

# **City of Lufkin**

## **Water Conservation Plan**



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Prepared By:



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## **INTRODUCTION**

In accordance with the guidelines of the Texas Water Development Board (TWDB), the City of Lufkin adopted a Water Conservation Plan in 2008. In order to meet requirements of the Texas Commission on Environmental Quality (TCEQ) the City has adopted its water conservation plan for adoption as a City resolution. The resolution of the City Council adopting the Water Conservation Plan shall authorize the City to implement, enforce, and administer the program.

The City of Lufkin owns and operates the water system serving CCN #10355 in Angelina County, Texas. The system provides potable water to over 17,300 active connections including 13 industrial users and 4 active wholesale connections. The service area covers an area of approximately 70 square miles, not counting the service areas of the wholesale connections. The City of Lufkin is the largest water provider in the county in terms of customer base and water delivery.

The City charter for Lufkin provides for managing control of the water system by City Council. The City Manager maintains a staff who provide for continuous operation of the water system. The council approves final budgets and rates for the system. City council members are elected by the citizens for two years terms.

The City, through adoption of the Water Conservation Plan, hopes to reduce per capita consumption of water within the City service area, and also to reduce the volume of unaccounted for water which is produced and treated but not sold.

### **A. UTILITY PROFILE**

#### **Population and Customer Data:**

The water distribution system covers nearly 70 square miles and serves approximately 43,000 people. The official 2010 Census population count for the City was 35,067, an increase of 7.2% from the Census 2000, or an annual growth rate of approximately 0.7%. Based on Census Block data, the 2010 population for the City's service area was 40,397. Population projections for the City of Lufkin, based on an annual growth rate of 1.0%, forecast the City's service area population to reach 43,826 by 2020 and 48,452 by 2030.

#### **Water Production:**

The City of Lufkin operates twelve wells with a combined capacity of approximately 20.7 million gallons per day (MGD) based on most recent testing at each well. The City receives most of its water supply from the Carrizo-Wilcox aquifer group. The City has three treatment plants with a combined capacity of 10,400,000 gallons ground storage. Four elevated tanks throughout the City provide a combined 4,000,000 gallons of elevated storage capacity.

#### **Water Use Data:**

The following table summarizes key water use statistics for 2014 – 2018. Average and peak daily demand is given in million gallons per day (MGD). The peak day to average day ratio varies between 1.43 and 1.70, meaning that peak day demand is generally less than twice the average demand. Peak demand during the last five years occurred in 2018 and

was 13.095 MGD. More detailed water use data is available in the Utility Profile included in Appendix "A".

**Table 1: Water Use Statistics**

	2014	2015	2016	2017	2018
Annual Average GPCD	188	185	168	143	179
Peak GPCD	345	277	310	284	334
Average Day (MGD)	7.880	7.821	7.184	6.845	7.708
Peak Day (MGD)	11.502	12.618	12.217	9.816	13.095
Peaking Factor	1.46	1.61	1.70	1.43	1.70

## **B. TARGETS AND GOALS**

To provide for continuing growth in the customer base and to protect available water supply to provide for the future, the City must insure that this water supply is not wasted or lost. In order to achieve these goals to the maximum amount achievable, the City proposed the following targets for water conservation:

**Table 2: 5- and 10-Yr Goals for Water Savings**

	<u><b>5-Year Average</b></u>	<u><b>Baseline</b></u>	<u><b>5-Year Goal</b></u>	<u><b>10-Year Goal</b></u>
Total Municipal Use (GPCD)	169	170	165	160
Residential Use (GPCD)	64	64	62	60
Water Loss (GPCD)	33	30	27	25
Water Loss (Percentage)	20%	18%	16%	16%

The municipal use numbers as indicated in the Utility profile (Appendix A) are calculated as total water treated except wholesale sales divided by population. Baseline numbers are calculated as a weighted average of the last three years that places more emphasis on recent years.

## **C. SCHEDULE FOR IMPLEMENTING THE WATER CONSERVATION PLAN**

The City will implement its water goals as described below:

1. Reduce per capita consumption through education by presenting non-wasteful uses of water and techniques that can be employed to conserve water. Information will be distributed as part of the annual Consumer Confidence Report that is mailed to all customers.
2. Once a year, the City will review consumption patterns and its income and expense levels and evaluate whether or not the current water rates are effective and appropriate.
3. The City provides updated information regarding the water rate structure through its website, [www.cityoflufkin.com](http://www.cityoflufkin.com). The City will also provide customers with historical water use for the previous 12 months upon request.

4. A leak detection and repair program will be maintained as well as a meter testing and repair/replacement program. Accounting of data of the water produced versus consumption will be monitored to determine water loss and unaccounted water.
5. Replacement of water lines found to be leaking or in generally poor condition will be completed as quickly as practical to ensure minimal water loss.

#### **D. TRACKING IMPLEMENTATION AND EFFECTIVENESS OF THE PLAN**

In order to track the progress of the Water Conservation and Drought Contingency Plan, the City will need to collect a variety of information with regards to each program. The following information will be useful in tracking the progress of the Water Conservation Plan:

1. Water production and usage data will be reviewed once a year to evaluate progress of the targets and goals listed previously in section "B."
2. The City will collect information about its programs and the population to evaluate the effectiveness of the program at least once every five years. For information brochures, the number of such brochures and topics covered will be documented. The total population of the service area will also be tracked.
3. The billing structure will be evaluated annually. Billing and customer records will be kept and water consumption by each customer class at the beginning and end of the reporting period will be recorded.
4. Guidelines for meter selection based on customer usage, meter replacement policies, and records on each meter in the system will be recorded and maintained.

#### **E. MEASURING AND ACCOUNTING OF SOURCE WATER**

The City currently meters well production at each well as well as treated water entering the distribution system by means of a master meter. The well production is compared to master metered flow to distribution to identify transmission or overflow losses.

#### **F. WATER METERING AND MAINTENANCE PROGRAM**

The City performed a system wide meter replacement program in the distribution system in 2006-2007. New radio read meters were installed to improve accuracy and accounting. The City's operation policy requires testing for all meters which are flagged as having excessively high or low water usage. In addition, the City policy provides the following routine testing schedule for water system meters:

1. Well Production Meters: Test once per year – Required accuracy  $\pm 5\%$ .
2. Water Plant Distribution Meter and Totalizer: Test and Calibrate once per year.
3. Meters larger than 1" nominal: Test once per year.
4. Meters 1" and smaller: Test every 10 years minimum.

The computer system receives collected meter data and prints out billing statements. Meters where customer complaint indicates higher than normal usage are also tested routinely. All tested distribution meters are replaced if reading accuracy is outside  $\pm 2\%$ .

Meters to public facilities are not routinely read with the customer meters.

## **G. WATER LOSS CONTROL MEASURES**

The goal of the City's water loss control program is to maintain unaccounted-for water (unbilled authorized and unbilled unauthorized usage) water at or below the goals listed previously in section "B." In order to meet these goals, the City has several programs in place, including routine water audits, a program of leak detection and repair, and meter testing and accuracy.

The City compares metered production with metered consumption, as well as accounted-for and unaccounted for water losses.

## **H. LEAK DETECTION, AND REPAIR**

The City performs routine inspection and maintenance of the distribution system in order to reduce unaccounted for water. All City staff are encouraged to observe and report observed puddles or wet areas that may indicate a water leak. Water system personnel observe water line routes when meter reading or performing other work along distribution lines. Customer reported leaks are observed immediately by operation staff.

Work orders are prepared based on observation, and operating staff repair each leak as quickly as possible. The work order system is used to identify line segments which have reached their useful life. These lines are maintained but flagged for future replacement.

In addition to these measures, a monthly water use accounting system is used to compare total metered consumption to volume pumped to distribution and measured by master meter. A sharp increase in demand would indicate major water main breaks or unauthorized water use. The production and treatment facilities are monitored daily.

The City maintains leak detection equipment. This equipment can be utilized with other methods to achieve water loss reduction goals.

## **I. PUBLIC INVOLVEMENT AND EDUCATION**

The City will promote water conservation through public education. The following methods in addition to mandatory information under drought conditions will be used to inform and involve the public in water conservation.

1. Distribution of Educational materials will be made through direct mail out twice per year. The educational materials will be timed to predate the peak summer demand period.
2. Articles will be published seasonally as described above with detail of water system operation conditions and recommendations for water saving methods for home and business.
3. New customers will receive general water conservation literature when applying for service.
4. Water Conservation literature is in racks available to the public at the water payment window in City hall.
5. Water conservation awareness literature will be available on the City of Lufkin website.

Information included as Appendix “B” will provide the basis for public education and awareness. These preprinted brochures are obtained from the Texas Water Development Board.

## **J. WATER RATE STRUCTURE**

The City of Lufkin water rate structure is contained as Appendix “C”. The present rate structure can be summarized as follows by customer category:

1. Residential Inside City	First 2,000 gal. (min.)	\$13.26
	Next 8,000 gal.	\$3.40/1000
	Above 10,000 gal.	\$3.93/1000
2. Residential Outside City	First 2,000 gal. (min.)	\$19.89
	Next 8,000 gal.	\$5.10/1000
	Above 10,000 gal.	\$5.90/1000
3. Commercial Inside City	First 2,000 gal. (min.)	\$13.26
	Next 48,000 gal.	\$3.40/1000
	Above 50,000 gal.	\$3.93/1000
4. Commercial Outside City	First 2,000 gal. (min.)	\$19.89
	Next 48,000 gal.	\$5.10/1000
	Above 50,000 gal.	\$5.90/1000
5. Burke Water Rates – Residential	First 2,000 gal. (min.)	\$22.54
	Next 8,000 gal.	\$5.80/1000
	Above 10,000 gal.	\$6.68/1000
6. Burke Water Rate – Commercial	First 2,000 gal. (min.)	\$22.54
	Next 48,000 gal.	\$5.80/1000
	Above 50,000 gal.	\$6.68/1000
7. Irrigation Rate is same as Residential Rates corresponding to same location		
8. Industrial Inside City	First 2,000 gal. (min.)	\$313.76
	Above 2,000 gal	\$2.22/1000
9. Industrial Outside City	First 2,000 gal. (min.)	\$470.64
	Above 2,000 gal	\$3.33/1000
10. Wholesale Rate	First 2,000 gal. (min.)	\$11.24
	Above 2,000 gal	\$2.21/1000

This rate structure is conservation oriented in that water bills are based on water consumption. In most user categories, the structure uses increasing block rates to discourage excessive water use. In the industrial and wholesale categories, rates are uniform.

## **K. IMPLEMENTATION AND ENFORCEMENT**

The provisions of this plan have been implemented as indicated by the resolution adopting the plan contained in Appendix D. The requirements contained in the plan will be enforced by the following methods:

1. Mandatory enforcement of plumbing fixtures and plumbing code measures through City inspection and code enforcement staff in new and major remodel construction.
2. The rate structure in combination with public awareness encourages retrofit of existing fixtures through cost savings on future water bills.
3. Rate structure is enforced through discontinuance of service for unpaid bills.

