



CITY OF GEORGETOWN

GEORGETOWN UTILITY SYSTEMS

WATER CONSERVATION PLAN

2019



Table of Contents

1. Introduction and Objectives.....	2
2. Utility Profile.....	3
3. Specification of Conservation Goals.....	5
3.1. Best Management Practices	6
4. Water Conservation Plan Requirements.....	7
4.1. Record Management System	7
4.2. Measuring and Accounting for Diversions	7
4.3. Universal Metering.....	7
4.4. Leak Detection and Repair.....	8
4.5. Continuing Public Education and Information	8
4.6. Non- Promotional Rate Structure	8
4.7. Reservoir Systems Operations Plan.....	10
4.8. Measures to Determine and Control Water Loss.....	10
5. Additional Conservation Strategies.....	12
5.1.1. Reuse Program	12
5.1.2. Landscape Water Management	12
5.1.3. Rebate and Incentive Programs.....	12
5.1.4. Marketing Campaigns	13
5.1.5. Community Partnerships	13
5.1.6. Two Day per Week Watering.....	13
5.2. Enforcement Procedure and Plan Adoption	13
5.3. Coordination with the Regional Water Planning Group(s)	13
5.4. Wholesale Contract Requirements	13
5.5. Plan Review and Update	13
6. Appendix	13
Hold for Appendix A - Utility Profile	14
Hold for Appendix B – Coordination with Regional Water Planning Group	15
Hold for Appendix C – Adopted Resolution of the Water Conservation Plan.....	16
Hold for Appendix D – Utility Rate Ordinance.....	17
Hold for Appendix E – Utility Water Use Ordinance	18
Hold for Appendix F – Drought Contingency Plan.....	19

1. Introduction and Objectives

Water supply is a key element in the growth and development of Georgetown, and for the greater Central Texas region. Much like the greater Central Texas region as a whole, Georgetown continues to experience high levels of residential and commercial growth, which continue to impact the growing demand for existing water supplies. Given the impact of growth, and the unpredictability of drought conditions it is important for the City of Georgetown to make efficient use of its existing supply. Through this efficiency, existing water sources can be prolonged.

Benefits of efficient water use are two-fold. First and foremost, efficient use will ensure our water supplies last into the future. Efficient water use helps maximize the value of our existing infrastructure, and the City of Georgetown can prolong the availability of current water supply by ten years, if the goals set forth in this plan are achieved. The secondary benefit is the reduction or delay of capital improvement projects, which results in water rate stability.

Both the Texas Commission on Environmental Quality (TCEQ) and the Texas Water Development Board (TWDB) have provided guidelines and requirements governing the development of water conservation plans. The Texas Water Development Board maintains best management practices which have been reviewed and considered in the development of this plan. The following Water Conservation Plan was developed and implemented by the City of Georgetown in accordance with guidelines established by the TCEQ and the TWDB.

The Water Conservation Plan objectives are listed below

- Reduce overall water consumption.
- Reduce the loss or waste of water.
- Improve the efficiency in the use of water.
- Document recycling and reuse efforts.

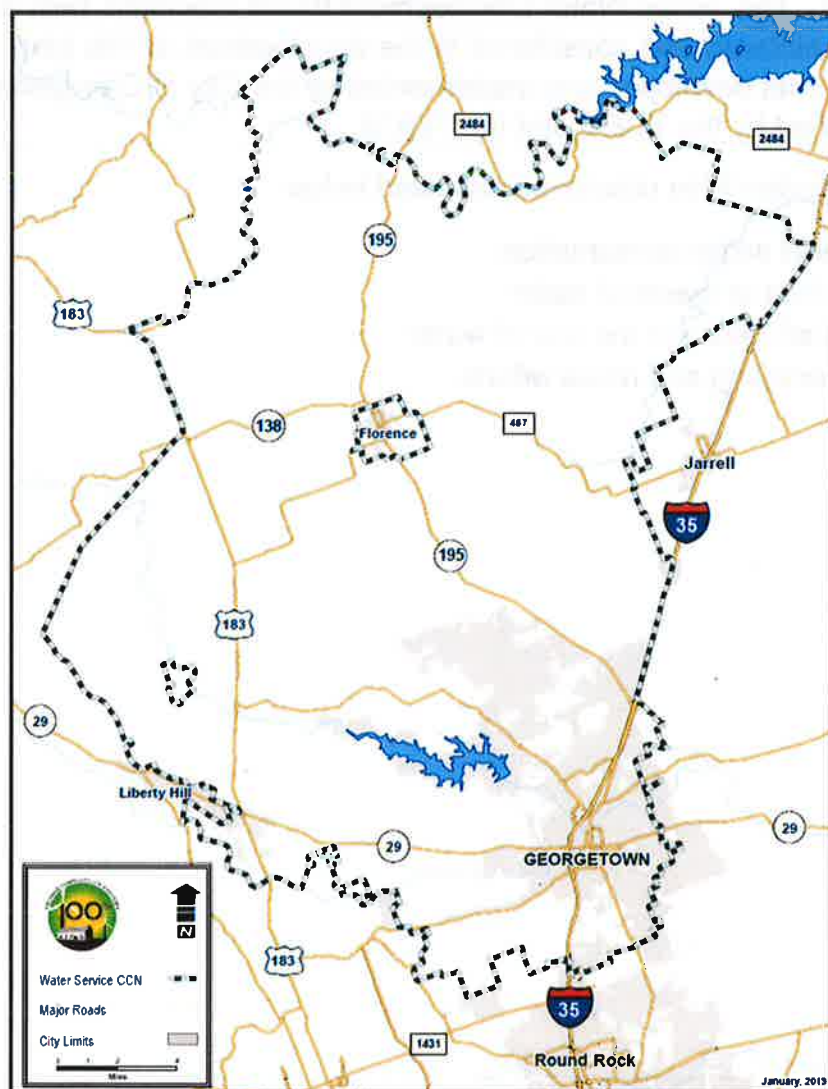
2. Utility Profile

The City of Georgetown currently serves over 400 square miles (Figure 2.1) which includes over 106,000 people, and 39,702 metered connections. The connections are made up of the following categories: 37,475 Residential, 1,895 Commercial, 28 Industrial, and 284 Institutional. In 2018, the average daily water use was 20.79 million gallons per day (MGD), and the peak usage was 41.22 million gallons.

The entirety of the service area falls within the Brazos River Basin, and has five major watersheds; Stillhouse Hollow Lake – Lampasas River, Berry Creek, North Fork San Gabriel River, South Fork San Gabriel River, and Salado Creek. The City is supplied surface water from Lake Georgetown through the Brazos River Authority, and ground water from the Edwards Aquifer.

There are two distinct soil types in the service area, which impact water usage. Interstate Highway 35 runs along the divide of the Edwards Plateau covering the western portion of the service area, and the soil is shallow and rocky. The Blackland Prairie runs to the east, and the soil is deep and clay-like which helps retain moisture.

FIGURE 2.1 City of Georgetown Water Service Area



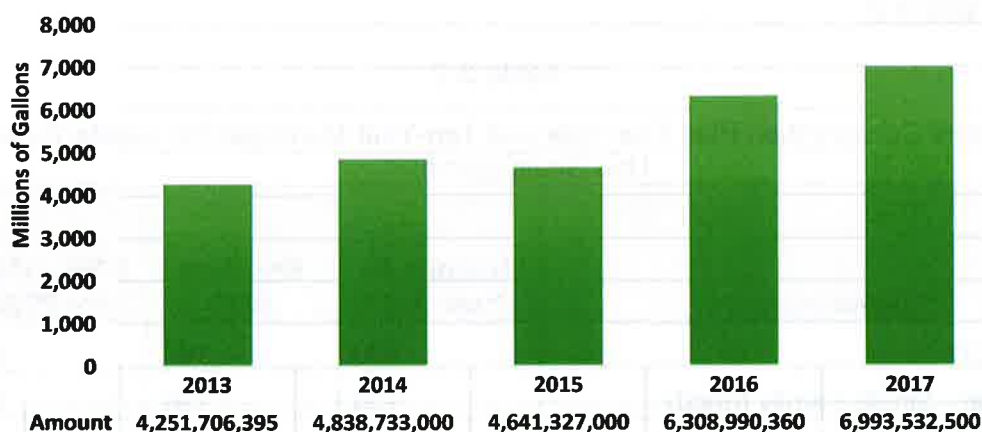
The City's service area is currently served by four treatment facilities; additional treated water can be supplied through an interconnection with Round Rock if needed. The total treatment capacity is 47.1 MGD and below is a listing of individual treatment facilities and their capacities.

Treatment Facility	Design Capacity (MGD)
Lake Water Treatment Plant	28.6
Park Water Treatment Plant	6.3
Southside Water Treatment Plant	3.2
Domel Water Treatment Plant	3.0
Round Rock Treated Supply (Optional)	6.0

The amount of water which has been diverted from our available sources is shown in Figure 2.2. In 2016, the City of Georgetown and Chisholm Trail Special Utilities District merged which increased the amount of diverted water and is reflected in Figure 2.2.

Figure 2.2

Amount of Diverted Water



In order to develop a comprehensive Water Conservation Plan, a review of the water distribution system must be completed. The TWDB Utility Profile was developed with the most current information available, and a copy of the full profile is attached as Appendix A.

3. Specification of Conservation Goals

The City of Georgetown must establish 5-year and 10-year goals for water loss and municipal water use as part of the plan. The previous 2014 plan goals are shown below in Table 3.1.

