

A RESOLUTION OF THE BOARD OF DIRECTORS ADOPTING A WATER CONSERVATION PLAN AND DROUGHT CONTINGENCY PLAN

WHEREAS, the Board recognizes that the amount of water available to the East Texas Municipal Utility District of Smith County (ETMUD) and to its shareholders is limited and must be protected with general guidelines for water management and conservation;

WHEREAS, ETMUD recognizes that natural limitations due to drought conditions and other acts of God cannot guarantee an uninterrupted water supply for all purposes;

WHEREAS, the Texas Administrative Code (TAC), the Texas Commission on Environmental Quality (TCEQ), Texas Water Development Board (TWDB), and other state and federal institutions and agencies request or require all public water supply systems to prepare conservation and drought contingency plans;

WHEREAS, the TCEQ and TWDB require that water systems use a combination of different strategies to reduce the volume of water withdrawn from a water supply source, for reducing the loss or waste of water, for maintaining or improving the efficiency in the use of water, for increasing the recycling and reuse of water, and for preventing the pollution of water; and

WHEREAS, as authorized under law, and in the best interests of the shareholders of ETMUD, the Board deems it appropriate and essential to establish procedures and policies for the Water Conservation Plan and Drought Contingency Plan;

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS:

That; the 2019 Water Conservation Plan and Drought Contingency Plan is hereby adopted as the official policy of East Texas Municipal Utility District of Smith County,

	ager is hereby directed t Drought Contingency a	to implement, administer, and enforce the 2019 Water adopted,
That; this resolution sh	all take effect immediat	ely upon its passage and,
That; this resolution sh Contingency Plan.	all overrule and superse	de any preceding Water Conservation Plan and Drought
		against BY THE BOARD OF DIRECTORS OF
		DISTRICT OF SMITH COUNTY, ON THE
DAY OF	, i	n the year of 2019.
Secretary of the Board Rita Cline	of Directors	President of the Board of Directors W. L. Snider



EAST TEXAS MUNICIPAL UTILITY DISTRICT 12162 STATE HWY 155 N. TYLER, TEXAS 75708

2019 Water Conservation Plan

SECTION I: INTRODUCTION AND OBJECTIVES

The Northeast Texas Regional Water Planning Group (NETRWPG) or Region I of the TWDB, of which East Texas Municipal Utility District (ETMUD) is a member, has adopted a Regional Water Plan in 2016 that includes general guidelines for water management and conservation. The water conservation plan herein outlines the ETMUD plan for conserving and protecting its current and future water supplies.

Maintaining dependable water supplies has always been a key issue in the development of Texas. Water conservation is not limited to the recurring periods of Texas drought. Although water-rich in comparison to many areas of Texas, Region I will continue to face increased demands on our water supplies due to the growing population and economic expansion occurring here. Population projections in the NETRWPG Regional Water Plan indicate the number of people residing in the region could increase by approximately 97 percent between the years 2020 and 2070, growing from about 44,500 to 87,800 within that time span. The plan further predicts water surplus to decrease by 63% during that time.

To meet the challenge of providing for our current and future needs we must learn to use the water we already have more efficiently. Conserving water and avoiding water waste are essential to sustainability of our region. By stretching our existing supplies, we can delay the need for new supplies, minimize the environmental impacts associated with developing new water resources, and postpone the high cost of building additional infrastructure (wells, storage tanks, treatment facilities, and pipelines) necessary to capture, treat and transport the additional water into our homes and businesses.

Recognizing the need for efficient use of existing water supplies, the Texas Commission on Environmental Quality (TCEQ) has developed guidelines and requirements governing the development of water conservation plans for public water suppliers. TCEQ definitions, guidelines and plan requirements are included in Appendix B.

The objectives of this water conservation plan are as follows:

- To reduce the loss and waste of water
- To reduce water consumption from levels that would prevail without conservation efforts
- To improve efficiency in our use of water
- To extend the life of current water supplies by reducing the rate of growth in water demand

SECTION II: TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES

The TCEQ rules governing development of water conservation plans for public water suppliers are contained in Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.2 of the Texas Administrative Code, which is included in Appendix B. For the purpose of these rules, a water conservation plan is defined as "A strategy or combination of strategies for reducing the volume of water withdrawn from a water supply source, for reducing the loss or waste of water, for maintaining or improving the efficiency in the use of water, for increasing the recycling and reuse of water, and for preventing the pollution of water." The elements in the TCEQ water conservation rules covered in this water conservation plan are listed below.