## **L. SPECIAL REQUIREMENTS OF WHOLESALE CUSTOMERS**

The City shall implement in every new or renewal of a wholesale contract entered into successive of the adoption of this plan, the requirement that the wholesale customer develop and implement a water conservation plan utilizing the applicable requirement of Texas Administrative Code, Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.2.

## **M. NOTIFICATION TO REGIONAL WATER PLANNING GROUP**

The notification letter contained in Appendix E has been prepared to notify the Region I Planning Group of the adoption of this plan.

## **N. OTHER WATER CONSERVATION STRATEGIES**

The City of Lufkin has adopted the 2006 International Plumbing Code as its standard for plumbing practices inside its jurisdiction. The City requires water saving plumbing fixtures on all new construction and major renovation of existing structures.

Customers are also furnished with information encouraging them to replace old plumbing devices with water saving devices. Customers are informed of water saving kits available to assist in their water conservation efforts. The retrofit program is a voluntary program.

The City has adopted a landscape ordinance. This ordinance encourages use of low water use plants and grasses for development. This program is voluntary. The ordinance also encourages use of water need type controllers to minimize excessive water use in rainy periods.

The City recycles and reuses treated wastewater at the wastewater plant for irrigation, washdown, and process water. The present permit does not allow off-site irrigation or use of this water. The remote location of the treatment plant has limited potential for additional reuse. The City will encourage further reuse of the wastewater stream should a potential use become available.

## **O. DROUGHT CONTINGENCY PLAN**

Appendix F contains the Drought Contingency Plan, which has been in place since 1999. The Drought Contingency Plan includes trigger conditions, implementation actions during



each stage of the plan, initiation and termination procedures, variances and enforcement, and public involvement and education.

**P. ADOPTION**

The resolution adopting this Water Conservation Plan is contained in Appendix D.

**Q. REPORTING REQUIREMENTS**

The goal and time tables for water reduction contained in this plan will be reviewed and updated each year. The annual reports will be maintained and submitted to the executive director of the Texas Commission of Environmental Quality and will address the progress and effectiveness of the plan. The annual report will include:

1. Public information documentation.
2. Public response to the conservation plan.
3. Up to date consumption data to evaluate the effectiveness of the water reduction strategies and progress toward plan goals.

In addition to annual reporting requirements, the plan must be reviewed and updated no later than May 1, 2024 and every 5 years after that date to coincide with the work of the Regional Water Planning group.



# **Appendix A**

**Utility Profile  
(TWDB Form No. 1965-R)**

**Water Conservation Plan Annual Report  
(TWDB Form No. 1966)**

## UTILITY PROFILE FOR RETAIL WATER SUPPLIER

### CONTACT INFORMATION

Name of Utility:	City of Lufkin		
Public Water Supply Identification Number (PWS ID):	TX0030004		
Certificate of Convenience and Necessity (CCN) Number:	10355		
Surface Water Right ID Number:	4393-A, 4394, 4411-H		
Wastewater ID Number:	20142		
Contact:	First Name:	Gary	Last Name: Barton
	Title:	Director of Utility Plant Operations	
Address:	P.O. Box 190	City:	Lufkin State: TX
Zip Code:	75902	Zip+4:	
		Email:	gbarton@cityoflufkin.com
Telephone Number:	9366330288	Date:	
Is this person the designated Conservation Coordinator?		<input checked="" type="radio"/> Yes <input type="radio"/> No	

Regional Water Planning Group: I

Groundwater Conservation District:

Our records indicate that you:

☐ Received financial assistance of \$500,000 or more from TWDB

☒ Have 3,300 or more retail connections

☒ Have a surface water right with TCEQ

#### A. Population and Service Area Data

1. Current service area size in square miles: 70

## UTILITY PROFILE FOR RETAIL WATER SUPPLIER

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
2018	47,754	5,137	34,954
2017	47,988	7,161	34,780
2016	42,719	7,161	34,571
2015	42,178	8,317	34,472
2014	42,037	3,670	34,265

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 Wastewater Water Service
2020	43,863	4,872	35,657
2030	48,452	5,382	39,387
2040	53,522	5,945	43,508
2050	59,121	6,567	48,060
2060	65,306	7,254	53,088

4. Described source(s)/method(s) for estimating current and projected populations.

Current & previous population estimate based on number of residential connections and Average Household Size = 2.75. Projected population based on annual growth rate of 1.0% for City of Lufkin.

## UTILITY PROFILE FOR RETAIL WATER SUPPLIER

### 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 G
2018	2,877,362,245	0	63,763,949	2,813,598,296	
2017	2,645,995,918	0	147,507,633	2,498,488,285	
2016	2,790,839,796	0	168,619,908	2,622,219,888	
2015	3,040,132,653	0	185,567,663	2,854,564,990	
2014	3,011,860,153	0	135,712,590	2,876,147,563	
Historic Average	2,873,238,153	0	140,234,349	2,733,003,804	

### C. Water Supply System

1. Designed daily capacity of system in gallons
2. Storage Capacity
  - 2a. Elevated storage in gallons:
  - 2b. Ground storage in gallons:

## UTILITY PROFILE FOR RETAIL WATER SUPPLIER

### 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)
2020	48,714	3,004,923,090
2021	49,201	3,017,005,320
2022	49,693	3,029,036,815
2023	50,190	3,041,012,100
2024	50,692	3,052,925,700
2025	51,199	3,064,772,140
2026	51,711	3,076,545,945
2027	52,228	3,088,241,640
2028	52,750	3,099,853,750
2029	53,278	3,111,435,200

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

Population based on 1% annual growth. Water demands based on weighted average per capita use of 169 GPCD (average of last five years), reducing each year until 2029 per capita use of 160 GPCD.

## UTILITY PROFILE FOR RETAIL WATER SUPPLIER

### 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
Pilgrim's Pride	Industrial	527,000,000	Treated
CHI / Memorial Hospital	Commercial	42,500,000	Treated
Georgia Pacific	Industrial	36,500,000	Treated
Lufkin ISD	Institutional	32,000,000	Treated
Woodland Heights Hospital	Commercial	30,000,000	Treated

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

Customer	Water Use Category	Annual Water Use	Treated or Raw
City of Diboll	Municipal	90,000,000	Treated
Woodlawn WSC	Municipal	50,000,000	Treated
Redland WSC	Municipal	20,000,000	Treated
Angelina County FWSD #1	Municipal	13,000,000	Treated

### F. Utility Data Comment Section

Additional comments about utility data.



## UTILITY PROFILE FOR RETAIL WATER SUPPLIER

### Section II: 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	12,848	73.99 %
Residential - Multi-Family	2,788	16.06 %
Industrial	13	0.07 %
Commercial	1,716	9.88 %
Institutional	0	0.00 %
Agricultural	0	0.00 %
<b>Total</b>	<b>17,365</b>	<b>100.00 %</b>

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
<b>2018</b>	19	4	0	3			26
<b>2017</b>	35	12	0	13			60
<b>2016</b>	24	2	3	13			42
<b>2015</b>	37	26	0	8			71
<b>2014</b>	53	8	0	17			78

## UTILITY PROFILE FOR RETAIL WATER SUPPLIER

### B. Accounting Data

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

Year	Residential - Single Family	Residential - Multi-Family	Industrial	Commercial	Institutional	Agricultural	Total
2018	1,030,581,920	116,899,560	660,358,260	524,682,950	0	0	2,332,421,690
2017	827,794,590	107,561,950	511,977,650	525,348,970	0	0	1,972,683,160
2016	776,930,650	116,016,920	615,158,480	440,127,600	0	105,681,130	2,053,914,780
2015	825,434,380	117,371,050	687,672,230	476,365,250	0	107,698,640	2,214,541,550
2014	801,932,030	115,710,310	741,936,610	383,814,200	0	93,547,640	2,136,940,790

### C. Residential Water Use

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

Year	Total Residential GPCD
2018	73
2017	60
2016	67
2015	61
2014	60
Historic Average	64

## UTILITY PROFILE FOR RETAIL WATER SUPPLIER

### D. Annual and Seasonal Water Use

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

Month	Total Gallons of Treated Water				
	2018	2017	2016	2015	2014
January	162,166,970	152,940,720	158,839,330	154,585,360	157,485,680
February	145,054,220	148,635,110	146,071,780	151,031,540	150,500,940
March	135,385,400	134,940,300	143,813,720	129,593,320	141,000,020
April	156,298,730	150,587,220	160,127,230	147,694,870	151,915,550
May	159,491,280	166,384,210	159,193,580	142,707,570	171,757,590
June	192,694,340	162,857,660	172,427,020	159,702,400	189,872,090
July	204,420,790	180,430,160	199,280,140	188,499,700	199,896,550
August	201,962,090	180,204,060	222,429,350	228,766,680	205,764,890
September	223,949,150	184,567,710	234,615,910	234,310,170	222,308,990
October	168,628,800	180,045,450	168,274,680	205,864,880	195,960,850
November	160,508,620	164,100,840	159,608,390	170,590,870	179,733,670
December	159,990,050	163,569,940	159,994,550	149,855,840	160,561,650
<b>Total</b>	2,070,550,440	1,969,263,380	2,084,675,680	2,063,203,200	2,126,758,470

## UTILITY PROFILE FOR RETAIL WATER SUPPLIER

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

Month	Total Gallons of Raw Water				
	2018	2017	2016	2015	2014
January	0	0	300	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	0	0
May	0	0	0	0	0
June	0	0	0	0	300
July	0	0	0	400	0
August	0	0	900	12,450	600
September	0	0	0	0	500
October	0	0	0	52,250	29,140
November	0	0	0	710	1,730
December	0	0	0	180	9,220
<b>Total</b>	0	0	1,200	65,990	41,490

3. Summary of seasonal and annual water use.

	Summer RETAIL (Treated + Raw)	Total RETAIL (Treated + Raw)
<b>2018</b>	599,077,220	2,070,550,440
<b>2017</b>	523,491,880	1,969,263,380
<b>2016</b>	594,137,410	2,084,676,880
<b>2015</b>	576,981,630	2,063,269,190
<b>2014</b>	595,534,430	2,126,799,960
<b>Average in Gallons</b>	577,844,514.00	2,062,911,970.00

## UTILITY PROFILE FOR RETAIL WATER SUPPLIER

### E. Water Loss

Water Loss data for the previous five years.

Year	Total Water Loss in Gallons	Water Loss in GPCD	Water Loss as a Percentage
2018	403,351,323	23	14.34 %
2017	438,473,361	25	17.55 %
2016	476,499,498	31	18.17 %
2015	606,253,317	39	21.24 %
2014	665,746,928	43	23.15 %
Average	518,064,885	32	18.89 %

### 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)
2018	5,672,740	6511708	1.1479
2017	5,395,242	5690129	1.0547
2016	5,711,443	6458015	1.1307
2015	5,652,792	6271539	1.1095
2014	5,826,849	6473200	1.1109

### G. Summary of Historic Water Use

Water Use Category	Historic Average	Percent of Connections	Percent of Water Use
Residential - Single Family	852,534,714	73.99 %	39.80 %
Residential - Multi-Family	114,711,958	16.06 %	5.36 %
Industrial	643,420,646	0.07 %	30.04 %
Commercial	470,067,794	9.88 %	21.94 %
Institutional	0	0.00 %	0.00 %
Agricultural	61,385,482	0.00 %	2.87 %

## UTILITY PROFILE FOR RETAIL WATER SUPPLIER

### H. System Data Comment Section

### Section III: Wastewater System Data

#### A. Wastewater System Data

- Design capacity of wastewater treatment plant(s) in gallons per day: 11,300,000
- List of active wastewater connections by major water use category.