Table 3.1

2014 Water Conservation Plan Five-Year and Ten-Year Municipal Per Capita Water Use Goals (gpcd)

Description	Historic 5-Year Avg	Baseline 2013	5 Year Goal for 2018	10 Year Goal for 2023
Total GPCD	231	218	180	160
Residential - Single Family (gpcd)	141	131	120	120
Residential - Multi-Family (gpcd)	--	--	--	--
Water Loss (gpcd)	39	45	27	19
Water Loss (%)	17	21	15	12

Using the guidelines set forth by the TCEQ and the TWDB, the new goals for the 2019 plan are noted in Table 3.2.

Table 3.2

2019 Water Conservation Plan Five-Year and Ten-Year Municipal Per Capita Water Use Goals (gpcd)

Description	Historic 5-Year Avg	Baseline 2018	5 Year Goal for 2024	10 Year Goal for 2029
Total GPCD	190	187	170	160
Residential - Single Family (gpcd)	135	136	125	112
Residential - Multi-Family (gpcd)	74	61	50	47
Water Loss (gpcd)	30	23	16	13
Water Loss (%)	15.58	12.35	10	8

3.1. Best Management Practices

The Texas Water Development Board published the “Water Conservation Best Management Practices Guide” in 2004 as a tool for utilities to improve water efficiency of their own operations as well as the efficiency of their customers. The City of Georgetown used these best management practices (BMP) during the development of this plan.

The best management practices are outlined in eight areas which consisting of 26 individual BMP's. The City of Georgetown has implemented eleven (11) of those, and over the next five years will implement programs for eight (8) new ones. Figure 3.1, provides an overview of the current City's BMP's and identifies the new ones to be implemented.

Figure 3.1 Best Management Practices

BMP Area	Individual BMP				
1) Conservation Analysis and Planning	Conservation Coordinator	Cost Effective Analysis	Water Survey for SF and MF Customers		
2) Financial	Water Conservation Pricing	Wholesale Agency Assistance Programs			
3) System Operations	Metering of all Connections	System Water Audit and Loss Control			
4) Landscaping	Athletic Field Conservation	Golf Course Conservation	Landscape Irrigation Conservation and Incentives	Park Conservation	Residential Landscape Irrigation Evaluation
5) Education and Public Awareness	Public Education	School Education	Small Utility Outreach and Education	Partnerships with Nonprofit Organizations	
6) Rebate, Retrofit, and Incentive Programs	Conservation for ICI Customers	Residential Clothes Washer Incentives	Residential Toilet Replacement	Showerhead, Aerator, Toilet Flapper Retrofit	WaterWise Landscape Design and Conversion Programs
7) Conservation Technology	New Construction Graywater	Rainwater Harvesting and Condensate Reuse	Water Reuse		
8) Regulatory and Enforcement	Prohibiting Wasting Water	Conservation Ordinance Planning and Development			



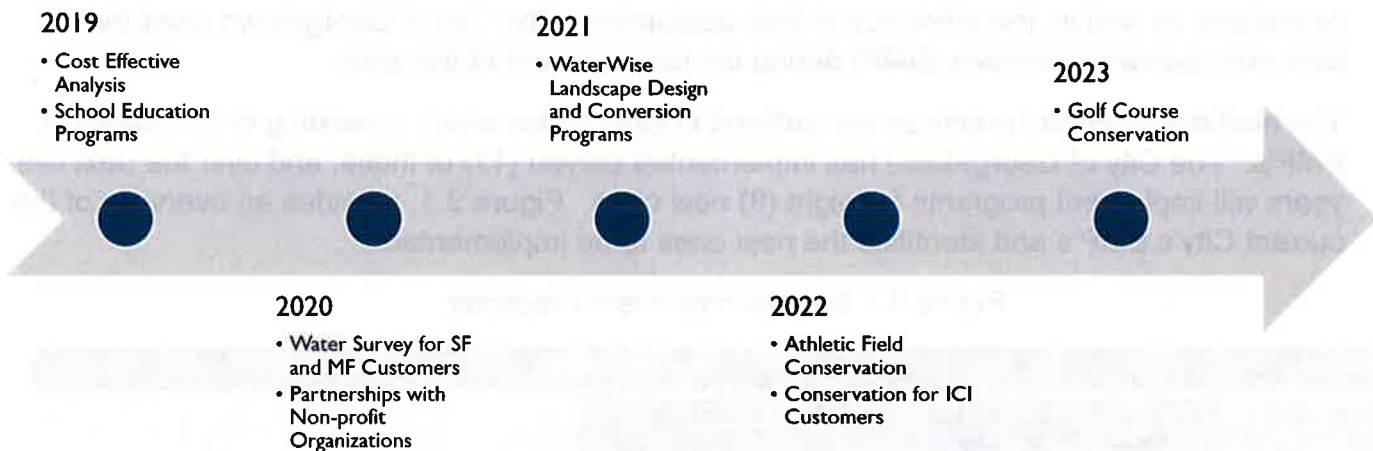
- Current BMP's Implemented



- Proposed BMP's

The BMP's highlighted in blue will be implemented over the next five years, and Figure 3.3 provides a timeline of the implementation schedule. The progress will be tracked and reviewed annually in conjunction with the annual TWDB review of the water conservation plan update.

Figure 3.2 Timeline of BMP Implementation



4. Water Conservation Plan Requirements

The following items are a requirement of Title 30, Texas Administrative Code §288.2, for entities completing a Water Conservation Plan.

4.1. Record Management System

In 2018, the City of Georgetown implemented a new Customer Information System (CIS) which allowed for the classification of customers by type of water use. Customers are segmented into the following classes: Residential, Commercial, Industrial, Government/School (Institutional). Campaign management features which were unavailable in the previous legacy system can now be used to reach these customers.

The City of Georgetown has deployed an Advanced Meter Infrastructure (AMI) to 70% of the service area, the other 30% utilizes an Automated Meter Reading (AMR) system. The AMI system allows for the collection and storage of hourly usage intervals and the data can be accessed through an online customer portal.

4.2. Measuring and Accounting for Diversions

The City of Georgetown currently utilizes nine master meters to track the amount of water into the treatment facilities. Additionally there is a metered connection with the City of Round Rock, to supply water if needed, by the City. These meters are checked daily and the master meters are tested and calibrated annually, or as needed.

4.3. Universal Metering

The City of Georgetown has meters in all connections of the distribution system. All meters meet accuracy standards when installed, and readings are subject to system validations and reviews on a monthly basis in the AMI and CIS systems during the billing process. In 2018 the City implemented a process to record all meters in the City's Enterprise Asset

Management system which allows for tracking of the meter and the various components through its entire lifecycle.

4.4. Leak Detection and Repair

The City does proactive leak detection on the entire distribution system annually. Leak detection is done on each main line segment and as leaks are found, the repairs are managed through a work order management system. In the associated leak work order, the amount of water loss is estimated and tracked for use in annual reporting. Customers can be alerted when they have a leak by utilizing leak alerts which are set up through a program called "Aqua Alerts".

4.5. Continuing Public Education and Information

The City promotes water conservation by providing the public with information in a variety of ways and is bulleted below.

- Providing information on the City's conservation website.
- Monthly articles/tips in the City newsletter which is mailed to all utility customers.
- Seasonal direct mailings to all water customers promoting efficient water use.
- Informational presentations to school and community groups.
- Informational booths at local festivals and events.

4.6. Non- Promotional Rate Structure

The City of Georgetown's water and wastewater rate structure is included below. Under this rate structure, the City applies both a base rate to each account and a volumetric rate determined by meter size, water use, and customer type in the case of wastewater.

Water Rates

Customer Charge (per month)	Inside City	Outside City
5/8 inch meter	\$15.50	\$18.50
3/4 inch meter	\$23.00	\$27.50
1 inch meter	\$38.50	\$46.00
1 1/2 inch meter	\$76.50	\$91.50
2 inch meter	\$153.50	\$183.50
3 inch meter	\$368.00	\$440.00
4 inch meter	\$644.00	\$770.00
6 inch meter	\$1,410.00	\$1,686.00
8 inch meter	\$2,450.00	\$2,929.50

Residential Water Rates (effective 01/01/19)*Cost is per 1,000 gallons	
(1,000 gallons)	Volumetric Rate
0-10	\$1.75
11-20	\$2.40
21-40	\$4.00
41-60	\$6.50
61 and above	\$8.50

Non-Residential Volumetric Water Rates (effective 01/01/19)*Cost is per 1,000 gallons

	Meter Size	Tier 1 Rate	Tier 2 Rate	Tier 2 Threshold
Small Commercial	<2"	\$2.40	\$6.50	300,001 gallons
Large Commercial	2"	\$2.40	\$6.50	600,001 gallons
Large Commercial	3"	\$2.40	\$6.50	900,001 gallons
Large Commercial	4"	\$2.40	\$6.50	4,000,001 gallons
Large Commercial	6"	\$2.40	\$6.50	6,000,001 gallons
Large Commercial	8"	\$2.40	\$6.50	8,000,001 gallons
Manufacturing	<8"	\$2.40		
Municipal Interruptible		\$2.40		
Restaurant		\$2.40		
Evaporative Cooling		\$2.40		
Fire Flow		\$2.40		
Irrigation Only		\$4.00	\$8.50	500,001 gallons

Wastewater Rates**Wastewater Rate Schedule (effective October 1st, 2019)**

	Customer Charge Inside (per month)	Volumetric Chg (per 1000 gals)	Customer Charge Out (per month)	Volumetric Chg (per 1000 gals)
Residential Service	\$32.00*	N/A	\$36.75*	N/A
Single family / Domestic use only				
Small Commercial Service	\$32.00	N/A	\$36.75	N/A
4" sewer line / 3/4" wtr mtr / 10 fixtures or less / must be requested in writing				
Commercial Service	\$48.40	\$2.75	\$55.65	\$3.15
6" or smaller sewer line				
Large Commercial Service	\$85.95	\$2.75	\$98.85	\$3.15
8" or larger sewer line				
High Strength Commercial	\$48.40	\$4.50	\$55.65	\$5.20
BOD over 250 / food processing or high level of oil or chemicals in the discharge				
Multi-Family Service	\$114.95	\$2.75	\$132.20	\$3.15
Residential housing with three or more individual dwelling units per water meter				

4.7. Reservoir Systems Operations Plan

The City of Georgetown is a wholesale customer of the Brazos River Authority (BRA). As such, the BRA is responsible for the operation of the eleven (11) reservoirs within its system.