Minimum Conservation Plan Requirements

The minimum requirements in the Texas Administrative Code for Water Conservation Plans for Public Water Suppliers are covered in this report as follows:

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288.2(a)(1)(A) Profile — see Section III and Appendix C
Utility
         288.2(a)(1)(C)
                        Specification of Goals --- see Section IV
         288.2(a)(1)(D)
                        Accurate Metering - see Section V
                        Universal Metering --- see Section VI
                       Determination and Control of Unaccounted Water — see Section VIII
Public
                       Education and Information Program — see Section IX
Non-
                       Promotional Water Rate Structure — see Section X
        288.2(a)(1)(I)
        288.2(a)(1)(J)
                        Reservoir System Operation Plan - see Section XI
        288.2(a)(1)(K) of Implementation and Enforcement — see Section XI
Coordination with Regional Water Planning Group — see Section XIII, Appendix E
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Additional Conservation Strategies

TCEQ rules also list additional optional, but not required, conservation strategies which may be adopted by suppliers. ETMUD reserves the right to amend this plan at a subsequent date to incorporate such strategies.

SECTION III: WATER UTILITY PROFILE

Appendix C to this water conservation plan is the ETMUD Water Utility Profile, submitted in the format recommended by the TCEQ. Prior to adoption of this water conservation plan, ETMUD will submit a draft Utility Profile to the NETRWPG. A final profile will be submitted to NETRWPG after adoption of this plan and any amendments thereto.

SECTION IV: SPECIFICATION OF WATER CONSERVATION GOALS

Current TCEQ rules require the adoption of specific water conservation goals for a water conservation plan. As part of plan adoption, ETMUD will develop 5-year and 10-year goals for per capita municipal use,

following TCEQ procedures described in the water utility profile (Appendix C). The goals for this water conservation plan include the following:

 Keep the per capita municipal water use below the specified amount in gallons per capita per day (GPCD) in a dry year. Municipal use for 2011 was 58 GPCD. Refer to the following Tables IV-I and IV-2 for current usage and 5-year and 10-year water conservation/water loss goals.

Table IV-1

5-Year and 10-Year Municipal Per Capita Water Use/ Conservation Goals

Description	Current Average (GPCD)	5-Year Goal (GPCD)	10-Year Goal (GPCD)
Current 5-Year Average Per Capita Municipal Use	70	30	20
Expected Reduction due to Low-Flow Fixtures Projected	0	0	0
Reduction Due to Elements in this Plan	0	0	0
Total Water Conservation Goals	70	30	20

Table IV-2

5-Year and 10-Year Municipal Water Loss Goals

	Historic 5yr Average	Baseline Year 2018	5-yr Goal for year 2023	10-yr Goal for year 2028
Total GPCD1	266	267	260	255
Residential GPCD ²	47	39	39	39
Water Loss (GPCD)³	31	70	30	20
Water Loss (Percentage) ⁴	12 %	26%	12%	8%

The above goals are based on the recommendations in the NETRWPG Regional Water Plan, which suggests conservation efficiency of 1.5% due simply to public education (see Section IX for water suppliers with small population bases. ETMUD anticipates achieving this 1.5% reduction, or slightly more, due to the total of all elements in this plan. By comparison, the Texas Water Conservation Implementation Task Force suggests a 1% reduction in GPCD per year. The Task Force was established per Senate Bill 1094 in 2004 to evaluate matters concerning water conservation. A water consumption level of 140 gallons per person per day is the statewide recommendation of the Task Force; however, as shown in Table IV-I above, the GPCD use within ETMUD service area is currently < 60 GPCD, which is already well below the Task Force target goal. Note that all the performance indicators outlined above are developed assuming a year of average rainfall

- Implement and maintain a program of universal metering and meter replacement and repair, as discussed in Section VI,
- Keep the level of unaccounted water in the system below 15% annually in 2020 and below 10% in subsequent years, as discussed in Section VIII
- Increase efficient water usage through a water conservation ordinance, order or resolution as shown in Appendix F
- Raise public awareness of water conservation and encourage responsible public behavior through a
 public education and information program, as discussed in Section IX
- Develop a system-specific strategy to conserve water during peak demands, thereby reducing the peak use

SECTION V: ACCURATE METERING

A key element in water conservation is the careful tracking of water use and control of losses through illegal diversions and leaks. The provision of water to all customers, including public and governmental users, should be metered. Water deliveries are metered by ETMUD using meters with accuracy of \pm 2%. These meters are calibrated as needed by ETMUD to maintain the required accuracy.