Water Use Category	Metered	Unmetered	Total Connections	Percent of Total Connections
<b>Municipal</b>	10,964	0	10,964	86.43 %
<b>Industrial</b>	7	0	7	0.06 %
<b>Commercial</b>	1,714	0	1,714	13.51 %
<b>Institutional</b>	0	0	0	0.00 %
<b>Agricultural</b>	0	0	0	0.00 %
<b>Total</b>	12,685	0	12,685	100.00 %

- Percentage of water serviced by the wastewater system: 75.00 %

## UTILITY PROFILE FOR RETAIL WATER SUPPLIER

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

Month	Total Gallons of Treated Water				
	2018	2017	2016	2015	2014
January	158,578,500	164,848,300	168,727,700	192,229,100	152,782,200
February	155,134,700	148,482,600	154,523,400	145,232,900	145,739,300
March	166,298,900	162,925,200	191,375,550	202,815,700	154,679,900
April	175,828,900	166,537,000	179,052,800	181,873,100	165,834,900
May	169,854,800	178,557,100	222,606,400	220,459,800	152,820,800
June	156,555,900	169,004,500	180,873,000	183,496,700	156,412,100
July	165,229,800	170,072,300	166,133,900	160,744,900	173,105,700
August	169,087,200	205,537,700	180,424,900	136,269,600	164,724,900
September	166,401,300	179,890,700	159,214,700	131,792,500	156,258,500
October	180,167,700	161,223,500	140,817,500	147,300,100	155,079,300
November	190,773,400	153,930,860	147,132,000	156,964,600	153,752,800
December	180,388,210	147,577,500	164,163,100	161,191,500	157,686,500
<b>Total</b>	2,034,299,310	2,008,587,260	2,055,044,950	2,020,370,500	1,888,876,900

5. Could treated wastewater be substituted for potable water?

☐

Yes

☒

No

### B. Reuse Data

1. Data by type of recycling and reuse activities implemented during the current reporting period.

Type of Reuse	Total Annual Volume (in gallons)
On-site Irrigation	
Plant wash down	
Chlorination/de-chlorination	
Industrial	
Landscape irrigation (park,golf courses)	0
Agricultural	
Discharge to surface water	0
Evaporation Pond	0
Other	183,960,000
<b>Total</b>	183,960,000

## UTILITY PROFILE FOR RETAIL WATER SUPPLIER

### C. Wastewater System Data Comment

Additional comments and files to support or explain wastewater system data listed below.

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# **Appendix B**

## **Water Conservation Literature (Current TWDB List of Publications)**

# Requestor Category A

Texas cities and towns; water and wastewater utilities and districts; other water-related districts; water supply corporations; river authorities; groundwater conservation districts, and state agencies may obtain free copies up to a total of 500 free pieces per calendar year, and may purchase additional copies at the listed price.

\* Entities may receive 500 free pieces of any combination of the brochures marked with an asterisk.

Publication Title	Number of Free Copies	Unit Price after Free Copies
<a href="#">Water Is Limited Brochure</a>	100 *	\$0.10
<a href="#">Water Is Limited Tip Card A - Flushing a Toilet</a>	100 *	\$0.10
<a href="#">Water Is Limited Tip Card B - Watering a Lawn</a>	100 *	\$0.10
<a href="#">Conserving Water Indoors Brochure</a>	100 *	\$0.10
<a href="#">Conserving Water Outdoors Brochure</a>	100 *	\$0.10
<a href="#">Water Conserving Tips Brochure</a>	100 *	\$0.10
<a href="#">Water Conservation for Industries, Businesses, and Institutions Brochure</a>	100 *	\$0.10
Water for Texas Coloring and Activity Book	10	\$0.20
A Watering Guide for Texas Landscape	50	\$0.20
Agricultural Water Conservation Irrigation Water Use Management - Best Management Practices	100	\$0.01
<a href="#">How do Texas Ag Producers Deal with Drought</a>	125	\$0.05
<a href="#">Agricultural Water Conservation in Texas</a>	100	\$0.10
Toilet Tank Leak Detector Tablet (2 tablets per packet, with Spanish/English instructions)	100	\$10.00/100 pkt.
<a href="#">The Texas Manual on Rainwater Harvesting, Third Edition</a>	0	\$5.00
<a href="#">Water Loss Audit Manual for Texas Utilities, March 2008</a>	5	\$2.00

# **Appendix C**

## **Water Rates (City Ordinances 52-15)**

<b>2017</b>		<b>LOW END RATE</b>		<b>\$2.21</b>				
		<b>MINIMUM</b>	<b>\$43.09</b>					
<b>RESIDENTIAL WATER</b>			<b>Inside City Limits</b>			<b>Outside City Limits</b>		
FIRST	2000	GALLONS	<b>\$13.26</b>			<b>\$19.89</b>		
NEXT	8000	GALLONS	\$3.40	\$27.20	\$40.46	\$5.10	\$40.80	\$60.69
ABOVE	10000	GALLONS	\$3.93			\$5.90		
<b>IRRIGATION WATER INSIDE CITY</b>								
FIRST	2000	GALLONS	<b>\$13.26</b>			<b>\$19.89</b>		
NEXT	8000	GALLONS	\$3.40	\$27.20	\$40.46	\$5.10	\$40.80	\$60.69
ABOVE	10000	GALLONS	\$3.93			\$5.90		
<b>COMMERCIAL WATER</b>								
FIRST	2000	GALLONS	<b>\$13.26</b>			<b>\$19.89</b>		
NEXT	48000	GALLONS	\$3.40	\$163.20	\$176.46	\$5.10	\$244.80	\$264.69
ABOVE	50000	GALLONS	\$3.93			\$5.90		
<b>BURKE RESIDENTIAL WATER</b>								
FIRST	2000	GALLONS	<b>\$22.54</b>			Minimum		
NEXT	8000	GALLONS	\$5.80	\$46.40	\$68.94	Per 1,000		
ABOVE	10000	GALLONS	\$6.68			Per 1,000		
<b>BURKE IRR WATER</b>								
FIRST	2000	GALLONS	<b>\$22.54</b>			Minimum		
NEXT	8000	GALLONS	\$5.80	\$46.40	\$68.94	Per 1,000		
ABOVE	10000	GALLONS	\$6.68			Per 1,000		
<b>BURKE COMMERCIAL WATER</b>								
FIRST	2000	GALLONS	<b>\$22.54</b>			Minimum		
NEXT	48000	GALLONS	\$5.80	\$278.40	\$300.94	Per 1,000		
ABOVE	50000	GALLONS	\$6.68			Per 1,000		
<b>INDUSTRIAL INSIDE</b>						Outside		
FIRST	2000	GALLONS	<b>\$313.76</b>	Minimum		<b>\$470.64</b>	Minimum	
Above	2000	GALLONS	\$2.22	Per 1,000		\$3.33	Per 1,000	
<b>WHOLE SALE WATER</b>								
First	2000	GALLONS	\$11.24	Minimum				
ABOVE	2000	GALLONS	\$2.21	Per 1,000				
INDUSTRIES BY BOD AND TSS     \$11.99 + V (2.36 + (.004069 X BOD) + (.002226 X TSS))								
SEWER RATES MINIMUM CHARGE OF 2000 GALLONS \$11.99    MAXIMUM IS \$81.83								
RESIDENTIAL CUSTOMERS SHALL BE CHARGED SEWER BASED ON								
AN AVERAGE CONSUMPTION FOR THE MONTHS OF DECEMBER,								
JANUARY AND FEBRUARY. IF THE CUSTOMER DOES NOT HAVE THESE THREE MONTHS THEIR								
SEWER CHARGE IS TO BE BASED ON THE ACTUAL MONTHLY CONSUMPTION UNTIL SUCH								
AVERAGE IS ATTAINABLE.								
RESIDENTIAL	FIRST 2000 GAL	<b>11.99</b>	<b>MINIMUM</b>		COMMERCIAL	First 2000 Gal	<b>11.99</b>	<b>MINIMUM</b>
	ABOVE 2000	3.88	<b>PER THOUSAND</b>			ABOVE 2000	4.29	<b>PER 1000</b>
<b>OUTSIDE CITY 2.00 TIMES     MAXIMUM OF 20,000 GALLONS     OUTSIDE CITY 2 X INSIDE RATE     NO MAX</b>								
RESTAURANT:		11.99	<b>MINIMUM</b>					
		8.46	<b>X</b>	<b>Total Con in 1000's</b>		<b>No Maximum</b>		
<b>SANITATION</b>								
RESIDENTIAL:		16.48 + 1.36 = 17.84						
COMMERCIAL:		20.00 + 1.65 = 21.65						

