WATER CONSERVATION AND WATER RESOURCE AND EMERGENCY MANAGEMENT PLAN
CITY OF GAINESVILLE, TEXAS

Date: May 2019

1. INTRODUCTION AND OBJECTIVES

Water supply has always been a key issue in the development of Texas. In recent years, the growing population and economic development of North Central Texas has led to increasing demands for water supplies. At the same time, local and less expensive sources of water supply are largely developed. Additional supplies to meet higher demands will be expensive and difficult to develop. It is therefore important that the City of Gainesville ("City") and its customers make the most efficient use of existing supplies. This will delay the need for new supplies, minimize the environmental impacts associated with developing new supplies, and delay the high cost of additional water supply development.

Recognizing the need for efficient use of existing water supplies, the Texas Commission on Environmental Quality ("TCEQ") has developed guidelines and requirements governing the development of water conservation and drought contingency plans for public water suppliers[1]. TCEQ guidelines and requirements are included in Appendix B. The City has developed this water conservation and water resource and emergency management plan following TCEQ guidelines and requirements.

The water conservation sections of this plan include measures that are intended to result in ongoing, long-term water savings. The drought contingency and water emergency response sections of this plan address strategies designed to temporarily reduce water use in response to specific conditions.

The objectives of this water conservation plan are as follows:

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

This plan includes all of the elements required by TCEQ. Some elements of this plan go beyond TCEQ requirements. This plan also is intended to include requirements of the Texas Water Development Board ("TWDB") for financial assistance programs of greater than $500,000 offered

by the TWDB.

2. TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES

2.1 Conservation Plans

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

Minimum Conservation Plan Requirements

The minimum requirements in the Texas Administrative Code for water conservation plans for public water suppliers are covered in this report as follows:

- §288.2(a)(1)(A) – Utility Profile – Section 3 and Appendix C
- §288.2(a)(1)(B) – Record Management System – Section 5.3
- §288.2(a)(1)(C) – Specific, Quantified Goals – Section 4
- §288.2(a)(1)(D) – Accurate Metering – Sections 5.1 and 5.2
- §288.2(a)(1)(E) – Universal Metering – Section 5.2
- §288.2(a)(1)(F) – Determination and Control of Water Loss – Section 5.4
- §288.2(a)(1)(G) – Public Education and Information Program –Section 6
- §288.2(a)(1)(H) – Non-Promotional Water Rate Structure – Section 7
- §288.2(a)(1)(I) – Reservoir System Operation Plan – Section 8.1
- §288.2(a)(1)(J) – Means of Implementing and Enforcement – Section 9
- §288.2(a)(1)(K) – Coordination with Regional Water Planning Group – Section 8.6 and Appendix G
- §288.2(c) – Review and Update of the Plan- Section 10

Conservation Additional Requirements

- §288.2(a)(2)(A) – Leak Detection, Repair, and Water Loss Accounting – Sections 5.4, 5.5 and 5.6
- §288.2(a)(2)(B) – Requirement for Water Conservation Plans by Wholesale Customers – Section 8.5

Additional Conservation Strategies

The TWDB requires a water conservation program annual report. This report is included in Appendix D. The TCEQ requires that a water conservation implementation report be completed and submitted on an annual basis. This report is included in Appendix E.

TCEQ rules also include optional, but not required, conservation strategies, which may be adopted

by suppliers. The City has adopted the following optional strategies:

- §288.2(a)(3)(A) – Conservation Oriented Water Rates – Section 7
- §288.2(a)(3)(B) – Ordinances, Plumbing Codes or Rules on Water-Conserving Fixtures – Section 8.3
- §288.2(a)(3)(D) – Reuse and Recycling of Wastewater – Section 8.2
- §288.2(a)(3)(G) –Monitoring Method – Section 5.6

2.2 Water Resource and Emergency Management Plans

The TCEQ rules governing development of drought contingency plans for public water suppliers are contained in Title 30, Part 1, Chapter 288, Subchapter B, Rule 288.20 of the Texas Administrative Code, a current copy of which is included in Appendix B. For the purpose of these rules, a water resource and emergency management plan is defined as "a strategy or combination of strategies for temporary supply and demand management responses to temporary and potentially recurring water supply shortages and other water supply emergencies."

3. WATER UTILITY PROFILE

Appendix C to this Water Conservation and Water Resource and Emergency Management Plan is a water utility profile based on the format recommended by the TCEQ.

4. SPECIFICATION OF WATER CONSERVATION GOALS

TCEQ rules require the adoption of specific water conservation goals for a water conservation plan. The goals for this water conservation plan include the following:

Table 4

WATER CONSERVATION PLAN
5- AND 10-YR GOALS FOR WATER SAVINGS

Facility Name: City of Gainesville

Water Conservation Plan Year: 2019

	Historic 5yr Average	Baseline	5-yr Goal for year 2024	10-yr Goal for year 2029
Total GPCD[1]	128	128	125	120
Residential GPCD[2]	72	72	70	70
Water Loss (GPCD)[3]	15	15	12	10
Water Loss (Percentage)[4]	12 %	12 %	10 %	8 %

1. Total GPCD = (Total Gallons in System ÷ Permanent Population) ÷ 365
2. Residential GPCD = (Gallons Used for Residential Use ÷ Residential Population) ÷ 365
3. Water Loss GPCD = (Total Water Loss ÷ Permanent Population) ÷ 365
4. Water Loss Percentage = (Total Water Loss ÷ Total Gallons in System) x 100; or (Water Loss GPCD ÷ Total GPCD) x 100

- Implement and maintain a program of universal metering and meter replacement and repair, as discussed in Section 5.2.
- Increase efficient water usage as discussed in Section 8
- Raise public awareness of water conservation and encourage responsible public behavior by a public education and information program, as discussed in Section 6.
- Develop a system specific strategy to conserve water during peak demands, thereby reducing the peak use.
- Maintain meter replacement program

These goals will be reviewed and updated as necessary when the plan is reviewed every five (5) years.