SECTION VI: UNIVERSAL METERING

All connections to the water system are metered connections. All meters will be maintained with acceptable operating accuracy range as defined by the manufacturer or AWWA Standard for meter accuracy, whichever is more stringent. East Texas MUD changes out residential meters as needed. A dead meter list is produced quarterly to detect stopped meters. East Texas MUD will test larger meters on not less than 5- year intervals. All residential meters are budgeted to be replaced as needed.

SECTION VII: RECORD MANAGEMENT SYSTEM

As required by TAC Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.2(a)(2)(B) the ETMUD record management system allows for the separation of water sales and uses into residential, commercial, public/institutional, and industrial categories. This information is maintained and tracked by the Customer Service Department and shall be included in the Annual Water Conservation Report, as described in Section VIII.

SECTION VIII: DETERMINATION AND CONTROL OF UNACCOUNTED WATER

Unaccounted water is the difference between water delivered to customers and metered deliveries to customers plus authorized but unmetered uses. Authorized but unmetered uses would include use for firefighting, releases for flushing of lines, and uses associated with new construction. Unaccounted water can include several categories:

- Inaccuracies in customer meters (especially older meters)
- Accounts which are being used but have not yet been added to the billing system

- Losses due to water main breaks and leaks in the water distribution system
- Losses due to illegal connections and theft
- Other unmetered uses

Careful metering of water deliveries and water use, detection and repair of leaks in the distribution system and regular monitoring of unaccounted water are important in controlling losses. Measures to control unaccounted water are part of the routine operations of ETMUD. Maintenance crews and personnel are asked to look for and report evidence of leaks in the water distribution system. The leak detection and repair program are described below. Meter readers are asked to watch for and report signs of illegal connections, so they can be addressed quickly.

Unaccounted water is calculated in accordance with the provisions of Appendix C. The 2011 amount for ETMUD represents only about >5%. With the measures described in this plan, ETMUD intends to maintain the unaccounted water at or below 15% in 2020 and below 10% in subsequent years. If unaccounted water exceeds this goal in any year, ETMUD will implement a more intensive audit to determine the source(s) of and reduce the unaccounted water. The annual conservation report described below is the primary tool used to monitor unaccounted water.

Leak Detection and Repair

As described above, ETMUD crews and personnel are asked to look for and report evidence of leaks in the water distribution system. Areas of the water distribution system in which numerous leaks and line breaks occur are targeted for replacement, as funds are available. ETMUD is currently establishing a plan to replace old distribution lines.

Monitoring of Effectiveness and Efficiency - Annual Water Conservation Report

Appendix C is a water utility profile form that will be used in the development of an annual water conservation report for ETMUD. This annual report will be completed by May 1 of each year and will be used to monitor the effectiveness and efficiency of the water conservation program and to plan conservation related activities for the next year. The profile records the water use by category, per capita municipal use, and unaccounted water for the current year and compares them to historical values. The annual report will serve to document and monitor effectiveness and efficiency of the water conservation strategies that have been implemented, as well as enumerating the 5-year and 10-year goals and addressing reasons the goals have, or have not, been met. The water profile and annual water conservation report will be sent to NETRWPG, which will monitor regional water conservation trends.

SECTION IX: PUBLIC EDUCATION AND INFORMATION PROGRAM

The ETMUD continuing public education and information campaign on water conservation includes elements from the following:

- Insert water conservation information with water bills, which inserts will include material developed by ETMUD staff and material obtained from NETRWPG, TWDB, TCEQ and other sources
- Encourage local media coverage of water conservation issues and the importance of water conservation
- Notify local organizations, schools and civic groups that ETMUD staff is available to make presentations on the importance of water conservation and ways to save water
- Make information on Texas Smartscape principles, water conservation brochures, and other water conservation materials available to the public at East Texas MUD offices and other public places
- Continue to update the information on water conservation available on the ETMUD website and include links to the Texas Smartscape website (www.txsmartscape.com) and to information on water conservation on NETRWPG, TWDB, and TCEQ websites

SECTION X: NON-PROMOTIONAL WATER RATE STRUCTURE

ETMUD has adopted an increasing block rate structure to discourage the excessive use of water. Current water rates are as follows:

Residential

•	First 3,000 gallons	\$10.00 to (Depending on meter size)
•	3,001-25,000 gallons	\$3.60 per 1,000 gallons
•	25,001-1,000,000 gallons	\$4.35 per 1,000 gallons
•	1,000,001 - 3,000,000	\$5.10 per 1,000 gallons
•	3,000,001 and up	\$5.85 per 1,000 gallons

Commercial

•	First 3,000 gallons	\$10.00 to (Depending on meter size)
•	3,001-25,000 gallons	\$4.00 per 1,000 gallons
•	25,001-1,000,000 gallons	\$4.75 per 1,000 gallons
•	1,000,001 - 3,000,000	\$5.50 per 1,000 gallons
•	3,000,001 and up .	\$6.25 per 1,000 gallons

Industrial

•	First 3,000 gallons	\$10.00 to (Depending on meter size)
•	3,001-25,000 gallons	\$4.25 per 1,000 gallons
•	25,001-1,000,000 gallons	\$5.00 per 1,000 gallons
•	1,000,001 - 3,000,000	\$5.75 per 1,000 gallons
•	3,000,001 and up	\$6.50 per 1,000 gallons

ETMUD has also implemented revenue generating fees based on per 1,000 gallons used. Capital Improvement, Operating Reserve, and Emergency fund fees that apply to all customers based upon usage tiers.

1.	Low	-	\$1.00 per 1,000 gallons
2.	Mid	-	\$2.00 per 1,000 gallons
3.	High	-	\$3.00 per 1,000 gallons
4.	Super High	_	\$4.00 per 1,000 gallons

SECTION XI: RESERVOIR SYSTEM OPERATION PLAN

ETMUD does not have surface water supplies; thus, a reservoir system operation plan is not applicable.

SECTION XII: IMPLEMENTATION AND ENFORCEMENT

The ETMUD General Manager, or his/her designee, is hereby authorized and directed to implement the applicable provisions of this Plan upon determination that such implementation is necessary to protect public health, safety, and welfare. The General Manager, or his/her designee, shall have the authority to initiate or terminate and enforce water conservation or other water supply emergency response measures as described in this Plan. Appendix F contains a copy of the resolution adopted by ETMUD that designates responsible officials to implement and enforce the water conservation plan.

SECTION XIII: COORDINATION WITH REGIONAL WATER PLANNING GROUP

The water service area of ETMUD is located within the NETRWPG, and ETMUD will make this plan available to the NETRWPG. This plan shall be reviewed and revised as necessary, and every five (5) years to coincide with the schedule adopted by NETRWPG. A copy of the letter of notification of this plan from ETMUD to NETRWPG is included in Appendix E.

SECTION XIV: APPLICATION

The provisions of this Water Conservation Plan shall apply to all customers utilizing water provided by ETMUD. The terms "person" and "customer" as used in the plan include individual residential, commercial and industrial customers using less than 100,000 gallons of water per month. The terms "Significant Water Use Customer" as used in the plan include businesses, corporations, partnerships, associations, institutions and all other legal entities using more than 100,000 gallons of water per month. A list of current Significant Water Use Customers is in Appendix D.

SECTION XV: SEVERABILITY

It is hereby declared to be the intention of the Board of Directors of ETMUD that the sections, paragraphs, sentences, clauses, and phrases of this Water Conservation Plan are severable and, if any phrase, clause, sentence, paragraph, or of this Water Conservation Plan shall be declared invalid, unenforceable, or illegal

by the valid judgment or decree of any court of competent jurisdiction, such action shall not affect any of the remaining phrases, clauses, sentences, paragraphs, and sections of this Water Conservation Plan.

LIST OF APPENDICES

APPENDIX A	Reference Documents
APPENDIX B	 Texas Commission on Environmental Quality Rules on Municipal Water Conservation Plans Texas Administrative Code Title 30, Part I, Chapter 288, Subchapter A, Rule 288.1 Definitions Texas Administrative Code Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.2 Water Conservation Plans for Municipal Uses by Public Water Suppliers
APPENDIX C	Water Utility Profile and Water Conservation Report
APPENDIX D	List of Significant Water Use Customers
APPENDIX E	Letter to East Texas Regional Water Planning Group
APPENDIX F	Adoption of Water Conservation Plan • Board Resolution Adopting Water Conservation Plan

APPENDIX A

Reference Documents

Governing Codes:

- Title 30 of the Texas Administrative Code, Part 1, Chapter 288, Subchapter A, Rules 288.1 and 288.5, and Subchapter B, Rule 288.22, March 2007.
- Texas Water Development Board: "Report 362 Water Conservation Best Management Practices," prepared by Water Conservation Implementation Task Force, Austin, November 2004.