# **Appendix D**

## **Resolution Adopting Water Conversation Plan**

~~~ RESOLUTION ~~~

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF  
LUFKIN, TEXAS TO ADOPT WATER CONSERVATION PLAN**

**WHEREAS**, the City Council, City of Lufkin, Texas recognizes that Water Conservation is critical to the continued supply of safe drinking water for its residents and others who depend on this source of water supply;

**WHEREAS**, the City Council commissioned the preparation of the attached Water Conservation Plan and needs assessment to establish the guidelines, goals, objectives, and priorities for the implementation of Water Conservation in the City; and

**WHEREAS**, the plan has been reviewed by the Director of Public Utilities and City Manager and they have provided their recommendation for adoption.

**NOW, THEREFORE, BE IT RESOLVED**, By the City Council of the City of Lufkin, Texas: does execute and adopt the attached Water Conservation Plan and replace any previously approved plans.

**PASSED AND APPROVED** by the City Council of the City of Lufkin, Texas on this the \_\_\_\_\_ day of \_\_\_\_\_, 2019.

\_\_\_\_\_  
Bob Brown, Mayor

ATTEST:

\_\_\_\_\_  
Kara Andrepont, City Secretary

# **Appendix E**

## **Region I Notification**



## ENGINEERING SERVICES

Engineering • Inspections • Planning

300 E Shepherd  
P.O. Drawer 190  
Lufkin, TX 75902-0190  
(936) 633-0215  
Fax: (936) 633-0416

April 30, 2019

Region I ETRWPG  
c/o Angelina & Neches River Authority  
2901 N John Redditt Drive  
Lufkin, TX 75904

Attn: Kelly Holcomb

RE: Water Conservation Plan  
City of Lufkin, Texas

Gentlemen:

This letter will serve as notification in accordance with TCEQ rules, that the City of Lufkin has updated and submitted their Water Conservation Plan. This plan is available for review at your request.

Sincerely,

Kevin T. Gee, P.E., CFM  
Director / City Engineer



# **Appendix F**

## **Drought Contingency Plan**



## § 52.03 WATER CONSERVATION; DROUGHT CONTINGENCY PLAN.

- A. *Approval of the plan.* The City Council hereby approves and adopts as the city's water conservation plan the water conservation/drought contingency plan as set forth in § 52.04. The city commits to implement the program according to the procedures set forth in the adopted plan.
- B. The city shall report to the Texas Water Commission annually on the implementation and effectiveness of the plan in accordance with the outline set forth in the plan.
- C.
  - (1) In regards to implementation and enforcement of the conservation/drought contingency plan, the City Manager is designated as the responsible official, and the following guidelines are adopted:
    - (a) *Mild conditions.* At any time the average daily water use approaches 9.6 MGD (million gallons per day) for three consecutive days the City Manager shall be authorized to request voluntary compliance by all users and initiate other measures in accordance with the conservation/drought contingency plan as set out in the attached plan.
    - (b) *Moderate conditions.* At any time the average daily water use reaches 10.7 MGD for three consecutive days, and/or, the net storage in water reservoirs is continually decreasing on a daily basis and falls below 2.9 MG capacity for 48 hours, the City Manager and the City Council shall implement compulsory compliance by all users in accordance with the conservation/drought contingency plan as set out in the attached plan.
    - (c) *Severe conditions.* At any time the actual failure of a major component of the system which would cause an immediate health or safety hazard and/or water demand is 12.7 MGD for three consecutive days and/or all water is being pumped from the system's storage reservoirs and replenishment of these reservoirs has stopped, a penalty shall be imposed on all users not acting in compliance with the conservation/drought contingency plan attached hereto in accordance with the standard of usage outline within the plan and with the penalties established therein.
  - (2) In the event severe conditions as recited above persist for an extended period of time the city may ration water usage or terminate service to selected users of the system in accordance with the following sequence:
    - (a) *First.* Industrial users.
    - (b) *Second.* Commercial users.
    - (c) *Third.* Residential users.
    - (d) *Last.* Public health and safety facilities.

('72 Code, § 26-4) (Penal Ord. 405, passed 11-16-93)

## § 52.04 DROUGHT CONTINGENCY PLANS.

- (A) *Trigger conditions.* The following trigger conditions indicate when drought contingency measures will be put into effect. Trigger conditions will be set for mild, moderate and severe conditions:
- (1) Mild drought:
    - (a) Average daily water use reaches 9.6 mgd (90% of firm plant capacity) for three consecutive days.
    - (b) Consideration will be given to weather conditions, time of year, and customer complaints of low water pressure.
  - (2) Moderate drought:
    - (a) Average daily water use reaches firm plant capacity of 10.7 mgd for three consecutive days.
    - (b) Net storage in water storage is continually decreasing on a daily basis and falls below 2.9 mg. (about 50% capacity) for 48 hours.
  - (3) Severe drought:
    - (a) The imminent or actual failure of a major component of the system which would cause an immediate health or safety hazard.
    - (b) Water demand is exceeding the firm system capacity of 12.7 mgd for three consecutive days.
    - (c) All available water supply is so low that the pumps cannot pump the daily water demand.
    - (d) All water is being pumped from system's storage reservoirs and all replenishment of water reservoirs has stopped.
- (B) *Drought contingency measures.* The city will implement a plan in which water can be partially or totally restricted, in the purview of the City Council and as necessitated by an emergency.
- (1) A Step I curtailment is one where the City Council can restrict the use of water for outdoor sprinkling, watering of lawn, shrubs, driveways and automobiles to certain areas of the service area by days and to certain hours. Said restrictions will remain in effect until the City Council lifts the restrictions. More specifically stated as follows:
    - (a) Inform the public through the news media that a trigger condition has been reached, and that they should look for ways to voluntarily reduce water use. Specific steps which can be taken will be provided through the news media.
    - (b) Notify major commercial water users of the situation and request voluntary water use reductions.
    - (c) The following mandatory lawn watering schedule shall be implemented: Customers with even numbered house numbers may

water on even numbered days of the month. Customers with odd numbered houses may water on odd days of the month. Watering shall occur only between the hours of 6 - 10 a.m. and 8 - 10 p.m. and none on weekends.

- (d) During winter months, request water users to insulate pipes rather than running water to prevent freezing.
  - (e) The city will begin monitoring water pressure in the distribution system and water levels in the storage tanks.
- (2) A Step II curtailment would be one where the City Council will ban the use of water totally for outdoor sprinkling, watering lawns, shrubs, driveways and automobiles. Said restriction will remain in effect until the City Council lifts the ban. More specifically stated as follows:
- (a) Continue implementation of all relevant actions in preceding phase.
  - (b) Car washing, window washing, pavement washing prohibited except when a bucket is used.
  - (c) The following public water uses, not essential for public health or safety, are prohibited:
    - 1. Street washing;
    - 2. Water hydrant flushing;
    - 3. Filling pools;
    - 4. Golf course watering; and
    - 5. Athletic field watering.
- (3) The curtailment will be effective upon the City Council giving notice of curtailment to the customers within the area; the posting of a notice of curtailment and notifying the news media of curtailment as stated in division (C) of this section.
- (4) The curtailment will be terminated upon the City Council giving notice of termination as done for the institution of the curtailment.
- (5) A variance may be issued by the City Council where, in their opinion, the restriction of water effects health and safety.
- (6) Any violation of the ordinance adopted by the city shall carry a penalty of a maximum fine of \$200 per violation.
- (7) In addition to the existing drought contingency plan, the system will enact the following drought contingency measures:
- (a) Mild drought contingency measures:
    - 1. Inform public by giving notice of a mild drought to the customers within the system; the posting of the notice, and notifying news media of the mild drought.

2. Included in the information to the public will be the recommendation that water users look for ways to conserve water.
3. Public will be advised of the trigger condition situation weekly.

(b) Moderate drought contingency measures:

1. Public will be informed as mentioned above.
2. The Step I curtailment will be enacted.
3. Public will be advised of the trigger conditions weekly.

(c) Major drought contingency measures:

1. Public will be informed as mentioned above.
2. The Step II curtailment will be enacted.
3. Certain industrial and commercial water users which are not essential to the health and safety of community will be prohibited from water use.
4. Public will be advised of the trigger conditions daily.



**ORDINANCE NO. 421**

**AN ORDINANCE OF THE CITY OF LUFKIN TEXAS, ADOPTING A DROUGHT CONTINGENCY PLAN; ESTABLISHING CRITERIA FOR THE INITIATION AND TERMINATION OF DROUGHT RESPONSE STAGES; ESTABLISHING RESTRICTIONS ON CERTAIN WATER USES; ESTABLISHING PENALTIES FOR THE VIOLATION OF AND PROVISIONS FOR ENFORCEMENT OF THESE RESTRICTIONS; ESTABLISHING PROCEDURES FOR GRANTING VARIANCES; AND PROVIDING SEVERABILITY AND EFFECTIVE DATE.**

**WHEREAS**, the City of Lufkin, Texas recognizes that the amount of water available to the City and its water utility customers is limited and subject to depletion during periods of extended drought;

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

**WHEREAS**, Section 12.1272 of the Texas Water Code and applicable rules of the Texas Natural Resource Conservation Commission require all public water supply systems in Texas to prepare a drought contingency plan; and

**WHEREAS**, as authorized under law, and in the best interests of the citizens of Lufkin, Texas, the City Council deems it expedient and necessary to establish certain rules and policies for the orderly and efficient management of limited water supplies during drought and other water supply emergencies;

**NOW THEREFORE, BE IT ORDAINED BY THE CITY OF LUFKIN, TEXAS:**

**SECTION 1.**

That the City of Lufkin, Texas Drought contingency Plan attached hereto as Exhibit "A" and made part hereof for all purposes be, and the same is hereby, adopted as the official policy of the City.

**SECTION 2.**

That all ordinances that are in conflict with the provisions of this ordinance be, and the same are hereby, repealed and all other ordinances of the City not in conflict with the provisions of this ordinance shall remain in full force and effect.

**SECTION 3.**

Should any paragraph, sentence, subdivision, clause, phrase, or section of this ordinance be adjudged or held to be unconstitutional, illegal or invalid, the same shall not affect the validity of this ordinance as a whole or any part or provision thereof, other than the part so declared to be invalid, illegal or unconstitutional.

SECTION 4.

This ordinance shall take effect immediately from and after its passage and the publication of the caption, as the law in such cases provides.

First Reading:

DULY PASSED BY THE CITY OF LUFKIN, TEXAS, on the 7th day  
of December, 1999.

APPROVED:

Louis W. Brannan  
MAYOR

ATTESTED TO:

Atha Stokes Martin  
CITY SECRETARY

APPROVED AS TO FORM:

Rose  
CITY ATTORNEY

Second Reading:

DULY PASSED BY THE CITY OF LUFKIN, TEXAS, on the 21st day  
of December, 1999.

APPROVED:

Louis W. Brannan  
MAYOR

ATTESTED TO:

Atha Stokes Martin  
CITY SECRETARY

APPROVED AS TO FORM:

Rose  
CITY ATTORNEY





**EXHIBIT A  
DROUGHT CONTINGENCY PLAN  
FOR THE  
CITY OF LUFKIN  
December 1999**

**Section I: Declaration of Policy, Purpose, and Intent**

In order to conserve the available water supply and protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage or other water supply emergency condition, the City of Lufkin hereby adopts the following regulations and restrictions on the delivery and consumption of water.

Water uses regulated or prohibited under this Drought Contingency Plan (the Plan) are considered to non-essential and continuation of such uses during times of water shortage or other emergency water supply condition are deemed to constitute a waste of water which subjects the offender(s) to penalties as defined in Section XI of this Plan.

**Section II: Public Involvement**

Opportunity for the public to provide input into the preparation of the Plan was provided by the City of Lufkin by means of a regularly scheduled council meeting held on December 7, 1999.

**Section III: Public Education**

The City of Lufkin will periodically provide the public with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage. This information will be provided by means of press releases and direct mailings to customers.

**Section IV: Coordination with Regional Water Planning Groups**

The service area of the City of Lufkin is located within the Region I Water Planning Area and the City of Lufkin has provided a copy of this Plan to the Region I Water Planning Group.

**Section V: Authorization**

The City 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 City Manager or his/her designee, shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan.