5. METERING, WATER USE RECORDS, CONTROL OF WATER LOSS, AND LEAK DETECTION AND REPAIR

One of the key elements of water conservation is tracking water use and controlling losses through illegal diversions and leaks. The City of Gainesville carefully meters water use, to detect and repair leaks in the distribution system and provide regular monitoring of unaccounted water.

5.1 Accurate Metering

The City of Gainesville meters diversions from Moss Lake and well system, and meters all treated water deliveries to the distribution system. Each meter has an accuracy of plus or minus two percent. The meters are calibrated on a semi-annual basis by the City of Gainesville personnel to maintain the required accuracy and are repaired and/or replaced as needed.

- Land owners on Moss Lake are permitted raw water usage via permit system and small

pump size.

5.2 Metering of Customer and Public Uses and Meter Testing, Repair and Replacement

Water usage for all customers of the City, including public and government users, is metered. As part of this water conservation plan, the City maintains a meter replacement program that will replace every meter on a 15-year cycle. The City will continue to monitor meters to ensure that the level of accuracy remains high. In addition, meters registering any unusual or questionable readings will be tested and repaired to restore to full functionality.

5.3 Record Management System

As required by TAC, Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.2(a)(2)(B), the record management system for the City records water pumped, water delivered, and water sold; estimates for water losses; and allows for the separation of water sales and uses into residential and commercial categories. This information will be included in an annual report, as described in Section 5.6.

5.4 Determination and Control of Water Loss

Total water loss is the difference between water delivered to customers from the City and metered water sales to customers plus metered water sales to customers plus water authorized for use but not sold. (Authorized but unmetered uses include use for fire fighting, releases for flushing of lines, uses associated with new construction, etc.) Total water loss includes two categories:

- Apparent losses – includes inaccuracies in customer meters (customer meters tend to run more slowly as they age and under-report actual use), losses due to illegal connections and theft, and accounts that are being used but have not yet been added to billing system.
- Real losses – includes physical losses from system or mains, reported breaks and leaks, storage overflow and unreported losses.

Measures to control unaccounted water are part of the routine operations of the City and its customers. Maintenance crews and personnel look for and report evidence of leaks in the water distribution system with periodic visual inspections along distribution lines. A leak detection and repair program is described in Section 5.5 below. Meter readers watch for and report signs of illegal connections, so they can be quickly addressed.

Total water loss should be calculated in accordance with the provisions of Appendix D, TWDB Water Conservation Plan Annual Report for Retail Water Supplier. With the measures described in this plan, the City's goal is to maintain total water loss at or below 10 percent in each year. If water loss exceeds this goal, the City shall implement a more intensive audit to determine the source(s) of and reduce the unaccounted water. The annual conservation report described below is the primary tool that shall be used to monitor total water loss.

5.5 Leak Detection and Repair

As described above, city/utility crews and personnel look for and report evidence of leaks in the water distribution system. Areas of the water distribution system in which numerous leaks and line breaks occur are targeted for replacement as funds are available.

5.6 Monitoring of Effectiveness and Efficiency – Annual Water Conservation Report

Appendix C (Water Utility Profile based on TCEQ and/or TWDB format) is the form that shall be completed annually and used in the development of an annual water conservation report, as well as identifying water conservation opportunities and potential targets and goals.

5.7 TWDB Annual Water Conservation Report

Appendix D includes the TWDB-required Water Conservation Program Annual Report. The Texas Water code requires that each entity that is required to submit a water conservation plan to the TWDB or the TCEQ shall file an annual report to the TWDB on the entity's progress in implementing each of the minimum requirements in their water conservation plan. This requirement applies to those entities receiving financial assistance of $500,000 or more from the TWDB; entities with 3,300 connections or more; and those entities that have a water right through TCEQ. Entities receiving financial assistance from the TWDB are to maintain an approved water conservation plan in effect until all financial obligations to the state have been discharged and file a report with the TWDB on the progress in implementing each of the minimum requirements in its water conservation plan and the status of any of its customers' water conservation plans required by contract, within one year after closing on the financial assistance and annually thereafter until all financial obligations to the state have been discharged.

6. CONTINUING PUBLIC EDUCATION AND INFORMATION CAMPAIGN

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

- Include inserts on water conservation with water bills or mail outs at least twice per year. Inserts will include material developed by City staff and material obtained from the Texas Water Development Board ("TWDB"), the TCEQ, and other sources.
- Encourage local media coverage of water conservation issues and the importance of water conservation
- Notify local organizations, schools, and civic groups that City staff is available to make presentations on the importance of water conservation and ways to save water
- Promote the *Texas Smartscape* website (www.txsmartscape.com) and provide water conservation brochures and other water conservation materials available to the public at city hall and other public places
- Make information on water conservation available online on the City website, www.gainesville.tx.us including links to the *Texas Smartscape* website and to information on water conservation on the TWDB and TCEQ websites and other resources
  Encouage the Major Rivers Program for 4th grade school curriculum into Gaineville ISD

7. WATER RATE STRUCTURE

With the intent of encouraging water conservation and discouraging waste and excessive use of water, the City of Gainesville has adopted the following water rate structure.

Table 7.1
Monthly Customer Charges

Meter Size (in.)	Total Charge	Meter Size (in.)	Total Charge
¾	$20.16	3	$166.57
1	$55.59	4	$233.61
1 ½	$91.73	6	$432.91
2	$135.68	8	$597.81

Table 7.2
Volume Unit Charges

Water User	Type/Volume	Volume Unit Charge (1,000 gallons)
Single-Family	Over 1,000 gallons	$4.02
Multi Family and Commercial	Over 1,000 gallons	$4.44

8. OTHER WATER CONSERVATION MEASURES

8.1 Reservoir System Operation Plan

The City of Gainesville has the following rights to divert water:

- From Moss Lake: Up to 7,740 acre-feet per year based on the natural yield of the reservoir
- From Lake Texoma (under contract with Greater Texoma Utility Authority): Up to 10,804 acre-feet per year based on the natural yield of the reservoir. However, for this water storage, at this time there is no delivery system.
- Up to 6.13 acre-feet per year on the reclaimed water discharge from the City's Wastewater Treatment Plant at Keneteso Park

Moss Lake is operated in coordination with the City of Gainesville's eight water wells as raw water supply sources; therefore, 1.5 MGD additional yield can be gained through system operation.

