GROUND WATER QUALITY SAMPLES  
COUNTY - Shelby

Well	Agency	Well Depth (feet)	Date of Collection	Agency Code	Lab Code	Relia-bility Code	Temp. Deg. C	pH	Silica (SiO2) MG/L	Calcium (Ca) MG/L	Magnesium (Mg) MG/L	Sodium (Na) MG/L	Potassium (K) MG/L	Carbonate (CO3) MG/L	Bicarb. (HCO3) MG/L	Sulfate (SO4) MG/L	Chloride (Cl) MG/L	Fluoride (F) MG/L	Nitrate (NO3) MG/L	Dissolved Solids MG/L	Spec. Cond. (micromhos) MG/L	Hardness as CaCO3 MG/L
37 14 901	124MLCX	174	06/27/1986	01	01	03	23	7.2	14	12	3	101	2	0	243	36	23	0.1	0.5	311	540	42
37 15 101	124MLCX	474	04/05/1960	01	02	03	06	0.6	12	5	2	282	2	0	658	51	34	0.5	<.0	711	1150	18
37 15 102	124MLCX	376	01/08/1966	00	05	03	22	0.8	2	1	1	322	1	36	693	35	28	0.7	<.0	763	1302	7
	124MLCX	376	04/29/1966	01	01	03	22	0.7	11	<1	<1	317	1	26	709	39	28	0.7	<.0	773	1368	6
	124MLCX	376	07/19/1989	01	01	10	24	0.6	11	1	0	328	2	20	720	34	29	0.7	0.1	780	1380	2
37 15 104	124MLCX	206	04/29/1986	01	01	02	22	0.4	14	7	2	236	2	7	492	80	37	0.2	0.1	627	1120	25
37 15 105	124MLCX	230	04/29/1986	01	01	03	22	7.9	16	105	81	317	5	0	622	472	200	0.2	2.0	1504	2830	595
37 15 106	124MLCX	360	11/18/1993	01	01	10	22	0.8	12	1	0	307	2	31	686	19	25	0.7	<.0	736	1255	4
37 15 301	124MLCX	402	06/09/1967	00	06	03	23	0.9	2	1	1	346	1	79	679	4	50	0.7	0.2	817	1400	6
	124MLCX	402	04/26/1986	01	01	03	23	0.8	11	<1	<1	355	1	36	775	5	51	1.2	<.0	843	1520	6
	124MLCX	402	07/21/1989	01	01	10	22	0.8	11	1	0	362	2	30	755	9	51	1.2	0.2	847	1400	3
37 15 401	124MLCX	48	08/29/1972	01	01	02	22	6.3	74	10	4	57		0	23	41	47	0.2	42.0	286	396	41
37 15 402	124MLCX	540	05/01/1986	01	01	03	24	0.8	12	<1	<1	240	1	23	522	45	17	0.3	<.0	596	1050	6
	124MLCX	540	07/19/1989	01	01	10	25	0.5	12	1	0	256	2	17	523	45	19	0.3	0.2	608	1020	2
37 15 403	124MLCX	186	06/30/1986	01	01	03	23	7.7	13	21	5	133	2	0	282	60	52	0.2	0.0	424	760	72
37 15 501	124MLCX	35	08/29/1972	01	01	02	23	6.2	78	7	2	18		0	15	21	16	0.2	4.0	153	147	25
	124MLCX	35	07/28/1977	01	01	02	19	6.7	87	8	1	17		0	22	16	13	<.1	9.2	162	138	24
	124MLCX	35	06/08/1982	01	01	02	19	7.4	27	2	<1	39		0	70	20	11	0.1	0.8	135	194	9
37 15 502	124MLCX	700	11/01/1965	00	05	03	23	0.8	18	2	1	343		29	771	0	29	0.2	0.0	800	1327	8
	124MLCX	700	05/01/1986	01	01	03	23	0.8	12	<1	<1	334	1	31	769	6	29	1.0	0.0	794	1410	6
	124MLCX	700	07/19/1989	01	01	10	26	0.7	12	1	0	345	2	42	761	9	29	1.0	0.2	815	1190	2
37 15 503	124MLCX	340	04/30/1986	01	01	02	22	0.6	11	<1	<1	146	1	0	348	9	9	0.2	2.2	359	620	6
37 15 504	124MLCX	136	06/30/1986	01	01	03	22	7.2	19	41	16	141	4	0	209	170	102	0.1	0.4	596	1085	188
37 15 601	124MLCX	472	04/26/1986	01	01	03	23	0.9	11	<1	<1	332	1	41	732	8	43	1.1	<.0	798	1430	6
37 16 201	124MLCX	59	08/31/1972	01	99	03	24	7.8	62	29	2	13		0	110	10	8	0.2	<.4	178	222	80
	124MLCX	59	07/28/1977	01	01	03	21	7.6	68	19	1	14		0	54	17	12	<.1	1.6	159	169	51
	124MLCX	59	11/18/1981	01	01	03	21	7.4	72	16	1	13		0	48	18	13	0.2	0.8	158	162	44
	124MLCX	59	04/23/1986	01	01	03	19	6.2	76	10	1	14		0	34	8	16	0.1	1.3	144	131	29

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U after date of collection signifies unbalanced or partial chemical analysis

GROUND WATER QUALITY SAMPLES  
COUNTY - Shelby

Well	Aquifer	Well Depth (feet)	Date of Collection	Agency Code	Lab Code	Relia- bility Code	Temp. Deg- C	pH	Silica (SiO2) MG/L	Calcium (Ca) MG/L	Magnesium (Mg) MG/L	Sodium (Na) MG/L	Potassium (K) MG/L	Carbonate (CO3) MG/L	Bicarb. (HCO3) MG/L	Sulfate (SO4) MG/L	Chloride (Cl) MG/L	Fluoride (F) MG/L	Nitrate (NO3) MG/L	Dissolved Solids MG/L	Spec. Cond. (microhos) as CaCO3	Hardness MG/L
37 16 302	124M/CX	25	09/03/1972	01	01	02	7.0	55	23	7	46	408	1	32	920	22	65	0.3	<.4	977	411	86
	124M/CX	25	07/28/1977	01	01	02	7.4	60	22	7	47	434	2	0	77	22	71	0.1	<.4	1017	267	417
	124M/CX	25	11/18/1981	01	01	02	7.5	60	12	2	27	20	1	0	51	10	30	0.2	3.2	177	169	219
	124M/CX	25	04/28/1986	01	01	03	6.7	64	8	2	32	35	1	0	55	11	30	0.3	2.5		177	228
37 16 501	124M/CX	400	04/26/1986	01	01	03	8.6	11	<1	<1	408	950	2	32	920	7	61	2.2	<.0	977	1749	6
	124M/CX	400	07/21/1989	01	01	18	8.7	11	1	0	434	950	2	30	950	8	62	2.2	0.1	1017	1550	2
37 16 701	124M/CX	42	09/02/1972	01	01	03	6.6	39	29	11	38	36	1	0	35	9	67	0.2	80.0	290	471	117
	124M/CX	42	07/28/1977	01	01	02	6.6	42	21	7	36	21	2	0	21	13	53	<.1	67.7	250	375	81
	124M/CX	42	11/18/1981	01	01	02	6.9	48	28	14	49	20	2	0	20	12	76	<.1	130.2	366	584	127
	124M/CX	42	04/28/1986	01	01	02	6.1	41	17	12	34	35	1	0	35	16	47	<.1	71.3	256	390	91
37 16 801	124M/CX	703	10/22/1963	01	06	03	8.8	10	1	1	372	751	1	62	751	0	17	0.9	<.0	831	1359	5
	124M/CX	703	04/26/1986	01	01	03	8.9	12	<1	<1	324	762	1	41	762	7	7	0.9	<.0	769	800	6
	124M/CX	703	07/21/1989	01	01	18	8.8	11	1	0	345	785	2	30	785	8	8	0.9	0.1	800	1210	3
	124M/CX	703	11/17/1993	01	01	18	8.9	12	<1	<1	328	754	2	46	754	7	7	0.9	<.0	775	1246	4
37 21 301	124M/CX	344	06/25/1986	01	01	03	8.5	11	1	<1	272	578	1	8	578	70	22	0.4	1.0	672	1168	6
37 21 302	124M/CX	600	06/25/1986	01	01	03	8.6	12	1	<1	252	554	1	13	554	58	17	0.3	<.0	627	1085	6
37 21 303	124M/CX	380	06/25/1986	01	01	03	7.4	15	34	19	63	253	4	0	253	63	29	0.1	<.0	351	640	163
37 21 903	124M/CX	286	06/27/1986	01	01	03	8.4	12	3	2	216	560	1	6	560	5	7	0.3	8.8	528	900	15
37 22 301	124M/CX	1455	12/23/1966	01	06	06	9.0	13	2	0	374	796	1	65	796	7	39	0.5	0.1	876	1300	4
	124M/CX	1455	06/28/1986	01	01	03	8.7	13	<1	<1	371	864	1	29	864	8	35	1.2	<.0	884	1550	6
	124M/CX	1455	07/18/1989	01	01	18	8.5	13	1	0	365	900	2	14	900	10	35	1.1	0.1	884	1575	3
37 22 501	124M/CX	155	06/28/1986	01	01	03	5.8	13	2	<1	3	2	1	0	2	1	5	<.1	6.6	33	37	9
37 23 301	124M/CX	1072	09/22/1944 U	12	04	04	8.5	533	2	0	533	617	11	38	617	11	15	0.7		904	1643	7
	124M/CX	1072	09/22/1944	12	04	04	8.6	374	1	0	374	603	94	54	603	94	48			907	1335	4
	124M/CX	1072	09/24/1944	08	04	04	8.4	843	6	1	843	805	<1	17	805	<1	825			2088		19
37 23 401	124M/CX	509	05/29/1979	01	06	06	8.8	106	1	0	106	207	14	14	207	30	7	0.2	0.0	260	420	3
	124M/CX	509	04/30/1986	01	01	03	8.7	13	<1	<1	107	238	1	7	238	24	3	0.2	<.0	274	459	6
	124M/CX	509	11/17/1993	01	01	10	8.8	13	0	<0	126	267	2	7	267	17	3	0.2	<.0	299	466	1
37 23 501	124M/CX	1400	11/17/1993	01	01	10	8.7	14	1	0	465	824	3	30	824	6	140	2.0	<.0	1065	1680	2

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GROUND WATER QUALITY SAMPLES  
COUNTY - Shelby

Well	Aquifer	Well Depth (feet)	Date of Collection	Agency Code	Lab Code	Relta-bility Code	Temp. Deg. C	pH	Silica (SiO2) MG/L	Calcium (Ca) MG/L	Magnesium (Mg) MG/L	Sodium (Na) MG/L	Potassium (K) MG/L	Carbonate (CO3) MG/L	Bicarb. (HCO3) MG/L	Sulfate (SO4) MG/L	Chloride (Cl) MG/L	Fluoride (F) MG/L	Nitrate (NO3) MG/L	Dissolved Solids MG/L	Spec. Cond. (micromhos) as CaCO3	Hardness MG/L
37 23 601	124M/CX	52	09/01/1972	01	01	02	7.0	13	18	3	<1	3		0	57	6	5	0.1	2.0	78	122	57
37 23 601	124M/CX	52	07/26/1977	01	01	02	6.9	11	9			3		0	23	3	6	0.1	1.0	45	67	26
37 23 602	124M/CX	487	07/31/1979		06		8.4		2			272		28	622	16	17	0.1	0.0	641	1000	7
	124M/CX	487	06/26/1980 U		06		8.7		2			185		24	646	28	18	0.7	0.0	576	1000	4
	124M/CX	487	04/30/1986	01	01	03	8.8	12	<1			273	1	26	624	33	13	0.4	<0	667	1184	6
	124M/CX	487	07/20/1989	01	01	10	8.7	12	1			288	2	24	700	18	13	0.4	0.2	703	1050	3
37 23 603	124M/CX	170	06/30/1986	01	01	03	7.7	24	23	8		185	7	0	290	94	31	0.2	0.2	455	790	90
37 23 801	124M/CX	273	06/28/1986	01	01	03	8.3	13	2	<1		185	2	0	445	31	7	0.3	<0	460	775	9
37 24 601	124M/CX	60	09/01/1972	01	01	03	7.2	46	66	26		43		0	270	115	21	0.6	<4	450	760	271
	124M/CX	60	07/28/1977	01	01	03	7.4	49	40	21		46		0	201	100	21	0.7	<4	393	630	206
	124M/CX	60	11/18/1981	01	01	03	7.4	54	3	1		13		0	40	4	2	0.3	<0	97	82	11
37 24 602	124M/CX	483	04/14/1966	08	04		7.8	12	32	7		58		0	256	0	16		<0	250	434	107
	124M/CX	483	04/28/1986	01	01	03	7.9	27	29	6		54	3	0	244	1	13	<1	<0	253	432	97
37 24 603	124M/CX	480	04/26/1986	01	01	03	7.9	23	23	4		59	3	0	238	1	11	<1	<0	241	417	73
	124M/CX	480	07/21/1989	01	01	10	7.4	22	24	5		62	4	0	234	1	11	<1	0.2	243	408	79
	124M/CX	480	11/17/1993	01	01	10	7.7	22	24	5		64	4	0	243	2	11	0.1	<0	251	373	80
37 32 301	124M/CX	50	09/02/1972	01	01	02	7.3	50	39	8		44		0	144	38	34	0.6	19.0	303	483	130
	124M/CX	50	07/28/1977	01	01	02	7.5	55	38	6		40		0	126	32	32	0.4	30.1	295	441	119
	124M/CX	50	06/08/1982	01	01	02	7.1	43	21	9		34	3	0	62	29	33	0.3	44.0	246	375	89
37 32 302	124M/CX	150	07/02/1986	01	01	03	8.2	12	1	<1		206	2	0	448	71	11	0.1	3.8	527	900	6

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U after date of collection signifies unbalanced or partial chemical analysis

Apr 18, 1995

TEXAS WATER DEVELOPMENT BOARD  
GROUND WATER DATA SYSTEM

RECORDS OF WELLS, SPRINGS, AND TEST HOLES  
COUNTY - Shelby

WELL	OWNER	LATITUDE	LONGITUDE	DATE CON- PLETED	DEPTH OF WELL (FT.)	CASING AND SCREEN DATA				ALTTUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT AND POWER	USE OF WATER	REMARKS	
						CASING DIA- OR ETER	TOP DEPTH (FT.)	BOT DEPTH (FT.)	BEARING UNIT		MEASURE- MENT FROM LSD (FT.)	DATE				
36-01-401	..Lovicks	315520	935819	1969	242	C	4			124M.CX	177			S E	C	
36-01-402	Martina Beckham	315520	935822	1970	27	C	24			124M.CX	191	-18.30	06-02-1971	C E	C	
36-01-403	Martina Beckham	315515	935810	1970	47	C	24			124M.CX	193	-22.33	06-02-1971	U		0.5
36-01-404	W. J. Frish	315510	935947	1981	216	C	2	1	206	124M.CX	230			J E	H	Yield 20 gpm with 10 ft. drawdown after 1 hr.
36-01-405	The Lovicks Water Association	315525	935809	1982	200	C	4			124M.CX	178			S	P	
36-01-701		315346	935804							NOT-APPL	175					011 test.
36-01-801	Roger Williams	315250	935638	1979	100	C	4	0	90	124M.CX	180	-6.00	03-16-1979	S E	P	Gravel packed from 90 ft. to 100 ft.
36-09-601	A. D. Raymond	314757	935454	1980	280	C	4	1	270	124M.CX	280	-90.00	08-28-1980	S E	H S	Yield 200 gpm. with 20 ft. drawdown after an hour. Gravel packed from 250 ft. to 280 ft.
36-09-701	U. S. Forest Service	314615	935845	1957	353	C	4			124M.CX	305			J E	P	
36-09-801		314601	935645							NOT-APPL	250					011 test.
36-09-901	Savanna Baptist Church	314540	935235	1971	50					124M.CX	290			H	Z	This well caved and was abandoned.
36-10-701	Billy J. O'Rear	314614	935140	1971	206	C	4			124M.CX	180	-2.66	09-02-1972	N	U	Current water level obs. well. -4.67 11-09-1994

RECORDS OF WELLS, SPRINGS, AND TEST HOLES  
COUNTY - Shelby

WELL	OWNER	LATITUDE	LONGITUDE	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING AND SCREEN DATA			WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL MEASURE		METHOD OF LIFT AND POWER	USE OF WATER	REMARKS	
						CASING DIA.	TOP OF SCREEN (IN.) (FT.)	BOT DEPTH (FT.)			DATE	HEIGHT FROM L.S.D. (FT.)				
36-17-201	J. E. Dean	314433	935540	1980	162				124MLCX	270	-85.00	05-14-1980	U	H S		
36-17-501	U. S. Forest Service	314206	935601	1954	200	S	4		124MLCX	340	-73.85	07-02-1986	S E	H		
36-17-502	R. A. Owens	314046	935730	1970	31	C	30	1	124MLCX	260	-9.32	09-01-1972	H	U	Current water level obs. well.	
											-4.28	11-09-1994				
36-17-601	John McCullen	314037	935418	1980	127	C	4	1	124MLCX	273	-76.00	08-02-1980	S E	H S	Yield 10 gpm.	
						C	4	117			-78.26	07-02-1986				
36-17-801		313739	935656						NOT APPL	276					Oil test.	
36-17-802	Billy Isbell	313918	935553	1969	50				124MLCX	340	-43.36	09-01-1972	J E	H		
											-33.85	11-09-1994				
36-17-803	West Hamilton Baptist Church	313826	935657	1976	143	C	2	1	143	124MLCX	312	-31.00	07-05-1976	J E	D	Unused ps. well.
						C	2	133								
36-17-901		313758	935345						NOT APPL	250					Oil test.	
36-18-101		314425	935229						NOT APPL	220					Oil test.	
36-18-102	Stillwater Cabins & Marina	314459	935017	1968	400	C	2		124MLCX	180					Flowing well.	
36-25-101	Browns Chapel Church	313520	935913	1979	232	C	2	1	222	124MLCX	302				Yield 10 gpm. with 10 ft. drawdown after 2 hrs. Gravel packed from 200 ft. to 232ft.	
						C	2	222								
36-25-102	Bell Chapel Church	313513	935955	1980	163	C	2		124MLCX	318						
36-26-101	Travis Risinger	313612	935056	1972	229	C	4		124MLCX	238	-92.00	04-20-1972	S E	H	Current water level obs. well.	
											-67.28	11-09-1994				

RECORDS OF WELLS, SPRINGS, AND TEST HOLES  
COUNTY - Shelby

WELL	OWNER	LATITUDE	LONGITUDE	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING AND SCREEN DATA		WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT AND POWER	USE OF WATER	REMARKS	
						DIAMETER (IN.)	DEPTH (FT.)			MEASURE-MENT FROM LSD (FT.)	DATE				
37-04-602	W. D. Fountain	315530	943002	1978	100	C	4 4	0 80 100	124M/CX	365	-50.00	03-30-1978	J E	H	Yield 10 gpm.
37-05-101	George Temple	315735	942935	1986	55	C	4 4	0 35 55	124M/CX	450	-26.93	06-24-1986	J E	H	Sandpacked with screen.
37-05-301	H. A. Tipton	315825	942329	1982	350	C	4 4	0 320 350	124M/CX	440	-210.00	02-02-1982	S E	H	Yield 12 gpm. Gravel packed 310 ft. to 350 ft.
37-05-701	I. L. Throckmorton	315454	942810	1969	59	C	30 1	59	124M/CX	380	-41.23	08-29-1972	J E	H	Current Water Level obs. well. -22.90 11-10-1994
37-05-702	I. L. Throckmorton	315457	942801	1982	100	C	4 4	0 80 100	124M/CX	392	-40.00	03-05-1982	N	H	Unused domestic well. Yield 10 gpm. Gravel packed 70 to 100 feet.
37-05-703	I. L. Throckmorton	315457	942800	1984	260	C	4 4	0 240 260	124M/CX	392	-70.00	08-02-1984	S E	H	Current water level obs. well. -67.14 11-10-1994
37-05-801		315241	942509						NOT APPL	374					Oil test.
37-05-802	Timpson Rural WSC	315330	942512	1966	805	C	9 4	0 712 784	124M/CX	397	-139.00	06-17-1966	S E	P	
37-05-803	Timpson Rural WSC	315345	942514	1981	773	S	5 9	0 650 700	124M/CX	390	-120.00	05-30-1981	S E	P	Yield 160 gpm. with 100 ft. drawdown after 24 hrs. Gravel packed 650 ft. to 700 ft.
37-05-901	City of Timpson #1	315425	942410		677				124M/CX	408			S E	P	
37-05-902	City of Timpson #2	315420	942412	1940	430	C	13 5	0 351 420	124M/CX	408	-143.75	09-04-1972	N	P	Abandoned public supply well in 1972.
37-05-903	City of Timpson	315447	942337	1952	774	C	7 7	351 430	124M/CX	390	-170.38	11-09-1981	S E	U	Geophysical log Q18. -131.37 09-04-1972 -144.10 01-10-1989
37-05-904	City of Timpson	315422	942353	1972	757	C	10 5	0 620 718	124M/CX	405	-155.00	04-10-1972	T E	P	

RECORDS OF WELLS, SPRINGS, AND TEST HOLES  
COUNTY - Shelby

WELL	OWNER	LATITUDE	LONGITUDE	DATE COM. OF WELL (FT.)	DEPTH OF WELL (FT.)	CASING DIA. OR ETER SCREEN (IN.) (FT.)	TOP BOT DEPTH (FT.)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	MEASURE. HEFT FROM LSD (FT.)	DATE	METHOD OF LIFT AND POWER	USE OF WATER	REMARKS
37-05-904 (Continued)														
37-05-905 City of Timpson		315422	942353	1986	737	C	10 0	624	124MLCX	405	-192.82	04-30-1986	T E P	Current water level obs. well. Gravel packed 624 to 725 feet. Yield 250gpm. with 50ft. drawdown after 36hrs.
37-06-101 Jim McNulty		315830	942110	1984	263	C	4 0	100	124MLCX	370	-73.17	03-21-1984	S E H	Current observation
37-06-401 Joe Dan Hairgrove		315504	942052	1969	170	C	4 1	170	124MLCX	315	-46.05	08-29-1972 11-10-1994	S E H	Current water level obs. well.
37-06-501 Tennessee USC		315702	941902	1970	348	C	9 0	303	124MLCX	321			S E P	Current water level obs. well. Geophysical log Q-113.
37-06-701 Ross Lumber		315255	942025	1994	240	C	4 4		124MLCX	349	-90.00	08-24-1994	S E N	
37-06-801 New Prospect Church		315232	941810	1982	385	C	2 0	385	124MLCX	359			J E T	Yield 20 gpm. with 0 ft. drawdown after 1 hour. Gravel packed from 365 ft. to 385 ft.
37-07-202 C. W. Watson		315813	941140	1969	150	C	4 1	150	124MLCX	230	-52.12	08-30-1972	S E H	Current water level obs. well.
37-07-401 City of Tenaha		315636	941439	1941	519	C	10 5	406 450	428 514	124MLCX	345		T E P	
37-07-402 City of Tenaha		315604	941419	1964	525	C	14 3	400	124MLCX	342			T E P	
						C	9 9	300	410					40
						S	9 9	410	445					
						C	9 9	445	450					
						S	9 9	450	505					
						C	9 9	505	523					
						C	9 9	523	525					

RECORDS OF WELLS, SPRINGS, AND TEST HOLES  
COUNTY - Shelby

WELL	OWNER	LATITUDE	LONGITUDE	DATE CON- PLETED	DEPTH OF WELL (FT.)	CASING AND SCREEN DATA				WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT AND POWER	USE OF WATER	REMARKS
						CASING DIA- METER SCREEN (IN.)	TOP DEPTH (FT.)	BOT DEPTH (FT.)	WATER BEARING UNIT			MEASURE- MENT FROM LSD (FT.)	DATE			
37-07-603	City of Tenaha	315625	941435	1992	504	C	11	0	405	124M/CX	340	-147.00	01-05-1992	S E	P	Owner's well # 3. Cemented from 0 to 405 feet.
37-07-601	Parton HSC	315726	940943	1968	404	C	9	0	355	124M/CX	337	-172.00	02-26-1968	S E	P	Geophysical log Q-102. Cemented to 355 ft. Yield 51gpm. with 106ft. drawdown after 24hrs.
						C	4	318	355							
						S	4	355	395							
						C	4	395	404							
37-07-701	Dude Parker	315317	941254	1907	2700					124M/CX	242			H	U	Yield 1 gpm.
37-08-201	City of Joaquin	315832	940318	1964	266	C	10	0	134	124M/CX	222			S E	P	
						C	7	-3	136							
						S	7	136	211							
						C	7	211	222							
37-08-301	City of Logansport, La. well #1	315835	940040	1936	208	C	12			124M/CX	192	-14.19	09-04-1972	N	U	Current water level obs. well.
37-08-302	City of Logansport, La. well #2	315800	940042	1941	196	C	12			124M/CX	185	-18.92	09-04-1972	T E	P	Current water level obs. well.
37-08-303	Town of Logan port	315945	940115		217					124M/CX					U	
37-08-501	Jackson Church	315615	940332	1982	100	C	4			124M/CX	285	-30.00	07-22-1982	S	H	Current water level obs. well.
37-08-601	Texas Eastern Gas Transmission Corp.	315705	940115	1954	330	C	9			124M/CX	250	-81.30	09-03-1972	Z E	H	Type of 1 1/2" used was denning sucker rod.
						C	5									
37-08-602	Jack Dam	315710	940135	1950	13	C	36			124M/CX	204			C E	U	
37-08-603	Jack Dam	315705	940115	1968	22					124M/CX	204	-16.25	06-02-1971	C E	H	
37-08-604	Henry Strman	315558	940005	1968	39	C	30	3	39	124M/CX	220	-14.40	09-01-1972	N	U	Current water level obs. well.
												0.22	11-09-1994			



RECORDS OF WELLS, SPRINGS, AND TEST HOLES  
 COUNTY - Shelby

WELL	OWNER	LATITUDE	LONGITUDE	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING DIA. OR SCREEN (IN.)	TOP DEPTH (FT.)	BOT DEPTH (FT.)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT AND POWER	USE OF WATER	REMARKS
											MEASURE	DATE			
37-08-605	Fellowship Baptist Church	315610	940131	1969	124	C	4		124MLCX	260			S E	U	
37-08-701	Rex McDaniel	315322	940509	1971	139	C	4		124MLCX	220	-8.02	08-31-1972	J E	H	
37-08-801	H. A. Pennington	315300	940419	1971	39	C	30	1	124MLCX	200	-18.65	09-30-1972	N	U	
37-08-802	Patton MSC	315330	940440	1975	400	C	8	0	124MLCX	255	-165.00	10-06-1975	S E	P	Yield 100 gpm. Cemented to 300 ft.
37-08-803	Patton MSC	315329	940440	1982		C	4		124MLCX	255			S E	P	Cemented to 10 ft.
37-13-301		315130	942350						NOT-APPL	429					Oil test.
37-13-302	Hugh P. Edwards	315145	942246	1964	290	C	4		124MLCX	394	-120.00	08-22-1964	S E	H	Cemented to 10ft.
37-13-601		314754	942330						NOT-APPL	388					Oil test.
37-13-602	Charles Hughes	315000	942340	1970	51	C	30	3	124MLCX	400	-33.09	08-30-1972	J E	H S	
37-13-603	John H. Childs	314812	942359	1968	118	C	4	1	124MLCX	340	-41.67	09-03-1972	J E	S	Current water level obs. well.
37-13-604	Timpson Rural MSC	314946	942347	1972	487	C	7	0	124MLCX	402	-118.00	10-28-1972	S E	P	Yield 100 gpm. with 260 ft. drawdown after 24 hrs. Cemented from 0 ft. to 447 ft.
37-13-901		314638	942450						NOT-APPL	279					Oil test.
37-14-101	O. R. Starkweather	315129	942135	1975	48	C	24	2	124MLCX	410			N E	H	

RECORDS OF WELLS, SPRINGS, AND TEST HOLES  
COUNTY - Shelby

WELL	OWNER	LATITUDE	LONGITUDE	DATE COM- PLETED	DEPTH OF WELL (FT.)	CASING AND SCREEN DATA				WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT AND POWER	USE OF WATER	REMARKS
						CASING DIA- METER (IN.)	TOP OF SCREEN (FT.)	DEPTH OF SCREEN (FT.)	BEARING UNIT			MEASURE- MENT FROM LSO (FT.)	DATE			
37-14-201	Drewie H. Bradshaw	315139	941958	1971	55	C	30	2	55	124MLCX	335	-20.17	08-29-1972	J E	H	
37-14-202	Earl Adams	315046	941815	1979	145	C	4			124MLCX	345			S	P	Cemented to 10 ft.
37-14-203	Earl Adams	315049	941818	1974	150	C	4	4		124MLCX	360			S E	P	
37-14-501	Vesper Hughes	314919	941950	1971	58	C	30	2	60	124MLCX	435	-42.58	09-01-1972	J E	H	Current water level obs. well.
37-14-502	Huber WSC	314938	941744	1970	610	C	6	0	460	124MLCX	410	-147.00	05-01-1986	S E	P	
37-14-701	Jackson Adams	314519	942208	1970	74	C	30	1	74	124MLCX	362	-49.40	08-30-1972	J E	H	Current water level obs. well.
37-14-702	Haskell Williams	314545	942027	1977	226	C	2	1	226	124MLCX	351	-64.00	09-12-1977	J E	U	Cemented from 1 ft. to 3 ft.
37-14-703	James Stigler	314718	942020	1983	255	C	4			124MLCX	388	-130.00	03-11-1983	S E	H	Cemented to 10 ft.
37-14-801		314545	941741							NOT-APPL	500					Oil test.
37-14-802	Tommy Wright	314524	941749	1974	288	C	2	1	288	124MLCX	555	-197.00	07-13-1974	N	U	Cemented from 1 ft. to 4 ft.
37-14-803	Tommy Wright	314530	941746	1985	235	C	4	1	225	124MLCX	480	-135.00	03-22-1985	S E	H	Yield 20 ft. with 10 ft. drawdown after one hour. Gravel packed from 200 ft. to 235 ft. Cemented from 1ft. to 10ft.
37-14-901	Keith Kennedy	314609	941641	1985	174	C	4			124MLCX	383	-90.00	05-31-1985	S E	P	Cemented to 10 ft.

RECORDS OF WELLS, SPRINGS, AND TEST HOLES  
 COUNTY - Shelby

WELL	OWNER	LATITUDE	LONGITUDE	DATE COM. OF WELL (FT.)	DEPTH OF WELL (FT.)	CASING AND SCREEN DATA				WATER MEASURE	WATER LEVEL	METHOD OF LIFT AND POWER	USE OF WATER	REMARKS		
						CASING DIA. (IN.)	TOP DEPTH (FT.)	BOTTOM DEPTH (FT.)	BEARING UNIT						ALTITUDE OF LAND SURFACE (FT.)	HEIGHT FROM LSD (FT.)
37-15-101	Center Country Club	315216	941244	1956	474	C	4	4	124MLCX	290		T E	P			
37-15-102	Flat Fork WSC	315202	941337	1965	376	C	7	2	270	124MLCX	347		S	P	Geophysical log Q-104. Cemented to 270 ft.	
						C	4	4	223	270						
						S	4	4	270	312						
						C	4	4	312	324						
						S	4	4	324	366						
						C	4	4	366	376						
37-15-103	Flat Fork WSC	315015	941302	1980	265	C	4	4	124MLCX	324	-102.00	07-25-1980	S	U	Cemented to 10 ft.	
											-53.52	10-12-1989				
37-15-104	Center Country Club	315215	941245	1982	206	C	4	1	196	124MLCX	290	-54.00	04-16-1982	S E	I	Yield 60 gpm with 30 feet drawdown after one hour. Gravel packed from 186ft. to 206ft.
						C	4	4	196	206						
37-15-105	Center Country Club	315213	941254	1985	230	C	4	1	215	124MLCX	295	-68.00	07-18-1985	S E	I	Yield 60 gpm. with 30 ft. drawdown after one hour. Gravel packed from 200 ft. to 230ft.
						C	4	4	215	230		-52.52	11-10-1994			
37-15-106	Flat Fork W.S.C.	315157	941340		360				124MLCX	329				S E	P	
37-15-301	Five May WSC	315116	940814	1967	402	C	10	2	320	124MLCX	302	-100.00	05-23-1967	S E	P	Geophysical log Q-106.
						C	6	6	282	320						
						C	6	6	375	395						
						S	6	6	320	375						
37-15-401	Gilbert Link	314948	941419	1968	48	C	30	2	48	124MLCX	382	-40.65	08-29-1972	N	U	Current water level obs. well.
												-35.99	11-10-1994			
37-15-402	East Lamar WSC	314751	941337	1981	540	C	8	0	470	124MLCX	315			S	P	Yield 85 gpm. with 150 ft. drawdown after 24 hours. Cemented to 470 ft.
						S			470	525						
						C	4	4	470	525						
37-15-403	Warr WSC	314910	941239	1977	186	C	4	4		124MLCX	330	-80.00	05-04-1977	S E	P	Cemented to 10 ft.
37-15-501	Bruce Carr	314735	941151	1970	35	C	30	1	35	124MLCX	340	-29.84	08-29-1972	J E	N	
												-107.34	10-12-1989			

RECORDS OF WELLS, SPRINGS, AND TEST HOLES  
COUNTY - Shelby

WELL	OWNER	LATITUDE	LONGITUDE	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING AND SCREEN DATA				WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT AND POWER	USE OF WATER	REMARKS
						CASING DIA.	OR ETER	TOP DEPTH (FT.)	BOT DEPTH (FT.)			MEASURE FROM	DATE			
37-15-502	East Lamar WSC	314742	941209	1965	700	C	8	2	590	124MLCX	350			S E	P	Cemented to 590 ft.
						C	4	4	540	590						
						S	4	4	590	650						
						C	4	4	650	650						
37-15-503	J. W. Henderson	314759	941149	1980	340	C	4	1	330	124MLCX	368	-120.00	11-11-1981	S E	H	Yield 25 gpm. with 20 ft. drawdown after one hour. Gravel packed from 310 ft. to 340 ft.
						S	4	4	330	340		-108.25	11-20-1994			
37-15-504	Harr WSC	314914	941212	1980	136	C	4			124MLCX	396			S	P	
37-15-601	Five May WSC	314903	940920	1981	472	C	7	0	400	124MLCX	310	-80.00	05-16-1981	S E	P	Yield 200 gpm. with 40 ft. drawdown after 24 hours. Gravel packed from 400 ft. to 450 ft. Cemented to 300 feet.
						S	4	4	400	450						
37-15-602	City of Center	314890	940937	1966	334	C	8			124MLCX	325			N	P	
37-16-201	Raymond Reynolds	315143	940459	1971	59	C	30	1	59	124MLCX	260	-13.52	08-31-1972	J E	H	Current water level obs. well.
												-7.91	11-09-1994			
37-16-301		315011	940155							NOT APPL	215					011 test.
37-16-302	Price Bright	315004	940032	1969	25	C	30	1	25	124MLCX	230	-14.00	09-03-1972	J E	H	Current water level obs. well.
												-10.92	11-09-1994			
37-16-501	Five May WSC	314824	940335	1967	400	C	6			124MLCX	255			S E	P	
37-16-701	C. S. Carlton	314658	940630	1969	42	C	30	3	42	124MLCX	270	-14.64	09-02-1972	N	U	
												-3.78	11-09-1994			
37-16-801	Shelbyville WSC	314540	940440	1964	703	C	8			124MLCX	290			S E	P	Yield 165 gpm.
37-21-301	Pershing Hughes	314448	942339	1978	344	C	4	1	334	124MLCX	425	-150.00	11-30-1978	S E	P	Cemented from 1 ft. to 3 ft.
						C	4	4	334	344						

RECORDS OF WELLS, SPRINGS, AND TEST HOLES  
COUNTY - Shelby

WELL	OWNER	LATITUDE	LONGITUDE	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING AND SCREEN DATA				WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT AND POWER	USE OF WATER	REMARKS
						CASING DIA.	TOP OF SCREEN (IN.) (FT.)	BOT DEPTH (FT.)	BEARING (FT.)			MEASURE FROM L.S.D (FT.)	DATE			
37-21-302	P. H. Clay	314432	942311	1983	600	C	4	0	845	124M/CX	530			SE	H	
37-21-303	P. H. Clay	314438	942306	1978	380	C	4	0	360	124M/CX	545			SE	H	Yield 5 gpm.
37-21-903	Claud Lynticum	313946	942311	1973	286	C	4			124M/CX	390	-160.00	03-14-1973	SE	H	
37-22-201		314435	941737							NOT-APPL	555					011 test.
37-22-301	Sand Hill NSC	314334	941523	1966	1455	C	8	0	845	124M/CX	525	-280.00	02-09-1967	SE	P	Geophysical E-log is separate folder. Cemented to 845 feet.
						C	5					-320.00	01-11-1989			
						S	5	848	858							
						S	5	858	876							
						S	5	876	896							
						C	5	896	912							
						S	5	912	932							
						C	5	932	958							
						S	5	958	978							
						C	5	978	996							
						S	5	996	1016							
37-22-401		314135	942140							NOT-APPL	350					011 test.
37-22-402		314136	942130							NOT-APPL	350					011 test.
37-22-403	Billy Fountain	314008	942131	1981	196	C	4	0	196	124M/CX	350			SE	U	Cemented to 196 ft.
37-22-501	Terry Adkison	314225	941852	1981	155	C	4	0	155	124M/CX	451	-97.00	07-10-1981	SE	U	Yield 25 gpm. with 8 ft. drawdown after one hour. Cemented to 10 ft.
37-22-701		313935	942135							NOT-APPL	376					
37-23-301	City of Center	314420	940932	1944	1072					124M/CX	250			N	U	Geophysical log Q-26.

RECORDS OF WELLS, SPRINGS, AND TEST HOLES  
COUNTY - Shelby

WELL	OWNER	LATITUDE	LONGITUDE	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING AND SCREEN DATA			ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT AND POWER	USE OF WATER	REMARKS	
						CASING DIA- OR SCREEN (IN.)	TOP DEPTH (FT.)	BOT DEPTH (FT.)		MEASURE- MENT FROM LSD (FT.)	DATE				
37-23-401	Choice MSC	314220	941430	1979	509	C 6	0	350	124MLCX	440	-225.00	06-25-1979	S E	P	Yield 70 gpm. with 65 ft. drawdown after 24 hours. Gravel packed from 308 ft. to 390 feet. Cemented to 350 feet.
37-23-501	Choice M.S.C. Newville Well	314100	941047	1992	1400	C 10	0	1350	124MLCX	468	-231.00	01-15-1992	S E	P	Measured yield 250 GPM with 61 feet drawdown after pumping 36 hours in 1992. Specific capacity 4.10 GPM/ft. Pumping level 292 feet. Cemented from 0 to 1350 feet. Gravel packed from 1350 to 1400 feet.
37-23-601	Tracy Hughes	314218	941000	1966	52	C 4			124MLCX	442	-50.77	09-01-1972	J	H	
37-23-602	Choice MSC	314015	940947	1979	487	C 7	0	380	124MLCX	470	-240.00	07-27-1979	S E	P	Yield 40 gpm. with 70 ft. drawdown after 24 hours. Cemented to 380 ft. Gravel packed from 380 ft. to 443 ft.
37-23-603	H. G. Matthews	314210	940747	1984	170	C 4			124MLCX	328	-80.00	06-10-1984	S E	H	Cemented to 10 ft.
37-23-801	Hilburn Parker	313953	941220	1973	273	C 2			124MLCX	420			J E	H	
37-23-802	Dale McCauley	313952	941211	1979	275	C 2	0	248	124MLCX	415	-99.00	09-11-1979	N	H	
37-23-803	Charles Martin	313812	941147	1981	214	C 4	0	214	124MLCX	400	-120.00	04-20-1981	N	H	Yield 30 gpm. with 20 ft. drawdown after one hour. Gravel packed from 170ft. to 214ft.
37-24-401		314038	940712						NOT-APPL	450					011 test.
37-24-601	Ebenzie Randall	314009	940219	1971	60	C 30	1	60	124MLCX	338	-30.73	09-01-1972	N	H	
											-29.18	11-09-1994			

RECORDS OF WELLS, SPRINGS, AND TEST HOLES  
COUNTY - Shelby

WELL	OWNER	LATITUDE	LONGITUDE	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING AND SCREEN DATA				WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT AND POWER	USE OF WATER	REMARKS
						CASING DIA. OR SCREEN (IN.)	TOP DEPTH (FT.)	BOT DEPTH (FT.)	MEASURE FROM LSD (FT.)			DATE				
37-24-602	McClelland WSC	314139	940123	1966	483	C	10	2	318	124MLCX	385			S E	P	Geophysical log Q-103. Yield 160 gpm. Cemented to 318 feet.
						C	6	2	318							
						S	6	318	418							
						C	6	418	423							
37-24-603	McClelland WSC	314149	940123	1969	480	C	10			124MLCX	382			S E	P	Yield 135 gpm.
37-32-301	Jack W. Blackman	313640	940225	1970	50	C	30	1	50	124MLCX	290	-24.93	09-02-1972	N	U	
												-11.35	11-09-1994			
37-32-302	Hawthorne Church	313625	940140	1980	150	C	2			124MLCX	270	-60.00	03-31-1980	J E	T	Cemented to 10 ft.

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**APPENDIX C**  
**TWDB BOARD WATER USE SURVEY**



===== M A I L L O G I N F O R M (login1.per) =====

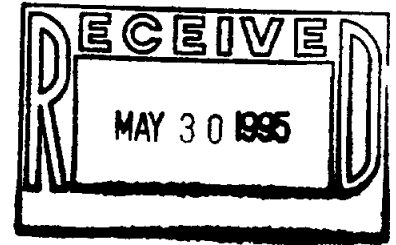
TWDB CODE: [107700 ]		Return [ ]	Op [ ]
NEW		Return date [ ]	Batch
		Add date [01/01/1995]	SIC [0000]
		Drop date [ ]	
		Change date [ ]	
		Status [0]	
		Use Code [1]	Municipal
		Class [W]	W.S.C.
		Used County [210]	SHELBY
		Used Basin [05]	SABINE
		Major Aquif [10]	Carizo-Wilcx
		Sub Aquif [032]	

1 [BUNA VISTA WATER SUPPLY CORP ]	
2 [ ]	
3 [ATTN: WAYNE HARRIS, PRES ]	
4 [RT 1, BOX 34-C ]	
5 [TIMPSON, TEXAS ]	
	Zip [75975 ]

Remarks (Temp): [ ]

Remarks (Perm): [NEW ADD 1994-WHML ]

TxDH CODE: 2100032 WATER RIGHTS:



===== M A I L L O G I N F O R M (login1.per) =====

TWDB CODE: [143560 ]		Return [Y]	Op [ ]
		Return date [02/27/1995]	Batch
		Add date [ ]	SIC [0000]
		Drop date [ ]	
		Change date [ ]	
		Status [0]	
		Use Code [1]	Municipal
		Class [M]	Municipal
		Used County [210]	SHELBY
		Used Basin [05]	SABINE
		Major Aquif [ ]	
		Sub Aquif [ ]	

1 [CITY OF CENTER ]	
2 [C/O DEPT. PUBLIC WORKS ]	
3 [P.O. BOX 311 ]	
4 [ ]	
5 [CENTER, TEXAS ]	
	Zip [75935 ]

Remarks (Temp): [ ]

Remarks (Perm): [ ]

TxDH CODE: 2100001 WATER RIGHTS: 4404 (6)  
CENTER

===== M A I L L O G I N F O R M (login1.per) =====

TWDB CODE: [152000 ]		Return [Y]	Op [ ]
		Return date [02/17/1995]	Batch
		Add date [ ]	SIC [0000]
		Drop date [ ]	
		Change date [02/23/1993]	
		Status [0]	
		Use Code [1]	Municipal
		Class [W]	W.S.C.
		Used County [210]	SHELBY
		Used Basin [05]	SABINE
		Major Aquif [10]	Carizo-Wilcx
		Sub Aquif [032]	

1 [CHOICE WATER SUPPLY CORP. ]	
2 [ATTN: JOE WEST, PRES. ]	
3 [RT. 6, BOX 862-A ]	
4 [ ]	
5 [CENTER, TEXAS ]	
	Zip [75935 ]

Remarks (Temp): [ ]

Remarks (Perm): [ ]

TxDH CODE: 2100005 WATER RIGHTS:

===== M A I L L O G I N F O R M (login1.per) =====

TWDB CODE: [249000 ] Return [Y]		Return date [02/17/1995] Batch	Op [ ]
		Add date [ ] SIC [0000]	
		Drop date [ ]	
		Change date [ ]	
1 [EAST LAMAR WATER SUPPLY CORP. ]		Status [0]	
2 [C/O J.C. WATLINGTON, SEC. ]		Use Code [1] Municipal	
3 [P. O. BOX 16 ]		Class [W] W.S.C.	
4 [ ]		Used County [210] SHELBY	
5 [CENTER, TEXAS ]		Used Basin [05] SABINE	
Zip [75935 ]		Major Aquif [10] Carizo-Wilcx	
		Sub Aquif [032]	
Remarks (Temp): [ ]			]
Remarks (Perm): [ ]			]
TxDH CODE: 2100006 WATER RIGHTS:			]

===== M A I L L O G I N F O R M (login1.per) =====

TWDB CODE: [287100 ] Return [ ]		Return date [ ] Batch	Op [ ]
		Add date [ ] SIC [0000]	
		Drop date [ ]	
		Change date [11/09/1994]	
1 [FIVE-WAY WATER SUPPLY CORP. ]		Status [0]	
2 [ ]		Use Code [1] Municipal	
3 [ATTN: VINCE DIVERDI, OPERATOR ]		Class [W] W.S.C.	
4 [P.O. BOX 667 ]		Used County [210] SHELBY	
5 [CENTER, TEXAS ]		Used Basin [05] SABINE	
Zip [75935 ]		Major Aquif [10] Carizo-Wilcx	
		Sub Aquif [032]	
Remarks (Temp): [DATA VIA CONVERSATION WITH VINCE-11/09/1994-KW ]			]
[PHONE #409/598-4328 ]			]
Remarks (Perm): [ ]			]
TxDH CODE: 2100008 WATER RIGHTS:			]

===== M A I L L O G I N F O R M (login1.per) =====

TWDB CODE: [287300 ] Return [ ]		Return date [ ] Batch	Op [ ]
		Add date [ ] SIC [0000]	
		Drop date [ ]	
		Change date [07/06/1993]	
1 [FLAT FORK WATER SUPPLY CORP. ]		Status [0]	
2 [ ]		Use Code [1] Municipal	
3 [C/O HAROLD ROBERTSON, PRESIDENT ]		Class [W] W.S.C.	
4 [P.O. BOX 99 ]		Used County [210] SHELBY	
5 [CENTER, TEXAS ]		Used Basin [05] SABINE	
Zip [75935 ]		Major Aquif [10] Carizo-Wilcx	
		Sub Aquif [190]	
Remarks (Temp): [ ]			]
Remarks (Perm): [ ]			]
TxDH CODE: 2100007 WATER RIGHTS:			]

===== M A I L L O G I N F O R M (login1.per) =====

TWDB CODE: [399250 ]		Return [Y]	Return date [02/22/1995]	Batch	Op [ ]
			Add date [ ]	SIC [0000]	
			Drop date [ ]		
			Change date [ ]		
1 [HUBER WATER SUPPLY CORP. ]			Status [0]		
2 [ ]			Use Code [1]	Municipal	
3 [ATTN: JOHN HENRY EDENS, PRES. ]			Class [P]	Private	
4 [ROUTE 3, BOX 242B ]			Used County [210]	SHELBY	
5 [TIMPSON, TEXAS ]			Used Basin [05]	SABINE	
Zip [75975 ]			Major Aquif [10]	Carizo-Wilcx	
			Sub Aquif [032]		
Remarks (Temp): [ ]					]
[ ]					]
Remarks (Perm): [ ]					]
[ ]					]
TxDH CODE: 2100009		WATER RIGHTS:			

===== M A I L L O G I N F O R M (login1.per) =====

TWDB CODE: [413300 ]		Return [Y]	Return date [02/07/1995]	Batch	Op [ ]
			Add date [ ]	SIC [0000]	
			Drop date [ ]		
			Change date [ ]		
1 [CITY OF HUXLEY ]			Status [0]		
2 [C/O LARRY VAUGHN, MAYOR ]			Use Code [1]	Municipal	
3 [RT. 1, BOX 1410 ]			Class [M]	Municipal	
4 [ ]			Used County [210]	SHELBY	
5 [SHELBYVILLE, TEXAS ]			Used Basin [05]	SABINE	
Zip [75973 ]			Major Aquif [ ]		
			Sub Aquif [ ]		
Remarks (Temp): [ ]					]
[ ]					]
Remarks (Perm): [ ]					]
[ ]					]
TxDH CODE: 2100019		WATER RIGHTS:			

===== M A I L L O G I N F O R M (login1.per) =====

TWDB CODE: [432845 ]		Return [ ]	Return date [ ]	Batch	Op [ ]
			Add date [ ]	SIC [0000]	
			Drop date [ ]		
			Change date [11/09/1994]		
1 [JACKSON WATER SUPPLY CORP. ]			Status [0]		
2 [ ]			Use Code [1]	Municipal	
3 [ATTN: VINCE DIVERDI, OPERATOR ]			Class [W]	W.S.C.	
4 [P.O. BOX 1138 ]			Used County [210]	SHELBY	
5 [CENTER, TEXAS ]			Used Basin [05]	SABINE	
Zip [75935 ]			Major Aquif [10]	Carizo-Wilcx	
			Sub Aquif [032]		
Remarks (Temp): [ ]					]
[ ]					]
Remarks (Perm): [ ]					]
[ ]					]
TxDH CODE: 2100031		WATER RIGHTS:			

===== M A I L L O G I N F O R M (login1.per) =====

TWDB CODE: [438400 ]	Return [ ]	Return date [ ]	Batch	Op [ ]
		Add date [ ]	SIC [0000]	
		Drop date [ ]		
		Change date [ ]		
1 [CITY OF JOAQUIN ]		Status [0]		
2 [C/O MAYOR ]		Use Code [1]	Municipal	
3 [P.O. BOX 237 ]		Class [M]	Municipal	
4 [ ]		Used County [210]	SHELBY	
5 [JOAQUIN, TEXAS ]		Used Basin [05]	SABINE	
	Zip [75954 ]	Major Aquif [10]	Carizo-Wilcx	
		Sub Aquif [190]		
Remarks (Temp): [ ]				
Remarks (Perm): [ ]				
TxDH CODE: 2100010	WATER RIGHTS:			

===== M A I L L O G I N F O R M (login1.per) =====

TWDB CODE: [547100 ]	Return [Y]	Return date [04/04/1995]	Batch	Op [ ]
		Add date [ ]	SIC [0000]	
		Drop date [ ]		
		Change date [ ]		
1 [MCCLELLAND WATER SUPPLY CORP. ]		Status [0]		
2 [C/O C.R. JONES, PRES. ]		Use Code [1]	Municipal	
3 [RT. 2, BOX 280 ]		Class [W]	W.S.C.	
4 [ ]		Used County [210]	SHELBY	
5 [SHELBYVILLE, TEXAS ]		Used Basin [05]	SABINE	
	Zip [75973 ]	Major Aquif [10]	Carizo-Wilcx	
		Sub Aquif [032]		
Remarks (Temp): [ ]				
Remarks (Perm): [ ]				
TxDH CODE: 2100011	WATER RIGHTS:			

===== M A I L L O G I N F O R M (login1.per) =====

TWDB CODE: [652130 ]	Return [ ]	Return date [ ]	Batch	Op [ ]
		Add date [ ]	SIC [0000]	
		Drop date [ ]		
		Change date [11/09/1994]		
1 [PAXTON WATER SUPPLY CORP. ]		Status [0]		
2 [ ]		Use Code [1]	Municipal	
3 [ATTN: VINCE DIVERDI, OPERATOR ]		Class [W]	W.S.C.	
4 [P.O. BOX 1138 ]		Used County [210]	SHELBY	
5 [CENTER, TEXAS ]		Used Basin [05]	SABINE	
	Zip [75935-1138]	Major Aquif [10]	Carizo-Wilcx	
		Sub Aquif [032]		
Remarks (Temp): [DATA FROM SALES FILE-MARY E.]				
Remarks (Perm): [ ]				
TxDH CODE: 2100012	WATER RIGHTS:			

===== M A I L L O G I N F O R M (login1.per) =====

TWDB CODE: [767000 ]	Return [Y]	Return date [02/09/1995]	Batch	Op [ ]
		Add date [ ]	SIC [0000]	
		Drop date [ ]		
		Change date [ ]		
1 [SAND HILLS WATER SUPPLY CORP. ]		Status [0]		
2 [C/O M.A. DILLARD ]		Use Code [1]	Municipal	
3 [RT. 2, BOX 720 ]		Class [W]	W.S.C.	
4 [ ]		Used County [210]	SHELBY	
5 [CENTER, TEXAS ]		Used Basin [05]	SABINE	
	Zip [75935 ]	Major Aquif [10]	Carizo-Wilcx	
		Sub Aquif [032]		

Remarks (Temp): [ ]

Remarks (Perm): [ ]

TxDH CODE: 2100013 WATER RIGHTS:

===== M A I L L O G I N F O R M (login1.per) =====

TWDB CODE: [791150 ]	Return [ ]	Return date [ ]	Batch	Op [ ]
		Add date [ ]	SIC [0000]	
		Drop date [ ]		
		Change date [ ]		
1 [SHELBYVILLE WATER SUPPLY CORP. ]		Status [0]		
2 [ ]		Use Code [1]	Municipal	
3 [C/O MARGARET BRADBERRY, SEC-TREA]		Class [W]	W.S.C.	
4 [P.O. BOX 297 ]		Used County [210]	SHELBY	
5 [SHELBYVILLE, TEXAS ]		Used Basin [05]	SABINE	
	Zip [75973 ]	Major Aquif [10]	Carizo-Wilcx	
		Sub Aquif [032]		

Remarks (Temp): [ ]

Remarks (Perm): [ ]

TxDH CODE: 2100014 WATER RIGHTS:

===== M A I L L O G I N F O R M (login1.per) =====

TWDB CODE: [846400 ]	Return [Y]	Return date [02/14/1995]	Batch	Op [ ]
		Add date [ ]	SIC [0000]	
		Drop date [ ]		
		Change date [ ]		
1 [CITY OF TENAHA ]		Status [0]		
2 [C/O GEORGE BOWERS, MAYOR ]		Use Code [1]	Municipal	
3 [P.O. BOX 70 ]		Class [M]	Municipal	
4 [ ]		Used County [210]	SHELBY	
5 [TENAHA, TEXAS ]		Used Basin [05]	SABINE	
	Zip [75974 ]	Major Aquif [10]	Carizo-Wilcx	
		Sub Aquif [190]		

Remarks (Temp): [ ]

Remarks (Perm): [ ]

TxDH CODE: 2100002 WATER RIGHTS:

===== M A I L L O G I N F O R M (login1.per) =====

TWDB CODE: [847300 ]	Return [Y]	Return date [02/22/1995]	Batch	Op [ ]
		Add date [ ]	SIC [0000]	
		Drop date [ ]		
		Change date [ ]		
1 [TENNESSEE WATER SUPPLY CORP. ]		Status [0]		
2 [C/O MARSHALL POLLARD, PRES. ]		Use Code [1]	Municipal	
3 [RT. 3, BOX 242B ]		Class [W]	W.S.C.	
4 [ ]		Used County [210]	SHELBY	
5 [TIMPSON, TEXAS ]		Used Basin [05]	SABINE	
	Zip [75975 ]	Major Aquif [10]	Carizo-Wilcx	
		Sub Aquif [190]		
Remarks (Temp): [ ]				
[ ]				
Remarks (Perm): [ ]				
[ ]				
TxDH CODE: 2100017	WATER RIGHTS:			

===== M A I L L O G I N F O R M (login1.per) =====

TWDB CODE: [867600 ]	Return [ ]	Return date [ ]	Batch	Op [ ]
		Add date [ ]	SIC [0000]	
		Drop date [ ]		
		Change date [03/14/1994]		
1 [CITY OF TIMPSON ]		Status [0]		
2 [ ]		Use Code [1]	Municipal	
3 [RICKEY HELTON, WTR DEPT FOREMAN ]		Class [M]	Municipal	
4 [P.O. BOX 369 ]		Used County [210]	SHELBY	
5 [TIMPSON, TEXAS ]		Used Basin [05]	SABINE	
	Zip [75975 ]	Major Aquif [10]	Carizo-Wilcx	
		Sub Aquif [032]		
Remarks (Temp): [ ]				
[ ]				
Remarks (Perm): [ ]				
[ ]				
TxDH CODE: 2100003	WATER RIGHTS:			

===== M A I L L O G I N F O R M (login1.per) =====

TWDB CODE: [867650 ]	Return [Y]	Return date [03/28/1995]	Batch	Op [ ]
		Add date [ ]	SIC [0000]	
		Drop date [ ]		
		Change date [ ]		
1 [TIMPSON RURAL WATER SPLY. CORP ]		Status [0]		
2 [C/O JOHN TYSON, PRES. ]		Use Code [1]	Municipal	
3 [P.O. BOX 397 ]		Class [W]	W.S.C.	
4 [ ]		Used County [210]	SHELBY	
5 [TIMPSON, TEXAS ]		Used Basin [06]	NECHES	
	Zip [75975 ]	Major Aquif [10]	Carizo-Wilcx	
		Sub Aquif [221]		
Remarks (Temp): [ ]				
[ ]				
Remarks (Perm): [ ]				
[ ]				
TxDH CODE: 2100015	WATER RIGHTS:			

===== M A I L L O G I N F O R M (login1.per) =====

TWDB CODE: [918750 ]		Return [Y]	Return date [02/13/1995]	Batch	Op [ ]
			Add date [ ]	SIC [0000]	
			Drop date [ ]		
			Change date [04/06/1994]		
			Status [0]		
			Use Code [1]	Municipal	
			Class [P]	Private	
			Used County [210]	SHELBY	
			Used Basin [05]	SABINE	
			Major Aquif [10]	Carizo-Wilcx	
			Sub Aquif [032]		

1 [WARR WATER SYSTEM	]	
2 [	]	
3 [ATTN: GLADYS WARR, OWNER	]	
4 [P.O. BOX 366	]	
5 [CENTER, TEXAS	]	
	Zip [75935	]

Remarks (Temp): [	]
	]
Remarks (Perm): [	]
	]
	]

TxDH CODE: 2100018      WATER RIGHTS:

TEXAS WATER DEVELOPMENT BOARD  
PLANNING DIVISION

COUNTY SUMMARY HISTORICAL WATER USE  
(Units: Acre-feet)

County	Population	Municipal	Manufact.	Power	Irrigation	Mining	Livestock	Total
SHELBY								
1950	23479							
1960	20479							
1970	19672							
1974		1735	164	0	0	17	735	2651
		773	849	0	0	0	1245	2867
	20971	2508	1013	0	0	17	1980	5518
1977		1593	89	0	0	0	728	2410
		1271	1148	0	0	0	610	3029
	22002	2864	1237	0	0	0	1338	5439
1980		1993	38	0	0	0	748	2779
		1925	1021	0	0	0	508	3454
	23084	3918	1059	0	0	0	1256	6233
1984		2604	50	0	5	0	584	3243
		1248	953	0	8	0	877	3086
	23971	3852	1003	0	13	0	1461	6329
1985		1874	23	0	12	0	561	2470
		1447	865	0	20	0	842	3174
	23879	3321	888	0	32	0	1403	5644
1986		1614	29	0	13	0	588	2244
		1347	1057	0	20	0	882	3306
	23700	2961	1086	0	33	0	1470	5550
1987		1733	18	0	13	0	664	2428
		1558	834	0	20	0	997	3409
	23700	3291	852	0	33	0	1661	5837
1988		1409	26	0	39	0	684	2158
		1786	886	0	61	0	1027	3760
	23900	3195	912	0	100	0	1711	5918
1989		1565	23	0	11	0	721	2320
		1365	998	0	24	0	1083	3470
	22137	2930	1021	0	35	0	1804	5790
1990		1581	69	0	12	0	785	2447
		1402	1135	0	28	0	1178	3743
	22034	2983	1204	0	40	0	1963	6190
1991		1693	82	0	12	0	801	2588
		1224	1209	0	28	0	1202	3663
	22494	2917	1291	0	40	0	2003	6251
1992		1917	79	0	12	0	779	2787
		1500	1266	0	28	0	1168	3962
	22515	3417	1345	0	40	0	1947	6749

- (1) Data is by county in which the water is used.
- (2) Municipal use excludes reported industrial sales.
- (3) Electric power cooling water is consumptive use.
- (4) Irrigation surface water use for 1974, 1977 is on -farm use.  
Surface water diversion loss estimates are included after 1977.
- (5) 1989 mining data is substituted for 1990.
- (6) 1991 and 1992 surface water for power is not available.



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]					SHELBY
		** YEAR [1993 ]			SOURCE COUNTY [210]
CITY OF CENTER					SOURCE BASIN [06]
C/O DEPT. PUBLIC WORKS					AQUIFER -[ ]
P.O. BOX 311					NUMBER WELLS [ ]
					RESERVOIR [06110]
CENTER, TEXAS		75935			STATUS = 0

Jan [ 71000000]	May [ 64400000]	Sep [ 76000000]		
Feb [ 51600000]	Jun [ 59100000]	Oct [ 74800000]		
Mar [ 68900000]	Jul [ 75700000]	Nov [ 68800000]		
Apr [ 58900000]	Aug [ 84100000]	Dec [ 72300000]		
	WATER TYPE [SS ]	ANNUAL TOTAL [ 825600000]		Units: Gallons
				2533.7 Acre-feet

Remarks: [FROM LAKE PINKSTON ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 3200  
 Outside conn: 231 Pop served: 7000 % Connections metered: 100  
 % Connections: RES 89 COMM 10 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]					SHELBY
		** YEAR [1992 ]			SOURCE COUNTY [210]
CITY OF CENTER					SOURCE BASIN [05]
C/O DEPT. PUBLIC WORKS					AQUIFER -[ ]
P.O. BOX 311					NUMBER WELLS [ ]
					RESERVOIR [05165]
CENTER, TEXAS		75935			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SS ]	ANNUAL TOTAL [ ]		Units: Gallons
				Acre-feet

Remarks: [USED SW FROM LK PINKSTON ONLY 92 ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2290  
 Outside conn: Pop served: 5827 % Connections metered: 100  
 % Connections: RES 88 COMM 10 IND 2.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]					SHELBY
		** YEAR [1992 ]			SOURCE COUNTY [210]
CITY OF CENTER					SOURCE BASIN [06]
C/O DEPT. PUBLIC WORKS					AQUIFER -[ ]
P.O. BOX 311					NUMBER WELLS [ ]
					RESERVOIR [06110]
CENTER, TEXAS		75935			STATUS = 0

Jan [ 56100000]	May [ 59700000]	Sep [ 67300000]		
Feb [ 55800000]	Jun [ 63500000]	Oct [ 65400000]		
Mar [ 57900000]	Jul [ 67400000]	Nov [ 59700000]		
Apr [ 56300000]	Aug [ 69300000]	Dec [ 65100000]		
	WATER TYPE [SS ]	ANNUAL TOTAL [ 743500000]		Units: Gallons
				2281.7 Acre-feet

Remarks: [FROM LK PINKSTON ONLY 1992 ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2290  
 Outside conn: Pop served: 5827 % Connections metered: 100  
 % Connections: RES 88 COMM 10 IND 2.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]		SHELBY
	** YEAR [1991 ]	SOURCE COUNTY [210]
CITY OF CENTER		SOURCE BASIN [05]
C/O DEPT. PUBLIC WORKS		AQUIFER -[ ]
P.O. BOX 311		NUMBER WELLS [ ]
		RESERVOIR [05165]
CENTER, TEXAS	75935	STATUS = 0

Jan [ 2560000]	May [ 623000]	Sep [ ]	
Feb [ 612000]	Jun [ 400800]	Oct [ ]	
Mar [ ]	Jul [ 105400]	Nov [ ]	
Apr [ 253000]	Aug [ ]	Dec [ ]	
	WATER TYPE [SS ]	ANNUAL TOTAL [ 4554200]	Units: Gallons
			14.0 Acre-feet

Remarks: [LAKE CENTER/SW LK PINKSTON ALSO ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 2259  
 Outside conn: 220 Pop served: 5827 % Connections metered: 100  
 % Connections: RES 88 COMM 10 IND 2.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]		SHELBY
	** YEAR [1991 ]	SOURCE COUNTY [210]
CITY OF CENTER		SOURCE BASIN [06]
C/O DEPT. PUBLIC WORKS		AQUIFER -[ ]
P.O. BOX 311		NUMBER WELLS [ ]
		RESERVOIR [06110]
CENTER, TEXAS	75935	STATUS = 0

Jan [ 57593800]	May [ 58489300]	Sep [ 59373800]	
Feb [ 55097500]	Jun [ 51222100]	Oct [ 57005300]	
Mar [ 48835500]	Jul [ 55526200]	Nov [ 56030200]	
Apr [ 54863400]	Aug [ 62860400]	Dec [ 48960000]	
	WATER TYPE [SS ]	ANNUAL TOTAL [ 665857500]	Units: Gallons
			2043.4 Acre-feet

Remarks: [FROM LK PINKSTON/SW LK CENTER TO ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 2259  
 Outside conn: 220 Pop served: 5827 % Connections metered: 100  
 % Connections: RES 88 COMM 10 IND 2.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]		SHELBY
	** YEAR [1990 ]	SOURCE COUNTY [210]
CITY OF CENTER		SOURCE BASIN [06]
C/O DEPT. PUBLIC WORKS		AQUIFER -[ ]
P.O. BOX 311		NUMBER WELLS [ ]
		RESERVOIR [06110]
CENTER, TEXAS	75935	STATUS = 0

Jan [ 42891900]	May [ 38789800]	Sep [ 60634000]	
Feb [ 39126700]	Jun [ 50969100]	Oct [ 69841300]	
Mar [ 36910200]	Jul [ 46964900]	Nov [ 60948800]	
Apr [ 33053000]	Aug [ 45394300]	Dec [ 52972500]	
	WATER TYPE [SS ]	ANNUAL TOTAL [ 578496500]	Units: Gallons
			1775.3 Acre-feet

Remarks: [FROM LK PINKSTON/SW LK CENTER TO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 2496  
 Outside conn: 227 Pop served: 5827 % Connections metered: 100  
 % Connections: RES 84 COMM 15 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]					SHELBY
		** YEAR [1990]			SOURCE COUNTY [210]
CITY OF CENTER					SOURCE BASIN [05]
C/O DEPT. PUBLIC WORKS					AQUIFER -[ ]
P.O. BOX 311					NUMBER WELLS [ ]
					RESERVOIR [05165]
CENTER, TEXAS		75935			STATUS = 0

Jan [ 12749000]	May [ 9175000]	Sep [ 11140000]		
Feb [ 13432000]	Jun [ 9472000]	Oct [ 9480000]		
Mar [ 17771500]	Jul [ 14800000]	Nov [ 260000]		
Apr [ 16645000]	Aug [ 15483000]	Dec [ 980000]		
	WATER TYPE [SS]	ANNUAL TOTAL [ 122855500]		Units: Gallons
				377.0 Acre-feet

Remarks: [LK CENTER/SW LK PINKSTON ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2496  
 Outside conn: 227 Pop served: 5827 % Connections metered: 100  
 % Connections: RES 84 COMM 15 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]					SHELBY
		** YEAR [1989]			SOURCE COUNTY [210]
CITY OF CENTER					SOURCE BASIN [05]
C/O DEPT. PUBLIC WORKS					AQUIFER -[ ]
P.O. BOX 311					NUMBER WELLS [ ]
					RESERVOIR [05165]
CENTER, TEXAS		75935			STATUS = 0

Jan [ 3150000]	May [ ]	Sep [ 6540000]		
Feb [ ]	Jun [ ]	Oct [ 23702000]		
Mar [ ]	Jul [ 1821000]	Nov [ 19179000]		
Apr [ ]	Aug [ 1291000]	Dec [ 2051000]		
	WATER TYPE [SS]	ANNUAL TOTAL [ 57734000]		Units: Gallons
				177.2 Acre-feet

Remarks: [LAKE CENTER/SW LK PINKSTON ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2280  
 Outside conn: 208 Pop served: 5827 % Connections metered: 100  
 % Connections: RES 84 COMM 15 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]					SHELBY
		** YEAR [1989]			SOURCE COUNTY [210]
CITY OF CENTER					SOURCE BASIN [06]
C/O DEPT. PUBLIC WORKS					AQUIFER -[ ]
P.O. BOX 311					NUMBER WELLS [ ]
					RESERVOIR [06110]
CENTER, TEXAS		75935			STATUS = 0

Jan [ 41956400]	May [ 45017700]	Sep [ 60509900]		
Feb [ 46485600]	Jun [ 52389800]	Oct [ 53035500]		
Mar [ 49302700]	Jul [ 49475600]	Nov [ 51142100]		
Apr [ 43739600]	Aug [ 47062200]	Dec [ 56174800]		
	WATER TYPE [SS]	ANNUAL TOTAL [ 596291900]		Units: Gallons
				1830.0 Acre-feet

Remarks: [FROM LK PINKSTON/SW LK CENTER TO ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2280  
 Outside conn: 208 Pop served: 5827 % Connections metered: 100  
 % Connections: RES 84 COMM 15 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]		* * YEAR [1988 ]		SHELBY	
CITY OF CENTER				SOURCE COUNTY [210]	
C/O DEPT. PUBLIC WORKS				SOURCE BASIN [05]	
P.O. BOX 311				AQUIFER -[ ]	
CENTER, TEXAS		75935		NUMBER WELLS [ ]	
				RESERVOIR [05165]	
				STATUS = 0	

Jan [ 7008000]	May [ 8284000]	Sep [ 4720000]	
Feb [ 5269000]	Jun [ 9809000]	Oct [ 5355000]	
Mar [ 7272000]	Jul [ 8140000]	Nov [ 8729000]	
Apr [ 7152000]	Aug [ 9720000]	Dec [ 6736000]	
WATER TYPE [SS ]		ANNUAL TOTAL [ 88194000]	Units:
			Gallons
			270.7 Acre-feet

Remarks: [LAKE CENTER/SW LK PINKSTON ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2425  
 Outside conn: 223 Pop served: 6719 % Connections metered: 98.0  
 % Connections: RES 78 COMM 20 IND 2.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]		* * YEAR [1988 ]		SHELBY	
CITY OF CENTER				SOURCE COUNTY [210]	
C/O DEPT. PUBLIC WORKS				SOURCE BASIN [06]	
P.O. BOX 311				AQUIFER -[ ]	
CENTER, TEXAS		75935		NUMBER WELLS [ ]	
				RESERVOIR [06110]	
				STATUS = 0	

Jan [ 55908000]	May [ 54545000]	Sep [ 58780000]	
Feb [ 48125000]	Jun [ 61500000]	Oct [ 46856000]	
Mar [ 53304000]	Jul [ 60657000]	Nov [ 47964000]	
Apr [ 51950000]	Aug [ 60447000]	Dec [ 67619000]	
WATER TYPE [SS ]		ANNUAL TOTAL [ 667655000]	Units:
			Gallons
			2049.0 Acre-feet

Remarks: [LK PINKSTON/SW LK CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2425  
 Outside conn: 223 Pop served: 6719 % Connections metered: 98.0  
 % Connections: RES 78 COMM 20 IND 2.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]		* * YEAR [1987 ]		SHELBY	
CITY OF CENTER				SOURCE COUNTY [210]	
C/O DEPT. PUBLIC WORKS				SOURCE BASIN [05]	
P.O. BOX 311				AQUIFER -[ ]	
CENTER, TEXAS		75935		NUMBER WELLS [ ]	
				RESERVOIR [05165]	
				STATUS = 0	

Jan [ 7625000]	May [ 7092000]	Sep [ 8861000]	
Feb [ 4016000]	Jun [ 5632000]	Oct [ 7574000]	
Mar [ 4285000]	Jul [ 8564000]	Nov [ 4686000]	
Apr [ 7727000]	Aug [ 9015000]	Dec [ 5224000]	
WATER TYPE [SS ]		ANNUAL TOTAL [ 80301000]	Units:
			Gallons
			246.4 Acre-feet

Remarks: [LAKE CENTER/SW LK PINKSTON ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2415  
 Outside conn: 215 Pop served: 6500 % Connections metered: 98.0  
 % Connections: RES 77 COMM 22 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]		SHELBY
	** YEAR [1987 ]	SOURCE COUNTY [210]
CITY OF CENTER		SOURCE BASIN [06]
C/O DEPT. PUBLIC WORKS		AQUIFER -[ ]
P.O. BOX 311		NUMBER WELLS [ ]
		RESERVOIR [06110]
CENTER, TEXAS	75935	STATUS = 0

Jan [ 55308000]	May [ 50020000]	Sep [ 49756000]	
Feb [ 44806000]	Jun [ 54303000]	Oct [ 50945000]	
Mar [ 50478000]	Jul [ 56127000]	Nov [ 45915000]	
Apr [ 52386000]	Aug [ 57394000]	Dec [ 41814000]	
WATER TYPE [SS ]			ANNUAL TOTAL [ 609252000]
			Units: 1869.7 Gallons Acre-feet

Remarks: [LAKE PINKSTON/SW LK CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2415  
 Outside conn: 215 Pop served: 6500 % Connections metered: 98.0  
 % Connections: RES 77 COMM 22 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]		SHELBY
	** YEAR [1986 ]	SOURCE COUNTY [210]
CITY OF CENTER		SOURCE BASIN [06]
C/O DEPT. PUBLIC WORKS		AQUIFER -[ ]
P.O. BOX 311		NUMBER WELLS [ ]
		RESERVOIR [06110]
CENTER, TEXAS	75935	STATUS = 0

Jan [ 47135000]	May [ 48899000]	Sep [ 53170000]	
Feb [ 44437000]	Jun [ 54452000]	Oct [ 52934000]	
Mar [ 50885000]	Jul [ 61877000]	Nov [ 50634000]	
Apr [ 52508000]	Aug [ 56311000]	Dec [ 48300000]	
WATER TYPE [SS ]			ANNUAL TOTAL [ 621542000]
			Units: 1907.4 Gallons Acre-feet

Remarks: [LAKE PINKSTON/SW LK CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2415  
 Outside conn: 215 Pop served: 6500 % Connections metered: 98.0  
 % Connections: RES 77 COMM 22 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]		SHELBY
	** YEAR [1986 ]	SOURCE COUNTY [210]
CITY OF CENTER		SOURCE BASIN [05]
C/O DEPT. PUBLIC WORKS		AQUIFER -[ ]
P.O. BOX 311		NUMBER WELLS [ ]
		RESERVOIR [05165]
CENTER, TEXAS	75935	STATUS = 0

Jan [ 76990000]	May [ 63410000]	Sep [ 74120000]	
Feb [ 52910000]	Jun [ 61320000]	Oct [ 61360000]	
Mar [ 57530000]	Jul [ 71860000]	Nov [ 63950000]	
Apr [ 62290000]	Aug [ 82710000]	Dec [ 63210000]	
WATER TYPE [SS ]			ANNUAL TOTAL [ 791660000]
			Units: 243.0 Gallons Acre-feet

Remarks: [LAKE CENTER/SW LK PINKSTON ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2415  
 Outside conn: 215 Pop served: 6500 % Connections metered: 98.0  
 % Connections: RES 77 COMM 22 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]			SHELBY
	** YEAR [1985 ]		SOURCE COUNTY [210]
CITY OF CENTER			SOURCE BASIN [05]
C/O DEPT. PUBLIC WORKS			AQUIFER -[ ]
P.O. BOX 311			NUMBER WELLS [ ]
			RESERVOIR [05165]
CENTER, TEXAS	75935		STATUS = 0

Jan [ 5583000]	May [ 6314000]	Sep [ 5736000]	
Feb [ 4770000]	Jun [ 5804000]	Oct [ 6089000]	
Mar [ 5468000]	Jul [ 6390000]	Nov [ 2899000]	
Apr [ 5741000]	Aug [ 6432000]	Dec [ 5481000]	Units:
	WATER TYPE [SS ]	ANNUAL TOTAL [ 66707000]	Gallons
			204.7 Acre-feet

Remarks: [LAKE CENTER/LAKE PINKSTON ALSO ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2395

Outside conn: 210 Pop served: 6492 % Connections metered: 90.0

% Connections: RES 78 COMM 22 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]			SHELBY
	** YEAR [1985 ]		SOURCE COUNTY [210]
CITY OF CENTER			SOURCE BASIN [06]
C/O DEPT. PUBLIC WORKS			AQUIFER -[ ]
P.O. BOX 311			NUMBER WELLS [ ]
			RESERVOIR [06110]
CENTER, TEXAS	75935		STATUS = 0

Jan [ 53117000]	May [ 57761000]	Sep [ 48963000]	
Feb [ 47805000]	Jun [ 54452000]	Oct [ 49673000]	
Mar [ 49203000]	Jul [ 55786000]	Nov [ 45260000]	
Apr [ 50600000]	Aug [ 53254000]	Dec [ 43965000]	Units:
	WATER TYPE [SS ]	ANNUAL TOTAL [ 609839000]	Gallons
			1871.5 Acre-feet

Remarks: [LAKE PINKSTON/LAKE CENTR ALSO ]

Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2395

Outside conn: 210 Pop served: 6492 % Connections metered: 90.0

% Connections: RES 78 COMM 22 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]			SHELBY
	** YEAR [1984 ]		SOURCE COUNTY [210]
CITY OF CENTER			SOURCE BASIN [06]
C/O DEPT. PUBLIC WORKS			AQUIFER -[ ]
P.O. BOX 311			NUMBER WELLS [ ]
			RESERVOIR [06110]
CENTER, TEXAS	75935		STATUS = 0

Jan [ 54721000]	May [ 52002000]	Sep [ 51945000]	
Feb [ 41879000]	Jun [ 67196000]	Oct [ 54991000]	
Mar [ 45457000]	Jul [ 59721000]	Nov [ 49720000]	
Apr [ 44433000]	Aug [ 58405000]	Dec [ 46890000]	Units:
	WATER TYPE [SS ]	ANNUAL TOTAL [ 627360000]	Gallons
			1925.3 Acre-feet

Remarks: [LAKE PINKSTON/LAKE CENTER ALSO ]

Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2262

Outside conn: 200 Pop served: 6327 % Connections metered: 98.0

% Connections: RES 77 COMM 22 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560] \* \* YEAR [1984 ] SHELBY  
 CITY OF CENTER SOURCE COUNTY [210]  
 C/O DEPT. PUBLIC WORKS SOURCE BASIN [05]  
 P.O. BOX 311 AQUIFER -[ ]  
 NUMBER WELLS [ ]  
 CENTER, TEXAS 75935 RESERVOIR [05165]  
 STATUS = 0

Jan [ 3160000]	May [ 5862000]	Sep [ 5260000]	
Feb [ 5670000]	Jun [ 6252000]	Oct [ 5629000]	
Mar [ 5730000]	Jul [ 5621000]	Nov [ 4997000]	
Apr [ 5485000]	Aug [ 6506000]	Dec [ 4387000]	
WATER TYPE [SS ]		ANNUAL TOTAL [ 64559000]	Units: Gallons 198.1 Acre-feet

Remarks: [LAKE CENTER/LAKE PINKSTON ALSO ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2262  
 Outside conn: 200 Pop served: 6327 % Connections metered: 98.0  
 % Connections: RES 77 COMM 22 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560] \* \* YEAR [1983 ] SHELBY  
 CITY OF CENTER SOURCE COUNTY [210]  
 C/O DEPT. PUBLIC WORKS SOURCE BASIN [06]  
 P.O. BOX 311 AQUIFER -[ ]  
 NUMBER WELLS [ ]  
 CENTER, TEXAS 75935 RESERVOIR [06110]  
 STATUS = 0

Jan [ 50145000]	May [ 52309000]	Sep [ 50110000]	
Feb [ 42332000]	Jun [ 50903000]	Oct [ 50010000]	
Mar [ 45905000]	Jul [ 51775000]	Nov [ 44327000]	
Apr [ 46619000]	Aug [ 54628000]	Dec [ 51125000]	
WATER TYPE [SS ]		ANNUAL TOTAL [ 590188000]	Units: Gallons 1811.2 Acre-feet

Remarks: [LAKE PINKSTON/LAKE CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2830  
 Outside conn: 196 Pop served: 7575 % Connections metered: 100  
 % Connections: RES 80 COMM 19 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560] \* \* YEAR [1983 ] SHELBY  
 CITY OF CENTER SOURCE COUNTY [210]  
 C/O DEPT. PUBLIC WORKS SOURCE BASIN [05]  
 P.O. BOX 311 AQUIFER -[ ]  
 NUMBER WELLS [ ]  
 CENTER, TEXAS 75935 RESERVOIR [05165]  
 STATUS = 0

Jan [ 4617000]	May [ 813000]	Sep [ ]	
Feb [ 4540000]	Jun [ ]	Oct [ ]	
Mar [ 5781000]	Jul [ ]	Nov [ 2203000]	
Apr [ 3049000]	Aug [ ]	Dec [ 4257000]	
WATER TYPE [SS ]		ANNUAL TOTAL [ 25260000]	Units: Gallons 77.5 Acre-feet

Remarks: [LAKE CENTER/LAKE PINKSTON ALSO ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2830  
 Outside conn: 196 Pop served: 7575 % Connections metered: 100  
 % Connections: RES 80 COMM 19 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]		* * YEAR [1982 ]		SHELBY	
CITY OF CENTER				SOURCE COUNTY [210]	
C/O DEPT. PUBLIC WORKS				SOURCE BASIN [06]	
P.O. BOX 311				AQUIFER -[ ]	
CENTER, TEXAS		75935		NUMBER WELLS [ ]	
				RESERVOIR [06110]	
				STATUS = 0	

Jan [ 61084000]	May [ 56899000]	Sep [ 54705000]	
Feb [ 55349000]	Jun [ 61679000]	Oct [ 53575000]	
Mar [ 65983000]	Jul [ 58829000]	Nov [ 52420000]	
Apr [ 58878000]	Aug [ 61654000]	Dec [ 49007000]	
WATER TYPE [SS ]		ANNUAL TOTAL [ 690062000]	Units:
			Gallons
			2117.7 Acre-feet

Remarks: [LAKE PINKSTON/LAKE CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2830  
 Outside conn: 196 Pop served: 7575 % Connections metered: 100  
 % Connections: RES 80 COMM 19 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]		* * YEAR [1982 ]		SHELBY	
CITY OF CENTER				SOURCE COUNTY [210]	
C/O DEPT. PUBLIC WORKS				SOURCE BASIN [05]	
P.O. BOX 311				AQUIFER -[ ]	
CENTER, TEXAS		75935		NUMBER WELLS [ ]	
				RESERVOIR [05165]	
				STATUS = 0	

Jan [ 6022000]	May [ 5241000]	Sep [ 4980000]	
Feb [ 4173000]	Jun [ 5594000]	Oct [ 4921000]	
Mar [ 6747000]	Jul [ 5087000]	Nov [ 3870000]	
Apr [ 5047000]	Aug [ 5139000]	Dec [ 3033000]	
WATER TYPE [SS ]		ANNUAL TOTAL [ 59854000]	Units:
			Gallons
			183.7 Acre-feet

Remarks: [LAKE CENTER/LAKE PINKSTON ALSO ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2830  
 Outside conn: 196 Pop served: 7575 % Connections metered: 100  
 % Connections: RES 80 COMM 19 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]		* * YEAR [1981 ]		SHELBY	
CITY OF CENTER				SOURCE COUNTY [210]	
C/O DEPT. PUBLIC WORKS				SOURCE BASIN [06]	
P.O. BOX 311				AQUIFER -[ ]	
CENTER, TEXAS		75935		NUMBER WELLS [ ]	
				RESERVOIR [06110]	
				STATUS = 0	

Jan [ 48311000]	May [ 45946000]	Sep [ 52836000]	
Feb [ 41334000]	Jun [ 50840000]	Oct [ 50765000]	
Mar [ 45775000]	Jul [ 57980000]	Nov [ 46693000]	
Apr [ 47571000]	Aug [ 56431000]	Dec [ 51940000]	
WATER TYPE [SS ]		ANNUAL TOTAL [ 596422000]	Units:
			Gallons
			1830.4 Acre-feet

Remarks: [LAKE PINKSTON/LAKE CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2186  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]		** YEAR [1981]		SHELBY	
CITY OF CENTER				SOURCE COUNTY [210]	
C/O DEPT. PUBLIC WORKS				SOURCE BASIN [05]	
P.O. BOX 311				AQUIFER -[ ]	
CENTER, TEXAS		75935		NUMBER WELLS [ ]	
				RESERVOIR [05165]	
				STATUS = 0	

Jan [ 7475000]	May [ 5353000]	Sep [ 6966000]	
Feb [ 7856000]	Jun [ 7273000]	Oct [ 7549000]	
Mar [ 7948000]	Jul [ 6997000]	Nov [ 7641000]	
Apr [ 8010000]	Aug [ 7856000]	Dec [ 6813000]	
WATER TYPE [SS ]		ANNUAL TOTAL [ 87737000]	Units:
			Gallons
			269.3 Acre-feet

Remarks: [LAKE CENTER/LAKE PINKSTON ALSO ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2186  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]		** YEAR [1980]		SHELBY	
CITY OF CENTER				SOURCE COUNTY [210]	
C/O DEPT. PUBLIC WORKS				SOURCE BASIN [06]	
P.O. BOX 311				AQUIFER -[ ]	
CENTER, TEXAS		75935		NUMBER WELLS [ ]	
				RESERVOIR [06110]	
				STATUS = 0	

Jan [ 56921000]	May [ 53532000]	Sep [ 54210000]	
Feb [ 58954000]	Jun [ 52178000]	Oct [ 50145000]	
Mar [ 52855000]	Jul [ 69118000]	Nov [ 60309000]	
Apr [ 53533000]	Aug [ 65730000]	Dec [ 51500000]	
WATER TYPE [SS ]		ANNUAL TOTAL [ 678985000]	Units:
			Gallons
			2083.7 Acre-feet

Remarks: [LAKE PINKSTON/LAKE CENTER ALSO ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2107  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]		** YEAR [1980]		SHELBY	
CITY OF CENTER				SOURCE COUNTY [210]	
C/O DEPT. PUBLIC WORKS				SOURCE BASIN [05]	
P.O. BOX 311				AQUIFER -[ ]	
CENTER, TEXAS		75935		NUMBER WELLS [ ]	
				RESERVOIR [05165]	
				STATUS = 0	

Jan [ 3510700]	May [ 5967300]	Sep [ 5967300]	
Feb [ 3508700]	Jun [ 5967300]	Oct [ 5967300]	
Mar [ 3510700]	Jul [ 5967300]	Nov [ 3510700]	
Apr [ 3510700]	Aug [ 5968300]	Dec [ 3510700]	
WATER TYPE [SS ]		ANNUAL TOTAL [ 56867000]	Units:
			Gallons
			174.5 Acre-feet

Remarks: [LAKE CENTER/LAKE PINKSTON ALSO ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2107  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]					SHELBY
		** YEAR [1979 ]			SOURCE COUNTY [210]
CITY OF CENTER					SOURCE BASIN [06]
C/O DEPT. PUBLIC WORKS					AQUIFER -[ ]
P.O. BOX 311					NUMBER WELLS [ ]
					RESERVOIR [06110]
CENTER, TEXAS		75935			STATUS = 0

Jan [ 66522500]	May [ 57442700]	Sep [ 54509800]			
Feb [ 53504600]	Jun [ 59728300]	Oct [ 60759500]			
Mar [ 60415800]	Jul [ 59674800]	Nov [ 55620000]			
Apr [ 51688800]	Aug [ 66460000]	Dec [ 57407000]			
	WATER TYPE [SS ]	ANNUAL TOTAL [ 703733800]			Units:
					Gallons
					2159.7 Acre-feet

Remarks: [LAKE PINKSTON/LAKE CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2209  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]					SHELBY
		** YEAR [1979 ]			SOURCE COUNTY [210]
CITY OF CENTER					SOURCE BASIN [05]
C/O DEPT. PUBLIC WORKS					AQUIFER -[ ]
P.O. BOX 311					NUMBER WELLS [ ]
					RESERVOIR [05165]
CENTER, TEXAS		75935			STATUS = 0

Jan [ 6633500]	May [ 6633500]	Sep [ 6419500]			
Feb [ 6943100]	Jun [ 6929300]	Oct [ 6633500]			
Mar [ 7254000]	Jul [ 7004000]	Nov [ 6419500]			
Apr [ 6419500]	Aug [ 7004100]	Dec [ 6393600]			
	WATER TYPE [SS ]	ANNUAL TOTAL [ 80687100]			Units:
					Gallons
					247.6 Acre-feet

Remarks: [LAKE CENTER/LAKE PINKSTON ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2209  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]					SHELBY
		** YEAR [1978 ]			SOURCE COUNTY [210]
CITY OF CENTER					SOURCE BASIN [06]
C/O DEPT. PUBLIC WORKS					AQUIFER -[ ]
P.O. BOX 311					NUMBER WELLS [ ]
					RESERVOIR [06110]
CENTER, TEXAS		75935			STATUS = 0

Jan [ 56518900]	May [ 52631500]	Sep [ 56958800]			
Feb [ 54521400]	Jun [ 57147700]	Oct [ 56258200]			
Mar [ 57151000]	Jul [ 57981900]	Nov [ 49969300]			
Apr [ 49529400]	Aug [ 58601000]	Dec [ 54312800]			
	WATER TYPE [SS ]	ANNUAL TOTAL [ 661581900]			Units:
					Gallons
					2030.3 Acre-feet

Remarks: [LAKE PINKSTON/LAKE CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2146  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560] \* \* YEAR [1978 ] SHELBY  
 CITY OF CENTER SOURCE COUNTY [210]  
 C/O DEPT. PUBLIC WORKS SOURCE BASIN [05]  
 P.O. BOX 311 AQUIFER -[ ]  
 NUMBER WELLS [ ]  
 RESERVOIR [05165]  
 STATUS = 0

CENTER, TEXAS 75935

Jan [ 4835600]	May [ 4741100]	Sep [ 4314300]
Feb [ 4607500]	Jun [ 4936600]	Oct [ 4561900]
Mar [ 4692300]	Jul [ 4627100]	Nov [ 3610400]
Apr [ 3564800]	Aug [ 4428300]	Dec [ 2711100]
WATER TYPE [SS ]		ANNUAL TOTAL [ 51631000]

Units: Gallons  
158.4 Acre-feet

Remarks: [LAKE CENTER/LAKE PINKSTON ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2146  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560] \* \* YEAR [1977 ] SHELBY  
 CITY OF CENTER SOURCE COUNTY [210]  
 C/O DEPT. PUBLIC WORKS SOURCE BASIN [06]  
 P.O. BOX 311 AQUIFER -[ ]  
 NUMBER WELLS [ ]  
 RESERVOIR [06110]  
 STATUS = 0

CENTER, TEXAS 75935

Jan [ 45032600]	May [ 52071000]	Sep [ 47672000]
Feb [ 48486600]	Jun [ 49431600]	Oct [ 49822600]
Mar [ 57512700]	Jul [ 50344000]	Nov [ 44706800]
Apr [ 42653900]	Aug [ 50604700]	Dec [ 44706800]
WATER TYPE [SS ]		ANNUAL TOTAL [ 583045300]

Units: Gallons  
1789.3 Acre-feet

Remarks: [LAKE PINKSTON/LAKE CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2300  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560] \* \* YEAR [1977 ] SHELBY  
 CITY OF CENTER SOURCE COUNTY [210]  
 C/O DEPT. PUBLIC WORKS SOURCE BASIN [05]  
 P.O. BOX 311 AQUIFER -[ ]  
 NUMBER WELLS [ ]  
 RESERVOIR [05165]  
 STATUS = 0

CENTER, TEXAS 75935

Jan [ ]	May [ ]	Sep [ 4366400]
Feb [ ]	Jun [ ]	Oct [ 3845000]
Mar [ ]	Jul [ 8993500]	Nov [ 4822600]
Apr [ ]	Aug [ 5050700]	Dec [ 4008000]
WATER TYPE [SS ]		ANNUAL TOTAL [ 31086200]

Units: Gallons  
95.4 Acre-feet

Remarks: [LAKE CENTER/LAKE PINKSTON ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2300  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]				SHELBY
	** YEAR [1976]			SOURCE COUNTY [210]
CITY OF CENTER				SOURCE BASIN [06]
C/O DEPT. PUBLIC WORKS				AQUIFER -[ ]
P.O. BOX 311				NUMBER WELLS [ ]
				RESERVOIR [06110]
CENTER, TEXAS	75935			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	46922500]	
Feb [ ]	Jun [ ]	Oct [ ]	56372200]	
Mar [ ]	Jul [ ]	Nov [ ]	36821200]	
Apr [ ]	Aug [ ]	Dec [ ]	38776300]	Units:
	WATER TYPE [SS]	ANNUAL TOTAL [ ]	178892200]	Gallons
			549.0	Acre-feet

Remarks: [LAKE PINKSTON/LAKE CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2120  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]				SHELBY
	** YEAR [1976]			SOURCE COUNTY [210]
CITY OF CENTER				SOURCE BASIN [05]
C/O DEPT. PUBLIC WORKS				AQUIFER -[ ]
P.O. BOX 311				NUMBER WELLS [ ]
				RESERVOIR [05165]
CENTER, TEXAS	75935			STATUS = 0