**Section VI: Application**

The provisions of this Plan shall apply to all persons, customers, and property utilizing water provided by the City of Lufkin. The terms "person" and "customer" as used in the Plan include individuals, corporations, partnerships, associations, and all other legal entities.

## Section VII: Definitions

For the purposes of this Plan, the following definitions shall apply:

Aesthetic water use: water use for ornamental or decorative purposes such as fountains, reflecting pools, and water gardens.

Commercial and institutional water use: water used which is integral to the operations of commercial and non-profit establishments and governmental entities such as retail establishments, hotels and motels, restaurants, and office buildings.

Conservation: those practices, techniques, and technologies that reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water or increase the recycling and reuse of water so that a supply is conserved and made available for future or alternative uses.

Customer: any person, company, or organization using water supplied by City of Lufkin.

Domestic water use: water use for personal needs or for household or sanitary purposes such as drinking, bathing, heating, cooking, sanitation, or for cleaning a residence, business, industry or institution.

Even number address: street addresses, box numbers, or rural postal route numbers ending in 0, 2, 4, 6, or 8 and locations without addresses.

Industrial water use: the use of water in processes designed to convert materials of lower value into forms having greater usability and value.

Landscape irrigation use: water used for the irrigation and maintenance of landscaped areas, whether publicly or privately owned, including residential and commercial lawns, gardens, golf courses, parks, and rights-of-way and medians.

Non-essential water use: water uses that are not essential nor required for the protection of public, health, safety, and welfare, including:

- (a) irrigation of landscape areas, including parks, athletic fields, and golf courses, except otherwise provided under this Plan;
- (b) use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle;
- (c) use of water to wash down any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
- (d) use of water to wash down buildings or structures for purposes other than immediate fire protection;
- (e) flushing gutters or permitting water to run or accumulate in any gutter or street;
- (f) use of water to fill, refill, or add to any indoor or outdoor swimming pools or Jacuzzi-type pools;
- (g) use of water in a fountain or pond for aesthetic or scenic purposes except where necessary to support aquatic life;
- (h) failure to repair a controllable leak(s) within a reasonable period after having been give notice directing the repair of such leak(s); and
- (i) use of water from hydrants for construction purposes or any other purposes other than fire fighting.

Odd numbered address: street addresses, box numbers, or rural postal route numbers ending in 1, 3, 5, 7, or 9.

## Section VIII: Triggering Criteria for Initiation and Termination of Drought Response Stages

The City Manager, or his/her designee, shall monitor water supply and/or demand conditions on a daily basis and shall determine when conditions warrant initiation or termination of each stage of the Plan. Public notification of the initiation or termination of drought response stages shall be by means of a press release to all local newspapers, radio stations, cable-tv interrupt, and television stations.

The triggering criteria described below are based on system capacity and distribution system computer modeling under record drought conditions.

**(b) Stage 1 - Mild Water Shortage Conditions**

Requirements for initiation - Customers shall be requested to voluntarily conserve water and adhere to the prescribed restrictions on certain water uses; defined in Section VII - Definitions, when total daily water demand equals or exceeds 13.0 million gallons for 3 consecutive days or 13.5 million gallons on a single day based on the "safe" operating capacity of water supply facilities.

Requirements for termination - Stage 1 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days.

**(c) Stage 2 - Moderate Water Shortage Conditions**

Requirements for initiation - Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses provided in Section VII of this Plan when total daily water demand equals or exceeds 14.0 million gallons for 3 consecutive days or 15.0 million gallons on a single day based on the "safe" operating capacity of water supply facilities.

Requirements for termination - Stage 2 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days. Upon termination of Stage 2, Stage 1 becomes operative.

**(d) Stage 3 - Severe Water Shortage Conditions**

Requirements for initiation - Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 3 of this Plan when total daily water demand equals or exceeds 15.0 million gallons for 3 consecutive days or 15.5 million gallons on a single day based on the "safe" operating capacity of water supply facilities.

Requirements for termination - Stage 3 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days. Upon termination of Stage 3, Stage 2 becomes operative.

**(e) Stage 4 - Critical Water Shortage Conditions**

Requirements for initiation - Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 4 of this Plan when total daily water demand equals or exceeds 16.0 million gallons on a single day.

Requirements for termination - Stage 4 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days. Upon termination of Stage 4, Stage 3 becomes operative.

**(f) Stage 5 - Emergency Water Shortage Conditions**

Requirements for initiation - Customers shall be required to comply with the requirements

and restrictions for Stage 5 of this Plan when the City Manager, or his/her designee, determines that a water supply emergency exists based on:

1. Major water line breaks, or pump or system failures occur, which cause unprecedented loss of capability to provide water service; or
2. Natural or man-made contamination of the water supply source(s); or
3. Contamination of the water distribution system due to losses of system pressure.

Requirements for termination - Stage 5 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days.

**(g) Water Rationing**

Requirements for initiation - Customers shall be required to comply with the water allocation plan prescribed in Section X of this Plan when the City Manager, or his/her designee, determines that a water supply emergency exists based on Stage 5 conditions

Requirements for termination - Water rationing may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days.

**Section IX: Drought Response Stages**

The City Manager, or his/her designee, shall monitor water supply and/or demand conditions on a daily basis and, in accordance with the triggering criteria set forth in Section VIII of the Plan, shall determine that a mild, moderate, severe, critical, or emergency condition exists and shall implement the following actions upon publication of notice in a newspaper of general circulation:

**Stage 1 - Mild Water Shortage Conditions**

Goal: Achieve a voluntary 10 percent reduction in daily water demand.

**Supply Management Measures:**

Raise public awareness of the situation through direct mail-outs of brochures on water conservation methods. Issue press release.

**Voluntary Water Use Restrictions:**

- (a) Water customers are requested to voluntarily limit the irrigation of landscaped areas to Sundays and Thursdays for customers with a street address ending in an even number (0, 2, 4, 6, or 8), and Saturdays and Wednesdays for water customers with a street address ending in an odd number (1, 3, 5, 7, or 9), and to irrigate landscapes only between the hours of midnight and 10:00 a.m. and 8:00 p.m. to midnight on designated watering days.
- (b) All operations of the City of Lufkin shall adhere to water use restrictions prescribed for Stage 2 of the Plan.
- (c) Water customers are requested to practice water conservation and to minimize or discontinue water use for non-essential purposes.

## Stage 2 - Moderate Water Shortage Conditions

Goal: Achieve a 10 percent reduction in daily water demand.

### Supply Management Measures:

Reduce flushing of water mains. Reduce irrigation of public landscaped areas. Issue press release.

Water Use Restrictions. Under threat of penalty for violation, the following water use restrictions shall apply to all persons:

1. Irrigation of landscaped areas with hose-end sprinklers or automatic irrigation systems shall be limited to Sundays and Thursdays for customers with a street address ending in an even number (0, 2, 4, 6, or 8), and Saturdays and Wednesdays for water customers with a street address ending in an odd number (1, 3, 5, 7 or 9), and irrigation of landscaped areas is further limited to the hours of 2:00 a.m. until 5:00 a.m. and between 9:00 p.m. and 12:00 midnight on designated watering days. However, irrigation of landscaped areas is permitted at any time if it is by means of a hand-held hose, a faucet filled bucket or watering can of five (5) gallons or less, or drip irrigation system.
2. Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is prohibited except on designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8:00 p.m. and 12:00 midnight. Such washing, when allowed, shall be done with a hand-held bucket or a hand-held hose equipped with a positive shutoff nozzle for quick rises. Vehicle washing may be done at any time on the immediate premises of a commercial car wash or commercial service station. Further, such washing may be exempted from these regulations if the health, safety, and welfare of the public is contingent upon frequent vehicle cleansing, such as garbage trucks and vehicles used to transport food and perishables.
3. Use of water to fill, refill, or add to any indoor or outdoor swimming pools, wading pools, or Jacuzzi-type pools is prohibited except on designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8:00 p.m. and 12:00 midnight.
4. Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
5. Use of water from hydrants shall be limited to fire fighting, related activities, or other activities necessary to maintain public health, safety, and welfare, except that use of water from designated fire hydrants for construction purposes may be allowed under special permit from the City of Lufkin.
6. Use of water for the irrigation of golf course greens, tees, and fairways is prohibited except on designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8:00 p.m. and 12:00 midnight. However, if the golf course utilizes a water source other than that provided by the City of Lufkin, the facility shall not be subject to these regulations.
7. All restaurants are prohibited from serving water to its patrons except when requested.

8. The following uses of water are defined as non-essential and are prohibited:
- (a) wash down of any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
  - (b) use of water to wash down buildings or structures for purposes other than immediate fire protection;
  - (c) use of water for dust control;
  - (d) flushing gutters or permitting water to run or accumulate in any gutter or street; and
  - (e) failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s).

### **Stage 3 - Severe Water Shortage Conditions**

Goal: Achieve a 10 percent reduction in daily water demand.

#### **Supply Management Measures:**

Discontinue all flushing of water mains. Discontinue all irrigation of public landscaped areas. Implement existing water contracts or agreements with adjacent water providers. Move personnel to leak repair crew and add evening shift. Issue press release.

1. Water Use Restrictions. All requirements of Stage 2 shall remain in effect during Stage 3 except:

- (a) Irrigation of landscaped areas shall be limited to designated watering days between the hours of 2:00 a.m. and 5:00 a.m. and between 9:00 p.m. and 12:00 midnight and shall be by means of hand-held hoses, hand-held buckets, drip irrigation, or permanently installed automatic sprinkler system only. The use of hose-end sprinklers is prohibited at all times.
- (b) The watering of golf course tees is prohibited unless the golf course utilizes a water source other than that provided by the City of Lufkin.
- (c) The use of water for construction purposes from designated fire hydrants under special permit is to be discontinued.

### **Stage 4 - Critical Water Shortage Conditions**

Goal: Achieve a 10 Percent reduction in daily water demand.

#### **Supply Management Measures:**

Discontinue all unnecessary water use by City personnel. Move personnel to leak repair crews. Provide personnel to enforcement crews to insure compliance with the drought contingency ordinance. Reduce water to wholesale customers. Issue press release.

Water Use Restrictions. All requirements of Stage 2 and 3 shall remain in effect during Stage 4 except:

- (a) Irrigation of landscaped areas shall be limited to designated watering days between the hours of 2:00 a.m. and 4:00 a.m. and between 9:00 p.m. and 10:00 p.m. and shall be by means of hand-held hoses, hand-held buckets, or drip irrigation only. The use of hose-end sprinklers or

permanently installed automatic sprinkler systems are prohibited at all times.

- (b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle not occurring on the premises of a commercial car wash and commercial service stations and not in the immediate interest of public health, safety, and welfare is prohibited. Further, such vehicle washing at commercial car washes and commercial service stations shall occur only between the hours of 6:00 a.m. and 10:00 a.m. and between 6:00 p.m. and 10:00 p.m.
- (c) The filling, refilling, or adding of water to swimming pools, wading pools, and Jacuzzi-type pools is prohibited.
- (d) Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