8.2 Reuse and Recycling of Wastewater

The City of Gainesville operates one wastewater treatment plant: The Gainesville wastewater treatment plant treats approximately 1.6 MGD, and from that amount approximately 6.13 acre-feet per year is discharged for watering of recreational facilities adjacent to the Gainesville wastewater treatment plant. The remaining 1,848 acre-feet of treated water is discharged into the Elm Fork of the Trinity River.

8.3 Ordinances, Plumbing Codes, or Rules on Water-Conserving Fixtures

The City of Gainesville adopted the 2000 International Plumbing Code. Similar standards are now required nationally under federal law. These state and federal standards assure that all new construction and renovations in the City will use water-conserving fixtures.

8.4 Additional Water Conservation Measures

The following water conservation measures are also included in the Plan:

- Water audits
    - The City of Gainesville currently conducts water audits annually

8.5 Requirement for Water Conservation Plans by Wholesale Customers

The City of Gainesville does not currently have wholesale water customers. However, every contract for the wholesale of water by customers that is entered into, renewed, or extended after the adoption of this water conservation plan will include a requirement that the wholesale customer and any wholesale customers of that wholesale customer develop and implement a water conservation plan meeting the requirements of Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.2 of the Texas Administrative Code.[1] The requirement will also extend to each successive wholesale customer in the resale of water.

8.6 Coordination with Regional Water Planning Group

Appendix G includes a letter to the Chair of the Region C Water Planning Group transmitting this water conservation plan. The adopted ordinance and the adopted water utility profile will be sent to the Chair of the Region C Water Planning Group, with a copy of the water conservation plan and water resource and emergency management plan.

9. IMPLEMENTATION AND ENFORCEMENT OF THE WATER CONSERVATION PLAN

Appendix F contains a copy of the ordinance adopted by the City Council regarding the water conservation plan and water resource and emergency management plan. Appendix E includes a copy of an ordinance adopted related to illegal connections and water theft.

9.1 Schedule for Implementing the Plan to Achieve Targets and Goals

Following is a schedule, to achieve the targets and goals for water conservation:

- Calibrations of meters for all treated water deliveries are conducted semi-annually
    - Meter replacement program:
    - Meters will continue to be monitored for accuracy annually and replaced on a twenty-

year cycle, or when accuracy cannot be maintained within ±5%

- Water audits conducted annually
  - Real water losses are identified and corrected
  - Real water losses are minimized by replacement of deteriorating water mains and appurtenances, conducted on an on-going basis
- Materials developed to encourage water conservation measures, materials obtained from the Texas Water Development Board, Texas Commission on Environmental Quality or other sources will be mailed out semi-annually (once in the spring and once in the summer) to all customers
- Water conserving pricing
  - Rates shall continue to be reviewed annually to insure water revenues exceed expenses and replacement costs and to discourage excessive and wasteful use
- The leak detection program to reduce real water losses
  - Inspections and soundings of all water main fittings and connections to be conducted semi-annually
  - Intermittent night-flow measurements to be conducted daily using SCADA
  - Pressure controlled to just above the standard-of-service level by use of pressure zones
  - Pressure zones operated based on the topography
  - Surges in pressure limited by coordination with Fire Department
  - Nighttime pressure reduced by pressure regulation when feasible
- The City of Gainesville adopted the 2015 International Plumbing Code, and all new construction or renovations required to use water conserving fixtures
- The City of Gainesville currently discharges approximately 6.13 acre-feet per year from its wastewater treatment plant to water a recreational field

9.2 Tracking of Targets and Goals

City staff shall track targets and goals by utilizing the following procedures:

- Records shall be maintained for meter calibration, meter testing, and meter replacement programs
- Annual water audits shall be documented and kept in the files
- City staff shall keep a record of the number of mail-outs distributed semi-annually
- Records shall be maintained for the Leak Detection Program, including but not limited to the following:
  - Annual inspections and soundings of all water main fittings and connections
  - Annual intermittent night-flow measurements
  - SCADA system is used to monitor water systems

10. REVIEW AND UPDATE OF WATER CONSERVATION PLAN

The plan will be reviewed and restructured as required and as appropriate based on new or updated information.

11. WATER RESOURCE AND EMERGENCY MANAGEMENT PLAN

11.1 Introduction

The purpose of this water resource and emergency management plan is as follows:

- To conserve the available water supply in times of drought and emergency
- To maintain supplies for domestic water use, sanitation, and fire protection
- To protect and preserve public health, welfare, and safety
- To minimize the adverse impacts of water supply shortages
- To minimize the adverse impacts of emergency water supply conditions

A drought is defined as an extended period of time when an area receives insufficient amounts of rainfall to replenish the water supply, causing water supply sources to be depleted. In the absence of drought response measures, water demands tend to increase during a drought due to the need for additional outdoor irrigation. The severity of a drought depends on the degree of the depletion of supplies and on the relationship of demand to available supplies.

11.2 State Requirements for Drought Contingency Measures

This water resource and emergency management plan is consistent with TCEQ guidelines and requirements for development of drought contingency measures by public drinking water suppliers, contained in Title 30, Part 1, Chapter 288, Subchapter B, Rule 288.20 of the Texas Administrative Code[1]. This rule is included in Appendix B.