Jan [ ]	15640800]	May [ ]	30304100]	Sep [ ]	
Feb [ ]	23461300]	Jun [ ]	30304100]	Oct [ ]	
Mar [ ]	23461300]	Jul [ ]	29326600]	Nov [ ]	
Apr [ ]	29652400]	Aug [ ]	34540200]	Dec [ ]	
	WATER TYPE [SS]	ANNUAL TOTAL [ ]	216690800]	Units:	
			665.0	Gallons	Acre-feet

Remarks: [LAKE CENTER/LAKE PINKSTON ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2120  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560]				SHELBY
	** YEAR [1975]			SOURCE COUNTY [210]
CITY OF CENTER				SOURCE BASIN [05]
C/O DEPT. PUBLIC WORKS				AQUIFER -[ ]
P.O. BOX 311				NUMBER WELLS [ ]
				RESERVOIR [05165]
CENTER, TEXAS	75935			STATUS = 0

Jan [ ]	44716000]	May [ ]	42315000]	Sep [ ]	44961000]
Feb [ ]	37498000]	Jun [ ]	44220000]	Oct [ ]	45789000]
Mar [ ]	42105000]	Jul [ ]	47877000]	Nov [ ]	36611000]
Apr [ ]	39080000]	Aug [ ]	47393000]	Dec [ ]	42950000]
	WATER TYPE [SS]	ANNUAL TOTAL [ ]	515515000]	Units:	
			1582.1	Gallons	Acre-feet

Remarks: [FROM LAKE CENTER ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 4989  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560] \* \* YEAR [1974 ] SHELBY  
 CITY OF CENTER SOURCE COUNTY [210]  
 C/O DEPT. PUBLIC WORKS SOURCE BASIN [05]  
 P.O. BOX 311 AQUIFER -[ ]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [05165]  
 STATUS = 0

Jan [ 43394000]	May [ 45516000]	Sep [ 43661000]	
Feb [ 37616000]	Jun [ 46334000]	Oct [ 44271000]	
Mar [ 40100000]	Jul [ 52891000]	Nov [ 42910000]	
Apr [ 42088000]	Aug [ 48287000]	Dec [ 41783000]	
WATER TYPE [SS ] ANNUAL TOTAL [ 528851000]			Units: Gallons Acre-feet 1623.0

Remarks: [MILL CREEK-CITY LAKES ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 2105  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560] \* \* YEAR [1973 ] SHELBY  
 CITY OF CENTER SOURCE COUNTY [210]  
 C/O DEPT. PUBLIC WORKS SOURCE BASIN [05]  
 P.O. BOX 311 AQUIFER -[ ]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [05165]  
 STATUS = 0

Jan [ 39753822]	May [ 43012332]	Sep [ 42034779]	
Feb [ 39427971]	Jun [ 43012332]	Oct [ 41383077]	
Mar [ 42360630]	Jul [ 43989885]	Nov [ 40079673]	
Apr [ 41383077]	Aug [ 47248395]	Dec [ 41708928]	
WATER TYPE [SS ] ANNUAL TOTAL [ 505394901]			Units: Gallons Acre-feet 1551.0

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 1985  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560] \* \* YEAR [1972 ] SHELBY  
 CITY OF CENTER SOURCE COUNTY [210]  
 C/O DEPT. PUBLIC WORKS SOURCE BASIN [05]  
 P.O. BOX 311 AQUIFER -[ ]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [05165]  
 STATUS = 0

Jan [ 39753822]	May [ 42686481]	Sep [ 42360630]	
Feb [ 39753822]	Jun [ 42686481]	Oct [ 41383077]	
Mar [ 42686481]	Jul [ 44315736]	Nov [ 40079673]	
Apr [ 41708928]	Aug [ 47574246]	Dec [ 41708928]	
WATER TYPE [SS ] ANNUAL TOTAL [ 506698305]			Units: Gallons Acre-feet 1555.0

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 1980  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [143560] \* \* YEAR [1971] | SHELBY  
CITY OF CENTER SOURCE COUNTY [210]  
C/O DEPT. PUBLIC WORKS SOURCE BASIN [05]  
P.O. BOX 311 AQUIFER -[ ]  
NUMBER WELLS [ ]  
RESERVOIR [05165]  
STATUS = 0  
CENTER, TEXAS 75935  
Jan [ 39102120] May [ 38450418] Sep [ 37798716]  
Feb [ 34866057] Jun [ 44315736] Oct [ 37472865]  
Mar [ 38450418] Jul [ 46270842] Nov [ 34214355]  
Apr [ 39102120] Aug [ 41383077] Dec [ 30629994] Units:  
WATER TYPE [SS ] ANNUAL TOTAL [ 462056718] Gallons  
1418.0 Acre-feet  
Remarks: [MILL CREEK ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 2000  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1993] | SHELBY  
CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
ATTN: JOE WEST, PRES. SOURCE BASIN [06]  
RT. 6, BOX 862-A AQUIFER 10 -[ ]  
NUMBER WELLS [ ]  
RESERVOIR [06110]  
STATUS = 0  
CENTER, TEXAS 75935  
Jan [ ] May [ ] Sep [ ]  
Feb [ ] Jun [ ] Oct [ ]  
Mar [ ] Jul [ ] Nov [ ]  
Apr [ ] Aug [ ] Dec [ ] Units:  
WATER TYPE [PS ] ANNUAL TOTAL [ ] Gallons  
Acre-feet  
Remarks: [USED OWN WELLS ONLY 1993 ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 300  
Outside conn: Pop served: 1200 % Connections metered: 100  
% Connections: RES 98 COMM 2.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1993] | SHELBY  
CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
ATTN: JOE WEST, PRES. SOURCE BASIN [05]  
RT. 6, BOX 862-A AQUIFER 10 -[032]  
NUMBER WELLS [ 2]  
RESERVOIR [ ]  
STATUS = 0  
CENTER, TEXAS 75935  
Jan [ 2045300] May [ 3030600] Sep [ 3081500]  
Feb [ 1978600] Jun [ 3169000] Oct [ 3080700]  
Mar [ 2097500] Jul [ 3569700] Nov [ 2646400]  
Apr [ 2319700] Aug [ 4145000] Dec [ 3121700] Units:  
WATER TYPE [SG ] ANNUAL TOTAL [ 34285700] Gallons  
105.2 Acre-feet  
Remarks: [ ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 300  
Outside conn: Pop served: 1200 % Connections metered: 100  
% Connections: RES 98 COMM 2.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1992 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [06]  
 RT. 6, BOX 862-A AQUIFER 10 -[ ]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [06110]  
 STATUS = 0

Jan [ 130000]	May [ ]	Sep [ ]	
Feb [ 142000]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [PS ]			ANNUAL TOTAL [ 272000]

Units: Gallons  
Acre-feet .8

Remarks: [FROM CENTER/USED GW ALSO ]  
 Seller Code: [143560] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 300  
 Outside conn: Pop served: 1200 % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1992 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [05]  
 RT. 6, BOX 862-A AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 2]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 2249900]	May [ 3005400]	Sep [ 3229900]	
Feb [ 2043600]	Jun [ 3586400]	Oct [ 3637600]	
Mar [ 2493200]	Jul [ 3960500]	Nov [ 2157800]	
Apr [ 2723400]	Aug [ 3412700]	Dec [ 2332200]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 34832600]

Units: Gallons  
Acre-feet 106.9

Remarks: [USED SW ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 300  
 Outside conn: Pop served: 1200 % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1991 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [06]  
 RT. 6, BOX 862-A AQUIFER 10 -[ ]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [06110]  
 STATUS = 0

Jan [ 360100]	May [ 412600]	Sep [ 392600]	
Feb [ 344700]	Jun [ 408200]	Oct [ 386200]	
Mar [ 401200]	Jul [ 415700]	Nov [ 372100]	
Apr [ 397200]	Aug [ 411200]	Dec [ 388100]	
WATER TYPE [PS ]			ANNUAL TOTAL [ 4689900]

Units: Gallons  
Acre-feet 14.4

Remarks: [FROM CENTER/USED GW ALSO ]  
 Seller Code: [143560] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 300  
 Outside conn: Pop served: 1200 % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1991 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [05]  
 RT. 6, BOX 862-A AQUIFER 10 -[032]  
 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 CENTER, TEXAS 75935 STATUS = 0

Jan [ 1954600]	May [ 2173000]	Sep [ 2048900]
Feb [ 1973800]	Jun [ 2416200]	Oct [ 1996000]
Mar [ 2335300]	Jul [ 2612100]	Nov [ 1915500]
Apr [ 2036600]	Aug [ 2500800]	Dec [ 1897500]
WATER TYPE [SG ]		ANNUAL TOTAL [ 25860300]

Units: Gallons  
79.4 Acre-feet

Remarks: [USED SW ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 300  
 Outside conn: Pop served: 1200 % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1990 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [06]  
 RT. 6, BOX 862-A AQUIFER 10 -[ ]  
 NUMBER WELLS [ ]  
 RESERVOIR [06110]  
 CENTER, TEXAS 75935 STATUS = 0

Jan [ 410000]	May [ 390000]	Sep [ 510000]
Feb [ 450000]	Jun [ 510000]	Oct [ 490000]
Mar [ 400000]	Jul [ 500000]	Nov [ 480000]
Apr [ 400000]	Aug [ 500000]	Dec [ 498000]
WATER TYPE [PS ]		ANNUAL TOTAL [ 5546000]

Units: Gallons  
17.0 Acre-feet

Remarks: [FROM CENTER/USED GW ALSO ]  
 Seller Code: [143560] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 270  
 Outside conn: Pop served: 1600 % Connections metered: 100  
 % Connections: RES 95 COMM 5.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1990 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [05]  
 RT. 6, BOX 862-A AQUIFER 10 -[032]  
 NUMBER WELLS [ 3 ]  
 RESERVOIR [ ]  
 CENTER, TEXAS 75935 STATUS = 0

Jan [ 1800000]	May [ 2000000]	Sep [ 2001000]
Feb [ 1780000]	Jun [ 2100000]	Oct [ 2010000]
Mar [ 2000000]	Jul [ 2200000]	Nov [ 1980000]
Apr [ 2000000]	Aug [ 2000000]	Dec [ 2000000]
WATER TYPE [SG ]		ANNUAL TOTAL [ 23871000]

Units: Gallons  
73.3 Acre-feet

Remarks: [USED SW ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 270  
 Outside conn: Pop served: 1600 % Connections metered: 100  
 % Connections: RES 95 COMM 5.0 IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1989 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [06]  
 RT. 6, BOX 862-A AQUIFER 10 -[ ]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [06110]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [PS ]			ANNUAL TOTAL [ 9775500 ]

Units:  
Gallons  
30.0 Acre-feet

Remarks: [FROM CENTER/USED GW ALSO ]  
 Seller Code: [143560] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 287  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1989 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [05]  
 RT. 6, BOX 862-A AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 5]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 34710700 ]

Units:  
Gallons  
106.5 Acre-feet

Remarks: [EST BY TWDB/USED SW ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 287  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1988 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [06]  
 RT. 6, BOX 862-A AQUIFER 10 -[ ]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [06110]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [PS ]			ANNUAL TOTAL [ 7494600 ]

Units:  
Gallons  
23.0 Acre-feet

Remarks: [FROM CENTER/OWN GW ALSO ]  
 Seller Code: [143560] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 246  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000]			SHELBY
	** YEAR [1988]		SOURCE COUNTY [210]
CHOICE WATER SUPPLY CORP.			SOURCE BASIN [05]
ATTN: JOE WEST, PRES.			AQUIFER 10 -[032]
RT. 6, BOX 862-A			NUMBER WELLS [ ]
			RESERVOIR [ ]
CENTER, TEXAS	75935		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG]			ANNUAL TOTAL [ 29888800]
			91.7

Units:  
Gallons  
Acre-feet

Remarks: [SW FROM CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 246  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000]			SHELBY
	** YEAR [1987]		SOURCE COUNTY [210]
CHOICE WATER SUPPLY CORP.			SOURCE BASIN [06]
ATTN: JOE WEST, PRES.			AQUIFER 10 -[ ]
RT. 6, BOX 862-A			NUMBER WELLS [ ]
			RESERVOIR [06110]
CENTER, TEXAS	75935		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [PS]			ANNUAL TOTAL [ 4752300]
			14.6

Units:  
Gallons  
Acre-feet

Remarks: [FROM CENTER SALES/WELLS ALSO ]  
 Seller Code: [143560] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 245  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000]			SHELBY
	** YEAR [1987]		SOURCE COUNTY [210]
CHOICE WATER SUPPLY CORP.			SOURCE BASIN [05]
ATTN: JOE WEST, PRES.			AQUIFER 10 -[032]
RT. 6, BOX 862-A			NUMBER WELLS [ 5]
			RESERVOIR [ ]
CENTER, TEXAS	75935		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG]			ANNUAL TOTAL [ 34438635]
			105.7

Units:  
Gallons  
Acre-feet

Remarks: [SW FROM CENTER ALSO-EST BT TWDB ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 245  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1986 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [06]  
 RT. 6, BOX 862-A AQUIFER 10 -[ ]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [06110]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [PS ]			ANNUAL TOTAL [ 9879900] Units: 30.3 Gallons Acre-feet

Remarks: [FROM CENTER/OWN GW ALSO ]  
 Seller Code: [143560] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 136  
 Outside conn: 12 Pop served: 396 % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1986 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [05]  
 RT. 6, BOX 862-A AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 1]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 539000]	May [ 938000]	Sep [ 1266000]	
Feb [ 614000]	Jun [ 804000]	Oct [ 847000]	
Mar [ 787000]	Jul [ 1718000]	Nov [ 600000]	
Apr [ 1282000]	Aug [ 1914000]	Dec [ 566000]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 11875000] Units: 36.4 Gallons Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ 1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 136  
 Outside conn: 12 Pop served: 396 % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1985 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [06]  
 RT. 6, BOX 862-A AQUIFER 10 -[ ]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [06110]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [PS ]			ANNUAL TOTAL [ 6642700] Units: 20.4 Gallons Acre-feet

Remarks: [FROM CITY OF CENTER SALES/WELLS ]  
 Seller Code: [143560] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 205  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1985 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [05]  
 RT. 6, BOX 862-A AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 5]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 1732700 ]	May [ 1780000 ]	Sep [ 1600000 ]	
Feb [ 1342100 ]	Jun [ 1694000 ]	Oct [ 1551200 ]	
Mar [ 1445000 ]	Jul [ 1871100 ]	Nov [ 1441300 ]	
Apr [ 1210600 ]	Aug [ 1880200 ]	Dec [ 1666300 ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 19214500 ]

Units: Gallons  
59.0 Acre-feet

Remarks: [SW FROM CITY OF CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 205  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1984 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [06]  
 RT. 6, BOX 862-A AQUIFER 10 -[ ]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [06110]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [PS ]			ANNUAL TOTAL [ 553800 ]

Units: Gallons  
1.7 Acre-feet

Remarks: [FROM CITY OF CENTER SALES/WELLS ]  
 Seller Code: [143560] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 600  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1984 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [05]  
 RT. 6, BOX 862-A AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 5]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 40075200 ]

Units: Gallons  
123.0 Acre-feet

Remarks: [EST TWDB/SW FROM CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 600  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000]		** YEAR [1983]		SHELBY	
CHOICE WATER SUPPLY CORP.				SOURCE COUNTY [210]	
ATTN: JOE WEST, PRES.				SOURCE BASIN [05]	
RT. 6, BOX 862-A				AQUIFER 10-[032]	
				NUMBER WELLS [ 5]	
				RESERVOIR [ ]	
CENTER, TEXAS		75935		STATUS = 0	

Jan [ ]	May [ ]	Sep [ ]	Units: Gallons Acre-feet
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ] ANNUAL TOTAL [ 12311800]			

Remarks: [EST BY TDWR ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 200

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000]		** YEAR [1982]		SHELBY	
CHOICE WATER SUPPLY CORP.				SOURCE COUNTY [210]	
ATTN: JOE WEST, PRES.				SOURCE BASIN [05]	
RT. 6, BOX 862-A				AQUIFER 10-[032]	
				NUMBER WELLS [ ]	
				RESERVOIR [ ]	
CENTER, TEXAS		75935		STATUS = 0	

Jan [ ]	May [ ]	Sep [ ]	Units: Gallons Acre-feet
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ] ANNUAL TOTAL [ 12571200]			

Remarks: [EST BY TDWR ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 194

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000]		** YEAR [1981]		SHELBY	
CHOICE WATER SUPPLY CORP.				SOURCE COUNTY [210]	
ATTN: JOE WEST, PRES.				SOURCE BASIN [05]	
RT. 6, BOX 862-A				AQUIFER 10-[032]	
				NUMBER WELLS [ 5]	
				RESERVOIR [ ]	
CENTER, TEXAS		75935		STATUS = 0	

Jan [ ]	May [ ]	Sep [ ]	Units: Gallons Acre-feet
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ] ANNUAL TOTAL [ 11908440]			

Remarks: [EST BY TDWR ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 190

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

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TWDB CODE:  [152000]                      SHELBY
                                         SOURCE COUNTY [210]
          ** YEAR [1980 ]                 SOURCE BASIN [05]
CHOICE WATER SUPPLY CORP.               AQUIFER 10 -[032]
ATTN: JOE WEST, PRES.                  NUMBER WELLS [ ]
RT. 6, BOX 862-A                       RESERVOIR [ ]
                                         STATUS = 0

CENTER, TEXAS                          75935

Jan [      ] May [      ] Sep [      ]
Feb [      ] Jun [      ] Oct [      ]
Mar [      ] Jul [      ] Nov [      ]
Apr [      ] Aug [      ] Dec [      ]
      WATER TYPE [SG ] ANNUAL TOTAL [ 11931900 ] Units:
                                         Gallons
                                         36.6 Acre-feet

Remarks: [EST BY TDWR ]
Seller Code: [      ] Metered/Est: [ ] Activity Code: [ ]
If purchased, % RAW =[      ], % TREATED =[ ]; Connections: 190
Outside conn:      Pop served:      % Connections metered:
% Connections: RES    COMM    IND    ; EFFLUENT(gal)
    
```

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

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TWDB CODE:  [152000]                      SHELBY
                                         SOURCE COUNTY [210]
          ** YEAR [1979 ]                 SOURCE BASIN [05]
CHOICE WATER SUPPLY CORP.               AQUIFER 10 -[032]
ATTN: JOE WEST, PRES.                  NUMBER WELLS [ ]
RT. 6, BOX 862-A                       RESERVOIR [ ]
                                         STATUS = 0

CENTER, TEXAS                          75935

Jan [      ] May [      ] Sep [      ]
Feb [      ] Jun [      ] Oct [      ]
Mar [      ] Jul [      ] Nov [      ]
Apr [      ] Aug [      ] Dec [      ]
      WATER TYPE [SG ] ANNUAL TOTAL [      ] Units:
                                         Gallons
                                         .0 Acre-feet

Remarks: [NO REPORT ]
Seller Code: [      ] Metered/Est: [ ] Activity Code: [ ]
If purchased, % RAW =[      ], % TREATED =[ ]; Connections:
Outside conn:      Pop served:      % Connections metered:
% Connections: RES    COMM    IND    ; EFFLUENT(gal)
    
```

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

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TWDB CODE:  [152000]                      SHELBY
                                         SOURCE COUNTY [210]
          ** YEAR [1978 ]                 SOURCE BASIN [05]
CHOICE WATER SUPPLY CORP.               AQUIFER 10 -[032]
ATTN: JOE WEST, PRES.                  NUMBER WELLS [ ]
RT. 6, BOX 862-A                       RESERVOIR [ ]
                                         STATUS = 0

CENTER, TEXAS                          75935

Jan [      ] May [      ] Sep [      ]
Feb [      ] Jun [      ] Oct [      ]
Mar [      ] Jul [      ] Nov [      ]
Apr [      ] Aug [      ] Dec [      ]
      WATER TYPE [SG ] ANNUAL TOTAL [      ] Units:
                                         Gallons
                                         .0 Acre-feet

Remarks: [NO REPORT ]
Seller Code: [      ] Metered/Est: [ ] Activity Code: [ ]
If purchased, % RAW =[      ], % TREATED =[ ]; Connections:
Outside conn:      Pop served:      % Connections metered:
% Connections: RES    COMM    IND    ; EFFLUENT(gal)
    