4.8. Measures to Determine and Control Water Loss

The City of Georgetown has undertaken significant efforts to address challenges with non-revenue water throughout the system. There are many variables which can impact the amount of water which is billed and these variables can have an effect on revenue. These include: meter inaccuracy, data discrepancies, unauthorized consumption, line breaks, and unreported losses.

The City of Georgetown traditionally used water loss percentage (%) as their preferred indicator, however the City has recently incorporated the use of an Infrastructure Leakage Index (ILI) as an additional indicator. The City completes an annual water loss audit, using the guidelines set forth by the TWDB, as well as a monthly water loss audit using the same methodology. A concerted effort has been achieved to increase the data validity, and significant improvement has been made in the reliability of the data which is used internally and reported externally. Figures 4.1 and 4.2 show the improvement between 2013 and 2018.

Figure 4.2 Water Loss Trend

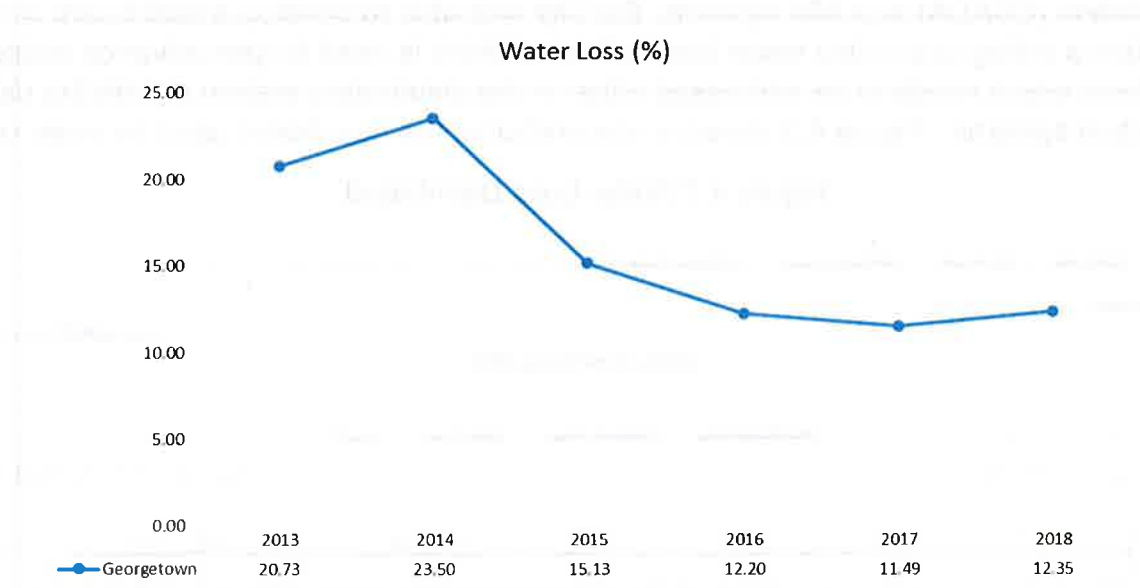
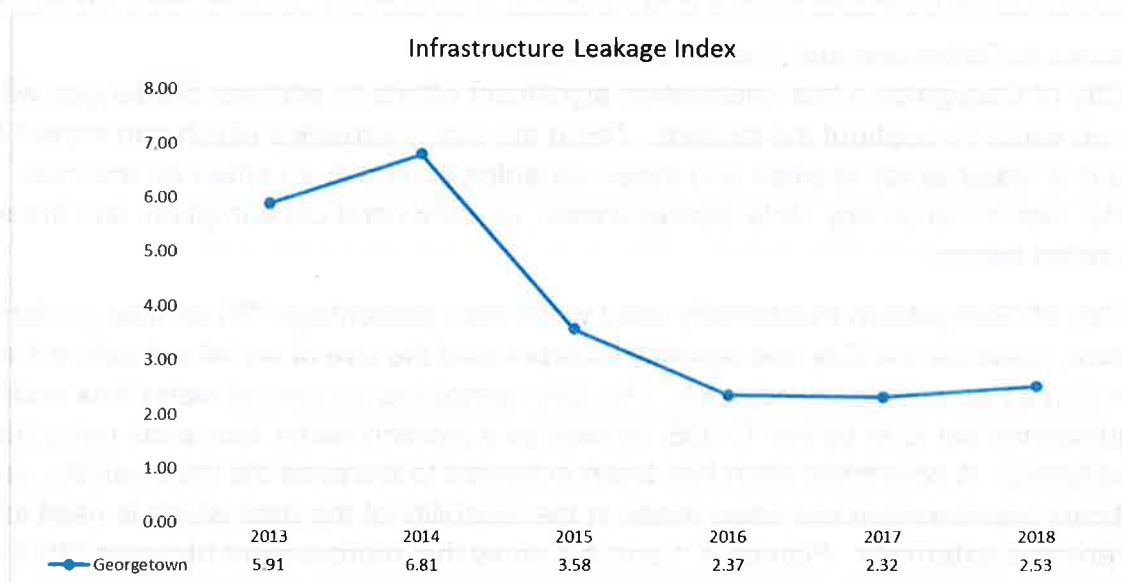
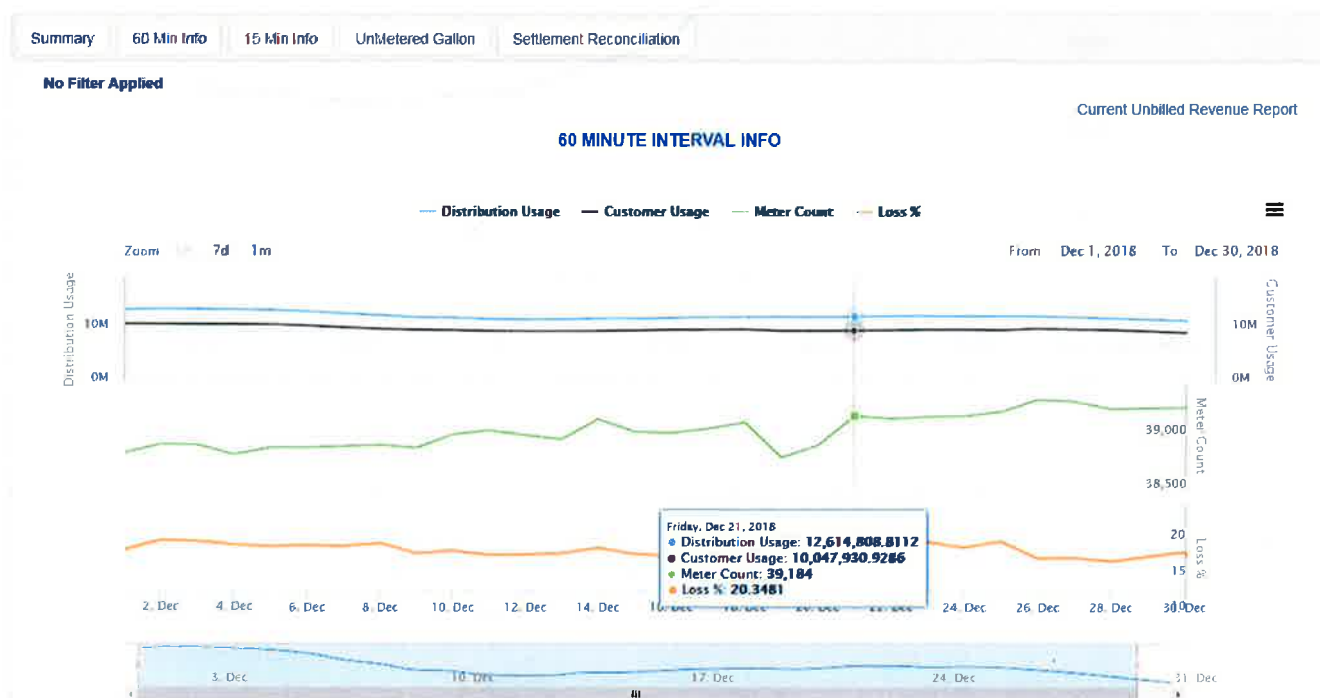


Figure 4.2 Infrastructure Leakage Index Trend



In 2017, an effort was initiated to incorporate non-revenue water into an operational indicator that could be captured and reviewed on a periodic basis. Using Supervisory Control and Data Acquisition (SCADA) and AMI systems, the City was able to develop a dashboard which provides a rolling seven day water loss indicator, which is used to gain advance notice of problems which needs to be addressed either in the distribution system or with the data collection systems. Figure 4.3 shows a screenshot of the dashboard used by water operators.