Minimum Requirements

TCEQ's minimum requirements for drought contingency measures are addressed in the following subsections of this report:

- 288.20(a)(1)(A) – Provisions to Inform the Public and Provide Opportunity for Public Input - Section 11.3
- 288.20(a)(1)(B) – Provisions for Continuing Public Education and Information – Section 11.4
- 288.20(a)(1)(C) – Coordination with Regional Water Planning Group(s) – Section 11.10
- 288.20(a)(1)(D) – Criteria for Initiation and Termination of Drought Stages – Section 11.6
- 288.20(a)(1)(E) – Drought and Emergency Response Stages – Section 11.7
- 288.20(a)(1)(F) – Specific, Quantified Targets for Water Use Reductions – Section 11.7
- 288.20(a)(1)(G) – Water Supply and Demand Management Measures for Each Stage – Section 11.7
- 288.20(a)(1)(H) – Procedures for Initiation and Termination of Drought Stages – Section 11.6
- 288.20(a)(1)(I) – Procedures for Granting Variances – Section 11.8
- 288.20(a)(1)(J) – Procedures for Enforcement of Mandatory Restrictions – Section 11.9
- 288.20(a)(3) – Consultation with Wholesale Supplier – Sections 11.6 and 11.7
- 288.20(b) – Notification of Implementation of Mandatory Measures – Section 11.6
- 288.20(c) – Review and Update of Plan – Section 11.11

11.3 Provisions to Inform the Public and Opportunity for Public Input

The City of Gainesville will provide opportunity for public input in the development of this water

resource and emergency management plan by the following means:

- Providing written notice of the proposed plan and the opportunity to comment on the plan by newspaper and posted notice and notice on the City's website – www.gainesville.tx.us
- Making the draft plan available on the City's website – www.gainesville.tx.us
- Providing the draft plan to anyone requesting a copy
- Holding a public meeting at the Gainesville City Hall at 6:30 pm, May 21, 2019 (Appendix H)

11.4 Provisions for Continuing Public Education and Information

The City of Gainesville will inform and educate the public about its water resource and emergency management plan by the following means:

- Preparing a bulletin describing the plan and making it available at city hall and/or other appropriate locations
- Making the plan available to the public through the City's website – www.gainesville.tx.us
- Including information about the water resource and emergency management plan on the City's website – www.gainesville.tx.us
- Notifying local organizations, schools, and civic groups that staff members are available to make presentations on the water resource and emergency management plan (usually in conjunction with presentations on water conservation programs).

At any time that the water resource and emergency management plan is activated or the drought stage or water emergency response stage changes, City will notify local media of the issues, the drought response stage or water emergency response stage (if applicable), and the specific actions required of the public. The information will also be publicized on the City's website – www.gainesville.tx.us. Billing inserts or mail outs will also be used as appropriate.

11.5 Application

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

11.6 Initiation and Termination of Drought or Water Emergency Response Stages

Initiation of a Drought or Water Emergency Response Stage

The Mayor or his/her official designee may order the implementation of a drought or water emergency response stage when one or more of the trigger conditions for that stage is met. The following actions will be taken when a drought or water emergency response stage is initiated:

- The public will be notified though local media and the City's website – www.gainesville.tx.us
- Wholesale customers and providers (if any) will be notified by e-mail with a follow-up letter or fax that provides details of the reasons for initiation of the drought/water emergency response stage

- If any mandatory provisions of the water resource and emergency management plan are activated, the City will notify the Executive Director of the TCEQ within five business days.

The Mayor or his/her official designee may decide not to order the implementation of a drought response stage or water emergency even though one or more of the trigger criteria for the stage are met. Factors that could influence such a decision include, but are not limited to, the time of the year, weather conditions, the anticipation of replenished water supplies, or the anticipation that additional facilities will become available to meet needs. The reason for this decision should be documented.

Termination of a Drought/Water Emergency Response Stage

The Mayor or his/her official designee may order the termination of a drought or water emergency response stage when the conditions for termination are met or at their discretion. The following actions will be taken when a drought or water emergency response stage is terminated:

- The public will be notified through local media and the City's website – www.gainesville.tx.us
- Wholesale customers and providers (if any) will be notified by e-mail with a follow-up letter or fax.
- If any mandatory provisions of the water resource and emergency management plan that have been activated are terminated, the City will notify the Executive Director of the TCEQ within five business days.

The Mayor or his/her designee may decide not to order the termination of a drought contingency or water emergency response stage even though the conditions for termination of the stage are met. Factors that could influence such a decision include, but are not limited to, the time of the year, weather conditions, or the anticipation of potential changed conditions that warrant the continuation of the drought contingency or water emergency stage. The reason for this decision should be documented.

11.7 Water Resource and Emergency Management Stages and Measures

Stage 1 Mild Water Shortage Conditions

Initiation and Termination Conditions for Stage 1

- The Mayor or his/her designee finds that conditions warrant the declaration of Stage 1
- The water storage level in Moss Lake is less than 65% of the total conservation pool capacity
- Ground water level reaches 100' above current pump settings
- City's water demand exceeds 90 percent of the amount that can be delivered to customers for three consecutive days.
- City's water demand for all or part of the delivery system approaches delivery capacity because delivery capacity is inadequate.
- Water demand is approaching the limit of the permitted supply

Stage 1 may be terminated when the circumstances that caused the initiation of Stage 1 no longer prevail.

Goal for Use Reductions and Actions Available Under Stage 1

Stage 1 is intended to raise public awareness of potential drought or water emergency problems. The goal for water use reduction under Stage 1 is a two percent reduction in the amount of water produced. The Mayor or his/her designee may order the implementation of any of the actions listed below, as deemed necessary:

- Request voluntary reductions in water use by the public and by wholesale customers
- Notify wholesale customers of actions being taken and request implementation of similar procedures
- Increase public education efforts on ways to reduce water use
- Review the problems that caused the initiation of Stage 1
- Intensify efforts on leak detection and repair
- Reduce non-essential city government use. (Examples include street cleaning, vehicle washing, operation of ornamental fountains, etc.)
- Notify major water users and work with them to achieve voluntary water use reductions
- Reduce city government water use for landscape irrigation
- Ask the public to follow voluntary landscape watering schedules

Stage 2 Moderate Water Shortage Conditions

Initiation and Termination Conditions for Stage 2

- The Mayor or his/her designee finds that conditions warrant the declaration of Stage 1
- The water storage level in Moss Lake is less than 55% of the total conservation pool capacity
- Ground water level reaches 75' above current pump settings
- City's water demand exceeds 95 percent of the amount that can be delivered to customers for three consecutive days
- City's water demand for all or part of the delivery system equals delivery capacity because delivery capacity is inadequate
- Water demand is approaching the limit of the permitted supply.