```

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000]					SHELBY
		** YEAR [1977]			SOURCE COUNTY [210]
CHOICE WATER SUPPLY CORP.					SOURCE BASIN [05]
ATTN: JOE WEST, PRES.					AQUIFER 10 -[032]
RT. 6, BOX 862-A					NUMBER WELLS [ ]
					RESERVOIR [ ]
CENTER, TEXAS		75935			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG]	ANNUAL TOTAL [ ]		Units:
				Gallons
				.0 Acre-feet

Remarks: [NO REPORT ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000]					SHELBY
		** YEAR [1976]			SOURCE COUNTY [210]
CHOICE WATER SUPPLY CORP.					SOURCE BASIN [05]
ATTN: JOE WEST, PRES.					AQUIFER 10 -[032]
RT. 6, BOX 862-A					NUMBER WELLS [ ]
					RESERVOIR [ ]
CENTER, TEXAS		75935			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG]	ANNUAL TOTAL [ ]		Units:
				Gallons
				.0 Acre-feet

Remarks: [NO REPORT ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000]					SHELBY
		** YEAR [1975]			SOURCE COUNTY [210]
CHOICE WATER SUPPLY CORP.					SOURCE BASIN [05]
ATTN: JOE WEST, PRES.					AQUIFER 10 -[032]
RT. 6, BOX 862-A					NUMBER WELLS [ 1]
					RESERVOIR [ ]
CENTER, TEXAS		75935			STATUS = 0

Jan [ 477600]	May [ 478100]	Sep [ 490700]		
Feb [ 464100]	Jun [ 510000]	Oct [ 480900]		
Mar [ 479300]	Jul [ 480100]	Nov [ 460100]		
Apr [ 460400]	Aug [ 485300]	Dec [ 475100]		
	WATER TYPE [SG]	ANNUAL TOTAL [ 5741700]		Units:
				Gallons
				17.6 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 96

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1974] | SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [05]  
 RT. 6, BOX 862-A AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 461000]	May [ 683200]	Sep [ 642000]	
Feb [ 510000]	Jun [ 691400]	Oct [ 614500]	
Mar [ 730000]	Jul [ 714300]	Nov [ 587600]	
Apr [ 112300]	Aug [ 713200]	Dec [ 514600]	
WATER TYPE [SG ] ANNUAL TOTAL [			6974100] Units:
			21.4 Gallons Acre-foot

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 94  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1973] | SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [05]  
 RT. 6, BOX 862-A AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 402000]	May [ 622000]	Sep [ 662000]	
Feb [ 461000]	Jun [ 670000]	Oct [ 610000]	
Mar [ 710000]	Jul [ 691000]	Nov [ 589000]	
Apr [ 620000]	Aug [ 701000]	Dec [ 502000]	
WATER TYPE [SG ] ANNUAL TOTAL [			7240000] Units:
			22.2 Gallons Acre-foot

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 93  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1972] | SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [05]  
 RT. 6, BOX 862-A AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 473000]	May [ 632200]	Sep [ 672000]	
Feb [ 501000]	Jun [ 680700]	Oct [ 510000]	
Mar [ 616000]	Jul [ 689000]	Nov [ 521000]	
Apr [ 633000]	Aug [ 719900]	Dec [ 483000]	
WATER TYPE [SG ] ANNUAL TOTAL [			7130800] Units:
			21.9 Gallons Acre-foot

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 90  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1971 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [05]  
 RT. 6, BOX 862-A AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 623600 ]	May [ 714300 ]	Sep [ 715200 ]	
Feb [ 686600 ]	Jun [ 726300 ]	Oct [ 710300 ]	
Mar [ 689500 ]	Jul [ 731100 ]	Nov [ 701200 ]	
Apr [ 700600 ]	Aug [ 727500 ]	Dec [ 633100 ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 8359300 ]

Units:  
 Gallons  
 25.7 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 75  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1970 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [05]  
 RT. 6, BOX 862-A AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 3360000 ]

Units:  
 Gallons  
 10.3 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections:  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1969 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [05]  
 RT. 6, BOX 862-A AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 2340000 ]

Units:  
 Gallons  
 7.2 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 70  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1968 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [05]  
 RT. 6, BOX 862-A AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 1]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ] ANNUAL TOTAL [ 1960000]			Units: Gallons
			6.0 Acre-feet

Remarks: [ OPERATION BEGAN 6-68 ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 70  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [152000] \* \* YEAR [1967 ] SHELBY  
 CHOICE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOE WEST, PRES. SOURCE BASIN [05]  
 RT. 6, BOX 862-A AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ] ANNUAL TOTAL [ ]			Units: Gallons
			.0 Acre-feet

Remarks: [ NOT IN OPERATION IN 1967 ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections:  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000] \* \* YEAR [1993 ] SHELBY  
 EAST LAMAR WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O J.C. WATLINGTON, SEC. SOURCE BASIN [05]  
 P. O. BOX 16 AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 2324600]	May [ 2802400]	Sep [ 5760700]	
Feb [ 2134100]	Jun [ 3961800]	Oct [ 4451500]	
Mar [ 1839000]	Jul [ 11927100]	Nov [ 4337900]	
Apr [ 2235000]	Aug [ 6943100]	Dec [ 3238900]	
WATER TYPE [SG ] ANNUAL TOTAL [ 51956100]			Units: Gallons
			159.4 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 249  
 Outside conn: Pop served: % Connections metered: 100  
 % Connections: RES 97 COMM 2.0 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]		* * YEAR [1992 ]		SHELBY	
EAST LAMAR WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O J.C. WATLINGTON, SEC.				SOURCE BASIN [05]	
P. O. BOX 16				AQUIFER 10 - [032]	
				NUMBER WELLS [ 2 ]	
CENTER, TEXAS		75935		RESERVOIR [ ]	
				STATUS = 0	

Jan [ 686000]	May [ 941400]	Sep [ 1241600]	
Feb [ 863000]	Jun [ 944700]	Oct [ 1089600]	
Mar [ 680200]	Jul [ 1216900]	Nov [ 1018200]	
Apr [ 861300]	Aug [ 1115700]	Dec [ 1159200]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 11817800]	Units: Gallons
		36.3	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 249

Outside conn: Pop served: % Connections metered: 100

% Connections: RES 97 COMM 2.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]		* * YEAR [1991 ]		SHELBY	
EAST LAMAR WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O J.C. WATLINGTON, SEC.				SOURCE BASIN [05]	
P. O. BOX 16				AQUIFER 10 - [032]	
				NUMBER WELLS [ 2 ]	
CENTER, TEXAS		75935		RESERVOIR [ ]	
				STATUS = 0	

Jan [ 1879200]	May [ 1835800]	Sep [ 2048800]	
Feb [ 1764100]	Jun [ 2179900]	Oct [ 2377500]	
Mar [ 1467600]	Jul [ 2578200]	Nov [ 1728700]	
Apr [ 1758100]	Aug [ 2575900]	Dec [ 2205000]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 24398800]	Units: Gallons
		74.9	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 248

Outside conn: Pop served: % Connections metered: 100

% Connections: RES 94 COMM 5.0 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]		* * YEAR [1990 ]		SHELBY	
EAST LAMAR WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O J.C. WATLINGTON, SEC.				SOURCE BASIN [05]	
P. O. BOX 16				AQUIFER 10 - [032]	
				NUMBER WELLS [ 2 ]	
CENTER, TEXAS		75935		RESERVOIR [ ]	
				STATUS = 0	

Jan [ 2375500]	May [ 1865600]	Sep [ 2879600]	
Feb [ 2108000]	Jun [ 2234200]	Oct [ 2111600]	
Mar [ 1838900]	Jul [ 3205100]	Nov [ 1932700]	
Apr [ 1728000]	Aug [ 2437200]	Dec [ 1715800]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 26432200]	Units: Gallons
		81.1	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 248

Outside conn: Pop served: % Connections metered: 100

% Connections: RES 96 COMM 4.0 IND ; EFFLUENT(gal)

==== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]		* * YEAR [1989 ]		SHELBY
EAST LAMAR WATER SUPPLY CORP.				SOURCE COUNTY [210]
C/O J.C. WATLINGTON, SEC.				SOURCE BASIN [05]
P. O. BOX 16				AQUIFER 10 - [032]
				NUMBER WELLS [240]
				RESERVOIR [ ]
CENTER, TEXAS	75935			STATUS = 0

Jan [ 1715600]	May [ 2036200]	Sep [ 2367200]	Units:
Feb [ 2087100]	Jun [ 2236700]	Oct [ 1995000]	Gallons
Mar [ 1596400]	Jul [ 2167900]	Nov [ 1881100]	
Apr [ 1940100]	Aug [ 2141500]	Dec [ 1940800]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 24105600]	74.0 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 244  
 Outside conn: Pop served: % Connections metered: 100  
 % Connections: RES 98 COMM 2.0 IND ; EFFLUENT(gal)

==== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]		* * YEAR [1988 ]		SHELBY
EAST LAMAR WATER SUPPLY CORP.				SOURCE COUNTY [210]
C/O J.C. WATLINGTON, SEC.				SOURCE BASIN [05]
P. O. BOX 16				AQUIFER 10 - [032]
				NUMBER WELLS [ 2]
				RESERVOIR [ ]
CENTER, TEXAS	75935			STATUS = 0

Jan [ 2607100]	May [ 2413600]	Sep [ 2572200]	Units:
Feb [ 1996100]	Jun [ 4043000]	Oct [ 1919600]	Gallons
Mar [ 2072400]	Jul [ 2564100]	Nov [ 935500]	
Apr [ 2446900]	Aug [ 3199500]	Dec [ 1255100]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 28025100]	86.0 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 248  
 Outside conn: Pop served: % Connections metered: 100  
 % Connections: RES 94 COMM 6.0 IND ; EFFLUENT(gal)

==== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]		* * YEAR [1987 ]		SHELBY
EAST LAMAR WATER SUPPLY CORP.				SOURCE COUNTY [210]
C/O J.C. WATLINGTON, SEC.				SOURCE BASIN [05]
P. O. BOX 16				AQUIFER 10 - [032]
				NUMBER WELLS [ 2]
				RESERVOIR [ ]
CENTER, TEXAS	75935			STATUS = 0

Jan [ 1959400]	May [ 2746400]	Sep [ 2800800]	Units:
Feb [ 1840500]	Jun [ 2691400]	Oct [ 2336800]	Gallons
Mar [ 1720200]	Jul [ 2277600]	Nov [ 1824400]	
Apr [ 2139500]	Aug [ 3795000]	Dec [ 2591800]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 28723800]	88.2 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 250  
 Outside conn: Pop served: % Connections metered: 100  
 % Connections: RES 98 COMM 2.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]		* * YEAR [1986]		SHELBY	
EAST LAMAR WATER SUPPLY CORP. C/O J.C. WATLINGTON, SEC. P. O. BOX 16				SOURCE COUNTY [210] SOURCE BASIN [05] AQUIFER 10 - [032] NUMBER WELLS [ 2] RESERVOIR [ ] STATUS = 0	
CENTER, TEXAS		75935			

Jan [ 1773500]	May [ 1967800]	Sep [ 2029100]	
Feb [ 1743200]	Jun [ 2716700]	Oct [ 2188700]	
Mar [ 1722500]	Jul [ 2173700]	Nov [ 1637300]	
Apr [ 2129300]	Aug [ 2558000]	Dec [ 1595800]	
WATER TYPE [SG]		ANNUAL TOTAL [ 24235600]	
		Units: 74.4	
		Gallons	
		Acre-feet	

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 245

Outside conn: Pop served: % Connections metered:

% Connections: RES 300 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]		* * YEAR [1985]		SHELBY	
EAST LAMAR WATER SUPPLY CORP. C/O J.C. WATLINGTON, SEC. P. O. BOX 16				SOURCE COUNTY [210] SOURCE BASIN [05] AQUIFER 10 - [032] NUMBER WELLS [ 2] RESERVOIR [ ] STATUS = 0	
CENTER, TEXAS		75935			

Jan [ 1915200]	May [ 1747800]	Sep [ 2282000]	
Feb [ 1664500]	Jun [ 2248400]	Oct [ 1950600]	
Mar [ 1484800]	Jul [ 2557800]	Nov [ 2035400]	
Apr [ 1806800]	Aug [ 3089300]	Dec [ 1987800]	
WATER TYPE [SG]		ANNUAL TOTAL [ 24770400]	
		Units: 76.0	
		Gallons	
		Acre-feet	

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 238

Outside conn: 208 Pop served: % Connections metered: 100

% Connections: RES 95 COMM 5.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]		* * YEAR [1984]		SHELBY	
EAST LAMAR WATER SUPPLY CORP. C/O J.C. WATLINGTON, SEC. P. O. BOX 16				SOURCE COUNTY [210] SOURCE BASIN [05] AQUIFER 10 - [032] NUMBER WELLS [ 2] RESERVOIR [ ] STATUS = 0	
CENTER, TEXAS		75935			

Jan [ 1968900]	May [ 1403900]	Sep [ 2063000]	
Feb [ 2448700]	Jun [ 2412800]	Oct [ 1343900]	
Mar [ 1849600]	Jul [ 2290400]	Nov [ 1603100]	
Apr [ 1532700]	Aug [ 3018300]	Dec [ 1709700]	
WATER TYPE [SG]		ANNUAL TOTAL [ 23645000]	
		Units: 72.6	
		Gallons	
		Acre-feet	

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 243

Outside conn: Pop served: % Connections metered: 100

% Connections: RES 94 COMM 6.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]

EAST LAMAR WATER SUPPLY CORP.  
C/O J.C. WATLINGTON, SEC.  
P. O. BOX 16

CENTER, TEXAS

\*\* YEAR [1983 ]

SHELBY  
SOURCE COUNTY [210]  
SOURCE BASIN [05]  
AQUIFER 10 - [032]  
NUMBER WELLS [ 2]  
RESERVOIR [ ]  
STATUS = 0

75935

Jan [ 1639800]	May [ 1596900]	Sep [ 1788000]	Units:
Feb [ 1605900]	Jun [ 1633200]	Oct [ 1514500]	Gallons
Mar [ 1395400]	Jul [ 1678400]	Nov [ 1617300]	Acre-feet
Apr [ 1528500]	Aug [ 1883100]	Dec [ 1613500]	
WATER TYPE [SG ] ANNUAL TOTAL [ 19494500]			59.8

Remarks: [ ]  
Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
If purchased, % RAW = [ ] , % TREATED = [ ] ; Connections: 231  
Outside conn: Pop served: % Connections metered: 100  
% Connections: RES 99 COMM 1.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]

EAST LAMAR WATER SUPPLY CORP.  
C/O J.C. WATLINGTON, SEC.  
P. O. BOX 16

CENTER, TEXAS

\*\* YEAR [1982 ]

SHELBY  
SOURCE COUNTY [210]  
SOURCE BASIN [05]  
AQUIFER 10 - [032]  
NUMBER WELLS [ 2]  
RESERVOIR [ ]  
STATUS = 0

75935

Jan [ 1770800]	May [ 1550300]	Sep [ 2705100]	Units:
Feb [ 1599800]	Jun [ 2307600]	Oct [ 1713400]	Gallons
Mar [ 1513800]	Jul [ 2152800]	Nov [ 1708700]	Acre-feet
Apr [ 1630200]	Aug [ 2182700]	Dec [ 1492500]	
WATER TYPE [SG ] ANNUAL TOTAL [ 22327700]			68.5

Remarks: [ ]  
Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
If purchased, % RAW = [ ] , % TREATED = [ ] ; Connections: 220  
Outside conn: Pop served: % Connections metered: 100  
% Connections: RES 98 COMM 2.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]

EAST LAMAR WATER SUPPLY CORP.  
C/O J.C. WATLINGTON, SEC.  
P. O. BOX 16

CENTER, TEXAS

\*\* YEAR [1981 ]

SHELBY  
SOURCE COUNTY [210]  
SOURCE BASIN [05]  
AQUIFER 10 - [032]  
NUMBER WELLS [ 2]  
RESERVOIR [ ]  
STATUS = 0

75935

Jan [ 1168800]	May [ 772000]	Sep [ 1831500]	Units:
Feb [ 1091400]	Jun [ 1574200]	Oct [ 1636800]	Gallons
Mar [ 1081500]	Jul [ 1953500]	Nov [ 1478600]	Acre-feet
Apr [ 1088900]	Aug [ 2573300]	Dec [ 1875700]	
WATER TYPE [SG ] ANNUAL TOTAL [ 18126200]			55.6

Remarks: [ ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW = [ ] , % TREATED = [ ] ; Connections: 216  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000] \* \* YEAR [1980 ] SHELBY  
 EAST LAMAR WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O J.C. WATLINGTON, SEC. SOURCE BASIN [05]  
 P. O. BOX 16 AQUIFER 10 -[032]  
 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 CENTER, TEXAS 75935 STATUS = 0

Jan [ 923730 ]	May [ 979465 ]	Sep [ 1618000 ]	
Feb [ 875390 ]	Jun [ 1702250 ]	Oct [ 1319800 ]	
Mar [ 801990 ]	Jul [ 1962920 ]	Nov [ 1279900 ]	
Apr [ 1057460 ]	Aug [ 1488700 ]	Dec [ 1118400 ]	
WATER TYPE [SG ] ANNUAL TOTAL [ 15128005 ]			Units: Gallons 46.4 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 173  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000] \* \* YEAR [1979 ] SHELBY  
 EAST LAMAR WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O J.C. WATLINGTON, SEC. SOURCE BASIN [05]  
 P. O. BOX 16 AQUIFER 10 -[032]  
 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 CENTER, TEXAS 75935 STATUS = 0

Jan [ 1051900 ]	May [ 1191830 ]	Sep [ 955220 ]	
Feb [ 1136150 ]	Jun [ 1062300 ]	Oct [ 1598710 ]	
Mar [ 1200000 ]	Jul [ 1360140 ]	Nov [ 1995420 ]	
Apr [ 1230620 ]	Aug [ 1324200 ]	Dec [ 857300 ]	
WATER TYPE [SG ] ANNUAL TOTAL [ 14963790 ]			Units: Gallons 45.9 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 160  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000] \* \* YEAR [1978 ] SHELBY  
 EAST LAMAR WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O J.C. WATLINGTON, SEC. SOURCE BASIN [05]  
 P. O. BOX 16 AQUIFER 10 -[032]  
 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 CENTER, TEXAS 75935 STATUS = 0

Jan [ 1120410 ]	May [ 1404430 ]	Sep [ 1382160 ]	
Feb [ 1168370 ]	Jun [ 1448230 ]	Oct [ 1184610 ]	
Mar [ 1193780 ]	Jul [ 2031490 ]	Nov [ 1106060 ]	
Apr [ 1228530 ]	Aug [ 1637130 ]	Dec [ 1051900 ]	
WATER TYPE [SG ] ANNUAL TOTAL [ 15957100 ]			Units: Gallons 49.0 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 156  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]		* * YEAR [1977 ]		SHELBY	
EAST LAMAR WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O J.C. WATLINGTON, SEC.				SOURCE BASIN [05]	
P. O. BOX 16				AQUIFER 10 -[032]	
				NUMBER WELLS [ 1]	
CENTER, TEXAS		75935		RESERVOIR [ ]	
				STATUS = 0	

Jan [ 1054240]	May [ 1178180]	Sep [ 1186490]	
Feb [ 1003370]	Jun [ 1378360]	Oct [ 1094720]	
Mar [ 787460]	Jul [ 1728770]	Nov [ 1200200]	
Apr [ 928850]	Aug [ 1505710]	Dec [ 885980]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 13932330]	Units: Gallons
			42.8 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 145

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]		* * YEAR [1976 ]		SHELBY	
EAST LAMAR WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O J.C. WATLINGTON, SEC.				SOURCE BASIN [05]	
P. O. BOX 16				AQUIFER 10 -[032]	
				NUMBER WELLS [ 1]	
CENTER, TEXAS		75935		RESERVOIR [ ]	
				STATUS = 0	

Jan [ 1089290]	May [ 772290]	Sep [ 1060130]	
Feb [ 938490]	Jun [ 1080980]	Oct [ 1009210]	
Mar [ 827350]	Jul [ 1015990]	Nov [ 857710]	
Apr [ 994700]	Aug [ 1416640]	Dec [ 803250]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 11866030]	Units: Gallons
			36.4 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 132

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]		* * YEAR [1975 ]		SHELBY	
EAST LAMAR WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O J.C. WATLINGTON, SEC.				SOURCE BASIN [05]	
P. O. BOX 16				AQUIFER 10 -[032]	
				NUMBER WELLS [ 1]	
CENTER, TEXAS		75935		RESERVOIR [ ]	
				STATUS = 0	

Jan [ 1012210]	May [ 931360]	Sep [ 979000]	
Feb [ 815300]	Jun [ 772120]	Oct [ 1007410]	
Mar [ 827700]	Jul [ 1209540]	Nov [ 963940]	
Apr [ 791500]	Aug [ 1095480]	Dec [ 863360]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 11268920]	Units: Gallons
			34.6 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 124

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]			SHELBY		
EAST LAMAR WATER SUPPLY CORP. C/O J.C. WATLINGTON, SEC. P. O. BOX 16			** YEAR [1974 ]	SOURCE COUNTY [210]	SOURCE BASIN [05]
CENTER, TEXAS			75935	AQUIFER 10 - [032]	NUMBER WELLS [ 1 ]
				RESERVOIR [ ]	STATUS = 0

Jan [ 815450]	May [ 800310]	Sep [ 1290810]		
Feb [ 739620]	Jun [ 1010660]	Oct [ 966400]		
Mar [ 665100]	Jul [ 1257950]	Nov [ 941780]		
Apr [ 738350]	Aug [ 1388040]	Dec [ 837350]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 11451820]	Units: Gallons
				35.1 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 127

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]			SHELBY		
EAST LAMAR WATER SUPPLY CORP. C/O J.C. WATLINGTON, SEC. P. O. BOX 16			** YEAR [1973 ]	SOURCE COUNTY [210]	SOURCE BASIN [05]
CENTER, TEXAS			75935	AQUIFER 10 - [032]	NUMBER WELLS [ 1 ]
				RESERVOIR [ ]	STATUS = 0

Jan [ 1088330]	May [ 779530]	Sep [ 777130]		
Feb [ 793950]	Jun [ 1000570]	Oct [ 934750]		
Mar [ 678540]	Jul [ 1087930]	Nov [ 702460]		
Apr [ 727360]	Aug [ 1169740]	Dec [ 688800]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 10429090]	Units: Gallons
				32.0 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 123

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]			SHELBY		
EAST LAMAR WATER SUPPLY CORP. C/O J.C. WATLINGTON, SEC. P. O. BOX 16			** YEAR [1972 ]	SOURCE COUNTY [210]	SOURCE BASIN [05]
CENTER, TEXAS			75935	AQUIFER 10 - [032]	NUMBER WELLS [ 1 ]
				RESERVOIR [ ]	STATUS = 0

Jan [ 586680]	May [ 702180]	Sep [ 1061830]		
Feb [ 509600]	Jun [ 927380]	Oct [ 905770]		
Mar [ 523290]	Jul [ 988110]	Nov [ 724780]		
Apr [ 648800]	Aug [ 965810]	Dec [ 718740]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 9262970]	Units: Gallons
				28.4 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 123

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]			* * YEAR [1971]			SHELBY		
EAST LAMAR WATER SUPPLY CORP.						SOURCE COUNTY [210]		
C/O J.C. WATLINGTON, SEC.						SOURCE BASIN [05]		
P. O. BOX 16						AQUIFER 10 -[032]		
CENTER, TEXAS			75935			NUMBER WELLS [ 1]		
						RESERVOIR [ ]		
						STATUS = 0		
Jan	[ 448720]	May	[ 653550]	Sep	[ 804400]			
Feb	[ 512540]	Jun	[ 876280]	Oct	[ 773750]			
Mar	[ 455070]	Jul	[ 1094880]	Nov	[ 635620]			
Apr	[ 518460]	Aug	[ 864810]	Dec	[ 535260]			
WATER TYPE [SG]						ANNUAL TOTAL	[ 8173340]	Units:
							25.1	Gallons
								Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ] , % TREATED = [ ]; Connections: 102

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]			* * YEAR [1970]			SHELBY		
EAST LAMAR WATER SUPPLY CORP.						SOURCE COUNTY [210]		
C/O J.C. WATLINGTON, SEC.						SOURCE BASIN [05]		
P. O. BOX 16						AQUIFER 10 -[032]		
CENTER, TEXAS			75935			NUMBER WELLS [ 1]		
						RESERVOIR [ ]		
						STATUS = 0		
Jan	[ 541060]	May	[ 480490]	Sep	[ 650430]			
Feb	[ 486320]	Jun	[ 670780]	Oct	[ 544960]			
Mar	[ 391680]	Jul	[ 752570]	Nov	[ 458480]			
Apr	[ 453270]	Aug	[ 569490]	Dec	[ 448720]			
WATER TYPE [SG]						ANNUAL TOTAL	[ 6448250]	Units:
							19.8	Gallons
								Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ] , % TREATED = [ ]; Connections: 96

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]			* * YEAR [1969]			SHELBY		
EAST LAMAR WATER SUPPLY CORP.						SOURCE COUNTY [210]		
C/O J.C. WATLINGTON, SEC.						SOURCE BASIN [05]		
P. O. BOX 16						AQUIFER 10 -[032]		
CENTER, TEXAS			75935			NUMBER WELLS [ 1]		
						RESERVOIR [ ]		
						STATUS = 0		
Jan	[ 338500]	May	[ 347850]	Sep	[ 597840]			
Feb	[ 294850]	Jun	[ 593940]	Oct	[ 541750]			
Mar	[ 269630]	Jul	[ 751280]	Nov	[ 460050]			
Apr	[ 357610]	Aug	[ 784510]	Dec	[ 417230]			
WATER TYPE [SG]						ANNUAL TOTAL	[ 5755040]	Units:
							17.7	Gallons
								Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ] , % TREATED = [ ]; Connections: 91

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]		* * YEAR [1968 ]		SHELBY	
EAST LAMAR WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O J.C. WATLINGTON, SEC.				SOURCE BASIN [05]	
P. O. BOX 16				AQUIFER 10 - [032]	
				NUMBER WELLS [ 1]	
CENTER, TEXAS		75935		RESERVOIR [ ]	
				STATUS = 0	

Jan [ 380040]	May [ 353620]	Sep [ 365150]	
Feb [ 368150]	Jun [ 433480]	Oct [ 263830]	
Mar [ 336830]	Jul [ 419950]	Nov [ 288060]	
Apr [ 364120]	Aug [ 439890]	Dec [ 339670]	Units:
WATER TYPE [SG ]			ANNUAL TOTAL [ 4352790] Gallons
			13.4 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 88

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]		* * YEAR [1967 ]		SHELBY	
EAST LAMAR WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O J.C. WATLINGTON, SEC.				SOURCE BASIN [05]	
P. O. BOX 16				AQUIFER 10 - [032]	
				NUMBER WELLS [ 1]	
CENTER, TEXAS		75935		RESERVOIR [ ]	
				STATUS = 0	

Jan [ 321930]	May [ 449450]	Sep [ 369980]	
Feb [ 339980]	Jun [ 452680]	Oct [ 405570]	
Mar [ 373670]	Jul [ 565420]	Nov [ 362450]	
Apr [ 375550]	Aug [ 437180]	Dec [ 380040]	Units:
WATER TYPE [SG ]			ANNUAL TOTAL [ 4833900] Gallons
			14.8 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 85

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [249000]		* * YEAR [1966 ]		SHELBY	
EAST LAMAR WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O J.C. WATLINGTON, SEC.				SOURCE BASIN [05]	
P. O. BOX 16				AQUIFER 10 - [032]	
				NUMBER WELLS [ 1]	
CENTER, TEXAS		75935		RESERVOIR [ ]	
				STATUS = 0	

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	Units:
WATER TYPE [SG ]			ANNUAL TOTAL [ 2771450] Gallons
			8.5 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 81

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]	* * YEAR [1993 ]	SHELBY
FIVE-WAY WATER SUPPLY CORP.		SOURCE COUNTY [210]
ATTN: VINCE DIVERDI, OPERATOR		SOURCE BASIN [05]
P.O. BOX 667		AQUIFER 10 - [032]
CENTER, TEXAS	75935	NUMBER WELLS [ 3]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 53000000]	Units: Gallons
		162.7	Acre-feet

Remarks: [DATA VIA CONV. W/OPERATOR 11/09/1994-KW ]  
 Seller Code: [ ] Metered/Est: [ 2 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 404  
 Outside conn: Pop served: 1212 % Connections metered: 100  
 % Connections: RES 90 COMM 10 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]	* * YEAR [1992 ]	SHELBY
FIVE-WAY WATER SUPPLY CORP.		SOURCE COUNTY [210]
ATTN: VINCE DIVERDI, OPERATOR		SOURCE BASIN [05]
P.O. BOX 667		AQUIFER 10 - [032]
CENTER, TEXAS	75935	NUMBER WELLS [ 3]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 39296700]	Units: Gallons
		120.6	Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 413  
 Outside conn: Pop served: 1315 % Connections metered: 100  
 % Connections: RES 90 COMM 10 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]	* * YEAR [1991 ]	SHELBY
FIVE-WAY WATER SUPPLY CORP.		SOURCE COUNTY [210]
ATTN: VINCE DIVERDI, OPERATOR		SOURCE BASIN [05]
P.O. BOX 667		AQUIFER 10 - [032]
CENTER, TEXAS	75935	NUMBER WELLS [ 3]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 38325000]	Units: Gallons
		117.6	Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 401  
 Outside conn: Pop served: 1310 % Connections metered: 100  
 % Connections: RES 90 COMM 10 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100] \* \* YEAR [1990 ] SHELBY  
 FIVE-WAY WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 667 AQUIFER 10 - [032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 3 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 38740000 ]
			Units: Gallons
			118.9 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 410  
 Outside conn: 410 Pop served: 1300 % Connections metered: 10.0  
 % Connections: RES 90 COMM 10 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100] \* \* YEAR [1989 ] SHELBY  
 FIVE-WAY WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 667 AQUIFER 10 - [032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 3 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 36300000 ]
			Units: Gallons
			111.4 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [3 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 400  
 Outside conn: Pop served: 1275 % Connections metered: 100  
 % Connections: RES 90 COMM 10 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100] \* \* YEAR [1988 ] SHELBY  
 FIVE-WAY WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 667 AQUIFER 10 - [032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 3 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 37800000 ]
			Units: Gallons
			116.0 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 389  
 Outside conn: Pop served: 1250 % Connections metered: 100  
 % Connections: RES 90 COMM 10 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]		SHELBY
FIVE-WAY WATER SUPPLY CORP.	** YEAR [1987 ]	SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 667		NUMBER WELLS [ 3]
CENTER, TEXAS	75935	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [	34940000]	Units: Gallons 107.2 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ 1 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 390

Outside conn: 390 Pop served: 1200 % Connections metered: 100

% Connections: RES 90 COMM 10 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]		SHELBY
FIVE-WAY WATER SUPPLY CORP.	** YEAR [1986 ]	SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 667		NUMBER WELLS [ 3]
CENTER, TEXAS	75935	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [	26154300]	Units: Gallons 80.3 Acre-feet

Remarks: [EST BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 383

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]		SHELBY
FIVE-WAY WATER SUPPLY CORP.	** YEAR [1985 ]	SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 667		NUMBER WELLS [ 3]
CENTER, TEXAS	75935	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [	28453100]	Units: Gallons 87.3 Acre-feet

Remarks: [EST BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 375

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]	* * YEAR [1984 ]	SHELBY
FIVE-WAY WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 667		NUMBER WELLS [ 3]
CENTER, TEXAS	75935	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 28992100]	Units: Gallons 89.0 Acre-feet

Remarks: [EST TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 363

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]	* * YEAR [1983 ]	SHELBY
FIVE-WAY WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 667		NUMBER WELLS [ 3]
CENTER, TEXAS	75935	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 26356341]	Units: Gallons 80.9 Acre-feet

Remarks: [EST BY TDWR ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 363

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]	* * YEAR [1982 ]	SHELBY
FIVE-WAY WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 667		NUMBER WELLS [ 3]
CENTER, TEXAS	75935	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 26826228]	Units: Gallons 82.3 Acre-feet

Remarks: [EST BY TDWR ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 351

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]		SHELBY
FIVE-WAY WATER SUPPLY CORP.	** YEAR [1981 ]	SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 667		NUMBER WELLS [ 3]
CENTER, TEXAS	75935	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 25679808]	Units: Gallons 78.8 Acre-feet

Remarks: [ EST BY TDWR ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 336

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]		SHELBY
FIVE-WAY WATER SUPPLY CORP.	** YEAR [1980 ]	SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 667		NUMBER WELLS [ ]
CENTER, TEXAS	75935	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 29891100]	Units: Gallons 91.7 Acre-feet

Remarks: [ EST BY TDWR ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 320

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]		SHELBY
FIVE-WAY WATER SUPPLY CORP.	** YEAR [1979 ]	SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 667		NUMBER WELLS [ 2]
CENTER, TEXAS	75935	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 25900000]	Units: Gallons 79.5 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 305

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]			SHELBY
	** YEAR [1978 ]		SOURCE COUNTY [210]
FIVE-WAY WATER SUPPLY CORP.			SOURCE BASIN [05]
			AQUIFER 10 -[032]
ATTN: VINCE DIVERDI, OPERATOR			NUMBER WELLS [ ]
P.O. BOX 667			RESERVOIR [ ]
CENTER, TEXAS	75935		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]		Units:
				Gallons
				.0 Acre-feet

Remarks: [NO REPORT ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: [ ]

Outside conn: Pop served: % Connections metered: [ ]

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]			SHELBY
	** YEAR [1977 ]		SOURCE COUNTY [210]
FIVE-WAY WATER SUPPLY CORP.			SOURCE BASIN [05]
			AQUIFER 10 -[032]
ATTN: VINCE DIVERDI, OPERATOR			NUMBER WELLS [ 2]
P.O. BOX 667			RESERVOIR [ ]
CENTER, TEXAS	75935		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ 24275000]		Units:
				Gallons
				74.5 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 288

Outside conn: Pop served: % Connections metered: [ ]

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]			SHELBY
	** YEAR [1976 ]		SOURCE COUNTY [210]
FIVE-WAY WATER SUPPLY CORP.			SOURCE BASIN [05]
			AQUIFER 10 -[032]
ATTN: VINCE DIVERDI, OPERATOR			NUMBER WELLS [ 2]
P.O. BOX 667			RESERVOIR [ ]
CENTER, TEXAS	75935		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ 23300000]		Units:
				Gallons
				71.5 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 274

Outside conn: Pop served: % Connections metered: [ ]

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]		* * YEAR [1975 ]		SHELBY	
FIVE-WAY WATER SUPPLY CORP.				SOURCE COUNTY [210]	
ATTN: VINCE DIVERDI, OPERATOR				SOURCE BASIN [05]	
P.O. BOX 667				AQUIFER 10 - [032]	
CENTER, TEXAS		75935		NUMBER WELLS [ 2]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 1680440]	May [ 1395070]	Sep [ 2354250]	
Feb [ 2072040]	Jun [ 2219390]	Oct [ 2370250]	
Mar [ 1776320]	Jul [ 2049770]	Nov [ 2137960]	
Apr [ 1830980]	Aug [ 2617500]	Dec [ 1929100]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 24433070]	Units:
		75.0	Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 270

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]		* * YEAR [1974 ]		SHELBY	
FIVE-WAY WATER SUPPLY CORP.				SOURCE COUNTY [210]	
ATTN: VINCE DIVERDI, OPERATOR				SOURCE BASIN [05]	
P.O. BOX 667				AQUIFER 10 - [032]	
CENTER, TEXAS		75935		NUMBER WELLS [ 2]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 1879000]	May [ 1765290]	Sep [ 1843330]	
Feb [ 1930610]	Jun [ 1896820]	Oct [ 1785000]	
Mar [ 1477390]	Jul [ 2450710]	Nov [ 1864400]	
Apr [ 2103010]	Aug [ 2103930]	Dec [ 1795820]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 22895310]	Units:
		70.3	Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 254

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]		* * YEAR [1973 ]		SHELBY	
FIVE-WAY WATER SUPPLY CORP.				SOURCE COUNTY [210]	
ATTN: VINCE DIVERDI, OPERATOR				SOURCE BASIN [05]	
P.O. BOX 667				AQUIFER 10 - [032]	
CENTER, TEXAS		75935		NUMBER WELLS [ 2]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 1600430]	May [ 1798400]	Sep [ 1444440]	
Feb [ 1530210]	Jun [ 1996210]	Oct [ 1761550]	
Mar [ 1631300]	Jul [ 1643400]	Nov [ 1548420]	
Apr [ 1723860]	Aug [ 2475310]	Dec [ 1461110]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 20614640]	Units:
		63.3	Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 240

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]		SHELBY
FIVE-WAY WATER SUPPLY CORP.	** YEAR [1972]	SOURCE COUNTY [210]
ATTN: VINCE DIVERDI, OPERATOR		SOURCE BASIN [05]
P.O. BOX 667		AQUIFER 10 - [032]
CENTER, TEXAS	75935	NUMBER WELLS [ 2]
		RESERVOIR [ ]
		STATUS = 0

Jan [ 1651920]	May [ 3028300]	Sep [ 1713810]	
Feb [ 1410350]	Jun [ 1948000]	Oct [ 1564130]	
Mar [ 1679930]	Jul [ 1542970]	Nov [ 1328060]	
Apr [ 1457810]	Aug [ 2152980]	Dec [ 1091607]	
WATER TYPE [SG]		ANNUAL TOTAL [ 20569867]	Units: Gallons
		63.1	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 222

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]		SHELBY
FIVE-WAY WATER SUPPLY CORP.	** YEAR [1971]	SOURCE COUNTY [210]
ATTN: VINCE DIVERDI, OPERATOR		SOURCE BASIN [05]
P.O. BOX 667		AQUIFER 10 - [032]
CENTER, TEXAS	75935	NUMBER WELLS [ 2]
		RESERVOIR [ ]
		STATUS = 0

Jan [ 1345250]	May [ 1147340]	Sep [ 1579080]	
Feb [ 1060010]	Jun [ 1050900]	Oct [ 1479650]	
Mar [ 1141300]	Jul [ 1953690]	Nov [ 1466110]	
Apr [ 1025040]	Aug [ 1655520]	Dec [ 1555900]	
WATER TYPE [SG]		ANNUAL TOTAL [ 16459790]	Units: Gallons
		50.5	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 212

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]		SHELBY
FIVE-WAY WATER SUPPLY CORP.	** YEAR [1970]	SOURCE COUNTY [210]
ATTN: VINCE DIVERDI, OPERATOR		SOURCE BASIN [05]
P.O. BOX 667		AQUIFER 10 - [032]
CENTER, TEXAS	75935	NUMBER WELLS [ 2]
		RESERVOIR [ ]
		STATUS = 0

Jan [ 1149580]	May [ 1052970]	Sep [ 1288150]	
Feb [ 863190]	Jun [ 1567300]	Oct [ 95020]	
Mar [ 891980]	Jul [ 1640070]	Nov [ 775300]	
Apr [ 1052900]	Aug [ 1418780]	Dec [ 1272920]	
WATER TYPE [SG]		ANNUAL TOTAL [ 13068160]	Units: Gallons
		40.1	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 188

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100] \* \* YEAR [1969 ] SHELBY  
 FIVE-WAY WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 667 AQUIFER 10 - [032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 778320]	May [ 931630]	Sep [ 1470000]	
Feb [ 770780]	Jun [ 1334000]	Oct [ 1120000]	
Mar [ 837900]	Jul [ 2122950]	Nov [ 936090]	
Apr [ 902370]	Aug [ 1307230]	Dec [ 1020730]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 13532000]	Units: Gallons 41.5 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 177  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100] \* \* YEAR [1968 ] SHELBY  
 FIVE-WAY WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 667 AQUIFER 10 - [032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 820140]	May [ 659820]	Sep [ 804020]	
Feb [ 760100]	Jun [ 873130]	Oct [ 939060]	
Mar [ 800040]	Jul [ 1197560]	Nov [ 656400]	
Apr [ 940600]	Aug [ 939060]	Dec [ 1555950]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 10945880]	Units: Gallons 33.6 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 164  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100] \* \* YEAR [1967 ] SHELBY  
 FIVE-WAY WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 667 AQUIFER 10 - [032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 7184250]	Units: Gallons 22.0 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 160  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287100]		SHELBY
FIVE-WAY WATER SUPPLY CORP.	** YEAR [1966 ]	SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 667		NUMBER WELLS [ 1]
CENTER, TEXAS	75935	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 3766970]	Gallons
			11.6 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 164

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]		SHELBY
FLAT FORK WATER SUPPLY CORP.	** YEAR [1993 ]	SOURCE COUNTY [210]
		SOURCE BASIN [05]
C/O HAROLD ROBERTSON, PRESIDENT		AQUIFER 10 - [190]
P.O. BOX 99		NUMBER WELLS [ 2]
CENTER, TEXAS	75935	RESERVOIR [ ]
		STATUS = 0

Jan [ 2208000]	May [ 2157000]	Sep [ 2486000]	
Feb [ 2089000]	Jun [ 2286000]	Oct [ 2298000]	
Mar [ 2168000]	Jul [ 2308000]	Nov [ 2182000]	
Apr [ 2136000]	Aug [ 2359000]	Dec [ 2213000]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 26890000]	Gallons
			82.5 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 230

Outside conn: Pop served: 700 % Connections metered: 100

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]		SHELBY
FLAT FORK WATER SUPPLY CORP.	** YEAR [1992 ]	SOURCE COUNTY [210]
		SOURCE BASIN [05]
C/O HAROLD ROBERTSON, PRESIDENT		AQUIFER 10 - [190]
P.O. BOX 99		NUMBER WELLS [ 2]
CENTER, TEXAS	75935	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 39909100]	Gallons
			122.5 Acre-feet

Remarks: [EST TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 220

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]			SHELBY
	** YEAR [1991]		SOURCE COUNTY [210]
FLAT FORK WATER SUPPLY CORP.			SOURCE BASIN [05]
			AQUIFER 10 - [190]
C/O HAROLD ROBERTSON, PRESIDENT			NUMBER WELLS [ 2]
P.O. BOX 99			RESERVOIR [ ]
CENTER, TEXAS	75935		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [	39909100]
			122.5
			Units: Gallons Acre-feet

Remarks: [NO REPORT-TWDB EST ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 220  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]			SHELBY
	** YEAR [1990]		SOURCE COUNTY [210]
FLAT FORK WATER SUPPLY CORP.			SOURCE BASIN [05]
			AQUIFER 10 - [190]
C/O HAROLD ROBERTSON, PRESIDENT			NUMBER WELLS [ 2]
P.O. BOX 99			RESERVOIR [ ]
CENTER, TEXAS	75935		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [	39882000]
			122.4
			Units: Gallons Acre-feet

Remarks: [EST BY TWDB ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 220  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]			SHELBY
	** YEAR [1989]		SOURCE COUNTY [210]
FLAT FORK WATER SUPPLY CORP.			SOURCE BASIN [05]
			AQUIFER 10 - [190]
C/O HAROLD ROBERTSON, PRESIDENT			NUMBER WELLS [ 2]
P.O. BOX 99			RESERVOIR [ ]
CENTER, TEXAS	75935		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [	39881600]
			122.4
			Units: Gallons Acre-feet

Remarks: [EST BY TWDB ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 220  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300] \* \* YEAR [1988 ] SHELBY  
 FLAT FORK WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O HAROLD ROBERTSON, PRESIDENT SOURCE BASIN [05]  
 P.O. BOX 99 AQUIFER 10 -[190]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 3 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 2974970]	May [ 3263680]	Sep [ 4008990]	Units:
Feb [ 2186870]	Jun [ 4640560]	Oct [ 4558830]	Gallons
Mar [ 1961840]	Jul [ 3897660]	Nov [ 4087990]	Acre-feet
Apr [ 2400940]	Aug [ 3532430]	Dec [ 2983990]	
WATER TYPE [SG ] ANNUAL TOTAL [ 40498750]			124.3

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 210  
 Outside conn: 210 Pop served: 1000 % Connections metered: 97.0  
 % Connections: RES 1.0 COMM 2.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300] \* \* YEAR [1987 ] SHELBY  
 FLAT FORK WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O HAROLD ROBERTSON, PRESIDENT SOURCE BASIN [05]  
 P.O. BOX 99 AQUIFER 10 -[190]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 1834860]	May [ 2886030]	Sep [ 1690900]	Units:
Feb [ 2020190]	Jun [ 2648560]	Oct [ 1792800]	Gallons
Mar [ 1842200]	Jul [ 2810520]	Nov [ 1887040]	Acre-feet
Apr [ 1284370]	Aug [ 2975420]	Dec [ 2437000]	
WATER TYPE [SG ] ANNUAL TOTAL [ 26109890]			80.1

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ 1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 210  
 Outside conn: 210 Pop served: 1000 % Connections metered: 100  
 % Connections: RES 97 COMM 1.0 IND 2.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300] \* \* YEAR [1986 ] SHELBY  
 FLAT FORK WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O HAROLD ROBERTSON, PRESIDENT SOURCE BASIN [05]  
 P.O. BOX 99 AQUIFER 10 -[190]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 2987060]	May [ 1964580]	Sep [ 2741420]	Units:
Feb [ 2742430]	Jun [ 2340090]	Oct [ 2187110]	Gallons
Mar [ 2960000]	Jul [ 2026500]	Nov [ 1909450]	Acre-feet
Apr [ 2707730]	Aug [ 4370340]	Dec [ 2065960]	
WATER TYPE [SG ] ANNUAL TOTAL [ 31002670]			95.1

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 208  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300] \* \* YEAR [1985 ] SHELBY  
 FLAT FORK WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O HAROLD ROBERTSON, PRESIDENT SOURCE BASIN [05]  
 P.O. BOX 99 AQUIFER 10 - [190]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 987680]	May [ 1204300]	Sep [ 1842331]
Feb [ 1044421]	Jun [ 1906473]	Oct [ 1404616]
Mar [ 1183677]	Jul [ 1993683]	Nov [ 1210205]
Apr [ 1346078]	Aug [ 2040311]	Dec [ 1110778]
WATER TYPE [SG ]		ANNUAL TOTAL [ 17274553]

Units: Gallons  
53.0 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 191  
 Outside conn: 191 Pop served: 450 % Connections metered: 100  
 % Connections: RES 99 COMM 1.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300] \* \* YEAR [1984 ] SHELBY  
 FLAT FORK WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O HAROLD ROBERTSON, PRESIDENT SOURCE BASIN [05]  
 P.O. BOX 99 AQUIFER 10 - [190]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 3 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 4950000]	May [ 6644000]	Sep [ 8120000]
Feb [ 4900000]	Jun [ 7771000]	Oct [ 8210000]
Mar [ 5100000]	Jul [ 8160000]	Nov [ 7100000]
Apr [ 5600000]	Aug [ 8470000]	Dec [ 5211000]
WATER TYPE [SG ]		ANNUAL TOTAL [ 80236000]

Units: Gallons  
246.2 Acre-feet

Remarks: [SYSTEM HAD LARGE LEAKS DURING 84 ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 180  
 Outside conn: 180 Pop served: 450 % Connections metered: 100  
 % Connections: RES 99 COMM 1.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300] \* \* YEAR [1983 ] SHELBY  
 FLAT FORK WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O HAROLD ROBERTSON, PRESIDENT SOURCE BASIN [05]  
 P.O. BOX 99 AQUIFER 10 - [190]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 3 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 976000]	May [ 827000]	Sep [ 900000]
Feb [ 894000]	Jun [ 991000]	Oct [ 910000]
Mar [ 1020000]	Jul [ 1004000]	Nov [ 880000]
Apr [ 776000]	Aug [ 1187000]	Dec [ 900000]
WATER TYPE [SG ]		ANNUAL TOTAL [ 11265000]

Units: Gallons  
34.6 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 181  
 Outside conn: 181 Pop served: 450 % Connections metered: 100  
 % Connections: RES 80 COMM 20 IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]	* * YEAR [1982]	SHELBY
FLAT FORK WATER SUPPLY CORP.		SOURCE COUNTY [210]
C/O HAROLD ROBERTSON, PRESIDENT		SOURCE BASIN [05]
P.O. BOX 99		AQUIFER 10 - [190]
CENTER, TEXAS	75935	NUMBER WELLS [ 3]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [ 11031269]	Units: Gallons
		33.9	Acre-feet

Remarks: [EST BY TDWR ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 158

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]	* * YEAR [1981]	SHELBY
FLAT FORK WATER SUPPLY CORP.		SOURCE COUNTY [210]
C/O HAROLD ROBERTSON, PRESIDENT		SOURCE BASIN [05]
P.O. BOX 99		AQUIFER 10 - [190]
CENTER, TEXAS	75935	NUMBER WELLS [ 1]
		RESERVOIR [ ]
		STATUS = 0

Jan [ 800000]	May [ 1020000]	Sep [ 900000]	
Feb [ 700000]	Jun [ 1100000]	Oct [ 900000]	
Mar [ 900000]	Jul [ 1300000]	Nov [ 700000]	
Apr [ 850000]	Aug [ 1600000]	Dec [ 750000]	
	WATER TYPE [SG]	ANNUAL TOTAL [ 11520000]	Units: Gallons
		35.4	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 165

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]	* * YEAR [1980]	SHELBY
FLAT FORK WATER SUPPLY CORP.		SOURCE COUNTY [210]
C/O HAROLD ROBERTSON, PRESIDENT		SOURCE BASIN [05]
P.O. BOX 99		AQUIFER 10 - [190]
CENTER, TEXAS	75935	NUMBER WELLS [ ]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [ 17035200]	Units: Gallons
		52.3	Acre-feet

Remarks: [EST BY TDWR ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 156

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]			SHELBY
	** YEAR [1979]		SOURCE COUNTY [210]
FLAT FORK WATER SUPPLY CORP.			SOURCE BASIN [05]
			AQUIFER 10 - [190]
C/O HAROLD ROBERTSON, PRESIDENT			NUMBER WELLS [ 2]
P.O. BOX 99			RESERVOIR [ ]
CENTER, TEXAS	75935		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [	1560000]
			47.9
			Units: Gallons Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 150

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]			SHELBY
	** YEAR [1978]		SOURCE COUNTY [210]
FLAT FORK WATER SUPPLY CORP.			SOURCE BASIN [05]
			AQUIFER 10 - [190]
C/O HAROLD ROBERTSON, PRESIDENT			NUMBER WELLS [ ]
P.O. BOX 99			RESERVOIR [ ]
CENTER, TEXAS	75935		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [	]
			.0
			Units: Gallons Acre-feet

Remarks: [NO REPORT]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]			SHELBY
	** YEAR [1977]		SOURCE COUNTY [210]
FLAT FORK WATER SUPPLY CORP.			SOURCE BASIN [05]
			AQUIFER 10 - [190]
C/O HAROLD ROBERTSON, PRESIDENT			NUMBER WELLS [ 2]
P.O. BOX 99			RESERVOIR [ ]
CENTER, TEXAS	75935		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [	1425000]
			43.7
			Units: Gallons Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 131

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]		SHELBY
	** YEAR [1976 ]	SOURCE COUNTY [210]
FLAT FORK WATER SUPPLY CORP.		SOURCE BASIN [05]
		AQUIFER 10 - [190]
C/O HAROLD ROBERTSON, PRESIDENT		NUMBER WELLS [ 1 ]
P.O. BOX 99		RESERVOIR [ ]
CENTER, TEXAS	75935	STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [	13100000]	Units:
			40.2	Gallons
				Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 135

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]		SHELBY
	** YEAR [1975 ]	SOURCE COUNTY [210]
FLAT FORK WATER SUPPLY CORP.		SOURCE BASIN [05]
		AQUIFER 10 - [190]
C/O HAROLD ROBERTSON, PRESIDENT		NUMBER WELLS [ 1 ]
P.O. BOX 99		RESERVOIR [ ]
CENTER, TEXAS	75935	STATUS = 0

Jan [ 1328030]	May [ 1520170]	Sep [ 1696950]		
Feb [ 1244190]	Jun [ 1163550]	Oct [ 1683840]		
Mar [ 1017750]	Jul [ 1786520]	Nov [ 1383890]		
Apr [ 2711400]	Aug [ 2005080]	Dec [ 1466620]		
	WATER TYPE [SG ]	ANNUAL TOTAL [	19007990]	Units:
			58.3	Gallons
				Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 127

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]		SHELBY
	** YEAR [1974 ]	SOURCE COUNTY [210]
FLAT FORK WATER SUPPLY CORP.		SOURCE BASIN [05]
		AQUIFER 10 - [190]
C/O HAROLD ROBERTSON, PRESIDENT		NUMBER WELLS [ 1 ]
P.O. BOX 99		RESERVOIR [ ]
CENTER, TEXAS	75935	STATUS = 0

Jan [ 980210]	May [ 1240710]	Sep [ 2200390]		
Feb [ 920740]	Jun [ 1290940]	Oct [ 1560780]		
Mar [ 1020990]	Jul [ 1610090]	Nov [ 1242040]		
Apr [ 1190600]	Aug [ 2349600]	Dec [ 1120390]		
	WATER TYPE [SG ]	ANNUAL TOTAL [	16727480]	Units:
			51.3	Gallons
				Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 126

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]	* * YEAR [1973 ]	SHELBY
FLAT FORK WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
C/O HAROLD ROBERTSON, PRESIDENT		AQUIFER 10 -[190]
P.O. BOX 99		NUMBER WELLS [ 1]
CENTER, TEXAS	75935	RESERVOIR [ ]
		STATUS = 0

Jan [ 980210]	May [ 1390990]	Sep [ 1693890]	
Feb [ 971340]	Jun [ 928470]	Oct [ 1990300]	
Mar [ 1203100]	Jul [ 1783360]	Nov [ 1810600]	
Apr [ 1210590]	Aug [ 1700490]	Dec [ 1645750]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 17309090]	Units:
		53.1	Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 125

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]	* * YEAR [1972 ]	SHELBY
FLAT FORK WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
C/O HAROLD ROBERTSON, PRESIDENT		AQUIFER 10 -[190]
P.O. BOX 99		NUMBER WELLS [ 1]
CENTER, TEXAS	75935	RESERVOIR [ ]
		STATUS = 0

Jan [ 973680]	May [ 1333210]	Sep [ 1597520]	
Feb [ 964180]	Jun [ 907390]	Oct [ 1393450]	
Mar [ 1138620]	Jul [ 1548860]	Nov [ 1166590]	
Apr [ 1236390]	Aug [ 2049540]	Dec [ 914910]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 15224340]	Units:
		46.7	Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 116

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]	* * YEAR [1971 ]	SHELBY
FLAT FORK WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
C/O HAROLD ROBERTSON, PRESIDENT		AQUIFER 10 -[190]
P.O. BOX 99		NUMBER WELLS [ 1]
CENTER, TEXAS	75935	RESERVOIR [ ]
		STATUS = 0

Jan [ 914050]	May [ 1158630]	Sep [ 1238540]	
Feb [ 861880]	Jun [ 1527380]	Oct [ 1006530]	
Mar [ 929580]	Jul [ 1699700]	Nov [ 908450]	
Apr [ 983780]	Aug [ 1586530]	Dec [ 998500]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 13813550]	Units:
		42.4	Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 112

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]				SHELBY
	** YEAR [1970]			SOURCE COUNTY [210]
FLAT FORK WATER SUPPLY CORP.				SOURCE BASIN [05]
				AQUIFER 10 -[190]
C/O HAROLD ROBERTSON, PRESIDENT				NUMBER WELLS [ 1]
P.O. BOX 99				RESERVOIR [ ]
CENTER, TEXAS	75935			STATUS = 0

Jan [ 894250]	May [ 1096680]	Sep [ 1198150]	
Feb [ 658070]	Jun [ 1564680]	Oct [ 924430]	
Mar [ 628590]	Jul [ 1779400]	Nov [ 812980]	
Apr [ 801850]	Aug [ 1793970]	Dec [ 771890]	
WATER TYPE [SG]	ANNUAL TOTAL [	12924940]	Units:
			Gallons
			39.7 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 100

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]				SHELBY
	** YEAR [1969]			SOURCE COUNTY [210]
FLAT FORK WATER SUPPLY CORP.				SOURCE BASIN [05]
				AQUIFER 10 -[190]
C/O HAROLD ROBERTSON, PRESIDENT				NUMBER WELLS [ 1]
P.O. BOX 99				RESERVOIR [ ]
CENTER, TEXAS	75935			STATUS = 0

Jan [ 2201160]	May [ 1374420]	Sep [ 1029160]	
Feb [ 496400]	Jun [ 1644730]	Oct [ 896180]	
Mar [ 1291730]	Jul [ 1222690]	Nov [ 733910]	
Apr [ 1160670]	Aug [ 1763810]	Dec [ 595680]	
WATER TYPE [SG]	ANNUAL TOTAL [	14410540]	Units:
			Gallons
			44.2 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 100

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]				SHELBY
	** YEAR [1968]			SOURCE COUNTY [210]
FLAT FORK WATER SUPPLY CORP.				SOURCE BASIN [05]
				AQUIFER 10 -[190]
C/O HAROLD ROBERTSON, PRESIDENT				NUMBER WELLS [ 1]
P.O. BOX 99				RESERVOIR [ ]
CENTER, TEXAS	75935			STATUS = 0

Jan [ 1004000]	May [ 2064630]	Sep [ 1431060]	
Feb [ 987960]	Jun [ 3102240]	Oct [ 1150320]	
Mar [ 928690]	Jul [ 2046050]	Nov [ 2057570]	
Apr [ 862880]	Aug [ 1526840]	Dec [ 1095480]	
WATER TYPE [SG]	ANNUAL TOTAL [	18257720]	Units:
			Gallons
			56.0 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 97

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]		* * YEAR [1967 ]		SHELBY	
FLAT FORK WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O HAROLD ROBERTSON, PRESIDENT				SOURCE BASIN [05]	
P.O. BOX 99				AQUIFER 10 - [190]	
CENTER, TEXAS		75935		NUMBER WELLS [ 1 ]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 454520]	May [ 896660]	Sep [ 840990]		
Feb [ 641770]	Jun [ 1259790]	Oct [ 793480]		
Mar [ 566070]	Jul [ 1349050]	Nov [ 494980]		
Apr [ 449510]	Aug [ 1831640]	Dec [ 460940]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 10039400]	Units: Gallons
				30.8 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 87

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [287300]		* * YEAR [1966 ]		SHELBY	
FLAT FORK WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O HAROLD ROBERTSON, PRESIDENT				SOURCE BASIN [05]	
P.O. BOX 99				AQUIFER 10 - [190]	
CENTER, TEXAS		75935		NUMBER WELLS [ 1 ]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ ]	May [ ]	Sep [ 301000]		
Feb [ ]	Jun [ ]	Oct [ 196000]		
Mar [ ]	Jul [ ]	Nov [ 203000]		
Apr [ ]	Aug [ 1206000]	Dec [ 176000]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 2082000]	Units: Gallons
				6.4 Acre-feet

Remarks: [ OPERATION BEGAN 8-1966 ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 85

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]		* * YEAR [1993 ]		SHELBY	
HUBER WATER SUPPLY CORP.				SOURCE COUNTY [210]	
ATTN: JOHN HENRY EDENS, PRES.				SOURCE BASIN [05]	
ROUTE 3, BOX 242B				AQUIFER 10 - [032]	
TIMPSON, TEXAS		75975		NUMBER WELLS [ 1 ]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 642000]	May [ 868000]	Sep [ 1274000]		
Feb [ 708000]	Jun [ 779000]	Oct [ 739000]		
Mar [ 738000]	Jul [ 868000]	Nov [ 941000]		
Apr [ 661000]	Aug [ 1191000]	Dec [ 632000]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 10041000]	Units: Gallons
				30.8 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 123

Outside conn: 123 Pop served: 369 % Connections metered: 100

% Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250] \* \* YEAR [1992 ] SHELBY  
 HUBER WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOHN HENRY EDENS, PRES. SOURCE BASIN [05]  
 ROUTE 3, BOX 242B AQUIFER 10 -[032]  
 TIMPSON, TEXAS 75975 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 999000 ]	May [ 815000 ]	Sep [ 618000 ]	
Feb [ 593000 ]	Jun [ 938000 ]	Oct [ 736000 ]	
Mar [ 487000 ]	Jul [ 907000 ]	Nov [ 715000 ]	
Apr [ 744000 ]	Aug [ 863000 ]	Dec [ 731000 ]	
WATER TYPE [SG ] ANNUAL TOTAL [ 9146000 ]			Units: Gallons 28.1 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 123  
 Outside conn: Pop served: 369 % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250] \* \* YEAR [1991 ] SHELBY  
 HUBER WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOHN HENRY EDENS, PRES. SOURCE BASIN [05]  
 ROUTE 3, BOX 242B AQUIFER 10 -[032]  
 TIMPSON, TEXAS 75975 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ] ANNUAL TOTAL [ 7345625 ]			Units: Gallons 22.5 Acre-feet

Remarks: [NO REPORT-TWDB EST ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 115  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250] \* \* YEAR [1990 ] SHELBY  
 HUBER WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOHN HENRY EDENS, PRES. SOURCE BASIN [05]  
 ROUTE 3, BOX 242B AQUIFER 10 -[032]  
 TIMPSON, TEXAS 75975 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ] ANNUAL TOTAL [ 7365500 ]			Units: Gallons 22.6 Acre-feet

Remarks: [EST BY TWDB ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 115  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]	* * YEAR [1989 ]	SHELBY
HUBER WATER SUPPLY CORP.		SOURCE COUNTY [210]
ATTN: JOHN HENRY EDENS, PRES.		SOURCE BASIN [05]
ROUTE 3, BOX 242B		AQUIFER 10 - [032]
TIMPSON, TEXAS	75975	NUMBER WELLS [ 2]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 7923500]	Units: Gallons 24.3 Acre-feet

Remarks: [EST BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 120

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]	* * YEAR [1988 ]	SHELBY
HUBER WATER SUPPLY CORP.		SOURCE COUNTY [210]
ATTN: JOHN HENRY EDENS, PRES.		SOURCE BASIN [05]
ROUTE 3, BOX 242B		AQUIFER 10 - [032]
TIMPSON, TEXAS	75975	NUMBER WELLS [ 2]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 8253600]	Units: Gallons 25.3 Acre-feet

Remarks: [EST BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 120

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]	* * YEAR [1987 ]	SHELBY
HUBER WATER SUPPLY CORP.		SOURCE COUNTY [210]
ATTN: JOHN HENRY EDENS, PRES.		SOURCE BASIN [05]
ROUTE 3, BOX 242B		AQUIFER 10 - [032]
TIMPSON, TEXAS	75975	NUMBER WELLS [ 2]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 8253480]	Units: Gallons 25.3 Acre-feet

Remarks: [EST BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 120

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]	* * YEAR [1986 ]	SHELBY
HUBER WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: JOHN HENRY EDENS, PRES.		AQUIFER 10 -[032]
ROUTE 3, BOX 242B		NUMBER WELLS [ 2]
TIMPSON, TEXAS	75975	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 8115900]	Units: Gallons
		24.9	Acre-feet

Remarks: [EST BY TWDB ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 118  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]	* * YEAR [1985 ]	SHELBY
HUBER WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: JOHN HENRY EDENS, PRES.		AQUIFER 10 -[032]
ROUTE 3, BOX 242B		NUMBER WELLS [ 2]
TIMPSON, TEXAS	75975	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 9017400]	Units: Gallons
		27.7	Acre-feet

Remarks: [EST BY TWDB ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 118  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]	* * YEAR [1984 ]	SHELBY
HUBER WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: JOHN HENRY EDENS, PRES.		AQUIFER 10 -[032]
ROUTE 3, BOX 242B		NUMBER WELLS [ 2]
TIMPSON, TEXAS	75975	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 8941000]	Units: Gallons
		27.4	Acre-feet

Remarks: [EST TWDB ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 117  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]	* * YEAR [1983 ]	SHELBY
HUBER WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: JOHN HENRY EDENS, PRES.		AQUIFER 10 -[032]
ROUTE 3, BOX 242B		NUMBER WELLS [ 2]
TIMPSON, TEXAS	75975	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [	8128224]
			Units: Gallons 24.9 Acre-feet

Remarks: [EST BY TDWR ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 117  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]	* * YEAR [1982 ]	SHELBY
HUBER WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: JOHN HENRY EDENS, PRES.		AQUIFER 10 -[032]
ROUTE 3, BOX 242B		NUMBER WELLS [ 2]
TIMPSON, TEXAS	75975	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [	7751568]
			Units: Gallons 23.8 Acre-feet

Remarks: [EST BY TDWR ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 106  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]	* * YEAR [1981 ]	SHELBY
HUBER WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: JOHN HENRY EDENS, PRES.		AQUIFER 10 -[032]
ROUTE 3, BOX 242B		NUMBER WELLS [ 2]
TIMPSON, TEXAS	75975	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [	7312800]
			Units: Gallons 22.4 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 100  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250] \* \* YEAR [1980 ] SHELBY  
 HUBER WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOHN HENRY EDENS, PRES. SOURCE BASIN [05]  
 ROUTE 3, BOX 242B AQUIFER 10 -[032]  
 TIMPSON, TEXAS 75975 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 430100]	May [ 522700]	Sep [ 559700]	
Feb [ 493800]	Jun [ 557100]	Oct [ 502300]	
Mar [ 493200]	Jul [ 748200]	Nov [ 459300]	
Apr [ 302500]	Aug [ 590500]	Dec [ 523800]	
WATER TYPE [SG ] ANNUAL TOTAL [ 6183200]			Units: Gallons 19.0 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 96  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250] \* \* YEAR [1979 ] SHELBY  
 HUBER WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOHN HENRY EDENS, PRES. SOURCE BASIN [05]  
 ROUTE 3, BOX 242B AQUIFER 10 -[032]  
 TIMPSON, TEXAS 75975 NUMBER WELLS [ ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 411000]	May [ 502900]	Sep [ 465400]	
Feb [ 444000]	Jun [ 679200]	Oct [ 664000]	
Mar [ 589000]	Jul [ 526400]	Nov [ 482500]	
Apr [ 774400]	Aug [ 837600]	Dec [ 497100]	
WATER TYPE [SG ] ANNUAL TOTAL [ 6873500]			Units: Gallons 21.1 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 94  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250] \* \* YEAR [1978 ] SHELBY  
 HUBER WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: JOHN HENRY EDENS, PRES. SOURCE BASIN [05]  
 ROUTE 3, BOX 242B AQUIFER 10 -[032]  
 TIMPSON, TEXAS 75975 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 666300]	May [ 491100]	Sep [ 586700]	
Feb [ 345200]	Jun [ 677900]	Oct [ 524400]	
Mar [ 530600]	Jul [ 702100]	Nov [ 449800]	
Apr [ 404300]	Aug [ 945400]	Dec [ 428900]	
WATER TYPE [SG ] ANNUAL TOTAL [ 6752700]			Units: Gallons 20.7 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 82  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]		* * YEAR [1977]		SHELBY	
HUBER WATER SUPPLY CORP.				SOURCE COUNTY [210]	
ATTN: JOHN HENRY EDENS, PRES.				SOURCE BASIN [05]	
ROUTE 3, BOX 242B				AQUIFER 10 - [032]	
TIMPSON, TEXAS		75975		NUMBER WELLS [ 1 ]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 441300]	May [ 423200]	Sep [ 551500]	
Feb [ 589700]	Jun [ 532600]	Oct [ 595000]	
Mar [ 421000]	Jul [ 588600]	Nov [ 505300]	
Apr [ 465100]	Aug [ 512700]	Dec [ 452200]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 6078200]	Units:
			Gallons
		18.7	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 82

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]		* * YEAR [1976]		SHELBY	
HUBER WATER SUPPLY CORP.				SOURCE COUNTY [210]	
ATTN: JOHN HENRY EDENS, PRES.				SOURCE BASIN [05]	
ROUTE 3, BOX 242B				AQUIFER 10 - [032]	
TIMPSON, TEXAS		75975		NUMBER WELLS [ 1 ]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 248300]	May [ 424000]	Sep [ 310600]	
Feb [ 358100]	Jun [ 500100]	Oct [ 396000]	
Mar [ 474900]	Jul [ 551700]	Nov [ 350700]	
Apr [ 352600]	Aug [ 457100]	Dec [ 441300]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 4865400]	Units:
			Gallons
		14.9	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 76

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]		* * YEAR [1975]		SHELBY	
HUBER WATER SUPPLY CORP.				SOURCE COUNTY [210]	
ATTN: JOHN HENRY EDENS, PRES.				SOURCE BASIN [05]	
ROUTE 3, BOX 242B				AQUIFER 10 - [032]	
TIMPSON, TEXAS		75975		NUMBER WELLS [ 1 ]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 356300]	May [ 283600]	Sep [ 421600]	
Feb [ 272300]	Jun [ 380400]	Oct [ 304500]	
Mar [ 283500]	Jul [ 470960]	Nov [ 524200]	
Apr [ 269100]	Aug [ 454440]	Dec [ 339000]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 4359900]	Units:
			Gallons
		13.4	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 70

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]					SHELBY
HUBER WATER SUPPLY CORP.	** YEAR [1974]				SOURCE COUNTY [210]
ATTN: JOHN HENRY EDENS, PRES.					SOURCE BASIN [05]
ROUTE 3, BOX 242B					AQUIFER 10 - [032]
TIMPSON, TEXAS	75975				NUMBER WELLS [ 1]
					RESERVOIR [ ]
					STATUS = 0

Jan [ 187980]	May [ 313000]	Sep [ 365100]		
Feb [ 210790]	Jun [ 347400]	Oct [ 249200]		
Mar [ 149560]	Jul [ 413800]	Nov [ 292400]		
Apr [ 199800]	Aug [ 384300]	Dec [ 249900]		
WATER TYPE [SG]	ANNUAL TOTAL [ 3363230]		Units:	
			Gallons	
			10.3	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 71

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]					SHELBY
HUBER WATER SUPPLY CORP.	** YEAR [1973]				SOURCE COUNTY [210]
ATTN: JOHN HENRY EDENS, PRES.					SOURCE BASIN [05]
ROUTE 3, BOX 242B					AQUIFER 10 - [032]
TIMPSON, TEXAS	75975				NUMBER WELLS [ ]
					RESERVOIR [ ]
					STATUS = 0

Jan [ 207881]	May [ 165482]	Sep [ 213170]		
Feb [ 220653]	Jun [ 194976]	Oct [ 216647]		
Mar [ 177408]	Jul [ 221197]	Nov [ 217107]		
Apr [ 171762]	Aug [ 236840]	Dec [ 200164]		
WATER TYPE [SG]	ANNUAL TOTAL [ 2443287]		Units:	
			Gallons	
			7.5	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 55

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]					SHELBY
HUBER WATER SUPPLY CORP.	** YEAR [1972]				SOURCE COUNTY [210]
ATTN: JOHN HENRY EDENS, PRES.					SOURCE BASIN [05]
ROUTE 3, BOX 242B					AQUIFER 10 - [032]
TIMPSON, TEXAS	75975				NUMBER WELLS [ 1]
					RESERVOIR [ ]
					STATUS = 0

Jan [ 149715]	May [ 165490]	Sep [ 231140]		
Feb [ 167117]	Jun [ 194940]	Oct [ 216645]		
Mar [ 169307]	Jul [ 221177]	Nov [ 204107]		
Apr [ 171051]	Aug [ 231542]	Dec [ 200170]		
WATER TYPE [SG]	ANNUAL TOTAL [ 2322401]		Units:	
			Gallons	
			7.1	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 53

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]		* * YEAR [1971 ]		SHELBY	
HUBER WATER SUPPLY CORP.				SOURCE COUNTY [210]	
ATTN: JOHN HENRY EDENS, PRES.				SOURCE BASIN [05]	
ROUTE 3, BOX 242B				AQUIFER 10 -[032]	
TIMPSON, TEXAS		75975		NUMBER WELLS [ 1]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [	159760]	May [	170027]	Sep [	203046]	
Feb [	159768]	Jun [	184319]	Oct [	186236]	
Mar [	158555]	Jul [	222177]	Nov [	190164]	
Apr [	193576]	Aug [	197846]	Dec [	198642]	
	WATER TYPE [SG ]		ANNUAL TOTAL [	2224116]		Units:
						Gallons
						6.8 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]		* * YEAR [1970 ]		SHELBY	
HUBER WATER SUPPLY CORP.				SOURCE COUNTY [210]	
ATTN: JOHN HENRY EDENS, PRES.				SOURCE BASIN [05]	
ROUTE 3, BOX 242B				AQUIFER 10 -[032]	
TIMPSON, TEXAS		75975		NUMBER WELLS [ 1]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [	201696]	May [	193020]	Sep [	203642]	
Feb [	136590]	Jun [	248777]	Oct [	178449]	
Mar [	140106]	Jul [	213673]	Nov [	183499]	
Apr [	180211]	Aug [	269978]	Dec [	184439]	
	WATER TYPE [SG ]		ANNUAL TOTAL [	2334080]		Units:
						Gallons
						7.2 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]		* * YEAR [1969 ]		SHELBY	
HUBER WATER SUPPLY CORP.				SOURCE COUNTY [210]	
ATTN: JOHN HENRY EDENS, PRES.				SOURCE BASIN [05]	
ROUTE 3, BOX 242B				AQUIFER 10 -[032]	
TIMPSON, TEXAS		75975		NUMBER WELLS [ 1]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [	118812]	May [	152840]	Sep [	130652]	
Feb [	130422]	Jun [	121860]	Oct [	152642]	
Mar [	103500]	Jul [	108558]	Nov [	112752]	
Apr [	130795]	Aug [	138213]	Dec [	120642]	
	WATER TYPE [SG ]		ANNUAL TOTAL [	1521688]		Units:
						Gallons
						4.7 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 53

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]					SHELBY
		** YEAR [1968]			SOURCE COUNTY [210]
HUBER WATER SUPPLY CORP.					SOURCE BASIN [05]
					AQUIFER 10 - [032]
ATTN: JOHN HENRY EDENS, PRES.					NUMBER WELLS [ 1]
ROUTE 3, BOX 242B					RESERVOIR [ ]
TIMPSON, TEXAS		75975			STATUS = 0

Jan [ 123172]	May [ 124426]	Sep [ 114419]		
Feb [ 126317]	Jun [ 141104]	Oct [ 102662]		
Mar [ 111019]	Jul [ 186198]	Nov [ 113672]		
Apr [ 123443]	Aug [ 125210]	Dec [ 101911]		
	WATER TYPE [SG]	ANNUAL TOTAL [ 1493553]		Units: Gallons 4.6 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]					SHELBY
		** YEAR [1967]			SOURCE COUNTY [210]
HUBER WATER SUPPLY CORP.					SOURCE BASIN [05]
					AQUIFER 10 - [032]
ATTN: JOHN HENRY EDENS, PRES.					NUMBER WELLS [ 1]
ROUTE 3, BOX 242B					RESERVOIR [ ]
TIMPSON, TEXAS		75975			STATUS = 0

Jan [ 75441]	May [ 133008]	Sep [ 130868]		
Feb [ 63596]	Jun [ 108138]	Oct [ 140249]		
Mar [ 85367]	Jul [ 154419]	Nov [ 121328]		
Apr [ 103877]	Aug [ 174176]	Dec [ 109641]		
	WATER TYPE [SG]	ANNUAL TOTAL [ 1400108]		Units: Gallons 4.3 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [399250]					SHELBY
		** YEAR [1966]			SOURCE COUNTY [210]
HUBER WATER SUPPLY CORP.					SOURCE BASIN [05]
					AQUIFER 10 - [032]
ATTN: JOHN HENRY EDENS, PRES.					NUMBER WELLS [ 1]
ROUTE 3, BOX 242B					RESERVOIR [ ]
TIMPSON, TEXAS		75975			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ 63215]		
Mar [ ]	Jul [ ]	Nov [ 79198]		
Apr [ ]	Aug [ ]	Dec [ 84589]		
	WATER TYPE [SG]	ANNUAL TOTAL [ 227002]		Units: Gallons .7 Acre-feet

Remarks: [ OPERATION BEGAN 10-66 ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [413300] \* \* YEAR [1994 ] SHELBY

CITY OF HUXLEY	SOURCE COUNTY [210]
C/O LARRY VAUGHN, MAYOR	SOURCE BASIN [05]
RT. 1, BOX 1410	AQUIFER [- [ ]
	NUMBER WELLS [ ]
	RESERVOIR [05170]
	STATUS = 0

SHELBYVILLE, TEXAS 75973

Jan [ 4458000]	May [ 5623000]	Sep [ 4864000]	
Feb [ 4606000]	Jun [ 6132000]	Oct [ 4114000]	
Mar [ 4701000]	Jul [ 6798000]	Nov [ 3431000]	
Apr [ 5549000]	Aug [ 6013000]	Dec [ 4131000]	
WATER TYPE [PS ] ANNUAL TOTAL [ 60420000]			Units: Gallons
			185.4 Acre-feet

Remarks: [FROM SABINE RA (TOLEDO BEND) ]

Seller Code: [ 80] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ 100], % TREATED =[ ] ; Connections: 641

Outside conn: 341 Pop served: 1923 % Connections metered: 100

% Connections: RES 70 COMM 30 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [413300] \* \* YEAR [1993 ] SHELBY

CITY OF HUXLEY	SOURCE COUNTY [210]
C/O LARRY VAUGHN, MAYOR	SOURCE BASIN [05]
RT. 1, BOX 1410	AQUIFER [- [ ]
	NUMBER WELLS [ ]
	RESERVOIR [05170]
	STATUS = 0

SHELBYVILLE, TEXAS 75973

Jan [ 8045000]	May [ 10560000]	Sep [ 7399000]	
Feb [ 6850000]	Jun [ 11200000]	Oct [ 5721000]	
Mar [ 9144000]	Jul [ 12155000]	Nov [ 4666000]	
Apr [ 8408000]	Aug [ 10811000]	Dec [ 4439000]	