Figure 4.3 Water Loss Dashboard



5. Additional Conservation Strategies

5.1.1. Reuse Program

The City of Georgetown currently has a reuse program in place which aims to reduce the amount of potable water used for irrigation purposes. Currently City parks facilities rely on treated effluent water for a portion of their irrigation requirements. Additionally, two large developments augment their outdoor water use for two golf courses and roadway landscapes with reuse.

5.1.2. Landscape Water Management

The City has taken multiple approaches which are focused on reducing the amount of water that has to be used to maintain a landscape in Central Texas. Understanding that outdoor irrigation is one of the key opportunities for water savings, and that the primary driver for irrigation is the type of landscape installed, the City has adopted ordinances which address both irrigation systems and landscape installation.

All new irrigation system installations must include either a rain or moisture sensor and are restricted on the amount of irrigated area, relative to the foundation footprint. Additionally, there are specific landscaping requirements for all new residential construction include:

- A minimum of six inches of soil depth, prior to the installation of the landscape.
- All new plant materials must come from the City of Georgetown Preferred Plant List.
- The amount of turf grass is limited, relative to the size of the building footprint.
- Installation of Saint Augustine turf grass is limited to those areas with ten inches or more of soil depth or less than six hours of full sun.

5.1.3. Rebate and Incentive Programs

The City of Georgetown currently offers several rebate programs to assist customers with improving the efficiency of their irrigation systems. These programs will be evaluated each year to ensure they achieve a reduction in peak demand and overall water use, as well as being cost effective. The current rebate programs include:

- Irrigation Evaluation Rebate – Aims to offset the cost of having a licensed irrigator perform a system evaluation
- Smart Controller Rebate – Incentivizes the replacement of irrigation controllers with one which is EPA WaterSense approved.
- Spray-to-Drip Conversion – Replace an entire zone of spray irrigation to drip irrigation.
- Multi-Stream Rotor Conversion – Replace an entire zone to multi-stream rotor heads.
- Rain Barrel Purchase – Rebate is applied on the purchase of a rain barrel.

In addition to the above, the City is developing programs which would incentivize the reduction in the amount of turf grass and/or irrigated area.

5.1.4. Marketing Campaigns

Fundamentally, conservation is about changing customer behavior. The City is committed to providing relevant information to customers directly, rather than relying on passive conservation campaigns and incentives. Two initial targeted campaigns will provide feedback to customers who are not following the established watering schedule, and to customers who are overwatering. Additional opportunities exist for communicating proactively with customers regarding potential leaks. Providing this level of information will be crucial in accomplishing both the long and short term goals of this plan.

The City will continue its overarching water conservation marketing effort. In 2016 the City developed its first campaign around the slogan “Don’t Water Down Georgetown”.

5.1.5. Community Partnerships

The City will build upon partnerships with community organizations to promote water efficiency. Key community groups such as the Sun City Water Ambassadors, Texas A&M Agrilife Extension, Southwestern University, and Georgetown Independent School District are vital to the success of a comprehensive water conservation strategy in Georgetown.

5.1.6. Two Day per Week Watering

In 2019, The City will adopt a two day per week watering schedule for all customers. Doing this will promote long term water savings as well as a reduction in the peak demand experienced during the heavy outdoor irrigation months.

5.2. Enforcement Procedure and Plan Adoption

The Water Conservation plan was adopted by Resolution of the Georgetown City Council on March 26th, 2019. The adoption of the Water Conservation Plan provides City staff the ability to implement, enforce, and administer the program.

5.3. Coordination with the Regional Water Planning Group(s)

The service area for the City of Georgetown is located within the Regional Water Planning Area G. A copy of the adopted Water Conservation Plan and Drought Contingency Plan has been provided to Region G. A copy of the transmittal is included in Appendix B.

5.4. Wholesale Contract Requirements

The City of Georgetown has wholesale water contracts with several surrounding cities including the cities of Leander, Florence, and Liberty Hill. Those contracts require that those cities certify adoption of a Water Conservation Plan and Drought Contingency Plan in accordance with TCEQ guidelines.

5.5. Plan Review and Update

TCEQ requires that water conservation plans be reviewed and updated, every five years to coincide with the regional water planning group. The revised plan must also include an implementation report.

6. Appendix

Appendix A - Utility Profile

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

CONTACT INFORMATION

Name of Utility: City of Georgetown

Public Water Supply Identification Number (PWS ID): TX2460001

Certificate of Convenience and Necessity (CCN) Number: 12369

Surface Water Right ID Number: 2360, 2362, 3738, 3742, 12104

Wastewater ID Number: 20786

Contact: First Name: James Last Name: Foutz

Title: Conservation and Marketing Manager

Address: _____ City: _____ State: _____

Zip Code: _____ Zip+4: _____ Email: james.foutz@georgetown.org

Telephone Number: 5129303650 Date: _____

Is this person the designated Conservation Coordinator? ☒ Yes ☐ No

Regional Water Planning Group: G

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: 464

Attached file(s):

File Name	File Description
City of Georgetown Water Service Map.jpg	City of Georgetown Water Service Map

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	106,813	0	63,982
2017	100,738	0	60,337
2016	94,546	0	57,202
2015	67,142	0	54,835
2014	63,437	0	50,042

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	119,498	4,000	67,627
2030	157,810	0	121,207
2040	197,647	0	162,892
2050	244,778	0	218,913
2060	297,432	0	294,202

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

Current population size is calculated by taking the number of metered connections, to include multi-family units and applying a population multiplier which is developed in the 2018 Georgetown Utility Systems Water Master Plan. Multipliers are by area and unit type. Inside Georgetown Single-Family Unit(SFU): 2.8, Age-Restricted SFU: 1.75, Outside Georgetown SFU: 3.21, Multi-Family Unit: 1.9. The projected population is taken from the 2018 Georgetown Utility Systems Water Master Plan, and is also used in the Regional Water Planning Process. Wastewater current and historical numbers were derived by calculating the number of connections by a population multiplier of 2.5. Wastewater projections were derived from the 2018 Georgetown Utility Systems Wastewater Master Plan.

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 GPCD
2018	7,285,082,594	0	9,143,000	7,275,939,594	187
2017	6,804,360,020	0	30,612,000	6,773,748,020	184
2016	6,230,981,127	0	32,772,000	6,198,209,127	180
2015	4,604,491,071	0	0	4,604,491,071	188
2014	4,887,609,091	0	0	4,887,609,091	211
Historic Average	5,962,504,781	0	14,505,400	5,947,999,381	190

C. Water Supply System

1. Designed daily capacity of system in gallons 47,100,000

2. Storage Capacity

2a. Elevated storage in gallons: 19,000,000

2b. Ground storage in gallons: 12,950,000

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	119,498	8,091,206,181
2021	123,329	8,316,206,296
2022	127,160	8,541,206,412
2023	130,991	8,766,206,527
2024	134,822	8,991,206,643
2025	138,654	9,216,206,758
2026	142,485	9,441,206,874
2027	146,316	9,666,206,989
2028	150,147	9,891,207,105
2029	153,978	10,116,207,220

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

Projections were derived from Appendix A of the 2018 Georgetown Utility Systems Water Master Plan. Individual years were calculated by interpolating the values based on the inputs given for 2020 and 2030.

Attached file(s):

File Name	File Description
01_GUS Water Master Plan 2018_AppendixA.pdf	Water Master Plan Appendix A

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
Southwest Materials	Industrial	129,962,000	Treated
Southwestern University	Institutional	62,928,000	Treated
City of Georgetown	Institutional	52,030,000	Treated
Pulte Homes of Georgetown	Residential	49,543,000	Treated
Georgetown ISD	Institutional	41,003,000	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 Liberty Hill	Municipal	5,145,000	Treated
City of Florence	Municipal	3,998,000	Treated

F. Utility Data Comment Section

Additional comments about utility data.