Stage 2 may terminate when the circumstances that caused the initiation of Stage 2 no longer prevail. Stage 1 becomes operative upon termination of Stage 2.

Goal for Use Reduction and Actions Available Under Stage 2

The goal for water use reduction under Stage 2 is a five percent reduction in the amount of water produced. If circumstances warrant, the Mayor or his/her designee may set a goal for greater water use reduction. The Mayor or his/her designee may order the implementation of any of the actions listed below, as deemed necessary:

- Continue or initiate any actions available under Stage 1
- Notify wholesale customers and suppliers (if any) of actions being taken and request them to implement similar procedures
- Initiate engineering studies to evaluate alternatives should conditions worsen

- Further accelerate public education efforts on ways to reduce water use
- Halt non-essential city government water use. (Examples include street cleaning, vehicle washing, and operations of ornamental fountains, etc.)
- Encourage the public to wait until the current drought or emergency situation has passed before establishing new landscaping

Stage 3 Severe Water Shortage Conditions

Initiation and Termination Conditions for Stage 3

- The Mayor or his/her designee finds that conditions warrant the declaration of Stage 3
- The water storage level in Moss Lake is less than 45% of the total conservation pool capacity
- Ground water level reaches 50' above current pump settings
- City's water demand exceeds 98 percent of the amount that can be delivered to customers for three consecutive days
- City's water demand for all or part of the delivery system exceeds delivery capacity because delivery capacity is inadequate
- Water demand is approaching the limit of the permitted supply.

Stage 3 may terminate when the circumstances that caused the initiation of Stage 3 no longer prevail. Stage 2 becomes operative upon termination of Stage 3.

Goal for Use Reduction and Actions Available Under Stage 3

The goal for water use reduction under Stage 3 is a reduction of ten percent in the amount of water produced. If circumstances warrant, the Mayor or his/her designee may set a goal for greater water use reduction.

The Mayor or his/her designee may order the implementation of any of the actions listed below, as deemed necessary. Measures described as "requires notification to TCEQ" impose mandatory requirements on customers. City must notify the Executive Director of the TCEQ within five business days if these measures are implemented.

- Continue or initiate any actions available under Stage 1 and 2
- Notify wholesale customers and providers (if any) of actions being taken and request them to implement similar procedures
- Implement viable alternative water supply strategies
- **Requires Notification to TCEQ –** Limit landscape watering with sprinklers or irrigation systems to no more than two days per week. An exception is allowed for landscape associated with new construction that may be watered as necessary for 30 days from the date of certificate of occupancy. An exemption is also allowed for registered and properly functioning ET/Smart irrigation systems and drip irrigation systems, which do not have restrictions to the number of days per week of operation
- **Requires Notification to TCEQ –** Restrict landscape and lawn irrigation from 10:00AM to 6:00PM

Stage 4 Critical Water Shortage Conditions

Initiation and Termination Conditions for Stage 4

- The Mayor or his/her designee finds that conditions warrant the declaration of Stage 4
- The water storage level in Moss Lake is less than 35% of the total conservation pool capacity
- Ground water level reaches 40' above current pump settings
- City's water demand exceeds the amount that can be delivered to customers
- City's water demand for all or part of the delivery system seriously exceeds delivery capacity because the delivery capacity is inadequate
- Water demand is approaching the limit of the permitted supply.

Stage 4 may terminate when the circumstances that caused the initiation of Stage 4 no longer prevail. Stage 3 becomes operative upon termination of Stage 4.

Goal for Use Reduction and Actions Available Under Stage 4

The goal for water use reduction under Stage 4 is a reduction of 12 percent in the amount of water produced.

The Mayor or his/her designee may order the implementation of any of the actions listed below, as deemed necessary. Measures described as "requires notification to TCEQ" impose mandatory requirements on retail and wholesale customers. The City must notify the Executive Director of the TCEQ within five business days if these measures are implemented.

- Continue or initiate any actions available under Stages 1, 2 and 3
- Notify wholesale customers of actions being taken and request them to implement similar procedures
- **Requires Notification to TCEQ –** Initiate mandatory water use restrictions as follows:
  - Prohibit hosing of paved areas, buildings, or windows. (Pressure washing of impervious surfaces is allowed.)
  - Prohibit operation of all ornamental fountains or other amenity impoundments to the extent they use treated water
  - Prohibit washing or rinsing of vehicles by hose except with a hose end cutoff nozzle
  - Prohibit using water in such a manner as to allow runoff or other waste
- **Requires Notification to TCEQ –** Limit landscape watering at each service address to once every seven days. Exceptions are as follows:
  - Foundations, new landscaping, new plantings (first year) of trees and shrubs may be watered for up to two hours on any day by a hand-held hose, a soaker hose, or a dedicated zone using a drip irrigation system.
  - Golf courses may water greens and tee boxes without restrictions.
  - Public athletic fields used for competition may be watered twice per week.
  - Locations using other sources of water supply for irrigation may irrigate without restrictions.
  - Properly functioning ET/Smart irrigation systems and drip irrigation systems may irrigate without restrictions.

- **Requires Notification to TCEQ –** Prohibit hydroseeding, hydromulching, and sprigging.
- **Requires Notification to TCEQ** – Existing swimming pools may not be drained and refilled (except refilling to replace normal water loss).
- **Requires Notification to TCEQ –** Initiate a rate surcharge for all water use over a certain level.
- **Requires notification to TCEQ** – Require all commercial water users to reduce water use by a percentage established by the Mayor/Manager and his/her designee

Stage 5 Emergency Water Shortage Conditions

Initiation and Termination Conditions for Stage 5

- The Mayor or his/her designee finds that conditions warrant the declaration of Stage 5
- Major water line breaks, or pump or system failure occur, which cause unprecedented loss of capability to provide water service or
- National or manmade contamination of the water supply sources occurs

Stage 5 may terminate when the circumstances that caused the initiation of Stage 5 no longer prevail. Stage 4 becomes operative upon termination of Stage 5.