- (e) No applications for new, additional, expanded, or increased-in-size water service connections, meters, service lines, pipeline extensions, mains, or water service facilities of any kind shall be allowed or approved.

#### **Stage 5 - Emergency Water Shortage Conditions**

Goal: Achieve a 10 percent reduction in daily water demand.

##### **Supply Management Measures:**

Reduce unessential personnel. Move personnel to enforcement teams. Have emergency crews and equipment on 24 hour standby. Activate 24 hour leak repair crews. Eliminate wholesale water usage. Issue press release.

Water Use Restrictions. All requirements of Stage 2, 3, and 4 shall remain in effect during Stage 5 except:

- (a) Irrigation of landscaped areas is absolutely prohibited.
- (b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is absolutely prohibited.

#### **Section X: Water Rationing**

In the event that water shortage conditions threaten public health, safety, and welfare, the City Manager is hereby authorized to ration water according to the following water allocation plan:

##### **Single-Family Residential Customers**

The allocation to residential water customers residing in a single-family dwelling shall be as follows:

| <b>Persons per Household</b> | <b>Gallons per Month</b> |
|------------------------------|--------------------------|
| 1 or 2                       | 6,000                    |
| 3 or 4                       | 7,000                    |
| 5 or 6                       | 8,000                    |
| 7 or 8                       | 9,000                    |
| 9 or 10                      | 10,000                   |
| 11 or more                   | 12,000                   |



"Household" means the residential premises served by the customer's meter. "Persons per household" includes only those persons currently physically residing at the premises and expected to reside there for the entire billing period. It shall be assumed that a particular customer's household is comprised of two (2) persons unless the customer notifies the City of Lufkin of a greater number of persons per household on a form prescribed by the City Manager. The City Manager shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every residential customer. If, however, a customer does not receive such a form, it shall be the customer's responsibility to go to the City of Lufkin offices to complete and sign the form claiming more than two (2) persons per household. New customers may claim more persons per household at the time of applying for water service on the form prescribed by the City Manager. When the number of persons per household increases so as to place the customer in a different allocation category, the customer may notify the City of Lufkin on such form and the change will be implemented in the next practicable billing period. If the number of persons in a household is reduced, the customer shall notify the City of Lufkin in writing within (2) days. In prescribing the method for claiming more than two (2) persons per household, the City Manager shall adopt methods to insure the accuracy of the claim. Any person who knowingly, recklessly, or with criminal negligence falsely reports the number of persons in a household or fails to timely notify the City of Lufkin of a reduction in the number of persons in a household shall be fined not less than \$ 1,000.00.

Residential water customers shall pay the following surcharges:

- \$ 50.00 for the first 1,000 gallons over allocation.
- \$ 100.00 for the second 1,000 gallons over allocation.
- \$ 150.00 for the third 1,000 gallons over allocation.
- \$ 200.00 for each additional 1,000 gallons over allocation.

Surcharge shall be cumulative.

#### **Master-Metered Multi-Family Residential Customers**

The allocation to a customer billed from a master meter which jointly measures water to multiple permanent residential dwelling units (e.g., apartments, mobile homes) shall be allocated 6,000 gallons per month for each dwelling unit. It shall be assumed that such a customer's meter serves two dwelling units unless the customer notifies the City of Lufkin of a greater number on a form prescribed by the City Manager. The City Manager shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every such customer. If, however, a customer does not receive such a form, it shall be the customer's responsibility to go to the City of Lufkin offices to complete and sign the form claiming more than two (2) dwellings. A dwelling unit may be claimed under this provision whether it is occupied or not. New customers may claim more dwelling units at the time of applying for water service on the form prescribed by the City Manager. If the number of dwelling units served by a master meter is reduced, the customer shall notify the City of Lufkin in writing within two (2) days. In prescribing the method for claiming more than two (2) dwelling units, the City Manager shall adopt methods to insure the accuracy of the claim. Any person who knowingly, recklessly, or with criminal negligence falsely reports the number of dwelling units served by a master meter or fails to timely notify the City of Lufkin of a reduction in the number of persons in a household shall be fined not less than \$ 2,000.00. Customers billed from a master meter under this provision shall pay the following monthly surcharges:

- \$ 200.00 for 1,000 gallons over allocation up through 1,000 gallons for each dwelling unit.



\$ 300.00 ,thereafter, for each additional 1,000 gallons over allocation up through a second 1,000 gallons for each dwelling unit.

\$ 400.00 , thereafter, for each additional 1,000 gallons over allocation up through a third 1,000 gallons for each dwelling unit.

\$ 500.00 , thereafter for each additional 1,000 gallons over allocation.

Surcharges shall be cumulative.

#### **Commercial Customers**

A monthly water usage allocation shall be established by the City Manager , or his/her designee, for each nonresidential commercial customer other than an industrial customer who uses water for processing purposes. The non-residential customer's allocation shall be approximately 75% percent of the customer's usage for corresponding month's billing period for the previous 12 months. If the customer's billing history is shorter than 12 months, the monthly average for the period for which there is a record shall be used for any monthly period for which no history exists. The City Manager shall give his/her best effort to see that notice of each non-residential customer's allocation is mailed to such customer. If, however, a customer does not receive such notice, it shall be the customer's responsibility to contact the City of Lufkin to determine the allocation. Upon request of the customer or at the initiative of the City Manager , the allocation may be reduced or increased if, (1) the designated period does not accurately reflect the customer's normal water usage, (2) one nonresidential customer agrees to transfer part of its allocation to another nonresidential customer, or (3) other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the City Council . Nonresidential commercial customers shall pay the following surcharges:

Customers whose allocation is 0 gallons through 6000 gallons per month:

- \$ 50.00 per thousand gallons for the first 1,000 gallons over allocation.
- \$ 100.00 per thousand gallons for the second 1,000 gallons over allocation.
- \$ 150.00 per thousand gallons for the third 1,000 gallons over allocation.
- \$ 200.00 per thousand gallons for each additional 1,000 gallons over allocation.

Customers whose allocation is 6001 Gallons per month or more:

- \$ 100.00 per thousand gallons for the first 1,000 gallons over allocation.
- \$ 200.00 per thousand gallons for the second 1,000 gallons over allocation.
- \$ 300.00 per thousand gallons for the third 1,000 gallons over allocation.
- \$ 400.00 per thousand gallons for each additional 1,000 gallons over allocation.

The surcharges shall be cumulative.

#### **Industrial Customers**

A monthly water usage allocation shall be established by the City Manager , or his/her designee, for each industrial customer, which uses water for processing purposes. The industrial customer's allocation shall be approximately 85 percent of the customer's water usage baseline. Ninety (90) days after the initial imposition of the allocation for industrial customers, the industrial customer's allocation shall be further reduced to 80 percent of the customer's water usage baseline. The industrial customer's water usage baseline will be computed on the average water usage for the 12 month period ending prior to the date of implementation of Stage 2 of the Plan. If the industrial water customer's billing history is shorter than 12

months, the monthly average for the period for which there is a record shall be used for any monthly period for which no billing history exists. The City Manager shall give his/her best effort to see that notice of each industrial customers allocation is mailed to such customer. If, however, a customer does not receive such notice, it shall be the customer's responsibility to contact the City of Lufkin to determine the allocation, and the allocation shall be fully effective notwithstanding the lack of receipt of written notice. Upon request of the customer or at the initiative of the City Manager, the allocation may be reduced or increased, (1) if the designated period does not accurately reflect the customer's normal water usage because the customer had shutdown a major processing unit for repair or overhaul during the period, (2) the customer has added or is in the process of adding significant additional processing capacity, (3) the customer has shutdown or significantly reduced the production of a major processing unit, (4) the customer has previously implemented significant permanent water conservation measures such that the ability to further reduce usage is limited, (5) the customer agrees to transfer part of its allocation to another industrial customer, or (6) if other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the City Council. Industrial customers shall pay the following surcharges:

Customers whose allocation is 0 gallons through 300,000 gallons per month:

- \$ 100.00 per thousand gallons for the first 1,000 gallons over allocation.
- \$ 200.00 per thousand gallons for the second 1,000 gallons over allocation.
- \$ 300.00 per thousand gallons for the third 1,000 gallons over allocation.
- \$ 400.00 per thousand gallons for each additional 1,000 gallons over allocation.

Customers whose allocation is 300,001 gallons per month or more:

- \$ 200.00 per thousand gallons for the first 1,000 gallons over allocation.
- \$ 400.00 per thousand gallons for the second 1,000 gallons over allocation.
- \$ 600.00 per thousand gallons for the third 1,000 gallons over allocation.
- \$ 800.00 per thousand gallons for each additional 1,000 gallons over allocation.

The surcharges shall be cumulative.

## Section XI: Enforcement

- (a) No person shall knowingly or intentionally allow the use of water from the City of Lufkin for residential, commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provision of this Plan, or in an amount in excess of that permitted by the drought response state in effect at the time pursuant to action taken by City Manager, or his/her designee, in accordance with provisions of this Plan.
- (b) Any person who violates this Plan is guilty of a misdemeanor and, upon conviction shall be punished by a fine of not less than one thousand dollars (\$ 1000.00 ) and not more than two thousand dollars (\$ 2000.00 ). Each day that one or more of the provisions in this Plan is violated shall constitute a separate offense. If a person is convicted of three or more distinct violations of this Plan, the City Manager shall, upon due notice to the customer, be authorized to discontinue water service to the premises where such violations occur. Services discontinued under such circumstances shall be restored only upon payment of a reconnection charge, hereby established at \$ 2000.00, and any other costs incurred by the City of Lufkin in discontinuing service. In addition, suitable assurance must be given to the City Manager that the same action shall not be repeated while the Plan is in effect. Compliance with this

plan may also be sought through injunctive relief in the district court.

- (c) Any person, including a person classified as a water customer of the City of Lufkin, in apparent control of the property where a violation occurs or originates shall be presumed to be the violator, and proof that the violation occurred on the person's property shall constitute a rebuttable presumption that the person in apparent control of the property committed the violation, but any such person shall have the right to show that he/she did not commit the violation. Parents shall be presumed to be responsible for violations of their minor children and proof that a violation, committed by a child, occurred on property within the parents' control shall constitute a rebuttable presumption that the parent committed the violation, but any such parent may be excused if he/she proves that he/she had previously directed the child not to use the water as it was used in violation of this Plan and that the parent could not have reasonably known of the violation.