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	37,475	82.66 %
Residential - Multi-Family	5,655	12.47 %
Industrial	28	0.06 %
Commercial	1,895	4.18 %
Institutional	284	0.63 %
Agricultural	0	0.00 %
Total	45,337	100.00 %

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

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
2018	1,625		8	83	20	0	1,736
2017	2,270		1	72	3	0	2,346
2016	1,880		0	65	0	0	1,945
2015	9,471		0	421	57	0	9,949
2014	1,262		0	185	14	0	1,461

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	4,846,692,000	132,614,000	78,235,001	1,067,375,997	161,211,000	0	6,286,127,998
2017	4,608,128,000	178,328,000	84,474,000	887,446,000	152,099,000	0	5,910,475,000
2016	4,087,435,000	238,569,000	40,134,000	851,516,000	115,740,000	0	5,333,394,000
2015	2,588,098,000	260,944,000	36,625,000	712,850,000	251,851,000	0	3,850,368,000
2014	2,615,222,000	205,612,000	40,619,000	713,900,000	102,512,000	0	3,677,865,000

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

C. Residential Water Use

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

Year	Residential - Single Family	Residential - Multi-Family	Total Residential
2018	136	40	128
2017	136	61	130
2016	130	80	125
2015	121	85	116
2014	127	82	122
Historic Average	130	70	124

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	401,338,200	352,532,000	312,873,903	242,439,000	289,693,000
February	357,183,000	357,915,000	360,478,470	225,992,000	241,148,000
March	506,853,000	458,208,930	447,495,382	261,386,000	329,703,000
April	615,311,000	491,590,130	430,768,133	321,284,000	408,023,000
May	785,068,930	646,372,000	424,852,357	271,742,000	435,047,000
June	891,750,830	691,937,240	609,426,861	341,235,000	454,205,000
July	1,007,850,800	944,097,500	879,734,654	558,491,000	540,576,000
August	1,029,750,580	813,539,380	691,150,076	722,525,000	617,972,000
September	572,100,740	746,167,940	652,824,945	621,991,000	512,774,000
October	493,569,970	549,380,000	679,943,583	521,176,000	437,626,000
November	466,311,030	547,255,390	450,602,374	279,895,000	298,657,000
December	431,203,480	394,536,990	368,839,622	273,171,000	273,309,000
Total	7,558,291,560	6,993,532,500	6,308,990,360	4,641,327,000	4,838,733,000

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	0	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	0
July	0	0	0	0	0
August	0	0	0	0	0
September	0	0	0	0	0
October	0	0	0	0	0
November	0	0	0	0	0
December	0	0	0	0	0
Total	0	0	0	0	0

3. Summary of seasonal and annual water use.

	Summer RETAIL (Treated + Raw)	Total RETAIL (Treated + Raw)
2018	2,929,352,210	7,558,291,560
2017	2,449,574,120	6,993,532,500
2016	2,180,311,591	6,308,990,360
2015	1,622,251,000	4,641,327,000
2014	1,612,753,000	4,838,733,000
Average in Gallons	2,158,848,384.20	6,068,174,884.00

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	898,862,351	23	12.35 %
2017	778,601,169	21	11.49 %
2016	748,922,845	22	12.08 %
2015	696,566,933	28	15.13 %
2014	1,148,648,977	50	23.50 %
Average	854,320,455	29	14.91 %

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	20,707,648	31840784	1.5376
2017	19,160,363	26625805	1.3896
2016	17,284,905	23699039	1.3711
2015	12,715,964	17633163	1.3867
2014	13,256,802	17529923	1.3223

G. Summary of Historic Water Use

Water Use Category	Historic Average	Percent of Connections	Percent of Water Use
Residential - Single Family	3,749,115,000	82.66 %	74.81 %
Residential - Multi-Family	203,213,400	12.47 %	4.05 %
Industrial	56,017,400	0.06 %	1.12 %
Commercial	846,617,599	4.18 %	16.89 %
Institutional	156,682,600	0.63 %	3.13 %
Agricultural	0	0.00 %	0.00 %

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

H. System Data Comment Section

Section III: Wastewater System Data

A. Wastewater System Data

1. Design capacity of wastewater treatment plant(s) in gallons per day: 8,500,000

2. List of active wastewater connections by major water use category.

Water Use Category	Metered	Unmetered	Total Connections	Percent of Total Connections
Municipal		21,134	21,134	95.25 %
Industrial		14	14	0.06 %
Commercial		956	956	4.31 %
Institutional		85	85	0.38 %
Agricultural		0	0	0.00 %
Total		22,189	22,189	100.00 %

3. Percentage of water serviced by the wastewater system: 56.00 %

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	134,997,000	149,883,400	137,667,300	151,502,000	
February	127,972,000	127,694,600	124,163,100	140,382,000	
March	152,839,000	104,679,400	152,955,500	161,480,000	
April	135,205,000	138,689,200	630,823,100	139,339,000	
May	124,585,700	131,158,300	185,197,100	202,176,000	
June	115,991,200	108,493,300	151,550,100	161,612,000	
July	107,589,000	91,395,600	105,788,600	123,361,000	
August	87,271,400	126,993,700	174,472,400	97,796,000	
September	152,956,000	115,483,000	217,304,600	124,880,000	
October	243,776,500	125,845,400	132,239,300	141,767,000	
November	211,274,700	125,373,600	146,165,500	165,064,000	
December	219,171,600	140,194,900	145,959,600	157,241,000	
Total	1,813,629,100	1,485,884,400	2,304,286,200	1,766,600,000	

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	279,746,001
Plant wash down	
Chlorination/de-chlorination	
Industrial	
Landscape irrigation (park,golf courses)	0
Agricultural	
Discharge to surface water	
Evaporation Pond	
Other	
Total	279,746,001

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

C. Wastewater System Data Comment

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

GUS's wastewater collection and treatment system consists of approximately 350 miles of gravity pipe, 25 miles of force main, 39 lift stations, and 5 wastewater treatment plants (WWTPs). The total average daily treatment capacity of the system based on the summed capacity of all five WWTPs is 8.5 million gallons per day (mgd). The existing service area covers approximately 17 square miles (10,710 acres).

Appendix B – Coordination with Regional Water Planning Group



April 26, 2019

Brazos River Authority
Attn: Administrative Agent
Regional Planning Group G
4600 Cobbs Drive
Waco, TX 76710

RE: 2019 Water Conservation Plan for the City of Georgetown

Dear Mr. Hamlin:

The City of Georgetown has adopted its 2019 Water Conservation Plan. The plan was adopted by resolution on April 9, 2019.

Included is the 2019 City of Georgetown Water Conservation Plan, to include the supporting appendixes.

Please feel free to contact me if you have any questions about the plan, or any of its elements.

Sincerely,

James Foutz, Marketing and Conservation Manager
City of Georgetown

Appendix C – Adopted Resolution of the Water Conservation Plan

RESOLUTION NO. 040919 - I

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GEORGETOWN, TEXAS, SUPPORTING THE PROPOSED 2019 WATER CONSERVATION PLAN TO BE SUBMITTED TO THE TEXAS WATER DEVELOPMENT BOARD (TWDB) AND THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) ON OR BEFORE MAY 1, 2019; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, the rules of the Texas Commission on Environmental Quality in the Texas Administrative Code, Title 30, Chapter 288 require Water Conservation Plans be updated every five (5) years to coincide with the regional water planning group; and

WHEREAS, the City's current Water Conservation Plan was last updated in May 2014; and

WHEREAS, the rules of the TCEQ in the Texas Administrative Code, Title 30, Chapter 288 require preparation and submittal of a water conservation plan for municipal water use by public water suppliers by May 1, 2019; and

WHEREAS, the required water conservation plan is to include the following plan elements: five-year and ten-year goals for water loss and gallons per capita daily water use, the completed TWDB Water Utility Profile, continuing education and outreach programs, an ordinance adopting non-promotional water rates, measures to determine and control water loss, a program of universal metering, the ordinance adopting an enforcement plan, the ordinance adopting the drought contingency plan, and a system of tracking and evaluating the effectiveness of the plan; and

WHEREAS, the attached Water Conservation Plan follows water conservation best practices and complies with the applicable rules of the TCEQ and the TWDB.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GEORGETOWN, TEXAS, THAT:

SECTION 1. The facts and recitations contained in the preamble of this resolution are hereby found and declared to be true and correct.

SECTION 2. The Water Conservation Plan attached hereto as Exhibit "A" is hereby adopted by the City Council of the City of Georgetown, Texas.

SECTION 3: This Resolution shall be effective upon approval by the City Council of the City of

Georgetown. The Mayor is hereby authorized to execute, and the City Secretary to attest thereto this resolution on behalf of the City of Georgetown.

RESOLVED this 9th day of April, 2019

ATTEST:



Karen Frost, Deputy City Secretary

THE CITY OF GEORGETOWN



Dale Ross, Mayor

APPROVED AS TO FORM:



Charlie McNabb, City Attorney

Appendix D – Utility Rate Ordinance

ORDINANCE NO. 2018-58

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF GEORGETOWN, TEXAS, AMENDING SECTION 13.04.120 TITLED "RATES AND CHARGES—WATER—SCHEDULE" OF THE CODE OF ORDINANCES OF THE CITY OF GEORGETOWN TEXAS; REPEALING CONFLICTING ORDINANCES AND RESOLUTIONS; INCLUDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, The City of Georgetown established its current water rates in 2013; and

WHEREAS, The City of Georgetown has completed a cost of service study for the water utility service; and

WHEREAS, City of Georgetown wishes to implement water rates that recover the cost of water service for all customer classes; and

WHEREAS, The City of Georgetown wishes to implement a water rate structure that promotes water conservation and the reduction of peak water demand; and

WHEREAS, The City Council of the City of Georgetown wishes to amend the current water rates and adopt proposed rates, effective on all utility billings after **January 1, 2019**;

NOW, THEREFORE, BE IT ORDAINED THAT THE CITY COUNCIL OF THE CITY OF GEORGETOWN, TEXAS THAT:

SECTION 1. The meeting at which this ordinance was approved was in all things conducted in compliance with the Texas Open Meetings Act, Texas Government Code, Chapter 551.

SECTION 2. The facts and recitations contained in the preamble of this ordinance are hereby found and declared to be true and correct, and are incorporated by reference herein and expressly made a part hereof, as if copied verbatim. The City Council hereby finds that this ordinance complies with the Vision Statement 4.0(G) of the City of Georgetown 2030 Comprehensive Plan relating to the conservation of water resources.