The model water conservation plan used in developing this plan was adapted in part from the following:

- North Texas Municipal Water District: "Model Drought Contingency Plan for North Texas Municipal Water District Member Cities and Customers," prepared by Freese and Nichols, Inc., Fort Worth, August 2004.
- Northeast Texas Regional Water Planning Group 2016 Region D Water Plan

The following conservation and drought contingency plans and related documents were reviewed in the development of this plan.

East Texas Regional Water Planning Area: 2016 Water Plan

APPENDIX B

Texas Commission on Environmental Quality Rules on Municipal Water Conservation Plans

Texas Administrative Code

TITLE 30

ENVIRONMENTAL QUALITY

PART 1

TEXAS COMMISSIONON ENVIRONIMENTAL QUALITY

CHAPTER 288

WATER CONSERVATION PLANS, DROUGHT CONTINGENCY

PLANS, GUIDELINES AND REQUIREMENTS

SUBCHAPTER A

WATER CONSERVATION PLANS

RULE 288.1

Texas Administrative Code

TITLE 30

ENVIRONMENTAL QUALITY

PART 1

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CHAPTER 288

WATER CONSERVATION PLANS, DROUGHT CONTINGENCY PLANS,

GUIDELINES AND REQUIREMENTS

SUBCHAPTER A

WATER CONSERVATION PLANS

RULE 288.2

Water Conservation Plans for Municipal Uses by Public Water Suppliers

APPENDIX C

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

Water Utility Profile

- A. Population and Service Area Data
 - Current service area size in square miles:
 - 2. Historical service area population for the previous five years, starting with the most current year.

Year	Historical Population Served By Retail Water Service	Historical Population Served By Wholesale Water Service	Historical Population Served by Wastewater Water Service
2017	2,400	0	2,360
2016	2,343	0	2,303
2015	2,244	0	2,204
2014	3,496	0	3,456
2013	3,496	0	3,456

3. Projected service area population for the following decades.

Year	Projected Population Served By Retail Water Service	Projected Population Served By Wholesale Water Service	Projected Population Served By WastewaterWater Service
2020	2,600	0	2,560
2030	2,620	0	2,580
2040	2,800	0	2,760
2050	2,800	0	2,760
2060	3,000	O	2,960

- 4. Described source(s)/method(s) for estimating current and projected populations.
- B. System Input

System input data for the previous five years.

Total System Input= Self*supplied + Imported - Exported

Year	Water Produced in Gallons	Purchased/Imported Water in Gallons	Exported Water in Gallons	Total System Input	Total GPCD
2017	225,710,300	0	0	225,710,300	258
2016	283,293,232	0	0	283,293,232	331
2015	291,589,485	.0	0	291,589,485	356
2014	225,283,559	0	0	225,283,559	177
2013	265,252,041	0	0	265,252,041	208
Historic Average	258,225,723	0	0	258,225,723	266

C. Water Supply System

1. Designed daily capacity of system in gallons	2,300,000
2. Storage Capacity	1. 1.1
2a. Elevated storage in gallons:	300,000
2b. Ground storage in gallons:	2,000,000

D. Projected Demands

1. The estimated water supply requirements for the next ten years using population trends, historical water use, economic growth, etc.

Year	Population	Water Demand (gallons)
2019	2,600	245,500,000
2020	2,600	247,500,000
2021	2,600	248,500,000
2022	2,600	250,500,000
2023	2,610	252,000,000
2024	2,610	255,000,000
2025	2,610	257,000,000
2026	2,620	259,000,000
2027	2,620	261,000,000
2028	2,620	263,000,000

^{2.} Description of source data and how projected water demands were determined.

E. High Volume Customers

1. The annual water use for the five highest volume RETAIL customers.

Customer	Water Use Category	Annual Water Use	Treated or Raw
UT Health Northeast	Institutional	80,513,000	Treated
Highland Dairy	Industrial	17,372,100	Treated
Watkins-Logan Veterans Home	Institutional	6,372,200	Treated
Rockwater Energy	Industrial	4,794,580	Treated
National Casein	· Industrial	1,271,770	Treated

2. The annual water use for the five highest volume WHOLESALE customers.

None.