- (d) Any employee of the City of Lufkin designated as code enforcement, police officer, City Engineer, Public Works Director, Water Utilities Director, or other employee designated by the City Manager, may issue a citation to a person he/she reasonably believes to be in violation of this Ordinance. The citation shall be prepared in duplicate and shall contain the name and address of the alleged violator, if known, the offense charged, and shall direct him/her to appear in the municipal court on the date shown on the citation for which the date shall not be less than 3 days nor more than 5 days from the date the citation was issued. The alleged violator shall be served a copy of the citation. Service of the citation shall be complete upon delivery of the citation to the alleged violator, to an agent or employee of a violator, or to a person over 14 years of age who is a member of the violator's immediate family or is a resident of the violator's residence. The alleged violator shall appear in municipal court to enter a plea of guilty or not guilty for the violation of this Plan. If the alleged violator fails to appear in municipal court, a warrant for his/her arrest may be issued. A summons to appear may be issued in lieu of an arrest warrant. These cases shall be expedited and given preferential setting in municipal court before all other cases.

## Section XII: Variances

The City Manager, or his/her designee, may, in writing, grant temporary variance for existing water uses otherwise prohibited under this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the health, sanitation, or fire protection for the public or the person requesting such variance and if one or more of the following conditions are met:

- (a) Compliance with this Plan cannot be technically accomplished during the duration of the water supply shortage or other condition for which the Plan is in effect.
- (b) Alternative methods can be implemented which will achieve the same level of reduction in water use.

Persons requesting an exemption from the provisions of this Ordinance shall file a petition for variance with the City of Lufkin within 5 days after the Plan or a particular drought response stage has been invoked. All petitions for variances shall be reviewed by the City Manager, or his/her designee, and shall include the following:

- (a) Name and address of the petitioner(s).
- (b) Purpose of water use.
- (c) Specific provision(s) of the Plan from which the petitioner is requesting relief.
- (d) Detailed statement as to how the specific provision of the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if

- petitioner complies with this Ordinance.
- (e) Description of the relief requested.
  - (f) Period of time for which the variance is sought.
  - (g) Alternative water use restrictions or other measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
  - (h) Other pertinent information.

Variances granted by the City of Lufkin shall be subject to the following conditions, unless waived or modified by the City Manger or his/her designee;

- (a) Variances granted shall include a timetable for compliance.
- (b) Variances granted shall expire when the Plan is no longer in effect, unless the petitioner failed to meet specified requirements.

No variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

### **Section XIII: Severability**

It is hereby declared to be the intention of the City of Lufkin that the sections, paragraphs, sentences, clauses, and phrases of this Ordinance are severable and, if any phrase, clause, sentence, paragraph, or section of this Plan shall be declared unconstitutional by the valid judgement or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs, and sections of this Plan, since the same would not have been enacted by the City of Lufkin without the incorporation into this Plan of any such unconstitutional phrase, clause, sentence, paragraph, or section.



ORDINANCE NO. 423

**AN ORDINANCE OF THE CITY OF LUFKIN TEXAS, ADOPTING A DROUGHT CONTINGENCY PLAN FOR PURCHASERS OF WHOLESALE WATER; ESTABLISHING CRITERIA FOR THE INITIATION AND TERMINATION OF DROUGHT RESPONSE STAGES; ESTABLISHING RESTRICTIONS ON CERTAIN WATER USES; ESTABLISHING PENALTIES FOR THE VIOLATION OF AND PROVISIONS FOR ENFORCEMENT OF THESE RESTRICTIONS; ESTABLISHING PROCEDURES FOR GRANTING VARIANCES; AND PROVIDING SEVERABILITY AND EFFECTIVE DATE.**

**WHEREAS**, the City of Lufkin, Texas recognizes that the amount of water available to the City and its wholesale water customers is limited and subject to depletion during periods of extended drought;

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

**WHEREAS**, Section 12.1272 of the Texas Water Code and applicable rules of the Texas Natural Resource Conservation Commission require all public water supply systems in Texas to prepare a drought contingency plan; and

**WHEREAS**, Section 11.039 of the Texas Water Code authorizes water suppliers to distribute available water supplies on a pro rata basis during times of water supply shortage; and

**WHEREAS**, as authorized under law, and in the best interests of the citizens of Lufkin, Texas, the City Council deems it expedient and necessary to establish certain rules and policies for the orderly and efficient management of limited water supplies during drought and other water supply emergencies;

NOW THEREFORE, BE IT ORDAINED BY THE CITY OF LUFKIN, TEXAS:

**SECTION 1.**

That the City of Lufkin, Texas Drought contingency Plan For Purchasers of Wholesale Water attached hereto as Exhibit "A" and made part hereof for all purposes be, and the same is hereby, adopted as the official policy of the City.

**SECTION 2.**

That all ordinances that are in conflict with the provisions of this ordinance be, and the same are hereby, repealed and all other ordinances of the City not in conflict with the provisions of this ordinance shall remain in full force and effect.

**SECTION 3.**

Should any paragraph, sentence, subdivision, clause, phrase, or section of this ordinance be adjudged or held to be unconstitutional, illegal or invalid, the same shall not affect the validity of this ordinance as a whole or any part or provision thereof, other than the part so declared to be invalid, illegal or unconstitutional.

**SECTION 4.**

This ordinance shall take effect immediately from and after its passage and the publication of the caption, as the law in such cases provides.

**First Reading:**

DULY PASSED BY THE CITY OF LUFKIN, TEXAS, on the 23rd day  
of May, 2000.

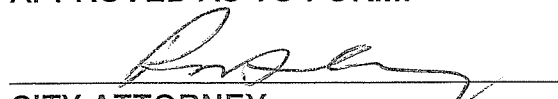
APPROVED:

  
MAYOR

ATTESTED TO:

  
CITY SECRETARY

APPROVED AS TO FORM:

  
CITY ATTORNEY

Second Reading:

DULY PASSED BY THE CITY OF LUFKIN, TEXAS, on the 6th day  
of June, 2000.

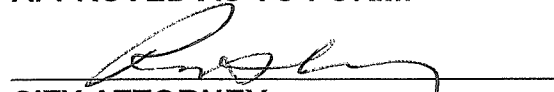
APPROVED:

  
MAYOR

ATTESTED TO:

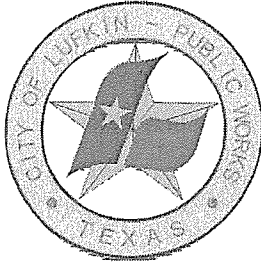
  
CITY SECRETARY

APPROVED AS TO FORM:

  
CITY ATTORNEY







## EXHIBIT A

# DROUGHT CONTINGENCY PLAN FOR PURCHASERS OF WHOLESALE WATER IN THE CITY OF LUFKIN May 2000

### Section I: Declaration of Policy, Purpose, and Intent

In order to conserve the available water supply and protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage or other water supply emergency condition, the City of Lufkin hereby adopts the following regulations and restrictions on the delivery and consumption of water.

Water uses regulated or prohibited under this Drought Contingency Plan (the Plan) are considered to non-essential and continuation of such uses during times of water shortage or other emergency water supply condition are deemed to constitute a waste of water which subjects the offender(s) to penalties as defined in Section XI of this Plan.

### Section II: Public Involvement

Opportunity for the public and wholesale water customers to provide input into the preparation of the Plan was provided by the City of Lufkin by means of a regularly scheduled council meeting held on \_\_\_\_\_.

### Section III: Wholesale Water Customer Education

The City of Lufkin will periodically provide the wholesale water customers with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage. This information will be provided by means of press releases and direct mailings to customers.

### Section IV: Coordination with Regional Water Planning Groups

The service area of the City of Lufkin is located within the Region I Water Planning Area and the City of Lufkin has provided a copy of this Plan to the Region I Water Planning Group.

## **Section V: Authorization**

The City 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 City Manager or his/her designee, shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan.

## **Section VI: Application**

The provisions of this Plan shall apply to all persons, customers, and property utilizing water provided by the City of Lufkin. The terms "person" and "customer" as used in the Plan include individuals, corporations, partnerships, associations, and all other legal entities.

## **Section VII: Triggering Criteria for Initiation and Termination of Drought Response Stages**

The City Manager, or his/her designee, shall monitor water supply and/or demand conditions on a daily basis and shall determine when conditions warrant initiation or termination of each stage of the Plan. Public notification of the initiation or termination of drought response stages shall be by means of a press release to all local newspapers, radio stations, cable-tv interrupt, and television stations.

The triggering criteria described below are based on system capacity and distribution system computer modeling under record drought conditions.

### **(a) Stage 1 - Mild Water Shortage Conditions**

Requirements for initiation - Customers shall be requested to voluntarily conserve water and adhere to the prescribed restrictions on certain water uses, defined in Section VII - Definitions, when total daily water demand equals or exceeds 13.0 million gallons for 3 consecutive days or 13.5 million gallons on a single day based on the "safe" operating capacity of water supply facilities.

Requirements for termination - Stage 1 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days.

**(b) Stage 2 - Moderate Water Shortage Conditions**

Requirements for initiation - Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses provided in Section VII of this Plan when total daily water demand equals or exceeds 14.0 million gallons for 3 consecutive days or 15.0 million gallons on a single day based on the "safe" operating capacity of water supply facilities.

Requirements for termination - Stage 2 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days. Upon termination of Stage 2, Stage 1 becomes operative.

**(c) Stage 3 - Severe Water Shortage Conditions**

Requirements for initiation - Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 3 of this Plan when total daily water demand equals or exceeds 15.0 million gallons for 3 consecutive days or 15.5 million gallons on a single day based on the "safe" operating capacity of water supply facilities.

Requirements for termination - Stage 3 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days. Upon termination of Stage 3, Stage 2 becomes operative.

**(d) Stage 4 - Critical Water Shortage Conditions**

Requirements for initiation - Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 4 of this Plan when total daily water demand equals or exceeds 16.0 million gallons on a single day.

Requirements for termination - Stage 4 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days. Upon termination of Stage 4, Stage 3 becomes operative.

**(e) Stage 5 - Emergency Water Shortage Conditions**

Requirements for initiation - Customers shall be required to comply with the requirements and restrictions for Stage 5 of this Plan when the City Manager, or his/her designee, determines that a water supply emergency exists based on:

1. Major water line breaks, or pump or system failures occur, which cause unprecedented loss of capability to provide water service; **or**
2. Natural or man-made contamination of the water supply source(s); **or**

3. Contamination of the water distribution system due to losses of system pressure.

Requirements for termination - Stage 5 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days.

## **Section VIII: Drought Response Stages**

The City Manager , or his/her designee, shall monitor water supply and/or demand conditions on a daily basis and, in accordance with the triggering criteria set forth in Section VIII of the Plan, shall determine that a mild, moderate, severe, critical, or emergency condition exists and shall implement the following actions upon publication of notice in a newspaper of general circulation:

### **Stage 1 - Mild Water Shortage Conditions**

Goal: Achieve a voluntary 10 percent reduction in daily water demand.

Supply Management Measures:

Raise public awareness of the situation through direct mail-outs of brochures on water conservation methods. Issue press release.

Voluntary Water Use Restrictions:

- (a) Water customers are requested to voluntarily limit the irrigation of landscaped areas to Sundays and Thursdays for customers with a street address ending in an even number (0, 2, 4, 6, or 8), and Saturdays and Wednesdays for water customers with a street address ending in an odd number (1, 3, 5, 7, or 9), and to irrigate landscapes only between the hours of midnight and 10:00 a.m. and 8:00 p.m. to midnight on designated watering days.
- (b) All operations of the City of Lufkin shall adhere to water use restrictions prescribed for Stage 2 of the Plan.
- (c) Water customers are requested to practice water conservation and to minimize or discontinue water use for non-essential purposes.

Demand Management Measures

- (a) The City Manager, or his/her designee, will contact wholesale water customers to discuss water supply and/or demand conditions and will

request that wholesale water customers initiate voluntary measures to reduce water use as listed above.

- (b) The City Manager, or his/her designee, will provide a weekly report to news media with information regarding current water supply and/or demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.

## **Stage 2 - Moderate Water Shortage Conditions**

Goal: Achieve a 10 percent reduction in daily water demand.

### **Supply Management Measures:**

Reduce flushing of water mains. Reduce irrigation of public landscaped areas. Issue press release.