SECTION 3. Section 13.04.120 "Rates and Charges—Water—Schedule" of the Code of Ordinances of the City of Georgetown, Texas is hereby amended and adopted as shown in Exhibit A.:

SECTION 4. All ordinances and resolutions, or parts of ordinances and resolutions, in conflict with this Ordinance are hereby repealed, and are no longer of any force and effect.

Ordinance Number: 2018-58
Description: Water Utility Service Ordinance
Date Approved: 9/25/2018, 2018

SECTION 5. If any provision of this ordinance or application thereof to any person or circumstance, shall be held invalid, such invalidity shall not affect the other provisions, or application thereof, of this ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are hereby declared to be severable.

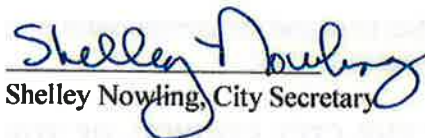
SECTION 6. The Mayor is hereby authorized to sign this ordinance and the City Secretary to attest. This ordinance shall become effective and be in full force after publication in accordance with the provisions of the Charter of the City of Georgetown.

PASSED AND APPROVED on the 1st reading at regular meeting of the City Council of Georgetown, Texas, on this the 11 day of September, 2018

PASSED AND APPROVED on the 2nd and final reading at a regular meeting of the City Council of Georgetown, Texas on this the 25 day of September, 2018.


ATTEST:

THE CITY OF GEORGETOWN:


Shelley Nowling, City Secretary

By: 
Dale Koss, Mayor Pro Tem
John Hesser

APPROVED AS TO FORM:


Charlie McNabb, City Attorney

Ordinance Number: 2018-58
Description: Water Utility Service Ordinance
Date Approved: 9/25, 2018

ARTICLE II. - WATER RATES

Sec. 13.04.110. - Rates and charges—Water—Established.

The monthly rates and charges for the sales made of services rendered by the water system of the City are established, levied, fixed and prescribed as set forth in section 13.04.120.

Sec. 13.04.120. - Rates and charges—Water—Schedule.

Rates and charges for water service are as follows:

A. Monthly Customer Base Charge.

Meter Size	Inside City Limits	Outside City Limits
$\frac{5}{8}$ -inch meter	\$15.50	\$18.50
$\frac{3}{4}$ -inch meter	23.00	27.50
1-inch meter	38.50	46.00
1½-inch meter	76.50	91.50
2-inch meter	153.50	183.50
3-inch meter	368.00	440.00
4-inch meter	644.00	770.00
6-inch meter	1,410.00	1,686.00
8-inch meter	2,450.00	2,929.50

B. Monthly residential customer volumetric charge, per 1,000 gallons for inside and outside city limits:

Up to and including 10,000 gallons	\$1.75
Over 11,000 gallons, up to and including 20,000 gallons	2.40
Over 21,000 gallons, up to and including 40,000 gallons	4.00

Over 41,000 gallons, up to and including 60,000 gallons	6.50
Over 61,000 gallons	8.50

C. Monthly nonresidential customer volumetric charge:

1. Small Commercial: < Two-inch meter.
 - a. Availability: This schedule is available to non-residential consumers with a meter size of less than two inches.
 - b. Net Monthly Rate:
 - i. Up to and including 300,000 gallons: \$2.40
 - ii. Over 300,001 gallons: \$6.50
2. Large Commercial: Two-inch meter.
 - a. Availability: This schedule is available to non-residential consumers with a two-inch meter.
 - b. Net Monthly Rate:
 - i. Up to and including 600,000 gallons: \$2.40
 - ii. Over 600,001 gallons: \$6.50
3. Large Commercial: Three-inch meter.
 - a. Availability: This schedule is available to non-residential consumers with a three-inch meter.
 - b. Net Monthly Rate:
 - i. Up to and including 900,000 gallons: \$2.40
 - ii. Over 900,001 gallons: \$6.50
4. Large Commercial: Four-inch meter.
 - a. Availability: This schedule is available to non-residential consumers with a four-inch meter.
 - b. Net Monthly Rate:
 - i. Up to and including 4,000,000 gallons: \$2.40
 - ii. Over 4,000,001 gallons: \$6.50
5. Large Commercial: Six-inch meter.
 - a. Availability: This schedule is available to non-residential consumers with a six-inch meter.
 - b. Net Monthly Rate:

- i. Up to and including 6,000,000 gallons: \$2.40
 - ii. Over 6,000,001 gallons: \$6.50
- 6. Large Commercial: Eight-inch meter.
 - a. Availability: This schedule is available to non-residential consumers with an eight-inch meter.
 - b. Net Monthly Rate:
 - i. Up to and including 8,000,000 gallons: \$2.40
 - ii. Over 8,000,001 gallons: \$6.50
- 7. Manufacturing: Eight-inch meter.
 - a. Availability: This schedule is available to non-residential consumers with an eight-inch meter whose water usage is primarily due to manufacturing of a product and irrigation usage is metered separately.
 - b. Net Monthly Rate:
 - i. Cost per 1,000 gallons: \$2.40
- 8. Municipal Interruptible:
 - a. Availability: This schedule is available to non-residential municipal facilities that agree to curtail water usage at the Utility's discretion based on drought measures and conservation practices.
 - b. Net Monthly Rate:
 - i. Cost per 1,000 gallons: \$2.40
- 9. Restaurants:
 - a. Availability: This schedule is available to non-residential consumers that operate a restaurant with a meter size of less than two inches.
 - b. Net Monthly Rate:
 - i. Cost per 1,000 gallons: \$2.40
- 10. Evaporative Cooling:
 - a. Availability: This schedule is available to non-residential consumers that have installed qualifying on-site evaporative cooling equipment.
 - b. Net Monthly Rate:
 - i. Cost per 1,000 gallons: \$2.40
- 11. Fire Flow Meter Use:
 - a. Availability: This schedule is available to non-residential consumers with an approved fire flow use.
 - b. Net Monthly Rate:
 - i. Cost per 1,000 gallons: \$2.40

- D. Monthly non-residential customer volumetric charge—Irrigation meter.
1. Non-residential irrigation meter:
 - a. Availability: This schedule is available to non-residential consumers with an irrigation meter installed for outdoor water use.
 - b. Net Monthly Rate:
 - i. Up to and including 500,000 gallons: \$4.00
 - ii. Over 500,001 gallons: \$8.50
- E. Residential customers may request a low-income water discount that is 30 percent below the current base rate for the meter size that is applicable.
1. Request for low-income discount must be made in writing.
 2. To qualify for the discount, customer or a permanent resident in the household must participate in the Medicaid Program and provide verifiable proof of that participation, such as an award letter or other official documentation.
 3. Requests for the low-income discount must be renewed annually.
 4. Customers qualifying for the sewer low-income discount, will automatically receive the water discount
- F. Non-Potable Water. Cost per 1,000 gallons: \$1.25.
- G. Fire Hydrant Meter/Bulk Water. For non-irrigation water use from fire hydrant meters with no connection to plumbing.
1. A \$150.00 deposit is required prior to use, unless water is prepaid (bulk water).
 2. Usage is read and billed monthly.
 3. Monthly base rate corresponds to meter size, as appropriate.
 4. Monthly customer volumetric charge per 1,000 gallons: \$8.50
 5. Customer is responsible for the meter and all parts and retrofits to the meter involved in the meter reading process and replacement of meter if damaged.
- H. Reserved.
- I. Exemption to the rates provided in this Section may be requested by a customer, in writing, from the City Manager, or his assigned agent, for leaks that occur on the customer side of the meter.
- J. A re-connection charge pursuant to Subsection 13.16.110 D. will be \$50.00 per occurrence.
- K. All other provisions for City utility service shall apply, except as provided in this Chapter.

Appendix E – Utility Water Use Ordinance

ORDINANCE NO. 2019-24

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF GEORGETOWN, TEXAS, AMENDING TITLE 13, CHAPTER 13.15, SECTION 13.15.040 TITLED "WATER USE REQUIREMENTS" OF THE CODE OF ORDINANCES OF THE CITY OF GEORGETOWN TEXAS REPEALING CONFLICTING ORDINANCES AND RESOLUTIONS; INCLUDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, The City of Georgetown values and supports water conservation as an effective resource to manage, sustain and protect the City's potable water supply; and

WHEREAS, The City of Georgetown wishes to modify the current irrigation schedule to more effectively manage the city's water resources; and

WHEREAS, The City of Georgetown wishes to identify water conservation and efficiency activities and integrate them into the water services provided to the City's water customers, and

WHEREAS, The City of Georgetown wishes to maintains compliance with the Texas Administrative Code, Title 30, Chapter 288; and

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GEORGETOWN, TEXAS THAT:

Section 1. The meeting at which this ordinance was approved was in all things conducted in compliance with the Texas Open Meetings Act, Texas Government Code, Chapter 551.

Section 2. The facts and recitations contained in the preamble of this ordinance are hereby found and declared to be true and correct and are incorporated by reference herein and expressly made a part hereof, as if copied verbatim. The City Council hereby finds that this ordinance complies with the Vision Statement 4.0(G) of the City of Georgetown 2030 Comprehensive Plan relating to the conservation of water resources.

Section 3. Section 13.15.040 of the City of Georgetown Code of Ordinances is hereby amended and adopted as shown on Exhibit A.

Section 4. 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 5. If any provision of this ordinance or application thereof to any person or circumstance shall be held invalid, such invalidity shall not affect the other provisions,

Ordinance Number: 2019-24
Description: Water Utility Service Ordinance
Date Approved: April 23, 2019

or application thereof, of this ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are hereby declared to be severable.