F. Utility Data Comment Section. Additional comments about utility data.

G. System Data

A. Retail Water Supplier Connections

1. list of active retail connections by major water use category.

Water Use Category Type	Total Retail Connections (Active + Inactive)	Percent of Total Connections
Residential - Single Family	833	86.50 %
Residential - Multi-Family	4	0.42 %
Industrial	10	1.04%
Commercial	102	10.59 %
Institutional	14	1.45 %
Agricultural	0	0.00%
Total	963	100.00 %

2. Net number of new retail connections by water use category for the previous five years.

	Net Number of New Retail Connections						
Year	Residential - Single Family	Residential - Multi-Family	Industrial	Commercial	Institutional	Agricultural	Total
2017	0	0	0	2	0	0	2
2016	0	0	0	0	0	0	0
2015	38	2	0	0	0	0	40
2014	0	0	0	0	0	0	0
2013	0	0	0	17	0	0	17

B. Accounting Data

The previous five years' gallons of RETAIL water provided in each major water use category.

Year	Residential - Single Family	Residential M Multi-Family	Industrial	Commercial	Institutional	Agricultural	Total
2017	33,387,021	744,510	22,707,170	20,820,790	91,885,200	0	169,544,691
2016	34,011,291	426,590	31,541,400	48,192,526	,808,300	0 ·	190,585,613
2015	32,405,106	426,250	21,073,400	72,521,473	62,058,200	0	188,484,429
2014	32,788,851	N/A	43,630,430	12,975,130	67,751,130	0	157,145,541
2013	32,037,144	444,770	4,332,720	62,802,844	67,831,600	0	167,449,078

C. Residential Water Use

The previous five years residential GPCD for single family and multi-family units.

Year	Total Residential GPCD
2017	43
2016	47
2015	48
2014	60
2013	35
Historic Average	47

D. Annual and Seasonal Water Use

1. The previous five years' gallons of treated water provided to RETAIL customers.

	Total Gallons of Treated Water					
Month	2017	2016	2015	2014	2013	
January	13,302,145	14,329,673	13,949,446	13,687,969	9,370,061	
February	15,815,624	11,724,386	10,224,295	8,083,467	15,683,306	
March	13,853,935	14,618,670	11,713,030	9,809,261	12,430,120	
April	12,261,167	14,683,055	9,577,643	24,191,893	11,861,248	
May	14,258,381	12,341,928	15,377,085	8,197,552	15,920,798	
June	17,680,586	16,002,664	19,996,503	13,261,726	17,302,980	
July	15,991,388	18,452,153	13,208,411	13,376,588	12,862,228	
August	15,613,627	17,955,242	20,369,540	18,137,254	14,858,322	
September	19,570,490	21,757,377	19,302,929	16,167,041	15,698,085	
October	16,951,050	17,806,624	19,316,911	19,971,443	18,908,609	
November	16,767,494	15,283,679	13,535,841	12,265,342	12,316,675	
December	12,302,537	16,506,752	12,421,725	12,603,445	10,247,241	
Total	184,368,424	191,462,203	178,993,359	169,752,981	167,459,673	

2. The previous five years' gallons of raw water provided to RETAIL customers.

	Total Gallons of Raw Water						
Month	2018	2017	2016	2015	2014		
January	15,248,000	20,449,000	21,235,000	25,189,000	21,892,000		
February	17,184,000	30,794,000	17,882,000	17,684,000	12,943,000		
March	22,256,000	13,094,000	21,161,000	21,231,000	15,943,000		
April	14,956,000	20,134,000	22,761,000	19,335,000	24,576,000		
May	14,464,000	19,931,000	19,949,000	24,229,000	19,686,000		
June	77,373,000	20,493,000	24,960,000	76,447,000	21,309,000		
July	18,616,000	19,353,000	27,966,000	18,030,000	21,632,000		
August	21,773,000	19,002,000	28,375,000	27,769,000	30,245,000		
September	25,144,000	23,030,000	24,914,000	24,576,000	23,410,000		
October	22,683,000	20,947,000	20,529,000	27,873,000	30,142,000		
November	19,403,000	19,314,000	18,456,000	22,654,000	19,361,000		
December	19,458,000	13,597,000	20,449,000	17,433,00	18,233,000		
Total	233,558,000	240,449,000	268,637,000	272,445,000	258,521,000		

3. Summary of seasonal and annual water use.

	Summer RETAIL (Treated +Raw)	Total RETAIL (Treated + Raw)
2017	49,285,601	184,368,424
2016	52,410,059	191,462,203
2015	53,574,454	178,993,359
2014	44,775,568	169,752,981
2013	45,023,530	167,459,673
Average in Gallons	49,013,842.40	178,407,328.00

E. Water Loss

Water Loss data for the previous five years.