**Water Use Restrictions.** Under threat of penalty for violation, the following water use restrictions shall apply to all persons:

1. Irrigation of landscaped areas with hose-end sprinklers or automatic irrigation systems shall be limited to Sundays and Thursdays for customers with a street address ending in an even number (0, 2, 4, 6, or 8), and Saturdays and Wednesdays for water customers with a street address ending in an odd number (1, 3, 5, 7 or 9), and irrigation of landscaped areas is further limited to the hours of 2:00 a.m. until 5:00 a.m. and between 9:00 p.m. and 12:00 midnight on designated watering days. However, irrigation of landscaped areas is permitted at any time if it is by means of a hand-held hose, a faucet filled bucket or watering can of five (5) gallons or less, or drip irrigation system.
2. Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is prohibited except on designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8:00 p.m. and 12:00 midnight. Such washing, when allowed, shall be done with a hand-held bucket or a hand-held hose equipped with a positive shutoff nozzle for quick rises. Vehicle washing may be done at any time on the immediate premises of a commercial car wash or commercial service station. Further, such washing may be exempted from these regulations if the health, safety, and welfare of the public is contingent upon frequent vehicle cleansing, such as garbage trucks and vehicles used to transport food and perishables.

3. Use of water to fill, refill, or add to any indoor or outdoor swimming pools, wading pools, or Jacuzzi-type pools is prohibited except on designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8:00 p.m. and 12:00 midnight.
4. Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
5. Use of water from hydrants shall be limited to fire fighting, related activities, or other activities necessary to maintain public health, safety, and welfare, except that use of water from designated fire hydrants for construction purposes may be allowed under special permit from the City of Lufkin .
6. Use of water for the irrigation of golf course greens, tees, and fairways is prohibited except on designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8:00 p.m. and 12:00 midnight. However, if the golf course utilizes a water source other than that provided by the City of Lufkin , the facility shall not be subject to these regulations.
7. All restaurants are prohibited from serving water to its patrons except when requested.
8. The following uses of water are defined as non-essential and are prohibited:
  - (a) wash down of any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
  - (b) use of water to wash down buildings or structures for purposes other than immediate fire protection;
  - (c) use of water for dust control;
  - (d) flushing gutters or permitting water to run or accumulate in any gutter or street; and
  - (e) failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s).

Demand Management Measures:

- (a) The City Manager, or his/her designees(s), will initiate weekly contact with wholesale water customers to discuss water supply and/or demand conditions and the possibility of pro rata curtailment of water

diversions and/or deliveries.

- (b) The City Manager, or his/her designee(s), will request wholesale water customers to initiate mandatory measures to reduce non-essential water use (e.g., implement Stage 2 of the customer's drought contingency plan).
- (c) The City Manager, or his/her designee(s), will initiate preparations for the implementation of pro rata curtailment of water diversions and/or deliveries by preparing a monthly water usage allocation baseline for each wholesale customer according to the procedures specified in Section VI of the Plan.
- (d) The City Manager, or his/her designee(s), will provide a weekly report to news media with information regarding current water supply and/or demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.

### **Stage 3 - Severe Water Shortage Conditions**

Goal: Achieve a 10 percent reduction in daily water demand.

#### **Supply Management Measures:**

Discontinue all flushing of water mains. Discontinue all irrigation of public landscaped areas. Implement existing water contracts or agreements with adjacent water providers. Move personnel to leak repair crew and add evening shift. Issue press release.

1. Water Use Restrictions. All requirements of Stage 2 shall remain in effect during Stage 3 except:
  - (a) Irrigation of landscaped areas shall be limited to designated watering days between the hours of 2:00 a.m. and 5:00 a.m. and between 9:00 p.m. and 12:00 midnight and shall be by means of hand-held hoses, hand-held buckets, drip irrigation, or permanently installed automatic sprinkler system only. The use of hose-end sprinklers is prohibited at all times.
  - (b) The watering of golf course tees is prohibited unless the golf course utilizes a water source other than that provided by the City of Lufkin.
  - (c) The use of water for construction purposes from designated fire hydrants under special permit is to be discontinued.

#### Demand Management Measures:

- (a) The City Manager, or his/her designee(s), will contact wholesale water customers to discuss water supply and/or demand conditions and will request that wholesale water customers initiate additional mandatory measures to reduce non-essential water use (e.g., implement Stage 3 of the customer's drought contingency plan).
- (b) The City Manager, or his/her designee(s), will initiate pro rata curtailment of water diversions and/or deliveries for each wholesale customer according to the procedures specified in Section VI of the Plan.
- (c) The City Manager, or his/her designee(s), will provide a weekly report to news media with information regarding current water supply and/or demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.

#### **Stage 4 - Critical Water Shortage Conditions**

Goal: Achieve a 10 Percent reduction in daily water demand.

#### Supply Management Measures:

Discontinue all unnecessary water use by City personnel. Move personnel to leak repair crews. Provide personnel to enforcement crews to insure compliance with the drought contingency ordinance. Reduce water to wholesale customers. Issue press release.

Water Use Restrictions. All requirements of Stage 2 and 3 shall remain in effect during Stage 4 except:

- (a) Irrigation of landscaped areas shall be limited to designated watering days between the hours of 2:00 a.m. and 4:00 a.m. and between 9:00 p.m. and 10:00 p.m. and shall be by means of hand-held hoses, hand-held buckets, or drip irrigation only. The use of hose-end sprinklers or permanently installed automatic sprinkler systems are prohibited at all times.
- (b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle not occurring on the premises of a commercial car wash and commercial service stations and not in the immediate interest of public health, safety, and welfare is prohibited. Further, such vehicle washing at commercial car washes and commercial service stations shall



occur only between the hours of 6:00 a.m. and 10:00 a.m. and between 6:00 p.m. and 10:00 p.m.

- (c) The filling, refilling, or adding of water to swimming pools, wading pools, and Jacuzzi-type pools is prohibited.
- (d) Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
- (e) No applications for new, additional, expanded, or increased-in-size water service connections, meters, service lines, pipeline extensions, mains, or water service facilities of any kind shall be allowed or approved.

**Demand Management Measures:**

- (a) The City Manager, or his/her designee(s), will contact wholesale water customers to discuss water supply and/or demand conditions and will request that wholesale water customers initiate additional mandatory measures to reduce non-essential water use (e.g., implement Stage 4 of the customer's drought contingency plan).

**Stage 5 - Emergency Water Shortage Conditions**

Goal: Achieve a 10 percent reduction in daily water demand.

**Supply Management Measures:**

Reduce unessential personnel. Move personnel to enforcement teams. Have emergency crews and equipment on 24 hour standby. Activate 24 hour leak repair crews. Eliminate wholesale water usage. Issue press release.

Water Use Restrictions. All requirements of Stage 2, 3, and 4 shall remain in effect during Stage 5 except:

- (a) Irrigation of landscaped areas is absolutely prohibited.
- (b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is absolutely prohibited.

## Section IX: Pro Rata Water Allocation

In the event that the triggering criteria specified in Section VII of the Plan for Stage 3 - Severe Water Shortage Conditions have been met, the City Manager is hereby authorized to initiate allocation of water supplies on a pro rata basis in accordance with Texas Water Code Section 11.039 and according to the following water allocation policies and procedures:

- (a) A wholesale customer's monthly allocation shall be a percentage of the customer's water usage baseline. The percentage will be set by resolution of the City Council based on the City Managers assessment of the severity of the water shortage condition and the need to curtail water diversions and/or deliveries and may be adjusted periodically by resolution of the City Council as conditions warrant. Once pro rata allocation is in effect, water diversions by or deliveries to each wholesale customer shall be limited to the allocation established for each month.
- (b) A water usage allocation shall be established by the City Manager, or his/her designee, for each wholesale customer. The wholesale customer's water usage for each Drought Response Stage will be computed based on a percentage of the maximum daily water usage as identified in the customers water supply contract with the City. The water available to wholesale customers will be reduced by the percent of desire water reduction as listed in each Drought Response Stage, Section VIII.
- (c) The City Manager shall provide notice, by certified mail, to each wholesale customer informing them of their water usage allocations for each Drought Response Stage and shall notify the news media and the executive director of the Texas Natural Resource Conservation commission upon initiation of pro rata water allocation.
- (d) Upon request of the customer or at the initiative of the City Manager, the allocation may be reduced or increased if, (1) the designated period does not accurately reflect the wholesale customer's normal water usage; (2) the customer agrees to transfer part of its allocation to another wholesale customer; or (3) other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the City Council of the City of Lufkin.

## **Section X: Enforcement**

During any period when pro rata allocation of available water supplies is in effect, wholesale customers shall pay the following surcharges on excess water diversions and/or deliveries:

- (a) Two times the normal water charge per 1000 gallons for water diversions and/or deliveries in excess of the water allocation up through 5 percent above the water allocation.
- (b) Two and one-half times the normal water charge per 1000 gallons for water diversions and/or deliveries in excess of the water allocation from 5 percent through 10 percent above the water allocation.
- (c) Three times the normal water charge per 1000 gallons for water diversions and/or deliveries in excess of the water allocation from 10 percent through 15 percent above the water allocation.
- (d) Three and one-half times the normal water charge per 1000 gallons for water diversions and/or deliveries more than 15 percent above the water allocation.
- (e) The above surcharges shall be cumulative.

## **Section XI: Variances**

The City Manager, or his/her designee, may, in writing, grant temporary variance to the pro rata water allocation policies provided by this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the public health, welfare, or safety and if one or more of the following conditions are met:

- (a) Compliance with this Plan cannot be technically accomplished during the duration of the water supply shortage or other condition for which the Plan is in effect.
- (b) Alternative methods can be implemented which will achieve the same level of reduction in water use.

Persons requesting an exemption from the provisions of this plan shall file a petition for variance with the City of Lufkin within 5 days after pro rata allocation has been invoked. All petitions for variances shall be reviewed by the City Council and shall include the following:

- (a) Name and address of the petitioner(s).
- (b) Detailed statement with supporting data and information as to how the pro rata allocation of water under the policies and procedures established

- in the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Ordinance.
- (c) Description of the relief requested.
  - (d) Period of time for which the variance is sought.
  - (e) Alternative measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
  - (f) Other pertinent information.

Variances granted by the City Council shall be subject to the following conditions, unless waived or modified by the City Council;

- (a) Variances granted shall include a timetable for compliance.
- (b) Variances granted shall expire when the Plan is no longer in effect, unless the petitioner failed to meet specified requirements.

No variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

## **Section XII: Severability**

It is hereby declared to be the intention of the City of Lufkin that the sections, paragraphs, sentences, clauses, and phrases of this Ordinance are severable and, if any phrase, clause, sentence, paragraph, or section of this Plan shall be declared unconstitutional by the valid judgement or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs, and sections of this Plan, since the same would not have been enacted by the City of Lufkin without the incorporation into this Plan of any such unconstitutional phrase, clause, sentence, paragraph, or section.