Section 6. The Mayor is hereby authorized to sign this ordinance and the City Secretary to attest. This Ordinance shall become effective and be in full force after publication in accordance with the provisions of the Charter of the City of Georgetown.

PASSED AND APPROVED on First Reading on the 9 day of April, 2019.

PASSED AND APPROVED on Second Reading on the 23 day of April, 2019.

ATTEST:


Robyn Densmore, City Secretary

THE CITY OF GEORGETOWN:


Dale Ross, Mayor

APPROVED AS TO FORM:


Charlie McNabb, City Attorney

Ordinance Number: 2019-24
Description: Water Utility Service Ordinance
Date Approved: April 23, 2019

Sec. 13.15.040. - Water use requirements.

- A. It is unlawful for any customer to waste water through use that serves no practical purpose. Such water waste includes the failure to repair a leak, either inside or outside a home, building, or facility, within a reasonable time, not to exceed 60 days from the date notice of the leak that resulted in water runoff or accumulation in a street, gutter, or parking lot, was provided.
- B. The use of an automatic irrigation system and hose-end sprinklers is restricted to the following schedule:
 - 1. Property with an address ending in 1, 5, 9, may be irrigated on Tuesday and/or Friday, but no other day of the week without an approved variance from the City.
 - 2. Property with an address ending in 2, 4, 6, 8 may be irrigated on Wednesday and/or Saturday, but no other day of the week without an approved variance from the City.
 - 3. Property with an address ending in 0, 3, 7, may be irrigated on Thursday and/or Sunday, but no other day of the week without an approved variance from the City.
 - 4. There shall be no irrigation, except by means of a handheld hose, drip irrigation, or soaker hoses on Monday.
- C. Landscape irrigation is allowed anytime, if it meets one or more of the following criteria:
 - 1. Watering occurs by means of a hand-held hose, soaker hoses, or drip irrigation;
 - 2. Watering occurs within the first 14 days after installation of new landscaping, with a qualifying variance;
 - 3. Watering occurs at a commercial plant nursery; or
 - 4. Watering occurs during testing of new irrigation system installation or existing irrigation repair.
- D. Irrigation Variance.
 - 1. Applications for a variance from the standard irrigation schedule shall be filed with the General Manager and shall be in effect for two weeks from the date of approval.
 - 2. A customer may file an application for an irrigation variance, which may include, but is not limited to vacation absence, installation of new landscaping, and installation of new turf.
 - 3. The General Manager may grant an irrigation variance upon his/her determination that special circumstances exist, which upon strict enforcement, will adversely affect the health, sanitation, or fire protection for the public or the applicant.

4. Irrigation variances granted under this Section will expire upon implementation of any phase of the Drought Contingency Plan.

Ordinance Number: _____
Description: Water Utility Service Ordinance
Date Approved: _____, 2019

Appendix F – Drought Contingency Plan

ORDINANCE NO. 2019-25

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF GEORGETOWN, TEXAS, AMENDING TITLE 13, CHAPTER 13.16, TITLED "DROUGHT CONTINGENCY PLAN" OF THE CODE OF ORDINANCES OF THE CITY OF GEORGETOWN TEXAS REPEALING CONFLICTING ORDINANCES AND RESOLUTIONS; INCLUDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE..

WHEREAS, the City of Georgetown, 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 drought; and

WHEREAS, Section 11.272 of the Texas Water Code and Title 30, Chapter 288 of the Texas Administrative Code require all Texas public water supply systems providing service to 3,300 or more connections to prepare a drought contingency plan; and

WHEREAS, elements of the drought contingency plan are being incorporated into the City's water conservation plan; and

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GEORGETOWN, TEXAS THAT:

Section 1. The meeting at which this ordinance was approved was in all things conducted in compliance with the Texas Open Meetings Act, Texas Government Code, Chapter 551.

Section 2. The facts and recitations contained in the preamble of this ordinance are hereby found and declared to be true and correct and are incorporated by reference herein and expressly made a part hereof, as if copied verbatim. The City Council hereby finds that this ordinance complies with the Vision Statement 4.0(G) of the City of Georgetown 2030 Comprehensive Plan relating to the conservation of water resources.

Section 3. Section 13.15.040 of the City of Georgetown Code of Ordinances is hereby amended and adopted as shown on Exhibit A.

Section 4. 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 5. If any provision of this ordinance or application thereof to any person or circumstance shall be held invalid, such invalidity shall not affect the other provisions, or application thereof, of this ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are hereby declared to be severable.

Ordinance Number: 2019-25
Description: Drought Contingency Plan Ordinance
Date Approved: April 23, 2019

Section 6. The Mayor is hereby authorized to sign this ordinance and the City Secretary to attest. This Ordinance shall become effective and be in full force after publication in accordance with the provisions of the Charter of the City of Georgetown.

PASSED AND APPROVED on First Reading on the 9 day of April, 2019.

PASSED AND APPROVED on Second Reading on the 23 day of April, 2019.

ATTEST:

THE CITY OF GEORGETOWN:


Robyn Densmore, City Secretary


Dale Ross, Mayor

APPROVED AS TO FORM:


Charlie McNabb, City Attorney

Ordinance Number: 2019-25
Description: Drought Contingency Plan Ordinance
Date Approved: April 23, 2019

CHAPTER 13.16. - DROUGHT CONTINGENCY PLAN[5]

Sec. 13.16.010. - Purpose.

The purpose of the Drought Contingency Plan ("Plan") is to conserve and protect the available water supply for domestic water use, sanitation, and fire protection, and to minimize the impact of water shortages during emergency conditions.

Sec. 13.16.020. - Public education.

The City will provide the public with information about the Plan, including information about the conditions under which each stage of the Plan is initiated, the drought response measures to be implemented, and the conditions necessary for termination. The information will be provided through press release, direct mailings, utility bill inserts, water use classes and the City's website.

Sec. 13.16.030. – Wholesale Water Customer Education

The City of Georgetown will provide 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 providing a copy of this plan annually.

Sec. 13.16.040. – Coordination with Regional Water Planning Groups.

The service area of the City of Georgetown is located within the Brazos Region (G) and the City of Georgetown has provided a copy of this Plan to the Brazos River Authority.

Sec. 13.16.050. - Authorization.

The General Manager, or his/her designee, is hereby authorized and directed to implement the applicable provisions of the Plan upon his/her determination that such implementation is necessary to protect the public health, safety, and welfare.

Sec. 13.16.060. - Application.

The provisions of this Plan shall apply to all persons, customers, and property utilizing water provided by the City, except those wholesale water utility customers where a similar Plan exists for their retail customers.

Ordinance Number: _____
Description: Drought Contingency Plan Ordinance
Date Approved: _____, 2019

Sec. 13.16.070. – Public Involvement

Opportunity for public and wholesale water customers to provide input into the preparation of the Plan was provided by the City of Georgetown by means of public notice in the local newspaper and the City website announcing the reading of the Drought Contingency Plan at City Council Meetings.

Sec. 13.16.080. - Utilization of alternative water sources and/or alternative delivery mechanisms:

Alternative water sources for the City of Georgetown are an interconnection with the City of Round Rock, as well as the use of reclaimed water for non-potable uses such as irrigation of parks and golf courses.

Sec. 13.16.090. - Definitions.

A. General Manager—General Manager of Utilities for the City of Georgetown, or the person otherwise authorized by the General Manager to have the duties and responsibilities under this Chapter.

B. Conservation—Those practices and techniques that reduce the consumption of water through increased efficiency, reduced losses, or reuse which results in conservation of the water supply for future use.

C. Customer—Any person, company, organization or entity that uses water supplied by the City, except customers that obtain water under a wholesale agreement and that have a Drought Contingency Plan for their customers.

D. Notice—Notification by press release or utility bill insert for the implementation of specific phases of this Plan by the City Manager through the news media (local newspaper and radio station) and the City's official bulletin board and web site.

E. Industrial water use—Water used in a manufacturing process.

F. Landscape irrigation use—Potable water and all untreated water diverted from wells connected to the City's water treatment plants intended for potable water use, excluding reclaimed water from wastewater treatment plant effluent, used for the irrigation and maintenance of landscaped areas, including residential and commercial lawns, gardens, golf courses, parks, rights-of-way, and medians.

G. New landscape—Vegetation installed at the time of new building construction, governmental capital improvement project, or which alters more than half the area of an existing landscape.

Ordinance Number: _____
Description: Drought Contingency Plan Ordinance
Date Approved: _____, 2019

H. Non-essential water use—Water uses that are not required for the protection of the public health, safety, and welfare, including, but not limited to:

1. Use of water to wash any motor vehicle, motorbike, boat, trailer, or airplane, or other vehicle.
2. Use of water to wash sidewalks, walkways, driveways, parking lots, or other hard-surfaced areas.
3. Flushing of gutters or permitting potable water to run or accumulate in any gutter, street, or drainage culvert.
4. Use of water to add to an indoor or outdoor swimming pool, splash pad, or hot-tub.
5. Use of water in a fountain, or pond, except where necessary to support aquatic life.

I. Water waste—Water use that serves no purpose including:

1. Failure to repair a leak within a reasonable period after having been given Notice to repair such leak.
2. Operating an irrigation system that results in water runoff or accumulation in a street or parking lot.

Sec. 13.16.100. - Phase I—Water conservation.