Goal for Use Reduction and Actions Available Under Stage 5
Stage 5 is intended for emergency water shortage conditions. The goal for water use reduction under Stage 5 is a reduction of 15 percent in the amount of water produced.

The Mayor or his/her designee may order the implementation of any of the actions listed below, as deemed necessary. Measures described as "requires notification to TCEQ" impose mandatory requirements on retail and wholesale customers. The City must notify the Executive Director of the TCEQ within five business days if these measures are implemented.

- Continue or initiate any actions available under Stages 1, 2, 3 and 4
- Notify wholesale customers of actions being taken and request them to implement similar procedures
- **Requires Notification to TCEQ –** Irrigation of landscaped areas is absolutely prohibited
- **Requires Notification to TCEQ –** Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is absolutely prohibited

11.8 Procedure for Granting Variances to the Plan

The Mayor and his/her designee may grant, in writing, temporary variances for existing water uses otherwise prohibited under this water resource and emergency management plan if one or more of the following conditions are met:

- Failure to grant such a variance would cause an emergency condition adversely affecting health, sanitation, or fire safety for the public or the person or entity requesting the variance
- Compliance with this plan cannot be accomplished due to technical or other limitations
- Alternative methods that achieve the same level of reduction in water use can be

implemented

Variances shall be granted or denied at the discretion of the Mayor or his/her designee. All petitions for variances should be in writing and should include the following information:

- Name and address of the petitioner(s)
- Purpose of water use
- Specific provisions from which relief is requested
- Detailed statement of the adverse effect of the provision from which relief is requested
- Description of relief requested
- Period of time for which the variance is sought
- Alternative measures that will be taken to reduce water use
- Other pertinent information

11.9 Procedure for Enforcing Mandatory Water Use Restrictions

Mandatory water use restrictions may be imposed in Stage 3, Stage 4 and Stage 5 drought contingency and water emergency response stages. These mandatory water use restrictions will be enforced by warnings and penalties as follows:

- No person shall knowingly or intentionally allow the use of water from the City of Gainesville 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 the Mayor or his/her designee, in accordance with the provisions of this Plan.
- On the first violation, customers will be given a written warning that they have violated the mandatory water use restriction.
- On the second and subsequent violations, citations may be issued to customers, with fines of not less than Twenty Dollars ($20.00) per incident and not to exceed Two Thousand Dollars ($2,000.00) per incident.
- After two violations have occurred, the City of Gainesville may install a flow restrictor in the line to limit the amount of water that may pass through the meter in a 24-hour period.
- After three violations have occurred, the City of Gainesville may cut off water service to the customer.

Appendix G contains City of Gainesville ordinance adopted by the City Council approving the water conservation and water resource and emergency management plan, including enforcement of same.

11.10 Coordination with the Regional Water Planning Groups

Appendix H includes a copy of a letter sent to the Chair of the Region C Water Planning Group with this Water Conservation and Water Resource and Emergency Management Plan.

11.11 Review and Update of Water Resource and Emergency Management Plan

As required by TCEQ rules, City of Gainesville staff shall review the Water Conservation and Water

Resource and Emergency Management Plan every five years. The plan will be reviewed and restructured as appropriate based on new or updated information.

Appendix A
List of References

(1) Title 30 of the Texas Administrative Code, Part 1, Chapter 288, Subchapter A, Rules 288.1, 288.2, and Subchapter B, Rule 288.20

Appendix B

Texas Administrative Code

TITLE 30	ENVIRONMENTAL QUALITY
PART 1	TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
CHAPTER 288	WATER CONSERVATION PLANS, DROUGHT CONTINGENCY PLANS, GUIDELINES AND REQUIREMENTS
SUBCHAPTER A	WATER CONSERVATION PLANS
RULE §288.1	Definitions

The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise.

(1) Agricultural or Agriculture--Any of the following activities:

(A) cultivating the soil to produce crops for human food, animal feed, or planting seed or for the production of fibers;

(B) the practice of floriculture, viticulture, silviculture, and horticulture, including the cultivation of plants in containers or non-soil media by a nursery grower;

(C) raising, feeding, or keeping animals for breeding purposes or for the production of food or fiber, leather, pelts, or other tangible products having a commercial value;

(D) raising or keeping equine animals;

(E) wildlife management; and

(F) planting cover crops, including cover crops cultivated for transplantation, or leaving land idle for the purpose of participating in any governmental program or normal crop or livestock rotation procedure.

(2) Agricultural use--Any use or activity involving agriculture, including irrigation.

(3) Best management practices--Voluntary efficiency measures that save a quantifiable amount of water, either directly or indirectly, and that can be implemented within a specific time frame.

(4) 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 water supply is made available for future or alternative uses.

(5) Commercial use--The use of water by a place of business, such as a hotel, restaurant, or office building. This does not include multi-family residences or agricultural, industrial, or institutional users.

(6) Drought contingency plan--A strategy or combination of strategies for temporary supply and demand management responses to temporary and potentially recurring water supply shortages and other water supply emergencies. A drought contingency plan may be a separate document identified as such or may be contained within another water management document(s).

(7) Industrial use--The use of water in processes designed to convert materials of a lower order of value into forms having greater usability and commercial value, and the development of power by means other than hydroelectric, but does not include agricultural use.

(8) Institutional use--The use of water by an establishment dedicated to public service, such as a

school, university, church, hospital, nursing home, prison, or government facility. All facilities dedicated to public service are considered institutional regardless of ownership.