WATER TYPE [PS ] ANNUAL TOTAL [ 99398000]			Units: Gallons
			305.0 Acre-feet

Remarks: [FROM SABINE RA (TOLEDO BEND) ]

Seller Code: [ 80] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ 100], % TREATED =[ ] ; Connections: 634

Outside conn: 320 Pop served: 2500 % Connections metered: 100

% Connections: RES 99 COMM 1.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [413300] \* \* YEAR [1992 ] SHELBY

CITY OF HUXLEY	SOURCE COUNTY [210]
C/O LARRY VAUGHN, MAYOR	SOURCE BASIN [05]
RT. 1, BOX 1410	AQUIFER [- [ ]
	NUMBER WELLS [ ]
	RESERVOIR [05170]
	STATUS = 0

SHELBYVILLE, TEXAS 75973

Jan [ 5768000]	May [ 7809000]	Sep [ 8720000]	
Feb [ 5350000]	Jun [ 9280000]	Oct [ 10133000]	
Mar [ 8151000]	Jul [ 7780000]	Nov [ 9186000]	
Apr [ 7458000]	Aug [ 9450000]	Dec [ 8610000]	
WATER TYPE [PS ] ANNUAL TOTAL [ 97695000]			Units: Gallons
			299.8 Acre-feet

Remarks: [FROM SABINE RA (TOLEDO BEND) ]

Seller Code: [ 80] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ 100], % TREATED =[ ] ; Connections: 640

Outside conn: 319 Pop served: 2560 % Connections metered: 100

% Connections: RES 99 COMM 1.0 IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [413300]		* * YEAR [1991 ]		SHELBY
CITY OF HUXLEY				SOURCE COUNTY [210]
C/O LARRY VAUGHN, MAYOR				SOURCE BASIN [05]
RT. 1, BOX 1410				AQUIFER -[ ]
SHELBYVILLE, TEXAS		75973		NUMBER WELLS [ ]
				RESERVOIR [05170]
				STATUS = 0

Jan [ 4348000]	May [ 5558000]	Sep [ 6405000]	
Feb [ 3325000]	Jun [ 5688000]	Oct [ 6164000]	
Mar [ 5049000]	Jul [ 7670000]	Nov [ 6332000]	
Apr [ 5376000]	Aug [ 5224000]	Dec [ 5429000]	
WATER TYPE [PS ]		ANNUAL TOTAL [ 66568000]	Units: Gallons
			204.3 Acre-feet

Remarks: [FROM SABINE RA (TOLEDO BEND) ]

Seller Code: [ 80] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ 100], % TREATED =[ ]; Connections: 624

Outside conn: 224 Pop served: 1000 % Connections metered: 100

% Connections: RES 95 COMM 5.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [413300]		* * YEAR [1990 ]		SHELBY
CITY OF HUXLEY				SOURCE COUNTY [210]
C/O LARRY VAUGHN, MAYOR				SOURCE BASIN [05]
RT. 1, BOX 1410				AQUIFER -[ ]
SHELBYVILLE, TEXAS		75973		NUMBER WELLS [ ]
				RESERVOIR [05170]
				STATUS = 0

Jan [ 4485000]	May [ 5274000]	Sep [ 9857000]	
Feb [ 4000000]	Jun [ 6278000]	Oct [ 8140000]	
Mar [ 4521000]	Jul [ 6921000]	Nov [ 5637000]	
Apr [ 4506000]	Aug [ 9320000]	Dec [ 5847000]	
WATER TYPE [PS ]		ANNUAL TOTAL [ 74786000]	Units: Gallons
			229.5 Acre-feet

Remarks: [FROM SABINE RA(TOLEDO BEND) ]

Seller Code: [ 80] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ 100], % TREATED =[ ]; Connections: 625

Outside conn: 325 Pop served: 1000 % Connections metered: 100

% Connections: RES 95 COMM 5.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [413300]		* * YEAR [1989 ]		SHELBY
CITY OF HUXLEY				SOURCE COUNTY [210]
C/O LARRY VAUGHN, MAYOR				SOURCE BASIN [05]
RT. 1, BOX 1410				AQUIFER -[ ]
SHELBYVILLE, TEXAS		75973		NUMBER WELLS [ ]
				RESERVOIR [05170]
				STATUS = 0

Jan [ 5000100]	May [ 6850000]	Sep [ 5000600]	
Feb [ 3780000]	Jun [ 6702000]	Oct [ 5000500]	
Mar [ 4115000]	Jul [ 6000900]	Nov [ 4231000]	
Apr [ 5794000]	Aug [ 5711000]	Dec [ 5471000]	
WATER TYPE [PS ]		ANNUAL TOTAL [ 63656100]	Units: Gallons
			195.4 Acre-feet

Remarks: [FROM SABINE RA (TOLEDO BEND) ]

Seller Code: [ 80] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ 100], % TREATED =[ ]; Connections: 602

Outside conn: 250 Pop served: 1000 % Connections metered: 100

% Connections: RES 95 COMM 5.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [413300] \* \* YEAR [1988 ] SHELBY  
 CITY OF HUXLEY SOURCE COUNTY [210]  
 C/O LARRY VAUGHN, MAYOR SOURCE BASIN [05]  
 RT. 1, BOX 1410 AQUIFER -[ ]  
 NUMBER WELLS [ ]  
 RESERVOIR [05170]  
 STATUS = 0  
 SHELBYVILLE, TEXAS 75973

Jan [ 3351500]	May [ 6555700]	Sep [ 6039000]	Units:
Feb [ 2353500]	Jun [ 5932000]	Oct [ 5824000]	Gallons
Mar [ 2969600]	Jul [ 6451500]	Nov [ 4765000]	Acre-feet
Apr [ 3386700]	Aug [ 7024000]	Dec [ 4280000]	
WATER TYPE [PS ] ANNUAL TOTAL [ 58932500]			180.9

Remarks: [FROM SABINE RA(TOLEDO BEND) ]  
 Seller Code: [ 80] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ 100], % TREATED =[ ]; Connections: 599  
 Outside conn: 260 Pop served: % Connections metered: 100  
 % Connections: RES 96 COMM 4.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [413300] \* \* YEAR [1987 ] SHELBY  
 CITY OF HUXLEY SOURCE COUNTY [210]  
 C/O LARRY VAUGHN, MAYOR SOURCE BASIN [05]  
 RT. 1, BOX 1410 AQUIFER -[ ]  
 NUMBER WELLS [ ]  
 RESERVOIR [05170]  
 STATUS = 0  
 SHELBYVILLE, TEXAS 75973

Jan [ 3910000]	May [ 5410000]	Sep [ 5631000]	Units:
Feb [ 3320000]	Jun [ 4420000]	Oct [ 5630000]	Gallons
Mar [ 4360000]	Jul [ 6280000]	Nov [ 4497600]	Acre-feet
Apr [ 4800000]	Aug [ 6659000]	Dec [ 3411500]	
WATER TYPE [PS ] ANNUAL TOTAL [ 58329100]			179.0

Remarks: [SABINE RA(TOLEDO BEND RES) ]  
 Seller Code: [ 80] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ 100], % TREATED =[ ]; Connections: 583  
 Outside conn: Pop served: % Connections metered: 100  
 % Connections: RES 96 COMM 4.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [413300] \* \* YEAR [1986 ] SHELBY  
 CITY OF HUXLEY SOURCE COUNTY [210]  
 C/O LARRY VAUGHN, MAYOR SOURCE BASIN [05]  
 RT. 1, BOX 1410 AQUIFER -[ ]  
 NUMBER WELLS [ ]  
 RESERVOIR [05170]  
 STATUS = 0  
 SHELBYVILLE, TEXAS 75973

Jan [ 3860000]	May [ 4590000]	Sep [ 5120000]	Units:
Feb [ 3400000]	Jun [ 4390000]	Oct [ 4400000]	Gallons
Mar [ 4740000]	Jul [ 6280000]	Nov [ 4370000]	Acre-feet
Apr [ 4510000]	Aug [ 6530000]	Dec [ 3380000]	
WATER TYPE [PS ] ANNUAL TOTAL [ 55570000]			170.5

Remarks: [SABINE RA/TOLEDO BEND RES. ]  
 Seller Code: [ 80] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ 100], % TREATED =[ ]; Connections: 588  
 Outside conn: 264 Pop served: % Connections metered: 100  
 % Connections: RES 96 COMM 4.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [413300]				SHELBY
		** YEAR [1985 ]		SOURCE COUNTY [210]
CITY OF HUXLEY				SOURCE BASIN [05]
C/O LARRY VAUGHN, MAYOR				AQUIFER -[ ]
RT. 1, BOX 1410				NUMBER WELLS [ ]
				RESERVOIR [05170]
SHELBYVILLE, TEXAS		75973		STATUS = 0

Jan [ 4129300]	May [ 4533900]	Sep [ 6120000]	
Feb [ 4121700]	Jun [ 6217800]	Oct [ 4150000]	
Mar [ 4300900]	Jul [ 6100000]	Nov [ 3760000]	
Apr [ 4626800]	Aug [ 6900000]	Dec [ 3970000]	Units:
	WATER TYPE [PS ]	ANNUAL TOTAL [ 58930400]	Gallons
			180.9 Acre-feet

Remarks: [SABINE RA/TOLEDO BEND RES ]  
 Seller Code: [ 80] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 73  
 Outside conn: 268 Pop served: 185 % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [413300]				SHELBY
		** YEAR [1984 ]		SOURCE COUNTY [210]
CITY OF HUXLEY				SOURCE BASIN [05]
C/O LARRY VAUGHN, MAYOR				AQUIFER -[ ]
RT. 1, BOX 1410				NUMBER WELLS [ ]
				RESERVOIR [05170]
SHELBYVILLE, TEXAS		75973		STATUS = 0

Jan [ 3998600]	May [ 4822600]	Sep [ 5270800]	
Feb [ 3364000]	Jun [ 5415900]	Oct [ 4305000]	
Mar [ 3695700]	Jul [ 5506656]	Nov [ 3708100]	
Apr [ 4478900]	Aug [ 5085800]	Dec [ 3501200]	Units:
	WATER TYPE [PS ]	ANNUAL TOTAL [ 53153256]	Gallons
			163.1 Acre-feet

Remarks: [SABINE RA-TOLEDO BEND RESERVOIR ]  
 Seller Code: [ 80] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 559  
 Outside conn: 258 Pop served: % Connections metered: 100  
 % Connections: RES 94 COMM 6.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [413300]				SHELBY
		** YEAR [1983 ]		SOURCE COUNTY [210]
CITY OF HUXLEY				SOURCE BASIN [05]
C/O LARRY VAUGHN, MAYOR				AQUIFER -[ ]
RT. 1, BOX 1410				NUMBER WELLS [ ]
				RESERVOIR [05170]
SHELBYVILLE, TEXAS		75973		STATUS = 0

Jan [ 3192900]	May [ 4398800]	Sep [ 4698100]	
Feb [ 2883900]	Jun [ 4506000]	Oct [ 4514100]	
Mar [ 3192900]	Jul [ 4950900]	Nov [ 3712400]	
Apr [ 3418500]	Aug [ 4873100]	Dec [ 4620200]	Units:
	WATER TYPE [PS ]	ANNUAL TOTAL [ 48961800]	Gallons
			150.3 Acre-feet

Remarks: [SABINE RA-TOLEDO BEND RESERVOIR ]  
 Seller Code: [ 1] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 539  
 Outside conn: 245 Pop served: % Connections metered: 100  
 % Connections: RES 97 COMM 3.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [413300]					SHELBY
		** YEAR [1982 ]			SOURCE COUNTY [210]
CITY OF HUXLEY					SOURCE BASIN [05]
C/O LARRY VAUGHN, MAYOR					AQUIFER -[ ]
RT. 1, BOX 1410					NUMBER WELLS [ ]
					RESERVOIR [05170]
SHELBYVILLE, TEXAS		75973			STATUS = 0

Jan [ 3671500]	May [ 3468000]	Sep [ 4565500]		
Feb [ 3295600]	Jun [ 4473100]	Oct [ 3601700]		
Mar [ 3648700]	Jul [ 4542900]	Nov [ 3401800]		
Apr [ 3360500]	Aug [ 5016800]	Dec [ 3192900]		
	WATER TYPE [PS ]	ANNUAL TOTAL [ 46239000]	Units:	
			Gallons	
			141.9	Acre-feet

Remarks: [SABINE RA-TOLEDO BEND RESERVOIR ]

Seller Code: [ 1 ] Metered/Est: [ 1 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 525

Outside conn: 242 Pop served: % Connections metered: 100

% Connections: RES 98 COMM 2.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [413300]					SHELBY
		** YEAR [1981 ]			SOURCE COUNTY [210]
CITY OF HUXLEY					SOURCE BASIN [05]
C/O LARRY VAUGHN, MAYOR					AQUIFER -[ ]
RT. 1, BOX 1410					NUMBER WELLS [ ]
					RESERVOIR [05170]
SHELBYVILLE, TEXAS		75973			STATUS = 0

Jan [ 2377600]	May [ 3239000]	Sep [ 3182300]		
Feb [ 2508300]	Jun [ 4036500]	Oct [ 2833100]		
Mar [ 2649800]	Jul [ 5121100]	Nov [ 2974200]		
Apr [ 3472200]	Aug [ 3914800]	Dec [ 2598500]		
	WATER TYPE [PS ]	ANNUAL TOTAL [ 38907400]	Units:	
			Gallons	
			119.4	Acre-feet

Remarks: [SABINE RA-TOLEDO BEND RESERVOIR ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 480

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [413300]					SHELBY
		** YEAR [1980 ]			SOURCE COUNTY [210]
CITY OF HUXLEY					SOURCE BASIN [05]
C/O LARRY VAUGHN, MAYOR					AQUIFER -[ ]
RT. 1, BOX 1410					NUMBER WELLS [ ]
					RESERVOIR [05170]
SHELBYVILLE, TEXAS		75973			STATUS = 0

Jan [ 2006000]	May [ 2616100]	Sep [ 3270700]		
Feb [ 2268300]	Jun [ 3449800]	Oct [ 2970300]		
Mar [ 2784900]	Jul [ 4172000]	Nov [ 2763200]		
Apr [ 2235600]	Aug [ 4369600]	Dec [ 2835000]		
	WATER TYPE [PS ]	ANNUAL TOTAL [ 35741500]	Units:	
			Gallons	
			109.7	Acre-feet

Remarks: [SABINE RA-TOLEDO BEND RESERVOIR ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 438

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [413300]

CITY OF HUXLEY  
C/O LARRY VAUGHN, MAYOR  
RT. 1, BOX 1410

SHELBYVILLE, TEXAS

\*\* YEAR [1979]

SHELBY  
SOURCE COUNTY [210]  
SOURCE BASIN [05]  
AQUIFER - [ ]  
NUMBER WELLS [ ]  
RESERVOIR [05170]  
STATUS = 0

75973

Jan	[ 2938400]	May	[ 2570800]	Sep	[ 2668100]	Units: Gallons Acre-feet
Feb	[ 1957600]	Jun	[ 2854600]	Oct	[ 2671100]	
Mar	[ 2445100]	Jul	[ 2983300]	Nov	[ 2370800]	
Apr	[ 2384500]	Aug	[ 2739900]	Dec	[ 2320600]	
WATER TYPE [PS]			ANNUAL TOTAL		[ 30904800]	

Remarks: [FROM SRA( TOLEDO BEND RESERVOIR) ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 410  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [413300]

CITY OF HUXLEY  
C/O LARRY VAUGHN, MAYOR  
RT. 1, BOX 1410

SHELBYVILLE, TEXAS

\*\* YEAR [1978]

SHELBY  
SOURCE COUNTY [210]  
SOURCE BASIN [05]  
AQUIFER - [ ]  
NUMBER WELLS [ ]  
RESERVOIR [05170]  
STATUS = 0

75973

Jan	[ 2140000]	May	[ 3187100]	Sep	[ 2816000]	Units: Gallons Acre-feet
Feb	[ 2137000]	Jun	[ 3179600]	Oct	[ 2559400]	
Mar	[ 2297100]	Jul	[ 3517600]	Nov	[ 2497800]	
Apr	[ 2948300]	Aug	[ 3204900]	Dec	[ 2388300]	
WATER TYPE [PS]			ANNUAL TOTAL		[ 32873100]	

Remarks: [FROM SRA ( TOLEDO BEND) ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 391  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [413300]

CITY OF HUXLEY  
C/O LARRY VAUGHN, MAYOR  
RT. 1, BOX 1410

SHELBYVILLE, TEXAS

\*\* YEAR [1977]

SHELBY  
SOURCE COUNTY [210]  
SOURCE BASIN [05]  
AQUIFER - [ ]  
NUMBER WELLS [ ]  
RESERVOIR [05170]  
STATUS = 0

75973

Jan	[ 1238000]	May	[ 1657000]	Sep	[ 2794000]	Units: Gallons Acre-feet
Feb	[ 1150000]	Jun	[ 2420000]	Oct	[ 2917800]	
Mar	[ 1453000]	Jul	[ 2577000]	Nov	[ 2248300]	
Apr	[ 1970000]	Aug	[ 1977000]	Dec	[ 2140000]	
WATER TYPE [PS]			ANNUAL TOTAL		[ 24542100]	

Remarks: [FROM SRA ( TOLEDO BEND) ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 365  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [432845] \* \* YEAR [1993 ] SHELBY  
 JACKSON WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 1138 AQUIFER 10 -[ ]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [05170]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [PS ]			ANNUAL TOTAL [	17400000] Units: 53.4 Gallons Acre-feet

Remarks: [FROM JOAQUIN-DATA VIA CONV. W/OPERATOR-K ]  
 Seller Code: [438400] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 180  
 Outside conn: Pop served: 540 % Connections metered: 100  
 % Connections: RES 90 COMM 10 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [432845] \* \* YEAR [1992 ] SHELBY  
 JACKSON WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 1138 AQUIFER 10 -[ ]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [05170]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [PS ]			ANNUAL TOTAL [	19710000] Units: 60.5 Gallons Acre-feet

Remarks: [EST TWDB ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 180  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [432845] \* \* YEAR [1991 ] SHELBY  
 JACKSON WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 1138 AQUIFER 10 -[ ]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [05170]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [PS ]			ANNUAL TOTAL [	19710000] Units: 60.5 Gallons Acre-feet

Remarks: [NO REPORT-TWDB EST ]  
 Seller Code: [ ] Metered/Est: [2 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 180  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]		** YEAR [1993]		SHELBY	
CITY OF JOAQUIN				SOURCE COUNTY [210]	
C/O MAYOR				SOURCE BASIN [05]	
P.O. BOX 237				AQUIFER 10 -[ ]	
JOAQUIN, TEXAS		75954		NUMBER WELLS [ ]	
				RESERVOIR [05170]	
				STATUS = 0	

Jan [ 5395700]	May [ 4793300]	Sep [ 6735300]	
Feb [ 4647100]	Jun [ 5458000]	Oct [ 5785600]	
Mar [ 5056400]	Jul [ 7306600]	Nov [ 6621000]	
Apr [ 4513900]	Aug [ 6349600]	Dec [ 5406800]	
WATER TYPE [PS]		ANNUAL TOTAL [ 68069300]	Units: Gallons
			208.9 Acre-feet

Remarks: [FROM TOWN OF LOGANSPORT ]  
 Seller Code: [ 125] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ 100]; Connections: 530  
 Outside conn: 135 Pop served: 1510 % Connections metered: 100  
 % Connections: RES 94 COMM 6.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]		** YEAR [1992]		SHELBY	
CITY OF JOAQUIN				SOURCE COUNTY [210]	
C/O MAYOR				SOURCE BASIN [05]	
P.O. BOX 237				AQUIFER 10 -[ ]	
JOAQUIN, TEXAS		75954		NUMBER WELLS [ ]	
				RESERVOIR [05170]	
				STATUS = 0	

Jan [ 4761700]	May [ 3802000]	Sep [ 6140000]	
Feb [ 4677200]	Jun [ 5780000]	Oct [ 5623400]	
Mar [ 4340900]	Jul [ 6635700]	Nov [ 4535200]	
Apr [ 4246100]	Aug [ 4949700]	Dec [ 5497400]	
WATER TYPE [PS]		ANNUAL TOTAL [ 60989300]	Units: Gallons
			187.2 Acre-feet

Remarks: [FROM LOGANSPORT ]  
 Seller Code: [ 125] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ 100]; Connections: 521  
 Outside conn: 136 Pop served: 1510 % Connections metered: 100  
 % Connections: RES 94 COMM 6.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]		** YEAR [1991]		SHELBY	
CITY OF JOAQUIN				SOURCE COUNTY [210]	
C/O MAYOR				SOURCE BASIN [05]	
P.O. BOX 237				AQUIFER 10 -[ ]	
JOAQUIN, TEXAS		75954		NUMBER WELLS [ ]	
				RESERVOIR [05170]	
				STATUS = 0	

Jan [ 4885400]	May [ 5624000]	Sep [ 3655900]	
Feb [ 3991200]	Jun [ 3991200]	Oct [ 5336300]	
Mar [ 3536400]	Jul [ 5855700]	Nov [ 4173400]	
Apr [ 4331900]	Aug [ 5206400]	Dec [ 5194900]	
WATER TYPE [PS]		ANNUAL TOTAL [ 55782700]	Units: Gallons
			171.2 Acre-feet

Remarks: [FROM LOGANSPORT ]  
 Seller Code: [ 125] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ 100]; Connections: 498  
 Outside conn: 133 Pop served: 1500 % Connections metered: 100  
 % Connections: RES 93 COMM 7.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400] CITY OF JOAQUIN C/O MAYOR P.O. BOX 237 JOAQUIN, TEXAS 75954	** YEAR [1990] SHELBY SOURCE COUNTY [210] SOURCE BASIN [05] AQUIFER 10 - [ ] NUMBER WELLS [ ] RESERVOIR [05170] STATUS = 0
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Jan [ 3898300]	May [ 4694700]	Sep [ 4192200]	Units:
Feb [ 3682900]	Jun [ 4569400]	Oct [ 3832800]	Gallons
Mar [ 3746700]	Jul [ 4476200]	Nov [ 4378000]	155.5
Apr [ 4049800]	Aug [ 4929400]	Dec [ 4206300]	
WATER TYPE [PS]	ANNUAL TOTAL [ 50656700]		Acre-feet

Remarks: [FROM LOGANSFORT ]  
 Seller Code: [ 125] Metered/Est: [ 1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 490  
 Outside conn: 107 Pop served: 1500 % Connections metered: 100  
 % Connections: RES 94 COMM 6.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400] CITY OF JOAQUIN C/O MAYOR P.O. BOX 237 JOAQUIN, TEXAS 75954	** YEAR [1989] SHELBY SOURCE COUNTY [210] SOURCE BASIN [05] AQUIFER 10 - [ ] NUMBER WELLS [ ] RESERVOIR [05170] STATUS = 0
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Jan [ 4443700]	May [ 3802400]	Sep [ 4997400]	Units:
Feb [ 3349800]	Jun [ 4815400]	Oct [ 4822800]	Gallons
Mar [ 4504600]	Jul [ 3327900]	Nov [ 3724800]	161.4
Apr [ 3675100]	Aug [ 5954100]	Dec [ 5175900]	
WATER TYPE [PS]	ANNUAL TOTAL [ 52593900]		Acre-feet

Remarks: [FROM LOGANSFORT ]  
 Seller Code: [ 125] Metered/Est: [ 1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 542  
 Outside conn: 123 Pop served: 1500 % Connections metered: 100  
 % Connections: RES 93 COMM 7.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400] CITY OF JOAQUIN C/O MAYOR P.O. BOX 237 JOAQUIN, TEXAS 75954	** YEAR [1988] SHELBY SOURCE COUNTY [210] SOURCE BASIN [05] AQUIFER 10 - [ ] NUMBER WELLS [ ] RESERVOIR [05170] STATUS = 0
---------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------

Jan [ 4066000]	May [ 4314000]	Sep [ 6216000]	Units:
Feb [ 2685000]	Jun [ 5033000]	Oct [ 5737000]	Gallons
Mar [ 5075000]	Jul [ 5635000]	Nov [ 5196000]	173.5
Apr [ 2689000]	Aug [ 5560000]	Dec [ 4334000]	
WATER TYPE [PS]	ANNUAL TOTAL [ 56540000]		Acre-feet

Remarks: [FROM LOGANSFORT ]  
 Seller Code: [ 125] Metered/Est: [ 1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 540  
 Outside conn: 195 Pop served: 1200 % Connections metered: 100  
 % Connections: RES 95 COMM 5.0 IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]		SHELBY
	** YEAR [1987 ]	SOURCE COUNTY [210]
CITY OF JOAQUIN		SOURCE BASIN [05]
C/O MAYOR		AQUIFER 10 -[ ]
P.O. BOX 237		NUMBER WELLS [ ]
		RESERVOIR [05170]
JOAQUIN, TEXAS	75954	STATUS = 0

Jan [ 1828000]	May [ 1963000]	Sep [ 3610000]	
Feb [ 2091000]	Jun [ 2265000]	Oct [ 3560000]	
Mar [ 2431000]	Jul [ 2943000]	Nov [ 2401000]	
Apr [ 2457000]	Aug [ 3216000]	Dec [ 2830000]	
	WATER TYPE [PS ]	ANNUAL TOTAL [ 31595000]	Units: Gallons 97.0 Acre-feet

Remarks: [FROM LOGANSFORT ]  
 Seller Code: [ 125] Metered/Est: [ 1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 355  
 Outside conn: 15 Pop served: 917 % Connections metered: 100  
 % Connections: RES 97 COMM 3.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]		SHELBY
	** YEAR [1986 ]	SOURCE COUNTY [210]
CITY OF JOAQUIN		SOURCE BASIN [05]
C/O MAYOR		AQUIFER 10 -[ ]
P.O. BOX 237		NUMBER WELLS [ ]
		RESERVOIR [05170]
JOAQUIN, TEXAS	75954	STATUS = 0

Jan [ 2472000]	May [ 1774000]	Sep [ 2007000]	
Feb [ 3017000]	Jun [ 2016000]	Oct [ 2382000]	
Mar [ 1796000]	Jul [ 2936000]	Nov [ 1880000]	
Apr [ 2187000]	Aug [ 2407000]	Dec [ 2326000]	
	WATER TYPE [PS ]	ANNUAL TOTAL [ 27200000]	Units: Gallons 83.5 Acre-feet

Remarks: [FROM LOGANSFORT ]  
 Seller Code: [ 125] Metered/Est: [ 1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 342  
 Outside conn: 15 Pop served: 917 % Connections metered: 100  
 % Connections: RES 97 COMM 3.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]		SHELBY
	** YEAR [1986 ]	SOURCE COUNTY [210]
CITY OF JOAQUIN		SOURCE BASIN [05]
C/O MAYOR		AQUIFER 10 -[190]
P.O. BOX 237		NUMBER WELLS [ ]
		RESERVOIR [ ]
JOAQUIN, TEXAS	75954	STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]	Units: Gallons Acre-feet

Remarks: [USED SW LOGANSFORT ONLY 1986 ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 342  
 Outside conn: 15 Pop served: 917 % Connections metered: 100  
 % Connections: RES 97 COMM 3.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]		* * YEAR [1985]		SHELBY
CITY OF JOAQUIN				SOURCE COUNTY [210]
C/O MAYOR				SOURCE BASIN [05]
P.O. BOX 237				AQUIFER 10 - [ ]
				NUMBER WELLS [ ]
JOAQUIN, TEXAS		75954		RESERVOIR [05170]
				STATUS = 0
Jan [ ]	May [ 1061000]	Sep [ 2588000]		
Feb [ ]	Jun [ 2219000]	Oct [ 2178000]		
Mar [ ]	Jul [ 2716000]	Nov [ 2142000]		
Apr [ ]	Aug [ 2474000]	Dec [ 2322000]		
WATER TYPE [PS]		ANNUAL TOTAL [ 17700000]		Units: 54.3 Gallons Acre-feet

Remarks: [FR LOGANSFORT, LA/OWN WELLS ALSO ]  
 Seller Code: [ 125 ] Metered/Est: [ 1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 350  
 Outside conn: 6 Pop served: 917 % Connections metered: 100  
 % Connections: RES 90 COMM 10 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]		* * YEAR [1985]		SHELBY
CITY OF JOAQUIN				SOURCE COUNTY [210]
C/O MAYOR				SOURCE BASIN [05]
P.O. BOX 237				AQUIFER 10 - [190]
				NUMBER WELLS [ 1]
JOAQUIN, TEXAS		75954		RESERVOIR [ ]
				STATUS = 0
Jan [ 1654100]	May [ 1621600]	Sep [ ]		
Feb [ 2122600]	Jun [ ]	Oct [ ]		
Mar [ 1538500]	Jul [ ]	Nov [ ]		
Apr [ 1751400]	Aug [ ]	Dec [ ]		
WATER TYPE [SG]		ANNUAL TOTAL [ 8688200]		Units: 26.7 Gallons Acre-feet

Remarks: [SW FR LOGANSFORT, LA ]  
 Seller Code: [ ] Metered/Est: [ 1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 350  
 Outside conn: 6 Pop served: 917 % Connections metered: 100  
 % Connections: RES 90 COMM 10 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]		* * YEAR [1984]		SHELBY
CITY OF JOAQUIN				SOURCE COUNTY [210]
C/O MAYOR				SOURCE BASIN [05]
P.O. BOX 237				AQUIFER 10 - [190]
				NUMBER WELLS [ 2]
JOAQUIN, TEXAS		75954		RESERVOIR [ ]
				STATUS = 0
Jan [ 1918200]	May [ 1649700]	Sep [ 2020400]		
Feb [ 1634100]	Jun [ 1701200]	Oct [ 1609000]		
Mar [ 1273900]	Jul [ 2115100]	Nov [ 1398000]		
Apr [ 1545700]	Aug [ 1854400]	Dec [ 1427100]		
WATER TYPE [SG]		ANNUAL TOTAL [ 20146800]		Units: 61.8 Gallons Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ 1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 325  
 Outside conn: 5 Pop served: 917 % Connections metered: 100  
 % Connections: RES 90 COMM 10 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]				SHELBY
		** YEAR [1983 ]		SOURCE COUNTY [210]
CITY OF JOAQUIN				SOURCE BASIN [05]
C/O MAYOR				AQUIFER 10 -[190]
P.O. BOX 237				NUMBER WELLS [ 2]
				RESERVOIR [ ]
JOAQUIN, TEXAS		75954		STATUS = 0

Jan [ 1315300]	May [ 1443800]	Sep [ 1769500]	
Feb [ 1225400]	Jun [ 1566200]	Oct [ 1454500]	
Mar [ 1167600]	Jul [ 1378800]	Nov [ 1399600]	
Apr [ 1353800]	Aug [ 2206700]	Dec [ 1374500]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 17655700]	Gallons
			54.2 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 304

Outside conn: 5 Pop served: 917 % Connections metered: 100

% Connections: RES 90 COMM 10 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]				SHELBY
		** YEAR [1982 ]		SOURCE COUNTY [210]
CITY OF JOAQUIN				SOURCE BASIN [05]
C/O MAYOR				AQUIFER 10 -[190]
P.O. BOX 237				NUMBER WELLS [ 2]
				RESERVOIR [ ]
JOAQUIN, TEXAS		75954		STATUS = 0

Jan [ 1435400]	May [ 1278100]	Sep [ 1914100]	
Feb [ 1906200]	Jun [ 1693200]	Oct [ 1830200]	
Mar [ 1200400]	Jul [ 1470800]	Nov [ 1400800]	
Apr [ 1402300]	Aug [ 1591000]	Dec [ 1328000]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 18450500]	Gallons
			56.6 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 300

Outside conn: 10 Pop served: 914 % Connections metered: 100

% Connections: RES 95 COMM 5.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]				SHELBY
		** YEAR [1981 ]		SOURCE COUNTY [210]
CITY OF JOAQUIN				SOURCE BASIN [05]
C/O MAYOR				AQUIFER 10 -[190]
P.O. BOX 237				NUMBER WELLS [ 2]
				RESERVOIR [ ]
JOAQUIN, TEXAS		75954		STATUS = 0

Jan [ 1426899]	May [ 1389172]	Sep [ 2085180]	
Feb [ 1451450]	Jun [ 1329090]	Oct [ 1458891]	
Mar [ 1093804]	Jul [ 1595415]	Nov [ 1518900]	
Apr [ 1250220]	Aug [ 1987906]	Dec [ 1092409]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 17679336]	Gallons
			54.3 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 305

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]			SHELBY
	** YEAR [1980 ]		SOURCE COUNTY [210]
CITY OF JOAQUIN			SOURCE BASIN [05]
C/O MAYOR			AQUIFER 10 -[190]
P.O. BOX 237			NUMBER WELLS [ 1]
			RESERVOIR [ ]
JOAQUIN, TEXAS	75954		STATUS = 0

Jan [ 1073600]	May [ 1246600]	Sep [ 1741200]	
Feb [ 1062700]	Jun [ 1640400]	Oct [ 1401800]	
Mar [ 1475300]	Jul [ 1893800]	Nov [ 1486500]	
Apr [ 1196600]	Aug [ 1728100]	Dec [ 1094200]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 17040800]	Gallons
			52.3 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 289

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]			SHELBY
	** YEAR [1979 ]		SOURCE COUNTY [210]
CITY OF JOAQUIN			SOURCE BASIN [05]
C/O MAYOR			AQUIFER 10 -[190]
P.O. BOX 237			NUMBER WELLS [ 1]
			RESERVOIR [ ]
JOAQUIN, TEXAS	75954		STATUS = 0

Jan [ 1471700]	May [ 1297000]	Sep [ 1445600]	
Feb [ 1048400]	Jun [ 1494700]	Oct [ 1201900]	
Mar [ 1054300]	Jul [ 1454800]	Nov [ 1389300]	
Apr [ 852900]	Aug [ 1425800]	Dec [ 1994400]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 16130800]	Gallons
			49.5 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]			SHELBY
	** YEAR [1978 ]		SOURCE COUNTY [210]
CITY OF JOAQUIN			SOURCE BASIN [05]
C/O MAYOR			AQUIFER 10 -[190]
P.O. BOX 237			NUMBER WELLS [ 2]
			RESERVOIR [ ]
JOAQUIN, TEXAS	75954		STATUS = 0

Jan [ 2042700]	May [ 1196300]	Sep [ 1774800]	
Feb [ 1053300]	Jun [ 1609600]	Oct [ 1226700]	
Mar [ 1109400]	Jul [ 1929600]	Nov [ 1433400]	
Apr [ 1283900]	Aug [ 1625000]	Dec [ 1204300]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 17489000]	Gallons
			53.7 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 295

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]				SHELBY
		** YEAR [1977 ]		SOURCE COUNTY [210]
CITY OF JOAQUIN				SOURCE BASIN [05]
C/O MAYOR				AQUIFER 10 -[190]
P.O. BOX 237				NUMBER WELLS [ 2]
				RESERVOIR [ ]
JOAQUIN, TEXAS	75954			STATUS = 0

Jan [ 1453700]	May [ 1371800]	Sep [ 1498500]	
Feb [ 1438000]	Jun [ 1826300]	Oct [ 1741000]	
Mar [ 854300]	Jul [ 1363200]	Nov [ 1745200]	
Apr [ 1213300]	Aug [ 1351900]	Dec [ 1716700]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 17573900]	Gallons
			53.9 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 295

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]				SHELBY
		** YEAR [1976 ]		SOURCE COUNTY [210]
CITY OF JOAQUIN				SOURCE BASIN [05]
C/O MAYOR				AQUIFER 10 -[190]
P.O. BOX 237				NUMBER WELLS [ 2]
				RESERVOIR [ ]
JOAQUIN, TEXAS	75954			STATUS = 0

Jan [ 1463800]	May [ 1478700]	Sep [ 1410200]	
Feb [ 1014600]	Jun [ 2145065]	Oct [ 1551300]	
Mar [ 994000]	Jul [ 1923600]	Nov [ 1329900]	
Apr [ 1249200]	Aug [ 1347200]	Dec [ 1438000]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 17345565]	Gallons
			53.2 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 295

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]				SHELBY
		** YEAR [1975 ]		SOURCE COUNTY [210]
CITY OF JOAQUIN				SOURCE BASIN [05]
C/O MAYOR				AQUIFER 10 -[190]
P.O. BOX 237				NUMBER WELLS [ 2]
				RESERVOIR [ ]
JOAQUIN, TEXAS	75954			STATUS = 0

Jan [ 1379800]	May [ 1148100]	Sep [ 1280900]	
Feb [ 1049600]	Jun [ 1784600]	Oct [ 1195000]	
Mar [ 1014900]	Jul [ 1141000]	Nov [ 1051900]	
Apr [ 1099600]	Aug [ 2336900]	Dec [ 1020800]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 15503100]	Gallons
			47.6 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 280

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]					SHELBY
		** YEAR [1974 ]			SOURCE COUNTY [210]
CITY OF JOAQUIN					SOURCE BASIN [05]
C/O MAYOR					AQUIFER 10 -[190]
P.O. BOX 237					NUMBER WELLS [ 2]
					RESERVOIR [ ]
JOAQUIN, TEXAS		75954			STATUS = 0
Jan [ 1090000]	May [ 1480200]	Sep [ 1000500]			
Feb [ 1000000]	Jun [ 1187344]	Oct [ 1425000]			
Mar [ 1215000]	Jul [ 1456200]	Nov [ 1135000]			
Apr [ 1300000]	Aug [ 1500000]	Dec [ 1110000]			
	WATER TYPE [SG ]	ANNUAL TOTAL [ 14899244]			Units:
					Gallons
					45.7 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 284

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]					SHELBY
		** YEAR [1973 ]			SOURCE COUNTY [210]
CITY OF JOAQUIN					SOURCE BASIN [05]
C/O MAYOR					AQUIFER 10 -[190]
P.O. BOX 237					NUMBER WELLS [ 2]
					RESERVOIR [ ]
JOAQUIN, TEXAS		75954			STATUS = 0
Jan [ 1575100]	May [ 2023671]	Sep [ 2466375]			
Feb [ 1472097]	Jun [ 2033874]	Oct [ 1989489]			
Mar [ 1391586]	Jul [ 2029654]	Nov [ 1896395]			
Apr [ 1421286]	Aug [ 2321086]	Dec [ 1266285]			
	WATER TYPE [SG ]	ANNUAL TOTAL [ 21886898]			Units:
					Gallons
					67.2 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 275

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]					SHELBY
		** YEAR [1972 ]			SOURCE COUNTY [210]
CITY OF JOAQUIN					SOURCE BASIN [05]
C/O MAYOR					AQUIFER 10 -[190]
P.O. BOX 237					NUMBER WELLS [ 2]
					RESERVOIR [ ]
JOAQUIN, TEXAS		75954			STATUS = 0
Jan [ 1086605]	May [ 1460158]	Sep [ 1003876]			
Feb [ 1195712]	Jun [ 1167244]	Oct [ 1541980]			
Mar [ 1202511]	Jul [ 1658188]	Nov [ 1134000]			
Apr [ 1000860]	Aug [ 1406200]	Dec [ 1000155]			
	WATER TYPE [SG ]	ANNUAL TOTAL [ 14857489]			Units:
					Gallons
					45.6 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 273

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]		SHELBY
	** YEAR [1971 ]	SOURCE COUNTY [210]
CITY OF JOAQUIN		SOURCE BASIN [05]
C/O MAYOR		AQUIFER 10 -[190]
P.O. BOX 237		NUMBER WELLS [ ]
		RESERVOIR [ ]
JOAQUIN, TEXAS	75954	STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]	10800000] Units: Gallons 33.1 Acre-feet

Remarks: [ EST. BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 300

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]		SHELBY
	** YEAR [1970 ]	SOURCE COUNTY [210]
CITY OF JOAQUIN		SOURCE BASIN [05]
C/O MAYOR		AQUIFER 10 -[190]
P.O. BOX 237		NUMBER WELLS [ ]
		RESERVOIR [ ]
JOAQUIN, TEXAS	75954	STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]	10581100] Units: Gallons 32.5 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]		SHELBY
	** YEAR [1969 ]	SOURCE COUNTY [210]
CITY OF JOAQUIN		SOURCE BASIN [05]
C/O MAYOR		AQUIFER 10 -[190]
P.O. BOX 237		NUMBER WELLS [ 1]
		RESERVOIR [ ]
JOAQUIN, TEXAS	75954	STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]	10269000] Units: Gallons 31.5 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]

CITY OF JOAQUIN  
C/O MAYOR  
P.O. BOX 237

JOAQUIN, TEXAS

\*\* YEAR [1968]

75954

SHELBY  
SOURCE COUNTY [210]  
SOURCE BASIN [05]  
AQUIFER 10 - [190]  
NUMBER WELLS [ 1]  
RESERVOIR [ ]  
STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	Units: Gallons Acre-feet
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ] ANNUAL TOTAL [ ]			

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: [ ]

Outside conn: Pop served: % Connections metered: [ ]

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]

CITY OF JOAQUIN  
C/O MAYOR  
P.O. BOX 237

JOAQUIN, TEXAS

\*\* YEAR [1967]

75954

SHELBY  
SOURCE COUNTY [210]  
SOURCE BASIN [05]  
AQUIFER 10 - [190]  
NUMBER WELLS [ 1]  
RESERVOIR [ ]  
STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	Units: Gallons Acre-feet
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ] ANNUAL TOTAL [ ]			

Remarks: [ EST. FROM VISIT BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 200

Outside conn: Pop served: % Connections metered: [ ]

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]

CITY OF JOAQUIN  
C/O MAYOR  
P.O. BOX 237

JOAQUIN, TEXAS

\*\* YEAR [1966]

75954

SHELBY  
SOURCE COUNTY [210]  
SOURCE BASIN [05]  
AQUIFER 10 - [190]  
NUMBER WELLS [ 1]  
RESERVOIR [ ]  
STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	Units: Gallons Acre-feet
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ] ANNUAL TOTAL [ ]			

Remarks: [ EST. FROM VISIT BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 195

Outside conn: Pop served: % Connections metered: [ ]

% Connections: RES COMM IND ; EFFLUENT(gal)





===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]

CITY OF JOAQUIN  
C/O MAYOR  
P.O. BOX 237

JOAQUIN, TEXAS

\*\* YEAR [1962] | SHELBY  
SOURCE COUNTY [210]  
SOURCE BASIN [05]  
AQUIFER 10 - [190]  
NUMBER WELLS [ ]  
RESERVOIR [ ]  
STATUS = 0

75954

Jan [ ]	May [ ]	Sep [ ]	Units:
Feb [ ]	Jun [ ]	Oct [ ]	Gallons
Mar [ ]	Jul [ ]	Nov [ ]	Acre-feet
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG]			ANNUAL TOTAL [ ]

Remarks: [NO REPORT]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW =[ ], % TREATED =[ ]; Connections:  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]

CITY OF JOAQUIN  
C/O MAYOR  
P.O. BOX 237

JOAQUIN, TEXAS

\*\* YEAR [1961] | SHELBY  
SOURCE COUNTY [210]  
SOURCE BASIN [05]  
AQUIFER 10 - [190]  
NUMBER WELLS [ 1]  
RESERVOIR [ ]  
STATUS = 0

75954

Jan [ ]	May [ ]	Sep [ ]	Units:
Feb [ ]	Jun [ ]	Oct [ ]	Gallons
Mar [ ]	Jul [ ]	Nov [ ]	Acre-feet
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG]			ANNUAL TOTAL [ 2500000 ]

Remarks: [ ESTIMATED BY BWE ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW =[ ], % TREATED =[ ]; Connections:  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]

CITY OF JOAQUIN  
C/O MAYOR  
P.O. BOX 237

JOAQUIN, TEXAS

\*\* YEAR [1960] | SHELBY  
SOURCE COUNTY [210]  
SOURCE BASIN [05]  
AQUIFER 10 - [190]  
NUMBER WELLS [ ]  
RESERVOIR [ ]  
STATUS = 0

75954

Jan [ ]	May [ ]	Sep [ ]	Units:
Feb [ ]	Jun [ ]	Oct [ ]	Gallons
Mar [ ]	Jul [ ]	Nov [ ]	Acre-feet
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG]			ANNUAL TOTAL [ 3000000 ]

Remarks: [ ESTIMATED BY BWE ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW =[ ], % TREATED =[ ]; Connections:  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]		SHELBY
	** YEAR [1959]	SOURCE COUNTY [210]
CITY OF JOAQUIN		SOURCE BASIN [05]
C/O MAYOR		AQUIFER 10 -[190]
P.O. BOX 237		NUMBER WELLS [ 1]
		RESERVOIR [ ]
JOAQUIN, TEXAS	75954	STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [	2810000]
			Units: Gallons
			8.6 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 25

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]		SHELBY
	** YEAR [1958]	SOURCE COUNTY [210]
CITY OF JOAQUIN		SOURCE BASIN [05]
C/O MAYOR		AQUIFER 10 -[190]
P.O. BOX 237		NUMBER WELLS [ 1]
		RESERVOIR [ ]
JOAQUIN, TEXAS	75954	STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [	2810000]
			Units: Gallons
			8.6 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 25

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]		SHELBY
	** YEAR [1957]	SOURCE COUNTY [210]
CITY OF JOAQUIN		SOURCE BASIN [05]
C/O MAYOR		AQUIFER 10 -[190]
P.O. BOX 237		NUMBER WELLS [ 1]
		RESERVOIR [ ]
JOAQUIN, TEXAS	75954	STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [	1095000]
			Units: Gallons
			3.4 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 29

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]					SHELBY
		** YEAR [1956 ]			SOURCE COUNTY [210]
CITY OF JOAQUIN					SOURCE BASIN [05]
C/O MAYOR					AQUIFER 10 - [190]
P.O. BOX 237					NUMBER WELLS [ 1 ]
					RESERVOIR [ ]
JOAQUIN, TEXAS		75954.			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		

	WATER TYPE [SG ]	ANNUAL TOTAL [	1095000]	Units:
			3.4	Gallons
				Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [438400]					SHELBY
		** YEAR [1955 ]			SOURCE COUNTY [210]
CITY OF JOAQUIN					SOURCE BASIN [05]
C/O MAYOR					AQUIFER 10 - [190]
P.O. BOX 237					NUMBER WELLS [ 1 ]
					RESERVOIR [ ]
JOAQUIN, TEXAS		75954			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		

	WATER TYPE [SG ]	ANNUAL TOTAL [	500000]	Units:
			1.5	Gallons
				Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100]					SHELBY
		** YEAR [1993 ]			SOURCE COUNTY [210]
MCCLELLAND WATER SUPPLY CORP.					SOURCE BASIN [05]
C/O C.R. JONES, PRES.					AQUIFER 10 - [032]
RT. 2, BOX 280					NUMBER WELLS [ 2 ]
					RESERVOIR [ ]
SHELBYVILLE, TEXAS		75973			STATUS = 0

Jan [ 2572700]	May [ 2438500]	Sep [ 4183900]		
Feb [ 2761400]	Jun [ 4059800]	Oct [ 3324800]		
Mar [ 2604900]	Jul [ 3056200]	Nov [ 2782600]		
Apr [ 2344100]	Aug [ 5027000]	Dec [ 2418700]		

	WATER TYPE [SG ]	ANNUAL TOTAL [	37574600]	Units:
			115.3	Gallons
				Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 386

Outside conn: 386 Pop served: 1200 % Connections metered: 100

% Connections: RES 95 COMM 1.0 IND 4.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100] \* \* YEAR [1992 ] SHELBY  
 MCCLELLAND WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O C.R. JONES, PRES. SOURCE BASIN [05]  
 RT. 2, BOX 280 AQUIFER 10 -[032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 2]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 36562400] Units: 112.2 Gallons Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 383  
 Outside conn: Pop served: 1280 % Connections metered: 100  
 % Connections: RES 95 COMM 5.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100] \* \* YEAR [1991 ] SHELBY  
 MCCLELLAND WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O C.R. JONES, PRES. SOURCE BASIN [05]  
 RT. 2, BOX 280 AQUIFER 10 -[032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 2]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 40150000] Units: 123.2 Gallons Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 385  
 Outside conn: 385 Pop served: 1270 % Connections metered: 100  
 % Connections: RES 95 COMM 5.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100] \* \* YEAR [1990 ] SHELBY  
 MCCLELLAND WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O C.R. JONES, PRES. SOURCE BASIN [05]  
 RT. 2, BOX 280 AQUIFER 10 -[032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 2]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 38843000] Units: 119.2 Gallons Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 380  
 Outside conn: 380 Pop served: 1260 % Connections metered: 100  
 % Connections: RES 95 COMM 5.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100] \* \* YEAR [1989 ] SHELBY  
 MCCLELLAND WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O C.R. JONES, PRES. SOURCE BASIN [05]  
 RT. 2, BOX 280 AQUIFER 10 -[032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 2]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 37900000] Units: 116.3 Gallons Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [3 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 375  
 Outside conn: 375 Pop served: 1250 % Connections metered: 100  
 % Connections: RES 95 COMM 5.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100] \* \* YEAR [1988 ] SHELBY  
 MCCLELLAND WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O C.R. JONES, PRES. SOURCE BASIN [05]  
 RT. 2, BOX 280 AQUIFER 10 -[032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 2]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 36500000] Units: 112.0 Gallons Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 1200  
 Outside conn: 360 Pop served: 360 % Connections metered: 100  
 % Connections: RES 95 COMM 5.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100] \* \* YEAR [1987 ] SHELBY  
 MCCLELLAND WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O C.R. JONES, PRES. SOURCE BASIN [05]  
 RT. 2, BOX 280 AQUIFER 10 -[032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 2]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 35770000] Units: 109.8 Gallons Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 360  
 Outside conn: 360 Pop served: 1300 % Connections metered: 100  
 % Connections: RES 90 COMM 10 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100] \* \* YEAR [1986 ] SHELBY  
 MCCLELLAND WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O C.R. JONES, PRES. SOURCE BASIN [05]  
 RT. 2, BOX 280 AQUIFER 10 -[032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 2]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]				
Feb [ ]	Jun [ ]	Oct [ ]				
Mar [ ]	Jul [ ]	Nov [ ]				
Apr [ ]	Aug [ ]	Dec [ ]				
	WATER TYPE [SG ]	ANNUAL TOTAL [	28523000]		Units:	
			87.5		Gallons	
					Acre-feet	

Remarks: [EST BY TWDB ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 354  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100] \* \* YEAR [1985 ] SHELBY  
 MCCLELLAND WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O C.R. JONES, PRES. SOURCE BASIN [05]  
 RT. 2, BOX 280 AQUIFER 10 -[032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 2]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]				
Feb [ ]	Jun [ ]	Oct [ ]				
Mar [ ]	Jul [ ]	Nov [ ]				
Apr [ ]	Aug [ ]	Dec [ ]				
	WATER TYPE [SG ]	ANNUAL TOTAL [	30796900]		Units:	
			94.5		Gallons	
					Acre-feet	

Remarks: [EST BY TWDB ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 344  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100] \* \* YEAR [1984 ] SHELBY  
 MCCLELLAND WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O C.R. JONES, PRES. SOURCE BASIN [05]  
 RT. 2, BOX 280 AQUIFER 10 -[032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 2]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]				
Feb [ ]	Jun [ ]	Oct [ ]				
Mar [ ]	Jul [ ]	Nov [ ]				
Apr [ ]	Aug [ ]	Dec [ ]				
	WATER TYPE [SG ]	ANNUAL TOTAL [	29812200]		Units:	
			91.5		Gallons	
					Acre-feet	

Remarks: [EST TWDB ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 333  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100] \* \* YEAR [1983 ] SHELBY  
 MCCLELLAND WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O C.R. JONES, PRES. SOURCE BASIN [05]  
 RT. 2, BOX 280 AQUIFER 10 - [032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 27101871 ]
			Units: Gallons
			83.2 Acre-feet

Remarks: [EST BY TDWR ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 333  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100] \* \* YEAR [1982 ] SHELBY  
 MCCLELLAND WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O C.R. JONES, PRES. SOURCE BASIN [05]  
 RT. 2, BOX 280 AQUIFER 10 - [032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 28100000 ]
			Units: Gallons
			86.2 Acre-feet

Remarks: [EST BY TDWR ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 328  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100] \* \* YEAR [1981 ] SHELBY  
 MCCLELLAND WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O C.R. JONES, PRES. SOURCE BASIN [05]  
 RT. 2, BOX 280 AQUIFER 10 - [032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 28013436 ]
			Units: Gallons
			86.0 Acre-feet

Remarks: [EST BY TDWR ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 327  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100]					SHELBY
	** YEAR [1980 ]				SOURCE COUNTY [210]
MCCLELLAND WATER SUPPLY CORP.					SOURCE BASIN [05]
C/O C.R. JONES, PRES.					AQUIFER 10 - [032]
RT. 2, BOX 280					NUMBER WELLS [ ]
					RESERVOIR [ ]
SHELBYVILLE, TEXAS	75973				STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [	27524800]	Units:
			84.5	Gallons
				Acre-feet

Remarks: [EST BY TDWR ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 306

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100]					SHELBY
	** YEAR [1979 ]				SOURCE COUNTY [210]
MCCLELLAND WATER SUPPLY CORP.					SOURCE BASIN [05]
C/O C.R. JONES, PRES.					AQUIFER 10 - [032]
RT. 2, BOX 280					NUMBER WELLS [ 2]
					RESERVOIR [ ]
SHELBYVILLE, TEXAS	75973				STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [	25700000]	Units:
			78.9	Gallons
				Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 300

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100]					SHELBY
	** YEAR [1978 ]				SOURCE COUNTY [210]
MCCLELLAND WATER SUPPLY CORP.					SOURCE BASIN [05]
C/O C.R. JONES, PRES.					AQUIFER 10 - [032]
RT. 2, BOX 280					NUMBER WELLS [ ]
					RESERVOIR [ ]
SHELBYVILLE, TEXAS	75973				STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [	.0]	Units:
				Gallons
				Acre-feet

Remarks: [NO REPORT ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100]		SHELBY
MCCLELLAND WATER SUPPLY CORP.	** YEAR [1977 ]	SOURCE COUNTY [210]
C/O C.R. JONES, PRES.		SOURCE BASIN [05]
RT. 2, BOX 280		AQUIFER 10 - [032]
SHELBYVILLE, TEXAS	75973	NUMBER WELLS [ 2 ]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 22980000 ]
			Units: Gallons 70.5 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 285

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100]		SHELBY
MCCLELLAND WATER SUPPLY CORP.	** YEAR [1976 ]	SOURCE COUNTY [210]
C/O C.R. JONES, PRES.		SOURCE BASIN [05]
RT. 2, BOX 280		AQUIFER 10 - [032]
SHELBYVILLE, TEXAS	75973	NUMBER WELLS [ 2 ]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 22000000 ]
			Units: Gallons 67.5 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 270

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100]		SHELBY
MCCLELLAND WATER SUPPLY CORP.	** YEAR [1975 ]	SOURCE COUNTY [210]
C/O C.R. JONES, PRES.		SOURCE BASIN [05]
RT. 2, BOX 280		AQUIFER 10 - [032]
SHELBYVILLE, TEXAS	75973	NUMBER WELLS [ 2 ]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 21756400 ]
			Units: Gallons 66.8 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 246

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100]					SHELBY
		** YEAR [1974 ]			SOURCE COUNTY [210]
MCCLELLAND WATER SUPPLY CORP.					SOURCE BASIN [05]
C/O C.R. JONES, PRES.					AQUIFER 10 - [032]
RT. 2, BOX 280					NUMBER WELLS [ 2]
					RESERVOIR [ ]
SHELBYVILLE, TEXAS		75973			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [	21164300]	Units:
			65.0	Gallons
				Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 244

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100]					SHELBY
		** YEAR [1973 ]			SOURCE COUNTY [210]
MCCLELLAND WATER SUPPLY CORP.					SOURCE BASIN [05]
C/O C.R. JONES, PRES.					AQUIFER 10 - [032]
RT. 2, BOX 280					NUMBER WELLS [ 1]
					RESERVOIR [ ]
SHELBYVILLE, TEXAS		75973			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [	19200000]	Units:
			58.9	Gallons
				Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 232

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100]					SHELBY
		** YEAR [1972 ]			SOURCE COUNTY [210]
MCCLELLAND WATER SUPPLY CORP.					SOURCE BASIN [05]
C/O C.R. JONES, PRES.					AQUIFER 10 - [032]
RT. 2, BOX 280					NUMBER WELLS [ 1]
					RESERVOIR [ ]
SHELBYVILLE, TEXAS		75973			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [	18140400]	Units:
			55.7	Gallons
				Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 228

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100]			SHELBY
	** YEAR [1971]		SOURCE COUNTY [210]
MCCLELLAND WATER SUPPLY CORP.			SOURCE BASIN [05]
C/O C.R. JONES, PRES.			AQUIFER 10 - [032]
RT. 2, BOX 280			NUMBER WELLS [ 1 ]
			RESERVOIR [ ]
SHELBYVILLE, TEXAS	75973		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [	17247600]
			52.9

Units:  
Gallons  
Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 210

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100]			SHELBY
	** YEAR [1970]		SOURCE COUNTY [210]
MCCLELLAND WATER SUPPLY CORP.			SOURCE BASIN [05]
C/O C.R. JONES, PRES.			AQUIFER 10 - [032]
RT. 2, BOX 280			NUMBER WELLS [ 1 ]
			RESERVOIR [ ]
SHELBYVILLE, TEXAS	75973		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [	14600400]
			44.8

Units:  
Gallons  
Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 180

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100]			SHELBY
	** YEAR [1969]		SOURCE COUNTY [210]
MCCLELLAND WATER SUPPLY CORP.			SOURCE BASIN [05]
C/O C.R. JONES, PRES.			AQUIFER 10 - [032]
RT. 2, BOX 280			NUMBER WELLS [ 1 ]
			RESERVOIR [ ]
SHELBYVILLE, TEXAS	75973		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [	13999500]
			43.0

Units:  
Gallons  
Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 165

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100] \* \* YEAR [1968 ] SHELBY  
 MCCLELLAND WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O C.R. JONES, PRES. SOURCE BASIN [05]  
 RT. 2, BOX 280 AQUIFER 10 -[032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 1]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 9925100]
			Units: 30.5
			Gallons
			Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 150  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100] \* \* YEAR [1967 ] SHELBY  
 MCCLELLAND WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O C.R. JONES, PRES. SOURCE BASIN [05]  
 RT. 2, BOX 280 AQUIFER 10 -[032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 1]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 9837490]
			Units: 30.2
			Gallons
			Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections:  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [547100] \* \* YEAR [1966 ] SHELBY  
 MCCLELLAND WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O C.R. JONES, PRES. SOURCE BASIN [05]  
 RT. 2, BOX 280 AQUIFER 10 -[032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 1]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	627110]
Feb [ ]	Jun [ ]	Oct [ ]	791220]
Mar [ ]	Jul [ ]	1192410]	Nov [ 724870]
Apr [ ]	Aug [ ]	112730]	Dec [ 663870]
WATER TYPE [SG ]			ANNUAL TOTAL [ 4112210]
			Units: 12.6
			Gallons
			Acre-feet

Remarks: [ OPERATION BEGAN 7-66 ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections:  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130]			SHELBY
	** YEAR [1993 ]		SOURCE COUNTY [210]
PAXTON WATER SUPPLY CORP.			SOURCE BASIN [05]
			AQUIFER 10 - [ ]
ATTN: VINCE DIVERDI, OPERATOR			NUMBER WELLS [ ]
P.O. BOX 1138			RESERVOIR [05170]
CENTER, TEXAS	75935-1138		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [PS ]	ANNUAL TOTAL [	23447200]	Units: Gallons 72.0 Acre-feet

Remarks: [FROM JOAQUIN REPORTED SALES ]

Seller Code: [438400] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 140

Outside conn: Pop served: 540 % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130]			SHELBY
	** YEAR [1992 ]		SOURCE COUNTY [210]
PAXTON WATER SUPPLY CORP.			SOURCE BASIN [05]
			AQUIFER 10 - [ ]
ATTN: VINCE DIVERDI, OPERATOR			NUMBER WELLS [ ]
P.O. BOX 1138			RESERVOIR [05170]
CENTER, TEXAS	75935-1138		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [PS ]	ANNUAL TOTAL [	17691500]	Units: Gallons 54.3 Acre-feet

Remarks: [FROM JOAQUIN SALES/WELL ALSO ]

Seller Code: [438400] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 140

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130]			SHELBY
	** YEAR [1992 ]		SOURCE COUNTY [210]
PAXTON WATER SUPPLY CORP.			SOURCE BASIN [05]
			AQUIFER 10 - [032]
ATTN: VINCE DIVERDI, OPERATOR			NUMBER WELLS [ 1]
P.O. BOX 1138			RESERVOIR [ ]
CENTER, TEXAS	75935-1138		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [	3259500]	Units: Gallons 10.0 Acre-feet

Remarks: [EST TWDB-SW JOAQUIN ALSO ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 140

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130] \* \* YEAR [1991 ] SHELBY  
 PAXTON WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 1138 AQUIFER 10 - [ ]  
 CENTER, TEXAS 75935-1138 NUMBER WELLS [ 1 ]  
 RESERVOIR [05170]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [PS ]			ANNUAL TOTAL [ 16833000] Units: 51.7 Gallons Acre-feet

Remarks: [NO REPORT-FROM JOAQUIN SALES ]  
 Seller Code: [438400] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 140  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130] \* \* YEAR [1991 ] SHELBY  
 PAXTON WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 1138 AQUIFER 10 - [032]  
 CENTER, TEXAS 75935-1138 NUMBER WELLS [ ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 4140000] Units: 12.7 Gallons Acre-feet

Remarks: [NO REPORT-TWDB EST/SW FROM JOAQUIN ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 140  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130] \* \* YEAR [1990 ] SHELBY  
 PAXTON WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 1138 AQUIFER 10 - [ ]  
 CENTER, TEXAS 75935-1138 NUMBER WELLS [ ]  
 RESERVOIR [05170]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [PS ]			ANNUAL TOTAL [ 14205300] Units: 43.6 Gallons Acre-feet

Remarks: [FROM JOAQUIN/OWN WELLS ALSO ]  
 Seller Code: [438400] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 140  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130]	* * YEAR [1990 ]	SHELBY
PAXTON WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 1138		NUMBER WELLS [ 1 ]
CENTER, TEXAS	75935-1138	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 4140000 ]	Units: Gallons
		12.7	Acre-feet

Remarks: [EST BY TWDB/SW JOAQUIN ALSO ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 140

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130]	* * YEAR [1989 ]	SHELBY
PAXTON WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [ ]
P.O. BOX 1138		NUMBER WELLS [ ]
CENTER, TEXAS	75935-1138	RESERVOIR [05170]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [PS ]	ANNUAL TOTAL [ 8160000 ]	Units: Gallons
		25.0	Acre-feet

Remarks: [FROM JOAQUIN/OWN WELLS ALSO ]

Seller Code: [438400] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 245

Outside conn: Pop served: % Connections metered: 100

% Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130]	* * YEAR [1989 ]	SHELBY
PAXTON WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 1138		NUMBER WELLS [ ]
CENTER, TEXAS	75935-1138	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 10000000 ]	Units: Gallons
		30.7	Acre-feet

Remarks: [SW FROM JOAQUIN ALSO ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 245

Outside conn: Pop served: % Connections metered: 100

% Connections: RES 100 COMM IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130]	* * YEAR [1988 ]	SHELBY
PAXTON WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [ ]
P.O. BOX 1138		NUMBER WELLS [ ]
CENTER, TEXAS	75935-1138	RESERVOIR [05170]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [PS ]	ANNUAL TOTAL [ 20558800]	Units:	
			Gallons	
			63.1	Acre-feet

Remarks: [FROM JOAQUIN REPORTED SALES ]

Seller Code: [438400] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 245

Outside conn: Pop served: 1100 % Connections metered: 100

% Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130]	* * YEAR [1988 ]	SHELBY
PAXTON WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 1138		NUMBER WELLS [ ]
CENTER, TEXAS	75935-1138	RESERVOIR [ ]
		STATUS = 0

Jan [ 1295000]	May [ 1295000]	Sep [ 1295000]		
Feb [ 1295000]	Jun [ 1295000]	Oct [ 1295000]		
Mar [ 1295000]	Jul [ 1295000]	Nov [ 1295000]		
Apr [ 1295000]	Aug [ 1295000]	Dec [ 1295000]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ 15540000]	Units:	
			Gallons	
			47.7	Acre-feet

Remarks: [SW FROM JOAQUIN ALSO ]

Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 245

Outside conn: Pop served: 1100 % Connections metered: 100

% Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130]	* * YEAR [1987 ]	SHELBY
PAXTON WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 1138		NUMBER WELLS [ 2]
CENTER, TEXAS	75935-1138	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ 6000000]	Units:	
			Gallons	
			18.4	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 250

Outside conn: 220 Pop served: 700 % Connections metered: 100

% Connections: RES 96 COMM 4.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130]	* * YEAR [1986 ]	SHELBY
PAXTON WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 1138		NUMBER WELLS [ 3]
CENTER, TEXAS	75935-1138	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 11923000]	Units: Gallons 36.6 Acre-feet

Remarks: [ EST BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 250

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130]	* * YEAR [1985 ]	SHELBY
PAXTON WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 1138		NUMBER WELLS [ 3]
CENTER, TEXAS	75935-1138	RESERVOIR [ ]
		STATUS = 0

Jan [ 1000000]	May [ 1040000]	Sep [ 1050000]		
Feb [ 1000000]	Jun [ 1070000]	Oct [ 1030000]		
Mar [ 1080000]	Jul [ 1010000]	Nov [ 1060000]		
Apr [ 1000000]	Aug [ 1040000]	Dec [ 1020000]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 12400000]	Units: Gallons 38.1 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [2 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 260

Outside conn: 260 Pop served: 1000 % Connections metered: 100

% Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130]	* * YEAR [1984 ]	SHELBY
PAXTON WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 1138		NUMBER WELLS [ 2]
CENTER, TEXAS	75935-1138	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 24030300]	Units: Gallons 73.7 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 261

Outside conn: 261 Pop served: % Connections metered: 100

% Connections: RES 98 COMM 2.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130] \* \* YEAR [1983 ] SHELBY  
 PAXTON WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 1138 AQUIFER 10 - [032]  
 CENTER, TEXAS 75935-1138 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 21700000]	Units: Gallons
			66.6	Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 259  
 Outside conn: 259 Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130] \* \* YEAR [1982 ] SHELBY  
 PAXTON WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 1138 AQUIFER 10 - [032]  
 CENTER, TEXAS 75935-1138 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 16701500]	Units: Gallons
			51.3	Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 260  
 Outside conn: Pop served: 1200 % Connections metered: 100  
 % Connections: RES 98 COMM 1.0 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130] \* \* YEAR [1981 ] SHELBY  
 PAXTON WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 1138 AQUIFER 10 - [032]  
 CENTER, TEXAS 75935-1138 NUMBER WELLS [ ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 1510000]	May [ 1680000]	Sep [ 1850000]		
Feb [ 1460000]	Jun [ 1635000]	Oct [ 1800000]		
Mar [ 1471000]	Jul [ 1975000]	Nov [ 1780000]		
Apr [ 1510000]	Aug [ 1950600]	Dec [ 1800500]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 20422100]	Units: Gallons
			62.7	Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 230  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130] \* \* YEAR [1980 ] SHELBY  
 PAXTON WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 1138 AQUIFER 10 - [032]  
 CENTER, TEXAS 75935-1138 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 1796000]	May [ 1667900]	Sep [ 1753400]	
Feb [ 1552000]	Jun [ 1713200]	Oct [ 1625800]	
Mar [ 1137900]	Jul [ 1766400]	Nov [ 1806700]	
Apr [ 1611700]	Aug [ 1675000]	Dec [ 1688400]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 19794400]	Units: Gallons Acre-feet
			60.7

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 264  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130] \* \* YEAR [1979 ] SHELBY  
 PAXTON WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 1138 AQUIFER 10 - [032]  
 CENTER, TEXAS 75935-1138 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 1559400]	May [ 1460400]	Sep [ 1476900]	
Feb [ 1244900]	Jun [ 1535100]	Oct [ 1324800]	
Mar [ 1922500]	Jul [ 1751800]	Nov [ 1598100]	
Apr [ 1405400]	Aug [ 1609000]	Dec [ 1451800]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 18340100]	Units: Gallons Acre-feet
			56.3

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 245  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130] \* \* YEAR [1978 ] SHELBY  
 PAXTON WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 1138 AQUIFER 10 - [032]  
 CENTER, TEXAS 75935-1138 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 1561200]	May [ 1460400]	Sep [ 1476900]	
Feb [ 1244900]	Jun [ 1535100]	Oct [ 1324800]	
Mar [ 1928900]	Jul [ 1751800]	Nov [ 1598100]	
Apr [ 1405400]	Aug [ 1609000]	Dec [ 1451800]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 18348300]	Units: Gallons Acre-feet
			56.3

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 235  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130]	* * YEAR [1977 ]	SHELBY
PAXTON WATER SUPPLY CORP.		SOURCE COUNTY [210]
ATTN: VINCE DIVERDI, OPERATOR		SOURCE BASIN [05]
P.O. BOX 1138		AQUIFER 10 - [032]
CENTER, TEXAS	75935-1138	NUMBER WELLS [ ]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]		Units:
				Gallons
				.0 Acre-feet

Remarks: [NO REPORT ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: [ ]

Outside conn: Pop served: % Connections metered: [ ]

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130]	* * YEAR [1976 ]	SHELBY
PAXTON WATER SUPPLY CORP.		SOURCE COUNTY [210]
ATTN: VINCE DIVERDI, OPERATOR		SOURCE BASIN [05]
P.O. BOX 1138		AQUIFER 10 - [032]
CENTER, TEXAS	75935-1138	NUMBER WELLS [ 2]
		RESERVOIR [ ]
		STATUS = 0

Jan [ 6200000]	May [ 6600000]	Sep [ 7100000]		
Feb [ 6350000]	Jun [ 6800000]	Oct [ 7000000]		
Mar [ 6450000]	Jul [ 7000000]	Nov [ 6800000]		
Apr [ 6500000]	Aug [ 7300000]	Dec [ 6400000]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ 80500000]		Units:
				Gallons
				247.0 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 225

Outside conn: Pop served: % Connections metered: [ ]

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130]	* * YEAR [1975 ]	SHELBY
PAXTON WATER SUPPLY CORP.		SOURCE COUNTY [210]
ATTN: VINCE DIVERDI, OPERATOR		SOURCE BASIN [05]
P.O. BOX 1138		AQUIFER 10 - [032]
CENTER, TEXAS	75935-1138	NUMBER WELLS [ 2]
		RESERVOIR [ ]
		STATUS = 0

Jan [ 41000]	May [ 42300]	Sep [ 45300]		
Feb [ 40500]	Jun [ 43700]	Oct [ 40800]		
Mar [ 41800]	Jul [ 44100]	Nov [ 40600]		
Apr [ 42400]	Aug [ 45200]	Dec [ 39100]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ 506800]		Units:
				Gallons
				1.6 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 101

Outside conn: Pop served: % Connections metered: [ ]

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130]	* * YEAR [1974 ]	SHELBY
PAXTON WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 1138		NUMBER WELLS [ 1]
CENTER, TEXAS	75935-1138	RESERVOIR [ ]
		STATUS = 0

Jan [ 804000]	May [ 823100]	Sep [ 917900]	
Feb [ 814000]	Jun [ 832100]	Oct [ 913800]	
Mar [ 817500]	Jul [ 867400]	Nov [ 912900]	
Apr [ 819475]	Aug [ 915700]	Dec [ 905800]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 10343675]	Gallons
			31.7 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 3

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130]	* * YEAR [1973 ]	SHELBY
PAXTON WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 1138		NUMBER WELLS [ 1]
CENTER, TEXAS	75935-1138	RESERVOIR [ ]
		STATUS = 0

Jan [ 630000]	May [ 622700]	Sep [ 860900]	
Feb [ 551000]	Jun [ 602000]	Oct [ 817700]	
Mar [ 650200]	Jul [ 700200]	Nov [ 711000]	
Apr [ 610000]	Aug [ 820600]	Dec [ 677000]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 8253300]	Gallons
			25.3 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 103

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130]	* * YEAR [1972 ]	SHELBY
PAXTON WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
ATTN: VINCE DIVERDI, OPERATOR		AQUIFER 10 - [032]
P.O. BOX 1138		NUMBER WELLS [ 1]
CENTER, TEXAS	75935-1138	RESERVOIR [ ]
		STATUS = 0

Jan [ 527000]	May [ 559700]	Sep [ 660900]	
Feb [ 453800]	Jun [ 615000]	Oct [ 599200]	
Mar [ 558000]	Jul [ 651400]	Nov [ 600500]	
Apr [ 597000]	Aug [ 662100]	Dec [ 589300]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 7073900]	Gallons
			21.7 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 90

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130] \* \* YEAR [1971 ] SHELBY  
 PAXTON WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 1138 AQUIFER 10 - [032]  
 CENTER, TEXAS 75935-1138 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 4320000 ]
			Units: 13.3 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 92  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130] \* \* YEAR [1970 ] SHELBY  
 PAXTON WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 1138 AQUIFER 10 - [032]  
 CENTER, TEXAS 75935-1138 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 6816000 ]
			Units: 20.9 Acre-feet

Remarks: [ EST. BY TWDB VISIT ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 71  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [652130] \* \* YEAR [1969 ] SHELBY  
 PAXTON WATER SUPPLY CORP. SOURCE COUNTY [210]  
 ATTN: VINCE DIVERDI, OPERATOR SOURCE BASIN [05]  
 P.O. BOX 1138 AQUIFER 10 - [032]  
 CENTER, TEXAS 75935-1138 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 3168000 ]
			Units: 9.7 Acre-feet

Remarks: [ EST. FROM VISIT ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections:  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000] \* \* YEAR [1994 ] SHELBY  
 SAND HILLS WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O M.A. DILLARD SOURCE BASIN [06]  
 RT. 2, BOX 720 AQUIFER 10 -[ ]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [06110]  
 STATUS = 0

Jan [ 3467300]	May [ 3228500]	Sep [ 3599300]
Feb [ 2879100]	Jun [ 3433400]	Oct [ 3565400]
Mar [ 2847000]	Jul [ 4239000]	Nov [ 3045500]
Apr [ 3263300]	Aug [ 4308800]	Dec [ 3627900]
WATER TYPE [PS ]		ANNUAL TOTAL [ 41504500]

Units: 127.4 Acre-feet  
 Gallons

Remarks: [FROM CENTER/OWN WELL ALSO ]  
 Seller Code: [143560] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 358  
 Outside conn: 358 Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000] \* \* YEAR [1994 ] SHELBY  
 SAND HILLS WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O M.A. DILLARD SOURCE BASIN [05]  
 RT. 2, BOX 720 AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 1]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 511738]	May [ 373590]	Sep [ 60887]
Feb [ ]	Jun [ 179306]	Oct [ 436831]
Mar [ 191565]	Jul [ ]	Nov [ 582915]
Apr [ 17749]	Aug [ 848904]	Dec [ ]
WATER TYPE [SG ]		ANNUAL TOTAL [ 3203485]

Units: 9.8 Acre-feet  
 Gallons

Remarks: [USED SW FROM CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 358  
 Outside conn: 358 Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000] \* \* YEAR [1993 ] SHELBY  
 SAND HILLS WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O M.A. DILLARD SOURCE BASIN [06]  
 RT. 2, BOX 720 AQUIFER 10 -[ ]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [06110]  
 STATUS = 0

Jan [ 3179500]	May [ 3041400]	Sep [ 4430400]
Feb [ 3061700]	Jun [ 3126100]	Oct [ 4243200]
Mar [ 2859100]	Jul [ 3377700]	Nov [ 3045100]
Apr [ 3007800]	Aug [ 4395800]	Dec [ 3273100]
WATER TYPE [PS ]		ANNUAL TOTAL [ 41040900]

Units: 125.9 Acre-feet  
 Gallons

Remarks: [FROM CENTER/OWN WELL ALSO ]  
 Seller Code: [143560] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 350  
 Outside conn: 350 Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000]				SHELBY
	* * YEAR [1993 ]			SOURCE COUNTY [210]
SAND HILLS WATER SUPPLY CORP.				SOURCE BASIN [05]
C/O M.A. DILLARD				AQUIFER 10 -[032]
RT. 2, BOX 720				NUMBER WELLS [ 1]
				RESERVOIR [ ]
CENTER, TEXAS	75935			STATUS = 0

Jan [ 330200]	May [ 337800]	Sep [ 1148300]	
Feb [ ]	Jun [ 856300]	Oct [ ]	
Mar [ ]	Jul [ 560800]	Nov [ 5200]	
Apr [ ]	Aug [ 686000]	Dec [ ]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 3924600]	Gallons
		12.0	Acre-feet

Remarks: [USED SW FROM CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 350  
 Outside conn: 350 Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000]				SHELBY
	* * YEAR [1992 ]			SOURCE COUNTY [210]
SAND HILLS WATER SUPPLY CORP.				SOURCE BASIN [06]
C/O M.A. DILLARD				AQUIFER 10 -[ ]
RT. 2, BOX 720				NUMBER WELLS [ ]
				RESERVOIR [06110]
CENTER, TEXAS	75935			STATUS = 0

Jan [ 2544000]	May [ 2764700]	Sep [ 5059100]	
Feb [ 3076900]	Jun [ 2797000]	Oct [ 2981000]	
Mar [ 2804600]	Jul [ 4116500]	Nov [ 3201900]	
Apr [ 3023800]	Aug [ 1977700]	Dec [ 2633400]	Units:
	WATER TYPE [PS ]	ANNUAL TOTAL [ 36980600]	Gallons
		113.5	Acre-feet

Remarks: [FROM CENTER/OWN WELL ALSO ]  
 Seller Code: [143560] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 334  
 Outside conn: Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000]				SHELBY
	* * YEAR [1992 ]			SOURCE COUNTY [210]
SAND HILLS WATER SUPPLY CORP.				SOURCE BASIN [05]
C/O M.A. DILLARD				AQUIFER 10 -[032]
RT. 2, BOX 720				NUMBER WELLS [ 1]
				RESERVOIR [ ]
CENTER, TEXAS	75935			STATUS = 0

Jan [ 430700]	May [ 381600]	Sep [ ]	
Feb [ 276700]	Jun [ 934800]	Oct [ 990400]	
Mar [ ]	Jul [ 434500]	Nov [ ]	
Apr [ 541900]	Aug [ 1804800]	Dec [ 57200]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 5852600]	Gallons
		18.0	Acre-feet

Remarks: [USED SW FROM CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 334  
 Outside conn: Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000] \* \* YEAR [1991 ] SHELBY  
 SAND HILLS WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O M.A. DILLARD SOURCE BASIN [06]  
 RT. 2, BOX 720 AQUIFER 10 -[ ]  
 NUMBER WELLS [ ]  
 RESERVOIR [06110]  
 CENTER, TEXAS 75935 STATUS = 0

Jan [ 3348300]	May [ 2548300]	Sep [ 3228100]	