`Үеаг	Total Water Loss in Gallons	Water Loss in GPCD	Water Loss as a Percentage
2017	23,811,794	27	10.55 %
2016	18,637,424	22	6.58%
2015	44,500,897	54	15.26 %
2014	2,459,130	2	0,93 %
2013	2,459,130	2	0.93 %
Average	18,373,675	21	6.85 %

F. Peak Day Use

Average Daily Water Use and Peak Day Water Use for the previous five years.

Year	Average Daily Use (gal)	Peak Day Use (gal)	Ratio (peak/avg)
2017	505,118	535713	1.0606
2016	524,553	569674	1.0860
2015	490,392	582331	1.1875
2014	465,076	486690	1.0465
2013	458,793	489386	1.0667

G. Summary of Historic Water Use

Water Use Category	Historic Average	Percent of Connections	Percent of Water Use
Residential Single Family	32,925,883	86.50 %	18.85 %
Residential - Multi-Family	408,424	0.42 %	0.23 %
Industrial	24,658,144	1.04 %	14.12 %
Commercial	43,582,552	10.59 %	24.96 %
Institutional	73,066,886	1.45%	41.84 %
Agricultural	0	0.00 %	0.00 %

H. System Data Comment Section.

Wastewater System Data

A. Wastewater System Data

- 1. Design capacity of wastewater treatment plant(s) in gallons per day: 870,000
- 2. List of active wastewater connections by major water use category.

Water use Category	Metered	Unmetered	Total Connections	Percent of Total Connections
Municipal	0	793	793	86,29 %
Industrial	0	10	10	1.09%
Commercial	4	98	102	, 11.10 %
Institutional	0	14	14	1.52 %
Agricultural	0	0	0	0.00 %
Total	4	915	919	100,0

Percentage of water serviced by the wastewater system:

96.00%

4. Number of gallons of wastewater that was treated by the utility for the previous five years.

Month	Total Gallons of Treated Water						
WiGitti	2017	2016	2015	2014	2013		
January	12,193,200	19,929,600	9,824,900	10,616,100	13,386,000		
February	11,386,000	18,072,000	9,287,300	12,976,100	23,665,400		
March	13,255,200	28,200,100	25,882,500	14,309,100	11,121,400		
April	13,187,100	20,005,100	21,612,900	14,553,300	11,543,400		
May	14,766,000	19,539,500	30,225,800	13,569,400	11,900,300		
June	15,643,300	16,356,900	20,113,400	13,695,900	10,806,980		
July	12,911,600	14,665,200	14,691,000	14,652,500	11,058,600		
August	15,058,100	14,110,300	12,788,500	14,813,000	10,061,100		
September	11,360,600	12,073,500	11,741,000	16,391,900	11,229,400		
October	11,484,500	11,579,400	14,565,600	14,722,000	13,032,000		
November	10,458,500	10,978,200	20,161,800	11,851,900	15,031,600		
December	12,608,400	11,095,200	26,007,800	7,492,500	15,094,100		
Total	154,312,500	196,605,000	216,902,500	159,643,700	157,930,280		

5. Could treated wastewater be substituted for potable water?

No, without major capital input.

No Reuse Data.

B. Wastewater System Data Comment.

APPENDIX D

List of Significant Water Use Customers

Below is a current listing of the East Texas MUD Wholesale and/or Significant Water Use Customers. This list shall be updated as necessary, not to exceed every five (5) years.

Customer Name		Phone Number	
(1)	UT Health Center.	903-877-3451	
(2)	Hiland Dairy.	903-877-6990	
(3)	Great American Treating	903-877-9211	
(4)	Patterson UTI Drilling	903-877-3659	
(5)	3P Industries	903-877-3960	
(6)	Nabors Drilling Inc.	903-984-5511	
(7)	Watkins-Logan Veterans Home	903-617-6150	
(8)	Reefs Ind.	903-939-5400	

APPENDIX E

Letter to North East Texas Regional Water Planning Group

(see attached Letter)

APPENDIX F

Adoption of Water Conservation Plan

(see attached Resolution)