(9) Irrigation--The agricultural use of water for the irrigation of crops, trees, and pastureland, including, but not limited to, golf courses and parks which do not receive water from a public water supplier.

(10) Irrigation water use efficiency--The percentage of that amount of irrigation water which is beneficially used by agriculture crops or other vegetation relative to the amount of water diverted from the source(s) of supply. Beneficial uses of water for irrigation purposes include, but are not limited to, evapotranspiration needs for vegetative maintenance and growth, salinity management, and leaching requirements associated with irrigation.

(11) Mining use--The use of water for mining processes including hydraulic use, drilling, washing sand and gravel, and oil field re-pressuring.

(12) Municipal use--The use of potable water provided by a public water supplier as well as the use of sewage effluent for residential, commercial, industrial, agricultural, institutional, and wholesale uses.

(13) Nursery grower--A person engaged in the practice of floriculture, viticulture, silviculture, and horticulture, including the cultivation of plants in containers or nonsoil media, who grows more than 50% of the products that the person either sells or leases, regardless of the variety sold, leased, or grown. For the purpose of this definition, grow means the actual cultivation or propagation of the product beyond the mere holding or maintaining of the item prior to sale or lease, and typically includes activities associated with the production or multiplying of stock such as the development of new plants from cuttings, grafts, plugs, or seedlings.

(14) Pollution--The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property, or to the public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

(15) Public water supplier--An individual or entity that supplies water to the public for human consumption.

(16) Regional water planning group--A group established by the Texas Water Development Board to prepare a regional water plan under Texas Water Code, §16.053.

(17) Residential gallons per capita per day--The total gallons sold for residential use by a public water supplier divided by the residential population served and then divided by the number of days in the year.

(18) Residential use--The use of water that is billed to single and multi-family residences, which applies to indoor and outdoor uses.

(19) Retail public water supplier--An individual or entity that for compensation supplies water to the public for human consumption. The term does not include an individual or entity that supplies water to itself or its employees or tenants when that water is not resold to or used by others.

(20) Reuse--The authorized use for one or more beneficial purposes of use of water that remains unconsumed after the water is used for the original purpose of use and before that water is either disposed of or discharged or otherwise allowed to flow into a watercourse, lake, or other body of state-owned water.

(21) Total use--The volume of raw or potable water provided by a public water supplier to billed customer sectors or nonrevenue uses and the volume lost during conveyance, treatment, or transmission of that water.

(22) Total gallons per capita per day (GPCD)--The total amount of water diverted and/or pumped for potable use divided by the total permanent population divided by the days of the year. Diversion volumes of reuse as defined in this chapter shall be credited against total diversion volumes for the purposes of calculating GPCD for targets and goals.

(23) Water conservation coordinator--The person designated by a retail public water supplier that is responsible for implementing a water conservation plan.

(24) Water conservation plan--A strategy or combination of strategies for reducing the volume of water withdrawn from a water supply source, for reducing the loss or waste of water, for maintaining or improving the efficiency in the use of water, for increasing the recycling and reuse of water, and for preventing the pollution of water. A water conservation plan may be a separate document identified as such or may be contained within another water management document(s).

(25) Wholesale public water supplier--An individual or entity that for compensation supplies water to another for resale to the public for human consumption. The term does not include an individual or entity that supplies water to itself or its employees or tenants as an incident of that employee service or tenancy when that water is not resold to or used by others, or an individual or entity that conveys water to another individual or entity, but does not own the right to the water which is conveyed, whether or not for a delivery fee.

(26) Wholesale use--Water sold from one entity or public water supplier to other retail water purveyors for resale to individual customers.

Source Note: The provisions of this §288.1 adopted to be effective May 3, 1993, 18 TexReg 2558; amended to be effective February 21, 1999, 24 TexReg 949; amended to be effective April 27, 2000, 25 TexReg 3544; amended to be effective August 15, 2002, 27 TexReg 7146; amended to be effective October 7, 2004, 29 TexReg 9384; amended to be effective January 10, 2008, 33 TexReg 193; amended to be effective December 6, 2012, 37 TexReg 9515; amended to be effective August 16, 2018, 43 TexReg 5218

Texas Administrative Code

TITLE 30	ENVIRONMENTAL QUALITY
PART 1	TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
CHAPTER 288	WATER CONSERVATION PLANS, DROUGHT CONTINGENCY PLANS, GUIDELINES AND REQUIREMENTS

(a) A water conservation plan for municipal water use by public water suppliers must provide information in response to the following. If the plan does not provide information for each requirement, the public water supplier shall include in the plan an explanation of why the requirement is not applicable.

(1) Minimum requirements. All water conservation plans for municipal uses by public water suppliers must include the following elements:

(A) a utility profile in accordance with the Texas Water Use Methodology, including, but not limited to, information regarding population and customer data, water use data (including total gallons per capita per day (GPCD) and residential GPCD), water supply system data, and wastewater system data;

(B) a record management system which allows for the classification of water sales and uses into the most detailed level of water use data currently available to it, including, if possible, the sectors listed in clauses (i) - (vi) of this subparagraph. Any new billing system purchased by a public water supplier must be capable of reporting detailed water use data as described in clauses (i) - (vi) of this subparagraph:

(i) residential;

(I) single family;

(II) multi-family;

(ii) commercial;

(iii) institutional;

(iv) industrial;

(v) agricultural; and,

(vi) wholesale.

(C) specific, quantified five-year and ten-year targets for water savings to include goals for water loss programs and goals for municipal use in total GPCD and residential GPCD. The goals established by a public water supplier under this subparagraph are not enforceable;

(D) metering device(s), within an accuracy of plus or minus 5.0% in order to measure and account for the amount of water diverted from the source of supply;

(E) a program for universal metering of both customer and public uses of water, for meter testing and repair, and for periodic meter replacement;

(F) measures to determine and control water loss (for example, periodic visual inspections along distribution lines; annual or monthly audit of the water system to determine illegal connections; abandoned services; etc.);

(G) a program of continuing public education and information regarding water conservation;

(H) a water rate structure which is not "promotional," i.e., a rate structure which is cost-based and which does not encourage the excessive use of water;

(I) a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin in order to optimize available water supplies; and

(J) a means of implementation and enforcement which shall be evidenced by:

(i) a copy of the ordinance, resolution, or tariff indicating official adoption of the water conservation plan by the water supplier; and

(ii) a description of the authority by which the water supplier will implement and enforce the conservation plan; and

(K) documentation of coordination with the regional water planning groups for the service area of the public water supplier in order to ensure consistency with the appropriate approved regional water plans.