Feb [ 2926200]	Jun [ 3327900]	Oct [ 3313900]	
Mar [ 2503300]	Jul [ 3457400]	Nov [ 3482500]	
Apr [ 2602700]	Aug [ 3696400]	Dec [ 2933600]	Units:
WATER TYPE [PS ] ANNUAL TOTAL [ 37368600]			Gallons
			114.7 Acre-feet

Remarks: [FROM CENTER/OWN WELL ALSO ]  
 Seller Code: [143560] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ 100]; Connections: 334  
 Outside conn: Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000] \* \* YEAR [1991 ] SHELBY  
 SAND HILLS WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O M.A. DILLARD SOURCE BASIN [05]  
 RT. 2, BOX 720 AQUIFER 10 -[032]  
 NUMBER WELLS [ 1]  
 RESERVOIR [ ]  
 CENTER, TEXAS 75935 STATUS = 0

Jan [ ]	May [ 599000]	Sep [ 450900]	
Feb [ 161600]	Jun [ 143800]	Oct [ 339400]	
Mar [ 58000]	Jul [ 256700]	Nov [ ]	
Apr [ 583700]	Aug [ 252800]	Dec [ 129900]	Units:
WATER TYPE [SG ] ANNUAL TOTAL [ 2975800]			Gallons
			9.1 Acre-feet

Remarks: [USED SW FROM CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 334  
 Outside conn: Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000] \* \* YEAR [1990 ] SHELBY  
 SAND HILLS WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O M.A. DILLARD SOURCE BASIN [06]  
 RT. 2, BOX 720 AQUIFER 10 -[ ]  
 NUMBER WELLS [ ]  
 RESERVOIR [06110]  
 CENTER, TEXAS 75935 STATUS = 0

Jan [ 2682200]	May [ 2015100]	Sep [ 3522300]	
Feb [ 2492800]	Jun [ 2777000]	Oct [ 3222000]	
Mar [ 1766700]	Jul [ 3000000]	Nov [ 3080900]	
Apr [ 2215500]	Aug [ 3677000]	Dec [ 2331200]	Units:
WATER TYPE [PS ] ANNUAL TOTAL [ 32782700]			Gallons
			100.6 Acre-feet

Remarks: [FROM CENTER/OWN WELL SLSO ]  
 Seller Code: [143560] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ 100]; Connections: 330  
 Outside conn: Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000]	* * YEAR [1990]	SHELBY
SAND HILLS WATER SUPPLY CORP.		SOURCE COUNTY [210]
C/O M.A. DILLARD		SOURCE BASIN [05]
RT. 2, BOX 720		AQUIFER 10 - [032]
		NUMBER WELLS [ 1 ]
CENTER, TEXAS	75935	RESERVOIR [ ]
		STATUS = 0

Jan [ 964900]	May [ 703500]	Sep [ 398400]	
Feb [ ]	Jun [ 342900]	Oct [ ]	
Mar [ 589800]	Jul [ 756500]	Nov [ 208900]	
Apr [ 119400]	Aug [ ]	Dec [ ]	
WATER TYPE [SG]	ANNUAL TOTAL [ 4084300]		Units:
			Gallons
			12.5 Acre-feet

Remarks: [SW FROM CENTER ALSO ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 330

Outside conn: Pop served: % Connections metered: 100

% Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000]	* * YEAR [1989]	SHELBY
SAND HILLS WATER SUPPLY CORP.		SOURCE COUNTY [210]
C/O M.A. DILLARD		SOURCE BASIN [05]
RT. 2, BOX 720		AQUIFER 10 - [ ]
		NUMBER WELLS [ ]
CENTER, TEXAS	75935	RESERVOIR [05165]
		STATUS = 0

Jan [ 2195400]	May [ 2939200]	Sep [ 3848000]	
Feb [ 2317900]	Jun [ 3215500]	Oct [ 3273100]	
Mar [ 2801100]	Jul [ 3417400]	Nov [ 3958900]	
Apr [ 2660600]	Aug [ 2600200]	Dec [ 3290100]	
WATER TYPE [PS]	ANNUAL TOTAL [ 36517400]		Units:
			Gallons
			112.1 Acre-feet

Remarks: [FROM CENTER/OWN WELL ALSO ]

Seller Code: [143560] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 324

Outside conn: Pop served: % Connections metered: 100

% Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000]	* * YEAR [1989]	SHELBY
SAND HILLS WATER SUPPLY CORP.		SOURCE COUNTY [210]
C/O M.A. DILLARD		SOURCE BASIN [05]
RT. 2, BOX 720		AQUIFER 10 - [032]
		NUMBER WELLS [ 1 ]
CENTER, TEXAS	75935	RESERVOIR [ ]
		STATUS = 0

Jan [ 378000]	May [ 29500]	Sep [ ]	
Feb [ 394100]	Jun [ ]	Oct [ 202100]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ 618100]	Dec [ ]	
WATER TYPE [SG]	ANNUAL TOTAL [ 1621800]		Units:
			Gallons
			5.0 Acre-feet

Remarks: [SW FROM CENTER ALSO ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 324

Outside conn: Pop served: % Connections metered: 100

% Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000]		* * YEAR [1988 ]		SHELBY	
SAND HILLS WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O M.A. DILLARD				SOURCE BASIN [05]	
RT. 2, BOX 720				AQUIFER 10 - [ ]	
				NUMBER WELLS [ ]	
				RESERVOIR [05165]	
CENTER, TEXAS		75935		STATUS = 0	
Jan [	2260500]	May [	2106400]	Sep [	3462100]
Feb [	1435200]	Jun [	3146100]	Oct [	2795900]
Mar [	1667300]	Jul [	3282700]	Nov [	2335000]
Apr [	1609400]	Aug [	3163600]	Dec [	2676900]
WATER TYPE [PS ]		ANNUAL TOTAL [		29941100]	
				Units:	
				Gallons	
				91.9 Acre-feet	

Remarks: [FROM CENTER/OWN WELL ALSO ]  
 Seller Code: [143560] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 320  
 Outside conn: Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000]		* * YEAR [1988 ]		SHELBY	
SAND HILLS WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O M.A. DILLARD				SOURCE BASIN [05]	
RT. 2, BOX 720				AQUIFER 10 - [032]	
				NUMBER WELLS [ 1]	
				RESERVOIR [ ]	
CENTER, TEXAS		75935		STATUS = 0	
Jan [	251202]	May [	1562926]	Sep [	]
Feb [	939525]	Jun [	166917]	Oct [	44201]
Mar [	464006]	Jul [	287483]	Nov [	155957]
Apr [	737771]	Aug [	821953]	Dec [	]
WATER TYPE [SG ]		ANNUAL TOTAL [		5431941]	
				Units:	
				Gallons	
				16.7 Acre-feet	

Remarks: [USED SW FROM CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 320  
 Outside conn: Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000]		* * YEAR [1987 ]		SHELBY	
SAND HILLS WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O M.A. DILLARD				SOURCE BASIN [05]	
RT. 2, BOX 720				AQUIFER 10 - [ ]	
				NUMBER WELLS [ ]	
				RESERVOIR [05165]	
CENTER, TEXAS		75935		STATUS = 0	
Jan [	2376300]	May [	2790900]	Sep [	2620500]
Feb [	1820100]	Jun [	2543700]	Oct [	3253900]
Mar [	1881400]	Jul [	2952600]	Nov [	2316000]
Apr [	2146500]	Aug [	2721000]	Dec [	1908800]
WATER TYPE [PS ]		ANNUAL TOTAL [		29331700]	
				Units:	
				Gallons	
				90.0 Acre-feet	

Remarks: [FROM CENTER/OWN WELL ALSO ]  
 Seller Code: [143560] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 312  
 Outside conn: 312 Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000] \* \* YEAR [1987 ] SHELBY  
 SAND HILLS WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O M.A. DILLARD SOURCE BASIN [05]  
 RT. 2, BOX 720 AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 1]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 9332]	May [ ]	Sep [ 389742]	
Feb [ 402689]	Jun [ 463106]	Oct [ ]	
Mar [ 132642]	Jul [ ]	Nov [ ]	
Apr [ 154910]	Aug [ 381664]	Dec [ 340870]	Units:
WATER TYPE [SG ] ANNUAL TOTAL [ 2274955]			Gallons
			7.0 Acre-feet

Remarks: [USED SW FROM CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 312  
 Outside conn: 312 Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000] \* \* YEAR [1986 ] SHELBY  
 SAND HILLS WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O M.A. DILLARD SOURCE BASIN [05]  
 RT. 2, BOX 720 AQUIFER 10 -[ ]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [05165]  
 STATUS = 0

Jan [ 2199700]	May [ 1745200]	Sep [ 2793000]	
Feb [ 2019200]	Jun [ 2105300]	Oct [ 2311300]	
Mar [ 1670100]	Jul [ 1848300]	Nov [ 2235500]	
Apr [ 1858900]	Aug [ 2903300]	Dec [ 1812800]	Units:
WATER TYPE [PS ] ANNUAL TOTAL [ 25502600]			Gallons
			78.3 Acre-feet

Remarks: [FROM CENTER/OWN WELL ALSO ]  
 Seller Code: [143560] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 301  
 Outside conn: Pop served: 100 % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000] \* \* YEAR [1986 ] SHELBY  
 SAND HILLS WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O M.A. DILLARD SOURCE BASIN [05]  
 RT. 2, BOX 720 AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 1]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 1279437]	May [ 592729]	Sep [ ]	
Feb [ 318336]	Jun [ 412520]	Oct [ 74332]	
Mar [ 924855]	Jul [ 1148541]	Nov [ ]	
Apr [ 628629]	Aug [ 785762]	Dec [ 75646]	Units:
WATER TYPE [SG ] ANNUAL TOTAL [ 6240787]			Gallons
			19.2 Acre-feet

Remarks: [USED SW FROM CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 301  
 Outside conn: Pop served: 100 % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000] \* \* YEAR [1985 ] SHELBY  
 SAND HILLS WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O M.A. DILLARD SOURCE BASIN [05]  
 RT. 2, BOX 720 AQUIFER 10 - [ ]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [05165]  
 STATUS = 0

Jan [ 1806600]	May [ 1829600]	Sep [ 2856100]	
Feb [ 2202900]	Jun [ 2124800]	Oct [ 2030400]	
Mar [ 1448000]	Jul [ 2149400]	Nov [ 2348900]	
Apr [ 1464600]	Aug [ 2335600]	Dec [ 1672400]	
WATER TYPE [PS ] ANNUAL TOTAL [ 24269300]			Units: Gallons 74.5 Acre-feet

Remarks: [FROM CENTER/OWN WELL ALSO ]  
 Seller Code: [143560] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 286  
 Outside conn: Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000] \* \* YEAR [1985 ] SHELBY  
 SAND HILLS WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O M.A. DILLARD SOURCE BASIN [05]  
 RT. 2, BOX 720 AQUIFER 10 - [032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 1]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 1318724]	May [ 4068791]	Sep [ 218638]	
Feb [ ]	Jun [ 1230162]	Oct [ 804189]	
Mar [ 644188]	Jul [ 961264]	Nov [ ]	
Apr [ 1367049]	Aug [ 1085144]	Dec [ 604790]	
WATER TYPE [SG ] ANNUAL TOTAL [ 8641027]			Units: Gallons 26.5 Acre-feet

Remarks: [USED SW FROM CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 286  
 Outside conn: Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000] \* \* YEAR [1984 ] SHELBY  
 SAND HILLS WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O M.A. DILLARD SOURCE BASIN [05]  
 RT. 2, BOX 720 AQUIFER 10 - [ ]  
 CENTER, TEXAS 75935 NUMBER WELLS [ ]  
 RESERVOIR [05165]  
 STATUS = 0

Jan [ 2582800]	May [ 1952400]	Sep [ 2313100]	
Feb [ 1626900]	Jun [ 1860600]	Oct [ 1584500]	
Mar [ 1979100]	Jul [ 2221700]	Nov [ 1792600]	
Apr [ 2121200]	Aug [ 2345700]	Dec [ 1870700]	
WATER TYPE [PS ] ANNUAL TOTAL [ 24251300]			Units: Gallons 74.4 Acre-feet

Remarks: [FROM CENTER/OWN WELL ALSO ]  
 Seller Code: [143560] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 284  
 Outside conn: 284 Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000]			SHELBY		
SAND HILLS WATER SUPPLY CORP.			** YEAR [1984 ]		
C/O M.A. DILLARD			SOURCE COUNTY [210]		
RT. 2, BOX 720			SOURCE BASIN [05]		
CENTER, TEXAS			AQUIFER 10 -[032]		
75935			NUMBER WELLS [ 1]		
			RESERVOIR [ ]		
			STATUS = 0		
Jan [	696962]	May [	446916]	Sep [	695693]
Feb [	649302]	Jun [	1006224]	Oct [	732706]
Mar [	]	Jul [	1404178]	Nov [	423639]
Apr [	1066005]	Aug [	652622]	Dec [	216011]
WATER TYPE [SG ]		ANNUAL TOTAL [		7990258]	Units:
				24.5	Gallons
					Acre-feet

Remarks: [USED SW FROM CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 284  
 Outside conn: 284 Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000]			SHELBY		
SAND HILLS WATER SUPPLY CORP.			** YEAR [1983 ]		
C/O M.A. DILLARD			SOURCE COUNTY [210]		
RT. 2, BOX 720			SOURCE BASIN [05]		
CENTER, TEXAS			AQUIFER 10 -[ ]		
75935			NUMBER WELLS [ ]		
			RESERVOIR [05165]		
			STATUS = 0		
Jan [	1504100]	May [	1453200]	Sep [	2163100]
Feb [	1422600]	Jun [	2160400]	Oct [	2079100]
Mar [	1285400]	Jul [	2690400]	Nov [	1495500]
Apr [	1894300]	Aug [	871600]	Dec [	1482900]
WATER TYPE [PS ]		ANNUAL TOTAL [		20502600]	Units:
				62.9	Gallons
					Acre-feet

Remarks: [FROM CENTER/OWN WELL ALSO ]  
 Seller Code: [143560] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ 100]; Connections: 276  
 Outside conn: 276 Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000]			SHELBY		
SAND HILLS WATER SUPPLY CORP.			** YEAR [1983 ]		
C/O M.A. DILLARD			SOURCE COUNTY [210]		
RT. 2, BOX 720			SOURCE BASIN [05]		
CENTER, TEXAS			AQUIFER 10 -[032]		
75935			NUMBER WELLS [ 1]		
			RESERVOIR [ ]		
			STATUS = 0		
Jan [	657092]	May [	547665]	Sep [	196503]
Feb [	446692]	Jun [	135799]	Oct [	168699]
Mar [	512707]	Jul [	]	Nov [	598065]
Apr [	219727]	Aug [	1423452]	Dec [	175907]
WATER TYPE [SG ]		ANNUAL TOTAL [		5082308]	Units:
				15.6	Gallons
					Acre-feet

Remarks: [USED SW FROM CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 276  
 Outside conn: 276 Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000]			SHELBY		
			** YEAR [1982]		
SAND HILLS WATER SUPPLY CORP.			SOURCE COUNTY [210]		
C/O M.A. DILLARD			SOURCE BASIN [05]		
RT. 2, BOX 720			AQUIFER 10 - [ ]		
			NUMBER WELLS [ ]		
CENTER, TEXAS			RESERVOIR [05165]		
75935			STATUS = 0		
Jan [ 3235200]	May [ 2781100]	Sep [ 1637700]			
Feb [ 1345300]	Jun [ 2216500]	Oct [ 1308800]			
Mar [ 2106100]	Jul [ 2072200]	Nov [ 2494800]			
Apr [ 1904200]	Aug [ 1148600]	Dec [ 599400]			
	WATER TYPE [PS ]	ANNUAL TOTAL [ 22849900]	Units: Gallons		
		70.1	Acre-feet		

Remarks: [FROM CITY OF CENTER/OWN WELL TOO ]  
 Seller Code: [143560] Metered/Est: [ 1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ 100]; Connections: 275  
 Outside conn: 275 Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000]			SHELBY		
			** YEAR [1982]		
SAND HILLS WATER SUPPLY CORP.			SOURCE COUNTY [210]		
C/O M.A. DILLARD			SOURCE BASIN [05]		
RT. 2, BOX 720			AQUIFER 10 - [032]		
			NUMBER WELLS [ 1 ]		
CENTER, TEXAS			RESERVOIR [ ]		
75935			STATUS = 0		
Jan [ ]	May [ ]	Sep [ 442802]			
Feb [ 466761]	Jun [ 433174]	Oct [ 685687]			
Mar [ ]	Jul [ 633540]	Nov [ ]			
Apr [ 276158]	Aug [ 1571122]	Dec [ 1095247]			
	WATER TYPE [SG ]	ANNUAL TOTAL [ 5604491]	Units: Gallons		
		17.2	Acre-feet		

Remarks: [USED SW FROM CITY OF CENTER ]  
 Seller Code: [ ] Metered/Est: [ 1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 275  
 Outside conn: 275 Pop served: % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000]			SHELBY		
			** YEAR [1981]		
SAND HILLS WATER SUPPLY CORP.			SOURCE COUNTY [210]		
C/O M.A. DILLARD			SOURCE BASIN [05]		
RT. 2, BOX 720			AQUIFER 10 - [ ]		
			NUMBER WELLS [ ]		
CENTER, TEXAS			RESERVOIR [05165]		
75935			STATUS = 0		
Jan [ 1177500]	May [ 1310900]	Sep [ 2847500]			
Feb [ 1632300]	Jun [ 1271700]	Oct [ 1641400]			
Mar [ 1400900]	Jul [ 2042900]	Nov [ 2758200]			
Apr [ 1788200]	Aug [ 2011400]	Dec [ 1878900]			
	WATER TYPE [PS ]	ANNUAL TOTAL [ 21761800]	Units: Gallons		
		66.8	Acre-feet		

Remarks: [FROM CITY OF CENTER/OWN WELL TOO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 267  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)









===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000]		* * YEAR [1975]		SHELBY	
SAND HILLS WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O M.A. DILLARD				SOURCE BASIN [05]	
RT. 2, BOX 720				AQUIFER 10 -[032]	
CENTER, TEXAS		75935		NUMBER WELLS [ 1]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 1386391]	May [ 1198159]	Sep [ 1424675]	
Feb [ 1227169]	Jun [ 1539028]	Oct [ 1337630]	
Mar [ 1022638]	Jul [ 1648600]	Nov [ 1751262]	
Apr [ 1190084]	Aug [ 1837589]	Dec [ 1221009]	
WATER TYPE [SG]		ANNUAL TOTAL [ 16784234]	Units:
		51.5	Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 211

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000]		* * YEAR [1974]		SHELBY	
SAND HILLS WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O M.A. DILLARD				SOURCE BASIN [05]	
RT. 2, BOX 720				AQUIFER 10 -[032]	
CENTER, TEXAS		75935		NUMBER WELLS [ 1]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 1294261]	May [ 1409943]	Sep [ 1183054]	
Feb [ 1210271]	Jun [ 1609109]	Oct [ 1300764]	
Mar [ 1096608]	Jul [ 1745298]	Nov [ 1175521]	
Apr [ 1424587]	Aug [ 1496519]	Dec [ 1219655]	
WATER TYPE [SG]		ANNUAL TOTAL [ 16165590]	Units:
		49.6	Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 205

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000]		* * YEAR [1973]		SHELBY	
SAND HILLS WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O M.A. DILLARD				SOURCE BASIN [05]	
RT. 2, BOX 720				AQUIFER 10 -[032]	
CENTER, TEXAS		75935		NUMBER WELLS [ 1]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 1518082]	May [ 1461709]	Sep [ 1535297]	
Feb [ 1025678]	Jun [ 1329991]	Oct [ 1471032]	
Mar [ 976757]	Jul [ 1476035]	Nov [ 1117139]	
Apr [ 1026189]	Aug [ 1754508]	Dec [ 1257805]	
WATER TYPE [SG]		ANNUAL TOTAL [ 15950222]	Units:
		48.9	Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000] \* \* YEAR [1969 ] SHELBY  
 SAND HILLS WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O M.A. DILLARD SOURCE BASIN [05]  
 RT. 2, BOX 720 AQUIFER 10 -[032]  
 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0  
 CENTER, TEXAS 75935

Jan [ 566250 ]	May [ 528280 ]	Sep [ 936060 ]
Feb [ 646960 ]	Jun [ 716750 ]	Oct [ 762410 ]
Mar [ 479580 ]	Jul [ 777110 ]	Nov [ 547980 ]
Apr [ 535850 ]	Aug [ 1070700 ]	Dec [ 644930 ]
WATER TYPE [SG ]		ANNUAL TOTAL [ 8213060 ] * Gallons
		25.2 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 143  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000] \* \* YEAR [1968 ] SHELBY  
 SAND HILLS WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O M.A. DILLARD SOURCE BASIN [05]  
 RT. 2, BOX 720 AQUIFER 10 -[032]  
 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0  
 CENTER, TEXAS 75935

Jan [ 283060 ]	May [ 507460 ]	Sep [ 356440 ]
Feb [ 244920 ]	Jun [ 504440 ]	Oct [ 452800 ]
Mar [ 465790 ]	Jul [ 495360 ]	Nov [ 570010 ]
Apr [ 496990 ]	Aug [ 599510 ]	Dec [ 503100 ]
WATER TYPE [SG ]		ANNUAL TOTAL [ 5479880 ] Gallons
		16.8 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 139  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000] \* \* YEAR [1967 ] SHELBY  
 SAND HILLS WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O M.A. DILLARD SOURCE BASIN [05]  
 RT. 2, BOX 720 AQUIFER 10 -[032]  
 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0  
 CENTER, TEXAS 75935

Jan [ ]	May [ ]	Sep [ 1164970 ]
Feb [ ]	Jun [ ]	Oct [ 1248500 ]
Mar [ ]	Jul [ 584920 ]	Nov [ 5826265 ]
Apr [ ]	Aug [ 907980 ]	Dec [ 6729390 ]
WATER TYPE [SG ]		ANNUAL TOTAL [ 16462025 ] Gallons
		50.5 Acre-feet

Remarks: [ OPERATION BEGAN 7-67 ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections:  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [767000]					SHELBY
	** YEAR [1966 ]				SOURCE COUNTY [210]
SAND HILLS WATER SUPPLY CORP.					SOURCE BASIN [05]
C/O M.A. DILLARD					AQUIFER 10 - [032]
RT. 2, BOX 720					NUMBER WELLS [ 1 ]
					RESERVOIR [ ]
CENTER, TEXAS	75935				STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]		Units:
				Gallons
				.0 Acre-feet

Remarks: [ OPERATION NOT BEGAN IN 66 ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections:  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791140]					SHELBY
	** YEAR [1987 ]				SOURCE COUNTY [210]
SHELBY BEACH WATER SYSTEM					SOURCE BASIN [05]
C/O MRS. JOHN WHITTINGTON					AQUIFER 10 - [998]
5692 OAKLANE RD.					NUMBER WELLS [ ]
					RESERVOIR [ ]
PINEVILLE, LA.	71360				STATUS = 1

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]		Units:
				Gallons
				Acre-feet

Remarks: [ DROP-CANNOT LOCATE ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections:  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791140]					SHELBY
	** YEAR [1985 ]				SOURCE COUNTY [210]
SHELBY BEACH WATER SYSTEM					SOURCE BASIN [05]
C/O MRS. JOHN WHITTINGTON					AQUIFER 10 - [998]
5692 OAKLANE RD.					NUMBER WELLS [ 2 ]
					RESERVOIR [ ]
PINEVILLE, LA.	71360				STATUS = 1

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]	4865700	Units:
				Gallons
				14.9 Acre-feet

Remarks: [ EST BY TWDB ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 39  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791140] \* \* YEAR [1984 ] SHELBY  
 SHELBY BEACH WATER SYSTEM SOURCE COUNTY [210]  
 C/O MRS. JOHN WHITTINGTON SOURCE BASIN [05]  
 5692 OAKLANE RD. AQUIFER 10 -[998]  
 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 PINEVILLE, LA. 71360 STATUS = 1

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 5121800] Units: 15.7 Gallons Acre-feet

Remarks: [EST TWDB ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 39  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791140] \* \* YEAR [1983 ] SHELBY  
 SHELBY BEACH WATER SYSTEM SOURCE COUNTY [210]  
 C/O MRS. JOHN WHITTINGTON SOURCE BASIN [05]  
 5692 OAKLANE RD. AQUIFER 10 -[998]  
 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 PINEVILLE, LA. 71360 STATUS = 1

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 4742394] Units: 14.6 Gallons Acre-feet

Remarks: [EST BY TDWR ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 39  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791140] \* \* YEAR [1982 ] SHELBY  
 SHELBY BEACH WATER SYSTEM SOURCE COUNTY [210]  
 C/O MRS. JOHN WHITTINGTON SOURCE BASIN [05]  
 5692 OAKLANE RD. AQUIFER 10 -[998]  
 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 PINEVILLE, LA. 71360 STATUS = 1

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 4991993] Units: 15.3 Gallons Acre-feet

Remarks: [EST BY TDWR ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 39  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791140]			SHELBY
	** YEAR [1981 ]		SOURCE COUNTY [210]
SHELBY BEACH WATER SYSTEM			SOURCE BASIN [05]
C/O MRS. JOHN WHITTINGTON			AQUIFER 10 -[998]
5692 OAKLANE RD.			NUMBER WELLS [ 2]
			RESERVOIR [ ]
PINEVILLE, LA.	71360		STATUS = 1

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [	4800000]	Units: Gallons 14.7 Acre-feet

Remarks: [EST BY TDWR ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 100  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791140]			SHELBY
	** YEAR [1980 ]		SOURCE COUNTY [210]
SHELBY BEACH WATER SYSTEM			SOURCE BASIN [05]
C/O MRS. JOHN WHITTINGTON			AQUIFER 10 -[998]
5692 OAKLANE RD.			NUMBER WELLS [ 2]
			RESERVOIR [ ]
PINEVILLE, LA.	71360		STATUS = 1

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [	5760000]	Units: Gallons 17.7 Acre-feet

Remarks: [EST BY TDWR ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 100  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791140]			SHELBY
	** YEAR [1979 ]		SOURCE COUNTY [210]
SHELBY BEACH WATER SYSTEM			SOURCE BASIN [05]
C/O MRS. JOHN WHITTINGTON			AQUIFER 10 -[998]
5692 OAKLANE RD.			NUMBER WELLS [ 2]
			RESERVOIR [ ]
PINEVILLE, LA.	71360		STATUS = 1

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [	480000]	Units: Gallons 1.5 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 10  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791140]	* * YEAR [1978]	SHELBY
SHELBY BEACH WATER SYSTEM		SOURCE COUNTY [210]
C/O MRS. JOHN WHITTINGTON		SOURCE BASIN [05]
5692 OAKLANE RD.		AQUIFER 10 - [998]
		NUMBER WELLS [ ]
PINEVILLE, LA.	71360	RESERVOIR [ ]
		STATUS = 1

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]		Units: Gallons Acre-feet
				.0

Remarks: [NO REPORT ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections:  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791140]	* * YEAR [1977]	SHELBY
SHELBY BEACH WATER SYSTEM		SOURCE COUNTY [210]
C/O MRS. JOHN WHITTINGTON		SOURCE BASIN [05]
5692 OAKLANE RD.		AQUIFER 10 - [998]
		NUMBER WELLS [ ]
PINEVILLE, LA.	71360	RESERVOIR [ ]
		STATUS = 1

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]		Units: Gallons Acre-feet
				.0

Remarks: [NO REPORT ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections:  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]	* * YEAR [1993]	SHELBY
SHELBYVILLE WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [06]
C/O MARGARET BRADBERRY, SEC-TREA		AQUIFER 10 - [ ]
P.O. BOX 297		NUMBER WELLS [ ]
SHELBYVILLE, TEXAS	75973	RESERVOIR [06110]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [PS ]	ANNUAL TOTAL [ ]	4000000]	Units: Gallons Acre-feet
				12.3

Remarks: [FROM CITY OF CENTER/OWN WELL TOO ]  
 Seller Code: [143560] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ 100]; Connections: 266  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]	* * YEAR [1993 ]	SHELBY
SHELBYVILLE WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
C/O MARGARET BRADBERRY, SEC-TREA		AQUIFER 10 - [032]
P.O. BOX 297		NUMBER WELLS [ 1 ]
SHELBYVILLE, TEXAS	75973	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 29560400 ]	Units: Gallons 90.7 Acre-feet

Remarks: [SW FROM CITY OF CENTER ALSO ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 266  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]	* * YEAR [1992 ]	SHELBY
SHELBYVILLE WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
C/O MARGARET BRADBERRY, SEC-TREA		AQUIFER 10 - [032]
P.O. BOX 297		NUMBER WELLS [ 1 ]
SHELBYVILLE, TEXAS	75973	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 33560400 ]	Units: Gallons 103.0 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 252  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]	* * YEAR [1991 ]	SHELBY
SHELBYVILLE WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
C/O MARGARET BRADBERRY, SEC-TREA		AQUIFER 10 - [032]
P.O. BOX 297		NUMBER WELLS [ 1 ]
SHELBYVILLE, TEXAS	75973	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 34675300 ]	Units: Gallons 106.4 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections: 252  
 Outside conn: Pop served: % Connections metered: 100  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150] \* \* YEAR [1990 ] SHELBY  
SHELBYVILLE WATER SUPPLY CORP. SOURCE COUNTY [210]  
C/O MARGARET BRADBERRY, SEC-TREA SOURCE BASIN [05]  
P.O. BOX 297 AQUIFER 10 -[032]  
SHELBYVILLE, TEXAS 75973 RESERVOIR [ ]  
STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	

WATER TYPE [SG ] ANNUAL TOTAL [ 25200000 ] Units:  
77.3 Gallons  
Acre-feet

Remarks: [ ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 252  
Outside conn: Pop served: 750 % Connections metered:  
% Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150] \* \* YEAR [1989 ] SHELBY  
SHELBYVILLE WATER SUPPLY CORP. SOURCE COUNTY [210]  
C/O MARGARET BRADBERRY, SEC-TREA SOURCE BASIN [05]  
P.O. BOX 297 AQUIFER 10 -[032]  
SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 1 ]  
RESERVOIR [ ]  
STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	

WATER TYPE [SG ] ANNUAL TOTAL [ 38825000 ] Units:  
119.1 Gallons  
Acre-feet

Remarks: [ ]  
Seller Code: [ ] Metered/Est: [ 1 ] Activity Code: [ ]  
If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 250  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150] \* \* YEAR [1988 ] SHELBY  
SHELBYVILLE WATER SUPPLY CORP. SOURCE COUNTY [210]  
C/O MARGARET BRADBERRY, SEC-TREA SOURCE BASIN [05]  
P.O. BOX 297 AQUIFER 10 -[032]  
SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 1 ]  
RESERVOIR [ ]  
STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	

WATER TYPE [SG ] ANNUAL TOTAL [ 25550000 ] Units:  
78.4 Gallons  
Acre-feet

Remarks: [ ]  
Seller Code: [ ] Metered/Est: [ 1 ] Activity Code: [ ]  
If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 272  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]			SHELBY
	** YEAR [1987]		SOURCE COUNTY [210]
SHELBYVILLE WATER SUPPLY CORP.			SOURCE BASIN [05]
			AQUIFER 10 - [032]
C/O MARGARET BRADBERRY, SEC-TREA			NUMBER WELLS [ 1]
P.O. BOX 297			RESERVOIR [ ]
SHELBYVILLE, TEXAS	75973		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [	45909200]
			140.9

Units:  
Gallons  
Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 250

Outside conn: Pop served: 1000 % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]			SHELBY
	** YEAR [1986]		SOURCE COUNTY [210]
SHELBYVILLE WATER SUPPLY CORP.			SOURCE BASIN [05]
			AQUIFER 10 - [032]
C/O MARGARET BRADBERRY, SEC-TREA			NUMBER WELLS [ 1]
P.O. BOX 297			RESERVOIR [ ]
SHELBYVILLE, TEXAS	75973		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [	18973800]
			58.2

Units:  
Gallons  
Acre-feet

Remarks: [EST BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 243

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]			SHELBY
	** YEAR [1985]		SOURCE COUNTY [210]
SHELBYVILLE WATER SUPPLY CORP.			SOURCE BASIN [05]
			AQUIFER 10 - [032]
C/O MARGARET BRADBERRY, SEC-TREA			NUMBER WELLS [ 1]
P.O. BOX 297			RESERVOIR [ ]
SHELBYVILLE, TEXAS	75973		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [	20995200]
			64.4

Units:  
Gallons  
Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 242

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]	* * YEAR [1984 ]	SHELBY
SHELBYVILLE WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
C/O MARGARET BRADBERRY, SEC-TREA		AQUIFER 10 - [032]
P.O. BOX 297		NUMBER WELLS [ 1]
SHELBYVILLE, TEXAS	75973	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 20941000]	Gallons
		64.3	Acre-feet

Remarks: [EST TWDB ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 240  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]	* * YEAR [1983 ]	SHELBY
SHELBYVILLE WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
C/O MARGARET BRADBERRY, SEC-TREA		AQUIFER 10 - [032]
P.O. BOX 297		NUMBER WELLS [ 1]
SHELBYVILLE, TEXAS	75973	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 19037280]	Gallons
		58.4	Acre-feet

Remarks: [EST BY TDWR ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 240  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]	* * YEAR [1982 ]	SHELBY
SHELBYVILLE WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
C/O MARGARET BRADBERRY, SEC-TREA		AQUIFER 10 - [032]
P.O. BOX 297		NUMBER WELLS [ 1]
SHELBYVILLE, TEXAS	75973	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 19788552]	Gallons
		60.7	Acre-feet

Remarks: [EST BY TDWR ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 237  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150] \* \* YEAR [1981 ] SHELBY  
 SHELBYVILLE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O MARGARET BRADBERRY, SEC-TREA SOURCE BASIN [05]  
 P.O. BOX 297 AQUIFER 10 -[032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 1]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 18619608] Units: 57.1 Gallons Acre-feet

Remarks: [EST BY TDWR ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 223  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150] \* \* YEAR [1980 ] SHELBY  
 SHELBYVILLE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O MARGARET BRADBERRY, SEC-TREA SOURCE BASIN [05]  
 P.O. BOX 297 AQUIFER 10 -[032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 21342600] Units: 65.5 Gallons Acre-feet

Remarks: [EST BY TDWR ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 213  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150] \* \* YEAR [1979 ] SHELBY  
 SHELBYVILLE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O MARGARET BRADBERRY, SEC-TREA SOURCE BASIN [05]  
 P.O. BOX 297 AQUIFER 10 -[032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 1]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 16700000] Units: 51.3 Gallons Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 200  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]		** YEAR [1978]		SHELBY	
SHELBYVILLE WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O MARGARET BRADBERRY, SEC-TREA				SOURCE BASIN [05]	
P.O. BOX 297				AQUIFER 10 - [032]	
SHELBYVILLE, TEXAS		75973		NUMBER WELLS [ ]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG]	ANNUAL TOTAL [ ]		Units: .0 Acre-feet

Remarks: [NO REPORT ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]		** YEAR [1977]		SHELBY	
SHELBYVILLE WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O MARGARET BRADBERRY, SEC-TREA				SOURCE BASIN [05]	
P.O. BOX 297				AQUIFER 10 - [032]	
SHELBYVILLE, TEXAS		75973		NUMBER WELLS [ 1]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG]	ANNUAL TOTAL [ 17000000]		Units: 52.2 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 184

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]		** YEAR [1976]		SHELBY	
SHELBYVILLE WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O MARGARET BRADBERRY, SEC-TREA				SOURCE BASIN [05]	
P.O. BOX 297				AQUIFER 10 - [032]	
SHELBYVILLE, TEXAS		75973		NUMBER WELLS [ 1]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG]	ANNUAL TOTAL [ 16100000]		Units: 49.4 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 180

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]	* * YEAR [1975 ]	SHELBY
SHELBYVILLE WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
C/O MARGARET BRADBERRY, SEC-TREA		AQUIFER 10 - [032]
P.O. BOX 297		NUMBER WELLS [ 1 ]
SHELBYVILLE, TEXAS	75973	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 15500000 ]
			47.6
			Units: Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 178

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]	* * YEAR [1974 ]	SHELBY
SHELBYVILLE WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
C/O MARGARET BRADBERRY, SEC-TREA		AQUIFER 10 - [032]
P.O. BOX 297		NUMBER WELLS [ 1 ]
SHELBYVILLE, TEXAS	75973	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 15316500 ]
			47.0
			Units: Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 163

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]	* * YEAR [1973 ]	SHELBY
SHELBYVILLE WATER SUPPLY CORP.		SOURCE COUNTY [210]
		SOURCE BASIN [05]
C/O MARGARET BRADBERRY, SEC-TREA		AQUIFER 10 - [032]
P.O. BOX 297		NUMBER WELLS [ 1 ]
SHELBYVILLE, TEXAS	75973	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 14185200 ]
			43.5
			Units: Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 158

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]			SHELBY
	** YEAR [1972 ]		SOURCE COUNTY [210]
SHELBYVILLE WATER SUPPLY CORP.			SOURCE BASIN [05]
			AQUIFER 10 - [032]
C/O MARGARET BRADBERRY, SEC-TREA			NUMBER WELLS [ 1]
P.O. BOX 297			RESERVOIR [ ]
SHELBYVILLE, TEXAS	75973		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [	13984700] Units:
			42.9 Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 152

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]			SHELBY
	** YEAR [1971 ]		SOURCE COUNTY [210]
SHELBYVILLE WATER SUPPLY CORP.			SOURCE BASIN [05]
			AQUIFER 10 - [032]
C/O MARGARET BRADBERRY, SEC-TREA			NUMBER WELLS [ 1]
P.O. BOX 297			RESERVOIR [ ]
SHELBYVILLE, TEXAS	75973		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [	13482000] Units:
			41.4 Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 151

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]			SHELBY
	** YEAR [1970 ]		SOURCE COUNTY [210]
SHELBYVILLE WATER SUPPLY CORP.			SOURCE BASIN [05]
			AQUIFER 10 - [032]
C/O MARGARET BRADBERRY, SEC-TREA			NUMBER WELLS [ 1]
P.O. BOX 297			RESERVOIR [ ]
SHELBYVILLE, TEXAS	75973		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [	12017000] Units:
			36.9 Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 130

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]		SHELBY
SHELBYVILLE WATER SUPPLY CORP.	** YEAR [1969]	SOURCE COUNTY [210]
C/O MARGARET BRADBERRY, SEC-TREA		SOURCE BASIN [05]
P.O. BOX 297		AQUIFER 10 - [032]
SHELBYVILLE, TEXAS	75973	NUMBER WELLS [ 1]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [ 11421600]	Units: Gallons
		35.1	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 121  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]		SHELBY
SHELBYVILLE WATER SUPPLY CORP.	** YEAR [1968]	SOURCE COUNTY [210]
C/O MARGARET BRADBERRY, SEC-TREA		SOURCE BASIN [05]
P.O. BOX 297		AQUIFER 10 - [032]
SHELBYVILLE, TEXAS	75973	NUMBER WELLS [ 1]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [ 9690200]	Units: Gallons
		29.7	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 116  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]		SHELBY
SHELBYVILLE WATER SUPPLY CORP.	** YEAR [1967]	SOURCE COUNTY [210]
C/O MARGARET BRADBERRY, SEC-TREA		SOURCE BASIN [05]
P.O. BOX 297		AQUIFER 10 - [032]
SHELBYVILLE, TEXAS	75973	NUMBER WELLS [ 1]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [ 8350500]	Units: Gallons
		25.6	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 120  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150] \* \* YEAR [1966 ] SHELBY  
 SHELBYVILLE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O MARGARET BRADBERRY, SEC-TREA SOURCE BASIN [05]  
 P.O. BOX 297 AQUIFER 10 -[032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 7282600 ]	Units: Gallons 22.3 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 85  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150] \* \* YEAR [1965 ] SHELBY  
 SHELBYVILLE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O MARGARET BRADBERRY, SEC-TREA SOURCE BASIN [05]  
 P.O. BOX 297 AQUIFER 10 -[032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 5399600 ]	Units: Gallons 16.6 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 87  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150] \* \* YEAR [1964 ] SHELBY  
 SHELBYVILLE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O MARGARET BRADBERRY, SEC-TREA SOURCE BASIN [05]  
 P.O. BOX 297 AQUIFER 10 -[032]  
 SHELBYVILLE, TEXAS 75973 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [SG ]			ANNUAL TOTAL [ ]	Units: Gallons .0 Acre-feet

Remarks: [NO REPORT]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections:  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]	* * YEAR [1963 ]	SHELBY
SHELBYVILLE WATER SUPPLY CORP.		SOURCE COUNTY [210]
C/O MARGARET BRADBERRY, SEC-TREA		SOURCE BASIN [05]
P.O. BOX 297		AQUIFER 10 -[032]
SHELBYVILLE, TEXAS	75973	NUMBER WELLS [ ]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]		Units: Gallons .0 Acre-feet

Remarks: [NO REPORT ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections:  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]	* * YEAR [1962 ]	SHELBY
SHELBYVILLE WATER SUPPLY CORP.		SOURCE COUNTY [210]
C/O MARGARET BRADBERRY, SEC-TREA		SOURCE BASIN [05]
P.O. BOX 297		AQUIFER 10 -[032]
SHELBYVILLE, TEXAS	75973	NUMBER WELLS [ ]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]		Units: Gallons .0 Acre-feet

Remarks: [NO REPORT ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections:  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [791150]	* * YEAR [1961 ]	SHELBY
SHELBYVILLE WATER SUPPLY CORP.		SOURCE COUNTY [210]
C/O MARGARET BRADBERRY, SEC-TREA		SOURCE BASIN [05]
P.O. BOX 297		AQUIFER 10 -[032]
SHELBYVILLE, TEXAS	75973	NUMBER WELLS [ 2]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]	10000000	Units: Gallons 30.7 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ]; Connections:  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]		* * YEAR [1994 ]		SHELBY	
CITY OF TENAHA				SOURCE COUNTY [210]	
C/O GEORGE BOWERS, MAYOR				SOURCE BASIN [05]	
P.O. BOX 70				AQUIFER 10 - [190]	
TENAHA, TEXAS		75974		NUMBER WELLS [ 3]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 7188000]	May [ 7934000]	Sep [ 6094000]		
Feb [ 6786000]	Jun [ 6255000]	Oct [ 5162000]		
Mar [ 7017000]	Jul [ 6727000]	Nov [ 5648000]		
Apr [ 6263000]	Aug [ 7198000]	Dec [ 5380000]		
WATER TYPE [SG ]		ANNUAL TOTAL [ 77652000]	Units:	
			Gallons	
			238.3	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ 1 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 488

Outside conn: 100 Pop served: 1572 % Connections metered: 95.0

% Connections: RES 90 COMM 5.0 IND 5.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]		* * YEAR [1993 ]		SHELBY	
CITY OF TENAHA				SOURCE COUNTY [210]	
C/O GEORGE BOWERS, MAYOR				SOURCE BASIN [05]	
P.O. BOX 70				AQUIFER 10 - [190]	
TENAHA, TEXAS		75974		NUMBER WELLS [ 3]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 5426000]	May [ 5843000]	Sep [ 7295000]		
Feb [ 5532000]	Jun [ 6456000]	Oct [ 5430000]		
Mar [ 6585000]	Jul [ 7261000]	Nov [ 5838000]		
Apr [ 6109000]	Aug [ 5417000]	Dec [ 6355000]		
WATER TYPE [SG ]		ANNUAL TOTAL [ 73547000]	Units:	
			Gallons	
			225.7	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 488

Outside conn: 100 Pop served: 1500 % Connections metered: 90.0

% Connections: RES 95 COMM 5.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]		* * YEAR [1992 ]		SHELBY	
CITY OF TENAHA				SOURCE COUNTY [210]	
C/O GEORGE BOWERS, MAYOR				SOURCE BASIN [05]	
P.O. BOX 70				AQUIFER 10 - [190]	
TENAHA, TEXAS		75974		NUMBER WELLS [ 3]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [SG ]		ANNUAL TOTAL [ 150089000]	Units:	
			Gallons	
			460.6	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ 1 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 523

Outside conn: 75 Pop served: 1500 % Connections metered: 90.0

% Connections: RES 95 COMM 5.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]		* * YEAR [1991 ]		SHELBY
CITY OF TENAHA				SOURCE COUNTY [210]
C/O GEORGE BOWERS, MAYOR				SOURCE BASIN [05]
P.O. BOX 70				AQUIFER 10 -[190]
				NUMBER WELLS [ 2]
TENAHA, TEXAS		75974		RESERVOIR [ ]
				STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [SG ]		ANNUAL TOTAL [	48130000]	Units: Gallons 147.7 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 520

Outside conn: 75 Pop served: 1500 % Connections metered: 90.0

% Connections: RES 95 COMM 5.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]		* * YEAR [1990 ]		SHELBY
CITY OF TENAHA				SOURCE COUNTY [210]
C/O GEORGE BOWERS, MAYOR				SOURCE BASIN [05]
P.O. BOX 70				AQUIFER 10 -[190]
				NUMBER WELLS [ 2]
TENAHA, TEXAS		75974		RESERVOIR [ ]
				STATUS = 0

Jan [ 5343700]	May [ 5180100]	Sep [ 5728900]		
Feb [ 5247400]	Jun [ 5167500]	Oct [ 5553200]		
Mar [ 5251900]	Jul [ 6034900]	Nov [ 4870400]		
Apr [ 5221100]	Aug [ 6566700]	Dec [ 4748500]		
WATER TYPE [SG ]		ANNUAL TOTAL [	64914300]	Units: Gallons 199.2 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 520

Outside conn: 90 Pop served: 1200 % Connections metered: 99.0

% Connections: RES 95 COMM 5.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]		* * YEAR [1989 ]		SHELBY
CITY OF TENAHA				SOURCE COUNTY [210]
C/O GEORGE BOWERS, MAYOR				SOURCE BASIN [05]
P.O. BOX 70				AQUIFER 10 -[190]
				NUMBER WELLS [ 2]
TENAHA, TEXAS		75974		RESERVOIR [ ]
				STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [SG ]		ANNUAL TOTAL [	59227000]	Units: Gallons 181.8 Acre-feet

Remarks: [EST BY TWDB ]

Seller Code: [ ] Metered/Est: [2 ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 520

Outside conn: 90 Pop served: 1100 % Connections metered: 95.0

% Connections: RES 95 COMM 5.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]					SHELBY
		** YEAR [1988 ]			SOURCE COUNTY [210]
CITY OF TENAHA					SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR					AQUIFER 10 - [190]
P.O. BOX 70					NUMBER WELLS [ 2]
					RESERVOIR [ ]
TENAHA, TEXAS		75974			STATUS = 0

Jan [ 4603400]	May [ 4603400]	Sep [ 4603400]		
Feb [ 4603400]	Jun [ 4603400]	Oct [ 4603400]		
Mar [ 4603400]	Jul [ 4603400]	Nov [ 4603400]		
Apr [ 4603400]	Aug [ 4603400]	Dec [ 4603400]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ 55240800]		Units: Gallons 169.5 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ 2 ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 485

Outside conn: Pop served: 70 % Connections metered: 100

% Connections: RES 90 COMM 10 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]					SHELBY
		** YEAR [1987 ]			SOURCE COUNTY [210]
CITY OF TENAHA					SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR					AQUIFER 10 - [190]
P.O. BOX 70					NUMBER WELLS [ 2]
					RESERVOIR [ ]
TENAHA, TEXAS		75974			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ 42000000]		Units: Gallons 128.9 Acre-feet

Remarks: [EST BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 500

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]					SHELBY
		** YEAR [1986 ]			SOURCE COUNTY [210]
CITY OF TENAHA					SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR					AQUIFER 10 - [190]
P.O. BOX 70					NUMBER WELLS [ ]
					RESERVOIR [ ]
TENAHA, TEXAS		75974			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ 42000000]		Units: Gallons 128.9 Acre-feet

Remarks: [EST BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 500

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]				SHELBY
		** YEAR [1985 ]		SOURCE COUNTY [210]
CITY OF TENAHA				SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR				AQUIFER 10 -[190]
P.O. BOX 70				NUMBER WELLS [ 2]
				RESERVOIR [ ]
TENAHA, TEXAS		75974		STATUS = 0

Jan [ 3500000]	May [ 3500000]	Sep [ 3500000]		
Feb [ 3500000]	Jun [ 3500000]	Oct [ 3500000]		
Mar [ 3500000]	Jul [ 3500000]	Nov [ 3500000]		
Apr [ 3500000]	Aug [ 3500000]	Dec [ 3500000]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ 42000000]		Units: Gallons 128.9 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [2 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 500

Outside conn: 50 Pop served: 1000 % Connections metered: 100

% Connections: RES 90 COMM 8.0 IND 2.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]				SHELBY
		** YEAR [1984 ]		SOURCE COUNTY [210]
CITY OF TENAHA				SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR				AQUIFER 10 -[190]
P.O. BOX 70				NUMBER WELLS [ 2]
				RESERVOIR [ ]
TENAHA, TEXAS		75974		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ 67518000]		Units: Gallons 207.2 Acre-feet

Remarks: [EST TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 500

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]				SHELBY
		** YEAR [1983 ]		SOURCE COUNTY [210]
CITY OF TENAHA				SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR				AQUIFER 10 -[190]
P.O. BOX 70				NUMBER WELLS [ ]
				RESERVOIR [ ]
TENAHA, TEXAS		75974		STATUS = 0

Jan [ 4603500]	May [ 4603500]	Sep [ 4603500]		
Feb [ 4603500]	Jun [ 4603500]	Oct [ 4603500]		
Mar [ 4603500]	Jul [ 4603500]	Nov [ 4603500]		
Apr [ 4603500]	Aug [ 4603500]	Dec [ 4603500]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ 55242000]		Units: Gallons 169.5 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [2 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 450

Outside conn: 70 Pop served: % Connections metered: 100

% Connections: RES 90 COMM 10 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]					SHELBY
		** YEAR [1982]			SOURCE COUNTY [210]
CITY OF TENAHA					SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR					AQUIFER 10 - [190]
P.O. BOX 70					NUMBER WELLS [ 2]
					RESERVOIR [ ]
TENAHA, TEXAS		75974			STATUS = 0

Jan [ 4688377]	May [ 4771446]	Sep [ 4694407]		
Feb [ 4721221]	Jun [ 4522661]	Oct [ 4667642]		
Mar [ 4672422]	Jul [ 4687427]	Nov [ 4704086]		
Apr [ 5008041]	Aug [ 4671489]	Dec [ 4622072]		
	WATER TYPE [SG]	ANNUAL TOTAL [ 56431291]		Units: Gallons 173.2 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 494

Outside conn: 300 Pop served: % Connections metered: 85.0

% Connections: RES 80 COMM 10 IND 10 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]					SHELBY
		** YEAR [1981]			SOURCE COUNTY [210]
CITY OF TENAHA					SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR					AQUIFER 10 - [190]
P.O. BOX 70					NUMBER WELLS [ 2]
					RESERVOIR [ ]
TENAHA, TEXAS		75974			STATUS = 0

Jan [ 4603400]	May [ 4603400]	Sep [ 4603400]		
Feb [ 4603400]	Jun [ 4603400]	Oct [ 4603400]		
Mar [ 4603400]	Jul [ 4603400]	Nov [ 4603400]		
Apr [ 4603400]	Aug [ 4603400]	Dec [ 4603400]		
	WATER TYPE [SG]	ANNUAL TOTAL [ 55240800]		Units: Gallons 169.5 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 485

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]					SHELBY
		** YEAR [1980]			SOURCE COUNTY [210]
CITY OF TENAHA					SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR					AQUIFER 10 - [190]
P.O. BOX 70					NUMBER WELLS [ ]
					RESERVOIR [ ]
TENAHA, TEXAS		75974			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG]	ANNUAL TOTAL [ 44779500]		Units: Gallons 137.4 Acre-feet

Remarks: [EST BY TDWR ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 450

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]	* * YEAR [1979 ]	SHELBY
CITY OF TENAHA		SOURCE COUNTY [210]
C/O GEORGE BOWERS, MAYOR		SOURCE BASIN [05]
P.O. BOX 70		AQUIFER 10 -[190]
		NUMBER WELLS [ ]
TENAHA, TEXAS	75974	RESERVOIR [ ]
		STATUS = 0

Jan [ 2892990]	May [ 2902030]	Sep [ 3732480]	
Feb [ 2932240]	Jun [ 2943020]	Oct [ 3543624]	
Mar [ 2934935]	Jul [ 3034220]	Nov [ 3446336]	
Apr [ 2959756]	Aug [ 3806375]	Dec [ 2866730]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 37994736]	Units:
		116.6	Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 420

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]	* * YEAR [1978 ]	SHELBY
CITY OF TENAHA		SOURCE COUNTY [210]
C/O GEORGE BOWERS, MAYOR		SOURCE BASIN [05]
P.O. BOX 70		AQUIFER 10 -[190]
		NUMBER WELLS [ ]
TENAHA, TEXAS	75974	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]	Units:
		.0	Gallons
			Acre-feet

Remarks: [NO REPORT ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]	* * YEAR [1977 ]	SHELBY
CITY OF TENAHA		SOURCE COUNTY [210]
C/O GEORGE BOWERS, MAYOR		SOURCE BASIN [05]
P.O. BOX 70		AQUIFER 10 -[190]
		NUMBER WELLS [ ]
TENAHA, TEXAS	75974	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 43650000]	Units:
		134.0	Gallons
			Acre-feet

Remarks: [EST BY TDWR ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]					SHELBY
		** YEAR [1976 ]			SOURCE COUNTY [210]
CITY OF TENAHA					SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR					AQUIFER 10 -[190]
P.O. BOX 70					NUMBER WELLS [ ]
					RESERVOIR [ ]
TENAHA, TEXAS		75974			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]		Units:
				Gallons
				.0 Acre-feet

Remarks: [NO REPORT ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections:  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]					SHELBY
		** YEAR [1975 ]			SOURCE COUNTY [210]
CITY OF TENAHA					SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR					AQUIFER 10 -[190]
P.O. BOX 70					NUMBER WELLS [ ]
					RESERVOIR [ ]
TENAHA, TEXAS		75974			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]		Units:
				Gallons
				.0 Acre-feet

Remarks: [NO REPORT ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections:  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]					SHELBY
		** YEAR [1974 ]			SOURCE COUNTY [210]
CITY OF TENAHA					SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR					AQUIFER 10 -[190]
P.O. BOX 70					NUMBER WELLS [ 2]
					RESERVOIR [ ]
TENAHA, TEXAS		75974			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]	51910300]	Units:
			159.3	Gallons
				Acre-feet

Remarks: [EST BY TWDB ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 410  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]	* * YEAR [1973 ]	SHELBY
CITY OF TENAHA		SOURCE COUNTY [210]
C/O GEORGE BOWERS, MAYOR		SOURCE BASIN [05]
P.O. BOX 70		AQUIFER 10 -[190]
		NUMBER WELLS [ ]
TENAHA, TEXAS	75974	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]	Units:
			Gallons
			.0 Acre-feet

Remarks: [NO REPORT ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 400

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]	* * YEAR [1972 ]	SHELBY
CITY OF TENAHA		SOURCE COUNTY [210]
C/O GEORGE BOWERS, MAYOR		SOURCE BASIN [05]
P.O. BOX 70		AQUIFER 10 -[190]
		NUMBER WELLS [ 1]
TENAHA, TEXAS	75974	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 53400000]	Units:
		163.9	Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 400

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]	* * YEAR [1971 ]	SHELBY
CITY OF TENAHA		SOURCE COUNTY [210]
C/O GEORGE BOWERS, MAYOR		SOURCE BASIN [05]
P.O. BOX 70		AQUIFER 10 -[190]
		NUMBER WELLS [ 2]
TENAHA, TEXAS	75974	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 42000000]	Units:
		128.9	Gallons
			Acre-feet

Remarks: [EST. BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 400

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]		* * YEAR [1970]		SHELBY	
CITY OF TENAHA				SOURCE COUNTY [210]	
C/O GEORGE BOWERS, MAYOR				SOURCE BASIN [05]	
P.O. BOX 70				AQUIFER 10 -[190]	
TENAHA, TEXAS		75974		NUMBER WELLS [ ]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [SG ]			ANNUAL TOTAL [	88597275]
				Units: 271.9
				Gallons
				Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: [ ]

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]		* * YEAR [1969]		SHELBY	
CITY OF TENAHA				SOURCE COUNTY [210]	
C/O GEORGE BOWERS, MAYOR				SOURCE BASIN [05]	
P.O. BOX 70				AQUIFER 10 -[190]	
TENAHA, TEXAS		75974		NUMBER WELLS [ 2]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [SG ]			ANNUAL TOTAL [	104600000]
				Units: 321.0
				Gallons
				Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 385

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]		* * YEAR [1968]		SHELBY	
CITY OF TENAHA				SOURCE COUNTY [210]	
C/O GEORGE BOWERS, MAYOR				SOURCE BASIN [05]	
P.O. BOX 70				AQUIFER 10 -[190]	
TENAHA, TEXAS		75974		NUMBER WELLS [ 2]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [SG ]			ANNUAL TOTAL [	110953680]
				Units: 340.5
				Gallons
				Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: [ ]

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]		SHELBY
	** YEAR [1967 ]	SOURCE COUNTY [210]
CITY OF TENAHA		SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR		AQUIFER 10 - [190]
P.O. BOX 70		NUMBER WELLS [ 2]
		RESERVOIR [ ]
TENAHA, TEXAS	75974	STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [	98200000]	Units: Gallons 301.4 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]		SHELBY
	** YEAR [1966 ]	SOURCE COUNTY [210]
CITY OF TENAHA		SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR		AQUIFER 10 - [190]
P.O. BOX 70		NUMBER WELLS [ 2]
		RESERVOIR [ ]
TENAHA, TEXAS	75974	STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [	70281840]	Units: Gallons 215.7 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]		SHELBY
	** YEAR [1965 ]	SOURCE COUNTY [210]
CITY OF TENAHA		SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR		AQUIFER 10 - [190]
P.O. BOX 70		NUMBER WELLS [ 2]
		RESERVOIR [ ]
TENAHA, TEXAS	75974	STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [	88200000]	Units: Gallons 270.7 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 346

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]				SHELBY
	** YEAR [1964 ]			SOURCE COUNTY [210]
CITY OF TENAHA				SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR				AQUIFER 10 -[190]
P.O. BOX 70				NUMBER WELLS [ 2 ]
				RESERVOIR [ ]
TENAHA, TEXAS	75974			STATUS = 0

Jan [ 1985000]	May [ 1985000]	Sep [ 1985000]		
Feb [ 1985000]	Jun [ 1985000]	Oct [ 1985000]		
Mar [ 1985000]	Jul [ 1985000]	Nov [ 1985000]		
Apr [ 1985000]	Aug [ 1985000]	Dec [ 1985000]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ 23820000]		Units: Gallons 73.1 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: [ ]

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]				SHELBY
	** YEAR [1963 ]			SOURCE COUNTY [210]
CITY OF TENAHA				SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR				AQUIFER 10 -[190]
P.O. BOX 70				NUMBER WELLS [ 1 ]
				RESERVOIR [ ]
TENAHA, TEXAS	75974			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ 35000000]		Units: Gallons 107.4 Acre-feet

Remarks: [ ESTIMATED BY TWC ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 375

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]				SHELBY
	** YEAR [1962 ]			SOURCE COUNTY [210]
CITY OF TENAHA				SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR				AQUIFER 10 -[190]
P.O. BOX 70				NUMBER WELLS [ 1 ]
				RESERVOIR [ ]
TENAHA, TEXAS	75974			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ 33529060]		Units: Gallons 102.9 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 328

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]			SHELBY
	** YEAR [1961]		SOURCE COUNTY [210]
CITY OF TENAHA			SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR			AQUIFER 10 - [190]
P.O. BOX 70			NUMBER WELLS [ 1]
			RESERVOIR [ ]
TENAHA, TEXAS	75974		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG]	ANNUAL TOTAL [	23497080]	Units: Gallons 72.1 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 302

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]			SHELBY
	** YEAR [1960]		SOURCE COUNTY [210]
CITY OF TENAHA			SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR			AQUIFER 10 - [190]
P.O. BOX 70			NUMBER WELLS [ 1]
			RESERVOIR [ ]
TENAHA, TEXAS	75974		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG]	ANNUAL TOTAL [	27093000]	Units: Gallons 83.1 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 310

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]			SHELBY
	** YEAR [1959]		SOURCE COUNTY [210]
CITY OF TENAHA			SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR			AQUIFER 10 - [190]
P.O. BOX 70			NUMBER WELLS [ 1]
			RESERVOIR [ ]
TENAHA, TEXAS	75974		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG]	ANNUAL TOTAL [	8212500]	Units: Gallons 25.2 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 300

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]		SHELBY
	** YEAR [1958 ]	SOURCE COUNTY [210]
CITY OF TENAHA		SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR		AQUIFER 10 - [190]
P.O. BOX 70		NUMBER WELLS [ 1 ]
		RESERVOIR [ ]
TENAHA, TEXAS	75974	STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [	9660000] Units:
			Gallons
			29.6 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 300

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]		SHELBY
	** YEAR [1957 ]	SOURCE COUNTY [210]
CITY OF TENAHA		SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR		AQUIFER 10 - [190]
P.O. BOX 70		NUMBER WELLS [ 1 ]
		RESERVOIR [ ]
TENAHA, TEXAS	75974	STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [	27300000] Units:
			Gallons
			83.8 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 250

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]		SHELBY
	** YEAR [1956 ]	SOURCE COUNTY [210]
CITY OF TENAHA		SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR		AQUIFER 10 - [190]
P.O. BOX 70		NUMBER WELLS [ 1 ]
		RESERVOIR [ ]
TENAHA, TEXAS	75974	STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [	25550000] Units:
			Gallons
			78.4 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 238

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [846400]					SHELBY
		** YEAR [1955]			SOURCE COUNTY [210]
CITY OF TENAHA					SOURCE BASIN [05]
C/O GEORGE BOWERS, MAYOR					AQUIFER 10 - [190]
P.O. BOX 70					NUMBER WELLS [ 1]
					RESERVOIR [ ]
TENAHA, TEXAS		75974			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]			
Feb [ ]	Jun [ ]	Oct [ ]			
Mar [ ]	Jul [ ]	Nov [ ]			
Apr [ ]	Aug [ ]	Dec [ ]			
	WATER TYPE [SG]	ANNUAL TOTAL [	18000000]	Units:	
				Gallons	
				55.2	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 250

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300]					SHELBY
		** YEAR [1993]			SOURCE COUNTY [210]
TENNESSEE WATER SUPPLY CORP.					SOURCE BASIN [05]
C/O MARSHALL POLLARD, PRES.					AQUIFER 10 - [190]
RT. 3, BOX 242B					NUMBER WELLS [ 1]
					RESERVOIR [ ]
TIMPSON, TEXAS		75975			STATUS = 0

Jan [ 517000]	May [ 513000]	Sep [ 748000]			
Feb [ 508000]	Jun [ 594000]	Oct [ 523000]			
Mar [ 470000]	Jul [ 624000]	Nov [ 424000]			
Apr [ 470000]	Aug [ 832000]	Dec [ 468000]			
	WATER TYPE [SG]	ANNUAL TOTAL [	6691000]	Units:	
				Gallons	
				20.5	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 115

Outside conn: 115 Pop served: 345 % Connections metered: 100

% Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300]					SHELBY
		** YEAR [1992]			SOURCE COUNTY [210]
TENNESSEE WATER SUPPLY CORP.					SOURCE BASIN [05]
C/O MARSHALL POLLARD, PRES.					AQUIFER 10 - [190]
RT. 3, BOX 242B					NUMBER WELLS [ 1]
					RESERVOIR [ ]
TIMPSON, TEXAS		75975			STATUS = 0

Jan [ 709000]	May [ 605000]	Sep [ 725000]			
Feb [ 709000]	Jun [ 715000]	Oct [ 464000]			
Mar [ 796000]	Jul [ 944000]	Nov [ 590000]			
Apr [ 778000]	Aug [ 791000]	Dec [ 620000]			
	WATER TYPE [SG]	ANNUAL TOTAL [	8446000]	Units:	
				Gallons	
				25.9	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 116

Outside conn: Pop served: 348 % Connections metered: 100

% Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300]		SHELBY
TENNESSEE WATER SUPPLY CORP. C/O MARSHALL POLLARD, PRES. RT. 3, BOX 242B	** YEAR [1991 ]	SOURCE COUNTY [210] SOURCE BASIN [05] AQUIFER 10 -[190] NUMBER WELLS [ 1 ] RESERVOIR [ ] STATUS = 0
TIMPSON, TEXAS	75975	

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 7889110]	Units: Gallons 24.2 Acre-feet

Remarks: [NO REPORT-TWDB EST ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 107

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300]		SHELBY
TENNESSEE WATER SUPPLY CORP. C/O MARSHALL POLLARD, PRES. RT. 3, BOX 242B	** YEAR [1990 ]	SOURCE COUNTY [210] SOURCE BASIN [05] AQUIFER 10 -[190] NUMBER WELLS [ 1 ] RESERVOIR [ ] STATUS = 0
TIMPSON, TEXAS	75975	

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 7903700]	Units: Gallons 24.3 Acre-feet

Remarks: [EST BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 107

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300]		SHELBY
TENNESSEE WATER SUPPLY CORP. C/O MARSHALL POLLARD, PRES. RT. 3, BOX 242B	** YEAR [1989 ]	SOURCE COUNTY [210] SOURCE BASIN [05] AQUIFER 10 -[190] NUMBER WELLS [ 1 ] RESERVOIR [ ] STATUS = 0
TIMPSON, TEXAS	75975	

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 8148100]	Units: Gallons 25.0 Acre-feet

Remarks: [EST BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 107

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300]		SHELBY
TENNESSEE WATER SUPPLY CORP.	** YEAR [1988 ]	SOURCE COUNTY [210]
C/O MARSHALL POLLARD, PRES.		SOURCE BASIN [05]
RT. 3, BOX 242B		AQUIFER 10 -[190]
		NUMBER WELLS [ 2]
TIMPSON, TEXAS	75975	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]	Units:
		8585600]	Gallons
		26.3	Acre-feet

Remarks: [EST BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 115

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300]		SHELBY
TENNESSEE WATER SUPPLY CORP.	** YEAR [1987 ]	SOURCE COUNTY [210]
C/O MARSHALL POLLARD, PRES.		SOURCE BASIN [05]
RT. 3, BOX 242B		AQUIFER 10 -[190]
		NUMBER WELLS [ 1]
TIMPSON, TEXAS	75975	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]	Units:
		7963424]	Gallons
		24.4	Acre-feet

Remarks: [EST BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 112

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300]		SHELBY
TENNESSEE WATER SUPPLY CORP.	** YEAR [1986 ]	SOURCE COUNTY [210]
C/O MARSHALL POLLARD, PRES.		SOURCE BASIN [05]
RT. 3, BOX 242B		AQUIFER 10 -[190]
		NUMBER WELLS [ 1]
TIMPSON, TEXAS	75975	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ ]	Units:
		8176700]	Gallons
		25.1	Acre-feet

Remarks: [EST BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 115

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300]		** YEAR [1985 ]		SHELBY	
TENNESSEE WATER SUPPLY CORP. C/O MARSHALL POLLARD, PRES. RT. 3, BOX 242B				SOURCE COUNTY [210] SOURCE BASIN [05] AQUIFER 10 - [190] NUMBER WELLS [ 1 ] RESERVOIR [ ]	
TIMPSON, TEXAS		75975		STATUS = 0	

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		

	WATER TYPE [SG ]	ANNUAL TOTAL [	9085200]	Units:
			27.9	Gallons Acre-feet

Remarks: [ ]

Seller Code: [ ]      Metered/Est: [ ]      Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ;      Connections: 115

Outside conn:      Pop served:      % Connections metered:

% Connections: RES      COMM      IND      ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300]		** YEAR [1984 ]		SHELBY	
TENNESSEE WATER SUPPLY CORP. C/O MARSHALL POLLARD, PRES. RT. 3, BOX 242B				SOURCE COUNTY [210] SOURCE BASIN [05] AQUIFER 10 - [190] NUMBER WELLS [ 1 ] RESERVOIR [ ]	
TIMPSON, TEXAS		75975		STATUS = 0	

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		

	WATER TYPE [SG ]	ANNUAL TOTAL [	9563400]	Units:
			29.3	Gallons Acre-feet

Remarks: [EST TWDB ]

Seller Code: [ ]      Metered/Est: [ ]      Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ;      Connections: 115

Outside conn:      Pop served:      % Connections metered:

% Connections: RES      COMM      IND      ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300]		** YEAR [1983 ]		SHELBY	
TENNESSEE WATER SUPPLY CORP. C/O MARSHALL POLLARD, PRES. RT. 3, BOX 242B				SOURCE COUNTY [210] SOURCE BASIN [05] AQUIFER 10 - [190] NUMBER WELLS [ 1 ] RESERVOIR [ ]	
TIMPSON, TEXAS		75975		STATUS = 0	

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		

	WATER TYPE [SG ]	ANNUAL TOTAL [	8694000]	Units:
			26.7	Gallons Acre-feet

Remarks: [EST BY TDWR ]

Seller Code: [ ]      Metered/Est: [ ]      Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ;      Connections: 115

Outside conn:      Pop served:      % Connections metered:

% Connections: RES      COMM      IND      ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300] \* \* YEAR [1982 ] SHELBY  
 TENNESSEE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O MARSHALL POLLARD, PRES. SOURCE BASIN [05]  
 RT. 3, BOX 242B AQUIFER 10 -[190]  
 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0  
 TIMPSON, TEXAS 75975

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	

WATER TYPE [SG ] ANNUAL TOTAL [ 8514910 ] Units:  
 26.1 Gallons  
 26.1 Acre-feet

Remarks: [EST BY TDWR ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 107  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300] \* \* YEAR [1981 ] SHELBY  
 TENNESSEE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O MARSHALL POLLARD, PRES. SOURCE BASIN [05]  
 RT. 3, BOX 242B AQUIFER 10 -[190]  
 NUMBER WELLS [ ]  
 RESERVOIR [ ]  
 STATUS = 0  
 TIMPSON, TEXAS 75975

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	

WATER TYPE [SG ] ANNUAL TOTAL [ ] Units:  
 .0 Gallons  
 .0 Acre-feet

Remarks: [NO REPORT ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 105  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300] \* \* YEAR [1980 ] SHELBY  
 TENNESSEE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O MARSHALL POLLARD, PRES. SOURCE BASIN [05]  
 RT. 3, BOX 242B AQUIFER 10 -[190]  
 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 STATUS = 0  
 TIMPSON, TEXAS 75975

Jan [ 680700 ]	May [ 509300 ]	Sep [ 869900 ]	
Feb [ 667700 ]	Jun [ 693400 ]	Oct [ 605100 ]	
Mar [ 458300 ]	Jul [ 714800 ]	Nov [ 649600 ]	
Apr [ 468000 ]	Aug [ 930000 ]	Dec [ 551900 ]	

WATER TYPE [SG ] ANNUAL TOTAL [ 7798700 ] Units:  
 23.9 Gallons  
 23.9 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 98  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300] \* \* YEAR [1979 ] SHELBY  
 TENNESSEE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O MARSHALL POLLARD, PRES. SOURCE BASIN [05]  
 RT. 3, BOX 242B AQUIFER 10 -[190]  
 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 TIMPSON, TEXAS 75975 STATUS = 0

Jan [ 723800]	May [ 717000]	Sep [ 854000]	
Feb [ 462100]	Jun [ 743800]	Oct [ 589000]	
Mar [ 474200]	Jul [ 724500]	Nov [ 557500]	
Apr [ 500100]	Aug [ 720500]	Dec [ 557200]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 7623700]	Units: Gallons 23.4 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 98  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300] \* \* YEAR [1978 ] SHELBY  
 TENNESSEE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O MARSHALL POLLARD, PRES. SOURCE BASIN [05]  
 RT. 3, BOX 242B AQUIFER 10 -[190]  
 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 TIMPSON, TEXAS 75975 STATUS = 0

Jan [ 629270]	May [ 544580]	Sep [ 750000]	
Feb [ 434260]	Jun [ 904400]	Oct [ 650000]	
Mar [ 504040]	Jul [ 945310]	Nov [ 490700]	
Apr [ 614530]	Aug [ 900000]	Dec [ 664800]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 8031890]	Units: Gallons 24.6 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 97  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300] \* \* YEAR [1977 ] SHELBY  
 TENNESSEE WATER SUPPLY CORP. SOURCE COUNTY [210]  
 C/O MARSHALL POLLARD, PRES. SOURCE BASIN [05]  
 RT. 3, BOX 242B AQUIFER 10 -[190]  
 NUMBER WELLS [ 1 ]  
 RESERVOIR [ ]  
 TIMPSON, TEXAS 75975 STATUS = 0

Jan [ 788490]	May [ 741260]	Sep [ 737780]	
Feb [ 720310]	Jun [ 846300]	Oct [ 670760]	
Mar [ 409400]	Jul [ 837580]	Nov [ 604810]	
Apr [ 707860]	Aug [ 762690]	Dec [ 522660]	
WATER TYPE [SG ]		ANNUAL TOTAL [ 8349900]	Units: Gallons 25.6 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 93  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300]				SHELBY
		** YEAR [1976 ]		SOURCE COUNTY [210]
TENNESSEE WATER SUPPLY CORP.				SOURCE BASIN [05]
C/O MARSHALL POLLARD, PRES.				AQUIFER 10 - [190]
RT. 3, BOX 242B				NUMBER WELLS [ 1]
				RESERVOIR [ ]
TIMPSON, TEXAS		75975		STATUS = 0

Jan [ 325184]	May [ 661560]	Sep [ 602120]	
Feb [ 345194]	Jun [ 633200]	Oct [ 478610]	
Mar [ 428220]	Jul [ 574120]	Nov [ 604050]	
Apr [ 733370]	Aug [ 675090]	Dec [ 524600]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 6585318]	Gallons
		20.2	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 94

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300]				SHELBY
		** YEAR [1975 ]		SOURCE COUNTY [210]
TENNESSEE WATER SUPPLY CORP.				SOURCE BASIN [05]
C/O MARSHALL POLLARD, PRES.				AQUIFER 10 - [190]
RT. 3, BOX 242B				NUMBER WELLS [ 1]
				RESERVOIR [ ]
TIMPSON, TEXAS		75975		STATUS = 0

Jan [ 450570]	May [ 326350]	Sep [ 389160]	
Feb [ 325890]	Jun [ 414860]	Oct [ 462720]	
Mar [ 295790]	Jul [ 404950]	Nov [ 393390]	
Apr [ 315290]	Aug [ 558540]	Dec [ 265170]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 4602680]	Gallons
		14.1	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 89

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300]				SHELBY
		** YEAR [1974 ]		SOURCE COUNTY [210]
TENNESSEE WATER SUPPLY CORP.				SOURCE BASIN [05]
C/O MARSHALL POLLARD, PRES.				AQUIFER 10 - [190]
RT. 3, BOX 242B				NUMBER WELLS [ 1]