A. Conditions for Implementation. The water level in the City's No. 1 well drops to, or stabilizes below 50 feet above the pump suction for a period of more than five consecutive days.

AND/OR

Lake Georgetown level drops to 770 feet (above mean sea level), and no rainfall or other inflow predicted, and the Williamson County Raw Water Line is unavailable or is not capable of maintaining Lake Georgetown level above 765 feet at the current level of demand.

AND/OR

The combined storage of Lake Georgetown and Lake Stillhouse Hollow is less than 162,752 acre feet of water.

AND/OR

Water treatment capacity has reached 85 percent for three consecutive days.

Ordinance Number: _____
Description: Drought Contingency Plan Ordinance
Date Approved: _____, 2019

AND/OR

An event occurs where water demand exceeds the supply and moderate conservation measures will maintain the ability to provide the proper level of service as determined by the GM, or designee.

B. Demand Reduction Target. Peak demand of 1.6 times the annual average daily usage (20 percent reduction).

C. Customer and City Actions.

1. City will:

- Increase efforts to inform the public on water conservation strategies.
- Increase detection and repair of water leaks in the distribution system.
- Suspend hydrant testing.

2. Prohibit all water waste.

3. Restrict landscape irrigation use to the use of automatic irrigation systems or hose-end sprinklers during the evening (7:00 p.m. to midnight) and morning hours (midnight to noon) in accordance with an irrigation schedule that provides for no landscape irrigation on Monday with landscape irrigation permitted no more than two days per week with the day of week and irrigation start time specified based upon customer address.

4. Landscape irrigation use is permitted at any time, if it is used:

- By means of a hand-held hose, soaker hoses, or drip irrigation systems.
- At a commercial plant nursery.
- During the testing of new irrigation system installation or existing irrigation system repair.

Sec. 13.16.110. - Phase II—Water restrictions.

A. Conditions for Implementation. The water level in the City's No. 1 well drops to, or stabilizes below 40 feet above the pump suction for a period of more than five consecutive days.

AND/OR

Ordinance Number: _____
Description: Drought Contingency Plan Ordinance
Date Approved: _____, 2019

Lake Georgetown level drops to 765 feet (above mean sea level), and no rainfall or other inflow predicted, and the Williamson County Raw Water Line is unavailable or is not capable of maintaining Lake Georgetown Level above 760 feet under the current demand.

AND/OR

The combined storage of Lake Georgetown and Lake Stillhouse Hollow is less than 105,001 acre feet of water.

AND/OR

Water treatment capacity has reached 90 percent for three consecutive days.

AND/OR

An event occurs where water demand exceeds the supply and aggressive conservation measures will maintain the ability to provide the proper level of service as determined by the General Manager.

B. Demand Reduction Target. Peak demand of 1.3 times the annual average daily usage (35 percent reduction).

C. Customer and City Actions.

1. City will:

- Increase efforts to inform the public on water conservation strategies.
- Increase detection and repair of water leaks in the distribution system.
- Suspend hydrant testing.

2. Prohibit all water waste.

3. Suspend the use of potable water for the following City municipal operations:

- Vehicle washing.
- Street cleaning.
- Landscape irrigation in City parks (does not include athletic fields) except by handheld hose or drip irrigation.

4. Prohibit all non-essential water use except:

Ordinance Number: _____

Description: Drought Contingency Plan Ordinance

Date Approved: _____, 2019

- The addition of water to a pool or splash pad where necessary to maintain the water purification system in service or to maintain structural integrity of the pool.
- The washing of vehicles or boats at a commercial car wash or service station.

5. Restrict landscape irrigation use to the evening (7:00 p.m. to midnight) and morning hours (midnight to noon) in accordance with an irrigation schedule that provides for no landscape irrigation on Monday with landscape irrigation permitted no more than one day per week with the day of week and irrigation start time specified based upon customer address.

Sec. 13.16.120. - Phase III—Water emergency.

A. Conditions for Implementation. An event occurs where water demand exceeds the supply and severe conservation measures are required to maintain the ability to provide the proper level of service as determined by the GM, or designee.

AND/OR

The combined storage of Lake Georgetown and Lake Stillhouse Hollow is less than 52,501 acre feet of water.

AND/OR

Water treatment capacity has reached 95 percent for three consecutive days.

B. Demand Reduction Target. Peak demand equal to the annual average daily usage (50 percent reduction).

C. Customer and City Actions.

1. City will:

- Increase efforts to inform the public on water conservation strategies.
- Increase detection and repair of water leaks in the distribution system.
- Suspend hydrant testing.

2. Prohibit all water waste.

3. Prohibit all non-essential water use.

4. Prohibit landscape irrigation water use.

Ordinance Number: _____
 Description: Drought Contingency Plan Ordinance
 Date Approved: _____, 2019

5. Prohibit or limit as deemed necessary all industrial water use.
6. The City shall arrange for the emergency purchase of water from utilities for which there exists proper agreements for such purchase.

Sec. 13.16.130. – Phase IV - Water system failure.

A. Conditions for Implementation. An event in which one of the following situations occurs:

1. Water demand approaches a reduced delivery capacity for all or part of the system, creating a situation in which water system demand exceeds water system capacity, for an extended length of time, as determined by the General Manager;
2. A major water line break, or a pump or other system failure occurs, which causes a loss in the capability to provide treated water service; or
3. A natural or man-made contamination of the water supply.

B. Demand Reduction Target. Peak demand equal to or surpasses the annual average daily usage (50 percent reduction).

C. Customer and City Actions.

1. Assess the severity of the problem and identify the actions needed and time required to resolve the problem;
2. Implement immediate measures to notify the public as to water system or water source failure;
3. Severely restrict or prohibit, as appropriate, all water system use in the affected service area;
4. Arrange for the emergency purchase of water from alternate sources for which there exists the proper agreements for such purchases; and
5. Customers will discontinue or severely restrict all use of potable water from GUS water system until notified by City that a safe and adequate water for public use is restored.

Sec. 13.16.131. - Pro Rata Curtailment

In the event that the triggering criteria specified in Phase IV have been met, the General Manager is hereby authorized to initiate allocation of water supplies on a pro rata basis in accordance with Texas Water Code, §11.039.

Ordinance Number: _____

Description: Drought Contingency Plan Ordinance

Date Approved: _____, 2019

Sec. 13.16.135. - Violations.

It shall be a violation of this Chapter for any person to intentionally, knowingly, recklessly or with criminal negligence disregard any provisions, specifications or requirements of this Chapter.

Sec. 13.16.140. - Enforcement.

A. Any person who violates this Plan is guilty of a misdemeanor and, upon conviction shall be punished by a fine of up to \$2,000.00 for each day the violation continues, with each day constituting a separate and distinct offense.

B. If a person is convicted of three or more violations of this Plan in a calendar year, the City Manager, or designee 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 re-connection charge. In addition, suitable assurance must be given to the City Manager, or his/her designee, that the same action shall not be repeated while the Plan is in effect.

C. Any City Code Enforcement Officer or Police Officer may issue a warning or citation to a person that is reasonably believed to be in violation of this Plan. The warning or citation shall contain the name and address of the alleged violator, if known, the offense charged, and if a citation, shall direct him/her to appear in the municipal court on the date shown on the citation. The alleged violator shall be served a copy of the warning or citation, with service complete upon delivery of the citation by hand or by certified mail to the alleged violator, and agent or employee, or to a person over 14 years of age who is a family member or resident of the violator's residence.

D. Any citizen or City employee may initiate a complaint through the Municipal Court concerning violations of this Plan. The complaint shall contain the name and address of the alleged violator, if known, the complaint, and shall submit the complaint to Georgetown Utility Systems Administration. If the complaint is the first violation in the calendar year, then a warning shall be issued and such warning shall state the specific offense and provide a City contact for assistance with efforts to remediate the violation. If the complaint is the second or subsequent violation in the calendar year, the complaint shall be forwarded to Municipal Court for resolution.

Sec. 13.16.150. - Variances.

A. A customer may file an application for a variance from this Plan for the property receiving water service with the GM. The GM may determine the proper information and require that the applicant provide such information to evaluate the variance request.

Ordinance Number: _____
Description: Drought Contingency Plan Ordinance
Date Approved: _____, 2019

B. A customer may file an application for a variance from this Plan due to vacation absence and the variance shall remain in effect for the period of the vacation absence if the customer complies with the requirements of Section 13.16.080 Phase I Water Conservation and a telephone contact number has been provided.

C. The GM may issue written orders varying one or more actions required under a Phase of the Plan if necessary to target particular customers, water systems, or areas.

D. The GM may grant a variance from the Plan upon his/her determination that special circumstances exist that upon strict enforcement of the Plan will adversely affect the health, sanitation, or fire protection for the public or the applicant.

E. Variances granted under this Section will expire upon escalation of the Plan to the next higher phase unless granted under Subsection B of this Section or termination of the Plan.

Sec. 13.16.160. Contract Provisions

The City of Georgetown will include a provision in every wholesale water contract entered into or renewed after adoption of the plan, including contract extensions, that in case of a shortage of water resulting from drought, the water to be distributed shall be divided in accordance with Texas Water Code, §11.039.

Sec. 13.16.170. - Termination.

The City Manager, or his/her designee, is hereby authorized and directed to terminate the applicable provisions of the Plan upon his/her determination that the applicable provisions are no longer necessary to protect the public health, safety, and welfare.

Ordinance Number: _____
Description: Drought Contingency Plan Ordinance
Date Approved: _____, 2019