				RESERVOIR [ ]
TIMPSON, TEXAS		75975		STATUS = 0

Jan [ 259960]	May [ 300355]	Sep [ 369092]	
Feb [ 175660]	Jun [ 320807]	Oct [ 235172]	
Mar [ 211960]	Jul [ 408810]	Nov [ 221766]	
Apr [ 292756]	Aug [ 341512]	Dec [ 190100]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 3327950]	Gallons
		10.2	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 85

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300]		* * YEAR [1973 ]		SHELBY	
TENNESSEE WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O MARSHALL POLLARD, PRES.				SOURCE BASIN [05]	
RT. 3, BOX 2428				AQUIFER 10 -[190]	
TIMPSON, TEXAS		75975		NUMBER WELLS [ 1]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [	173120]	May [	286660]	Sep [	227673]	
Feb [	185330]	Jun [	291751]	Oct [	275220]	
Mar [	174130]	Jul [	273980]	Nov [	217407]	
Apr [	236050]	Aug [	257414]	Dec [	285395]	
	WATER TYPE [SG ]		ANNUAL TOTAL [	2884130]	Units:	
					Gallons	
					8.9	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 84

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300]		* * YEAR [1972 ]		SHELBY	
TENNESSEE WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O MARSHALL POLLARD, PRES.				SOURCE BASIN [05]	
RT. 3, BOX 2428				AQUIFER 10 -[190]	
TIMPSON, TEXAS		75975		NUMBER WELLS [ 1]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [	]	May [	]	Sep [	]	
Feb [	]	Jun [	]	Oct [	]	
Mar [	]	Jul [	]	Nov [	]	
Apr [	]	Aug [	]	Dec [	]	
	WATER TYPE [SG ]		ANNUAL TOTAL [	9088500]	Units:	
					Gallons	
					27.9	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 83

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [847300]		* * YEAR [1971 ]		SHELBY	
TENNESSEE WATER SUPPLY CORP.				SOURCE COUNTY [210]	
C/O MARSHALL POLLARD, PRES.				SOURCE BASIN [05]	
RT. 3, BOX 2428				AQUIFER 10 -[190]	
TIMPSON, TEXAS		75975		NUMBER WELLS [ 1]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [	]	May [	]	Sep [	]	
Feb [	]	Jun [	]	Oct [	]	
Mar [	]	Jul [	]	Nov [	]	
Apr [	]	Aug [	]	Dec [	]	
	WATER TYPE [SG ]		ANNUAL TOTAL [	3556710]	Units:	
					Gallons	
					10.9	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 79

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]		* * YEAR [1993 ]		SHELBY	
CITY OF TIMPSON				SOURCE COUNTY [210]	
RICKEY HELTON, WTR DEPT FOREMAN				SOURCE BASIN [05]	
P.O. BOX 369				AQUIFER 10 -[032]	
TIMPSON, TEXAS		75975		NUMBER WELLS [ 2 ]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 4961000]	May [ 5178000]	Sep [ 9176000]	
Feb [ 4407000]	Jun [ 5274000]	Oct [ 4161000]	
Mar [ 4540000]	Jul [ 5789000]	Nov [ 4589000]	
Apr [ 4683000]	Aug [ 8218000]	Dec [ 4484000]	Units:
WATER TYPE [SG ] ANNUAL TOTAL [ 65460000]			Gallons
			200.9 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 550

Outside conn: 2 Pop served: 1100 % Connections metered: 100

% Connections: RES 95 COMM 4.0 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]		* * YEAR [1992 ]		SHELBY	
CITY OF TIMPSON				SOURCE COUNTY [210]	
RICKEY HELTON, WTR DEPT FOREMAN				SOURCE BASIN [05]	
P.O. BOX 369				AQUIFER 10 -[032]	
TIMPSON, TEXAS		75975		NUMBER WELLS [ 2 ]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 5038000]	May [ 5040000]	Sep [ 5682000]	
Feb [ 4455000]	Jun [ 6045000]	Oct [ 5527000]	
Mar [ 5372000]	Jul [ 6818000]	Nov [ 4957000]	
Apr [ 5037000]	Aug [ 7121000]	Dec [ 4840000]	Units:
WATER TYPE [SG ] ANNUAL TOTAL [ 65932000]			Gallons
			202.3 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 552

Outside conn: 2 Pop served: 1200 % Connections metered: 100

% Connections: RES 95 COMM 4.0 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]		* * YEAR [1991 ]		SHELBY	
CITY OF TIMPSON				SOURCE COUNTY [210]	
RICKEY HELTON, WTR DEPT FOREMAN				SOURCE BASIN [05]	
P.O. BOX 369				AQUIFER 10 -[032]	
TIMPSON, TEXAS		75975		NUMBER WELLS [ 2 ]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 6734000]	May [ 7302000]	Sep [ 6367000]	
Feb [ 5988000]	Jun [ 6051000]	Oct [ 5916000]	
Mar [ 7339000]	Jul [ 7567000]	Nov [ 4434000]	
Apr [ 7658000]	Aug [ 7927000]	Dec [ 4829000]	Units:
WATER TYPE [SG ] ANNUAL TOTAL [ 78112000]			Gallons
			239.7 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 550

Outside conn: 12 Pop served: 1150 % Connections metered: 97.0

% Connections: RES 74 COMM 26 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]					SHELBY
		** YEAR [1990]			SOURCE COUNTY [210]
CITY OF TIMPSON					SOURCE BASIN [05]
					AQUIFER 10 - [032]
RICKEY HELTON, WTR DEPT FOREMAN					NUMBER WELLS [ 2]
P.O. BOX 369					RESERVOIR [ ]
TIMPSON, TEXAS		75975			STATUS = 0

Jan [ 4926000]	May [ 4867000]	Sep [ 4576000]	
Feb [ 4551000]	Jun [ 5582000]	Oct [ 5360000]	
Mar [ 5037000]	Jul [ 5882000]	Nov [ 5147000]	
Apr [ 4906000]	Aug [ 6472000]	Dec [ 5800000]	
	WATER TYPE [SG]	ANNUAL TOTAL [ 63106000]	Units: Gallons
			193.7 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ 1 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 550

Outside conn: 12 Pop served: 1150 % Connections metered: 97.0

% Connections: RES 74 COMM 25 IND 1.0 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]					SHELBY
		** YEAR [1989]			SOURCE COUNTY [210]
CITY OF TIMPSON					SOURCE BASIN [05]
					AQUIFER 10 - [032]
RICKEY HELTON, WTR DEPT FOREMAN					NUMBER WELLS [ 2]
P.O. BOX 369					RESERVOIR [ ]
TIMPSON, TEXAS		75975			STATUS = 0

Jan [ 5609000]	May [ 5407000]	Sep [ 5389000]	
Feb [ 5607000]	Jun [ 5359000]	Oct [ 5065000]	
Mar [ 4893000]	Jul [ 5291000]	Nov [ 5370000]	
Apr [ 4245000]	Aug [ 6429000]	Dec [ 6271000]	
	WATER TYPE [SG]	ANNUAL TOTAL [ 64935000]	Units: Gallons
			199.3 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 530

Outside conn: 12 Pop served: 1250 % Connections metered: 97.0

% Connections: RES 74 COMM 26 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]					SHELBY
		** YEAR [1988]			SOURCE COUNTY [210]
CITY OF TIMPSON					SOURCE BASIN [05]
					AQUIFER 10 - [032]
RICKEY HELTON, WTR DEPT FOREMAN					NUMBER WELLS [ 2]
P.O. BOX 369					RESERVOIR [ ]
TIMPSON, TEXAS		75975			STATUS = 0

Jan [ 5806820]	May [ 7025000]	Sep [ 6873000]	
Feb [ 5923050]	Jun [ 7553000]	Oct [ 6000000]	
Mar [ 6036990]	Jul [ 7053000]	Nov [ 5921000]	
Apr [ 5154610]	Aug [ 6869000]	Dec [ 6044000]	
	WATER TYPE [SG]	ANNUAL TOTAL [ 76259470]	Units: Gallons
			234.0 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 530

Outside conn: 12 Pop served: 1250 % Connections metered: 97.0

% Connections: RES 74 COMM 26 IND ; EFFLUENT(gal)

=====  
 ===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====  
 =====

TWDB CODE: [867600]		SHELBY
	** YEAR [1987 ]	SOURCE COUNTY [210]
CITY OF TIMPSON		SOURCE BASIN [05]
		AQUIFER 10 - [032]
RICKEY HELTON, WTR DEPT FOREMAN		NUMBER WELLS [ 2 ]
P.O. BOX 369		RESERVOIR [ ]
TIMPSON, TEXAS	75975	STATUS = 0

Jan [ 7084000]	May [ 6742530]	Sep [ 7318930]	
Feb [ 6310990]	Jun [ 6883290]	Oct [ 7446350]	
Mar [ 8000000]	Jul [ 7033880]	Nov [ 7567450]	
Apr [ 7050000]	Aug [ 7186130]	Dec [ 7683550]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 86307100]	Units: Gallons 264.9 Acre-feet

Remarks: [ ]

Seller Code: [ ]	Metered/Est: [ ]	Activity Code: [ ]
If purchased, % RAW =[ ]	, % TREATED =[ ]	Connections: 530
Outside conn: 12	Pop served: 1250	% Connections metered: 99.0
% Connections: RES 74	COMM 26	IND ; EFFLUENT(gal)

=====  
 ===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====  
 =====

TWDB CODE: [867600]		SHELBY
	** YEAR [1986 ]	SOURCE COUNTY [210]
CITY OF TIMPSON		SOURCE BASIN [05]
		AQUIFER 10 - [032]
RICKEY HELTON, WTR DEPT FOREMAN		NUMBER WELLS [ 2 ]
P.O. BOX 369		RESERVOIR [ ]
TIMPSON, TEXAS	75975	STATUS = 0

Jan [ 7894250]	May [ 7261000]	Sep [ 8007000]	
Feb [ 6847000]	Jun [ 7142000]	Oct [ 7180000]	
Mar [ 8437000]	Jul [ 7585000]	Nov [ 6558000]	
Apr [ 7290000]	Aug [ 8500000]	Dec [ 7478000]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 90179250]	Units: Gallons 276.7 Acre-feet

Remarks: [ ]

Seller Code: [ ]	Metered/Est: [ ]	Activity Code: [ ]
If purchased, % RAW =[ ]	, % TREATED =[ ]	Connections: 530
Outside conn: 12	Pop served: 1200	% Connections metered: 99.0
% Connections: RES 74	COMM 26	IND ; EFFLUENT(gal)

=====  
 ===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====  
 =====

TWDB CODE: [867600]		SHELBY
	** YEAR [1985 ]	SOURCE COUNTY [210]
CITY OF TIMPSON		SOURCE BASIN [05]
		AQUIFER 10 - [032]
RICKEY HELTON, WTR DEPT FOREMAN		NUMBER WELLS [ 1 ]
P.O. BOX 369		RESERVOIR [ ]
TIMPSON, TEXAS	75975	STATUS = 0

Jan [ 9568000]	May [ 7729000]	Sep [ 7879000]	
Feb [ 8926000]	Jun [ 8757000]	Oct [ 7082000]	
Mar [ 8331000]	Jul [ 7580000]	Nov [ 7861000]	
Apr [ 8284000]	Aug [ 8404000]	Dec [ 8270000]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 98671000]	Units: Gallons 302.8 Acre-feet

Remarks: [ ]

Seller Code: [ ]	Metered/Est: [ 1 ]	Activity Code: [ ]
If purchased, % RAW =[ ]	, % TREATED =[ ]	Connections: 547
Outside conn: 8	Pop served: 1054	% Connections metered: 100
% Connections: RES 70	COMM 20	IND 10 ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]				SHELBY
	* * YEAR [1984 ]			SOURCE COUNTY [210]
CITY OF TIMPSON				SOURCE BASIN [05]
				AQUIFER 10 -[032]
RICKEY HELTON, WTR DEPT FOREMAN				NUMBER WELLS [ 2]
P.O. BOX 369				RESERVOIR [ ]
TIMPSON, TEXAS	75975			STATUS = 0

Jan [ 37779000]	May [ 66346000]	Sep [ 11938000]	
Feb [ 35996000]	Jun [ 7641000]	Oct [ 5012000]	
Mar [ 42102000]	Jul [ 8069000]	Nov [ 8782000]	
Apr [ 17676000]	Aug [ 7733000]	Dec [ 9070000]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 258144000]	Gallons
		792.2	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 559

Outside conn: Pop served: 1194 % Connections metered: 99.0

% Connections: RES 85 COMM 15 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]				SHELBY
	* * YEAR [1983 ]			SOURCE COUNTY [210]
CITY OF TIMPSON				SOURCE BASIN [05]
				AQUIFER 10 -[032]
RICKEY HELTON, WTR DEPT FOREMAN				NUMBER WELLS [ 2]
P.O. BOX 369				RESERVOIR [ ]
TIMPSON, TEXAS	75975			STATUS = 0

Jan [ 8308000]	May [ 8091000]	Sep [ 8010000]	
Feb [ 7476000]	Jun [ 7800000]	Oct [ 8308000]	
Mar [ 8184000]	Jul [ 8215000]	Nov [ 7776000]	
Apr [ 7860000]	Aug [ 8215000]	Dec [ 9294000]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 97537000]	Gallons
		299.3	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 562

Outside conn: 16 Pop served: 1189 % Connections metered: 100

% Connections: RES 95 COMM 5.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]				SHELBY
	* * YEAR [1982 ]			SOURCE COUNTY [210]
CITY OF TIMPSON				SOURCE BASIN [05]
				AQUIFER 10 -[032]
RICKEY HELTON, WTR DEPT FOREMAN				NUMBER WELLS [ 2]
P.O. BOX 369				RESERVOIR [ ]
TIMPSON, TEXAS	75975			STATUS = 0

Jan [ 7010000]	May [ 7594000]	Sep [ 9893000]	
Feb [ 7190000]	Jun [ 8401000]	Oct [ 6886000]	
Mar [ 5954000]	Jul [ 7113000]	Nov [ 7008000]	
Apr [ 6995000]	Aug [ 7332000]	Dec [ 6991000]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 88367000]	Gallons
		271.2	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [2 ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 657

Outside conn: 11 Pop served: 1260 % Connections metered: 99.0

% Connections: RES 74 COMM 26 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]			SHELBY
	** YEAR [1981 ]		SOURCE COUNTY [210]
CITY OF TIMPSON			SOURCE BASIN [05]
			AQUIFER 10 -[032]
RICKEY HELTON, WTR DEPT FOREMAN			NUMBER WELLS [ 2]
P.O. BOX 369			RESERVOIR [ ]
TIMPSON, TEXAS	75975		STATUS = 0

Jan [ 7010000]	May [ 7594000]	Sep [ 9893000]	
Feb [ 7193000]	Jun [ 8401000]	Oct [ 6886000]	
Mar [ 5951000]	Jul [ 7113000]	Nov [ 7008000]	
Apr [ 6995000]	Aug [ 7332000]	Dec [ 6991000]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 88367000]	Gallons
		271.2	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 657

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]			SHELBY
	** YEAR [1980 ]		SOURCE COUNTY [210]
CITY OF TIMPSON			SOURCE BASIN [05]
			AQUIFER 10 -[032]
RICKEY HELTON, WTR DEPT FOREMAN			NUMBER WELLS [ 2]
P.O. BOX 369			RESERVOIR [ ]
TIMPSON, TEXAS	75975		STATUS = 0

Jan [ 4668000]	May [ 4793000]	Sep [ 14127000]	
Feb [ 4465000]	Jun [ 9012000]	Oct [ 5134000]	
Mar [ 7330000]	Jul [ 8580000]	Nov [ 5659000]	
Apr [ 5053000]	Aug [ 7517000]	Dec [ 6187000]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 82525000]	Gallons
		253.3	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 655

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]			SHELBY
	** YEAR [1979 ]		SOURCE COUNTY [210]
CITY OF TIMPSON			SOURCE BASIN [05]
			AQUIFER 10 -[032]
RICKEY HELTON, WTR DEPT FOREMAN			NUMBER WELLS [ 2]
P.O. BOX 369			RESERVOIR [ ]
TIMPSON, TEXAS	75975		STATUS = 0

Jan [ 6283000]	May [ 7469000]	Sep [ 10563000]	
Feb [ 6983000]	Jun [ 8345000]	Oct [ 6416000]	
Mar [ 5761000]	Jul [ 6714000]	Nov [ 6352000]	
Apr [ 6682000]	Aug [ 7770000]	Dec [ 6416000]	Units:
	WATER TYPE [SG ]	ANNUAL TOTAL [ 85754000]	Gallons
		263.2	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 650

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]					SHELBY
		** YEAR [1978 ]			SOURCE COUNTY [210]
CITY OF TIMPSON					SOURCE BASIN [05]
					AQUIFER 10 -[032]
RICKEY HELTON, WTR DEPT FOREMAN					NUMBER WELLS [ 2]
P.O. BOX 369					RESERVOIR [ ]
TIMPSON, TEXAS		75975			STATUS = 0

Jan [ 4069000]	May [ 4201000]	Sep [ 6733000]		
Feb [ 4186000]	Jun [ 4833000]	Oct [ 5913000]		
Mar [ 4211000]	Jul [ 5600000]	Nov [ 3765000]		
Apr [ 5053000]	Aug [ 6013000]	Dec [ 5560000]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ 60137000]	Units:	
			Gallons	
			184.6	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 628

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]					SHELBY
		** YEAR [1977 ]			SOURCE COUNTY [210]
CITY OF TIMPSON					SOURCE BASIN [05]
					AQUIFER 10 -[032]
RICKEY HELTON, WTR DEPT FOREMAN					NUMBER WELLS [ ]
P.O. BOX 369					RESERVOIR [ ]
TIMPSON, TEXAS		75975			STATUS = 0

Jan [ 4081000]	May [ 4474000]	Sep [ 6710000]		
Feb [ 4240000]	Jun [ 4978000]	Oct [ 5880000]		
Mar [ 4143000]	Jul [ 5583000]	Nov [ 3890000]		
Apr [ 5074000]	Aug [ 5931000]	Dec [ 6246000]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ 61230000]	Units:	
			Gallons	
			187.9	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 595

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]					SHELBY
		** YEAR [1976 ]			SOURCE COUNTY [210]
CITY OF TIMPSON					SOURCE BASIN [05]
					AQUIFER 10 -[032]
RICKEY HELTON, WTR DEPT FOREMAN					NUMBER WELLS [ 2]
P.O. BOX 369					RESERVOIR [ ]
TIMPSON, TEXAS		75975			STATUS = 0

Jan [ 4051000]	May [ 4444000]	Sep [ 6680000]		
Feb [ 4210000]	Jun [ 4948000]	Oct [ 5850000]		
Mar [ 4113000]	Jul [ 5553000]	Nov [ 3860000]		
Apr [ 5044000]	Aug [ 5901000]	Dec [ 6216000]		
	WATER TYPE [SG ]	ANNUAL TOTAL [ 60870000]	Units:	
			Gallons	
			186.8	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 580

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]				SHELBY
		** YEAR [1975 ]		SOURCE COUNTY [210]
CITY OF TIMPSON				SOURCE BASIN [05]
				AQUIFER 10 - [032]
RICKEY HELTON, WTR DEPT FOREMAN				NUMBER WELLS [ 2]
P.O. BOX 369				RESERVOIR [ ]
TIMPSON, TEXAS		75975		STATUS = 0

Jan [ 4051000]	May [ 4444000]	Sep [ 6956000]	
Feb [ 4210000]	Jun [ 4948000]	Oct [ 5481000]	
Mar [ 4113000]	Jul [ 5553000]	Nov [ 4051000]	
Apr [ 6044000]	Aug [ 6509000]	Dec [ 6216000]	
WATER TYPE [SG ] ANNUAL TOTAL [ 62576000]			Units: 192.0
			Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 556

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]				SHELBY
		** YEAR [1974 ]		SOURCE COUNTY [210]
CITY OF TIMPSON				SOURCE BASIN [05]
				AQUIFER 10 - [032]
RICKEY HELTON, WTR DEPT FOREMAN				NUMBER WELLS [ 2]
P.O. BOX 369				RESERVOIR [ ]
TIMPSON, TEXAS		75975		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ] ANNUAL TOTAL [ 52000000]			Units: 159.6
			Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 575

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]				SHELBY
		** YEAR [1973 ]		SOURCE COUNTY [210]
CITY OF TIMPSON				SOURCE BASIN [05]
				AQUIFER 10 - [032]
RICKEY HELTON, WTR DEPT FOREMAN				NUMBER WELLS [ 1]
P.O. BOX 369				RESERVOIR [ ]
TIMPSON, TEXAS		75975		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ] ANNUAL TOTAL [ 24247732]			Units: 74.4
			Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 545

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]	* * YEAR [1972 ]	SHELBY
CITY OF TIMPSON		SOURCE COUNTY [210]
RICKEY HELTON, WTR DEPT FOREMAN		SOURCE BASIN [05]
P.O. BOX 369		AQUIFER 10 -[032]
TIMPSON, TEXAS	75975	NUMBER WELLS [ 2]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 22186593]	Units: Gallons 68.1 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 530

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]	* * YEAR [1971 ]	SHELBY
CITY OF TIMPSON		SOURCE COUNTY [210]
RICKEY HELTON, WTR DEPT FOREMAN		SOURCE BASIN [05]
P.O. BOX 369		AQUIFER 10 -[032]
TIMPSON, TEXAS	75975	NUMBER WELLS [ 2]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 22864330]	Units: Gallons 70.2 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 506

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]	* * YEAR [1970 ]	SHELBY
CITY OF TIMPSON		SOURCE COUNTY [210]
RICKEY HELTON, WTR DEPT FOREMAN		SOURCE BASIN [05]
P.O. BOX 369		AQUIFER 10 -[032]
TIMPSON, TEXAS	75975	NUMBER WELLS [ ]
		RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 23092200]	Units: Gallons 70.9 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]					SHELBY
		** YEAR [1966]			SOURCE COUNTY [210]
CITY OF TIMPSON					SOURCE BASIN [05]
					AQUIFER 10 -[032]
RICKEY HELTON, WTR DEPT FOREMAN					NUMBER WELLS [ 2]
P.O. BOX 369					RESERVOIR [ ]
TIMPSON, TEXAS		75975			STATUS = 0

Jan [ 1491000]	May [ 2192000]	Sep [ 1930000]		
Feb [ 1454000]	Jun [ 2096000]	Oct [ 1869000]		
Mar [ 1739000]	Jul [ 2554000]	Nov [ 1618000]		
Apr [ 1589000]	Aug [ 2014000]	Dec [ 1712000]		
	WATER TYPE [SG]	ANNUAL TOTAL [ 22258000]	Units:	
			Gallons	
			68.3	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: [ ]

Outside conn: Pop served: % Connections metered: [ ]

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]					SHELBY
		** YEAR [1965]			SOURCE COUNTY [210]
CITY OF TIMPSON					SOURCE BASIN [05]
					AQUIFER 10 -[032]
RICKEY HELTON, WTR DEPT FOREMAN					NUMBER WELLS [ 2]
P.O. BOX 369					RESERVOIR [ ]
TIMPSON, TEXAS		75975			STATUS = 0

Jan [ 4495000]	May [ 4495000]	Sep [ 5550000]		
Feb [ 4060000]	Jun [ 4800000]	Oct [ 5735000]		
Mar [ 4495000]	Jul [ 5425000]	Nov [ 5100000]		
Apr [ 4350000]	Aug [ 5735000]	Dec [ 4340000]		
	WATER TYPE [SG]	ANNUAL TOTAL [ 58580000]	Units:	
			Gallons	
			179.8	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 607

Outside conn: Pop served: % Connections metered: [ ]

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]					SHELBY
		** YEAR [1964]			SOURCE COUNTY [210]
CITY OF TIMPSON					SOURCE BASIN [05]
					AQUIFER 10 -[032]
RICKEY HELTON, WTR DEPT FOREMAN					NUMBER WELLS [ 2]
P.O. BOX 369					RESERVOIR [ ]
TIMPSON, TEXAS		75975			STATUS = 0

Jan [ 4185000]	May [ 4185000]	Sep [ 4650000]		
Feb [ 3780000]	Jun [ 4350000]	Oct [ 4340000]		
Mar [ 4185000]	Jul [ 4805000]	Nov [ 4050000]		
Apr [ 4050000]	Aug [ 4805000]	Dec [ 4185000]		
	WATER TYPE [SG]	ANNUAL TOTAL [ 51570000]	Units:	
			Gallons	
			158.3	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 446

Outside conn: Pop served: % Connections metered: [ ]

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600] \* \* YEAR [1963 ] SHELBY  
 CITY OF TIMPSON SOURCE COUNTY [210]  
 RICKEY HELTON, WTR DEPT FOREMAN SOURCE BASIN [05]  
 P.O. BOX 369 AQUIFER 10 -[032]  
 TIMPSON, TEXAS 75975 NUMBER WELLS [ 2]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 5400000] Units: 165.7 Gallons Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 385  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600] \* \* YEAR [1962 ] SHELBY  
 CITY OF TIMPSON SOURCE COUNTY [210]  
 RICKEY HELTON, WTR DEPT FOREMAN SOURCE BASIN [05]  
 P.O. BOX 369 AQUIFER 10 -[032]  
 TIMPSON, TEXAS 75975 NUMBER WELLS [ 2]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 5475000] Units: 168.0 Gallons Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections:  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600] \* \* YEAR [1961 ] SHELBY  
 CITY OF TIMPSON SOURCE COUNTY [210]  
 RICKEY HELTON, WTR DEPT FOREMAN SOURCE BASIN [05]  
 P.O. BOX 369 AQUIFER 10 -[032]  
 TIMPSON, TEXAS 75975 NUMBER WELLS [ 2]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 3720000]	May [ 3720000]	Sep [ 4650000]	
Feb [ 3720000]	Jun [ 3720000]	Oct [ 4650000]	
Mar [ 3720000]	Jul [ 4650000]	Nov [ 4650000]	
Apr [ 3720000]	Aug [ 4650000]	Dec [ 3720000]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 4929000] Units: 151.3 Gallons Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 387  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]	* * YEAR [1960 ]	SHELBY
CITY OF TIMPSON		SOURCE COUNTY [210]
		SOURCE BASIN [05]
RICKEY HELTON, WTR DEPT FOREMAN		AQUIFER 10 -[032]
P.O. BOX 369		NUMBER WELLS [ ]
TIMPSON, TEXAS	75975	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [	45000000] Units:
			138.1 Gallons
			Acre-feet

Remarks: [ ESTIMATED BY BWE ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 385

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]	* * YEAR [1959 ]	SHELBY
CITY OF TIMPSON		SOURCE COUNTY [210]
		SOURCE BASIN [05]
RICKEY HELTON, WTR DEPT FOREMAN		AQUIFER 10 -[032]
P.O. BOX 369		NUMBER WELLS [ ]
TIMPSON, TEXAS	75975	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [	.0] Units:
			Acre-feet

Remarks: [NO REPORT ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections:

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]	* * YEAR [1958 ]	SHELBY
CITY OF TIMPSON		SOURCE COUNTY [210]
		SOURCE BASIN [05]
RICKEY HELTON, WTR DEPT FOREMAN		AQUIFER 10 -[032]
P.O. BOX 369		NUMBER WELLS [ 2]
TIMPSON, TEXAS	75975	RESERVOIR [ ]
		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [	45625000] Units:
			140.0 Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 511

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]	* * YEAR [1957 ]	SHELBY
CITY OF TIMPSON		SOURCE COUNTY [210]
		SOURCE BASIN [05]
		AQUIFER 10 - [032]
RICKEY HELTON, WTR DEPT FOREMAN		NUMBER WELLS [ 2]
P.O. BOX 369		RESERVOIR [ ]
TIMPSON, TEXAS	75975	STATUS = 0

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Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [	43800000] Units:
			134.4 Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 492

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]	* * YEAR [1956 ]	SHELBY
CITY OF TIMPSON		SOURCE COUNTY [210]
		SOURCE BASIN [05]
		AQUIFER 10 - [032]
RICKEY HELTON, WTR DEPT FOREMAN		NUMBER WELLS [ 2]
P.O. BOX 369		RESERVOIR [ ]
TIMPSON, TEXAS	75975	STATUS = 0

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Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [	43800000] Units:
			134.4 Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 485

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867600]	* * YEAR [1955 ]	SHELBY
CITY OF TIMPSON		SOURCE COUNTY [210]
		SOURCE BASIN [05]
		AQUIFER 10 - [032]
RICKEY HELTON, WTR DEPT FOREMAN		NUMBER WELLS [ 2]
P.O. BOX 369		RESERVOIR [ ]
TIMPSON, TEXAS	75975	STATUS = 0

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Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG ]	ANNUAL TOTAL [	40150000] Units:
			123.2 Gallons
			Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 436

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650]				SHELBY
	** YEAR [1993 ]			SOURCE COUNTY [210]
TIMPSON RURAL WATER SPLY. CORP				SOURCE BASIN [06]
C/O JOHN TYSON, PRES.				AQUIFER 10 -[221]
P.O. BOX 397				NUMBER WELLS [ 5]
				RESERVOIR [ ]
TIMPSON, TEXAS	75975			STATUS = 0

Jan [ 3265000]	May [ 3218000]	Sep [ 5185000]		
Feb [ 2720000]	Jun [ 3788000]	Oct [ 3621000]		
Mar [ 2723000]	Jul [ 4191000]	Nov [ 3423000]		
Apr [ 3151000]	Aug [ 5218000]	Dec [ 3201000]	Units:	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 43704000]	Gallons	
			134.1	Acre-feet

Remarks: [WELLS-4-SHELBY, 1-NACOGDOCHES ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 550  
 Outside conn: 550 Pop served: 1650 % Connections metered: 100  
 % Connections: RES 99 COMM 1.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650]				SHELBY
	** YEAR [1992 ]			SOURCE COUNTY [210]
TIMPSON RURAL WATER SPLY. CORP				SOURCE BASIN [06]
C/O JOHN TYSON, PRES.				AQUIFER 10 -[221]
P.O. BOX 397				NUMBER WELLS [ 4]
				RESERVOIR [ ]
TIMPSON, TEXAS	75975			STATUS = 0

Jan [ 3519000]	May [ 4043000]	Sep [ 4445000]		
Feb [ 4692000]	Jun [ 4320000]	Oct [ 4753000]		
Mar [ 3284000]	Jul [ 5486000]	Nov [ 3329000]		
Apr [ 3815000]	Aug [ 4750000]	Dec [ 3782000]	Units:	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 50218000]	Gallons	
			154.1	Acre-feet

Remarks: [WELLS 3-SHELBY, 1-NACOGDOCHES ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 550  
 Outside conn: Pop served: 1650 % Connections metered: 100  
 % Connections: RES 99 COMM 1.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650]				SHELBY
	** YEAR [1991 ]			SOURCE COUNTY [210]
TIMPSON RURAL WATER SPLY. CORP				SOURCE BASIN [06]
C/O JOHN TYSON, PRES.				AQUIFER 10 -[221]
P.O. BOX 397				NUMBER WELLS [ 4]
				RESERVOIR [ ]
TIMPSON, TEXAS	75975			STATUS = 0

Jan [ 3585600]	May [ 3913700]	Sep [ 4420700]		
Feb [ 3500300]	Jun [ 3203600]	Oct [ 4660200]		
Mar [ 3203800]	Jul [ 4973900]	Nov [ 3627300]		
Apr [ 3375900]	Aug [ 3992400]	Dec [ 3395500]	Units:	
	WATER TYPE [SG ]	ANNUAL TOTAL [ 45852900]	Gallons	
			140.7	Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 550  
 Outside conn: 550 Pop served: 1650 % Connections metered: 100  
 % Connections: RES 99 COMM 1.0 IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650]		* * YEAR [1990 ]		SHELBY	
TIMPSON RURAL WATER SPLY. CORP				SOURCE COUNTY [210]	
C/O JOHN TYSON, PRES.				SOURCE BASIN [06]	
P.O. BOX 397				AQUIFER 10 -[221]	
TIMPSON, TEXAS		75975		NUMBER WELLS [ 5]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 39776000]	Units: Gallons 122.1 Acre-feet

Remarks: [ EST BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 545

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650]		* * YEAR [1989 ]		SHELBY	
TIMPSON RURAL WATER SPLY. CORP				SOURCE COUNTY [210]	
C/O JOHN TYSON, PRES.				SOURCE BASIN [06]	
P.O. BOX 397				AQUIFER 10 -[221]	
TIMPSON, TEXAS		75975		NUMBER WELLS [ 5]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 3502900]	May [ 3375300]	Sep [ 3429100]		
Feb [ 3127900]	Jun [ 3545300]	Oct [ 3664400]		
Mar [ 2918500]	Jul [ 3112500]	Nov [ 3130300]		
Apr [ 3247700]	Aug [ 3934200]	Dec [ 4168100]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 41156200]	Units: Gallons 126.3 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 547

Outside conn: Pop served: 1641 % Connections metered: 100

% Connections: RES 99 COMM 1.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650]		* * YEAR [1988 ]		SHELBY	
TIMPSON RURAL WATER SPLY. CORP				SOURCE COUNTY [210]	
C/O JOHN TYSON, PRES.				SOURCE BASIN [06]	
P.O. BOX 397				AQUIFER 10 -[221]	
TIMPSON, TEXAS		75975		NUMBER WELLS [ 5]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 4074230]	May [ 3496770]	Sep [ 4160910]		
Feb [ 2947960]	Jun [ 4943740]	Oct [ 3429380]		
Mar [ 3135440]	Jul [ 4226670]	Nov [ 3882480]		
Apr [ 3146730]	Aug [ 3790080]	Dec [ 2642080]		
WATER TYPE [SG ]			ANNUAL TOTAL [ 43876470]	Units: Gallons 134.7 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 540

Outside conn: Pop served: 1620 % Connections metered: 100

% Connections: RES 99 COMM 1.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650]		* * YEAR [1987 ]		SHELBY	
TIMPSON RURAL WATER SPLY. CORP				SOURCE COUNTY [210]	
C/O JOHN TYSON, PRES.				SOURCE BASIN [06]	
P.O. BOX 397				AQUIFER 10 - [221]	
				NUMBER WELLS [ 5]	
TIMPSON, TEXAS		75975		RESERVOIR [ ]	
				STATUS = 0	

Jan [ 2986790]	May [ 3391820]	Sep [ 3607320]	
Feb [ 2798790]	Jun [ 3663190]	Oct [ 2841000]	
Mar [ 3297660]	Jul [ 4252610]	Nov [ 3117710]	
Apr [ 3435860]	Aug [ 4299280]	Dec [ 2668060]	Units:
WATER TYPE [SG ] ANNUAL TOTAL [ 40360090]			Gallons
			123.9 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 520

Outside conn: 520 Pop served: 1560 % Connections metered: 100

% Connections: RES 99 COMM 1.0 IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650]		* * YEAR [1986 ]		SHELBY	
TIMPSON RURAL WATER SPLY. CORP				SOURCE COUNTY [210]	
C/O JOHN TYSON, PRES.				SOURCE BASIN [06]	
P.O. BOX 397				AQUIFER 10 - [221]	
				NUMBER WELLS [ 3]	
TIMPSON, TEXAS		75975		RESERVOIR [ ]	
				STATUS = 0	

Jan [ 2641000]	May [ 3169000]	Sep [ 2970000]	
Feb [ 2814000]	Jun [ 2982000]	Oct [ 2769000]	
Mar [ 2704000]	Jul [ 3990000]	Nov [ 2762000]	
Apr [ 3431000]	Aug [ 4371000]	Dec [ 2690000]	Units:
WATER TYPE [SG ] ANNUAL TOTAL [ 37293000]			Gallons
			114.4 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 520

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650]		* * YEAR [1985 ]		SHELBY	
TIMPSON RURAL WATER SPLY. CORP				SOURCE COUNTY [210]	
C/O JOHN TYSON, PRES.				SOURCE BASIN [06]	
P.O. BOX 397				AQUIFER 10 - [221]	
				NUMBER WELLS [ 4]	
TIMPSON, TEXAS		75975		RESERVOIR [ ]	
				STATUS = 0	

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	Units:
WATER TYPE [SG ] ANNUAL TOTAL [ 38890200]			Gallons
			119.3 Acre-feet

Remarks: [EST BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 504

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650] \* \* YEAR [1984 ] SHELBY  
 TIMPSON RURAL WATER SPLY. CORP SOURCE COUNTY [210]  
 C/O JOHN TYSON, PRES. SOURCE BASIN [06]  
 P.O. BOX 397 AQUIFER 10 - [221]  
 NUMBER WELLS [ 4 ]  
 TIMPSON, TEXAS 75975 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	

WATER TYPE [SG ] ANNUAL TOTAL [ 36652400 ] Units:  
 112.5 Gallons  
 Acre-feet

Remarks: [EST TWDB ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 475  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650] \* \* YEAR [1983 ] SHELBY  
 TIMPSON RURAL WATER SPLY. CORP SOURCE COUNTY [210]  
 C/O JOHN TYSON, PRES. SOURCE BASIN [06]  
 P.O. BOX 397 AQUIFER 10 - [221]  
 NUMBER WELLS [ 4 ]  
 TIMPSON, TEXAS 75975 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	

WATER TYPE [SG ] ANNUAL TOTAL [ 33320300 ] Units:  
 102.3 Gallons  
 Acre-feet

Remarks: [EST BY TDWR ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 475  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650] \* \* YEAR [1982 ] SHELBY  
 TIMPSON RURAL WATER SPLY. CORP SOURCE COUNTY [210]  
 C/O JOHN TYSON, PRES. SOURCE BASIN [06]  
 P.O. BOX 397 AQUIFER 10 - [221]  
 NUMBER WELLS [ 3 ]  
 TIMPSON, TEXAS 75975 RESERVOIR [ ]  
 STATUS = 0

Jan [ 3261350 ]	May [ 2700960 ]	Sep [ 3067740 ]	
Feb [ 2758270 ]	Jun [ 3254160 ]	Oct [ 2868690 ]	
Mar [ 2833590 ]	Jul [ 3021950 ]	Nov [ 2446990 ]	
Apr [ 2343290 ]	Aug [ 3776410 ]	Dec [ 2297170 ]	

WATER TYPE [SG ] ANNUAL TOTAL [ 34630570 ] Units:  
 106.3 Gallons  
 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 469  
 Outside conn: 469 Pop served: 1407 % Connections metered: 100  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650] \* \* YEAR [1981 ] SHELBY  
 TIMPSON RURAL WATER SPLY. CORP SOURCE COUNTY [210]  
 C/O JOHN TYSON, PRES. SOURCE BASIN [06]  
 P.O. BOX 397 AQUIFER 10 - [221]  
 TIMPSON, TEXAS 75975 NUMBER WELLS [ ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 33153786 ]
			Units: 101.7 Acre-feet

Remarks: [EST BY TDWR ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 449  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650] \* \* YEAR [1980 ] SHELBY  
 TIMPSON RURAL WATER SPLY. CORP SOURCE COUNTY [210]  
 C/O JOHN TYSON, PRES. SOURCE BASIN [06]  
 P.O. BOX 397 AQUIFER 10 - [221]  
 TIMPSON, TEXAS 75975 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 2896300 ]	May [ 2437730 ]	Sep [ 3412180 ]	
Feb [ 2165250 ]	Jun [ 3999660 ]	Oct [ 3162860 ]	
Mar [ 2710540 ]	Jul [ 2380960 ]	Nov [ 2679420 ]	
Apr [ 2835340 ]	Aug [ 3801760 ]	Dec [ 2469420 ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 34951420 ]
			Units: 107.3 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 432  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650] \* \* YEAR [1979 ] SHELBY  
 TIMPSON RURAL WATER SPLY. CORP SOURCE COUNTY [210]  
 C/O JOHN TYSON, PRES. SOURCE BASIN [06]  
 P.O. BOX 397 AQUIFER 10 - [221]  
 TIMPSON, TEXAS 75975 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 2971730 ]	May [ 2657120 ]	Sep [ 3014950 ]	
Feb [ 2594830 ]	Jun [ 3331500 ]	Oct [ 2456520 ]	
Mar [ 2055450 ]	Jul [ 3301710 ]	Nov [ 3176620 ]	
Apr [ 2441900 ]	Aug [ 3315740 ]	Dec [ 2346120 ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 33664190 ]
			Units: 103.3 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 410  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650]		* * YEAR [1978 ]		SHELBY	
TIMPSON RURAL WATER SPLY. CORP				SOURCE COUNTY [210]	
C/O JOHN TYSON, PRES.				SOURCE BASIN [06]	
P.O. BOX 397				AQUIFER 10 - [221]	
TIMPSON, TEXAS		75975		NUMBER WELLS [ 2 ]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 2335350]	May [ 2203940]	Sep [ 3767710]	
Feb [ 2293600]	Jun [ 2914550]	Oct [ 2220020]	
Mar [ 2244880]	Jul [ 4073170]	Nov [ 2961800]	
Apr [ 2124360]	Aug [ 3571310]	Dec [ 2167470]	Units:
WATER TYPE [SG ] ANNUAL TOTAL [ 32878160]			Gallons
			100.9 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 370

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650]		* * YEAR [1977 ]		SHELBY	
TIMPSON RURAL WATER SPLY. CORP				SOURCE COUNTY [210]	
C/O JOHN TYSON, PRES.				SOURCE BASIN [06]	
P.O. BOX 397				AQUIFER 10 - [221]	
TIMPSON, TEXAS		75975		NUMBER WELLS [ 3 ]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 2188140]	May [ 2157840]	Sep [ 2546690]	
Feb [ 1911460]	Jun [ 2815730]	Oct [ 1870310]	
Mar [ 1512100]	Jul [ 2962340]	Nov [ 2060290]	
Apr [ 2200920]	Aug [ 2400750]	Dec [ 1885150]	Units:
WATER TYPE [SG ] ANNUAL TOTAL [ 26511720]			Gallons
			81.4 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 343

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650]		* * YEAR [1976 ]		SHELBY	
TIMPSON RURAL WATER SPLY. CORP				SOURCE COUNTY [210]	
C/O JOHN TYSON, PRES.				SOURCE BASIN [06]	
P.O. BOX 397				AQUIFER 10 - [221]	
TIMPSON, TEXAS		75975		NUMBER WELLS [ 3 ]	
				RESERVOIR [ ]	
				STATUS = 0	

Jan [ 4158330]	May [ 2171604]	Sep [ 2172440]	
Feb [ 2656274]	Jun [ 2093884]	Oct [ 1811360]	
Mar [ 2016264]	Jul [ 3209424]	Nov [ 1714200]	
Apr [ 1820126]	Aug [ 2501244]	Dec [ 1932850]	Units:
WATER TYPE [SG ] ANNUAL TOTAL [ 28258000]			Gallons
			86.7 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 320

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650] \* \* YEAR [1975 ] SHELBY  
 TIMPSON RURAL WATER SPLY. CORP SOURCE COUNTY [210]  
 C/O JOHN TYSON, PRES. SOURCE BASIN [06]  
 P.O. BOX 397 AQUIFER 10 - [221]  
 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 TIMPSON, TEXAS 75975 STATUS = 0

Jan [ 3373580]	May [ 1622580]	Sep [ 2526610]
Feb [ 3214260]	Jun [ 2380650]	Oct [ 2819459]
Mar [ 2923180]	Jul [ 2413360]	Nov [ 3227501]
Apr [ 3340000]	Aug [ 2709110]	Dec [ 3596680]
WATER TYPE [SG ]		ANNUAL TOTAL [ 34146970]

Units: 104.8 Gallons Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 400  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650] \* \* YEAR [1974 ] SHELBY  
 TIMPSON RURAL WATER SPLY. CORP SOURCE COUNTY [210]  
 C/O JOHN TYSON, PRES. SOURCE BASIN [06]  
 P.O. BOX 397 AQUIFER 10 - [221]  
 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 TIMPSON, TEXAS 75975 STATUS = 0

Jan [ 2398280]	May [ 2910510]	Sep [ 3195506]
Feb [ 2298670]	Jun [ 2922770]	Oct [ 2016594]
Mar [ 2138490]	Jul [ 3483874]	Nov [ 2807410]
Apr [ 2488280]	Aug [ 3126176]	Dec [ 2975280]
WATER TYPE [SG ]		ANNUAL TOTAL [ 32761840]

Units: 100.5 Gallons Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 294  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650] \* \* YEAR [1973 ] SHELBY  
 TIMPSON RURAL WATER SPLY. CORP SOURCE COUNTY [210]  
 C/O JOHN TYSON, PRES. SOURCE BASIN [06]  
 P.O. BOX 397 AQUIFER 10 - [221]  
 NUMBER WELLS [ 2 ]  
 RESERVOIR [ ]  
 TIMPSON, TEXAS 75975 STATUS = 0

Jan [ 2013340]	May [ 2057490]	Sep [ 3080760]
Feb [ 2322220]	Jun [ 2144710]	Oct [ 2993980]
Mar [ 1521740]	Jul [ 2160100]	Nov [ 2429770]
Apr [ 1525070]	Aug [ 3081910]	Dec [ 1723350]
WATER TYPE [SG ]		ANNUAL TOTAL [ 27054440]

Units: 83.0 Gallons Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections:  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650] \* \* YEAR [1972] SHELBY  
 TIMPSON RURAL WATER SPLY. CORP SOURCE COUNTY [210]  
 C/O JOHN TYSON, PRES. SOURCE BASIN [06]  
 P.O. BOX 397 AQUIFER 10 - [221]  
 NUMBER WELLS [ 1]  
 RESERVOIR [ ]  
 TIMPSON, TEXAS 75975 STATUS = 0

Jan [ 1225610]	May [ 1476240]	Sep [ 1744680]	Units:
Feb [ 1207880]	Jun [ 1916320]	Oct [ 1879070]	Gallons
Mar [ 1078620]	Jul [ 1889220]	Nov [ 1758000]	Acre-feet
Apr [ 1313790]	Aug [ 1716610]	Dec [ 1400550]	
WATER TYPE [SG ] ANNUAL TOTAL [ 18606590]			57.1

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 225  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650] \* \* YEAR [1971] SHELBY  
 TIMPSON RURAL WATER SPLY. CORP SOURCE COUNTY [210]  
 C/O JOHN TYSON, PRES. SOURCE BASIN [06]  
 P.O. BOX 397 AQUIFER 10 - [221]  
 NUMBER WELLS [ 1]  
 RESERVOIR [ ]  
 TIMPSON, TEXAS 75975 STATUS = 0

Jan [ 1217380]	May [ 1235310]	Sep [ 1630050]	Units:
Feb [ 1246240]	Jun [ 1608680]	Oct [ 1413610]	Gallons
Mar [ 1081540]	Jul [ 2086580]	Nov [ 1562270]	Acre-feet
Apr [ 1324240]	Aug [ 1557640]	Dec [ 1100430]	
WATER TYPE [SG ] ANNUAL TOTAL [ 17063970]			52.4

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 196  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650] \* \* YEAR [1970] SHELBY  
 TIMPSON RURAL WATER SPLY. CORP SOURCE COUNTY [210]  
 C/O JOHN TYSON, PRES. SOURCE BASIN [06]  
 P.O. BOX 397 AQUIFER 10 - [221]  
 NUMBER WELLS [ 1]  
 RESERVOIR [ ]  
 TIMPSON, TEXAS 75975 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	Units:
Feb [ ]	Jun [ ]	Oct [ ]	Gallons
Mar [ ]	Jul [ ]	Nov [ ]	Acre-feet
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ] ANNUAL TOTAL [ 12185310]			37.4

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 187  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650] \* \* YEAR [1969] SHELBY  
 TIMPSON RURAL WATER SPLY. CORP SOURCE COUNTY [210]  
 C/O JOHN TYSON, PRES. SOURCE BASIN [06]  
 P.O. BOX 397 AQUIFER 10 - [221]  
 NUMBER WELLS [ 1]  
 RESERVOIR [ ]  
 STATUS = 0  
 TIMPSON, TEXAS 75975

Jan [ 647960]	May [ 657410]	Sep [ 1094860]
Feb [ 1251230]	Jun [ 1134280]	Oct [ 899450]
Mar [ 573750]	Jul [ 1799080]	Nov [ 968810]
Apr [ 807450]	Aug [ 1713450]	Dec [ 744360]
WATER TYPE [SG ]		ANNUAL TOTAL [ 12292090]

Units: 37.7  
 Gallons  
 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 175  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650] \* \* YEAR [1968] SHELBY  
 TIMPSON RURAL WATER SPLY. CORP SOURCE COUNTY [210]  
 C/O JOHN TYSON, PRES. SOURCE BASIN [06]  
 P.O. BOX 397 AQUIFER 10 - [221]  
 NUMBER WELLS [ 1]  
 RESERVOIR [ ]  
 STATUS = 0  
 TIMPSON, TEXAS 75975

Jan [ 584760]	May [ 642230]	Sep [ 760120]
Feb [ 417360]	Jun [ 779250]	Oct [ 661190]
Mar [ 548720]	Jul [ 777080]	Nov [ 743450]
Apr [ 561220]	Aug [ 892640]	Dec [ 646180]
WATER TYPE [SG ]		ANNUAL TOTAL [ 8014200]

Units: 24.6  
 Gallons  
 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 162  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650] \* \* YEAR [1967] SHELBY  
 TIMPSON RURAL WATER SPLY. CORP SOURCE COUNTY [210]  
 C/O JOHN TYSON, PRES. SOURCE BASIN [06]  
 P.O. BOX 397 AQUIFER 10 - [221]  
 NUMBER WELLS [ 1]  
 RESERVOIR [ ]  
 STATUS = 0  
 TIMPSON, TEXAS 75975

Jan [ 710012]	May [ 584600]	Sep [ 654210]
Feb [ 702014]	Jun [ 695580]	Oct [ 654260]
Mar [ 363866]	Jul [ 798350]	Nov [ 624430]
Apr [ 576154]	Aug [ 721100]	Dec [ 551940]
WATER TYPE [SG ]		ANNUAL TOTAL [ 7636516]

Units: 23.4  
 Gallons  
 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 150  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)



===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [867650] \* \* YEAR [1966 ] SHELBY  
TIMPSON RURAL WATER SPLY. CORP SOURCE COUNTY [210]  
C/O JOHN TYSON, PRES. SOURCE BASIN [06]  
P.O. BOX 397 AQUIFER 10 - [221]  
NUMBER WELLS [ 1 ]  
RESERVOIR [ ]  
STATUS = 0  
TIMPSON, TEXAS 75975

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 490000] Units: 1.5 Gallons Acre-feet

Remarks: [ ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 149  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750] \* \* YEAR [1994 ] SHELBY  
WARR WATER SYSTEM SOURCE COUNTY [210]  
ATTN: GLADYS WARR, OWNER SOURCE BASIN [05]  
P.O. BOX 366 AQUIFER 10 - [032]  
CENTER, TEXAS 75935 NUMBER WELLS [ 2 ]  
RESERVOIR [ ]  
STATUS = 0

Jan [ 189850]	May [ 191500]	Sep [ 200640]	
Feb [ 176130]	Jun [ 209390]	Oct [ 226070]	
Mar [ 166870]	Jul [ 364840]	Nov [ 189390]	
Apr [ 204680]	Aug [ 258310]	Dec [ 200990]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 2578660] Units: 7.9 Gallons Acre-feet

Remarks: [ ]  
Seller Code: [ ] Metered/Est: [1 ] Activity Code: [ ]  
If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 32  
Outside conn: Pop served: 100 % Connections metered: 100  
% Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750] \* \* YEAR [1993 ] SHELBY  
WARR WATER SYSTEM SOURCE COUNTY [210]  
ATTN: GLADYS WARR, OWNER SOURCE BASIN [05]  
P.O. BOX 366 AQUIFER 10 - [032]  
CENTER, TEXAS 75935 NUMBER WELLS [ 2 ]  
RESERVOIR [ ]  
STATUS = 0

Jan [ 177200]	May [ 192800]	Sep [ 335900]	
Feb [ 152100]	Jun [ 233600]	Oct [ 205400]	
Mar [ 156700]	Jul [ 225400]	Nov [ 184000]	
Apr [ 190400]	Aug [ 415600]	Dec [ 189800]	
WATER TYPE [SG ]			ANNUAL TOTAL [ 2658900] Units: 8.2 Gallons Acre-feet

Remarks: [ ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW =[ ] , % TREATED =[ ] ; Connections: 32  
Outside conn: 32 Pop served: 100 % Connections metered: 100  
% Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750]					SHELBY
		** YEAR [1992]			SOURCE COUNTY [210]
WARR WATER SYSTEM					SOURCE BASIN [05]
					AQUIFER 10 -[032]
ATTN: GLADYS WARR, OWNER					NUMBER WELLS [ 2]
P.O. BOX 366					RESERVOIR [ ]
CENTER, TEXAS	75935				STATUS = 0

Jan [ 213000]	May [ 222900]	Sep [ 257600]		
Feb [ 197000]	Jun [ 273700]	Oct [ 220900]		
Mar [ 164900]	Jul [ 343500]	Nov [ 170700]		
Apr [ 209300]	Aug [ 303800]	Dec [ 212800]		
	WATER TYPE [SG]	ANNUAL TOTAL [ 2790100]	Units:	
			Gallons	
			8.6	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 32

Outside conn: 32 Pop served: 100 % Connections metered: 100

% Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750]					SHELBY
		** YEAR [1991]			SOURCE COUNTY [210]
WARR WATER SYSTEM					SOURCE BASIN [05]
					AQUIFER 10 -[032]
ATTN: GLADYS WARR, OWNER					NUMBER WELLS [ 2]
P.O. BOX 366					RESERVOIR [ ]
CENTER, TEXAS	75935				STATUS = 0

Jan [ 244000]	May [ 213000]	Sep [ 226000]		
Feb [ 177000]	Jun [ 237000]	Oct [ 249000]		
Mar [ 199000]	Jul [ 272000]	Nov [ 191000]		
Apr [ 228000]	Aug [ 258000]	Dec [ 206000]		
	WATER TYPE [SG]	ANNUAL TOTAL [ 2700000]	Units:	
			Gallons	
			8.3	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [1] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 32

Outside conn: Pop served: 90 % Connections metered: 100

% Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750]					SHELBY
		** YEAR [1990]			SOURCE COUNTY [210]
WARR WATER SYSTEM					SOURCE BASIN [05]
					AQUIFER 10 -[032]
ATTN: GLADYS WARR, OWNER					NUMBER WELLS [ 2]
P.O. BOX 366					RESERVOIR [ ]
CENTER, TEXAS	75935				STATUS = 0

Jan [ 237000]	May [ 240000]	Sep [ 289000]		
Feb [ 176000]	Jun [ 253000]	Oct [ 263000]		
Mar [ 198000]	Jul [ 324000]	Nov [ 230000]		
Apr [ 194000]	Aug [ 291000]	Dec [ 284000]		
	WATER TYPE [SG]	ANNUAL TOTAL [ 2979000]	Units:	
			Gallons	
			9.1	Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [1] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 32

Outside conn: Pop served: 90 % Connections metered: 95.0

% Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750] \* \* YEAR [1989 ] SHELBY  
 WARR WATER SYSTEM SOURCE COUNTY [210]  
 ATTN: GLADYS WARR, OWNER SOURCE BASIN [05]  
 P.O. BOX 366 AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 2]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 288000]	May [ 310000]	Sep [ 311000]	
Feb [ 227000]	Jun [ 237000]	Oct [ 267000]	
Mar [ 261000]	Jul [ 239000]	Nov [ 222000]	
Apr [ 324000]	Aug [ 362000]	Dec [ 238000]	Units:
WATER TYPE [SG ] ANNUAL TOTAL [ 3286000]			Gallons
			10.1 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ 1 ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 35  
 Outside conn: Pop served: 85 % Connections metered:  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750] \* \* YEAR [1988 ] SHELBY  
 WARR WATER SYSTEM SOURCE COUNTY [210]  
 ATTN: GLADYS WARR, OWNER SOURCE BASIN [05]  
 P.O. BOX 366 AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 2]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ 176000]	May [ 569000]	Sep [ 462000]	
Feb [ 154000]	Jun [ 470000]	Oct [ 384000]	
Mar [ 146000]	Jul [ 321000]	Nov [ 237000]	
Apr [ 267000]	Aug [ 374000]	Dec [ 221000]	Units:
WATER TYPE [SG ] ANNUAL TOTAL [ 3781000]			Gallons
			11.6 Acre-feet

Remarks: [JAN-FEB EST BY TWDB ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 36  
 Outside conn: 36 Pop served: 90 % Connections metered:  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750] \* \* YEAR [1987 ] SHELBY  
 WARR WATER SYSTEM SOURCE COUNTY [210]  
 ATTN: GLADYS WARR, OWNER SOURCE BASIN [05]  
 P.O. BOX 366 AQUIFER 10 -[032]  
 CENTER, TEXAS 75935 NUMBER WELLS [ 2]  
 RESERVOIR [ ]  
 STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	Units:
WATER TYPE [SG ] ANNUAL TOTAL [ 3120800]			Gallons
			9.6 Acre-feet

Remarks: [EST BY TWDB ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 35  
 Outside conn: Pop served: 100 % Connections metered:  
 % Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750]			SHELBY
	** YEAR [1986]		SOURCE COUNTY [210]
WARR WATER SYSTEM			SOURCE BASIN [05]
			AQUIFER 10 -[032]
ATTN: GLADYS WARR, OWNER			NUMBER WELLS [ ]
P.O. BOX 366			RESERVOIR [ ]
CENTER, TEXAS	75935		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [ ]	3285000
			Units: Gallons
			10.1 Acre-feet

Remarks: [EST BY TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 35

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750]			SHELBY
	** YEAR [1985]		SOURCE COUNTY [210]
WARR WATER SYSTEM			SOURCE BASIN [05]
			AQUIFER 10 -[032]
ATTN: GLADYS WARR, OWNER			NUMBER WELLS [ ]
P.O. BOX 366			RESERVOIR [ ]
CENTER, TEXAS	75935		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [ ]	3285000
			Units: Gallons
			10.1 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 35

Outside conn: 35 Pop served: 90 % Connections metered:

% Connections: RES 100 COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750]			SHELBY
	** YEAR [1984]		SOURCE COUNTY [210]
WARR WATER SYSTEM			SOURCE BASIN [05]
			AQUIFER 10 -[032]
ATTN: GLADYS WARR, OWNER			NUMBER WELLS [ 2]
P.O. BOX 366			RESERVOIR [ ]
CENTER, TEXAS	75935		STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
	WATER TYPE [SG]	ANNUAL TOTAL [ ]	1567500
			Units: Gallons
			4.8 Acre-feet

Remarks: [EST TWDB ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 36

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750]

\* \* YEAR [1983 ]

WARR WATER SYSTEM

ATTN: GLADYS WARR, OWNER  
P.O. BOX 366  
CENTER, TEXAS

75935

SHELBY  
SOURCE COUNTY [210]  
SOURCE BASIN [05]  
AQUIFER 10 - [032]  
NUMBER WELLS [ 2]  
RESERVOIR [ ]  
STATUS = 0

Jan [ ] May [ ] Sep [ ]  
Feb [ ] Jun [ ] Oct [ ]  
Mar [ ] Jul [ ] Nov [ ]  
Apr [ ] Aug [ ] Dec [ ]

WATER TYPE [SG ] ANNUAL TOTAL [ 1425000] Units:  
4.4 Gallons  
Acre-feet

Remarks: [EST BY TDWR ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 36  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750]

\* \* YEAR [1982 ]

WARR WATER SYSTEM

ATTN: GLADYS WARR, OWNER  
P.O. BOX 366  
CENTER, TEXAS

75935

SHELBY  
SOURCE COUNTY [210]  
SOURCE BASIN [05]  
AQUIFER 10 - [032]  
NUMBER WELLS [ 2]  
RESERVOIR [ ]  
STATUS = 0

Jan [ ] May [ ] Sep [ ]  
Feb [ ] Jun [ ] Oct [ ]  
Mar [ ] Jul [ ] Nov [ ]  
Apr [ ] Aug [ ] Dec [ ]

WATER TYPE [SG ] ANNUAL TOTAL [ 1500000] Units:  
4.6 Gallons  
Acre-feet

Remarks: [EST BY TDWR ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 36  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750]

\* \* YEAR [1981 ]

WARR WATER SYSTEM

ATTN: GLADYS WARR, OWNER  
P.O. BOX 366  
CENTER, TEXAS

75935

SHELBY  
SOURCE COUNTY [210]  
SOURCE BASIN [05]  
AQUIFER 10 - [032]  
NUMBER WELLS [ 2]  
RESERVOIR [ ]  
STATUS = 0

Jan [ ] May [ ] Sep [ ]  
Feb [ ] Jun [ ] Oct [ ]  
Mar [ ] Jul [ ] Nov [ ]  
Apr [ ] Aug [ ] Dec [ ]

WATER TYPE [SG ] ANNUAL TOTAL [ 1399680] Units:  
4.3 Gallons  
Acre-feet

Remarks: [EST BY TDWR ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 36  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750]				SHELBY
	** YEAR [1980]			SOURCE COUNTY [210]
WARR WATER SYSTEM				SOURCE BASIN [05]
				AQUIFER 10 - [032]
ATTN: GLADYS WARR, OWNER				NUMBER WELLS [ ]
P.O. BOX 366				RESERVOIR [ ]
CENTER, TEXAS	75935			STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG]	ANNUAL TOTAL [ ]	1679600]	Units: Gallons 5.2 Acre-feet

Remarks: [ EST BY TDWR ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 36  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750]				SHELBY
	** YEAR [1979]			SOURCE COUNTY [210]
WARR WATER SYSTEM				SOURCE BASIN [05]
				AQUIFER 10 - [032]
ATTN: GLADYS WARR, OWNER				NUMBER WELLS [ 1 ]
P.O. BOX 366				RESERVOIR [ ]
CENTER, TEXAS	75935			STATUS = 0

Jan [ 105000]	May [ 110000]	Sep [ 105000]		
Feb [ 105000]	Jun [ 110000]	Oct [ 100000]		
Mar [ 105000]	Jul [ 115000]	Nov [ 100000]		
Apr [ 108000]	Aug [ 120000]	Dec [ 100000]		
	WATER TYPE [SG]	ANNUAL TOTAL [ ]	1283000]	Units: Gallons 3.9 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 33  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750]				SHELBY
	** YEAR [1978]			SOURCE COUNTY [210]
WARR WATER SYSTEM				SOURCE BASIN [05]
				AQUIFER 10 - [032]
ATTN: GLADYS WARR, OWNER				NUMBER WELLS [ ]
P.O. BOX 366				RESERVOIR [ ]
CENTER, TEXAS	75935			STATUS = 0

Jan [ 75000]	May [ 85000]	Sep [ 90000]		
Feb [ 75000]	Jun [ 85000]	Oct [ 75000]		
Mar [ 85000]	Jul [ 100000]	Nov [ 75000]		
Apr [ 85000]	Aug [ 100000]	Dec [ 70000]		
	WATER TYPE [SG]	ANNUAL TOTAL [ ]	1000000]	Units: Gallons 3.1 Acre-feet

Remarks: [ ]  
 Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
 If purchased, % RAW = [ ], % TREATED = [ ]; Connections: 28  
 Outside conn: Pop served: % Connections metered:  
 % Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750] \* \* YEAR [1977 ] SHELBY  
WARR WATER SYSTEM SOURCE COUNTY [210]  
ATTN: GLADYS WARR, OWNER SOURCE BASIN [05]  
P.O. BOX 366 AQUIFER 10-[032]  
CENTER, TEXAS 75935 NUMBER WELLS [ 1 ]  
RESERVOIR [ ]  
STATUS = 0

Jan [	70000]	May [	85000]	Sep [	100000]	
Feb [	70000]	Jun [	88000]	Oct [	75000]	
Mar [	80000]	Jul [	95000]	Nov [	70000]	
Apr [	80000]	Aug [	100000]	Dec [	70000]	
WATER TYPE [SG ]				ANNUAL TOTAL [	983000]	Units: Gallons
						3.0 Acre-feet

Remarks: [ ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 30  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750] \* \* YEAR [1976 ] SHELBY  
WARR WATER SYSTEM SOURCE COUNTY [210]  
ATTN: GLADYS WARR, OWNER SOURCE BASIN [05]  
P.O. BOX 366 AQUIFER 10-[032]  
CENTER, TEXAS 75935 NUMBER WELLS [ 1 ]  
RESERVOIR [ ]  
STATUS = 0

Jan [	39000]	May [	51000]	Sep [	56000]	
Feb [	37500]	Jun [	49000]	Oct [	46000]	
Mar [	45000]	Jul [	55000]	Nov [	42000]	
Apr [	45000]	Aug [	57000]	Dec [	40000]	
WATER TYPE [SG ]				ANNUAL TOTAL [	562500]	Units: Gallons
						1.7 Acre-feet

Remarks: [ ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 22  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750] \* \* YEAR [1975 ] SHELBY  
WARR WATER SYSTEM SOURCE COUNTY [210]  
ATTN: GLADYS WARR, OWNER SOURCE BASIN [05]  
P.O. BOX 366 AQUIFER 10-[032]  
CENTER, TEXAS 75935 NUMBER WELLS [ ]  
RESERVOIR [ ]  
STATUS = 0

Jan [	]	May [	]	Sep [	]	
Feb [	]	Jun [	]	Oct [	]	
Mar [	]	Jul [	]	Nov [	]	
Apr [	]	Aug [	]	Dec [	]	
WATER TYPE [SG ]				ANNUAL TOTAL [	]	Units: Gallons
						.0 Acre-feet

Remarks: [NO REPORT ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW =[ ], % TREATED =[ ]; Connections:  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750] \* \* YEAR [1974 ] SHELBY  
WARR WATER SYSTEM SOURCE COUNTY [210]  
ATTN: GLADYS WARR, OWNER SOURCE BASIN [05]  
P.O. BOX 366 AQUIFER 10 -[032]  
CENTER, TEXAS 75935 NUMBER WELLS [ ]  
RESERVOIR [ ]  
STATUS = 0

Jan [ 48000]	May [ 65000]	Sep [ 75000]	
Feb [ 40000]	Jun [ 75000]	Oct [ 60000]	
Mar [ 50000]	Jul [ 85000]	Nov [ 50000]	
Apr [ 50000]	Aug [ 85000]	Dec [ 45000]	
WATER TYPE [SG ] ANNUAL TOTAL [ 728000]			Units: Gallons 2.2 Acre-feet

Remarks: [ ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 20  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750] \* \* YEAR [1973 ] SHELBY  
WARR WATER SYSTEM SOURCE COUNTY [210]  
ATTN: GLADYS WARR, OWNER SOURCE BASIN [05]  
P.O. BOX 366 AQUIFER 10 -[032]  
CENTER, TEXAS 75935 NUMBER WELLS [ ]  
RESERVOIR [ ]  
STATUS = 0

Jan [ ]	May [ ]	Sep [ ]	
Feb [ ]	Jun [ ]	Oct [ ]	
Mar [ ]	Jul [ ]	Nov [ ]	
Apr [ ]	Aug [ ]	Dec [ ]	
WATER TYPE [SG ] ANNUAL TOTAL [ ]			Units: Gallons .0 Acre-feet

Remarks: [NO REPORT ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW =[ ], % TREATED =[ ]; Connections:  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750] \* \* YEAR [1972 ] SHELBY  
WARR WATER SYSTEM SOURCE COUNTY [210]  
ATTN: GLADYS WARR, OWNER SOURCE BASIN [05]  
P.O. BOX 366 AQUIFER 10 -[032]  
CENTER, TEXAS 75935 NUMBER WELLS [ 1 ]  
RESERVOIR [ ]  
STATUS = 0

Jan [ 58000]	May [ 60000]	Sep [ 62000]	
Feb [ 57000]	Jun [ 59000]	Oct [ 58000]	
Mar [ 59000]	Jul [ 61000]	Nov [ 56000]	
Apr [ 57000]	Aug [ 62000]	Dec [ 55000]	
WATER TYPE [SG ] ANNUAL TOTAL [ 704000]			Units: Gallons 2.2 Acre-feet

Remarks: [ ]  
Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]  
If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 17  
Outside conn: Pop served: % Connections metered:  
% Connections: RES COMM IND ; EFFLUENT(gal)

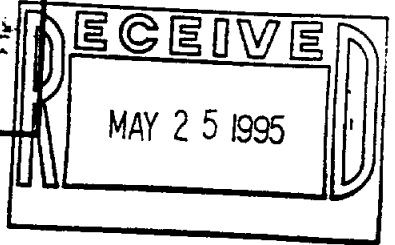


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**APPENDIX D**  
**TWDB POPULATION AND WATER USE PROJECTIONS**

# Definitions for Population & Municipal Water Use Projections



- MIGRATION RATE** **.0:** Assumes no net migration over the projection period for the county.
- MIGRATION RATE** **.5:** Assumes 50% of the net migration (positive or negative) over the period 1980-1990 for the county.
- MIGRATION RATE:** **1.0:** Assumes 100% of the net migration (positive or negative) over the period 1980-1990 for the county.
- MOST LIKELY SERIES:** The population growth pattern for the county selected from the three migration scenarios by staff of TWDB, TNRCC, and Parks and Wildlife as the most likely to occur.
- AVG. WEATHER COND.** The average annual per capita water use associated with average weather conditions over the period 1987-1991 and no additional implementation of water conservation practices and programs.
- BELOW NORMAL RAINFALL:** The highest annual per capita water use associated with below normal rainfall conditions (dry) over the period 1982-1991 constrained not to exceed more than 25% above the average annual per capita use associated with normal rainfall conditions over the period 1987-1991 and no additional implementation of water conservation practices and programs.
- AVERAGE/CONSERVATION:** Average rainfall condition per capita water use with the most likely conservation scenario which includes the plumbing code legislation impact along with other potential water savings from other conservation practices such as xeriscape, outside watering efficiencies, leak detection, etc..
- BELOW NORMAL/CONSERV:** Below normal rainfall condition per capita water use with the most likely conservation scenario which includes the plumbing code legislation impact along with other potential water savings from other conservation practices such as xeriscape, outside watering efficiencies, leak detection, etc...
- AVERAGE/ADVANCED CONSV:** Average rainfall condition per capita water use with potential water savings associated with accelerated implementation of conservation practices and programs.
- BELOW NORMAL/ADVANCED:** Below normal rainfall condition per capita water use with potential water savings associated with accelerated implementation of conservation practices and programs.

## **PLUMBING CODE ONLY:**

### **AVERAGE/CONSERVATION:**

Average rainfall condition per capita water use with potential water savings over the projection period associated with the implementation of the plumbing code legislation, but without additional potential water savings from other conservation practices and programs.

### **BELOW NORMAL CONSERV:**

Below normal rainfall condition per capita water use with potential water savings over the projection period associated with the implementation of the plumbing code legislation, but without additional potential water savings from other conservation practices and programs.

### **AVERAGE/ADVANCED CONSERV:**

Average rainfall condition per capita water use with potential water savings over the projection period associated with accelerated implementation of the plumbing code legislation, but without additional potential water savings from other conservation practices and programs.

### **BELOW NORMAL/ADVANCED:**

Below normal rainfall conditions per capita water use with potential water savings over the projection period associated with accelerated implementation of the plumbing code legislation, but without additional potential water savings from other conservation practices and programs.

1996 CONSENSUS TEXAS WATER PLAN  
 PROJECTIONS OF POPULATION AND MUNICIPAL WATER USE  
 WATER USE UNITS: ACRE-FEET  
 \*\*\* DRAFT -- SUBJECT TO REVISION \*\*\*

COUNTY: 210 SHELBY

SERIES	----- HISTORICAL -----		*----- PROJECTED -----*					
	1980	1990	2000	2010	2020	2030	2040	2050
Population	23084	22034						
Water Use	3918	2983						
MIGRATION RATE .0								
Population.....			22524	23186	23816	24291	24552	24794
Avg. Weather Condition			3027	3120	3207	3272	3308	3342
Below Normal Rainfall			3448	3561	3664	3743	3786	3825
Average/Conservation			2867	2790	2701	2653	2583	2581
Below Normal/Conserv.			3277	3190	3109	3067	3001	3005
Average/Advanced Cons			2763	2581	2440	2454	2434	2424
Below Normal/Advanced			3154	2961	2813	2820	2804	2808
(With Plumbing Code Only)								
Average/Conservation			2926	2904	2879	2830	2758	2759
Below Normal/Conserv.			3347	3346	3336	3300	3236	3241
Average/Advanced Cons			2867	2776	2753	2755	2758	2732
Below Normal/Advanced			3287	3218	3211	3225	3236	3214
MIGRATION RATE .5								
Population.....			22281	22569	22583	22439	21280	21245
Avg. Weather Condition			2993	3038	3042	3025	2870	2856
Below Normal Rainfall			3410	3468	3476	3460	3284	3260
Average/Conservation			2836	2717	2568	2437	2201	2204
Below Normal/Conserv.			3243	3113	2950	2844	2565	2559
Average/Advanced Cons			2735	2515	2316	2253	2108	2055
Below Normal/Advanced			3118	2883	2670	2613	2428	2374
(With Plumbing Code Only)								
Average/Conservation			2894	2829	2733	2623	2371	2357
Below Normal/Conserv.			3311	3259	3166	3055	2783	2760
Average/Advanced Cons			2837	2702	2612	2547	2389	2333
Below Normal/Advanced			3254	3132	3045	2981	2800	2736
MIGRATION RATE 1.0								
Population.....			21830	20936	19584	17828	15796	13552
Avg. Weather Condition			2934	2819	2641	2408	2139	1841
Below Normal Rainfall			3342	3219	3017	2753	2443	2110
Average/Conservation			2779	2513	2200	1877	1670	1425
Below Normal/Conserv.			3180	2888	2530	2182	1940	1660
Average/Advanced Cons			2679	2316	1978	1798	1575	1338
Below Normal/Advanced			3055	2665	2270	2071	1812	1552
(With Plumbing Code Only)								
Average/Conservation			2835	2617	2348	2019	1783	1522
Below Normal/Conserv.			3245	3015	2723	2363	2091	1791
Average/Advanced Cons			2764	2498	2221	2033	1782	1508
Below Normal/Advanced			3172	2896	2597	2378	2090	1776
MOST LIKELY SERIES								
Population.....			23059	23937	24942	26043	27033	28017
Avg. Weather Condition			3097	3220	3357	3505	3640	3773
Below Normal Rainfall			3529	3676	3837	4011	4166	4321
Average/Conservation			2933	2877	2806	2823	2831	2901
Below Normal/Conserv. **			3355	3292	3236	3286	3302	3393
Average/Advanced Cons			2829	2656	2553	2610	2676	2734
Below Normal/Advanced			3226	3056	2945	3022	3086	3171
(With Plumbing Code Only)								
Average/Conservation			2992	2994	3012	3031	3034	3115
Below Normal/Conserv.			3425	3453	3491	3537	3560	3662
Average/Advanced Cons			2914	2864	2882	2951	3026	3082
Below Normal/Advanced			3348	3322	3361	3457	3552	3630

1996 CONSENSUS TEXAS WATER PLAN  
 PROJECTIONS OF WATER USE  
 WATER USE UNITS: ACRE-FEET  
 \*\*\* DRAFT -- SUBJECT TO REVISION \*\*\*

COUNTY: 210 SHELBY

SERIES	----- HISTORICAL -----		*----- PROJECTED -----*					
	1980	1990	2000	2010	2020	2030	2040	2050
<b>MANUFACTURING</b>								
Base Oil Prices								
With Conser **	1059	1204	1436	1694	1944	2189	2550	2928
W/O Conser			1492	1833	2207	2613	3045	3498
High Oil Prices								
With Conser			1429	1680	1926	2169	2522	2899
W/O Conser			1485	1818	2187	2589	3013	3464
Low Oil Prices								
With Conser			1448	1716	1976	2228	2598	2985
W/O Conser			1505	1856	2242	2656	3099	3560
No Mfg Growth								
With Conser			1159	1114	1063	1012	1012	1012
<b>IRRIGATION</b>								
Series 1	0	40	40	40	40	40	40	40
Series 2 **			40	40	40	40	40	40
Series 3			40	40	40	40	40	40
<b>STEAM ELECTRIC POWER</b>								
High Series **	0	0	0	0	0	0	0	0
Low Series			0	0	0	0	0	0
MINING **	0	0	0	0	0	0	0	0
LIVESTOCK **	1256	1963	1947	1947	1947	1947	1947	1947

**Municipal:**

Historical and projected municipal water use excludes sales to industry.  
 Water use for cities excludes wholesale sales to other public water systems.

**Manufacturing:**

Base oil prices range between \$17.00-\$23.00 per barrel of West Texas Intermediate Crude. High oil prices range from the mid to high \$20's per barrel. Low oil prices range from \$13.00 to \$17.00 per barrel.

**Irrigation:**

Projections include both on-farm irrigation water use and diversion loss estimates. 1980 and 1990 water use includes diversion loss.  
 Series 1 - Assumes no change in water efficient irrigation technology and no reduction in Federal Farm Program payments.  
 Series 2 - Assumes the most likely adoption of water efficient irrigation technology, and no reduction in Federal Farm Program payments.  
 Series 3 - Assumes aggressive adoption of water efficient irrigation technology, and a reduction in Federal Farm Program payments by one-half.

**Steam electric power:**

High series projections reflect use of existing technology to meet demand. Low series assume new technology and conservation will result in savings. Where appropriate, water use includes forced and net natural evaporation, self-supplied ground water pumpage, and purchased potable water.

\*\* The double asterisk denote projection scenarios of "Most Likely" to be used in planning.

1996 CONSENSUS TEXAS WATER PLAN  
 PROJECTIONS OF POPULATION AND MUNICIPAL WATER USE  
 WATER USE UNITS: ACRE-FEET  
 \*\*\* DRAFT -- SUBJECT TO REVISION \*\*\*

COUNTY: 210 SHELBY

CITY: 104 CENTER

SERIES	----- HISTORICAL -----		*----- PROJECTED -----*					
	1980	1990	2000	2010	2020	2030	2040	2050
Population	5827	4950						
Water Use	1775	705						
<b>MIGRATION RATE .0</b>								
Population.....			5277	5726	6016	6272	6411	6553
Avg. Weather Condition			768	834	876	913	934	954
Below Normal Rainfall			963	1045	1098	1145	1171	1196
Average/Conservation			727	744	735	745	740	749
Below Normal/Conserv.			916	936	937	948	948	962
Average/Advanced Cons			703	693	674	689	697	697
Below Normal/Advanced			887	872	849	871	883	896
(With Plumbing Code Only)								
Average/Conservation			745	776	788	794	790	800
Below Normal/Conserv.			940	988	1011	1026	1027	1042
Average/Advanced Cons			727	744	761	780	790	793
Below Normal/Advanced			922	956	984	1012	1027	1035
<b>MIGRATION RATE .5</b>								
Population.....			5221	5573	5705	5793	5557	5331
Avg. Weather Condition			760	812	831	844	809	776
Below Normal Rainfall			953	1018	1042	1058	1015	973
Average/Conservation			719	724	703	688	635	609
Below Normal/Conserv.			906	918	888	883	815	782
Average/Advanced Cons			696	674	639	636	598	567
Below Normal/Advanced			877	849	805	811	759	729
(With Plumbing Code Only)								
Average/Conservation			737	755	748	740	678	651
Below Normal/Conserv.			930	961	959	954	884	848
Average/Advanced Cons			719	724	722	720	678	645
Below Normal/Advanced			912	930	933	934	884	842
<b>MIGRATION RATE 1.0</b>								
Population.....			5115	5170	4947	4603	4125	3697
Avg. Weather Condition			745	753	720	670	601	538
Below Normal Rainfall			934	944	903	840	753	675
Average/Conservation			705	678	610	541	476	422
Below Normal/Conserv.			888	851	770	691	610	542
Average/Advanced Cons			682	625	554	495	448	393
Below Normal/Advanced			859	793	698	634	568	505
(With Plumbing Code Only)								
Average/Conservation			722	707	654	577	508	451
Below Normal/Conserv.			911	898	837	748	661	588
Average/Advanced Cons			705	678	626	562	508	447
Below Normal/Advanced			894	869	809	732	661	584
<b>MOST LIKELY SERIES</b>								
Population.....			5403	5911	6301	6724	7059	7411
Avg. Weather Condition			787	861	918	979	1028	1079
Below Normal Rainfall			986	1079	1150	1228	1289	1353
Average/Conservation			744	768	769	798	807	838
Below Normal/Conserv. **			938	967	981	1017	1044	1087
Average/Advanced Cons			720	708	706	738	767	789
Below Normal/Advanced			908	900	889	934	973	1013
(With Plumbing Code Only)								
Average/Conservation			763	801	826	851	870	905
Below Normal/Conserv.			962	1020	1059	1100	1131	1179
Average/Advanced Cons			744	768	798	836	862	897
Below Normal/Advanced			944	987	1030	1085	1123	1170

1996 CONSENSUS TEXAS WATER PLAN  
 PROJECTIONS OF POPULATION AND MUNICIPAL WATER USE  
 WATER USE UNITS: ACRE-FEET  
 \*\*\* DRAFT -- SUBJECT TO REVISION \*\*\*

COUNTY: 210 SHELBY

CITY: 598 TENAHA

SERIES	----- HISTORICAL -----		*----- PROJECTED -----*					
	1980	1990	2000	2010	2020	2030	2040	2050
Population	1005	1072						
Water Use	117	148						
<b>MIGRATION RATE .0</b>								
Population.....								
Avg. Weather Condition			1087	1112	1135	1149	1157	1165
Below Normal Rainfall			121	123	126	127	128	129
			151	154	158	160	161	162
Average/Conservation			113	108	103	99	96	95
Below Normal/Conserv.			142	137	131	129	124	124
Average/Advanced Cons			108	98	93	91	89	89
Below Normal/Advanced			138	126	118	117	115	115
(With Plumbing Code Only)								
Average/Conservation			116	113	111	107	102	102
Below Normal/Conserv.			146	144	142	139	135	134
Average/Advanced Cons			112	107	104	103	102	100
Below Normal/Advanced			142	138	136	135	135	133
<b>MIGRATION RATE .5</b>								
Population.....								
Avg. Weather Condition			1075	1082	1076	1062	1003	947
Below Normal Rainfall			119	120	119	118	111	105
			149	150	149	148	139	132
Average/Conservation			112	105	98	92	81	77
Below Normal/Conserv.			141	135	125	119	107	101
Average/Advanced Cons			107	97	88	84	78	72
Below Normal/Advanced			136	122	112	108	100	93
(With Plumbing Code Only)								
Average/Conservation			114	110	105	99	88	83
Below Normal/Conserv.			144	141	135	128	116	109
Average/Advanced Cons			112	104	99	95	89	82
Below Normal/Advanced			142	135	129	125	117	108
<b>MIGRATION RATE 1.0</b>								
Population.....								
Avg. Weather Condition			1053	1004	933	844	745	658
Below Normal Rainfall			117	111	103	94	83	73
			146	139	130	117	103	91
Average/Conservation			110	98	84	69	62	54
Below Normal/Conserv.			138	124	107	91	80	70
Average/Advanced Cons			105	89	73	67	58	50
Below Normal/Advanced			133	112	94	86	74	65
(With Plumbing Code Only)								
Average/Conservation			112	102	90	75	66	57
Below Normal/Conserv.			142	130	116	98	87	76
Average/Advanced Cons			109	96	84	77	66	57
Below Normal/Advanced			138	124	110	100	87	75
<b>MOST LIKELY SERIES</b>								
Population.....								
Avg. Weather Condition			1169	1213	1264	1320	1370	1420
Below Normal Rainfall			130	135	140	146	152	157
			162	168	176	183	190	197
Average/Conservation			122	117	115	114	114	115
Below Normal/Conserv. **			153	149	146	146	147	151
Average/Advanced Cons			117	107	102	105	106	108
Below Normal/Advanced			147	137	130	135	137	140
(With Plumbing Code Only)								
Average/Conservation			124	122	122	123	121	124
Below Normal/Conserv.			157	156	157	160	160	164
Average/Advanced Cons			120	117	116	118	121	122
Below Normal/Advanced			153	151	151	155	160	162

1996 CONSENSUS TEXAS WATER PLAN  
 PROJECTIONS OF POPULATION AND MUNICIPAL WATER USE  
 WATER USE UNITS: ACRE-FEET  
 \*\*\* DRAFT -- SUBJECT TO REVISION \*\*\*

COUNTY: 210 SHELBY

CITY: 607 TIMPSON

SERIES	----- HISTORICAL -----		*----- PROJECTED -----*					
	1980	1990	2000	2010	2020	2030	2040	2050
Population	1164	1029						
Water Use	253	189						
<b>MIGRATION RATE .0</b>								
Population.....			1115	1141	1167	1184	1192	1200
Avg. Weather Condition			244	249	255	259	260	262
Below Normal Rainfall			305	312	319	324	326	328
Average/Conservation			234	229	225	223	220	220
Below Normal/Conserv.			292	288	282	281	278	278
Average/Advanced Cons			227	217	210	211	210	210
Below Normal/Advanced			285	271	261	263	262	262
(With Plumbing Code Only)								
Average/Conservation			239	238	239	237	234	234
Below Normal/Conserv.			300	300	303	302	299	300
Average/Advanced Cons			235	233	233	233	234	233
Below Normal/Advanced			296	295	297	298	299	298
<b>MIGRATION RATE .5</b>								
Population.....			1103	1111	1107	1094	1034	977
Avg. Weather Condition			241	243	242	239	226	213
Below Normal Rainfall			301	304	303	299	283	267
Average/Conservation			231	224	213	206	189	179
Below Normal/Conserv.			289	280	268	260	240	227
Average/Advanced Cons			225	212	200	195	182	171
Below Normal/Advanced			282	264	248	243	227	213
(With Plumbing Code Only)								
Average/Conservation			236	233	227	219	202	190
Below Normal/Conserv.			297	294	288	279	258	244
Average/Advanced Cons			232	226	221	216	203	189
Below Normal/Advanced			293	287	281	276	259	243
<b>MIGRATION RATE 1.0</b>								
Population.....			1081	1030	960	869	767	677
Avg. Weather Condition			236	225	210	190	168	148
Below Normal Rainfall			295	282	262	238	210	185
Average/Conservation			226	207	184	161	142	124
Below Normal/Conserv.			285	260	231	203	180	157
Average/Advanced Cons			220	195	171	155	135	118
Below Normal/Advanced			276	245	213	193	168	148
(With Plumbing Code Only)								
Average/Conservation			231	216	196	170	151	132
Below Normal/Conserv.			291	272	248	218	193	169
Average/Advanced Cons			228	209	189	172	150	131
Below Normal/Advanced			287	265	242	220	192	168
<b>MOST LIKELY SERIES</b>								
Population.....			1142	1178	1222	1269	1313	1359
Avg. Weather Condition			249	257	267	277	287	297
Below Normal Rainfall			312	322	334	347	359	371
Average/Conservation			239	236	235	239	241	248
Below Normal/Conserv. **			299	297	294	301	306	315
Average/Advanced Cons			233	224	220	226	231	237
Below Normal/Advanced			292	280	274	281	288	297
(With Plumbing Code Only)								
Average/Conservation			243	245	249	254	257	265
Below Normal/Conserv.			306	310	316	324	329	339
Average/Advanced Cons			240	240	244	250	257	263
Below Normal/Advanced			303	305	311	320	329	338



1996 CONSENSUS TEXAS WATER PLAN  
 PROJECTIONS OF POPULATION AND MUNICIPAL WATER USE  
 WATER USE UNITS: ACRE-FEET  
 \*\*\* DRAFT -- SUBJECT TO REVISION \*\*\*

COUNTY: 210 SHELBY

CITY: 757 COUNTY-OTHER

SERIES	----- HISTORICAL -----		*----- PROJECTED -----*					
	1980	1990	2000	2010	2020	2030	2040	2050
Population	15088	14983						
Water Use	1773	1941						
<b>MIGRATION RATE .0</b>								
Population.....			15045	15207	15498	15686	15792	15876
Avg. Weather Condition			1894	1914	1950	1973	1986	1997
Below Normal Rainfall			2029	2050	2089	2114	2128	2139
Average/Conservation			1793	1709	1638	1586	1527	1517
Below Normal/Conserv.			1927	1829	1759	1709	1651	1641
Average/Advanced Cons			1725	1573	1463	1463	1438	1428
Below Normal/Advanced			1844	1692	1585	1569	1544	1535
(With Plumbing Code Only)								
Average/Conservation			1826	1777	1741	1692	1632	1623
Below Normal/Conserv.			1961	1914	1880	1833	1775	1765
Average/Advanced Cons			1793	1692	1655	1639	1632	1606
Below Normal/Advanced			1927	1829	1794	1780	1775	1748
<b>MIGRATION RATE .5</b>								
Population.....			14882	14803	14695	14490	13686	13990
Avg. Weather Condition			1873	1863	1850	1824	1724	1762
Below Normal Rainfall			2007	1996	1982	1955	1847	1888
Average/Conservation			1774	1664	1554	1451	1296	1339
Below Normal/Conserv.			1907	1780	1669	1582	1403	1449
Average/Advanced Cons			1707	1532	1389	1338	1250	1245
Below Normal/Advanced			1823	1648	1505	1451	1342	1339
(With Plumbing Code Only)								
Average/Conservation			1807	1731	1653	1565	1403	1433
Below Normal/Conserv.			1940	1863	1784	1694	1525	1559
Average/Advanced Cons			1774	1648	1570	1516	1419	1417
Below Normal/Advanced			1907	1780	1702	1646	1540	1543
<b>MIGRATION RATE 1.0</b>								
Population.....			14581	13732	12744	11512	10159	8520
Avg. Weather Condition			1836	1730	1608	1454	1287	1082
Below Normal Rainfall			1967	1854	1722	1558	1377	1159
Average/Conservation			1738	1530	1322	1106	990	825
Below Normal/Conserv.			1869	1653	1422	1197	1070	891
Average/Advanced Cons			1672	1407	1180	1081	934	777
Below Normal/Advanced			1787	1515	1265	1158	1002	834
(With Plumbing Code Only)								
Average/Conservation			1770	1592	1408	1197	1058	882
Below Normal/Conserv.			1901	1715	1522	1299	1150	958
Average/Advanced Cons			1722	1515	1322	1222	1058	873
Below Normal/Advanced			1853	1638	1436	1326	1150	949
<b>MOST LIKELY SERIES</b>								
Population.....			15345	15635	16155	16730	17291	17827
Avg. Weather Condition			1931	1967	2032	2103	2173	2240
Below Normal Rainfall			2069	2107	2177	2253	2328	2400
Average/Conservation			1828	1756	1687	1672	1669	1700
Below Normal/Conserv. **			1965	1879	1815	1822	1805	1840
Average/Advanced Cons			1759	1617	1525	1541	1572	1600
Below Normal/Advanced			1879	1739	1652	1672	1688	1721
(With Plumbing Code Only)								
Average/Conservation			1862	1826	1815	1803	1786	1821
Below Normal/Conserv.			2000	1967	1959	1953	1940	1980
Average/Advanced Cons			1810	1739	1724	1747	1786	1800
Below Normal/Advanced			1948	1879	1869	1897	1940	1960

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750]					SHELBY
WARR WATER SYSTEM		** YEAR [1971]			SOURCE COUNTY [210]
					SOURCE BASIN [05]
ATTN: GLADYS WARR, OWNER					AQUIFER 10 - [032]
P.O. BOX 366					NUMBER WELLS [ 1]
CENTER, TEXAS		75935			RESERVOIR [ ]
					STATUS = 0

Jan [ 45000]	May [ 60000]	Sep [ 80000]		
Feb [ 42000]	Jun [ 70000]	Oct [ 60000]		
Mar [ 50000]	Jul [ 80000]	Nov [ 55000]		
Apr [ 55000]	Aug [ 80000]	Dec [ 50000]		
	WATER TYPE [SG]	ANNUAL TOTAL [ 727000]		Units: Gallons
				2.2 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 16

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

===== TWDB WATER USE SURVEY - MUNICIPAL USERS =====

TWDB CODE: [918750]					SHELBY
WARR WATER SYSTEM		** YEAR [1970]			SOURCE COUNTY [210]
					SOURCE BASIN [05]
ATTN: GLADYS WARR, OWNER					AQUIFER 10 - [032]
P.O. BOX 366					NUMBER WELLS [ 1]
CENTER, TEXAS		75935			RESERVOIR [ ]
					STATUS = 0

Jan [ ]	May [ ]	Sep [ ]		
Feb [ ]	Jun [ ]	Oct [ ]		
Mar [ ]	Jul [ ]	Nov [ ]		
Apr [ ]	Aug [ ]	Dec [ ]		
	WATER TYPE [SG]	ANNUAL TOTAL [ 350000]		Units: Gallons
				1.1 Acre-feet

Remarks: [ ]

Seller Code: [ ] Metered/Est: [ ] Activity Code: [ ]

If purchased, % RAW =[ ], % TREATED =[ ]; Connections: 14

Outside conn: Pop served: % Connections metered:

% Connections: RES COMM IND ; EFFLUENT(gal)

**APPENDIX E** **PIPELINE PROFILES FOR PROPOSED OPTIONS**

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**APPENDIX F**  
**EXISTING SHELBY COUNTY WATER RATES**

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# EXISTING SHELBY CO. WATER RATES

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The following is a listing of the current water rates as set by the specified Shelby County water suppliers. The listings are alphabetized based on the name of the water supplier. The source of this information is also referenced where possible.

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## Center, City of (From Audit Report dated September 30, 1994)

1. Residential, Commercial, and Industrial
  - a. Inside the City Limits
    - i. Minimum, including the first 2,000 gallons ..... \$9.50
    - ii. 2,001 to 15,000 gallons ..... \$1.80 per M
    - iii. 15,001 to 50,000 gallons ..... \$1.70 per M
    - iv. 50,001 to 6,000,000 gallons ..... \$1.65 per M
    - v. All over 6,000,000 gallons ..... \$1.00 per M
  - b. Outside of the City Limits - "The rate for services furnished outside the City limits shall be double the rate for the same service supplied inside the City limits." Therefore:
    - i. Minimum, including the first 2,000 gallons ..... \$19.00
    - ii. 2,001 to 15,000 gallons ..... \$3.60 per M
    - iii. 15,001 to 50,000 gallons ..... \$3.40 per M
    - iv. 50,001 to 6,000,000 gallons ..... \$3.20 per M
    - v. All over 6,000,000 gallons ..... \$1.90 per M
2. Bulk Water Sales
  - a. Minimum ..... \$20.00
  - b. All over 10,000 gallons ..... \$2.00 per M

## East Lamar Water Supply Corporation (From data dated February 1994)

First 3,000 gallons .....	\$12.00
Each 1,000 gallons thereafter .....	\$2.15
 Total cost of 10,000 gallons of water .....	 \$27.05

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# EXISTING SHELBY CO. WATER RATES

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## Flat Fork Water Supply Corporation

*(From telephone call to Mrs. Betty Robertson on June 6, 1996)*

Up to the first 2,000 gallons	\$10.00 minimum fee
2,001 gallons to 6,000 gallons	\$1.50/thousand
6,001 gallons to 10,000 gallons	\$1.45/thousand
10,001 gallons to 14,000 gallons	\$1.40/thousand
14,001 gallons to 18,000 gallons	\$1.35/thousand
18,001 gallons to 22,000 gallons	\$1.30/thousand
22,001 gallons to 26,000 gallons	\$1.25/thousand
26,001 gallons to 30,000 gallons	\$1.20/thousand
30,001 gallons to 34,000 gallons	\$1.25/thousand
34,001 gallons to 36,000 gallons	\$1.20/thousand
36,001 gallons to 40,000 gallons	\$1.15/thousand
40,001 gallons to 43,000 gallons	\$1.10/thousand
Over 43,001 gallons	\$1.00/thousand
Total Cost of 10,000 gallons of water	\$21.80

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## Huber Water Supply Corporation

*(From Initial Questionnaire)*

Total cost of 10,000 gallons of water ..... \$22.40

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## McClelland Water Supply Corporation

*(From correspondence received September 5, 1994)*

0 to 2,000 gallons	\$12.00
2,001 to 6,000 gallons	\$1.40 per thousand gallons
6,001 to 10,000 gallons	\$1.30 per thousands gallons
over 10,000 gallons	\$1.20 per thousand gallons
Total cost of 10,000 gallons of water	\$22.80

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## Paxton Water Supply Corporation

*(From Initial Questionnaire received February 16, 1994)*

Total cost of 10,000 gallons of water ..... \$38.00

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# EXISTING SHELBY CO. WATER RATES

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**Sand Hills Water Supply Corporation**  
*(From Initial Questionnaire dated February 18, 1994)*

First 2,000 gallons .....	\$14.00
Each 1,000 gallons thereafter .....	\$1.75
Total cost of 10,000 gallons of water .....	\$28.00

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**Shelbyville Water Supply Corporation**  
*(From telephone call to Shelbyville Water Office (409-598-7479) on May 23, 1996)*

First 2,000 gallons .....	\$12.06
2,000 to 20,000 gallons .....	\$2.00/thousand
20,000 to 40,000 gallons .....	\$1.70/thousand
Total cost of 10,000 gallons of water .....	\$28.06

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**Tenaha, City of**  
*(From Initial Questionnaire dated February 23, 1994)*  
*(Verified by conversation with Ms. Doyce Baily, City Secretary, May 23, 1996)*

First 1,000 gallons .....	\$11.50
Each 1,000 gallons thereafter .....	\$1.50
Total cost of 10,000 gallons of water .....	\$25.00

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**Tennessee Water Supply Corporation**  
*(From Initial Questionnaire dated February 24, 1994)*

Total Cost of 10,000 gallons of water .....	\$28.20
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**Timpson Rural Water Supply Corporation**  
*(From Initial Questionnaire)*

Total cost of 10,000 gallons of water .....	\$27.90
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## EXISTING SHELBY CO. WATER RATES

<b>COMPARISON OF COSTS - SHELBY COUNTY WATER SUPPLIERS</b>		
<b>NAME OF SUPPLIER</b>	<b>COST OF 10,000 GALLONS</b>	<b>DATE OF INFORMATION</b>
Center, City of	\$23.90	From audit report dated September 30, 1994
East Lamar WSC	\$27.05	From data dated February 1994
Flat Fork WSC	\$21.80	From phone call dated June 6, 1996
Huber WSC	\$22.40	From initial questionnaire
McClelland WSC	\$22.80	From correspondence dated September 5, 1994
Paxton WSC	\$38.00	From initial questionnaire dated February 16, 1994
Sand Hills WSC	\$28.00	From initial questionnaire dated February 18, 1994
Shelbyville WSC	\$28.06	Phone call on May 23, 1996
Tenaha, City of	\$25.00	Phone call on May 23, 1996
Tennessee WSC	\$28.20	From initial questionnaire dated February 24, 1994
Timpson RWSC	\$27.90	From initial questionnaire



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**APPENDIX G**  
**NOTES REGARDING POPULATION/WATER USE PROJECTIONS**

# NOTES REGARDING POPULATION/WATER USE PROJECTIONS

The information contained in this report depends heavily on the future population growth and water consumption of Shelby County. To aid this report, information was obtained from the Texas Water Development Board (TWDB). This information is enclosed in the following appendices of the report:

1. Appendix C: TWDB Water Use Surveys - This consists of historical survey data regarding characteristics such as total water provided, total number of connections, percentages of industrial/business/residential connections, etc. Detailed historical data is provided in these surveys for each water supplying entity on a year by year basis.
2. Appendix D: TWDB Population and Water Use Projections - This consists of the 1996 Consensus Texas Water Plan Projections of Population and Municipal Water Use for various conditions.

The options considered in the Shelby County Regional Water Study were made in the context of the present and future needs of the local entities. The present needs were analyzed based on current and historical records of the entities. Future needs were estimated by applying a linear regression to the historical records found in Appendix C, with the assumption that the entities will continue to grow in the future at the same rate as they grew in the past. The information found in Appendix C was chosen over the projections in Appendix D for several reasons, the following of which predominate:

1. There are 18 county water suppliers in Shelby County. However, the TWDB projections in Appendix D give specific projections only for the Cities of Center, Tenaha, and Timpson. All other projections were addressed under the broad category of "County - other." Alternately, the historical records contained in Appendix C provide detailed information regarding number of connections and water consumption on a yearly and monthly basis for each individual entity. In many cases, this information goes back decades.

Please note that this Regional Water Study was intended to address the specific needs of each county entity as well as that of the county as a whole. This required a specific knowledge of each entity's potential for growth and future need for water. Therefore, the historical records found in Appendix C were used as a basis to project each entity's future needs, with the assumption that the specific entity's future growth will continue at the same rate in the future as it has in the past. This data was used in an analysis of the storage, pressure, and delivery systems of each entity, since (1) they must have enough water for their users and (2) be able to provide this water at pressure even during periods of high demand. This information was then applied to various options to determine the most feasible option for supplying those needs.

2. The information contained for the Cities of Center, Tenaha, and Timpson in Appendix D appears to conflict with the information contained in the historical records contained in Appendix C. Some of these discrepancies are summarized in the following table:

NOTABLE DISCREPANCIES IN SHELBY COUNTY DATA					
REFERENCED CITY	YEAR	WATER USAGE VALUE USED IN TWDB FUTURE PROJECTIONS (acre*ft)	HISTORICAL RECORD LISTED IN TWDB WATER USE SURVEYS (acre*ft)	DIFFERENCE (acre*ft)	DIFFERENCE (million gallons)
Center	1980	1,775	2,258.2	483.2	157.5
	1990	705	2,152.3	1,447.3	471.6
Tenaha	1980	117	137.4	20.4	6.6
	1990	148	199.2	51.2	16.7
Timpson	1980	253	253.3	0.3	0.1
	1990	189	193.7	4.7	1.5

Please note that a summary of the historical water usages (from Appendix C) was mailed to each of the county participants so that they could verify those values from their records. Responses indicated that the data was accurate, and any discrepancies that were noted were corrected with data supplied from the individual participants.

3. The 1990 census data indicates that Shelby County had a total population of 22,034 and a total of 10,616 housing units. According to the TWDB Population and Water Use Projections found in Appendix D, the summary of the total population in Shelby County in 1990 was 22,034 while the total water used was 2,983 acre-feet. However, the data from the historical records (in Appendix C) the total water used by the county water supply entities was about 3,886.9 acre-feet. This represents an apparent discrepancy of approximately 903.9 acre-feet, or 294.5 million gallons.

In addition, the census figures reflect the total population of Shelby County. Many private wells exist in the area, which means that the entire population of Shelby County is not necessarily serviced by the County's municipalities or water supply corporations. The TWDB Population and Water Use Projections seems to imply that the water usage is based on the entire population. However, the historical survey data was referenced in terms of total connections served, rather than population. Accordingly, a summarizing the historical records indicates that a total of 7,747 connections were served by the County water entities in 1990. Applying this total number of connections to the total housing units listed in the census data indicates that the percentage of the total County residences serviced by the entities is approximately 73%.

Table 1  
Total Population by Race/Ethnicity and Housing Units from the 1990-1991 Census Tracts for 1990  
in the County and Places Within Shelby County

Area Name	Total Population	Rauing Units	Total Number of Persons by Race						Total Number of Non-Hispanics by Race					
			Total	Hispanic	White	Black	American Indian	Asian	Other	White	Black	American Indian	Asian	Other
State of Texas	16,986,510	7,008,999	4,339,903	12,774,762	2,021,632	65,877	319,459	1,804,780	11,291,680	1,976,360	52,803	303,825	21,937	
Shelby County	22,034	10,616	539	17,047	4,727	36	31	193	16,719	4,710	34	30	2	
Waring District	22,034	10,616	539	17,047	4,727	36	31	193	16,719	4,710	34	30	2	
Tract Number 9509.00	4,295	2,161	128	3,064	1,855	2	0	0	2,911	1,848	2	10	0	
Center City	11	0	0	0	0	0	0	0	0	0	0	0	0	
Black Group 1	11	0	0	0	0	0	0	0	0	0	0	0	0	
Tract Number 9501.00	1,912	2,152	179	1,053	1,851	2	10	10	2,902	1,846	2	10	0	
Black Group 1	882	342	30	639	38	0	0	0	594	38	0	0	0	
Black Group 2	1,232	516	24	803	439	0	4	6	788	438	0	0	0	
Black Group 3	321	138	33	245	40	0	16	0	246	40	0	0	0	
Black Group 4	588	278	13	547	17	0	1	0	535	17	0	0	0	
Black Group 5	534	290	10	487	64	0	1	0	477	66	0	0	0	
Black Group 6	1,342	565	43	274	1,251	2	4	11	242	1,249	2	4	0	
Quincy City	332	261	7	329	0	0	0	6	328	0	0	0	0	
Tract Number 9506.00	332	261	7	329	0	0	0	6	328	0	0	0	0	
Black Group 1	48	22	0	49	0	0	0	0	49	0	0	0	0	
Black Group 2	288	239	7	280	0	0	0	6	279	0	0	0	0	
JANOLA CITY	803	390	14	634	149	1	1	1	641	149	1	0	0	
Tract Number 9501.00	803	390	14	634	149	1	1	1	641	149	1	0	0	
Black Group 1	786	381	14	635	149	1	0	1	622	149	1	0	0	
Black Group 2	19	10	0	19	0	0	0	0	19	0	0	0	0	
Black Group 3	19	10	0	19	0	0	0	0	19	0	0	0	0	
Tract Number 9501.00	1,072	450	26	581	480	0	2	9	546	478	0	0	0	
Yanah Town - 6	1,072	450	26	581	480	0	2	9	546	478	0	0	0	
Black Group 5	319	133	24	236	94	0	2	0	221	94	0	0	0	
Black Group 6	739	297	2	345	384	0	0	0	343	384	0	0	0	
Tampson City	1,028	542	8	597	427	0	2	0	597	422	0	0	0	
Tract Number 9501.00	1,028	542	8	597	427	0	2	0	597	422	0	0	0	
Black Group 2	549	280	6	292	275	0	1	3	292	270	0	0	0	
Black Group 3	433	241	2	273	138	0	2	0	273	138	0	0	0	
Black Group 4	30	15	0	15	14	0	1	0	15	14	0	0	0	

# FUTURE PROJECTIONS

This Appendix contains information regarding the future projected number of connections and water usage for each participating Shelby County Water Supplier. The historical water records obtained from the TWDB was used as the basis for all future predictions made in this report (refer to Appendix C). As noted previously, this historical data was evaluated by regression analysis.

Regression analysis shows the relationship between a set of independent variables and one dependent variable. It basically defines the extent that the dependent variable can be explained and predicted by the independent variable(s). In this case, separate analyses were performed for the number of active connections and for the total water usage for each participating entity. The independent variable in each case was time, while the dependent variables were the number of active connections and the total water usage, respectively. The relationship between dependent and independent variables in a regression analysis is a linear estimate, which results with a "best fit" line through a scattered plot of each independent-dependent data pair. Because regressions assume a linear relationship, the results are most accurate when the data closely matches a linear model.

Once a linear relationship was established for the given data, it was then projected into the future in 10 year increments to extrapolate values at those times. Extrapolation is the process of estimating the value of a function that lies outside the range of the existing data. As can be seen from the following graphs, the majority of the Shelby County water supplying entities have historically grown at rates that are very close to linear. This seems to indicate a fair degree of accuracy can be expected for the projections.

## A. GENERAL ANALYSIS PROCEDURE

The general process followed for each regression analysis is briefly described below, with the data provided for the Sand Hills WSC used as an example:

1. Data regarding the historical number of connections was provided for the Sand Hills WSC for a period from 1968 to 1997. This data was plotted against time to show the growth in number of connections that period.
2. Regression analyses were then performed on the historical data using standard Quatro Pro software. The regression was performed using time as the independent variable and the number of connections as the dependent variable. The analysis provided the equation of a straight line that describes the rate of growth in connections during the historic period.
3. Making the assumption that the rate of growth in the future continues at the same rate as it did in the past, the linear equations was then used to estimate the number of connections in the future (at 10 year increments).

The following pages contain graphs of the historic and projected number of connections and water usage for each of the participating county entities. The method used to analyze each entity is generally the same as that outlined above for the Sand Hills WSC. As can be seen from the following graphs, the majority of the Shelby County water supplying entities have historically grown at rates that are very close to linear. However, in some cases the historic data was not very linear and/or contained information that appeared to be in error. In these cases, some modifications were made in the procedure so that more logical values resulted. These "special cases" are detailed in Section B below.

## B. SPECIAL CASES

Some "special cases" did occur where the regression analysis had to be modified from the format described above. This occurred where the historic data was not very linear and/or contained information that appeared to be in error. In these cases, some modifications were made in the procedure so that more logical values resulted. These modifications are detailed below on a case-by-case basis:

1. **BUENA VISTA WSC** - The Buena Vista WSC began operations in mid-1994. The most recent update of information from the TWDB provided the number of connections and water usage for the years of 1994, 1995, and 1996. However, the data for 1994 regarding water usage

does not represent a full years worth of data. With only three data points, the accuracy of any regression estimate is very subject to question. As noted on the following graphs, several different methods were used to estimate the future number of connections and water usage: (1) a regression analysis using data from 1994 to 1996, (2) a regression analysis using data from 1995 and 1996 only, and (3) estimating the average growth rate indicated by the projections for all the other county entities and then applying this growth rate to that of the Buena Vista WSC. In all cases, the most conservative values were chosen, which in both cases involved the application of the average County growth rate to that of the WSC.

2. CITY OF CENTER - In their comments regarding the draft study, the TWDB requested that Center be reexamined in regard to its potential growth in connections and water use. Please refer to APPENDIX I: *Executive Administrator's Comments* and APPENDIX J: *Replies to Executive Administrator's Comments* for more information regarding this. Please note that the response in Appendix I was submitted and received no further comment from the TWDB.

However, prior to the submittal of the final copy of the study, updated information was obtained from the TWDB regarding the number of connections and water usage for the City. The projections used in the draft study was based on information that ended circa 1991. The updated information provides additional data on the number of connections for the years of 1994, 1995, and 1997. The updated information also provided additional water usage data for the years 1994 and 1995. This updated information was added to the existing data base and then used in the regression analysis. The same conventions used in the regression performed for the reply to the TWDB were also used in these analyses. These modifications are summarized as follows:

- (i). Estimated Number of Connections - The data provided by the TWDB for the City of Center showed that the number of connections for the City jumped from 2,105 in 1974 to 4,989 in 1975, and then back down to 2,120 in 1976. The value used for 1975 was assumed to be a typo. It was assumed that the actual value for that year was 1,989 connections. Therefore, that value was used in the regression analysis.

In addition, the information indicates that the number of connections jumped from 2,186 to 2,830 between 1981 and 1982; and then fell from 2,830 to 2,262 between 1983 and 1984. These numbers were assumed to be in error and were deleted from the regression analysis data.

Please refer to the appropriate graphs in this Appendix Section for a graph of the historic data points and the "best fit" line used for the projected connections. Please note that incorporating the most recent data into the regression analysis results in slightly higher values than those submitted in the reply to the TWDB. However, since it is based on the most recent data, it is felt that the revised estimate provides a more accurate assessment. For example, a phone call placed to the City in June 1997 revealed that the City serviced a total of 2,640 connections. The linear regression estimate for 1997 is 2,607 connections, which has a percent relative error of 1.25% when compared to the actual value.

- (ii). Estimated Water Usage - The historical data regarding water consumption was basically used as presented. Please refer to the appropriate graphs in this Appendix Section for a graph of the historic data points and the "best fit" line used for the projected connections. Please note that incorporating the most recent data into the regression analysis results in slightly lower values than those submitted in the reply to the TWDB. However, since it is based on the most recent data, it is felt that the revised estimate provides a more accurate assessment.

2. CHOICE WSC -The historical data for the Choice WSC showed some large fluctuations in their total number of connections that seemed to be completely out of character. Specifically, the historic records indicate that the number of connections increased from 200 connections in 1984 to 600 connections in 1985, and then fell back to 205 connections in 1986. A similar (but less severe) fluctuation was also shown in 1987 when the total number of connections decreased to 136 connections and then rose the next year back up to 245 connections.

Because these fluctuations did not appear to be logical, two regression analyses were performed for this WSC for purposes of comparison. Regression #1 used all of the historical data. Regression #2 used the same data, but deleted the excessively high and low values indicated above. Please refer to the following graphs for the plot of both regression analyses.

Regression #2 was the most conservative. Therefore, the summary table presented in the following pages shows those projected values. However, it should be noted that there was very little difference between values generated by the two projections.

4. **FLAT FORK WSC** - The historical water usage listed for the Flat Fork WSC showed some large fluctuations that seemed to be out of character with the rest of the data. For example, the historical records show that the usage increased from 34.8 acre-feet in 1983 to 246.2 acre-feet in 1984 and 1985, and then fell to 95.1 acre-feet in 1986. Similar fluctuations were also noted 1989 to 1993, although those increases were less severe. Please refer to the following tables and graphs for more information.

Because these fluctuations did not appear to be logical, two regression analyses were performed for this WSC for purposes of comparison. Regression #1 used all of the historical data. Regression #2 used the same data, but deleted the excessively high values indicated above. Please refer to the following graphs for the plot of both regression analyses. Regression #2 was the most conservative. Therefore, the summary table presented in the following pages shows those projected values.

5. **PAXTON WSC** - In their comments regarding the draft study, the TWDB requested that the Paxton WSC be reexamined in regard to its potential growth in connections and water use. Please refer to APPENDIX I: *Executive Administrator's Comments* and APPENDIX J: *Replies to Executive Administrator's Comments* for more information regarding this. Please note that the response in Appendix I was submitted and received no further comment from the TWDB.

However, prior to the submittal of the final copy of the study, updated information was obtained from the TWDB regarding the number of connections and water usage for the WSC. The projections used in the draft study was based on information that ended circa 1993. The updated information provides additional data on connections and water usage for the years of 1994 and 1995. This updated information was added to the existing data base and then used in the regression analysis. The same conventions used in the regression performed for the reply to the TWDB were also used in these analyses. These modifications are summarized as follows:

- (i). **Estimated Number of Connections** - The historic data indicates that the Corporation experienced slow growth until the mid-1970's when it experienced a large increase in connections that almost doubled it in size. The historic data then indicates that growth basically leveled out until the late 1980's, when the number of connections decreased drastically. The most recent information indicates that the current number of connections had remained constant during the early 1990's, but began to increase again during 1995 (the last date for which information is available).

Please refer to the appropriate graphs in this Appendix Section for a graph of the historic data points and the "best fit" line used for the projected connections. Please note that it is somewhat difficult to accurately predict the future connections of a system with such dynamic fluctuations. Incorporating the most recent data into the regression analysis results in slightly lower values than those submitted in the reply to the TWDB. Since it is based on the most recent data, the revised estimate is probably the most accurate assessment.

- (ii). **Estimated Water Usage** - The historic data from 1970 to 1993 indicates rapid increases and declines in water usage. Several data points that appeared to be in error were not included in the regression analyses. In specific, data from the years 1969, 1975, 1987, and 1988 were deleted from the regression analysis. Please refer to the appropriate attached graph for more information. Please note that the data points were deleted from the regression analysis but are shown in the plot of the historic data for comparison. Please note that these revised values are slightly higher

than those originally presented in the reply to the TWDB. Since it is based on the most recent data, the revised estimate is probably the most accurate assessment.

6. CITY OF TENAHA - The historical water usage listed for Tenaha showed some very large fluctuations that seemed to be out of character with the rest of the data. For example, the historical records show that the usage almost tripled between 1965 and 1970, and then declined. The data also indicated a similar incident in the early 1990's. Since these fluctuations did not appear to be logical, two regression analyses were performed and compared. Regression #1 used all of the historical data as reported above, while Regression #2 deleted the excessively high values.

In addition, the previous regressions used data that ended in 1994. The most recent information obtained provides data for the years of 1995 and 1996. This information was incorporated into the existing database for the revised estimates. Please note that the data provided for 1996 stated that the water usage for that year was 2,365.04 acre-feet, which is over eleven times the amount of water used the previous year. It was therefore assumed that value was a type caused by the misplacement of the decimal point. Therefore, the value used in the regression for 1996 was 236.504 acre-feet. Please refer to the following table and graphs for more information.

Regression #2 provided the most conservative estimates for the next 50 years. Although fluctuations are still prevalent, the removal of the excessively high water usage values showed the remaining historical data to be much closer to linear than was previously the case. Therefore, the summary table presented in the following pages shows those projected values from Regression #2.

7. TENNESSEE WSC - In their comments regarding the draft study, the TWDB requested that the Tennessee WSC be reexamined in regard to its potential growth in connections and water use. Please refer to APPENDIX I: *Executive Administrator's Comments* and APPENDIX J: *Replies to Executive Administrator's Comments* for more information regarding this. Please note that the response in Appendix I was submitted and received no further comment from the TWDB.

However, prior to the submittal of the final copy of the study, updated information was obtained from the TWDB regarding the number of connections and water usage for the WSC. The projections used in the draft study was based on information that ended circa 1994. The updated information provides additional data on connections for the years 1994 through 1996. A telephone call to the Corporation yielded the current number of connections in 1997. In addition, the TWDB information also contains water usage data for the years of 1994 through 1996. This updated information was added to the existing data base and then used in the regression analysis. The same conventions used in the regression performed for the reply to the TWDB were also used in these analyses. These modifications are summarized as follows:

- (i). Estimated Number of Connections - The historic data indicates that the Corporation experienced steady growth from 1970 until the mid-1980's, when it began to level off. A sudden decrease in the number of connections occurred in the late 1980's, but was then followed by a sudden increase in the early 1990's. The most recent information indicates that the number of connections has leveled off and remains fairly constant. A regression analysis was performed on the historical data. Please refer to the appropriate graphs in this Appendix Section for a graph of the historic data points and the "best fit" line used for the projected connections. Please note that incorporating the most recent data into the regression analysis results in slightly lower values than those submitted in the reply to the TWDB. Since it is based on the most recent data, the revised estimate is probably the most accurate assessment.
- (ii). Estimated Water Usage - The historic data indicates that the Corporation experienced vast fluctuations in water usage during the early 1970's. Water usage then seemed to stabilize and increase at a moderate rate of growth from the mid-1970's until the mid 1980's. From the mid-1980's until the early 1990's, the rates of water usage fluctuated with a general downward trend. However, the most recent data for 1995



and 1996 indicates that water usage is increasing.

A regression analysis was performed on the water usage data. All of the historical data was used with the following exception: the data from 1973 and 1981 were not used. This was due to the fact that the water consumption in years 1973 and 1981 appeared to be too low to be statistically accurate. Therefore, the same convention was followed as was used in the reply to the TWDB and the data from those years was not used in the analysis.

Please note that due to the fluctuations of water use at the beginning of the historical record, the water use does not appear to be extremely linear. Therefore, the "best fit" line for the projection also provides a poor fit for much of the historical data. However, as can be seen from the attached graph, the projection does very closely approximate the actual number of connections for the last few years.

8. THE CITY OF TIMPSON -In their comments regarding the draft study, the TWDB requested that Timpson be reexamined in regard to its potential growth in connections and water use. Please refer to APPENDIX I: *Executive Administrator's Comments* and APPENDIX J: *Replies to Executive Administrator's Comments* for more information regarding this. Please note that the response in Appendix I was submitted and received no further comment from the TWDB.

However, prior to the submittal of the final copy of the study, updated information was obtained from the TWDB regarding the number of connections and water usage for the City. The projections used in the draft study was based on information that ended circa 1994. The updated information provides additional data on the number of connections and water usage for the years of 1995 and 1996. The same conventions used in the regression performed for the reply to the TWDB were also used in these analyses. These modifications are summarized as follows:

- (i). Estimated Number of Connections - The historic data indicates that the City experienced sporadic fluctuations in its number of connections over the past 40 years. Steady growth is indicated by the historic records from 1955 until 1960, when the number of connections decreased significantly. The number then stabilized for a period and then suddenly increased again in the mid-1960's. Sharp growth then continued at a fairly constant rate from the early 1970's until the early 1980's, after which a sharp decline was noted. The number of connections appeared to level off and show some moderate increase from the mid-1980's until the mid-1990's.

The fluctuations in the historic number of connections makes a close approximation very difficult. There is fairly high deviation between the historic values and the projected water use in the historic period as generated by the regression. However, the projection appears to offer a better rough approximation of the average water usage for the period between 1955 and 1996 than a regression taken over a shorter segment of the historic data would. Therefore, we feel that the regression provides the best approximation for the future number of connections for the City of Timpson. Please refer to the attached graphs for more information.

- (ii). Estimated Water Usage - The historic data indicates that the City experienced steady increase in water consumption from 1955 to the mid-1960's. The level of water consumption decreased rapidly in the mid-1960's and then remained fairly stable until the mid 1970's. The water usage then increased at a notable rate of growth from the mid-1970's until the mid-1980's. The water consumption then decreased noticeably from the mid-1980's until 1990. The level of water consumption has fluctuated since 1990, but the most recent data indicates that it was on an upward trend in 1996.

The regression was performed using the historic water usage from 1955 to 1994. As noted above, the water usage shown for the City peaked in 1984. However, the historical data indicates that the water consumption went from 299.3 acre-feet in 1983 to 792.2 acre-feet in 1985, and then fell back to 302.8 acre-feet in 1986. In keeping

with the reply to the TWDB, the information for 1984 was assumed to be in error and was not used in the regression. Even though the large fluctuations in past usage cause its deviation to be large, the regression does provide a much better fit for the entire historic range of data than a regression taken over a smaller span of data. The revised estimates for water consumption are shown on the attached tables and graphs. Please note that these revised values are somewhat more conservative than those originally presented in the reply to the TWDB.

COUNTY WIDE TOTALS: NUMBERS OF CONNECTIONS

YEAR	CITIES				EASTERN				WESTERN				CENTRAL				COMBINED TOTAL
	HUBLEY	JOASHUM	TRIANA	TIMPSON	MCLELLAND	FAYTON	SMELTYVILLE	BUENA VISTA	HABER	SANDHILLS	TENNESSEE	TIMPSON RURAL	CHOICE	EAST LAMAR	PLATONK	WARR	
1955			250	436												686	
1956			238	485												723	
1957		29	250	492												771	
1958		25	300	511												836	
1959		25	300													325	
1960			310	365												665	
1961			302	367												669	
1962			328													328	
1963			375	365												760	
1964				448												448	
1965		28	346	607			87									1,068	
1966		195			184		85				148			81		759	
1967		200		500	160		120				150			85		1,302	
1968				600	184	150	116		139		162			88		1,416	
1969			365		177	165	121		53	143	175			70		1,480	
1970					188	180	130				187			70		1,406	
1971	2,000	300	400	908	212	210	151			182	151	79		75		4,633	
1972	1,980	273	400	530	222	228	90		53		225	83		90		4,582	
1973	1,985	275	400	545	240	232	103	158	55		94	84		93		4,018	
1974	2,105	284	410	575	254	244	103	163	71	205	284	85		94		5,190	
1975	4,969	280		566	270	246	101	178	70	211	400	89		124		7,641	
1976	2,120	295		500	274	270	225	160	78	216	320	94		132		4,639	
1977	2,300	365		565	288	285		184	82	221	343	83		145		5,387	
1978	2,148	391		628		235	222	97	82	222	370	96		156		4,860	
1979	2,209	410		650	305	300	245	200	94	245	410	98		160		5,829	
1980	2,107	438		656	320	306	284	213	98	250	432	98		173		6,283	
1981	2,186	480		657	336	327	230	223	100	267	449	105		190		6,737	
1982	2,830	525		657	351	328	260	237	108	275	469	107		190		7,543	
1983	2,830	539		562	337	337	276	240	117	276	415	115		194		7,509	
1984	2,282	569		569	363	333	281	240	117	284	475	115		200		7,082	
1985	2,395	573		547	375	344	280	242	118	286	504	115		200		7,673	
1986	2,415	588		530	383	354	250	243	118	301	520	115		205		7,362	
1987	2,415	583		530	360	360	250	250	120	312	520	112		136		7,326	
1988	2,425	598		530	369	360	245	242	120	320	540	115		245		7,649	
1989	2,280	602		520	375	375	245	250	120	324	547	107		248		7,587	
1990	2,496	625		560	410	360	140	250	115	334	545	107		248		7,747	
1991	2,259	624		550	401	365	140	252	115	334	550	107		270		7,505	
1992		640		523	413	363	140	268	123	334	550	116		300		7,505	
1993		634		530	404	366	140	268	123	350	550	115		248		7,505	
1994	2,584	641		527	488	550	189	262	189	358	550	115		254		8,190	
1995	2,587	650		544	416	360	189	262	181	326	547	113		300		8,113	
1996		648		405	257	497			196	134	367	125		258		8,113	
1997	2,640	642		520	600				133	367	574	121		270		8,113	
2000	3,878	738		669	692	606	303	318	207	414	686	128		363		9,276	
2010	3,918	878		851	801	667	277	378	238	487	837	143		448		10,860	
2020	3,167	1,012		814	719	664	310	438	270	213	686	167		544		12,104	
2030	3,396	1,148		893	788	693	342	498	301	244	693	172		638		13,617	
2040	3,836	1,286		1,050	867	733	396	568	328	274	748	186		734		14,924	
2050	3,878	1,422		1,183	926	762	493	618	357	306	828	201		830		16,860	

1. Shaded areas indicate projected future values based upon a linear regression of historic data for a particular entity.  
 2. DATA DESIGNATION: Regular font indicates data from TWDB. Italic font indicates data obtained from other sources, and boldshaded indicates future projections based on historic data.  
 \* Two regressions were performed for this entity, the first using all of the historical data and the second with exceptionally high or low values deleted. The second (more conservative) estimate is shown herein.  
 \*\*\* Regressions for these entities were addressed in some detail in the reply to the TWDB comments to the draft copy of the study. Please note that the values in this table are based on regressions whose base data have been updated since that time.  
 \*\*\*\* Please note that the War WSC was sold around June 1997. The name has been changed to On-Site Waterworks. The name War WSC has been retained herein for purposes of identification.  
 \*\*\*\*\* Please note that some of the historical data is incomplete, especially from the earlier years. Areas of missing data are left blank or filled with "N/A" in the table at right. The accuracy of the total water consumption in this column will be affected accordingly.

COUNTY WIDE TOTALS: WATER CONSUMPTION

CONSUMPTION MEASURED IN MILLIONS OF GALLONS

YEAR	CITIES				EASTERN				WESTERN				CENTRAL				COMBINED TOTAL****		
	CENTER**	HUXLEY	JOAQUIN	TEMAHA*	TIMPSON*	FIVE WAY	MCLELLAND	PAXTON*	SHELBYVILLE	BUENA VISTA	HUBER	SANDHILLS	TENNESSEE**	TIMPSON RURAL	CHOCOE	EAST LAMAR		FLATFORK*	WARR***
1955			05	18.0	40.1														58.6
1956			1.1	25.5	43.8														70.4
1957			1.1	27.3	43.8														72.2
1958			2.8	9.6	45.6														58.1
1959			2.8	8.2															11.0
1960			3.0	27.1	45.0														75.1
1961			2.5	23.5	49.3			100											85.3
1962				35.0	54.7														88.3
1963				35.0	54.0														89.0
1964				23.8	51.6														75.4
1965				2.5	88.2	58.6													154.7
1966			6.5	70.3	22.3	3.8	4.1	5.4	7.3	0.2				0.5		2.8	2.1	119.8	
1967			7.3	98.2	23.4	7.2	9.8	8.3	8.3	1.4	16.5			7.6		4.8	10.0	194.5	
1968				111.0	21.3	10.9	9.9	9.7	9.7	1.5	5.5			8.0		4.4		200.4	
1969			10.3	104.6	22.8	13.5	14.0	3.2	11.4	1.5	8.2			12.3	2.0	5.8	14.4	223.9	
1970			10.6	88.6	23.1	13.1	14.6	6.8	12.0	2.3	9.5			12.2		6.5	12.9	215.0	
1971	462.1		10.8	47.0	22.9	16.5	17.2	4.3	13.5	2.2	13.6			17.1	3.4	6.2	13.8	651.7	
1972	506.7		14.9	53.4	22.2	20.6	18.1	7.1	14.0	2.3	16.5			18.6	6.2	9.3	15.2	736.8	
1973	505.4		21.9		24.2	20.6	19.2	8.2	14.2	2.4	15.9			27.0	7.1	10.4	17.3	697.0	
1974	528.9		14.9	51.9	52.0	22.9	21.2	10.3	15.3	3.4	16.2			32.7	7.2	11.4	16.7	809.1	
1975	515.5		15.5		62.6	24.4	21.8	0.5	15.5	4.4	16.8			34.1	7.0	11.3	19.0	753.0	
1976	395.6		17.3		60.9	23.3	22.0	80.5	16.1	4.9	20.0			28.3		11.9	13.1	700.9	
1977	614.1	24.5	17.6	43.7	61.2	24.3	23.0		17.0	6.1	20.1			8.3		13.9	14.2	915.6	
1978	713.2	32.9	17.5		60.2			18.3		6.7	22.3			32.9		16.0		928.9	
1979	784.4	30.9	16.1	38.0	85.8	25.9	25.7	18.3	16.7	6.9	27.1			33.7		15.0	15.6	1149.0	
1980	735.8	35.7	17.0	44.8	82.5	29.9	27.5	19.8	21.3	6.2	27.7			35.0		15.1	17.0	1125.0	
1981	684.2	38.9	17.7	55.2	88.4	25.7	28.0	20.4	18.6	7.3	29.7			33.1		18.1	11.5	1090.2	
1982	749.9	46.2	18.4	56.4	88.4	26.8	28.1	16.7	19.8	7.8	28.4			34.6		11.9	11.0	1176.9	
1983	615.4	49.0	17.7	55.2	97.5	26.4	27.1	21.7	19.0	8.1	25.6			33.3		19.5	11.3	1061.4	
1984	691.9	53.1	20.1	67.5	258.1	29.0	29.8	24.0	21.0	8.9	32.2			36.7		23.7	80.2	1428.1	
1985	676.5	58.9	26.4	42.0	98.7	28.4	30.8	12.4	21.0	9.0	32.9			38.9		24.8	33.3	1219.2	
1986	700.7	55.6	27.2	47.0	90.2	26.2	28.5	11.9	19.0	8.1	31.8			37.3		24.2	31.0	1166.8	
1987	689.5	58.3	31.6	47.0	86.3	34.9	35.8	6.0	45.9	8.2	31.6			40.4		28.7	26.1	1215.8	
1988	755.9	58.9	56.5	55.2	76.2	37.8	36.5	36.1	25.5	8.2	35.4			43.9		28.0	40.5	1344.6	
1989	654.1	63.7	52.6	59.2	64.9	36.3	37.9	18.1	38.8	7.9	38.2			41.2		24.1	39.9	1232.8	
1990	701.3	74.8	50.7	64.9	63.1	38.7	38.8	18.3	25.2	7.4	36.9			29.4		26.4	39.9	1266.6	
1991	670.4	66.6	55.8	48.1	78.1	38.3	40.1	21.0	34.7	7.3	40.3			30.6		24.4	39.9	1252.1	
1992		97.7	61.0	150.1	65.9	39.3	36.6	21.0	33.6	9.2	42.8			35.1		11.8	39.9	705.4	
1993		99.4	68.1	75.5	65.5	53.0	37.6	23.5	33.6	10.0	44.9			34.3		51.9	26.9	675.2	
1994	742.3	60.4	68.0	77.7	48.5	54.5	36.3	26.8	29.1	7.0	44.7			35.7		30.5	25.7	1352.2	
1995	815.1	62.0	57.4	70.6	51.3	53.3	40.9	24.0	8.5	10.9	11.2			40.8		32.5	24.4	1418.5	
1996		52.7	59.4		51.4		41.9			12.8	9.5			48.6		31.3	24.4	2.6	indef. data
2000	851.9	90.2	59.8	73.7	80.4	54.1	47.4	28.0	35.0	14.8	53.7			50.7		38.0	28.5	3.8	1589.3
2010	966.1	115.5	75.3	86.0	90.3	67.7	58.4	34.5	42.6	16.6	65.5			71.2		66.8	48.3	5.0	1872.0
2020	1080.3	140.8	90.7	95.3	100.2	81.3	69.3	41.1	50.2	18.8	81.7			84.5		58.6	39.3	6.1	2155.0
2030	1194.6	165.1	106.2	110.6	110.2	94.8	80.2	47.6	57.9	21.4	95.7			97.9		68.9	44.7	7.2	2438.3
2040	1308.8	191.4	121.7	122.9	120.1	108.4	91.2	54.1	65.5	24.3	109.6			111.2		79.3	50.1	8.4	2721.9
2050	1423.1	216.7	137.1	135.2	130.0	122.0	102.1	60.7	73.1	27.6	123.5			124.5		89.6	55.5	9.5	3006.0

1. Shaded areas indicate projected future values based upon a linear regression of historic data for a particular entity. Due to lack of data, Buena Vista's growth is based on the average projected increase in water consumption for the rest of the participating entity. 2. DATA DESIGNATION: Regular font indicates data from TWDB, italics indicates data obtained from other sources, and bold/shaded indicates future projections based on historic data.

\*\* Two regressions were performed for this entity, the first using all of the historical data and the second with exceptionally high or low values deleted. The second (more conservative) estimate is shown herein.

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\*\*\*\* Please note that the Warr WSC was sold around June 1997. The name has been changed to On-Site Waterworks. The name Warr WSC has been retained herein for purposes of identification.

Please note that some of the historical data is incomplete, especially from the earlier years. Areas of missing data are left blank or filled with "N/A" in the table at right. The accuracy of the total water consumption in this column will be affected accordingly.

COUNTY WIDE TOTALS: WATER CONSUMPTION

CONSUMPTION MEASURED IN ACRE-FOOT

YEAR	CITIES			EASTERN			WESTERN			CENTRAL			COMBINED							
	CENTER**	HUXLEY	JOAQUIN	TENAHA*	TIMPSON**	FIVE WAY	MC-CLELLAND	PAXTON**	SHELBYVILLE	BUENA VISTA	HUBER	SANDHILLS	TENNESSEE**	TIMPSON RURAL	CHOICE	EAST LAMAR	FLATFORK*	WARR**	TOTAL****	
1955			15	552	1232														1799	
1956			34	784	1344														2162	
1957			34	838	1344														2216	
1958			86	296	1400														1782	
1959			86	252															338	
1960			92	831	1381														2304	
1961			77	721	1513			307											2618	
1962				1029	1680														2709	
1963				1074	1657														2731	
1964				731	1583														2314	
1965			77	2707	1798			166											4748	
1966			201	2157	683		116	126	223		07			15		85	64		3677	
1967			223	3014	717		220	302	256		43	505		234		148	308		5970	
1968				3405	653		336	305	297		46	168		246		134	560		6150	
1969			315	3210	699		415	430	351		47	252		377		177	442		6872	
1970			325	2719	709		401	448	369		72	293		374		198	397	11	6597	
1971	1,418.0		331	1289	702		505	529	414		68	416	109	524		251	424	22	20000	
1972	1,555.0		456	1639	681		631	557	429		71	505	279	571		284	467	22	22611	
1973	1,551.0		672	1596	744		633	589	435		75	489	89	830		320	531	22	21389	
1974	1,623.0		457	1593	1596		703	650	470		103	496	102	1005		351	513	22	24830	
1975	1,582.1		476	1582	1920		750	668	16		134	515	141	1048		346	583	17	23108	
1976	1,214.0		532	1340	1869		715	675	494		187	616	202	867		364	402	17	21510	
1977	1,884.7	75.3	539	1846	1846		745	705	522		207	683	246	1009		490	437	30	28098	
1978	2,188.7	100.9	537	1846	1846		785	789	563		211	833	234	1033		459	479	39	35262	
1979	2,407.3	94.8	495	1166	2632		917	845	607		224	850	239	1073		464	523	52	34524	
1980	2,258.2	109.7	523	1374	2533		788	860	571		224	911	0.0	1017		556	354	43	33458	
1981	2,089.7	119.4	543	1695	2712		823	862	607		238	873	261	1063		685	339	46	36118	
1982	2,301.4	141.9	566	1732	2712		809	832	584		249	785	267	1023		751	267	44	32574	
1983	1,888.7	150.3	542	1695	2993		890	915	643		274	989	293	1125		726	246	48	43826	
1984	2,123.4	163.1	618	2072	2922		873	945	644		277	1010	279	1193		760	246	101	37417	
1985	2,076.2	180.9	810	1289	3028		803	875	582		249	975	251	1144		667	744	95	13980	
1986	2,150.4	170.5	835	1289	2767		1072	1098	184		253	970	244	1239		882	801	96	37310	
1987	2,116.1	179.0	970	1289	2649		1160	1120	784		253	1086	263	1347		860	1243	116	41263	
1988	2,319.7	180.9	1735	1695	2340		1114	1163	1191		243	1171	250	1263		740	1224	101	37833	
1989	2,007.2	195.4	1614	1818	1893		1189	1192	563		226	1131	243	1221		811	1224	91	38869	
1990	2,152.3	229.5	1555	1992	1937		1176	1232	644		225	1238	242	1407		938	1225	83	38426	
1991	2,057.4	204.3	1712	1477	2397		1206	1122	643		281	1315	269	1541		363	1225	86	21647	
1992	2,988.4	298.8	1872	4806	2023		1627	1153	720		308	1379	205	1341		1394	825	82	20721	
1993	2,278.0	185.4	2089	2257	2009		1673	1174	821		214	298	1372	1473		936	789	79	41496	
1994	2,501.4	190.2	1763	2167	1574		1635	1255	738		335	343	1598	1639		959	749	89	43531	
1995	2,501.4	190.2	1763	2167	1574		1635	1255	738		394	293	1546	1492		997	749	89	43531	
1996	2,614.3	276.7	1835	2262	2466		1661	1455	858		448	377	1647	1775		1165	876	118	48774	
2000	2,964.9	354.4	2309	2640	2771		2078	1791	1059		509	475	2077	2185		2050	1482	152	57450	
2010	3,315.5	432.0	2784	3017	3076		2494	2126	1260		578	574	2506	2595		2545	1799	1707	187	66134
2030	3,666.0	509.6	3259	3395	3381		2911	2462	1461		657	673	2935	3004		2116	4373	222	74828	
2040	4,016.6	587.3	3734	3773	3686		3127	2797	1662		746	772	3365	3474		2430	1539	256	83533	
2050	4,367.2	664.9	4208	4150	3991		3744	3133	1862		848	871	3794	3823		2750	1705	291	92249	

1 Shaded areas indicate projected future values based upon a linear regression of historic data for a particular entity. Due to lack of data, Buena Vista's growth is based on the average projected increase in water consumption for the rest of the participating entity. DATA DESIGNATION Regular font indicates data from TWDB, italics indicates data obtained from other sources, and bold/italicized indicates future projections based on historic data.

\*\* Two regressions were performed for this entity, the first using all of the historical data and the second with exceptionally high or low values deleted. The second (more conservative) estimate is shown herein.

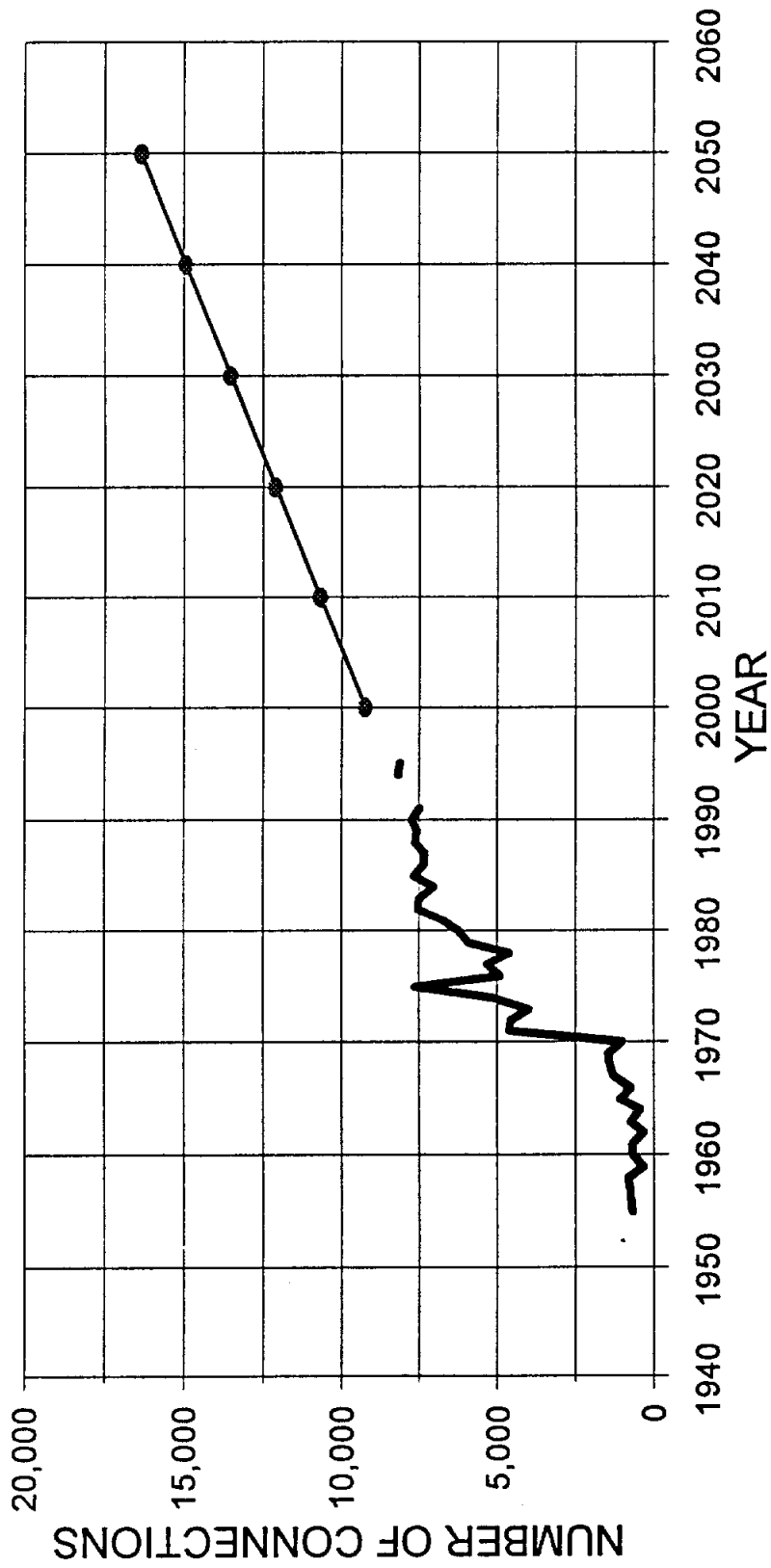
\*\*\* Regressions for these entities were addressed in some detail in the reply to the TWDB comments to the draft copy of the study. Please note that the values in this table are based on regressions whose base data have been updated since that time.

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\*\*\*\*\* Please note that some of the historical data is incomplete, especially from the earlier years. Areas of missing data are left blank or filled with "N/A" in the table at right. The accuracy of the total water consumption in this column will be affected accordingly!

# TOTAL CONNECTIONS - SHELBY COUNTY

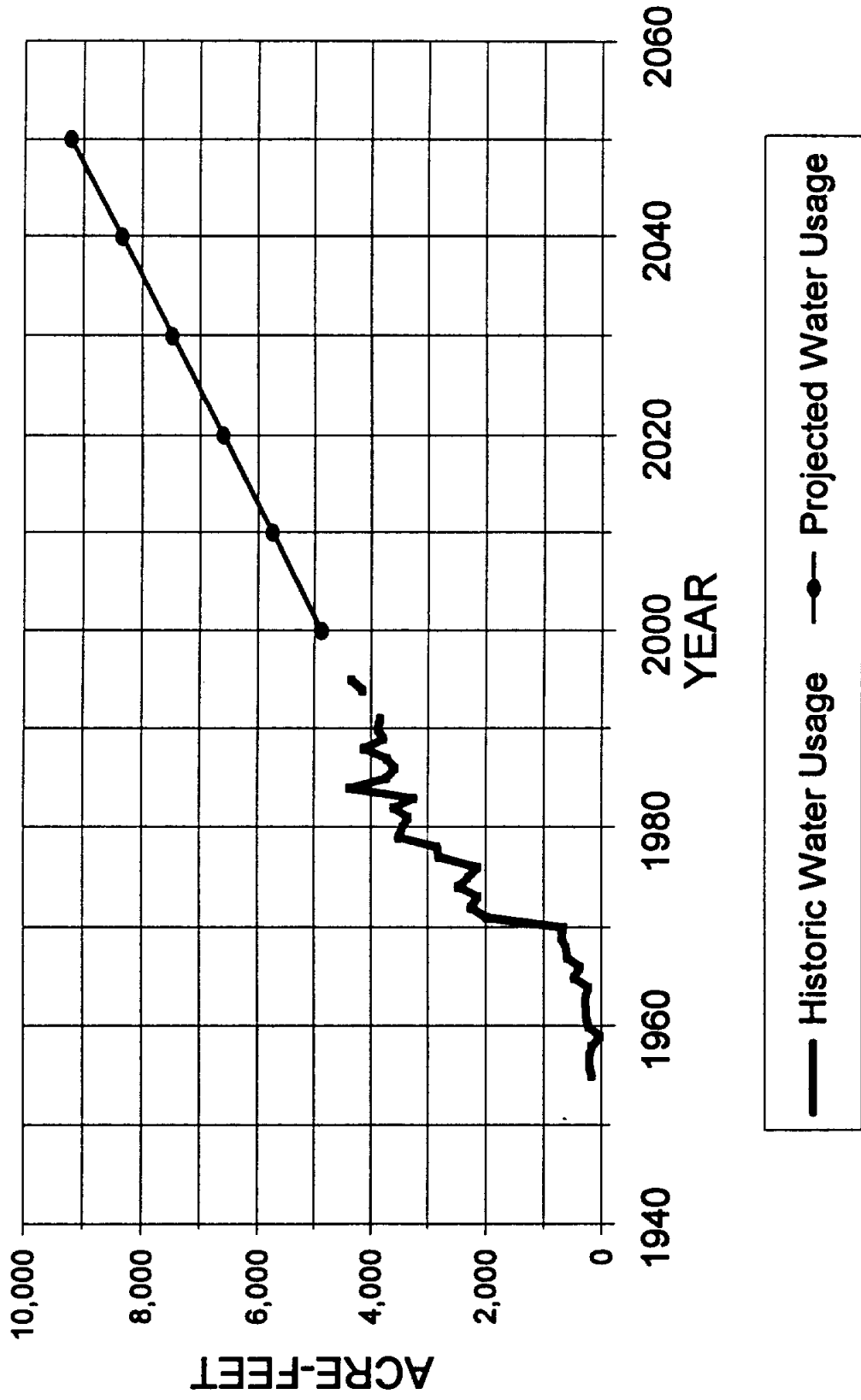
(Some historic data is incomplete)



— Historic Connections    ●— Projected Connections

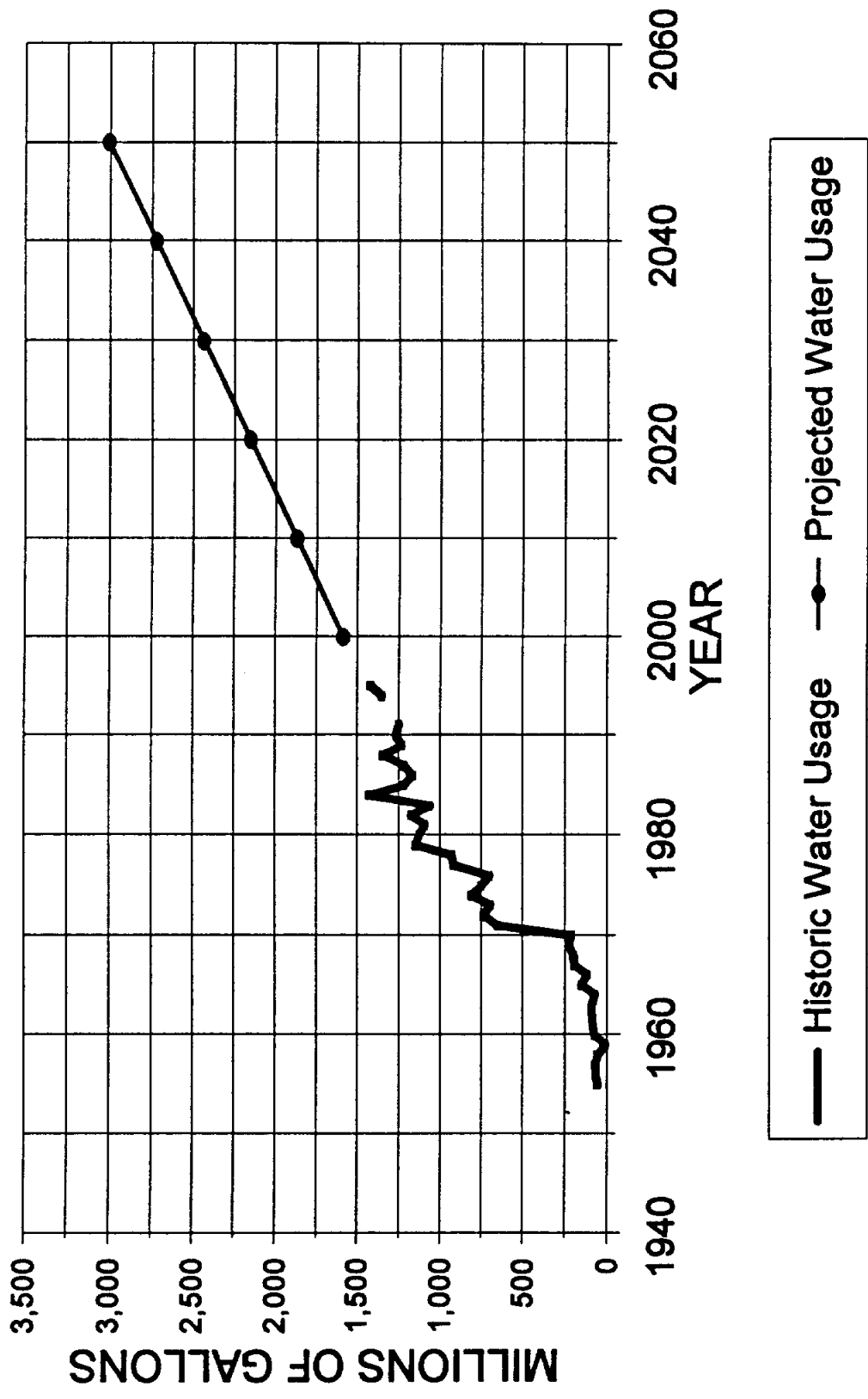
# SHELBY COUNTY WATER CONSUMPTION

(Some historical data is incomplete)



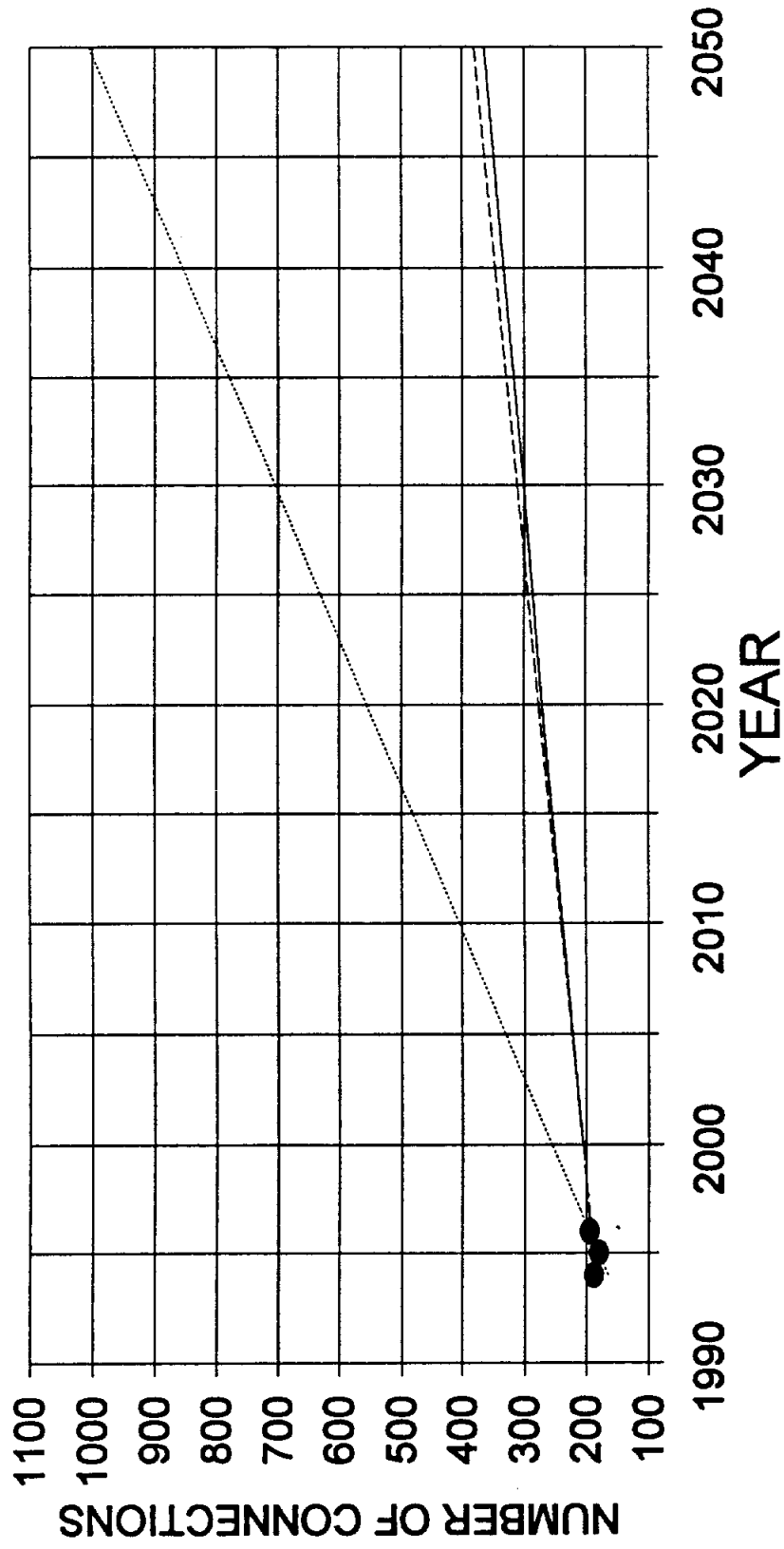
# SHELBY COUNTY WATER CONSUMPTION

(Some historical data is incomplete)



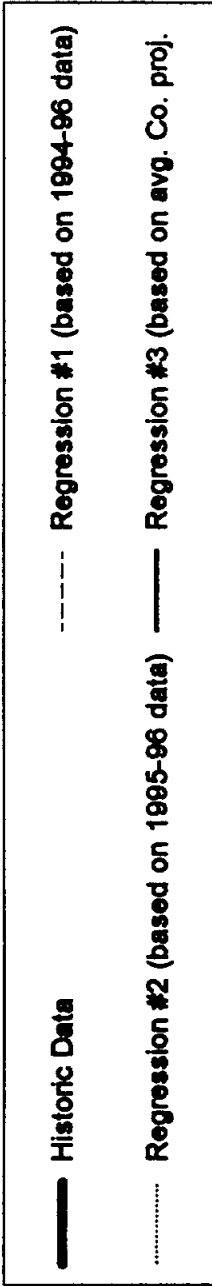
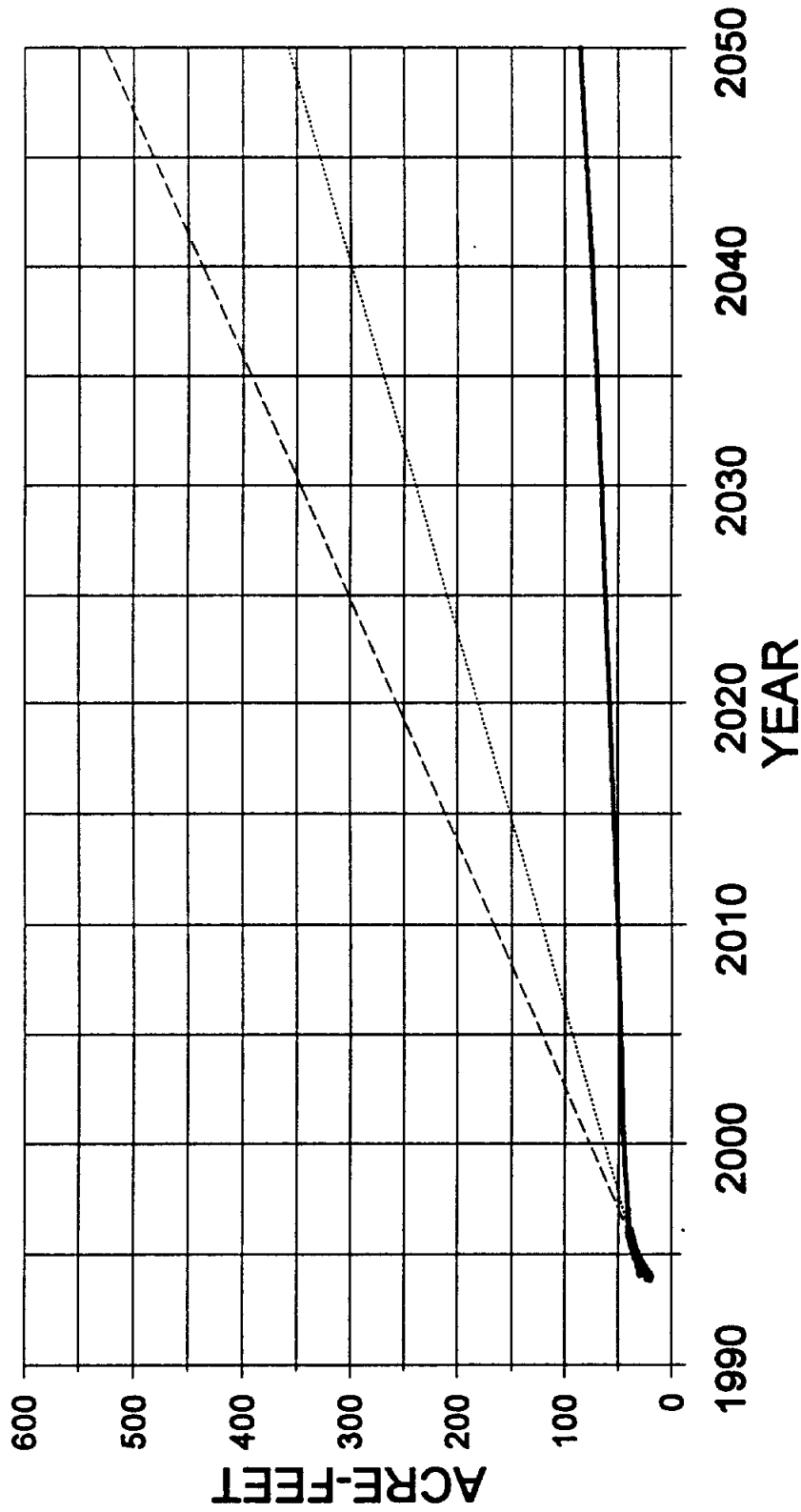


# BUENA VISTA WSC NUMBER OF CONNECTIONS

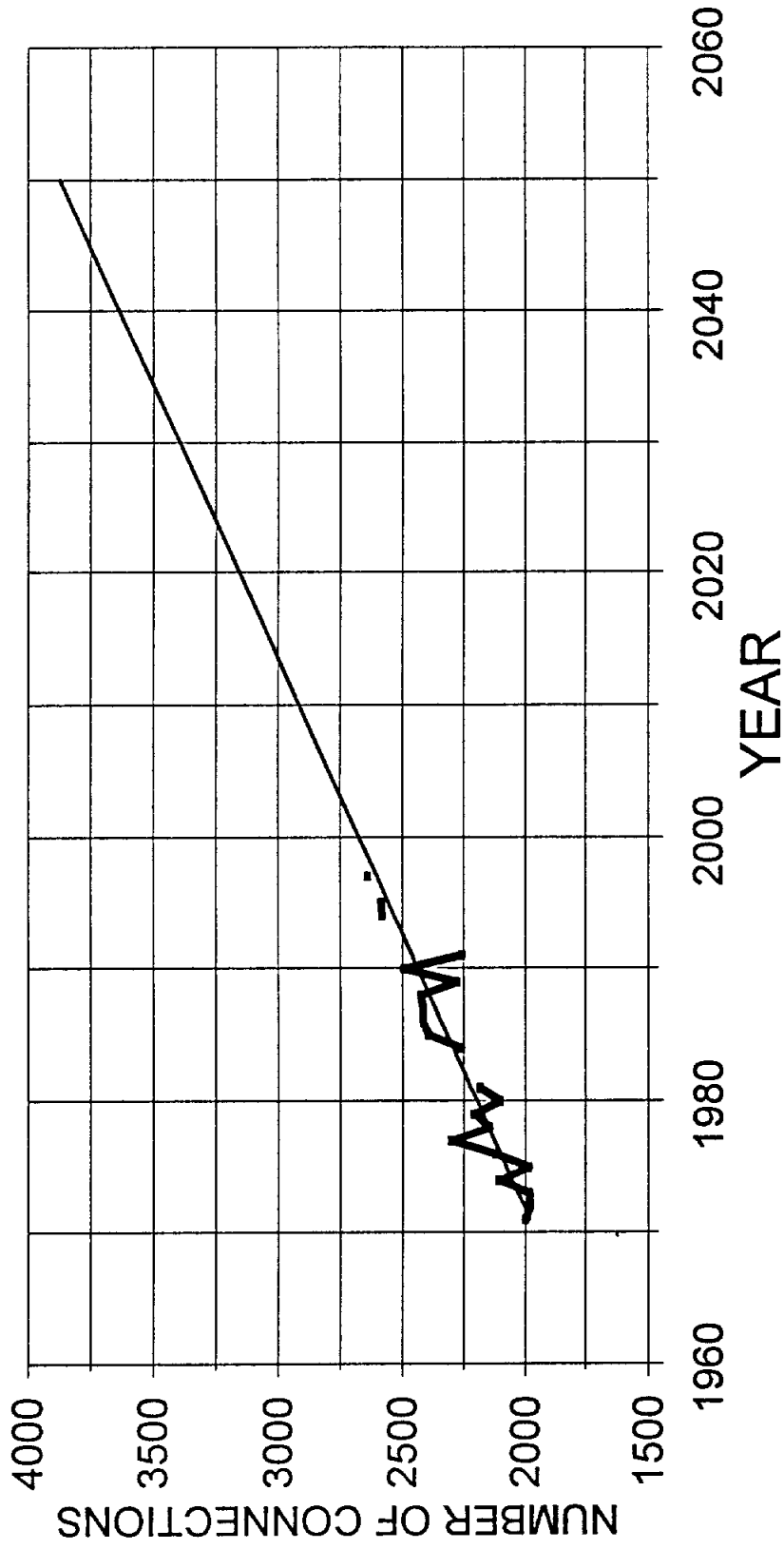


- Historic Connections
- ..... Regression Analysis (1994-96 Data)
- Regression Analysis (1995-96 Data)
- Growth based on Avg. Co. Proj

# BUENA VISTA WSC WATER CONSUMPTION

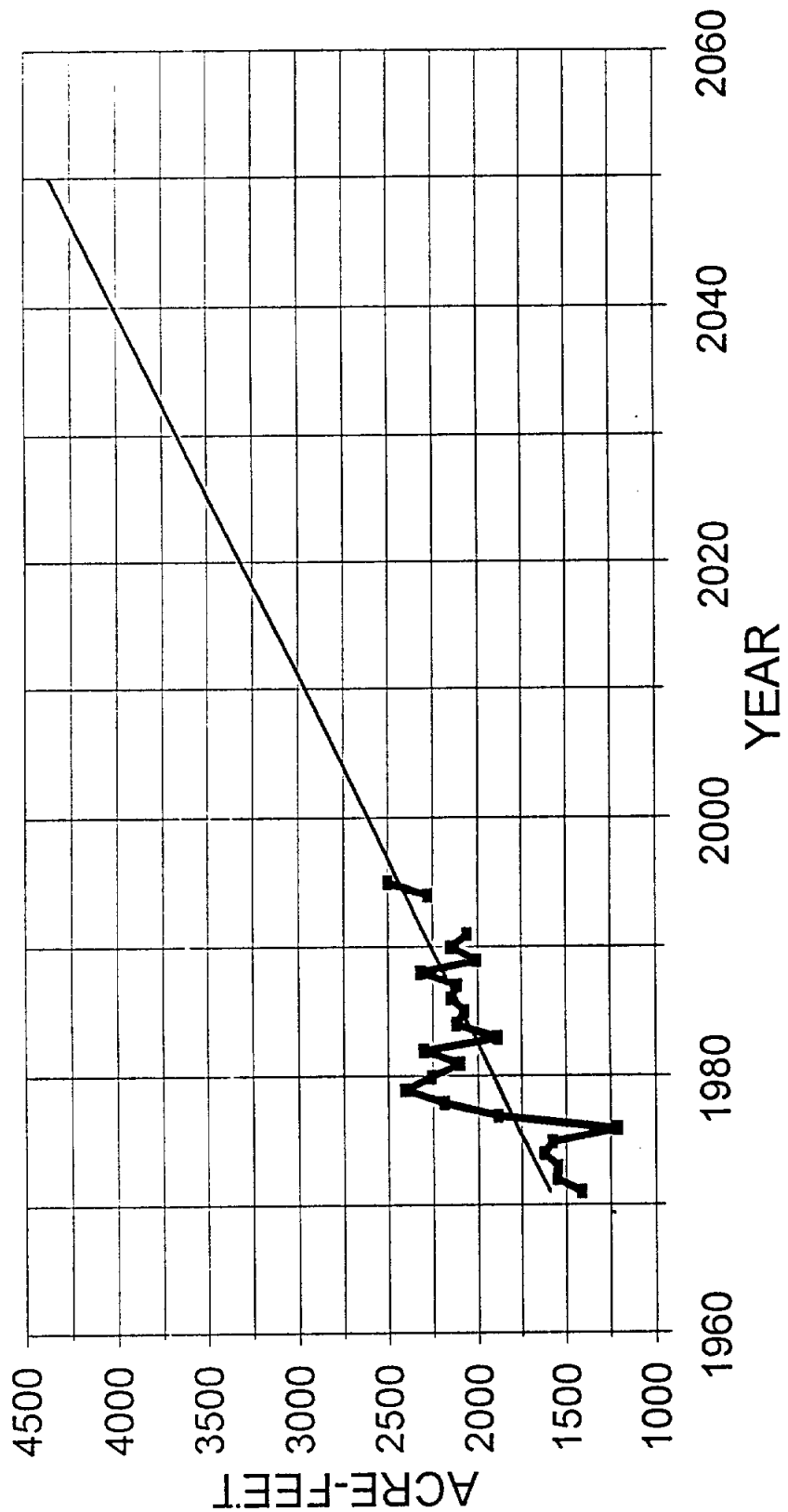


# CITY OF CENTER NUMBER OF CONNECTIONS



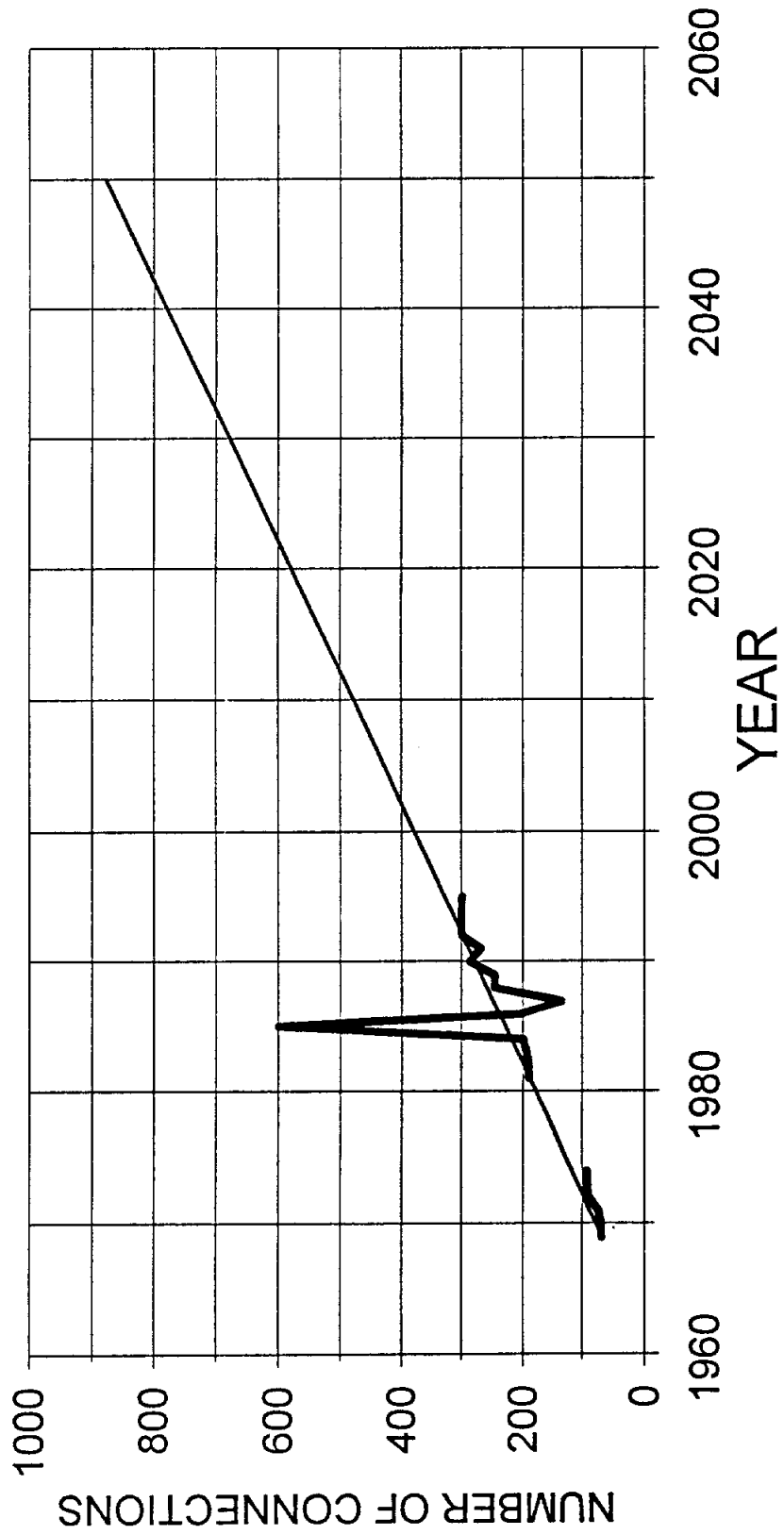
— Historic Connections    — Projected Connections

# CITY OF CENTER WATER CONSUMPTION



— Historic Water Usage    — Projected Water Usage

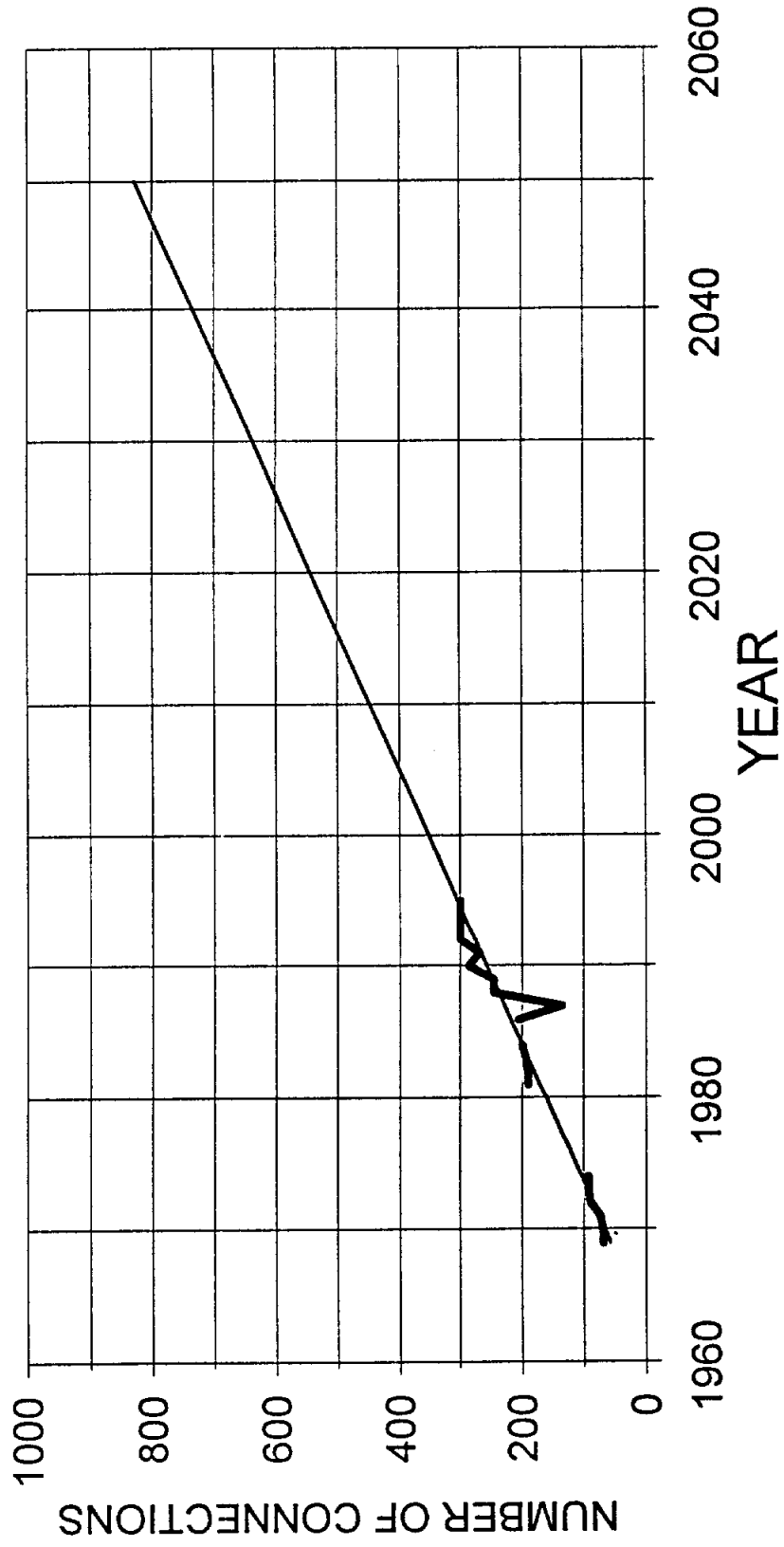
# CHOICE WSC (Regression #1) NUMBER OF CONNECTIONS



— Historic Connections    — Projected Connections

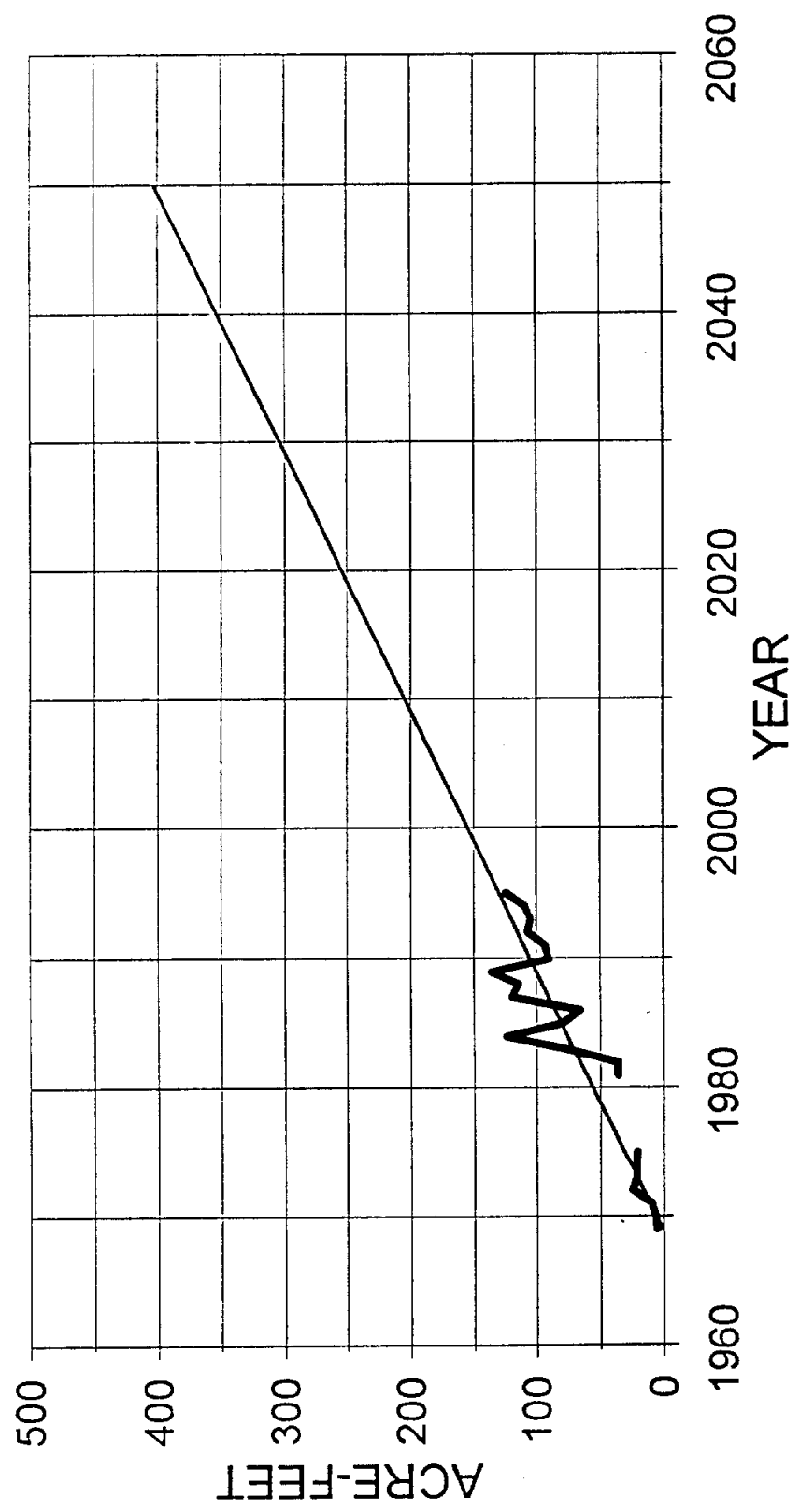
# CHOICE WSC (Regression #2)

## NUMBER OF CONNECTIONS



— Historic Connections — Projected Connections

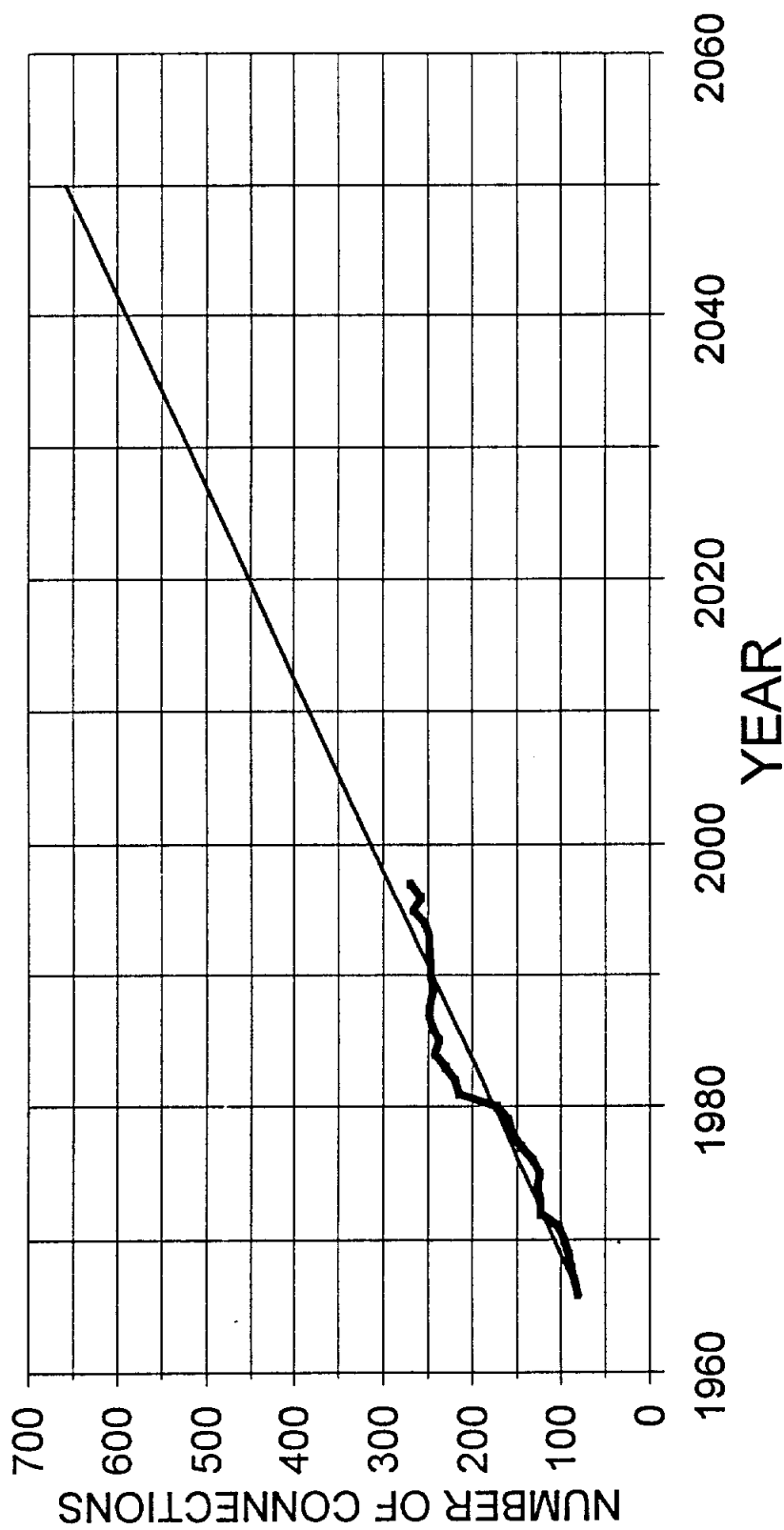
# CHOICE WSC WATER CONSUMPTION



— Historic Water Usage — Projected Water Usage

# EAST LAMAR WSC

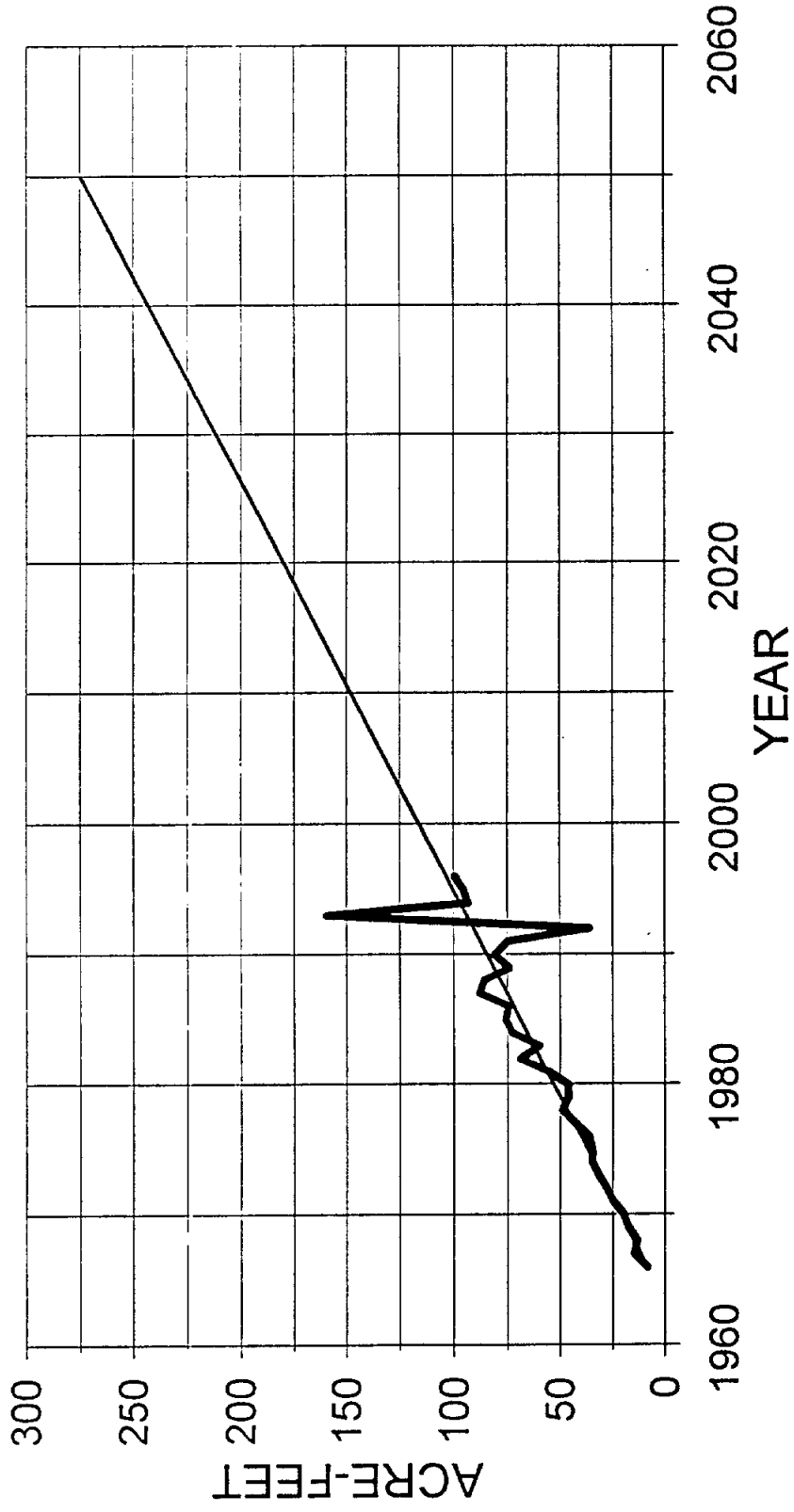
## NUMBER OF CONNECTIONS



— Historic Connections    — Projected Connections

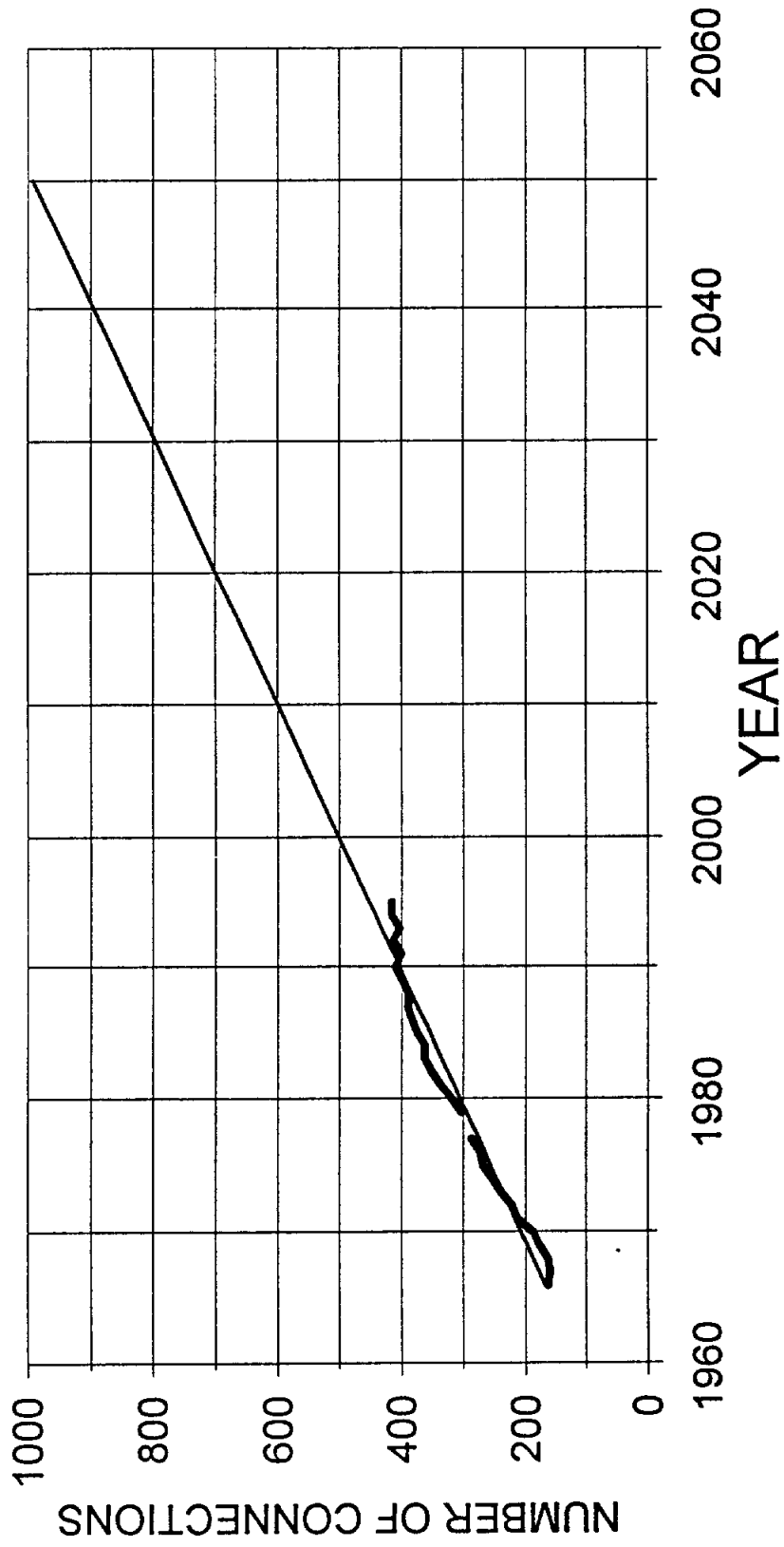


# EAST LAMAR WSC WATER CONSUMPTION



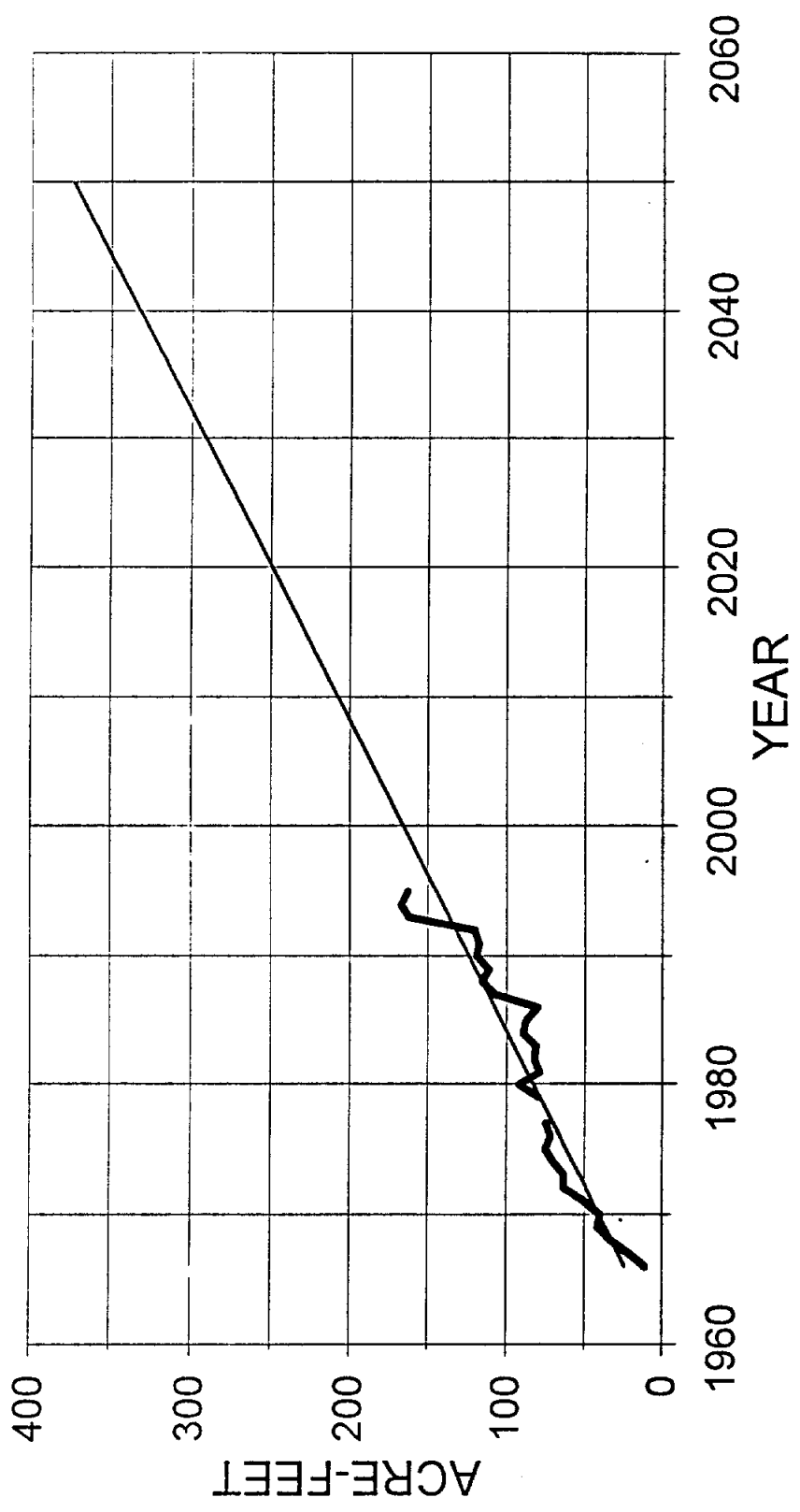
— Historic Water Usage    — Projected Water Usage

# FIVE WAY WSC NUMBER OF CONNECTIONS



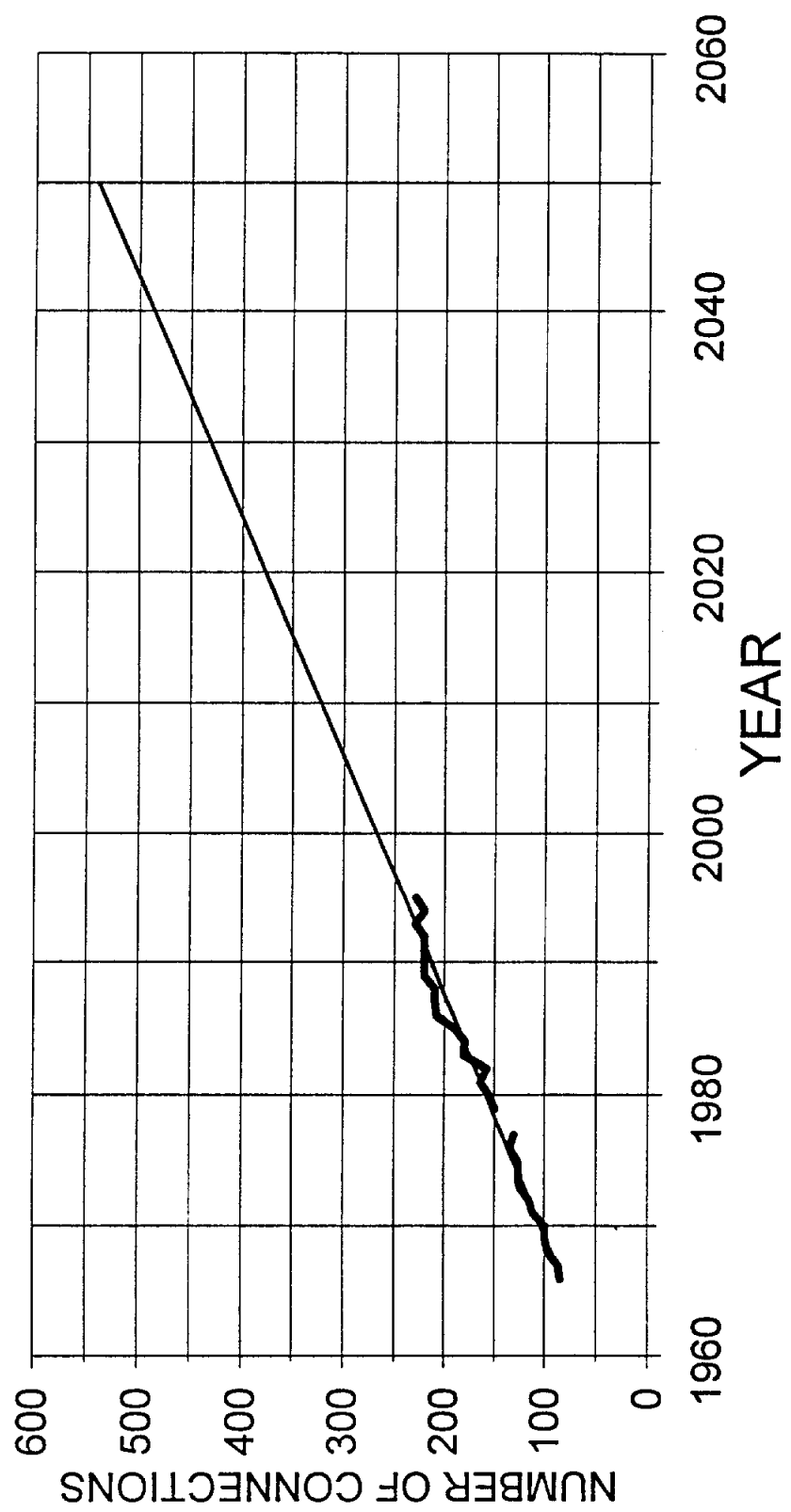
— Historic Connections    - - - Projected Connections

# FIVE WAY WSC WATER CONSUMPTION



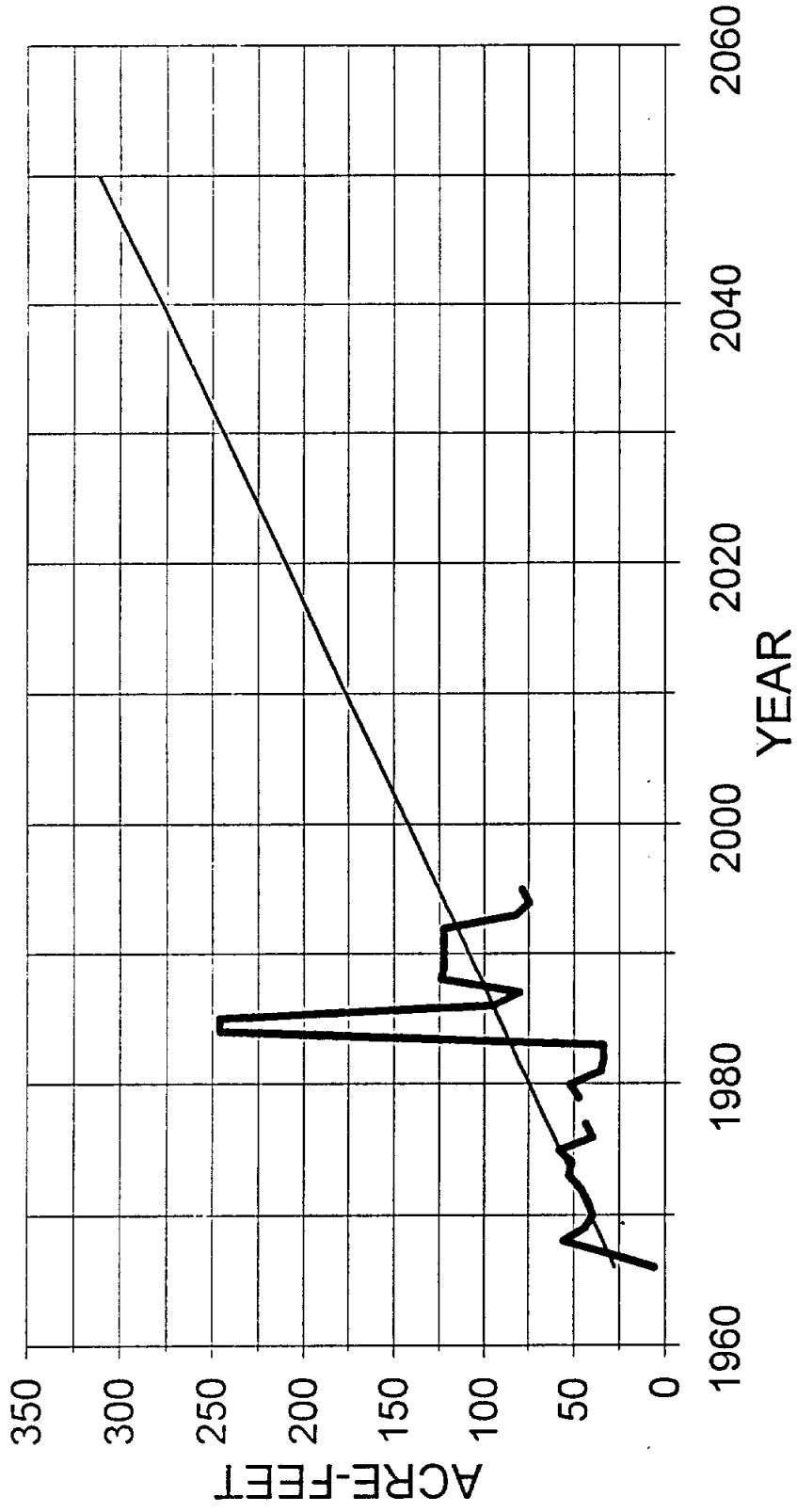
— Historic Water Usage — Projected Water Usage

# FLAT FORK WSC NUMBER OF CONNECTIONS



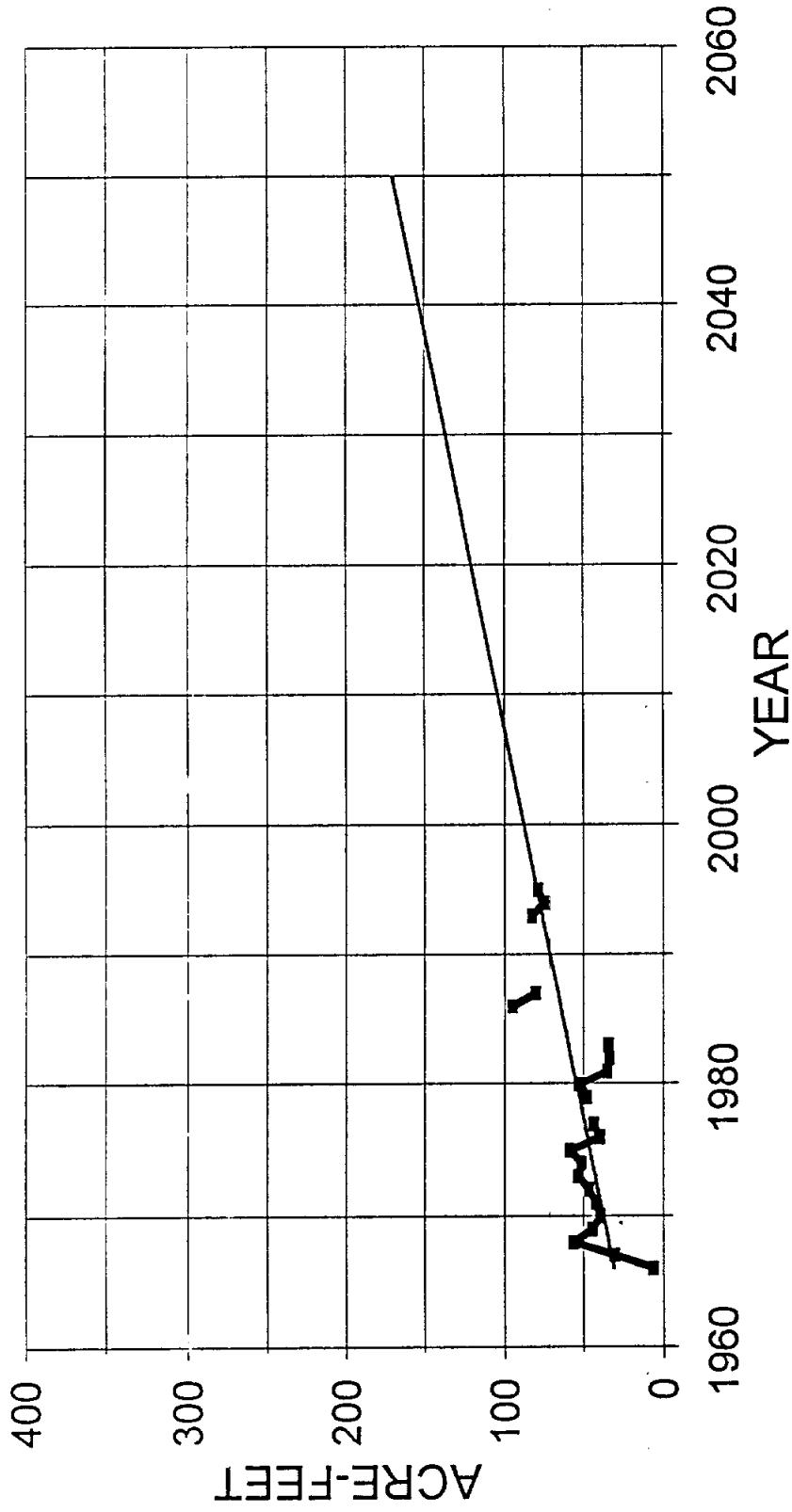
— Historic Connections    — Projected Connections

# FLAT FORK WSC (Regression #1) WATER CONSUMPTION



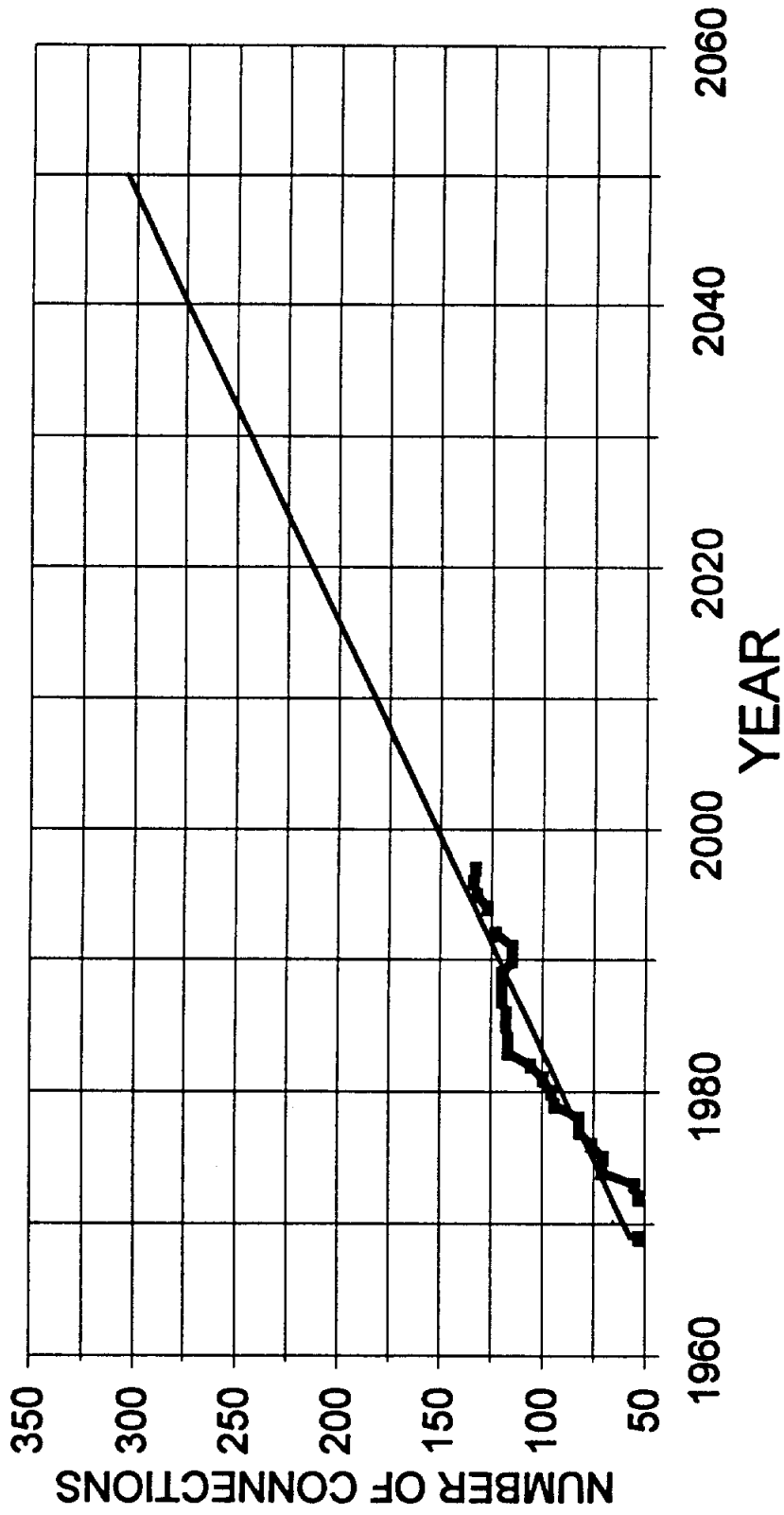
— Historic Water Usage — Projected Water Usage

# FLAT FORK WSC (Regression #2) WATER CONSUMPTION



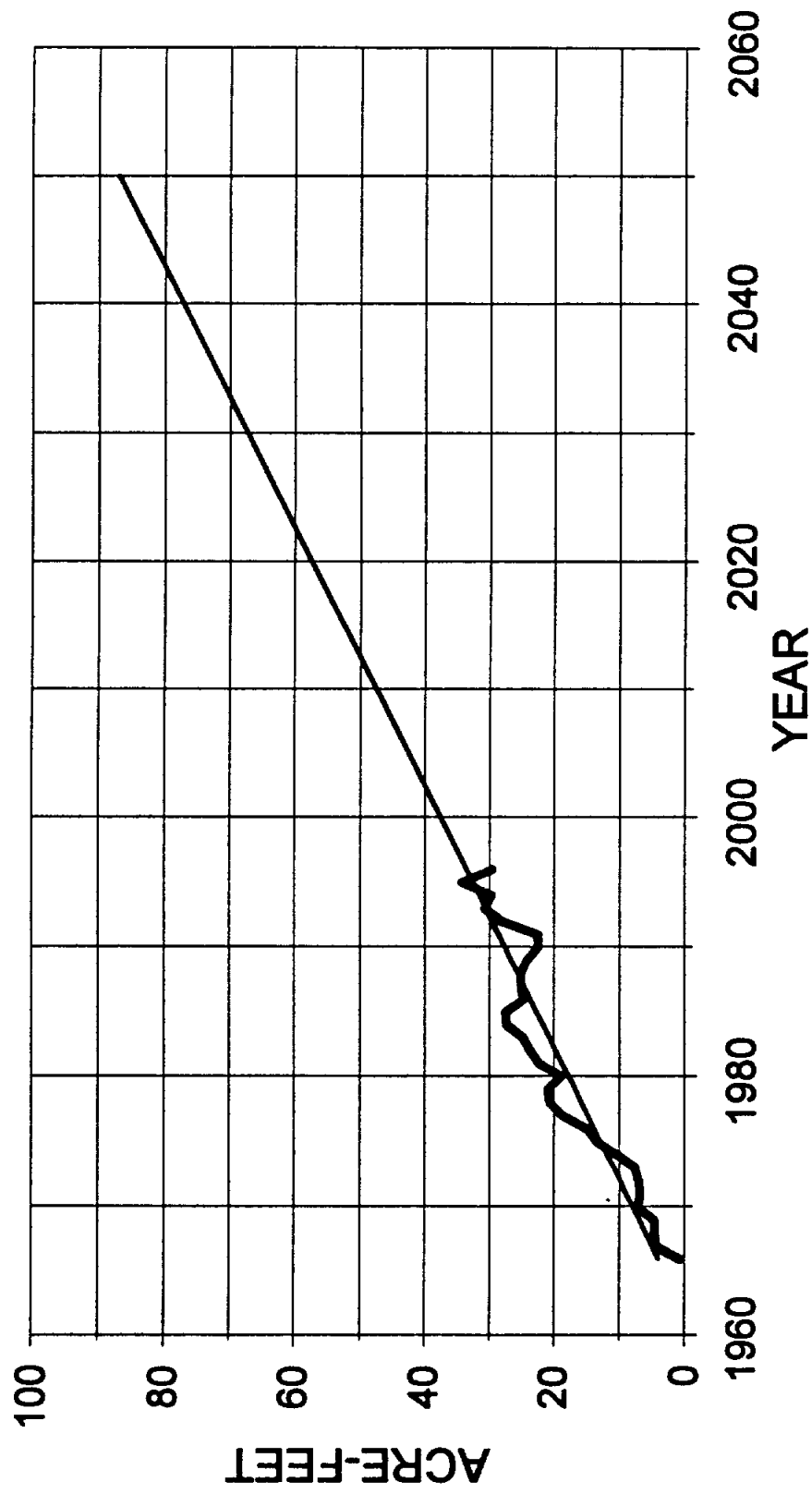
— Historic Water Usage — Projected Water Usage

# HUBER WSC NUMBER OF CONNECTIONS



— Historic Connections — Projected Connections

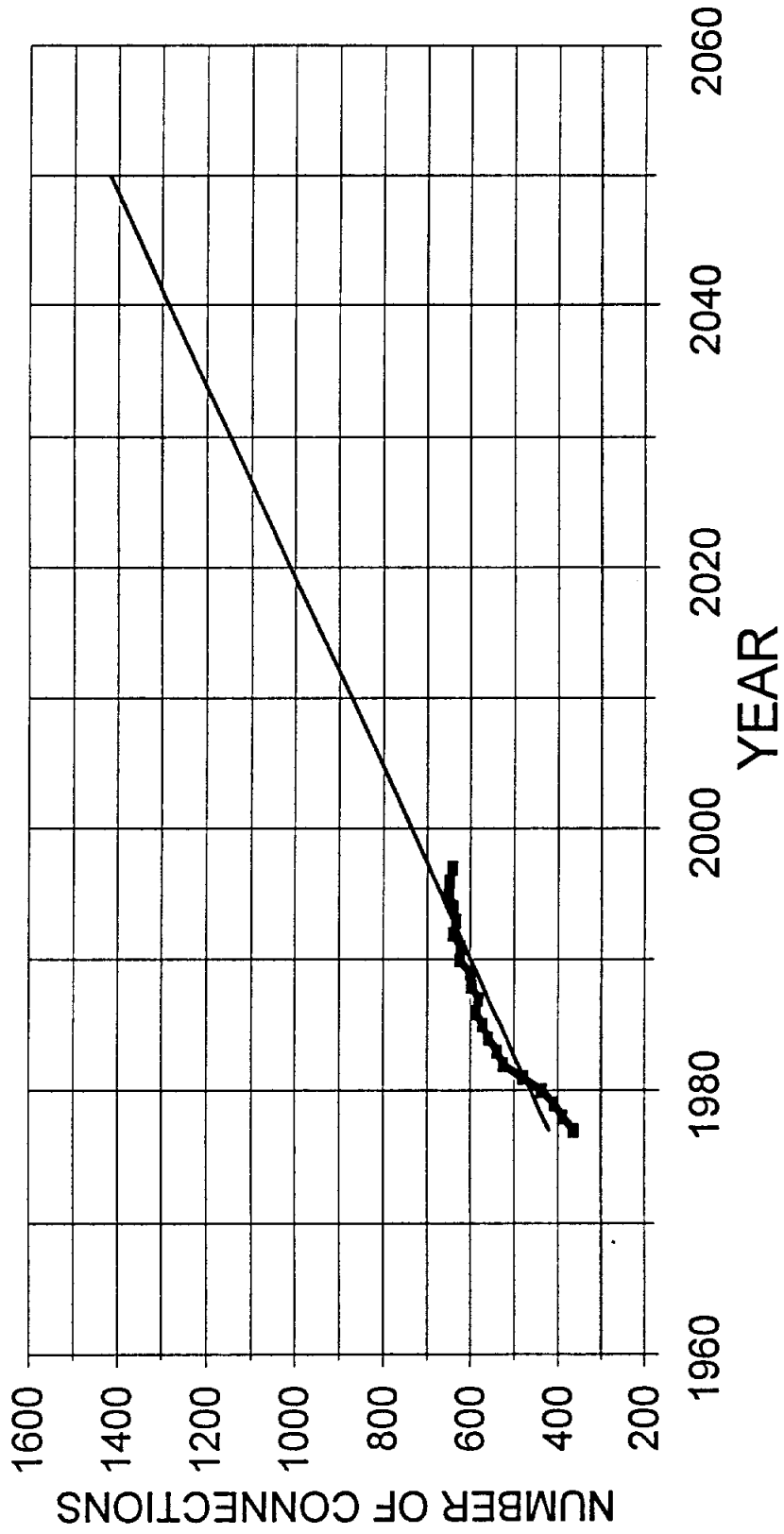
# HUBER WSC WATER CONSUMPTION



— Historic Water Usage    — Projected Water Usage

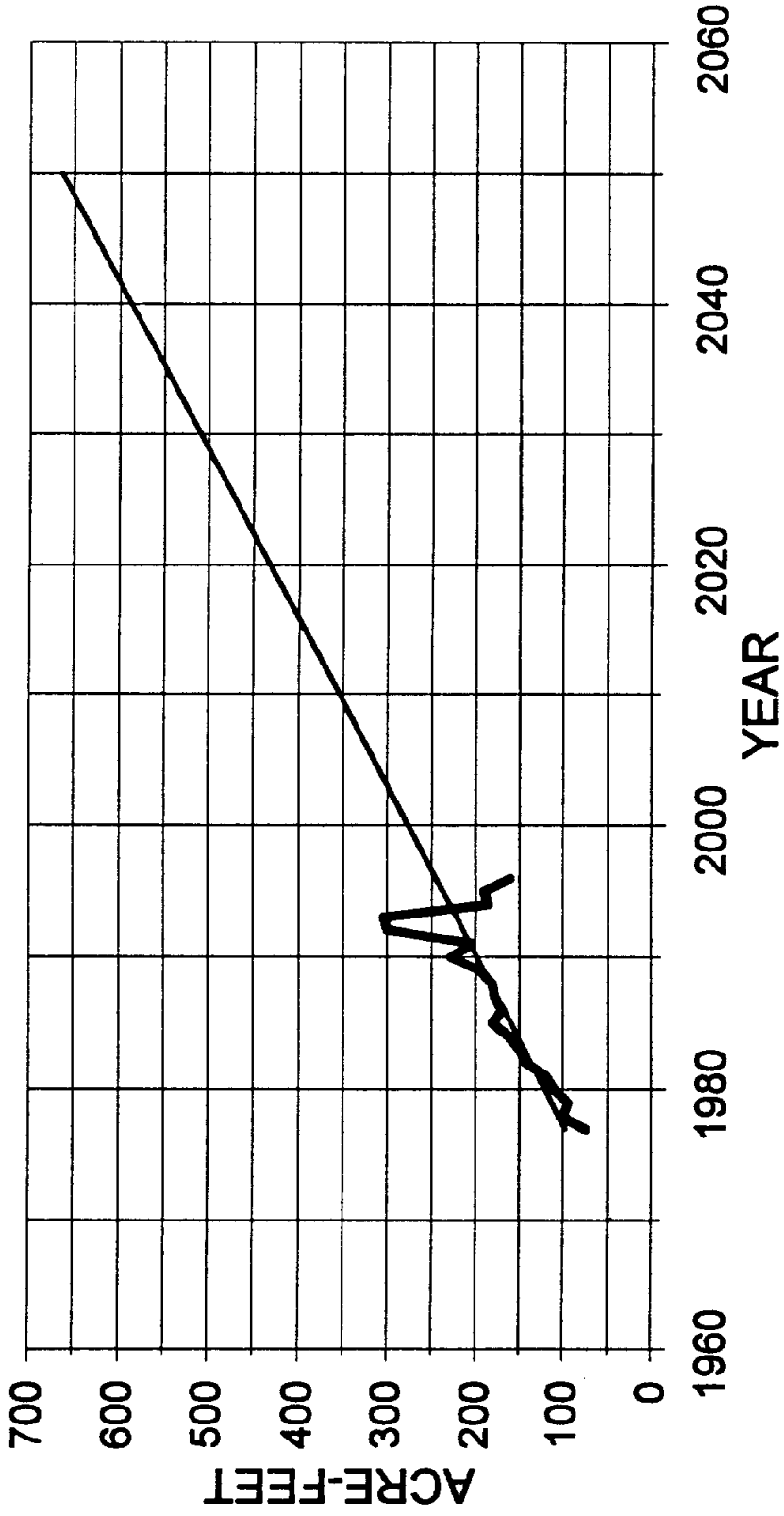


# CITY OF HUXLEY NUMBER OF CONNECTIONS



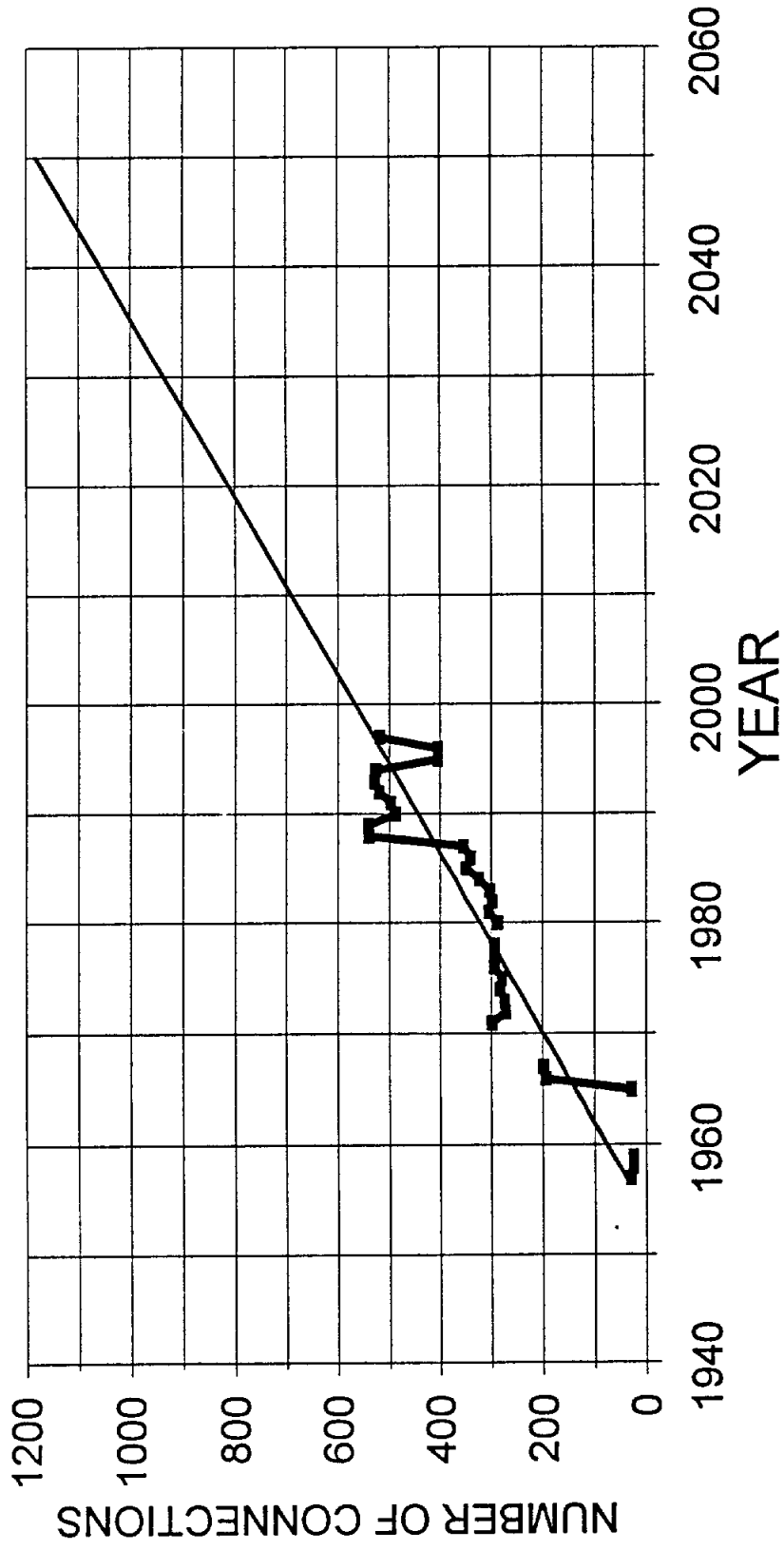
— Historic Connections    — Projected Connections

# CITY OF HUXLEY WATER CONSUMPTION



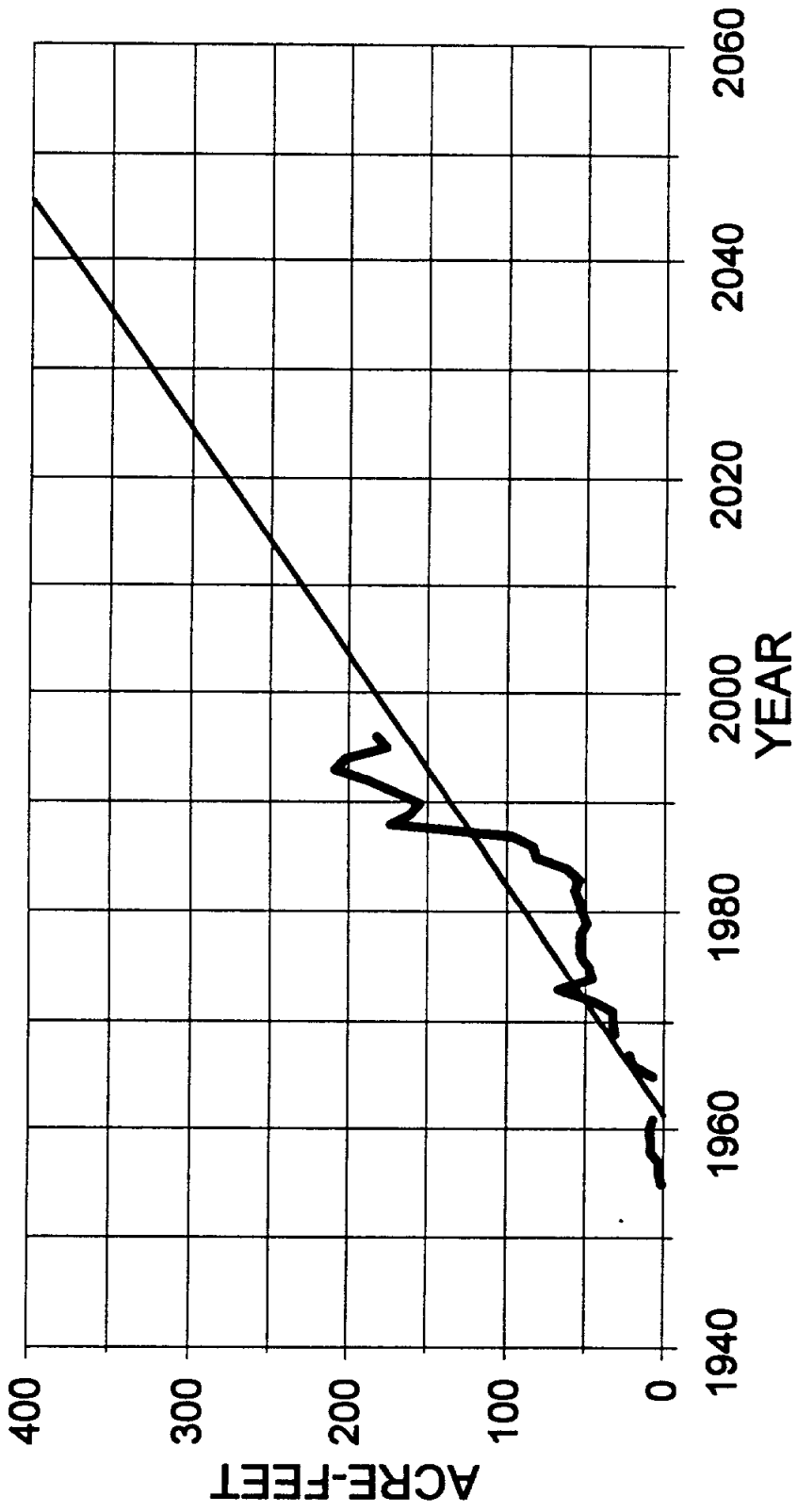
— Historic Water Usage    — Projected Water Usage

# CITY OF JOAQUIN NUMBER OF CONNECTIONS



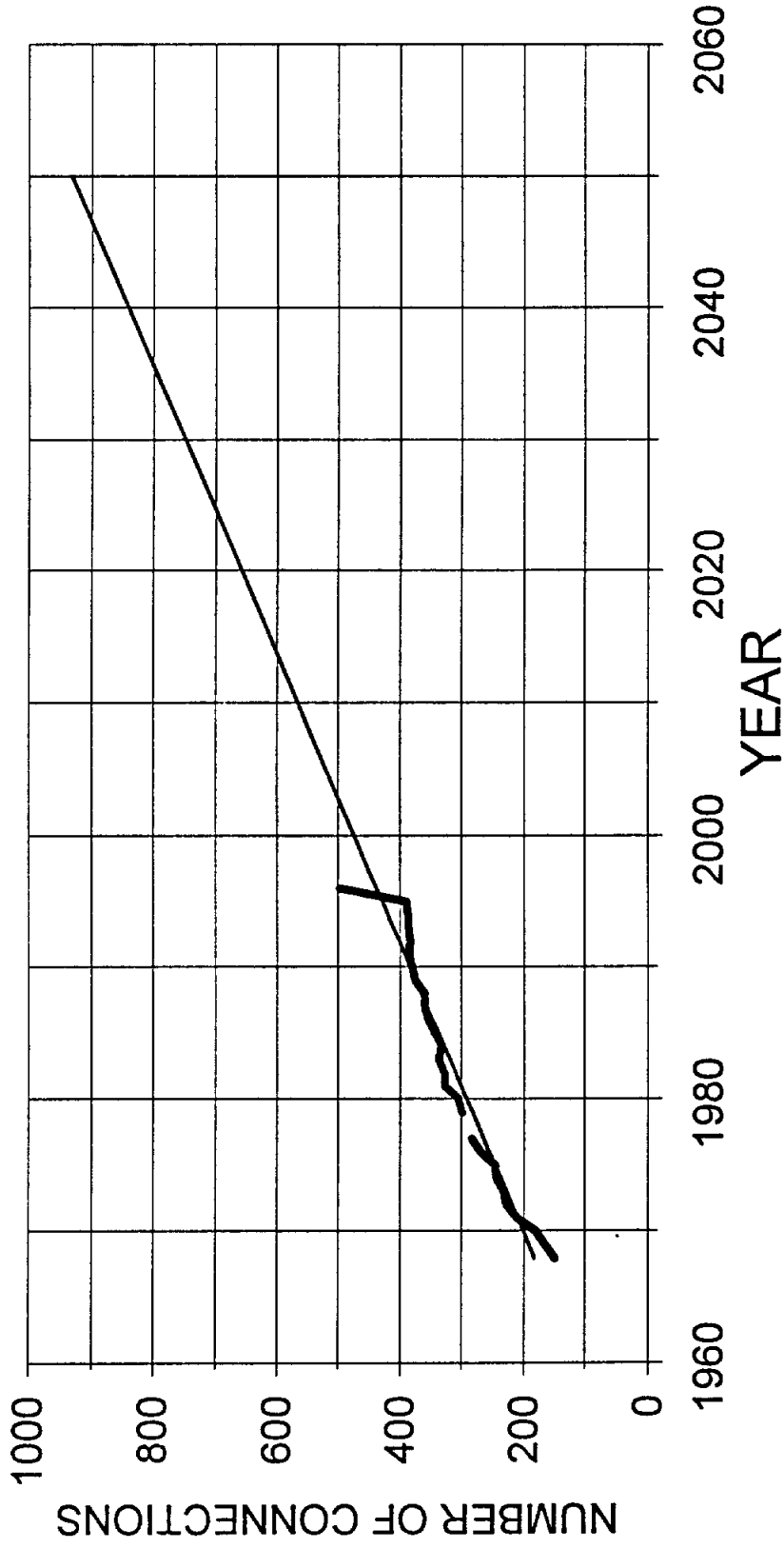
— Historic Connections    — Projected Connections

# CITY OF JOAQUIN WATER CONSUMPTION



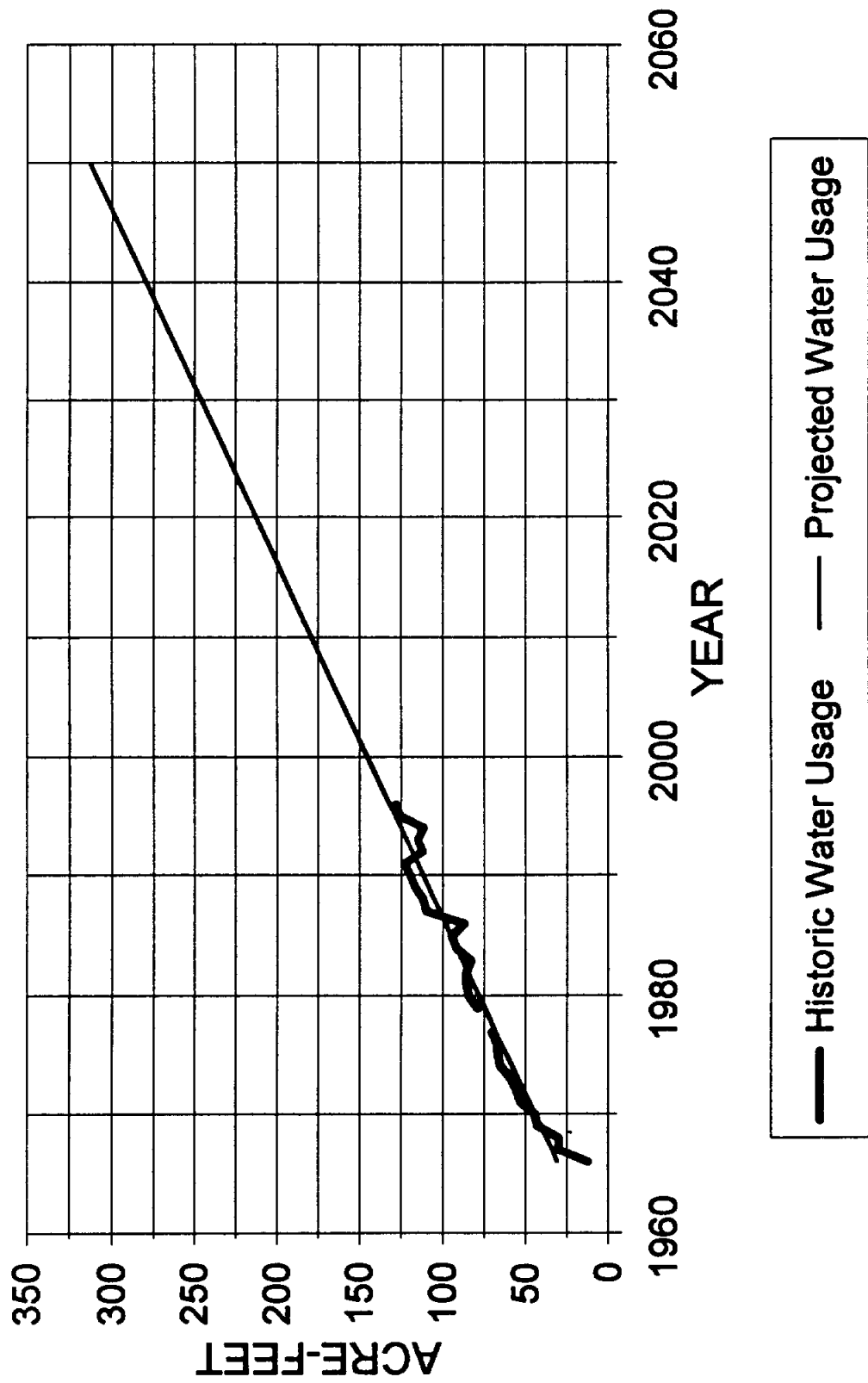
— Historic Water Usage    — Projected Water Usage

# McCLELLAND WSC NUMBER OF CONNECTIONS

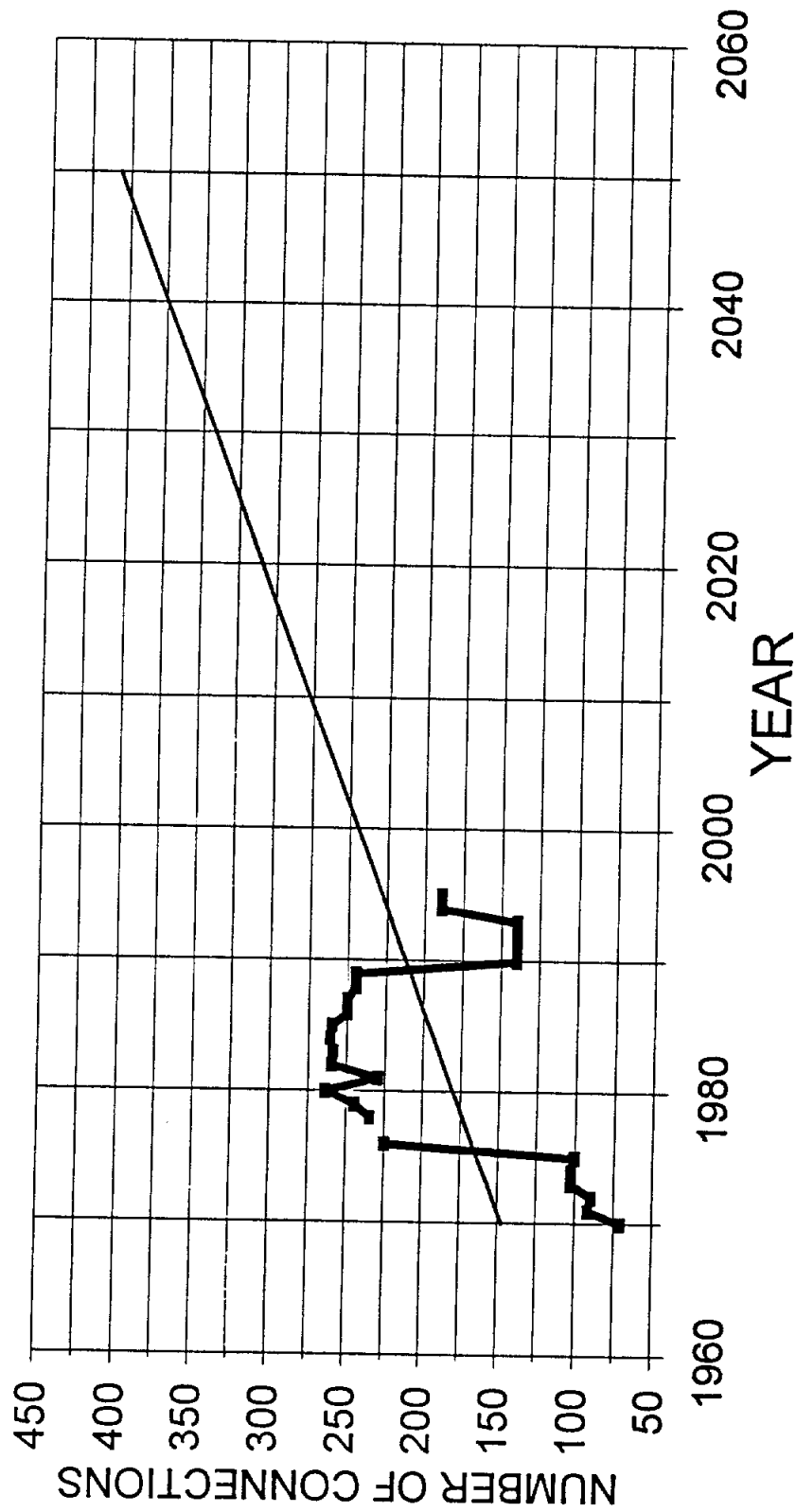


— Historic Connections    — Projected Connections

# McCLELLAND WSC WATER CONSUMPTION

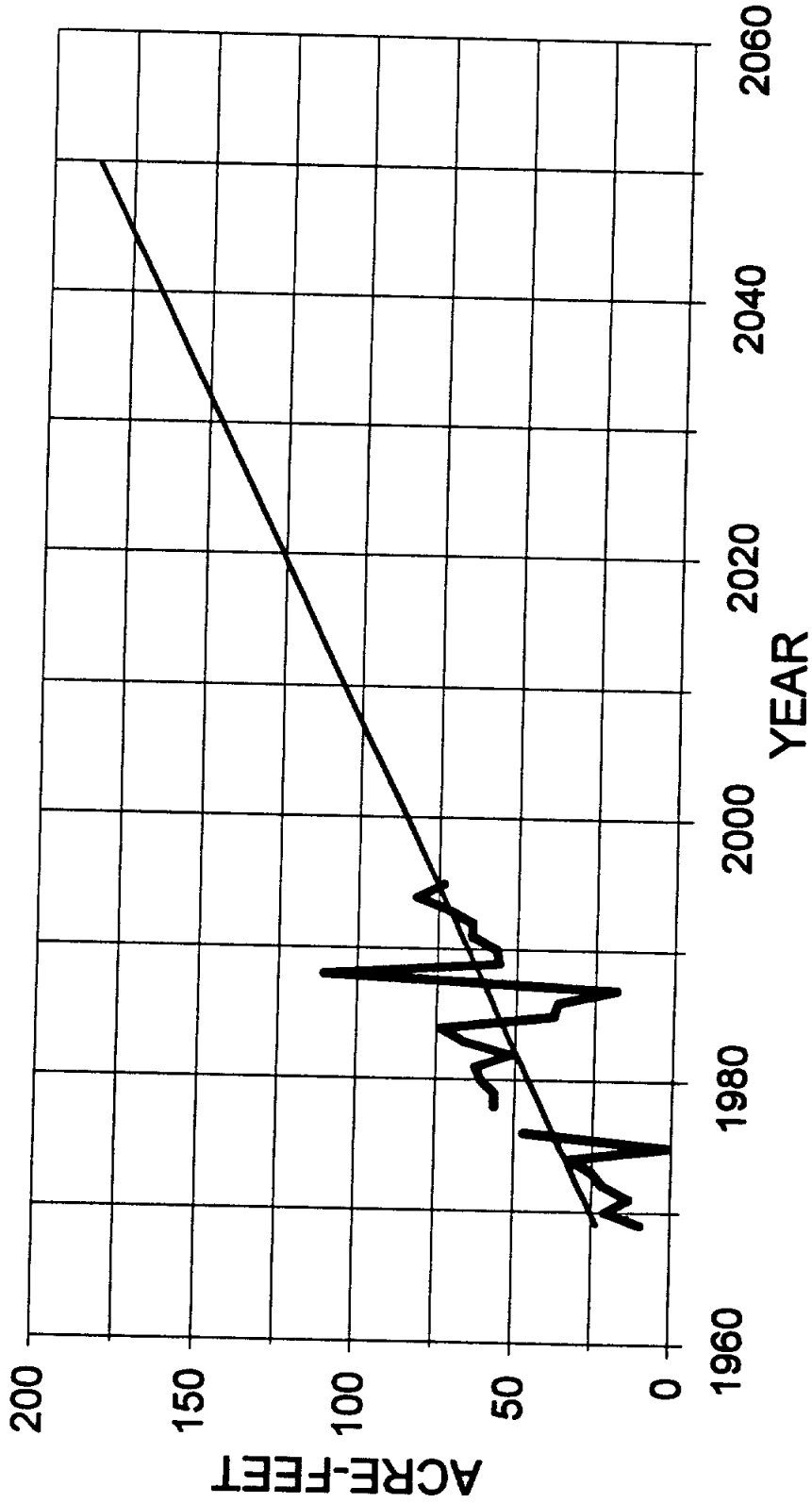


# PAXTON WSC NUMBER OF CONNECTIONS



— Historic Connections — Projected Connections

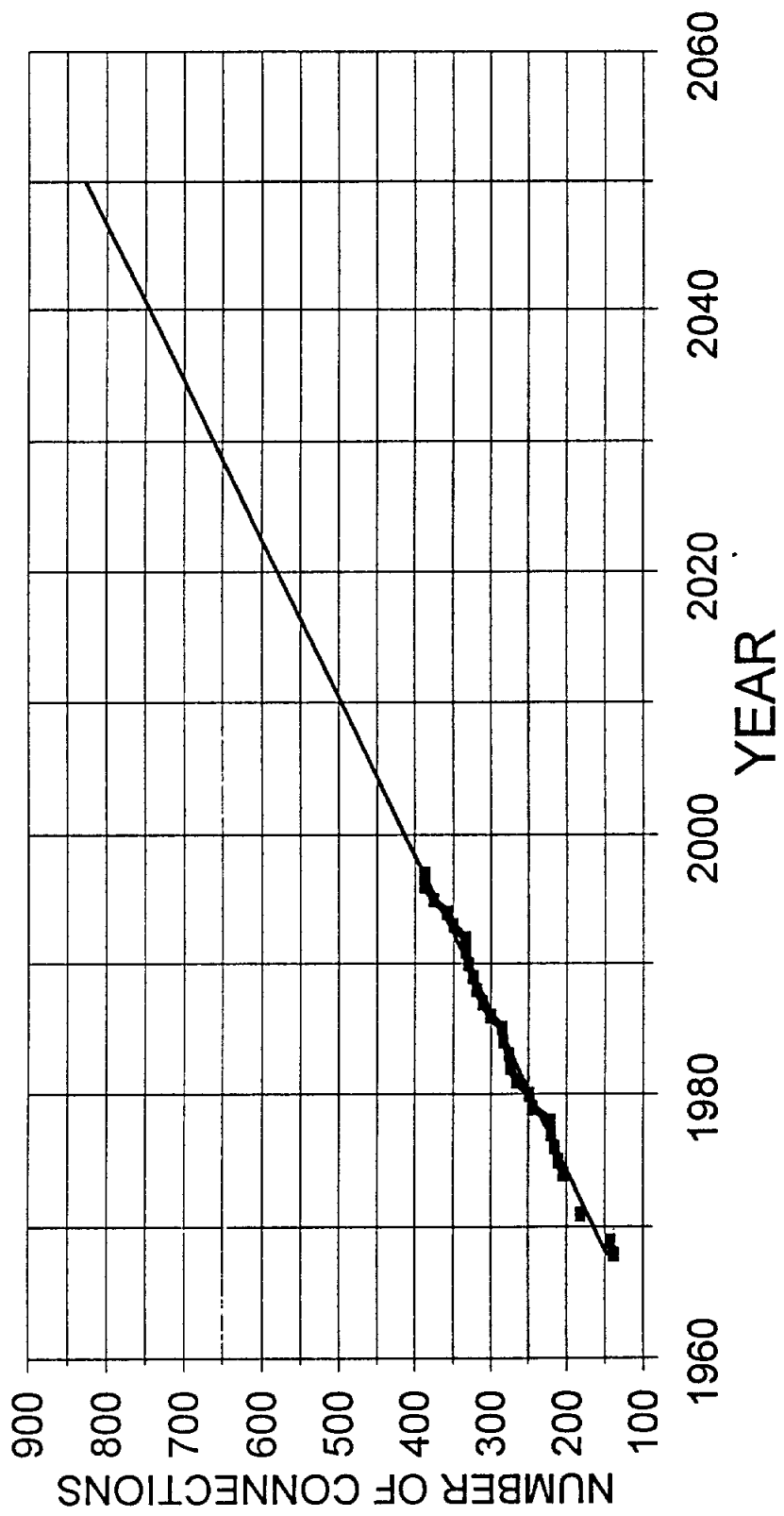
# PAXTON WSC WATER CONSUMPTION



— Historic Water Usage    — Projected Water Usage

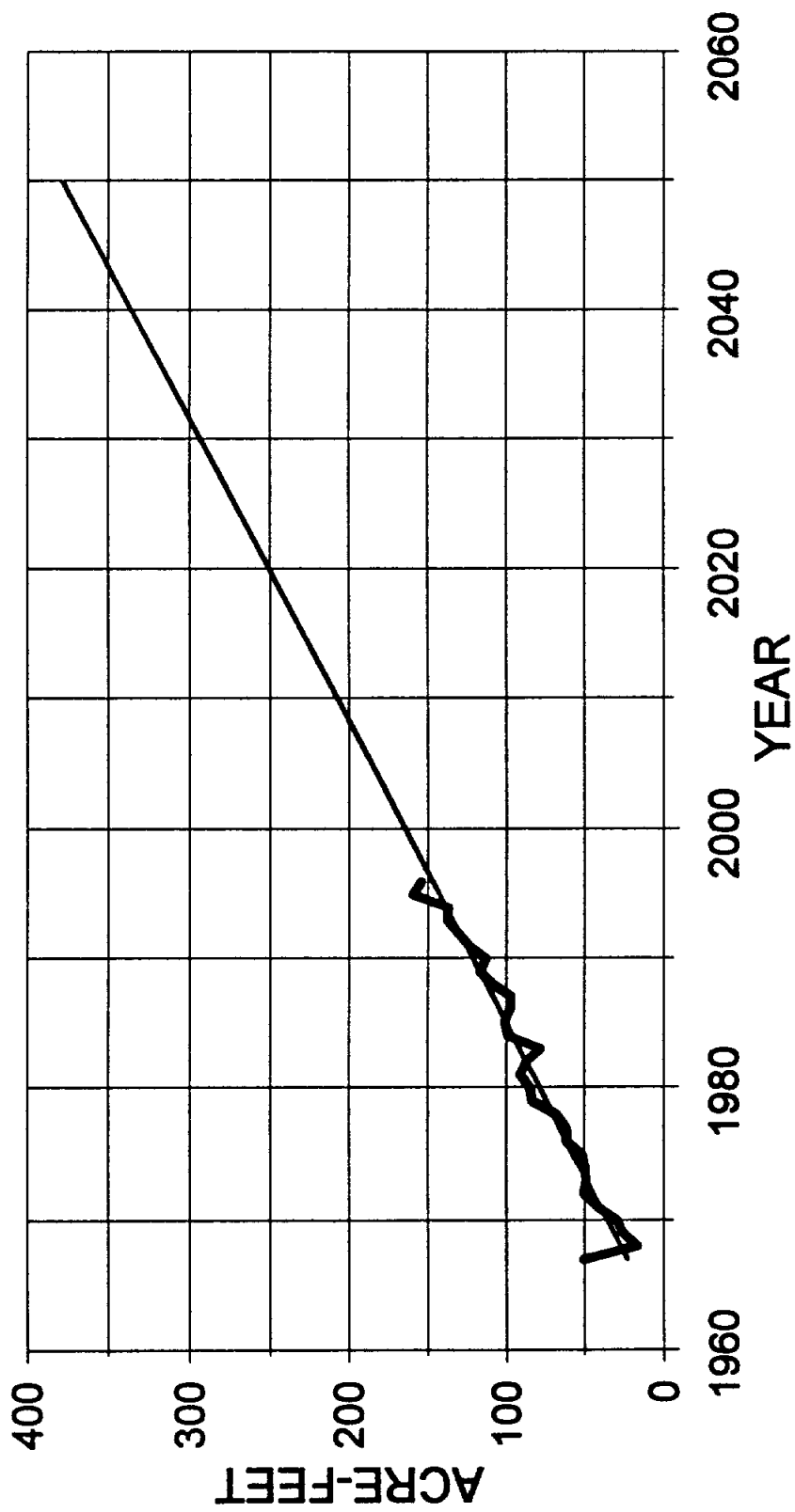


# SAND HILLS WSC NUMBER OF CONNECTIONS



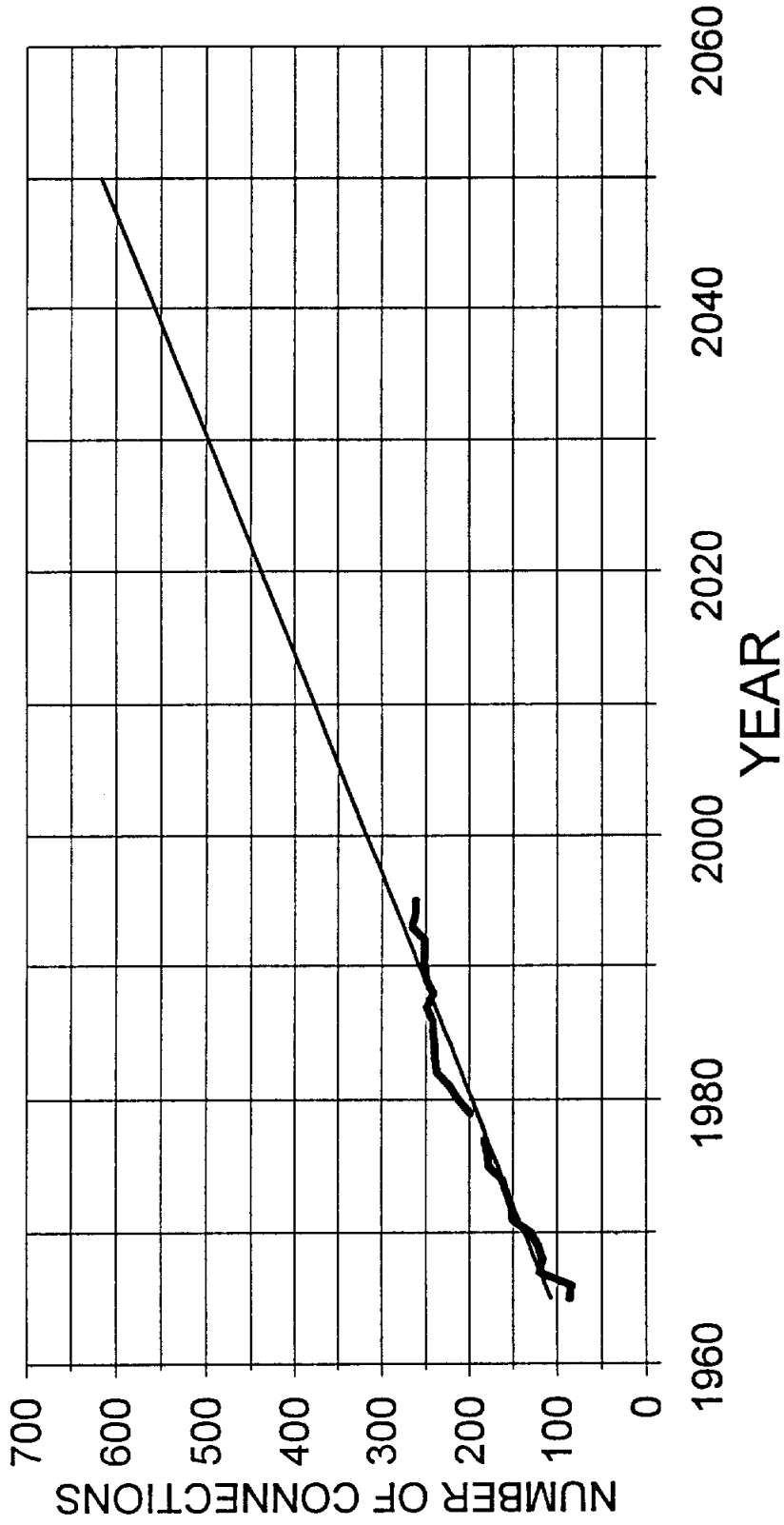
■ Historic Connections    — Projected Connections

# SAND HILLS WSC WATER CONSUMPTION



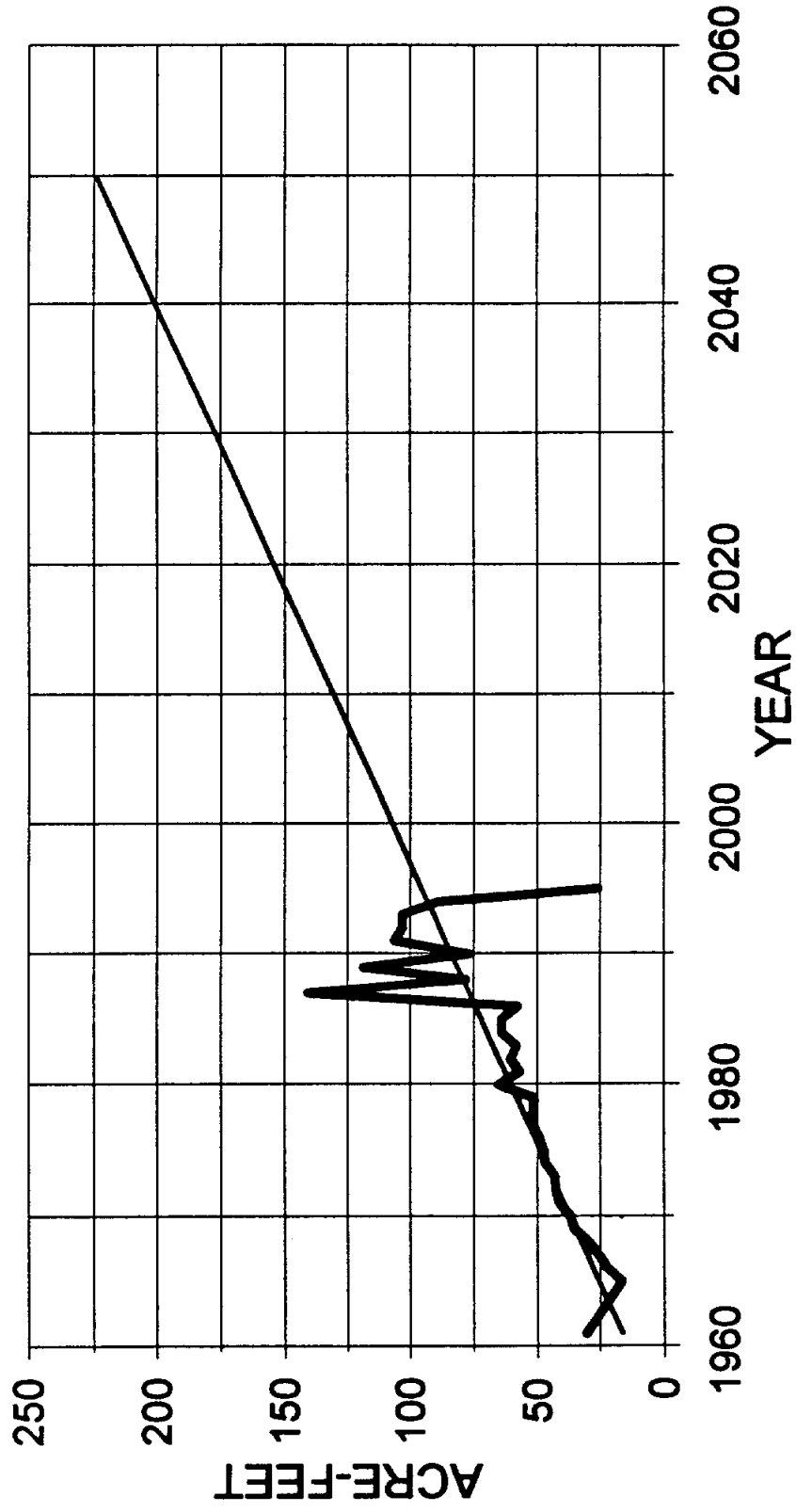
— Historic Water Usage    - - - Projected Water Usage

# SHELBYVILLE WSC NUMBER OF CONNECTIONS



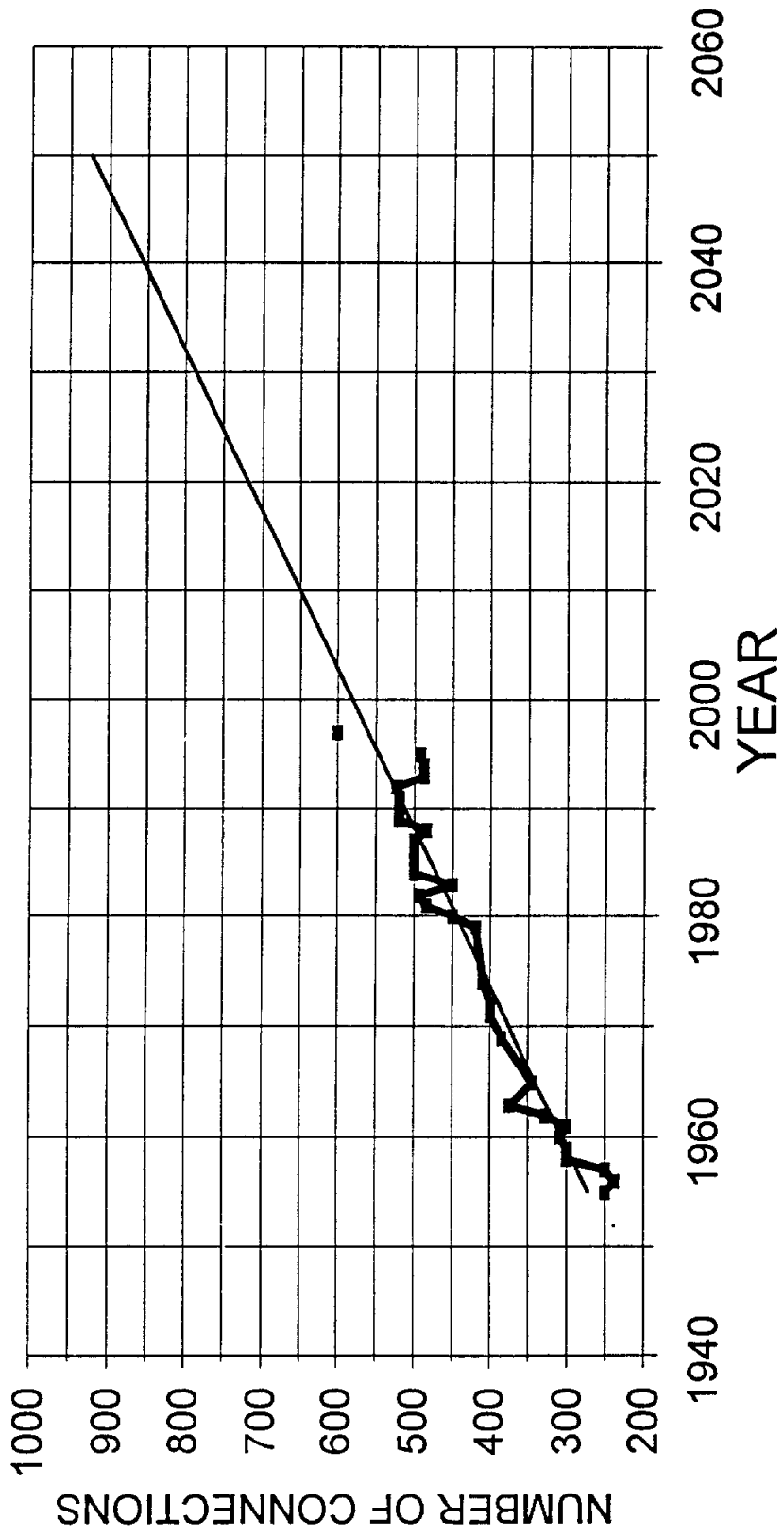
— Historic Connections    - - - Projected Connections

# SHELBYVILLE WSC WATER CONSUMPTION



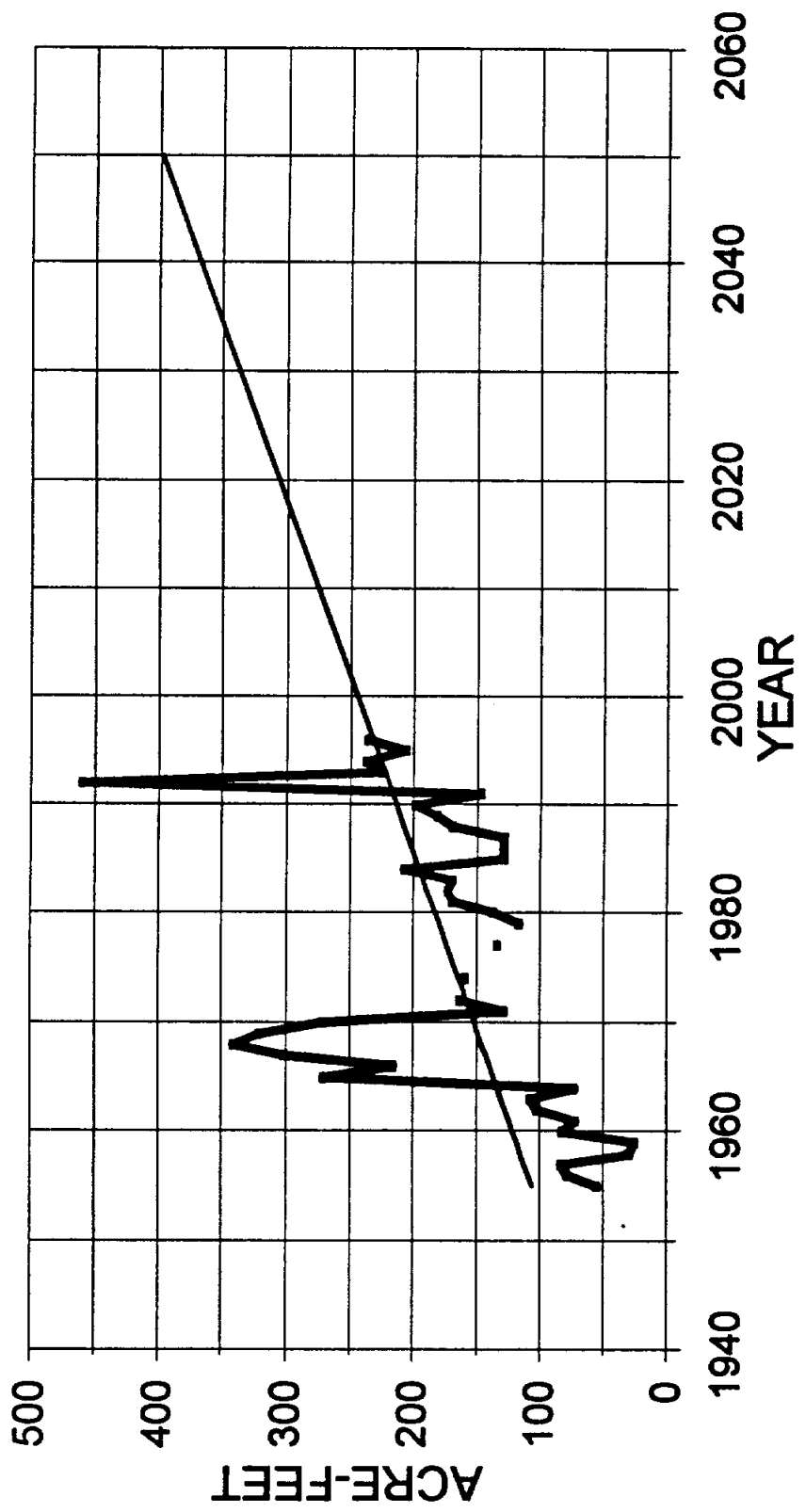
— Historic Water Usage — Projected Water Usage

# CITY OF TENAHA NUMBER OF CONNECTIONS



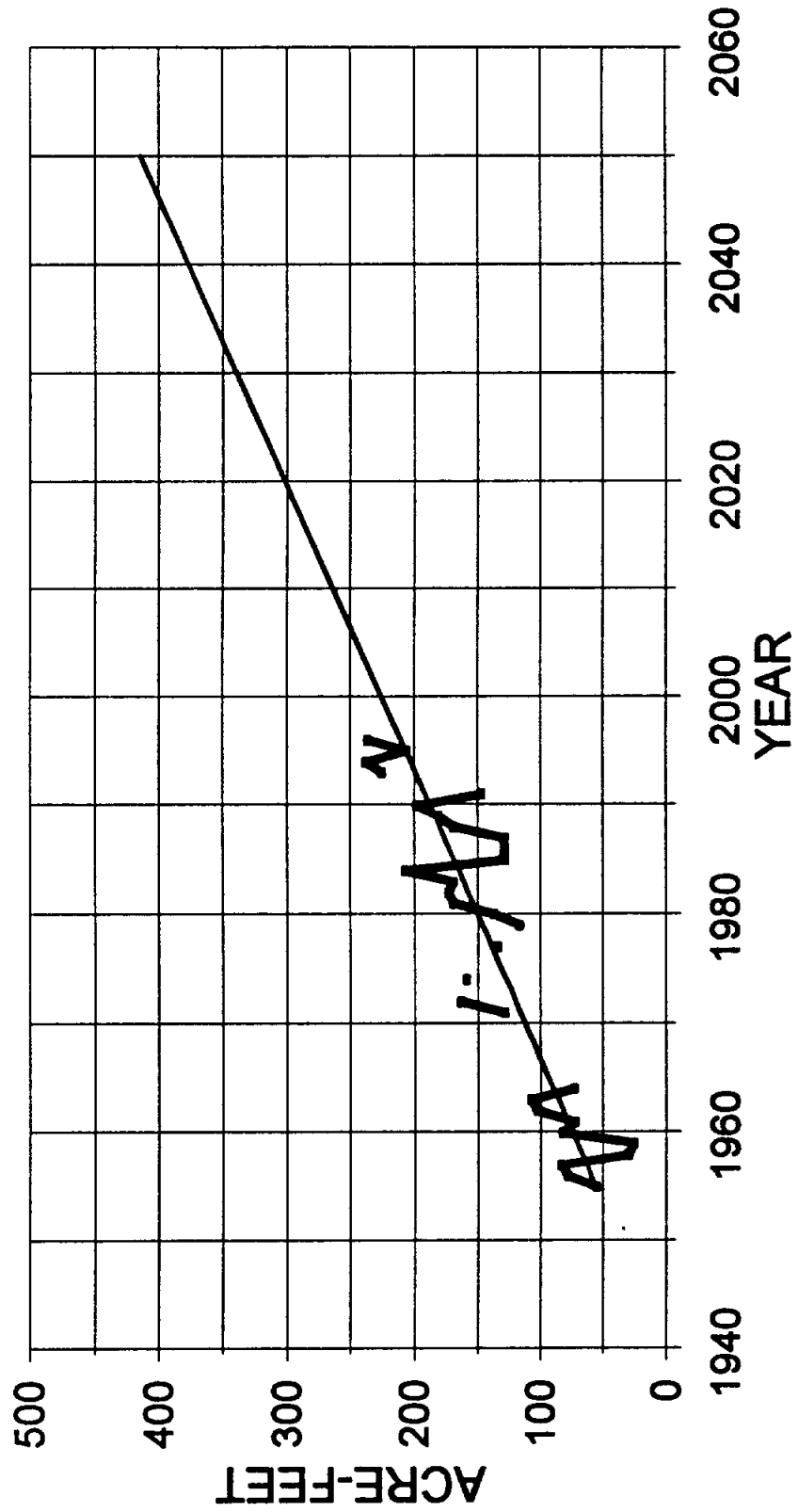
Historic Connections — Projected Connections

# CITY OF TENAHA (Regression #1) WATER CONSUMPTION



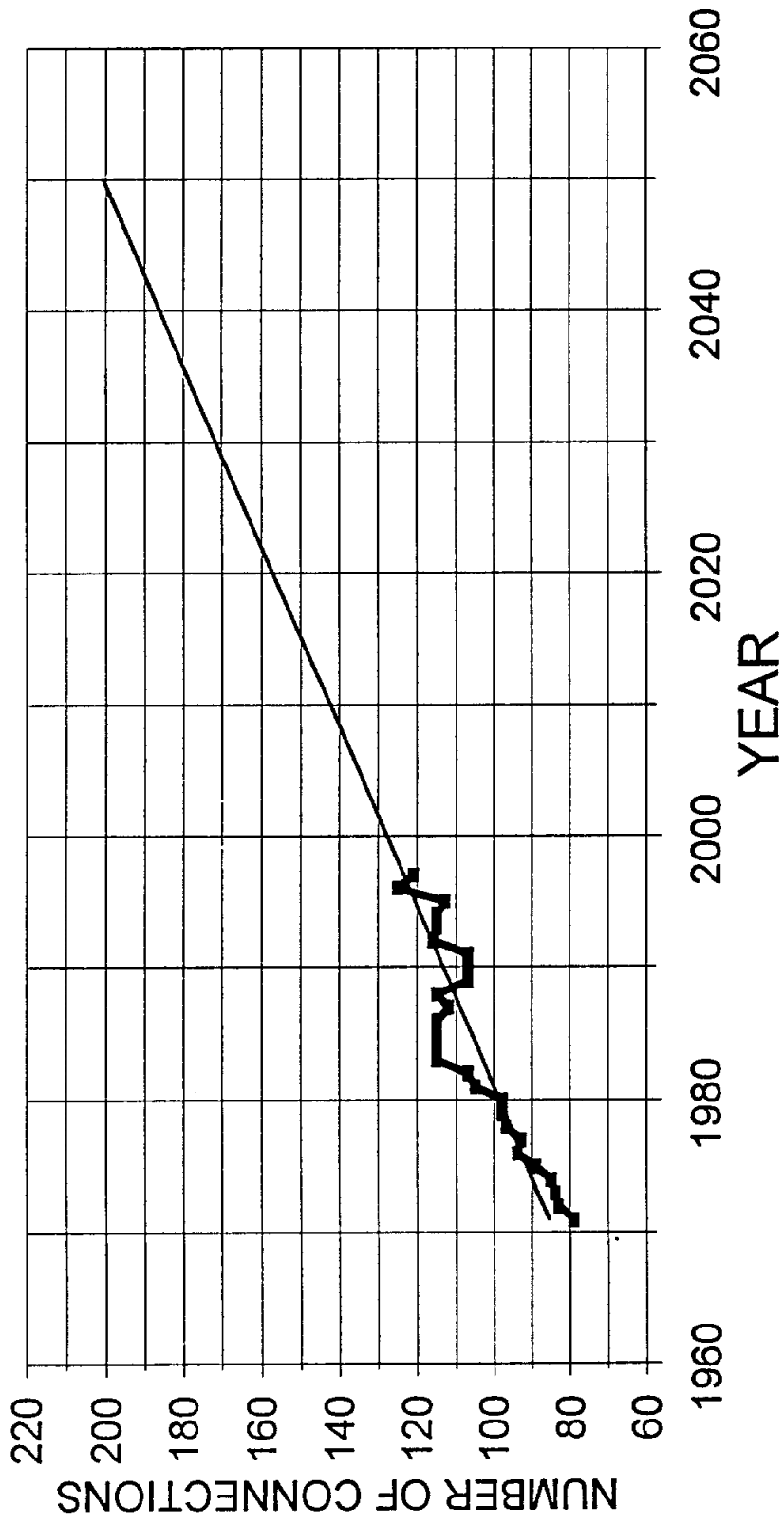
— Historic Water Usage — Projected Water Usage

# CITY OF TENAHAHA (Regression #2) WATER CONSUMPTION



— Historic Water Usage    - - - Projected Water Usage

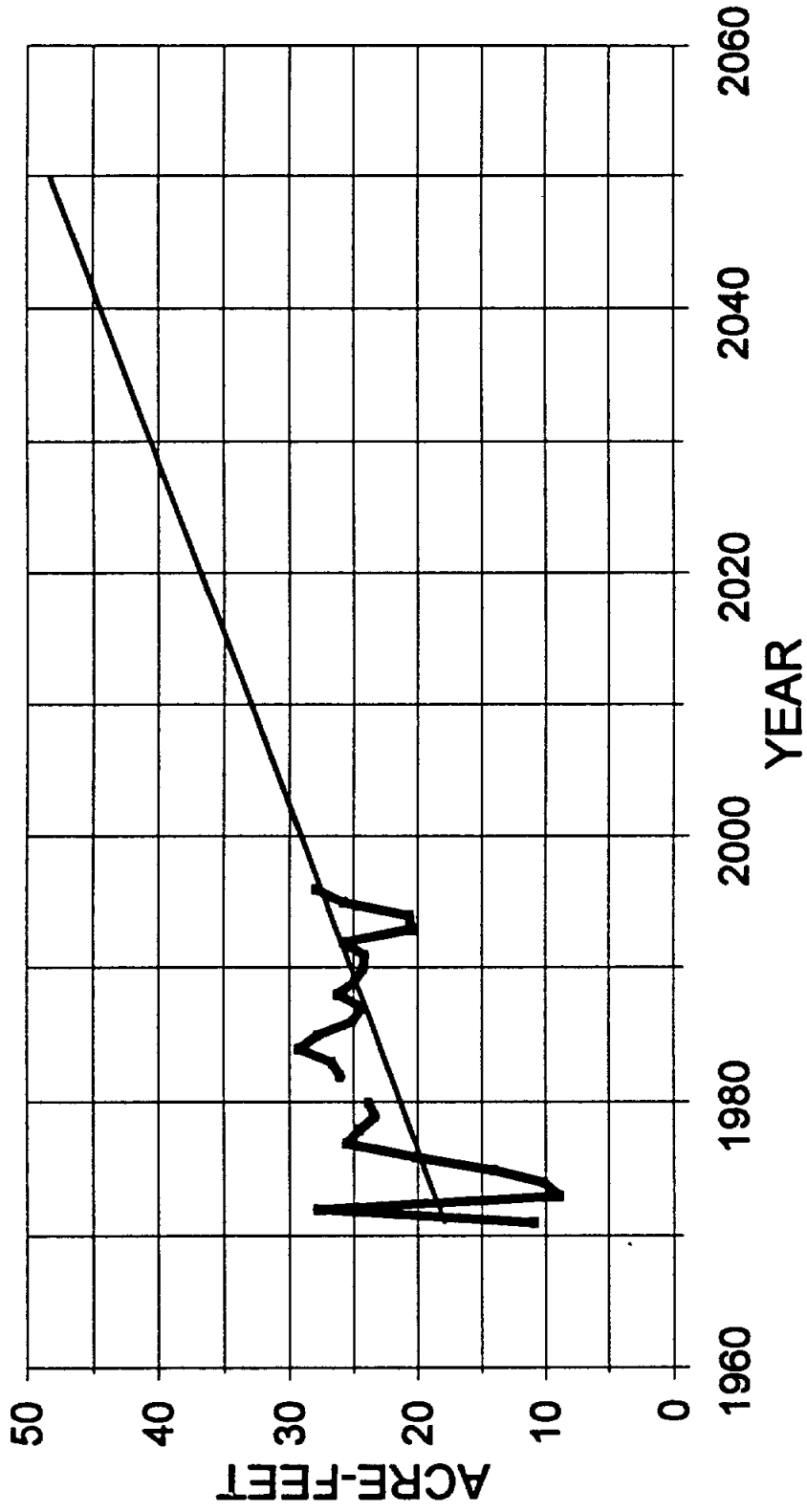
# TENNESSEE WSC NUMBER OF CONNECTIONS



— Historic Connections    — Projected Connections

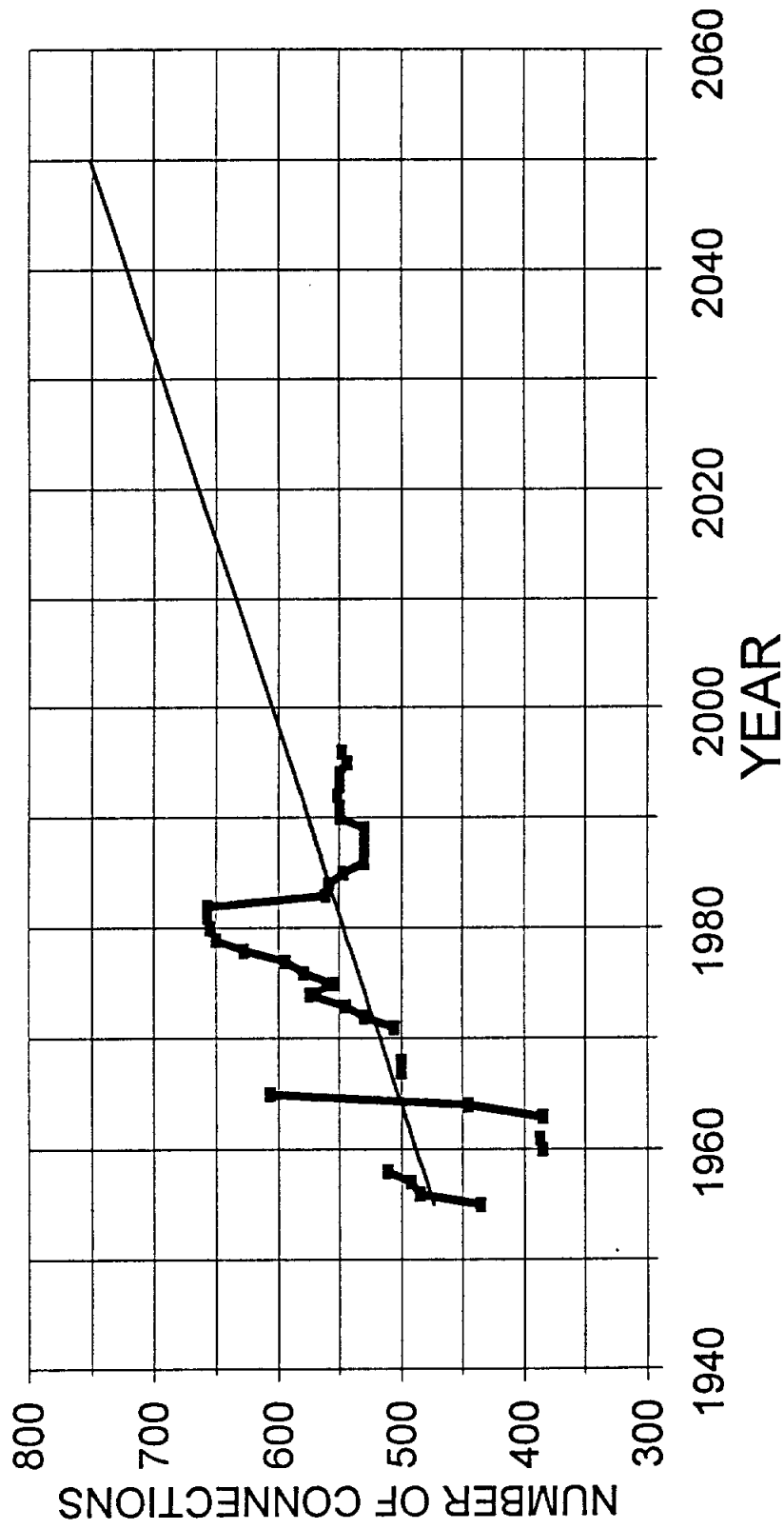


# TENNESSEE WSC WATER CONSUMPTION



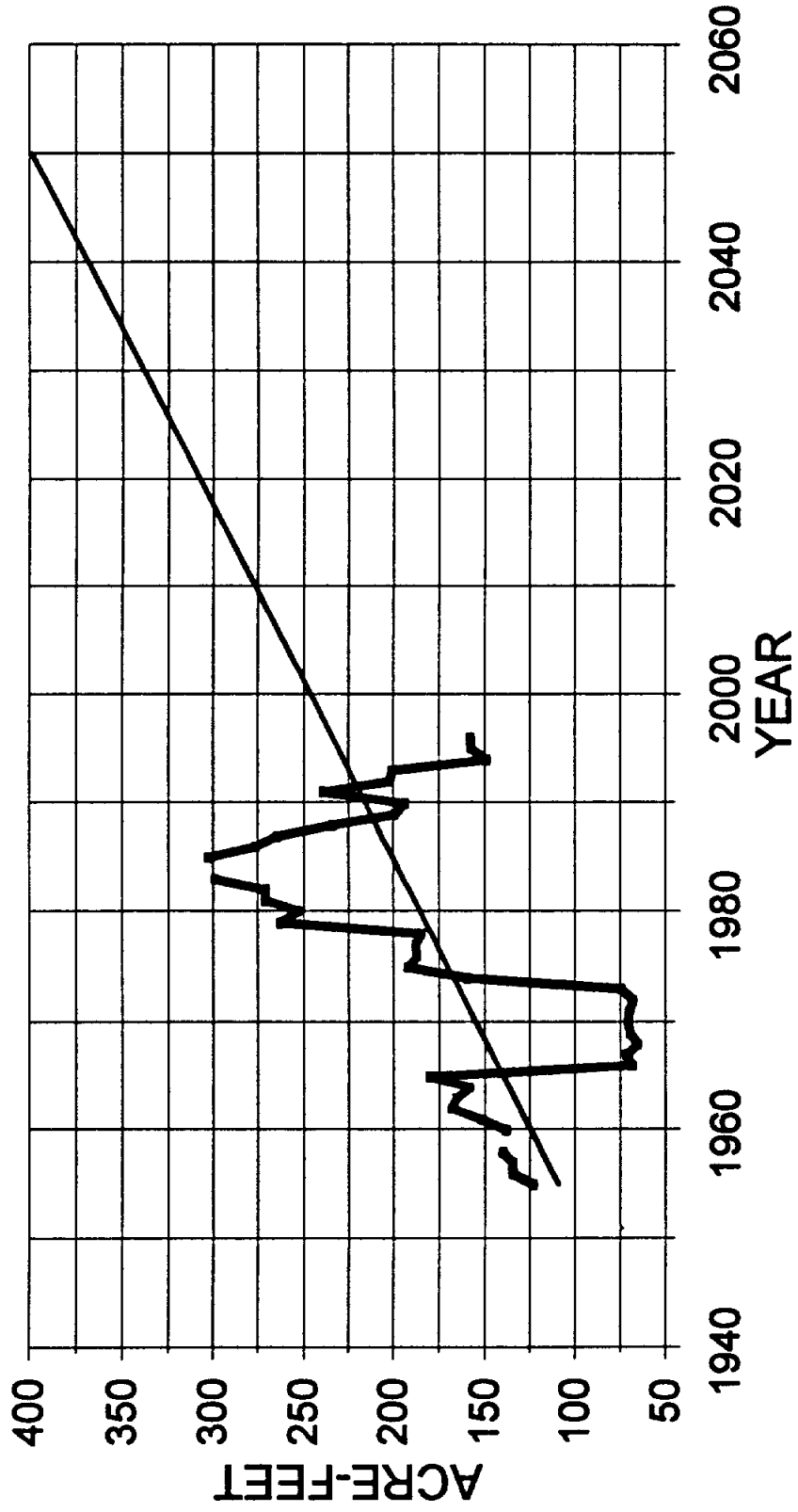
— Historic Water Usage — Projected Water Usage

# CITY OF TIMPSON NUMBER OF CONNECTIONS



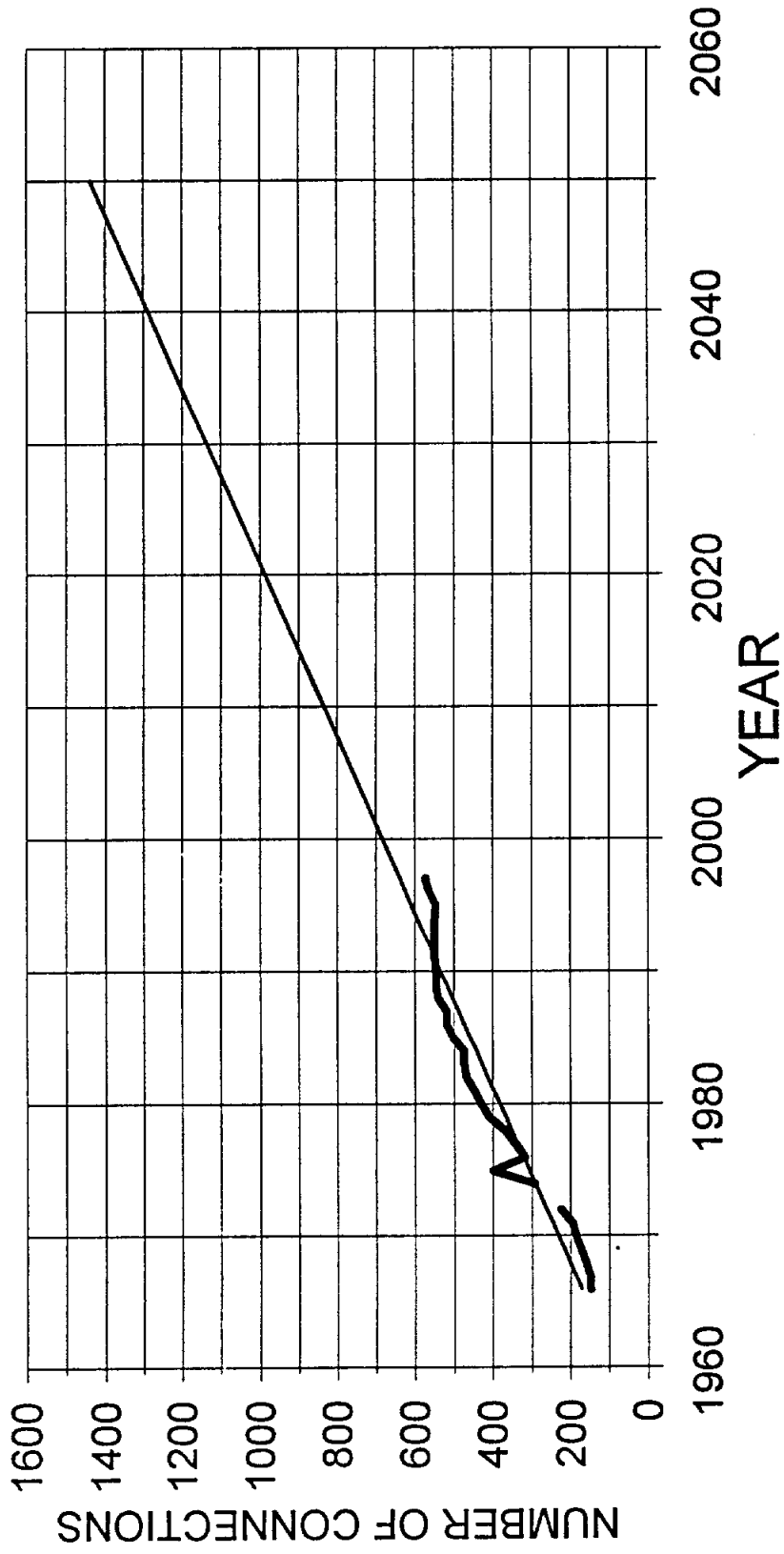
— Historic Connections    — Projected Connections

# CITY OF TIMPSON WATER CONSUMPTION



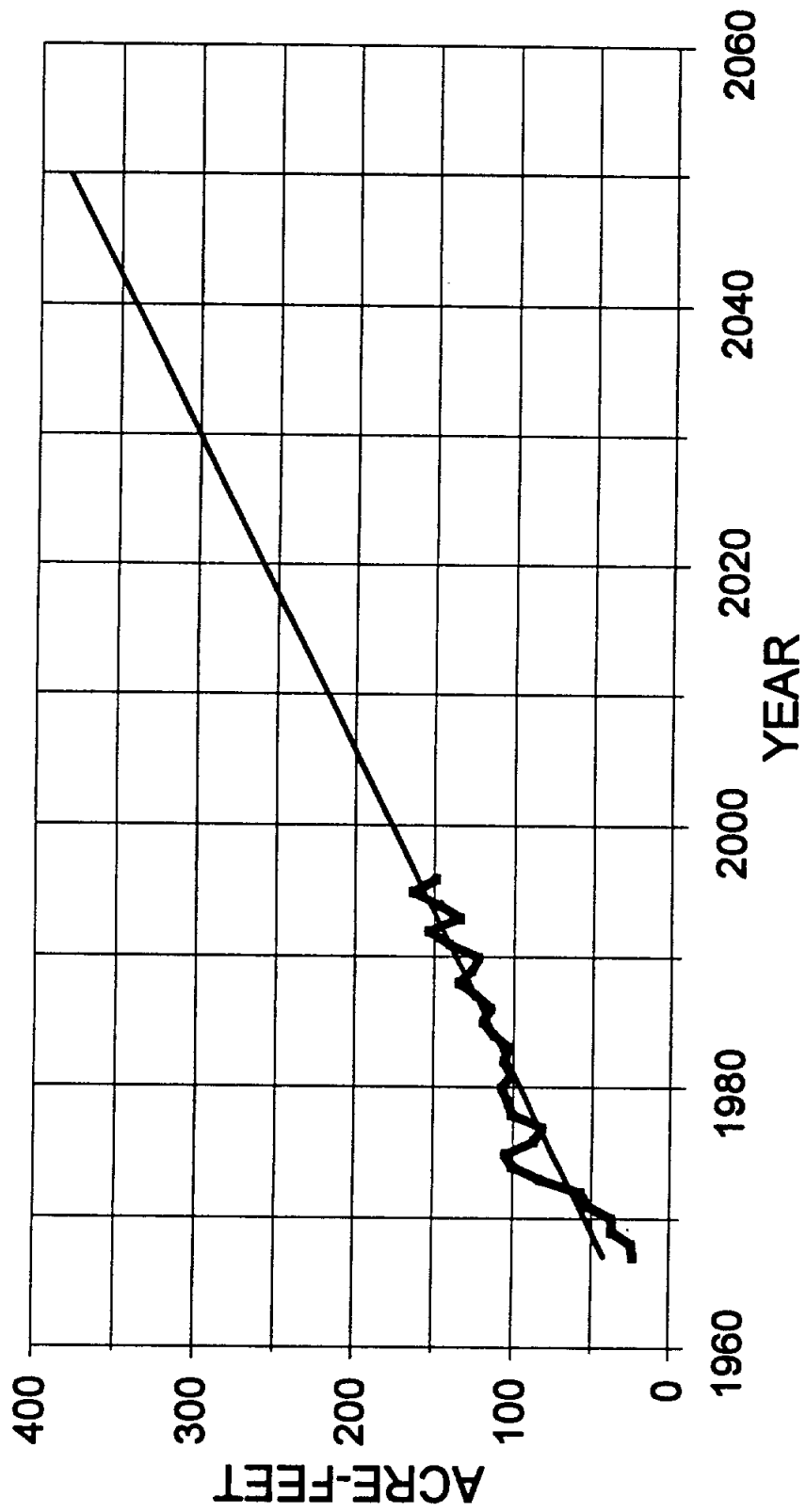
— Historic Water Usage    — Projected Water Usage

# TIMPSON RURAL WSC NUMBER OF CONNECTIONS



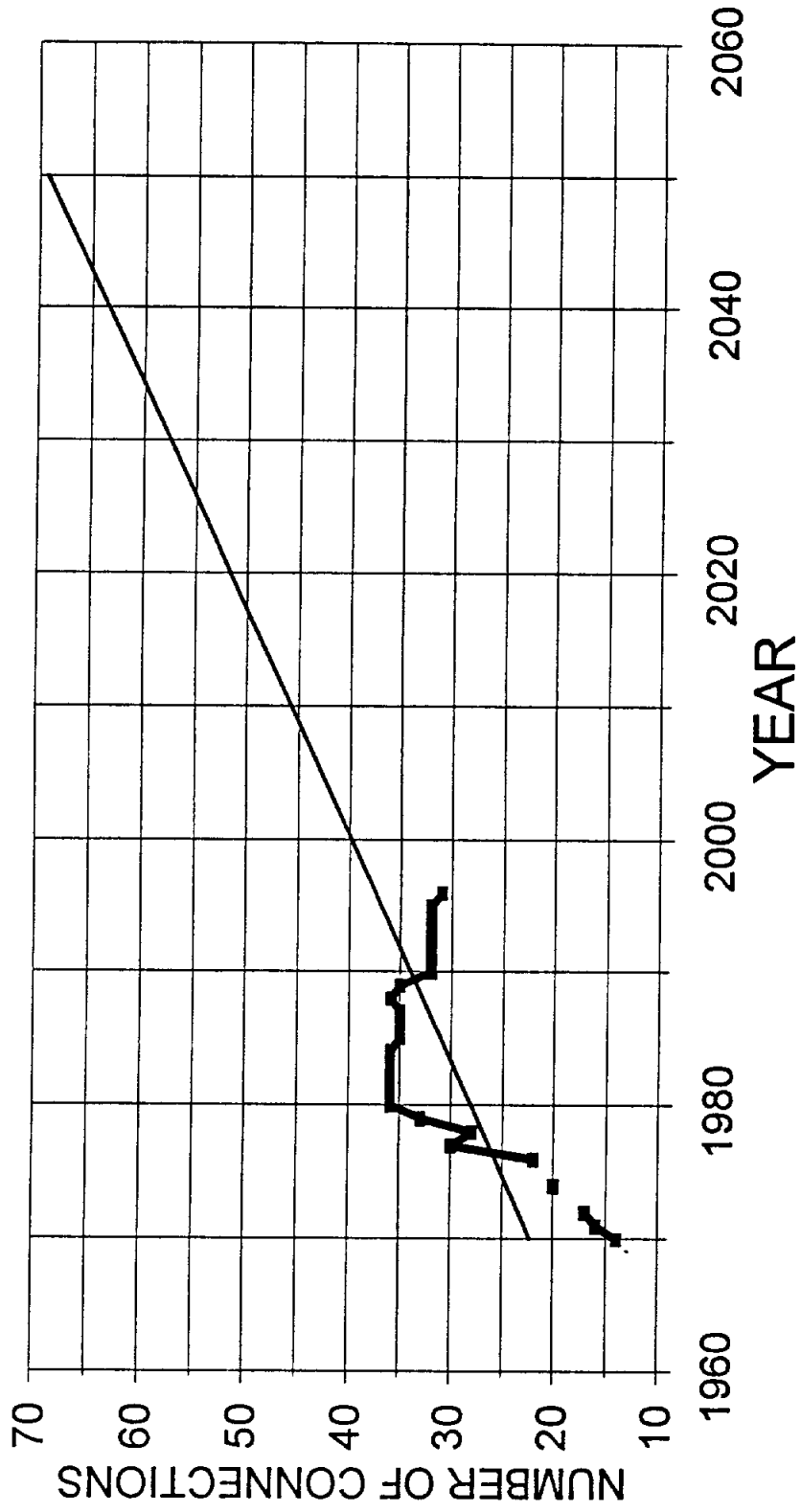
— Historic Connections    — Projected Connections

# TIMPSON RURAL WSC WATER CONSUMPTION



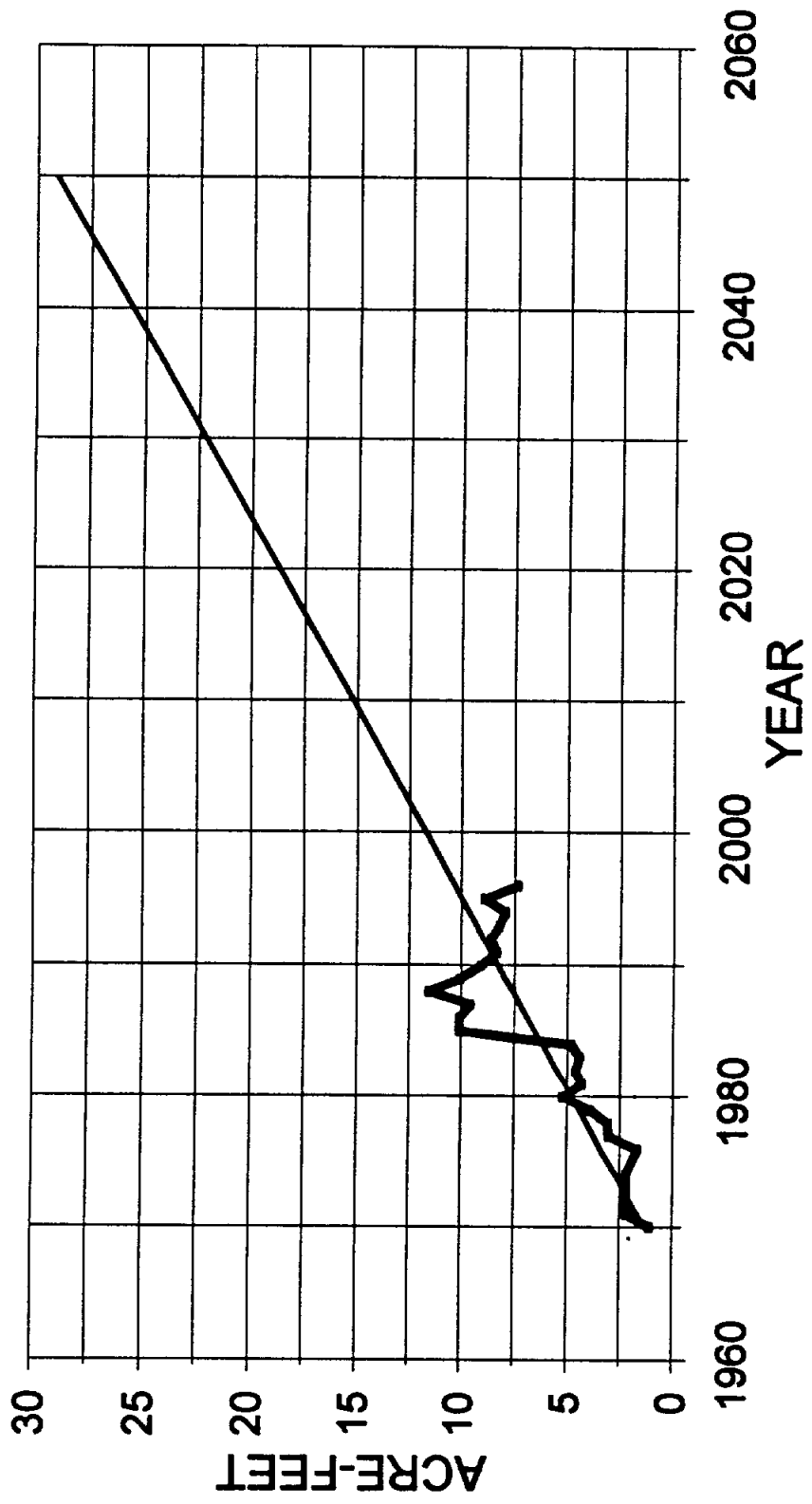
— Historic Water Usage — Projected Water Usage

# WARR WSC NUMBER OF CONNECTIONS



— Historic Connections    — Projected Connections

# WARR WSC (now ON-SITE WATERWORKS) WATER CONSUMPTION



— Historic Water Usage    — Projected Water Usage

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**APPENDIX H**  
**POULTRY WATER CONSUMPTION**



## BROILER CHICKENS-TEMPERATURE

SOURCE: POULTRY PRODUCTION IN HOT CLIMATES

AUTHOR: Edited by N.J. Deghr, Faculty of Agricultural Sciences, United Arab Emirates University

Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken houses = 1 houses  
 Assumed gpd/cap for pop. equiv. = 100 gpd/person

### AVERAGE DAYTIME HOUSE TEMP = 37.8C (100.04F)

AGE IN WEEKS	DAILY WATER DEMAND (liters/1000 broilers)	DAILY WATER DEMAND (gal/1000 broilers)	DAILY WATER USED (gpd)	TOTAL WATER USED PER WEEK (gallons)	POPULATI EQUIVALE -daily cons.- (people)
1	50.0	13.2	132	925	1
2	187.5	49.5	495	3,467	5
3	362.5	95.8	958	6,703	10
4	450.0	118.9	1,189	8,321	12
5	625.0	165.1	1,651	11,558	17
6	750.0	198.1	1,981	13,869	20
7	825.0	217.9	2,179	15,256	22
8	850.0	224.5	2,245	15,718	22
TOTAL			N/A	75,817	N/A
AVG.			1,354	9,477	14

SOURCE: POULTRY PRODUCTION IN HOT CLIMATES

AUTHOR: Edited by N.J. Deghr, Faculty of Agricultural Sciences, United Arab Emirates University

Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken houses = 1 houses  
 Assumed gpd/cap for pop. equiv. = 100 gpd/person

### AVERAGE DAYTIME HOUSE TEMP = 32.2C (89.96F)

AGE IN WEEKS	DAILY WATER DEMAND (liters/1000 broilers)	DAILY WATER DEMAND (gal/1000 broilers)	DAILY WATER USED (gpd)	TOTAL WATER USED PER WEEK (gallons)	POPULATI EQUIVALE -daily cons.- (people)
1	50.0	13.2	132	925	1
2	100.0	26.4	264	1,849	3
3	200.0	52.8	528	3,698	5
4	275.0	72.6	726	5,085	7
5	350.0	92.5	925	6,472	9
6	412.5	109.0	1,090	7,628	11
7	450.0	118.9	1,189	8,321	13
8	475.0	125.5	1,255	8,784	13
TOTAL			N/A	42,763	N/A
AVG.			764	5,345	8

SOURCE: POULTRY PRODUCTION IN HOT CLIMATES

AUTHOR: Edited by N.J. Deghr, Faculty of Agricultural Sciences, United Arab Emirates University

Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken houses = 1 houses  
 Assumed gpd/cap for pop. equiv. = 100 gpd/person

### AVERAGE DAYTIME HOUSE TEMP = 21.1C (69.98F)

AGE IN WEEKS	DAILY WATER DEMAND (liters/1000 broilers)	DAILY WATER DEMAND (gal/1000 broilers)	DAILY WATER USED (gpd)	TOTAL WATER USED PER WEEK (gallons)	POPULATI EQUIVALE -daily cons.- (people)
1	37.5	9.9	99	693	1
2	62.5	16.5	165	1,156	2
3	100.0	26.4	264	1,849	3
4	150.0	39.6	396	2,774	4
5	175.0	46.2	462	3,236	5
6	220.0	58.1	581	4,068	6
7	250.0	66.0	660	4,623	7
8	275.0	72.6	726	5,085	7
TOTAL			N/A	23,485	N/A
AVG.			419	2,936	4

SOURCE: POULTRY PRODUCTION IN HOT CLIMATES

AUTHOR: Edited by N.J. Deghr, Faculty of Agricultural Sciences, United Arab Emirates University

Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken houses = 1 houses  
 Assumed gpd/cap for pop. equiv. = 100 gpd/person

### AVERAGE DAYTIME HOUSE TEMP = 10.0C (50F)

AGE IN WEEKS	DAILY WATER DEMAND (liters/1000 broilers)	DAILY WATER DEMAND (gal/1000 broilers)	DAILY WATER USED (gpd)	TOTAL WATER USED PER WEEK (gallons)	POPULATI EQUIVALE -daily cons.- (people)
1	37.5	9.9	99	693	1
2	50.0	13.2	132	925	1
3	75.0	19.8	198	1,387	2
4	100.0	26.4	264	1,849	3
5	125.0	33.0	330	2,312	3
6	162.5	42.9	429	3,005	4
7	187.5	49.5	495	3,467	5
8	212.5	56.1	561	3,930	6
TOTAL			N/A	17,567	N/A
AVG.			314	2,196	3

SOURCE: COMMERCIAL CHICKEN PRODUCTION MANUAL, 4th Ed.

AUTHOR: Meck O. North, Donald D. Bell: Van Nostrand Reinhold Co. Inc., 1990

Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken ho = 1 houses  
 Assumed gpd/cap for pop. equi = 100 gpd/person

### AVERAGE DAYTIME HOUSE TEMP = 100F

AGE IN WEEKS	DAILY WATER DEMAND (gal/1000 br)	DAILY WATER USED (gpd)	TOTAL WA USED PER WEEK (gallons)	POPULATI EQUIVALE -daily cons.- (people)	
1	10.0	100	700	1	
2	48.0	480	3,360	5	
3	95.0	950	6,650	10	
4	130.0	1,300	9,100	13	
5	170.0	1,700	11,900	17	
6	200.0	2,000	14,000	20	
7	221.0	2,210	15,470	22	
8	228.0	2,280	15,960	23	
TOTAL			N/A	77,140	N/A
AVG.			1,378	9,643	14

SOURCE: COMMERCIAL CHICKEN PRODUCTION MANUAL, 4th Ed.

AUTHOR: Meck O. North, Donald D. Bell: Van Nostrand Reinhold Co. Inc., 1990

Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken ho = 1 houses  
 Assumed gpd/cap for pop. equi = 100 gpd/person

### AVERAGE DAYTIME HOUSE TEMP = 90F

AGE IN WEEKS	DAILY WATER DEMAND (gal/1000 br)	DAILY WATER USED (gpd)	TOTAL WA USED PER WEEK (gallons)	POPULATI EQUIVALE -daily cons.- (people)	
1	9.0	90	630	1	
2	26.0	260	1,820	3	
3	52.0	520	3,640	5	
4	72.0	720	5,040	7	
5	94.0	940	6,580	9	
6	110.0	1,100	7,700	11	
7	122.0	1,220	8,540	12	
8	125.0	1,250	8,750	13	
TOTAL			N/A	42,700	N/A
AVG.			763	5,338	8

SOURCE: COMMERCIAL CHICKEN PRODUCTION MANUAL, 4th Ed.

AUTHOR: Meck O. North, Donald D. Bell: Van Nostrand Reinhold Co. Inc., 1990

Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken ho = 1 houses  
 Assumed gpd/cap for pop. equi = 100 gpd/person

### AVERAGE DAYTIME HOUSE TEMP = 70F

AGE IN WEEKS	DAILY WATER DEMAND (gal/1000 br)	DAILY WATER USED (gpd)	TOTAL WA USED PER WEEK (gallons)	POPULATI EQUIVALE -daily cons.- (people)	
1	8.0	80	560	1	
2	16.0	160	1,120	2	
3	25.0	250	1,750	3	
4	35.0	350	2,450	4	
5	46.0	460	3,220	5	
6	57.0	570	3,990	6	
7	67.0	670	4,690	7	
8	76.0	760	5,320	8	
TOTAL			N/A	23,100	N/A
AVG.			413	2,888	4

SOURCE: COMMERCIAL CHICKEN PRODUCTION MANUAL, 4th Ed.

AUTHOR: Meck O. North, Donald D. Bell: Van Nostrand Reinhold Co. Inc., 1990

Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken ho = 1 houses  
 Assumed gpd/cap for pop. equi = 100 gpd/person

### AVERAGE DAYTIME HOUSE TEMP = 50F

AGE IN WEEKS	DAILY WATER DEMAND (gal/1000 br)	DAILY WATER USED (gpd)	TOTAL WA USED PER WEEK (gallons)	POPULATI EQUIVALE -daily cons.- (people)	
1	8.0	80	560	1	
2	12.0	120	840	1	
3	19.0	190	1,330	2	
4	26.0	260	1,820	3	
5	35.0	350	2,450	4	
6	43.0	430	3,010	4	
7	50.0	500	3,500	5	
8	57.0	570	3,990	6	
TOTAL			N/A	17,500	N/A
AVG.			313	2,188	3

## BROILER CHICKENS

SOURCE: *Raising Poultry the Modern Way*, by Leonard S. Mercia: Capital City Press, 1990

Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken houses = 1 houses  
 Assumed gpd/cap for pop. equiv. = 100 gpd/person

AGE IN WEEKS	DAILY WATER DEMAND (gal/100 birds)	DAILY WATER USED (gpd)	TOTAL WATER USED PER WEEK (gallons)	POPULATION EQUIVALENT -daily cons.- (people)
0-1	1.0	100	700	1
1-2	1.5	150	1,050	2
2-3	2.5	250	1,750	3
3-4	3.2	320	2,240	3
4-5	3.7	370	2,590	4
5-6	4.3	430	3,010	4
6-7	5.0	500	3,500	5
7-8	5.5	550	3,850	6
TOTAL		N/A	18,690	N/A
AVG.		334	2,336	3

SOURCE: *Raising Chickens*, by Cynthia Haynes: TAB Books Inc, 1985

Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken houses = 1 houses  
 Assumed gpd/cap for pop. equiv. = 100 gpd/person

AGE IN WEEKS	DAILY WATER DEMAND (gal/200 birds)	DAILY WATER USED (gpd)	TOTAL WATER USED PER WEEK (gallons)	POPULATION EQUIVALENT -daily cons.- (people)
1	1.0	50	350	1
2	2.6	130	910	1
3	4.8	240	1,680	2
4	7.4	370	2,590	4
5	10.6	530	3,710	5
6	13.8	690	4,830	7
7	17.0	850	5,950	9
8	20.0	1,000	7,000	10
TOTAL		N/A	27,020	N/A
AVG.		483	3,378	5

SOURCE: *Poultry Meat and Egg Production*, by C.R. Parkhurst & G.J. Mountray: Van Nostrand Reinhold Co. Inc., 1988

Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken houses = 1 houses  
 Assumed gpd/cap for pop. equiv. = 100 gpd/person

AGE IN WEEKS	DAILY WATER DEMAND (gal/1000 birds)	DAILY WATER USED (gpd)	TOTAL WATER USED PER WEEK (gallons)	POPULATION EQUIVALENT -daily cons.- (people)
1	6.0	60	420	1
2	12.0	120	840	1
3	17.0	170	1,190	2
4	34.0	340	2,380	3
5	38.0	380	2,660	4
6	47.0	470	3,290	5
7	56.0	560	3,920	6
8	64.0	640	4,480	6
TOTAL		N/A	19,180	N/A
AVG.		343	2,398	3

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**APPENDIX I**  
**EXECUTIVE ADMINISTRATOR'S COMMENTS**



# TEXAS WATER DEVELOPMENT BOARD

William B. Madden, *Chairman*  
Charles W. Jenness, *Member*  
Lynwood Sanders, *Member*

Craig D. Pedersen  
*Executive Administrator*

Noé Fernández, *Vice-Chairman*  
Elaine M. Barrón, M.D., *Member*  
Charles L. Geren, *Member*

March 5, 1997

MAR 18 1997

*Send to  
Shayne  
Atulz*

The Honorable Floyd A Watson  
County Judge, Shelby County  
c/o Paxton WSC  
200 San Augustine Street  
Center, Texas 75930

Re: Review Comments for Draft Report Submitted by Shelby County, TWDB Contract No. 95-483-090

Dear Judge Watson :

Staff members of the Texas Water Development Board have completed a review of the draft report under TWDB Contract No. 95-483-090. The comments in Attachment 1 should be considered and incorporated before the report is finalized.

The Board looks forward to receiving one (1) unbound camera-ready original and nine (9) bound double-sided copies of the Final Report on this planning project. Please contact Ms. Cindy Yates, the Board's Contract Manager, at (512) 463-1061, if you have any questions about the Board's comments.

Sincerely,

Tommy Knowles  
Deputy Executive Administrator  
for Planning

cc: Cindy Yates, TWDB

3400300  
File Number 110 2.5

*Our Mission*

*Responsible and responsible development of water resources for the benefit of the citizens, economy, and environment of Texas.*

P.O. Box 13231 • 1700 N. Congress Avenue • Austin, Texas 78711-3231  
Telephone (512) 463-7847 • Telefax (512) 475-2053 • 1-800- RELAY TX (for the hearing impaired)  
URL Address: <http://www.twdb.state.tx.us> • E-Mail Address: [info@twdb.state.tx.us](mailto:info@twdb.state.tx.us)

**ATTACHMENT 1  
TEXAS WATER DEVELOPMENT BOARD**

**COMMENTS ON SHELBY COUNTY  
Contract No. 95-483-090**

The Texas Water Development Board recommends the following additions and changes:

1. The report indicates a substantial growth, approaching 1.4% annual growth through the year 2050, in the number of connections by the various water suppliers in Shelby County. Based on previous Census counts for the population of Shelby County, the County's population increased by 0.2% per year from 1960 to 1990 and 0.6% per year from 1970 to 1990. From 1980 to 1990, the County's population decreased from 23,084 to 22,034 residents. Only once over the last three decades has the County's population growth exceed 1.0% per year and that being the 1970 to 1980 period.
2. There are four water supply entities that should be reexamined regarding their potential growth in connections and water use based on historical data reported to the TWDB. The four entities and the historical data and the year 2000 projections are presented below:

<u>Entity</u>	<u>1982</u>	<u>1991</u>	<u>2000</u>
<b>Center</b>			
Connections	2830	2259	2665
Water Use	2302	2057	2624
<b>Paxton WSC</b>			
Connections	260	140	248
Water Use (acre-feet)	51	64	109
<b>Tennessee WSC</b>			
Connections	107	107	129
Water Use (acre-feet)	26	24	34
<b>Timpson</b>			
Connections	657	550	605
Water Use (acre-feet)	271	240	319

Based on this historical data, the last ten year trend for these entities is one of very little growth or declining growth. The TWDB consensus population projections indicate compound annual population growth rates for the County and the Cities of Center, Tenaha, and Timpson

as follows:

	<u>1990-2050</u>
Shelby County	0.4%
Center	0.7%
Tenaha	0.5%
Timpson	0.46%
County Other(rural)	0.3%

3. Please address the treatment of existing surface water facilities. Under Options 1 & 2 it appears that all current wells will be abandoned, but continued use of existing surface water treatment plants is not addressed.
4. Please provide further explanation for the assumed future demand of 5 MGD for Options 1 & 2.
5. The Cities of Timpson and Tenaha seem to have sufficient well capacity to meet demands through 2050 (Table 5-1) and each has completed at least one new well in the past decade (Table 4-1). Continued reliance on groundwater would seem to be an appropriate option. Please provide more information to support the assumption that these systems (and other systems currently supplied by groundwater) should switch to surface water.
6. The recommendation of a phased plan with the City of Center's existing facilities as a hub in Phase 1 seems valid, although it is not fully supported by the cost and other evidence in this study. In light of the other TWDB comments concerning long term availability of groundwater, please provide more information to support the assumptions in Options 1 and 2 of total conversion from groundwater to surface water.
7. The cost analysis does note that Option 3 is different from the other options in that it does not include the purchase of water by the City of Center. How much water would the City be purchasing under Options 1 & 2?
8. The Option 3 costs include \$1.00 per thousand gallons to the City of Center for the purchase of treated water. However, Appendix F shows a current cost for "Bulk Water Sales" of \$2.00 per thousand gallons. Please provide the basis for the treated water costs used in Option 3.
9. In Section 4, Inventory of Existing Facilities, information on Pinkston Reservoir and Lake Center should be presented in a manner similar to the information provided on Toledo Bend Reservoir.

10. The groundwater resources available for future development are underestimated based on the Board's most current work connected with the update of the State Water Plan. This work involved the development and application of a regional computer flow model for the Carrizo -Wilcox aquifer. Results of that study indicate that all future projected demands through the year 2050 for entities in Shelby County currently using ground water from the Wilcox aquifer can continue to be met with water from the aquifer.

Understandably, this information was not available at the time the Shelby County study was conducted and, therefore, was not presented as a strong, viable future option in the final recommendations. It does not diminish the feasibility of the study's recommended options, however, it may be wise and important to the individual participants to have the newest information incorporated into the results and be available to help guide making future planning decisions.

11. Section 3.3.1.1. indicates that commercial and industrial water use accounts for a significant portion of all water sold. This sector of water use should be specifically mentioned when designing a water conservation plan.
12. Section 3.3.3.2 and Sections 3.4 and 3.5 show future water use projections based on linear regression analysis of water use by the project utilities. They should be modified to reflect future water conservation. This is especially true of the municipal projections. These projections should be modified to reflect changes in State Plumbing Code and other expected conservation measures.
13. Table 4.4 shows that several utilities have very high peak to average ratios. The Conservation plan should specifically address these peak demands.
14. Section 14 on water conservation needs to be modified to include specific goals for industrial and commercial users and for reduction in peak demand (see items #11 and #13). Also, the analysis does not address unaccounted for water, yet at least one of the participants has had high historic unaccounted for water.
15. Appendix F indicated that some utilities still have declining block rates. Changing these to non-promotional rates should also be a goal of the Conservation plan.
16. The reference made in Section 14 is to an outdated set of Board rules. Please reference the current rules, 30 TAC 363.15.

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**APPENDIX J**  
**REPLIES TO EXECUTIVE ADMINISTRATOR'S COMMENTS**





Everett Griffith, Jr. & Associates Inc.  
ENGINEERS • SURVEYORS

May 30, 1997

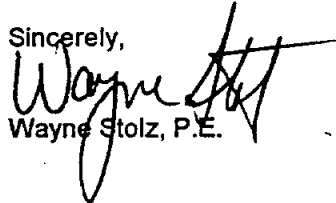
Ms. Cindy Yates  
Texas Water Development Board  
P.O. Box 13231, Capital Station  
Austin, Texas 78711-3231  
(512) 463-1061

RE: Reply to Comments Regarding  
Shelby County Regional Water Study  
Contract No. 95-483-090

Dear Ms. Yates:

The information enclosed herein is intended to address the comments and questions stated in your letter dated March 5, 1997. We would appreciate your review and commentary of the enclosed information. Please notify us if these revisions/modifications meet with your approval. If so, we will incorporate them into a revised final report.

Sincerely,



Wayne Stolz, P.E.

WS/cl

Encl.

cc/encl. The Honorable Floyd Watson, Shelby County Judge

SHELBYWTRSTUDY\FINAL.RPT\TWDB-02.LET

**REPLY TO TWDB COMMENTS  
SHELBY COUNTY REGIONAL WATER STUDY  
CONTRACT NO. 95-483-090**

The information enclosed herein is intended to address the comments and questions stated in the TWDB letter dated March 5, 1997. These revisions/modifications will be incorporated into the final report upon approval by the TWDB. For clarity, the replies are given below in the same numerical order as stated in the letter. Where necessary, the remarks have been further subdivided into sections denoted by capital letters and/or Roman numerals that were not included in the original letter.

1. The following are some general comments on population growth in the system. It is intended that these provide some clarification as to the assumptions made in the study. In regard to your comments, the future population projections were generated based on a linear regression of historical data. The assumption was made that the entities will continue to grow in the future at the same rate as they grew in the past. Some possible reasons that a discrepancy exists between the projections and the census data are:
  - (i). Since the range of the study extends over 50 years into the future, as much historical data was used in the regression as possible. Much of the regression used data on a yearly interval, whereas the Census uses data on a ten year interval.
  - (ii). The number of connections in the historical data does not necessarily have a direct correlation to the population. Undoubtedly, a large number of these connections can be attributed to commercial businesses, industries, schools, farms, etc.
  - (iii). The historic values were used because they generally provided a great deal of information on each of the individual systems. However, it was noted that some of the values indicated in the historical data fluctuate from year to year. Please note that copies of all the data used in the study were mailed to each of the County water suppliers so that they could check it against their records. Response was sluggish. Some minor changes were noted; however, the majority of those who responded indicated no change from the values listed. Therefore, the values indicated were considered valid.
  - (iv). Recent census' have achieved a certain notoriety in the press for not counting significant segments of the population. This is not meant as a slight to the census, it is merely a statement that we feel that the historical records reflect a more accurate measurement of the growth in number of connections and water usage than the census does.
  
2. We have reexamined the four water supply entities that you mentioned in your letter. As noted in the study, a linear regression was used to estimate the future growth of each participant. Since a linear regression estimates a "best fit" line based on the individual data points, the slope of the line is heavily dependent on the data range used. The data range used for each entity was limited by the amount of historic data available for each. In general, as much historic data was used as possible in order to provide a large range of data for each entity. Since some of the data showed sporadic growth and decline over the years, it was hoped that the wider range of data would minimize the overall error of the estimate involved (i.e. average out the sporadic high and low data points) and provide a conservative basis for the future growth projections. We also felt that the wider range of data was desirable since the future projections used in the study extended over 50 years in the future.

Based on your comment, we have reexamined the projections for the City of Center, Paxton WSC, Tennessee WSC, and the City of Timpson. In keeping with the tone of your comment, projections were made based solely on the most recent 10 years of data and compared with projections based on the entire historic range of data. For ease of discussion, the estimated values below will be identified by the time period that was used to generate the regression data (i.e. regression data obtained from 10 years worth of base information will be identified below as the "10-year regression"). Spreadsheet calculations and graphs of these calculations are found in Attachment 1 to this letter. The results are summarized as follows:

City of Center - Historical data from 1971 to 1991 was available for Center. In order to remain consistent with the study, linear regressions were also performed on this data. However, some modifications were made as follows:

- A. Estimated Number of Connections - Two regressions were performed to estimate the future number of projections. One was calculated over a 20 year data range, while the other was performed over a 10 year data range. Also, several data points that appeared to be in error were not included in the regression. These modifications result in more uniform data, as can be seen in the attached graph. As a result, the average change for the historic data used is approximately 13 connections per year. The maximum change noted in the historic data used was approximately 237 connections, which occurred between 1990 and 1991 (please note that this was a decrease in the total number of connections).

As seen on the attached graph and spreadsheet, the 20-year and 10-year regressions have very similar results. The spreadsheet also compares the values generated by the linear regressions with the actual historical values, and then computes the percent relative error between the two. When compared with the historic values from 1971 to 1991, the 20-year regression has an average percent relative error of about -0.137%, with a standard deviation of 3.763%. When compared with the historic values from 1981 to 1991, the 10-year regression has an average percent relative error of -0.155% with a standard deviation of 4.152%.

From the above information, the 20-year regression has the least amount of percent relative error when compared to the actual data. Please note that this information pertains to the total number of connections, not the population. If considered in terms of population, the regression data seems to match very closely with the information presented in the TWDB 1996 Consensus Texas Water Plan Projections of Population and Municipal Water Use (included in Appendix D of the study). The TWDB projection indicates that the population of Center was 4,950 in 1990. The historic records indicate that the total number of connections at this time was 2,496. This provides a ratio of approximately 1.9832 people per connection. Assuming that this ratio remains constant, the two estimates are very similar. The table below provides a comparison of the estimated population based on the 20-year regression with the Most Likely Series projections presented in the TWDB Consensus. In addition, a telephone call placed to the City on June 4, 1997 found that their current number of active connections is 2,640. As can be seen from the information in Attachment 1, this value is very close to the estimated number of connections projected.

<b>COMPARISON OF REGRESSION TO TWDB ESTIMATES</b>			
<b>YEAR</b>	<b>20-YEAR REGRESSION</b>		<b>TWDB PROJECTION</b>
	<b>PROJECTED CONNECTIONS</b>	<b>ESTIMATED POPULATION</b>	<b>ESTIMATED POPULATION</b>
2000	2,633	5,222	5,403
2010	2,852	5,656	5,911
2020	3,070	6,088	6,301
2030	3,289	6,523	6,724
2040	3,508	6,957	7,059
2050	3,726	7,389	7,411

- B. Estimated Water Usage - 20-year and 10-year regressions were also used to estimate the

future amount of water usage for the City of Center. The 20-year regression is very close to the values listed in the study. When compared to the historic data, the 20-year regression has an average percent relative error of -1.793%, with a standard deviation of 14.144%. Likewise, the 10-year regression is based on data recorded in the period from 1981 to 1991. When compared to historical values, the 10-year regression has an average percent relative error of -0.301%, with a standard deviation of 5.814%. However, fluctuations of water usage during that period results in a negative growth based on a linear regression of only 10 years. We know that the Tyson facility in Center currently uses 1 MGD of water during normal operations, which accounts for approximately 1,121 acre-feet per year. The 10-year regression indicates that the City would be using only 1,771 acre-feet of water in the Year 2050 (including the amount used by Tyson).

The historic records indicate that Center had a drastic growth in water usage during the 1970's, followed by a slight decreasing trend in the 1980's and early 1990's. Based on the knowledge of current and future expansion of the poultry production industry in and around Center, decreasing water usage is not expected in the future. Therefore, the 10-year regression does not appear to be the most reasonable approximation of future growth.

However, it should be noted that water records obtained from the City of Center for its Aiken Plant show that facility had 790,100,000 gallons of treated water pumpage over the period from August 1994 to July 1995. This corresponds to approximately 2,425 acre-feet/year for that time. As can be seen on the attached spreadsheet, the 20-year water use projection calculated for 1994 is 2,420 acre-feet, while that for 1995 is 2,456 acre-feet. This is very close to the amount of water produced at the Aiken WTP from August 1994 to July 1995. Therefore, we feel that there is some merit to using the 20-year projections to estimate the future water usage for Center.

Paxton WSC - Historical data from 1970 to 1994 was available for the Paxton WSC. This information is used in the revised future projections below.

- A. Estimated Number of Connections - The historic data indicates that the Corporation experienced slow growth until the mid-1970's when it experienced a large increase in connections that almost doubled it in size. The historic data then indicates that growth basically leveled out until the late 1980's, when the number of connections decreased drastically. The most recent information indicates that the current number of connections had remained constant during the early 1990's, but began to increase again during 1994 (the last date for which information is available).

In order to remain consistent with the study, linear regressions were performed using the historic data. A 10-year regression was performed using the most recent 10 years' worth of data. Similarly, a 24-year regression was also performed using the information from 1970 to 1994. When compared with the actual historical data, the projections calculated from the 10-year regression have an average percent relative error of -10.050%, and a standard deviation of 19.959%. Similarly, the projections calculated from the 24-year regression have an average percent relative error of -1.312%, and a standard deviation of 37.562%. These large deviations are caused by the rapid growth and decline indicated from the historic records (please refer to the attached graph). It is somewhat difficult to accurately predict the future connections of a system with such dynamic fluctuations.

Due to the drastic decrease that occurred in the late 1980's, the estimates based on the 10-year linear regression show a drastic system decline that would indicate no connections remaining by the year 2010. It is not expected that the Paxton WSC will cease to exist in the next ten years. We feel that the 10-year regression was disproportionately influenced by the sudden decrease in the late 1980's. Similarly, if a regression had been made based on the data from 1990 to 1994, a rather rapid growth would have been indicated. Therefore, we feel that the 24-year regression offers a better approximation for future connections. By using data over the 24 year interval, the intense growth and rapid decline tends to balance out to provide

a more reasonable estimate. Please refer to the attached spreadsheet for the revised estimate.

- B. Estimated Water Usage - The historic data from 1970 to 1993 indicates that the Corporation's water usage has also shown rapid increases and declines. Both a 10-year and 23-year regression were performed using the historic data. However, several data points that appeared to be in error were not included in the regressions. These modifications result in more uniform data, as can be seen in the attached graph. When compared with the actual historical data, the projections calculated from the 10-year regression have an average percent relative error of -5.560%, with a standard deviation of 27.713%. Similarly, the projections calculated from the 23-year regression have an average percent relative error of -10.123%, with a standard deviation of 35.431%. These large deviations are caused by the rapid growth and decline in water usage as indicated from the historic records (please refer to the attached graph). It is somewhat difficult to accurately predict the future connections of a system with such dynamic fluctuations, but both projections seem to indicate continued growth. However, since the system has shown such large fluctuations and because the projections to be made are so far into the future, we feel that the 23-year regression provides a more accurate long term estimate. These revised figures are shown on the attached spreadsheet. Please note that these revised values are somewhat more conservative than those originally presented in the study.

Tennessee WSC - Historical data from 1971 to 1994 was available for the Tennessee WSC. This information is used in the revised future projections below.

- A. Estimated Number of Connections - The historic data indicates that the Corporation experienced steady growth from 1970 until the mid-1980's, when it began to level off. A sudden decrease in the number of connections occurred in the late 1980's, but was then followed by a sudden increase in the early 1990's. The most recent information indicates that the number of connections has leveled off and remains fairly constant.

A 10-year regression was performed using the historic data from 1984 to 1994. Similarly, a 23-year regression was performed using the historic data from 1971 to 1994. When compared to the actual historic number of connections, the 10-year projection displayed an average percent relative error of -0.223%, with a standard deviation of 3.397%. The 23-year projection displayed an average percent relative error of -0.310%, with a standard deviation of 5.276%.

Attachment 1 contains a spreadsheet showing the estimates for both regressions. The graph included in Attachment 1 also shows a plot of the 10-year and 23-year projections as compared to the actual historical data. Please note that the sudden decrease in connections that occurred during the late 1980's influences the 10-year regression towards a slight negative growth rate. Although fluctuations in the number of connections should be expected, a continuous decrease in growth over the next 50 years is not expected to occur. As can be seen from the graph, the "best fit" line generated from the 10-year regression provides a good fit for the last 10 years worth of data; however, it is a very poor fit when compared to the total growth in number of connections over the available historic period. On the other hand, the 23-year projection appears to be a fairly close approximation for the entire historic number of connections. Therefore, we feel that the 23-year regression provides the best approximation for the future number of connections in the Tennessee WSC.

- B. Estimated Water Usage - The historic data indicates that the Corporation experienced vast fluctuations in water usage during the early 1970's. Water usage then seemed to stabilize and increase at a moderate rate of growth from the mid-1970's until the mid 1980's. From the mid-1980's until the early 1990's, the rates of water usage have fluctuated but shown a general downward trend.

A 10-year regression was performed using the historic data from 1984 to 1994. Similarly, a

23-year regression was performed using the historic water usage from 1971 to 1994. When compared to the historic data, the 10-year projection displayed an average percent relative error of -1.087%, with a standard deviation of 6.418%. The 23-year projection displayed an average percent relative error of -6.380%, with a standard deviation of 31.085%.

Attachment 1 contains a spreadsheet showing the estimates for both regressions. The graph included in Attachment 1 also shows a plot of the 10-year and 23-year projections as compared to the actual historical data. Please note that the general downward trend that began in the mid-1980's influences the 10-year regression towards a negative growth rate that would indicate zero water usage before the Year 2040. Although fluctuations of water consumption should be expected, a continuous decrease over the next 40 years followed by cessation of water use is not expected to occur. As can be seen from the graph, the "best fit" line generated from the 10-year regression provides a good fit for the last 10 years worth of data; however, it is a very poor fit when compared to the total water usage over the available historic period. Due to the fluctuations of water use at the beginning of the historical record, the "best fit" line for the 23-year projection also provides a poor fit. However, it does do a better job of approximating the overall increase in consumption than the 10-year projection. Since the system has shown such large fluctuations and because the projections to be made are so far into the future, we feel that the 23-year regression provides a more accurate long term estimate. The revised estimates for water consumption are shown on the attached spreadsheet in Attachment 1. Please note that these revised values are somewhat more conservative than those originally presented in the study.

City of Timpson - Historical data from 1955 to 1994 was available for the City of Timpson. This information is used in the revised future projections below.

- A. Estimated Number of Connections - The historic data indicates that the City experienced sporadic fluctuations in its number of connections over the past 40 years. Steady growth is indicated by the historic records from 1955 until 1960, when the number of connections decreased significantly. The number then stabilized for a period and then suddenly increased again in the mid-1960's. Sharp growth then continued at a fairly constant rate from the early 1970's until the early 1980's, after which a sharp decline was noted. The number of connections appeared to level off and show some moderate increase from the mid-1980's until the mid-1990's.

A 10-year regression was performed using the historic data from 1984 to 1994. Similarly, a 39-year regression was performed using the historic data from 1955 to 1994. When compared to the actual historic number of connections, the 10-year projection displayed an average percent relative error of 0.120%, with a standard deviation of 1.970%. The 39-year projection displayed an average percent relative error of -1.302%, with a standard deviation of 11.686%.

Attachment 1 contains a spreadsheet showing the estimates for both regressions. The graph included in Attachment 1 also shows a plot of the 10-year and 39-year projections as compared to the actual historical data. Both projections indicate continued future growth. However, the fluctuations in the historic number of connections makes a close approximation very difficult. As can be seen from the graph, the "best fit" line generated from the 10-year regression provides a good fit for the last 10 years worth of data; however, it is a very poor fit when compared to the total growth in number of connections over the last 39 years of the historic period. Although the 10-year regression ties in fairly well with the most recent information regarding water usage, its projected water usage in the Year 2050 is much less than the historical water usage of the early 1980's.

There is fairly high deviation between the historic values and the projected water use in the historic period as generated by the 39-year regression. However, the 39-year projection does appear to offer better rough approximation of the average water usage for the period between 1955 and 1994 than the 10-year regression does. Therefore, we feel that the 39-year

regression provides the best approximation for the future number of connections for the City of Timpson.

- B. Estimated Water Usage - The graph in Attachment 1 shows the historic water use in the City of Timpson. The historic data indicates that the City experienced steady increase in water consumption from 1955 to the mid-1960's. The level of water consumption decreased rapidly in the mid-1960's and then remained fairly stable until the mid 1970's. The water usage then increased at a notable rate of growth from the mid-1970's until the mid-1980's. The water consumption then decreased noticeably from the mid-1980's until 1990. The level of water consumption has fluctuated since 1990, but the most recent data indicates that it was on an upward trend in 1994.

A 10-year regression was performed using the historic data from 1984 to 1994. Similarly, a 39-year regression was performed using the historic water usage from 1955 to 1994. When compared to the historic data, the 10-year projection displayed an average percent relative error of -0.887%, with a standard deviation of 10.658%. The 39-year projection displayed an average percent relative error of -17.270%, with a standard deviation of 56.903%.

Attachment 1 contains a spreadsheet showing the estimates for both regressions. The graph included in Attachment 1 also shows a plot of the 10-year and 39-year projections as compared to the actual historical data. Please note that the general downward trend that began in the mid-1980's influences the 10-year regression towards a negative growth rate that would indicate zero water usage before the Year 2020. Although fluctuations of water consumption should be expected, a continuous decrease over the next 20 years followed by cessation of water use in the City of Timpson is not expected to occur. As can be seen from the graph, the "best fit" line generated from the 10-year regression provides a good fit for the last 10 years worth of data; however, it is a very poor fit when compared to the total water usage over the available historic period. Even though the large fluctuations in past usage cause its deviation to be large, the 39-year regression does provide a much better fit for the entire historic range of data. Since the projections to be made 50 years into the future, it seems apparent the 39 years of past data would be a better indication of long-term trends than just the last ten years' worth of data. We therefore feel that the 39-year regression provides the best estimate for future water consumption in the City of Timpson. The revised estimates for water consumption are shown on the appropriate spreadsheet in Attachment 1. Please note that these revised values are somewhat more conservative than those originally presented in the study.

3. Options 1 and 2 were formulated on the assumption that all of the water supplying entities in the County would purchase their water from the proposed county-wide system. The water wells of the individual systems could then act as emergency back-up, if necessary. This same option applies to the existing surface water plants operated by the City of Center and the City of Huxley.

Options 1 and 2 were formulated upon the assumption that Center's plants were not being used to supply water to the County. However, there are several possibilities in respect to incorporate Center's Water Plants into the various phases of system expansion. Some discussion has also been made in regard to the possibility of these plants being utilized to provide water to adjacent counties, if Option 1 or 2 is implemented. However, that would require additional study to determine its actual feasibility.

Likewise, Option 1 presents the scenario of a surface water treatment plant being constructed in or near the City of Huxley. Under that scenario, use of its existing plant would probably be discontinued. However, some discussion has also been made in regard to the possibility of the plant providing water to entities in nearby San Augustine County if Option 1 or 2 is implemented. However, that would require additional study to determine its actual feasibility.

4. Table 3-3 shows the projected water consumption for each of the county entities. Options 1 and 2 present scenarios that assume each county entity purchases its water from the regional system. The projected water consumption at the Year 2000 is as follows:

<u>Entity Name</u>	<u>Year 2000 Projected Water Consumption</u>
Buena Vista WSC .....	38 acre-feet
Center, City of .....	2,624 acre-feet
Choice WSC .....	141 acre-feet
East Lamar WSC .....	114 acre-feet
Five Way WSC .....	148 acre-feet
Flat Fork WSC .....	151 acre-feet
Huber .....	34 acre-feet
Huxley, City of .....	302 acre-feet
Joaquin, City of .....	225 acre-feet
McClelland WSC .....	152 acre-feet
Paxton WSC .....	109 acre-feet
Sand Hills WSC .....	159 acre-feet
Shelbyville WSC .....	112 acre-feet
Tenaha, City of .....	192 acre-feet
Tennessee WSC .....	34 acre-feet
Timpson, City of .....	319 acre-feet
Timpson Rural WSC .....	169 acre-feet
Warr WSC .....	14 acre-feet
	<b>Total = 5,037 acre-feet</b>

The figures used in the study projected a Year 2000 water consumption of approximately 5,037 acre-feet or 1,641,320,211 gallons for that year. Dividing this by the number of days in a year (365.25 days) yields a county-wide demand of 13.8 acre-feet per day or 4,493,690 gallons per day. This average was rounded to the nearest million gallons (i.e. from approximately 4.5 MGD to 5 MGD).

5. Because of the nearness of extensive high quality surface water sources, the report placed a lot of focus on that option. The study stated several reasons why well water was not considered to be the best source of water for the county-wide system. Some of the reasons stated in the study, as pertaining to Timpson and Tenaha are stated below.

Please note, only limited well production estimates are available for Shelby County at the time of the writing of the study. No groundwater studies had been done for the area at that time. Most of the groundwater information used was acquired from Texas Water Commission Bulletin 6307, Reconnaissance of the Ground Water Resources of the Sabine River Basin, dated August 1963, and from Texas Water Commission Bulletin 6308, Reconnaissance of the Ground Water Resources of the Neches River Basin, dated August 1963. We have been unable to acquire more recent information. Updated information might alter the perception obtained from the above mentioned sources.

- A. Water Quality - Water obtained from the wells of Tenaha and Timpson is relatively high in sodium. Based on the information obtained from the most recent well testings, Tenaha's wells have an average sodium concentration of 399 mg/l. Similarly, Timpson's wells average 322 mg/l. The presence of sodium in the water supply is significant because it can adversely affect persons suffering from heart, kidney, or circulatory ailments. No recommended limit for sodium has been established in TAC 290. However, the American Heart Association's 500-mg and 1000-mg-sodium-per-day diet recommends that distilled water be used if the water supply contains more than 20 mg/l of sodium. Water containing more than 270 mg/l of sodium should not be used for drinking by those on a moderately restricted sodium diet.

In addition, the wells of Tenaha have high concentrations of total dissolved solids. The most recent well testings data indicates that Tenaha's wells have an average TDS concentration of 965 mg/l. Generally, 1000 mg/l is the maximum allowed.

- B. Reliance - Systems that depend on several wells can be greatly impaired if one or all of their wells become inoperative due to a drop in pumping levels, contamination or failure. The possibility of contamination is especially high when several wells are in such close proximity.



Well failure can not only cause loss of capacity, it can also cause a violation of state requirements. The problem can be further compounded by the fact that construction of a new well requires considerable time, effort, and cost on the part of the entity. Unless other sources of supply are accessible, the system may be out of compliance for quite a while. The reduction in the system's well capacity can also put an increased burden on the remaining wells in service. Also, there is no guarantee that a new well will provide usable water or that the water quality in an existing well will remain a constant. Since most of Shelby County lies within the outcrop area of the Carrizo-Wilcox Aquifer, the groundwater levels are likely to respond to seasonal variations in precipitation. Prolonged drought conditions could have an adverse effect on both water quantity and quality, especially in the area of larger well fields.

Switching to surface water supplied by the regional system would provide the Cities with a reliable supply of water with a consistent level of quality. The wells then could be used as a back-up in case of emergency.

6. Your comments No. 6 and No. 10 seem to indicate that you wish for the most recent TWDB studies of groundwater in the Shelby County area to be incorporated into the final report. This is something with which we concur. There was a notable lack of updated information available at the time of the writing of the study, which understandably concerned us. It was generally known during the writing of the study that the TWDB was in the process of conducting a groundwater study of the area. However, telephone calls to the TWDB at that time revealed that no information was available to be used in our study.

From your comment No. 10, it appears that the preliminary work in this area is either in the final stages or has been completed. However, it is our understanding that this information is still unavailable (please refer to 10 below). Please advise us of your wishes in this matter.

7. Options 1 and 2 were formulated on the assumption that all of the water supplying entities in the County would purchase their water from the proposed county-wide system. The water usages assumed are those given in 4 above. As noted therein, the estimated water consumption of the City of Center was 2,624 acre-feet per year (855,037,569 gallons per year). This amount corresponds to approximately 2,340,965 gallons per day. Please note that the Tyson Chicken Plant in Center has a daily demand of at least 1,000,000 gallons per day.
8. Appendix F is a summary of the current water rates set by the specified water suppliers. The information contained therein is repeated verbatim from the information we obtained from the listed supplier.

Option 3 represents a refinement of several suggestions submitted after the original draft report was submitted for review and comment. It is based upon a phased approach for county participants with distribution lines only going to those initially involved. It also considers the possibility of a portion of these participants purchasing all of their water from the regional entity, while the others only purchase a limited amount while still relying on their existing wells. This option requires that the City of Center supply water to the participating entities. For the purpose of comparison, it was assumed that Center would charge \$1.00 per thousand gallons. This number was chosen based upon the input of Frank Simpson, the City Manager for the City of Center. It does not represent a legal binding agreement, it is merely a "best guess" used for the purposes of comparison to evaluate the feasibility of the option.

9. Information regarding Lake Pinkston and Lake Center was incorporated in the Executive Summary but was overlooked in Section 4. The information presented in the Executive Summary is reproduced below:

*Information regarding Lake Pinkston was obtained from the TNRCC. The information received was a copy of the Certificate of Adjudication of Water Rights for the lake. Therein, it is stated that the City of Center is authorized to maintain an existing dam and reservoir and impound water therein not to exceed 7,380 acre-feet (2,404.79 million gallons) of water. The City is further authorized to divert and use an amount*

*of water not to exceed 3,800 acre-feet/year (1,238.24 million gallons/year) at a maximum rate of 2,250 gpm.*

*Information regarding Lake Center was obtained from the TNRCC. The information received was a copy of the Certificate of Adjudication of Water Rights for the lake. Therein, it is stated that the City of Center is authorized to maintain an existing dam and reservoir and impound water therein not to exceed 446 acre-feet (145.33 million gallons) of water. The City is further authorized to divert and use an amount of water not to exceed 1,460 acre-feet/year (475.74 million gallons/year) at a maximum rate of 1,200 gpm.*

As per your comment, this data will be included in Section 4 of the final report.

10. Several telephone calls were made to the TWDB in reference to acquiring the most current work regarding the regional computer flow model for the Carrizo-Wilcox Aquifer. We were referred to Mr. David Thorkildsen of the Water Supplies Section of the TWDB. Mr. Thorkildsen stated that an effort was being made to write-up the results of the model, but that nothing was available at the present time. He said that an effort was likely to be made to publish before the year was over and that some form of notice would go out to inform interested parties of its availability.

We agree with your comment that it is wise and important to individual participants to have the newest information incorporated into the study. We will endeavor to incorporate this information in the study when it becomes available to us. Please advise us in this regard.

11. Your comment here apparently is in reference to the pie charts shown in Section 3.3.1.1. Please note that the information shown was based on historical data provided by the TWDB. It shows the rough percentages of residential, commercial, and industrial connections as reported to the TWDB by the individual entity. The reference is to the total number of industrial and commercial connections, which is not necessarily equivalent to the total amounts of water used.

The scope of this study did not include the designing of a water conservation plan for Shelby County. Reference to water conservation and planning was made in Section 14.4. As per your comment, Section 14.4 will be modified to stress the importance of mentioning commercial and industrial water use in the formulation of a county-wide conservation plan.

12. In reference to your comment, we have reviewed several water conservation plans for guidance. The plans reviewed generally hope to achieve a 10% reduction in water usage per person within a 5-year period following enactment. As noted previously, the scope of this project did not include the formulation of a detailed water conservation plan for the County. However, the need for one was addressed in Section 14.

We realize that changes in the State Plumbing Code and other expected conservation measures could result in a change in water consumption. Most of the water conservation plans that we reviewed stressed the importance of cities and utilities with general plumbing codes to adopt water saving plumbing codes for new construction and for replacement of plumbing in existing structures. The plans also asked utilities that do not have a plumbing code to adopt water saving codes or distribute information to their customers and builders to guide them in purchasing and installing water saving plumbing devices. It is generally assumed in the study that the establishment of a regional water supplier will entail the adoption of a county-wide conservation plan that will espouse goals similar to those above.

In reality, strict enforcement of plumbing codes is more likely to occur in the municipalities than in the rural water corporations. To simulate this, we will introduce a straight reduction of 10% in the projected water demands for municipalities in the study. A lesser rate will be assigned to the rural corporations.

13. As per your comment, Section 14.4 will be modified to stress the importance of considering peak demands in the formulation of a county-wide conservation plan. Table 4.4 will also be reproduced in

Section 14.4 to highlight the high peak to average ratios displayed by several of the utilities.

14. The scope of this study did not include the designing of an in-depth water conservation plan for Shelby County. However, reference to the need for water conservation and planning was made in Section 14.4. As per your comment, Section 14.4 will be modified to emphasize the importance of specific conservation goals for industrial and commercial users and the reduction of peak demand.

Reference to the need for reducing the amount of unaccounted for water will also be stated in that section. The study addresses the feasibility of a regional water system, it does not provide for individual system improvements. Each individual water supplier is responsible for the upkeep of its distribution system. The identification and repair of leaks and/or faulty meters is the responsibility of each individual system, and is often a function of its available manpower and funds. However, the adoption of a county-wide conservation plan will require participating entities to set specific goals in reducing the amount of unaccounted for water.

15. As per your comment, Section 14.4 will be modified to include the changing of block rates to non-promotional rates as a goal of the conservation plan.
16. From your letter we understand that a reference was made to an outdated set of board rules. The reference to TWDB 363.53 on page 14-2 will be revised to a reference to 30 TAC 363.15, as per your comment.

Note: In addition to the above statements, we would like to re-emphasize the fact that water demand is exceptionally high in Shelby County due to poultry production in the area. During the writing of the study, we spoke with many residents of Shelby County at various meetings. A recurring theme expressed at these meetings was the desire of many farmers for additional water supply so that they could expand their chicken operations. Many more expressed an interest in entering the industry if more water was made available. Please note that many of the chicken farmers in the County operate several chicken houses, and that many of these houses can hold 30,000 birds at one time. The water needed for these animals is profound, especially in the summer time.

We have taken the liberty of attaching some rough spreadsheet calculations regarding the water consumption required for chickens. These calculations are found in Attachment 2. Please note that at an average house temperature of 100°F, approximately 2,280 gallons of water per day is consumed by 10,000 eight-week old broiler chickens. It is conceivable that a farm operating three chicken houses with 30,000 birds each would consume around 20,520 gpd. Assuming that the average person consumes 100 gpd, that farm has a population equivalent of over 205 people. This provides an illustration of how much variation in water demand is possible due to poultry production.

Again, please note that poultry production is the largest single industry in Shelby County. Tyson maintains a large processing plant in Center. Likewise, Pilgrim's pride has recently built a feed mill in Tenaha. In addition, Pilgrim's Pride is expanding a recently purchased plant in Nacogdoches which will require an additional 300 poultry houses in Shelby and Nacogdoches Counties to supply birds. Interest in this industry is likely to increase as time goes on.

**ATTACHMENT 1**  
**REEXAMINATION OF PROJECTIONS FOR THE CITY**  
**OF CENTER, PAXTON WSC, TENNESSEE WSC, AND**  
**THE CITY OF TIMPSON**

REPLY TO TWDB (5/30/97)

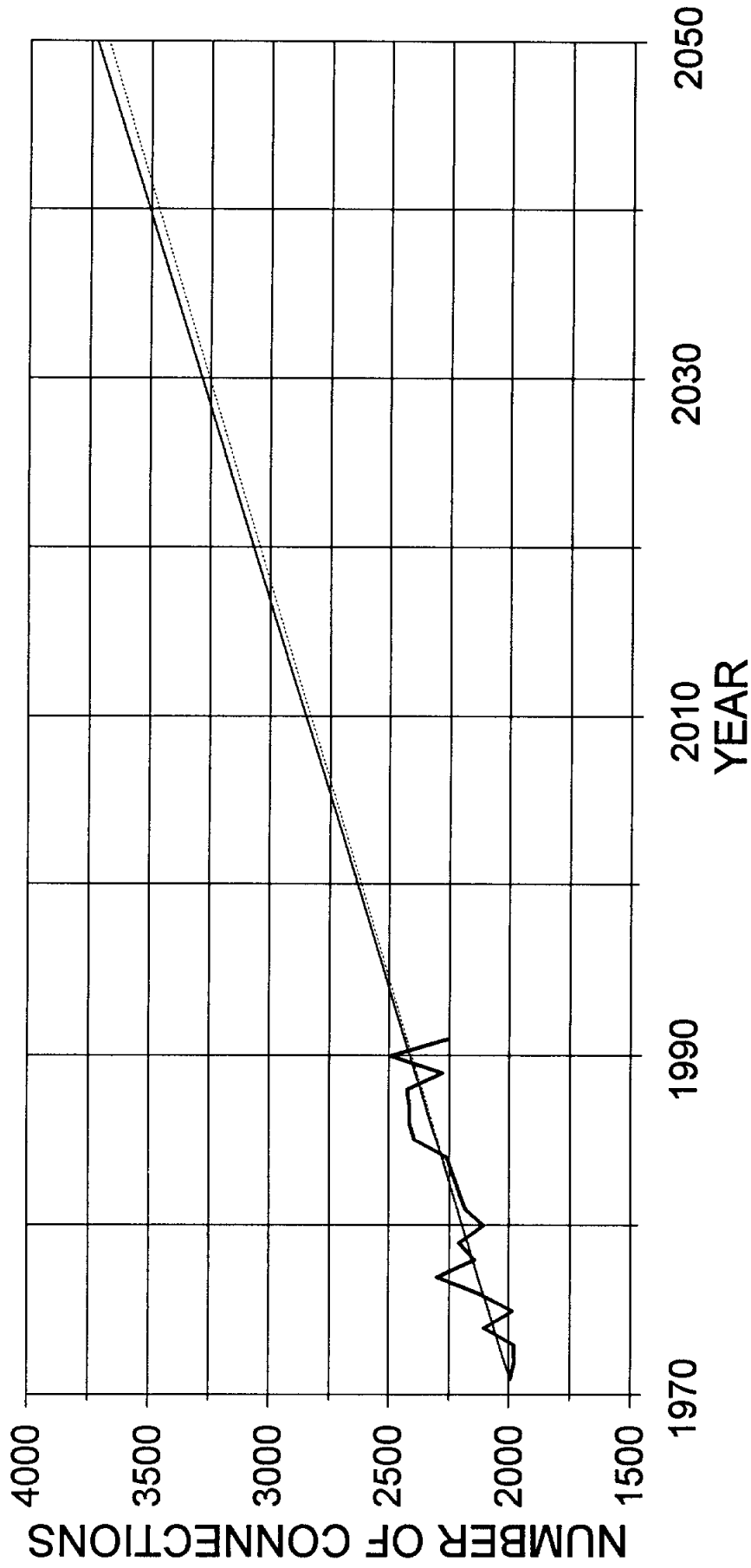
CITY OF CENTER	PROJECTED OVER 20 YRS		PROJECTED OVER 10 YRS	
	No. OF CONNECTIONS	PROJECTED CONNECTIONS	PROJECTED CONNECTIONS	ERROR (%)
YEAR				ERROR (%)
1971	2,000	1,999	0.036	n/a
1972	1,980	2,021	-2.078	n/a
1973	1,985	2,043	-2.922	n/a
1974	2,105	2,065	1.907	n/a
1975	1,989	2,087	-4.913	n/a
1976	2,120	2,109	0.539	n/a
1977	2,300	2,130	7.372	n/a
1978	2,146	2,152	-0.293	n/a
1979	2,209	2,174	1.577	n/a
1980	2,107	2,196	-4.225	-4.147
1981	2,186	2,218	-1.458	-1.355
1984	2,262	2,283	-0.948	-0.768
1985	2,395	2,305	3.745	3.940
1986	2,415	2,327	3.637	3.856
1987	2,415	2,349	2.732	2.976
1988	2,425	2,371	2.232	2.500
1989	2,280	2,393	-4.945	-4.633
1990	2,496	2,415	3.261	3.571
1991	2,259	2,436	-7.855	-7.486
2000	n/a	2,633	n/a	n/a
2010	n/a	2,852	n/a	n/a
2020	n/a	3,070	n/a	n/a
2030	n/a	3,289	n/a	n/a
2040	n/a	3,508	n/a	n/a
2050	n/a	3,726	n/a	n/a
		AVG. ERROR*	-0.137	AVG. ERROR*
		ST. DEV.ERROR*	3.763	ST. DEV.ERROR*
				4.152

\* Average and standard deviation of error extends only to last year of actual data.

CHANGES:

1. Information from TWDB listed number of connections in 1975 to be 4,989. Assumption is made here that that number was a mis-type and is listed here as being 1,989.
2. The information indicates that the number of connections jumped from 2,186 to 2,830 between 1981 and 1982. Then fell from 2,830 to 2,262 between 1983 and 1984. These numbers were assumed to be in error and were deleted from the regression.

# CITY OF CENTER ESTIMATED CONNECTIONS



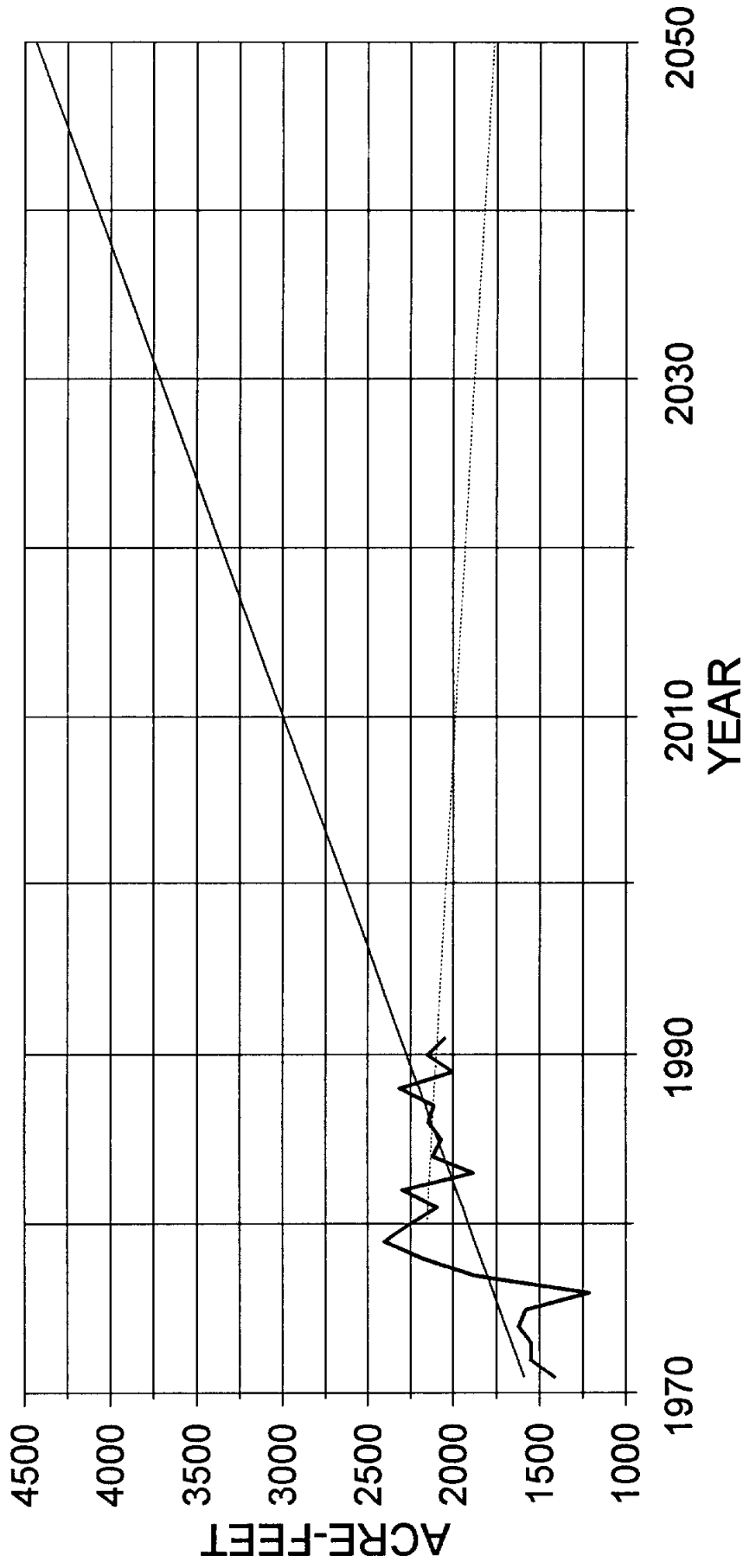
— Historic Connections    — Projection 1 (1971-1991 Data)    ..... Projection 2 (1980-1991 Data)

**NOTE:** Information re: Aiken WTP shows that 2,425 acre-feet of treated water pumpage occurred from between August 1994 and July 1995. This doesn't match up to a complete year's worth of data consistent with that presented above. However, 1994 and 1995 were included under the projections for comparison.

CITY OF CENTER		PROJECTED OVER 20 YRS		PROJECTED OVER 10 YRS	
YEAR	CONSUMPTION (acre-ft)	PROJECTED CONSUMPTION	ERROR (%)	PROJECTED CONSUMPTION	ERROR (%)
1971	1,418.0	1,591	-12.177	n/a	n/a
1972	1,555.0	1,627	-4.612	n/a	n/a
1973	1,551.0	1,663	-7.206	n/a	n/a
1974	1,623.0	1,699	-4.672	n/a	n/a
1975	1,582.1	1,735	-9.656	n/a	n/a
1976	1,214.0	1,771	-45.875	n/a	n/a
1977	1,884.7	1,807	4.124	n/a	n/a
1978	2,188.7	1,843	15.794	n/a	n/a
1979	2,407.3	1,879	21.943	n/a	n/a
1980	2,258.2	1,915	15.193	2,160	4.359
1981	2,099.7	1,951	7.074	2,154	-2.596
1982	2,301.4	1,987	13.652	2,149	6.637
1983	1,888.7	2,023	-7.125	2,143	-13.470
1984	2,123.4	2,059	3.018	2,138	-0.666
1985	2,076.2	2,095	-0.923	2,132	-2.688
1986	2,150.4	2,131	0.883	2,126	1.114
1987	2,116.1	2,167	-2.427	2,121	-0.227
1988	2,319.7	2,204	5.009	2,115	8.809
1989	2,007.2	2,240	-11.577	2,110	-5.111
1990	2,152.3	2,276	-5.729	2,104	2.233
1991	2,057.4	2,312	-12.359	2,099	-2.007
1992	n/a	2,348	n/a	2,093	n/a
1993	n/a	2,384	n/a	2,088	n/a
1994	n/a	2,420	n/a	2,082	n/a
1995	n/a	2,456	n/a	2,076	n/a
2000	n/a	2,636	n/a	2,049	n/a
2010	n/a	2,997	n/a	1,993	n/a
2020	n/a	3,357	n/a	1,938	n/a
2030	n/a	3,718	n/a	1,882	n/a
2040	n/a	4,078	n/a	1,827	n/a
2050	n/a	4,439	n/a	1,771	n/a
		AVG. ERROR*	-1.793	AVG. ERROR*	-0.301
		ST. DEV. ERROR*	14.144	ST. DEV. ERROR*	5.814

\* Average and standard deviation of error extends only to last year of actual data.

# CITY OF CENTER ESTIMATED WATER CONSUMPTION



— Historic Connections    — Projection 1 (1971-1991 Data)    ..... Projection 2 (1980-1991 Data)



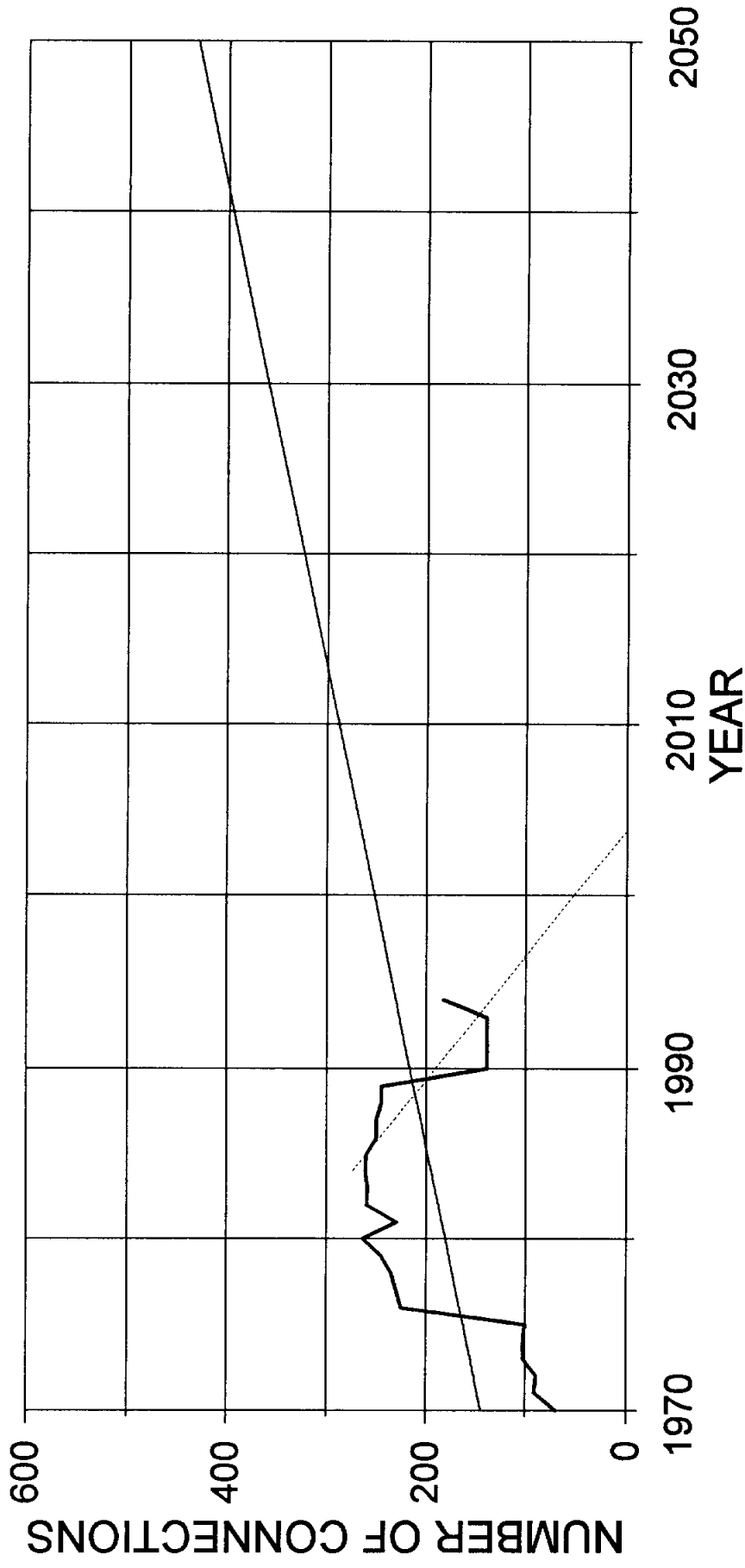
REPLY TO TWDB (5/30/97)

PAXTON WSC		PROJ. 1970-1994		PROJ. 1984-1994	
YEAR	No. OF CONNECTIONS	PROJECTED CONNECTIONS	ERROR (%)	PROJECTED CONNECTIONS	ERROR (%)
1970	71	145	-104.377	n/a	n/a
1971	92	149	-61.619	n/a	n/a
1972	90	152	-69.190	n/a	n/a
1973	103	156	-51.313	n/a	n/a
1974	103	159	-54.790	n/a	n/a
1975	101	163	-61.402	n/a	n/a
1976	225	167	25.957	n/a	n/a
1978	235	174	26.059	n/a	n/a
1979	245	177	27.615	n/a	n/a
1980	264	181	31.468	n/a	n/a
1981	230	185	19.780	n/a	n/a
1982	260	188	27.659	n/a	n/a
1983	259	192	25.997	n/a	n/a
1984	261	195	25.191	288	-10.380
1985	260	199	23.526	274	-5.472
1986	250	202	19.035	260	-4.145
1987	250	206	17.602	246	1.400
1988	245	210	14.458	233	5.046
1989	245	213	12.997	219	10.705
1990	140	217	-54.814	205	-46.364
1991	140	220	-57.373	191	-36.461
1992	140	224	-59.931	177	-26.558
1993	140	227	-62.489	163	-16.656
1994	183	231	-26.266	149	18.331
2000	n/a	253	n/a	136	n/a
2010	n/a	288	n/a	52	n/a
2020	n/a	324	n/a	-86	n/a
2030	n/a	360	n/a	-225	n/a
2040	n/a	396	n/a	-363	n/a
2050	n/a	432	n/a	-502	n/a
		AVG. ERROR*	-1.312	AVG. ERROR*	-10.050
		ST. DEV.ERROR*	37.562	ST. DEV.ERROR*	19.959

\* Average and standard deviation of error extends only to last year of actual data.

# PAXTON WSC

## ESTIMATED CONNECTIONS



— Historic Connections

..... Projection 1 (1970-1994 Data)

----- Projection 2 (1984-1994 Data)

**PAXTON WSC**

YEAR	CONSUMPTION (acre-ft)	PROJ. 1970-1993		PROJ. 1983-1993	
		PROJECTED CONSUMPTION	ERROR (%)	PROJECTED CONSUMPTION	ERROR (%)
1970	20.9	26	-25.190	n/a	n/a
1971	13.3	28	-111.252	n/a	n/a
1972	21.7	30	-38.379	n/a	n/a
1973	25.3	32	-26.324	n/a	n/a
1974	31.7	34	-6.913	n/a	n/a
1978	56.3	42	26.077	n/a	n/a
1979	56.3	44	22.646	n/a	n/a
1980	60.7	45	25.071	n/a	n/a
1981	62.7	47	24.380	n/a	n/a
1982	51.3	49	3.811	n/a	n/a
1983	66.6	51	23.008	54	19.346
1984	73.7	53	27.804	55	25.810
1985	38.1	55	-44.725	56	-46.037
1986	36.6	57	-55.934	57	-54.651
1989	55.7	63	-12.867	59	-6.802
1990	56.3	65	-15.096	60	-7.372
1991	64.4	67	-3.619	61	4.638
1992	64.3	69	-6.784	62	2.994
1993	72.0	71	1.953	63	12.032
2000	n/a	84	n/a	70	n/a
2010	n/a	103	n/a	80	n/a
2020	n/a	123	n/a	89	n/a
2030	n/a	142	n/a	99	n/a
2040	n/a	161	n/a	109	n/a
2050	n/a	181	n/a	118	n/a
		<b>AVG. ERROR*</b>	<b>-10.123</b>	<b>AVG. ERROR*</b>	<b>-5.560</b>
		<b>ST. DEV. ERROR*</b>	<b>35.431</b>	<b>ST. DEV. ERROR*</b>	<b>27.713</b>

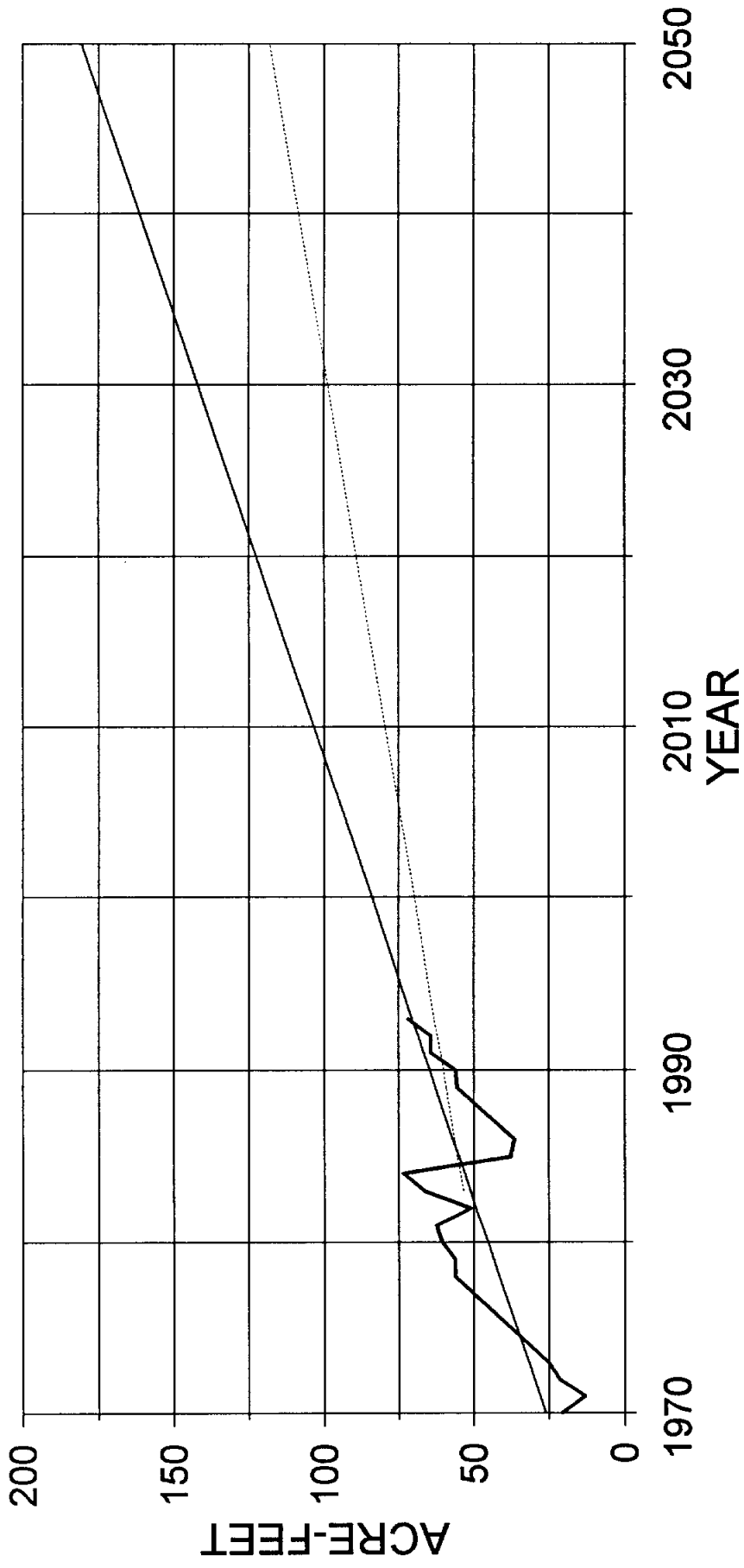
\* Average and standard deviation of error extends only to last year of actual data.

**CHANGES:**

1. Data from years 1969, 1975, 1976, 1987, and 1988 all showed high variation in proportion to the preceding and following years. Therefore, these data points were not included in the regression.

# PAXTON WSC

ESTIMATED WATER CONSUMPTION



— Historic Water Usage    — Projection 1 (1970-1993 Data)    ..... Projection 2 (1983-1993 Data)

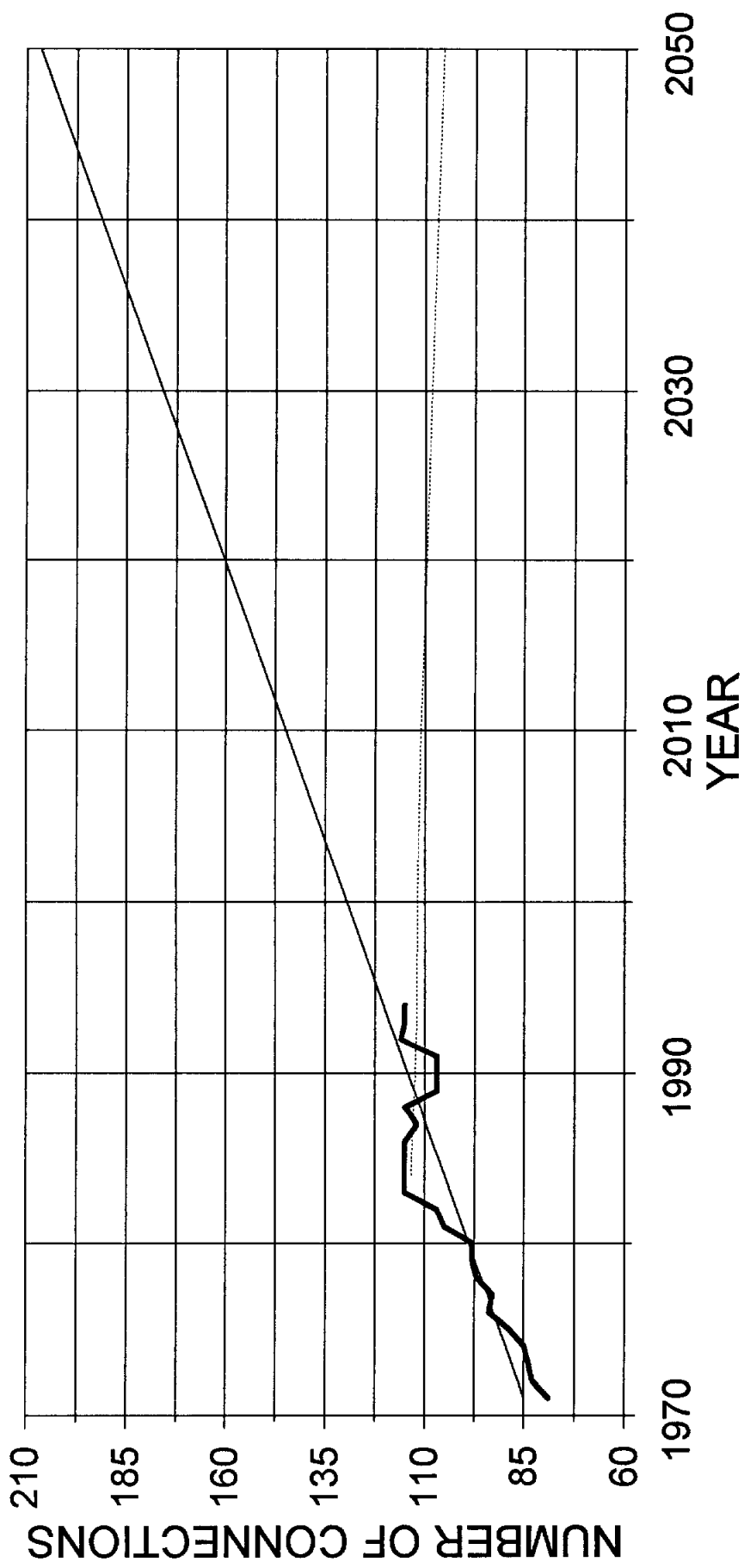
REPLY TO TWDB (6/02/97)

TENNESSEE WSC			PROJ. 1970-1994		PROJ. 1984-1994	
YEAR	No. OF CONNECTIONS		PROJECTED CONNECTIONS	ERROR (%)	PROJECTED CONNECTIONS	ERROR (%)
1971	79		85	-7.658	n/a	n/a
1972	83		87	-4.324	n/a	n/a
1973	84		88	-4.915	n/a	n/a
1974	85		90	-5.491	n/a	n/a
1975	89		91	-2.479	n/a	n/a
1976	94		93	1.334	n/a	n/a
1977	93		94	-1.381	n/a	n/a
1978	97		96	1.212	n/a	n/a
1979	98		97	0.650	n/a	n/a
1980	98		99	-0.921	n/a	n/a
1981	105		100	4.342	n/a	n/a
1982	107		102	4.691	n/a	n/a
1983	115		104	9.983	n/a	n/a
1984	115		105	8.645	113	1.344
1985	115		107	7.306	113	1.462
1986	115		108	5.968	113	1.581
1987	112		110	2.075	113	-0.933
1988	115		111	3.291	113	1.818
1989	107		113	-5.378	113	-5.395
1990	107		114	-6.816	113	-5.268
1991	107		116	-8.255	113	-5.140
1992	116		117	-1.183	112	3.135
1993	115		119	-3.401	112	2.411
1994	115		120	-4.739	112	2.530
2000	n/a		130	n/a	112	n/a
2010	n/a		145	n/a	111	n/a
2020	n/a		160	n/a	110	n/a
2030	n/a		176	n/a	108	n/a
2040	n/a		191	n/a	107	n/a
2050	n/a		207	n/a	106	n/a
			<b>AVG. ERROR*</b>	<b>-0.310</b>	<b>AVG. ERROR*</b>	<b>-0.223</b>
			<b>ST. DEV.ERROR*</b>	<b>5.276</b>	<b>ST. DEV.ERROR*</b>	<b>3.397</b>

\* Average and standard deviation of error extends only to last year of actual data.

# TENNESSEE WSC

## ESTIMATED CONNECTIONS



— Historic Connections

..... Projection 1 (1970-1994 Data)

..... Projection 2 (1984-1994 Data)

**TENNESSEE WSC**

**CHANGES:**

1. Consumption in years 1973 and 1981 appear to be too low to be statistically accurate. The assumption is made that they are in error, and so they have been deleted in this regression.

YEAR	PROJ. 1970-1994		PROJ. 1984-1994	
	CONSUMPTION (acre-ft)	PROJECTED CONSUMPTION	PROJECTED CONSUMPTION	ERROR (%)
1971	10.9	19	n/a	n/a
1972	27.9	19	n/a	n/a
1974	10.2	20	n/a	n/a
1975	14.1	20	n/a	n/a
1976	20.2	21	n/a	n/a
1977	25.6	21	n/a	n/a
1978	24.6	22	n/a	n/a
1979	23.4	22	n/a	n/a
1980	23.9	22	n/a	n/a
1982	26.1	23	29	-9.237
1983	26.7	23	28	-4.852
1984	29.3	24	27	6.212
1985	27.9	24	27	3.353
1986	25.1	24	26	-5.375
1987	24.4	25	26	-6.285
1988	26.3	25	25	3.353
1989	25.0	26	25	0.389
1990	24.3	26	24	-0.359
1991	24.2	26	24	1.356
1992	25.9	27	23	9.821
1993	20.5	27	23	-11.419
2000	n/a	30	19	n/a
2010	n/a	33	14	n/a
2020	n/a	37	9	n/a
2030	n/a	41	4	n/a
2040	n/a	45	-1	n/a
2050	n/a	48	-7	n/a
		<b>AVG. ERROR*</b>	<b>AVG. ERROR*</b>	<b>-1.087</b>
		<b>ST. DEV.ERROR*</b>	<b>ST. DEV.ERROR*</b>	<b>6.418</b>

\* Average and standard deviation of error extends only to last year of actual data.

# TENNESSEE WSC ESTIMATED WATER CONSUMPTION



— Historic Connections    — Projection 1 (1971-1994 Data)    ..... Projection 2 (1984-1994 Data)



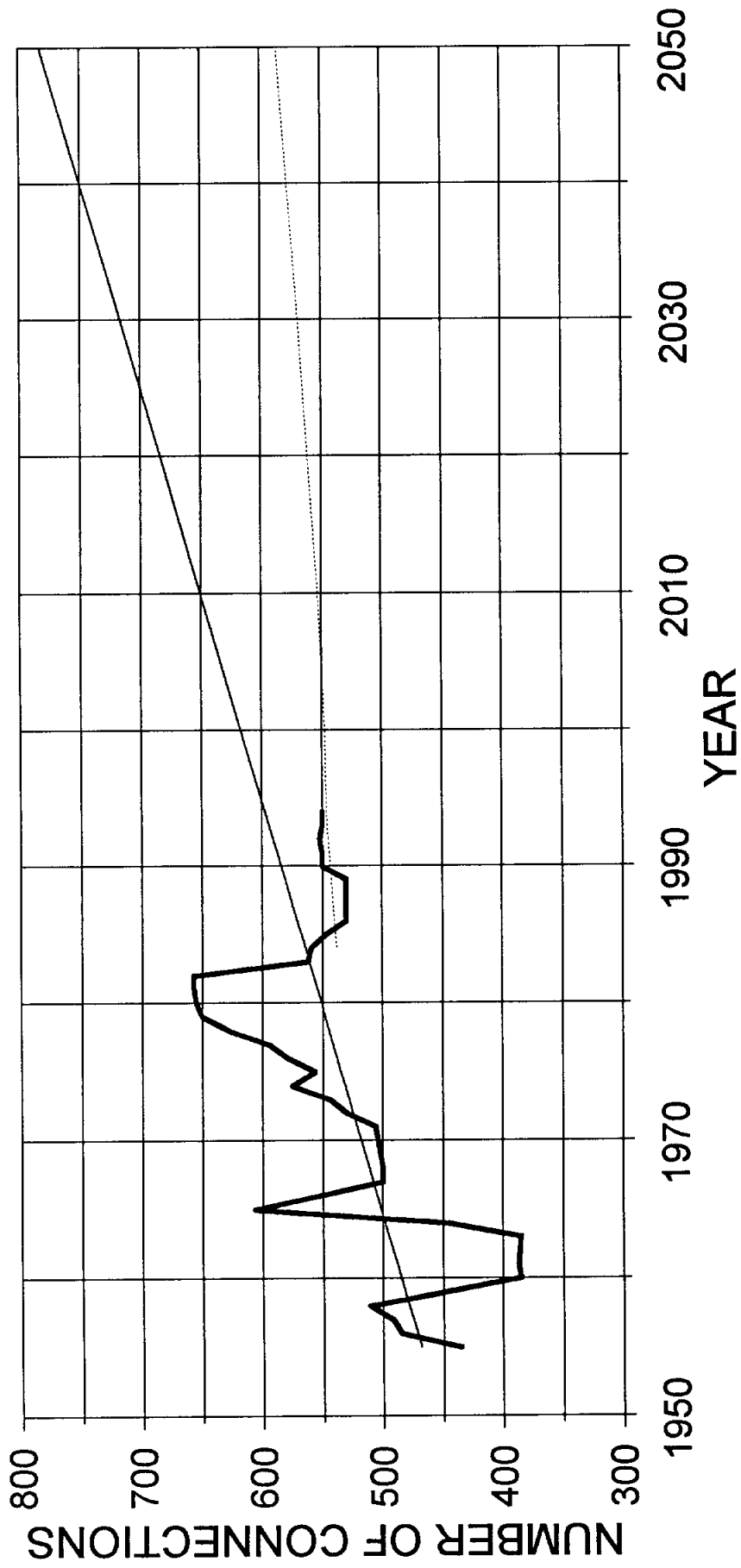
REPLY TO TWDB (6/02/97)

CITY OF TIMPSON		PROJ. 1955-1994		PROJ. 1984-1994	
YEAR	No. OF CONNECTIONS	PROJECTED CONNECTIONS	ERROR (%)	PROJECTED CONNECTIONS	ERROR (%)
1955	436	468	-7.436	n/a	n/a
1956	485	472	2.736	n/a	n/a
1957	492	475	3.447	n/a	n/a
1958	511	478	6.389	n/a	n/a
1960	385	485	-25.967	n/a	n/a
1961	387	488	-26.171	n/a	n/a
1963	385	495	-28.546	n/a	n/a
1964	446	498	-11.707	n/a	n/a
1965	607	502	17.377	n/a	n/a
1967	500	508	-1.629	n/a	n/a
1968	500	511	-2.291	n/a	n/a
1971	506	521	-3.041	n/a	n/a
1972	530	525	1.001	n/a	n/a
1973	545	528	3.118	n/a	n/a
1974	575	531	7.597	n/a	n/a
1975	556	535	3.844	n/a	n/a
1976	580	538	7.252	n/a	n/a
1977	595	541	9.034	n/a	n/a
1978	628	545	13.287	n/a	n/a
1979	650	548	15.712	n/a	n/a
1980	655	551	15.850	n/a	n/a
1981	657	554	15.603	n/a	n/a
1982	657	558	15.099	n/a	n/a
1983	562	561	0.158	n/a	n/a
1984	559	564	-0.970	538	3.688
1985	547	568	-3.790	539	1.421
1986	530	571	-7.744	540	-1.901
1987	530	574	-8.369	541	-2.060
1988	530	578	-8.993	542	-2.220
1989	530	581	-9.618	543	-2.379
1990	550	584	-6.234	543	1.190
1991	550	588	-6.836	544	1.036
1992	552	591	-7.048	545	1.242
1993	550	594	-8.039	546	0.729
1994	550	598	-8.641	547	0.575
2000	n/a	617	n/a	548	n/a
2010	n/a	650	n/a	553	n/a
2020	n/a	684	n/a	561	n/a
2030	n/a	717	n/a	570	n/a
2040	n/a	750	n/a	578	n/a
2050	n/a	783	n/a	587	n/a
		AVG. ERROR*	-1.302	AVG. ERROR*	0.120
		ST. DEV.ERROR*	11.686	ST. DEV.ERROR*	1.970

\* Average and standard deviation of error extends only to last year of actual data.

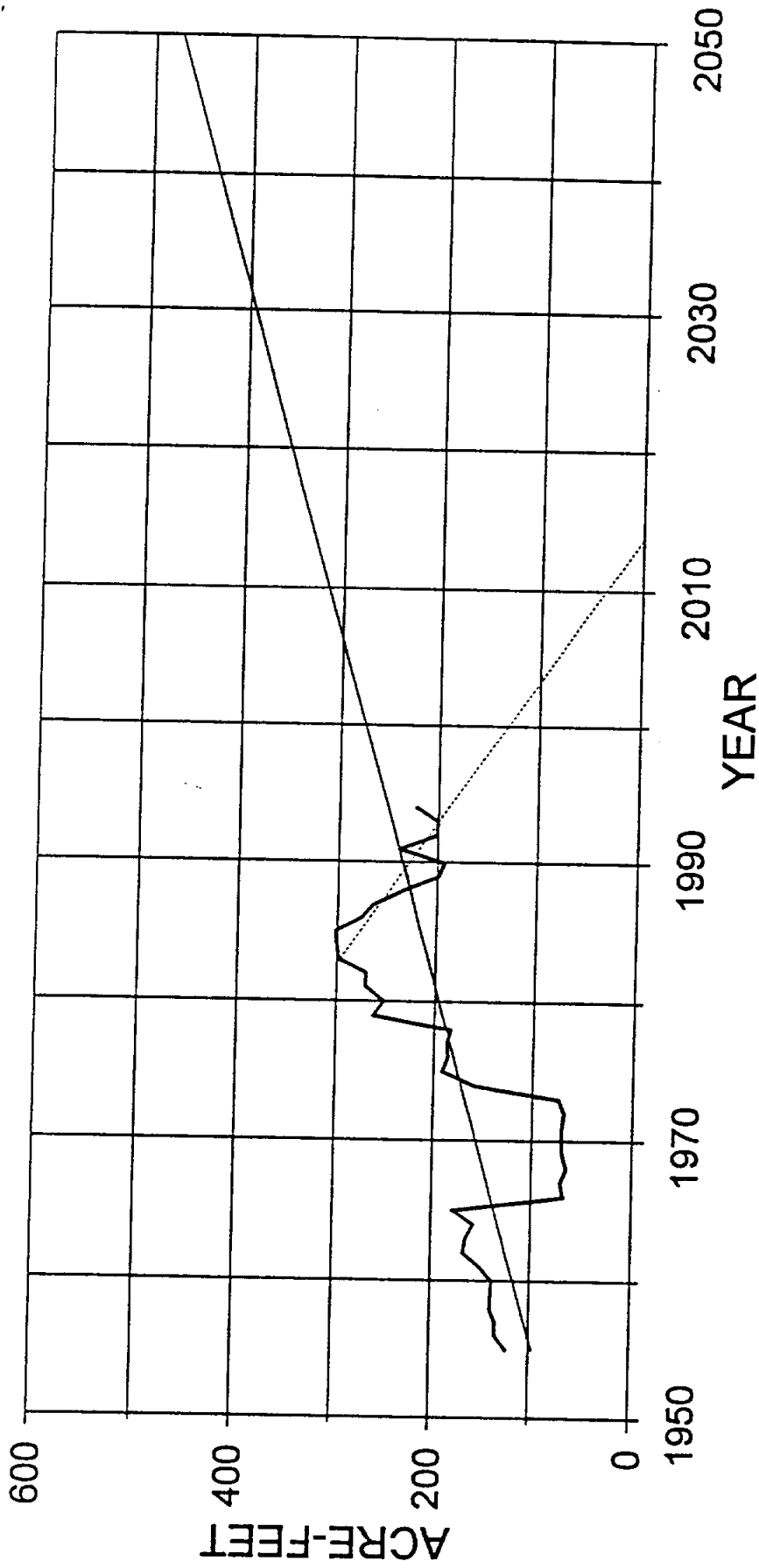
# CITY OF TIMPSON

## ESTIMATED CONNECTIONS



— Historic Connections      — Projection 1 (1955-1994 Data)      ..... Projection 2 (1984-1994 Data)

# CITY OF TIMPSON ESTIMATED WATER CONSUMPTION



— Historic Connections      — Projection 1 (1955-1994 Data)      ..... Projection 2 (1983-1994 Data)

**ATTACHMENT 2**  
**CALCULATION OF POULTRY WATER CONSUMPTION**

## BROILER CHICKENS-TEMPERATURE

**SOURCE:** POULTRY PRODUCTION IN HOT CLIMATES

**AUTHOR:** Edited by N.J. Dagher, Faculty of Agricultural Sciences, United Arab Emirates University  
 Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken houses = 1 houses  
 Assumed gpd/cap for pop. equiv. = 100 gpd/person

### AVERAGE DAYTIME HOUSE TEMP = 37.8C (100.04F)

AGE IN WEEKS	DAILY WATER DEMAND (liters/1000 broilers)	DAILY WATER DEMAND (gal/1000 broilers)	DAILY WATER USED (gpd)	TOTAL WATER USED PER WEEK (gallons)	POPULATION EQUIVALENT -daily cons. (people)
1	50.0	13.2	132	925	1
2	187.5	49.5	495	3,467	5
3	362.5	95.8	958	6,703	10
4	450.0	118.9	1,189	8,321	12
5	625.0	165.1	1,651	11,558	17
6	750.0	198.1	1,981	13,869	20
7	825.0	217.9	2,179	15,256	22
8	850.0	224.5	2,245	15,718	22
TOTAL			N/A	75,817	N/A
AVG.			1,354	9,477	14

**SOURCE:** POULTRY PRODUCTION IN HOT CLIMATES

**AUTHOR:** Edited by N.J. Dagher, Faculty of Agricultural Sciences, United Arab Emirates University  
 Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken houses = 1 houses  
 Assumed gpd/cap for pop. equiv. = 100 gpd/person

### AVERAGE DAYTIME HOUSE TEMP = 32.2C (89.96F)

AGE IN WEEKS	DAILY WATER DEMAND (liters/1000 broilers)	DAILY WATER DEMAND (gal/1000 broilers)	DAILY WATER USED (gpd)	TOTAL WATER USED PER WEEK (gallons)	POPULATION EQUIVALENT -daily cons. (people)
1	50.0	13.2	132	925	1
2	100.0	26.4	264	1,849	3
3	200.0	52.8	528	3,698	5
4	275.0	72.6	726	5,085	7
5	350.0	92.5	925	6,472	9
6	412.5	109.0	1,090	7,628	11
7	450.0	118.9	1,189	8,321	12
8	475.0	125.5	1,255	8,784	13
TOTAL			N/A	42,763	N/A
AVG.			714	5,345	8

**SOURCE:** POULTRY PRODUCTION IN HOT CLIMATES

**AUTHOR:** Edited by N.J. Dagher, Faculty of Agricultural Sciences, United Arab Emirates University  
 Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken houses = 1 houses  
 Assumed gpd/cap for pop. equiv. = 100 gpd/person

### AVERAGE DAYTIME HOUSE TEMP = 21.1C (69.98F)

AGE IN WEEKS	DAILY WATER DEMAND (liters/1000 broilers)	DAILY WATER DEMAND (gal/1000 broilers)	DAILY WATER USED (gpd)	TOTAL WATER USED PER WEEK (gallons)	POPULATION EQUIVALENT -daily cons. (people)
1	37.5	9.9	99	693	1
2	62.5	16.5	165	1,156	2
3	100.0	26.4	264	1,849	3
4	150.0	39.6	396	2,774	4
5	175.0	46.2	462	3,236	5
6	220.0	58.1	581	4,068	6
7	250.0	66.0	660	4,623	7
8	275.0	72.6	726	5,085	7
TOTAL			N/A	23,485	N/A
AVG.			419	2,936	4

**SOURCE:** POULTRY PRODUCTION IN HOT CLIMATES

**AUTHOR:** Edited by N.J. Dagher, Faculty of Agricultural Sciences, United Arab Emirates University  
 Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken houses = 1 houses  
 Assumed gpd/cap for pop. equiv. = 100 gpd/person

### AVERAGE DAYTIME HOUSE TEMP = 10.0C (50F)

AGE IN WEEKS	DAILY WATER DEMAND (liters/1000 broilers)	DAILY WATER DEMAND (gal/1000 broilers)	DAILY WATER USED (gpd)	TOTAL WATER USED PER WEEK (gallons)	POPULATION EQUIVALENT -daily cons. (people)
1	37.5	9.9	99	693	1
2	50.0	13.2	132	925	1
3	75.0	19.8	198	1,387	2
4	100.0	26.4	264	1,849	3
5	125.0	33.0	330	2,312	3
6	162.5	42.9	429	3,005	4
7	187.5	49.5	495	3,467	5
8	212.5	56.1	561	3,930	6
TOTAL			N/A	17,567	N/A
AVG.			314	2,196	3

**SOURCE:** COMMERCIAL CHICKEN PRODUCTION MANUAL, 4th Ed.

**AUTHOR:** Mack O. North, Donald D. Bell, Van Nostrand Reinhold Co. Inc., 1990  
 Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken ho = 1 houses  
 Assumed gpd/cap for pop. equi = 100 gpd/person

### AVERAGE DAYTIME HOUSE TEMP = 100F

AGE IN WEEKS	DAILY WATER DEMAND (gal/1000 br)	DAILY WATER USED (gpd)	TOTAL WA USED PER WEEK (gallons)	POPULATI EQUIVALEN -daily cons. (people)	
1	10.0	100	700	1	
2	48.0	480	3,360	5	
3	95.0	950	6,650	10	
4	130.0	1,300	9,100	13	
5	170.0	1,700	11,900	17	
6	200.0	2,000	14,000	20	
7	221.0	2,210	15,470	22	
8	228.0	2,280	15,960	23	
TOTAL			N/A	77,140	N/A
AVG.			1,378	9,643	14

**SOURCE:** COMMERCIAL CHICKEN PRODUCTION MANUAL, 4th Ed.

**AUTHOR:** Mack O. North, Donald D. Bell, Van Nostrand Reinhold Co. Inc., 1990  
 Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken ho = 1 houses  
 Assumed gpd/cap for pop. equi = 100 gpd/person

### AVERAGE DAYTIME HOUSE TEMP = 90F

AGE IN WEEKS	DAILY WATER DEMAND (gal/1000 br)	DAILY WATER USED (gpd)	TOTAL WA USED PER WEEK (gallons)	POPULATI EQUIVALEN -daily cons. (people)	
1	9.0	90	630	1	
2	26.0	260	1,820	3	
3	52.0	520	3,640	5	
4	72.0	720	5,040	7	
5	94.0	940	6,580	9	
6	110.0	1,100	7,700	11	
7	122.0	1,220	8,540	12	
8	125.0	1,250	8,750	13	
TOTAL			N/A	42,700	N/A
AVG.			763	5,338	8

**SOURCE:** COMMERCIAL CHICKEN PRODUCTION MANUAL, 4th Ed.

**AUTHOR:** Mack O. North, Donald D. Bell, Van Nostrand Reinhold Co. Inc., 1990  
 Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken ho = 1 houses  
 Assumed gpd/cap for pop. equi = 100 gpd/person

### AVERAGE DAYTIME HOUSE TEMP = 70F

AGE IN WEEKS	DAILY WATER DEMAND (gal/1000 br)	DAILY WATER USED (gpd)	TOTAL WA USED PER WEEK (gallons)	POPULATI EQUIVALEN -daily cons. (people)	
1	8.0	80	560	1	
2	16.0	160	1,120	2	
3	25.0	250	1,750	3	
4	35.0	350	2,450	4	
5	46.0	460	3,220	5	
6	57.0	570	3,990	6	
7	67.0	670	4,690	7	
8	76.0	760	5,320	8	
TOTAL			N/A	23,100	N/A
AVG.			413	2,888	4

**SOURCE:** COMMERCIAL CHICKEN PRODUCTION MANUAL, 4th Ed.

**AUTHOR:** Mack O. North, Donald D. Bell, Van Nostrand Reinhold Co. Inc., 1990  
 Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken ho = 1 houses  
 Assumed gpd/cap for pop. equi = 100 gpd/person

### AVERAGE DAYTIME HOUSE TEMP = 50F

AGE IN WEEKS	DAILY WATER DEMAND (gal/1000 br)	DAILY WATER USED (gpd)	TOTAL WA USED PER WEEK (gallons)	POPULATI EQUIVALEN -daily cons. (people)	
1	8.0	80	560	1	
2	12.0	120	840	1	
3	19.0	190	1,330	2	
4	26.0	260	1,820	3	
5	35.0	350	2,450	4	
6	43.0	430	3,010	4	
7	50.0	500	3,500	5	
8	57.0	570	3,990	6	
TOTAL			N/A	17,500	N/A
AVG.			313	2,188	3

# BROILER CHICKENS

**SOURCE:** *Raising Poultry the Modern Way*, by Leonard S. Mercia: Capital City Press, 1990

Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken houses = 1 houses  
 Assumed gpd/cap for pop. equiv. = 100 gpd/person

AGE IN WEEKS	DAILY WATER DEMAND (gal/100 birds)	DAILY WATER USED (gpd)	TOTAL WATER USED PER WEEK (gallons)	POPULATION EQUIVALENT -daily cons.- (people)
0-1	1.0	100	700	1
1-2	1.5	150	1,050	2
2-3	2.5	250	1,750	3
3-4	3.2	320	2,240	3
4-5	3.7	370	2,590	4
5-6	4.3	430	3,010	4
6-7	5.0	500	3,500	5
7-8	5.5	550	3,850	6
<b>TOTAL</b>		<b>N/A</b>	<b>18,690</b>	<b>N/A</b>
<b>AVG.</b>		<b>334</b>	<b>2,336</b>	<b>3</b>

**SOURCE:** *Raising Chickens*, by Cynthia Haynes: TAB Books Inc, 1985

Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken houses = 1 houses  
 Assumed gpd/cap for pop. equiv. = 100 gpd/person

AGE IN WEEKS	DAILY WATER DEMAND (gal/200 birds)	DAILY WATER USED (gpd)	TOTAL WATER USED PER WEEK (gallons)	POPULATION EQUIVALENT -daily cons.- (people)
1	1.0	50	350	1
2	2.6	130	910	1
3	4.8	240	1,680	2
4	7.4	370	2,590	4
5	10.6	530	3,710	5
6	13.8	690	4,830	7
7	17.0	850	5,950	9
8	20.0	1,000	7,000	10
<b>TOTAL</b>		<b>N/A</b>	<b>27,020</b>	<b>N/A</b>
<b>AVG.</b>		<b>483</b>	<b>3,378</b>	<b>5</b>

**SOURCE:** *Poultry Meat and Egg Production*, by C.R. Parkhurst & G.J. Mountney: Van Nostrand Reinhold Co. Inc., 1988

Assumed size of chicken house = 10,000 birds  
 Assumed number of chicken houses = 1 houses  
 Assumed gpd/cap for pop. equiv. = 100 gpd/person

AGE IN WEEKS	DAILY WATER DEMAND (gal/1000 birds)	DAILY WATER USED (gpd)	TOTAL WATER USED PER WEEK (gallons)	POPULATION EQUIVALENT -daily cons.- (people)
1	6.0	60	420	1
2	12.0	120	840	1
3	17.0	170	1,190	2
4	34.0	340	2,380	3
5	38.0	380	2,660	4
6	47.0	470	3,290	5
7	56.0	560	3,920	6
8	64.0	640	4,480	6
<b>TOTAL</b>		<b>N/A</b>	<b>19,180</b>	<b>N/A</b>
<b>AVG.</b>		<b>343</b>	<b>2,398</b>	<b>3</b>