(2) Additional content requirements. Water conservation plans for municipal uses by public drinking water suppliers serving a current population of 5,000 or more and/or a projected population of 5,000 or more within the next ten years subsequent to the effective date of the plan must include the following elements:

(A) a program of leak detection, repair, and water loss accounting for the water transmission, delivery, and distribution system;

(B) a requirement in every wholesale water supply contract entered into or renewed after official adoption of the plan (by either ordinance, resolution, or tariff), and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements in this chapter. If the customer intends to resell the water, the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures in accordance with the provisions of this chapter.

(3) Additional conservation strategies. Any combination of the following strategies shall be selected by the water supplier, in addition to the minimum requirements in paragraphs (1) and (2) of this subsection, if they are necessary to achieve the stated water conservation goals of the plan. The commission may require that any of the following strategies be implemented by the water supplier if the commission determines that the strategy is necessary to achieve the goals of the water conservation plan:

(A) conservation-oriented water rates and water rate structures such as uniform or increasing block rate schedules, and/or seasonal rates, but not flat rate or decreasing block rates;

(B) adoption of ordinances, plumbing codes, and/or rules requiring water-conserving plumbing fixtures to be installed in new structures and existing structures undergoing substantial modification or addition;

(C) a program for the replacement or retrofit of water-conserving plumbing fixtures in existing structures;

(D) reuse and/or recycling of wastewater and/or graywater;

(E) a program for pressure control and/or reduction in the distribution system and/or for customer connections;

(F) a program and/or ordinance(s) for landscape water management;

(G) a method for monitoring the effectiveness and efficiency of the water conservation plan; and

(H) any other water conservation practice, method, or technique which the water supplier shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

(b) A water conservation plan prepared in accordance with 31 TAC §363.15 (relating to Required Water Conservation Plan) of the Texas Water Development Board and substantially meeting the requirements of this section and other applicable commission rules may be submitted to meet application requirements in accordance with a memorandum of understanding between the commission and the Texas Water Development Board.

(c) A public water supplier for municipal use shall review and update its water conservation plan,

as appropriate, based on an assessment of previous five-year and ten-year targets and any other new or updated information. The public water supplier for municipal use shall review and update the next revision of its water conservation plan every five years to coincide with the regional water planning group.

Source Note: The provisions of this §288.2 adopted to be effective May 3, 1993, 18 TexReg 2558; amended to be effective February 21, 1999, 24 TexReg 949; amended to be effective April 27, 2000, 25 TexReg 3544; amended to be effective October 7, 2004, 29 TexReg 9384; amended to be effective December 6, 2012, 37 TexReg 9515

Texas Administrative Code

TITLE 30	ENVIRONMENTAL QUALITY
PART 1	TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
CHAPTER 288	WATER CONSERVATION PLANS, DROUGHT CONTINGENCY PLANS, GUIDELINES AND REQUIREMENTS
SUBCHAPTER B	DROUGHT CONTINGENCY PLANS
RULE §288.20	Drought Contingency Plans for Municipal Uses by Public Water Suppliers

(a) A drought contingency plan for a retail public water supplier, where applicable, must include the following minimum elements.

(1) Minimum requirements. Drought contingency plans must include the following minimum elements.

(A) Preparation of the plan shall include provisions to actively inform the public and affirmatively provide opportunity for public input. Such acts may include, but are not limited to, having a public meeting at a time and location convenient to the public and providing written notice to the public concerning the proposed plan and meeting.

(B) Provisions shall be made for a program of continuing public education and information regarding the drought contingency plan.

(C) The drought contingency plan must document coordination with the regional water planning groups for the service area of the retail public water supplier to ensure consistency with the appropriate approved regional water plans.

(D) The drought contingency plan must include a description of the information to be monitored by the water supplier, and specific criteria for the initiation and termination of drought response stages, accompanied by an explanation of the rationale or basis for such triggering criteria.

(E) The drought contingency plan must include drought or emergency response stages providing for the implementation of measures in response to at least the following situations:

(i) reduction in available water supply up to a repeat of the drought of record;

(ii) water production or distribution system limitations;

(iii) supply source contamination; or

(iv) system outage due to the failure or damage of major water system components (e.g., pumps).

(F) The drought contingency plan must include specific, quantified targets for water use reductions to be achieved during periods of water shortage and drought. The entity preparing the plan shall establish the targets. The goals established by the entity under this subparagraph are not enforceable.

(G) The drought contingency plan must include the specific water supply or water demand management measures to be implemented during each stage of the plan including, but not limited to, the following:

(i) curtailment of non-essential water uses; and

(ii) utilization of alternative water sources and/or alternative delivery mechanisms with the prior approval of the executive director as appropriate (e.g., interconnection with another water system, temporary use of a non-municipal water supply, use of reclaimed water for non-potable purposes, etc.).

(H) The drought contingency plan must include the procedures to be followed for the initiation or termination of each drought response stage, including procedures for notification of the public.

(I) The drought contingency plan must include procedures for granting variances to the plan.

(J) The drought contingency plan must include procedures for the enforcement of mandatory water use restrictions, including specification of penalties (e.g., fines, water rate surcharges, discontinuation of service) for violations of such restrictions.

(2) Privately-owned water utilities. Privately-owned water utilities shall prepare a drought contingency plan in accordance with this section and incorporate such plan into their tariff.

(3) Wholesale water customers. Any water supplier that receives all or a portion of its water supply from another water supplier shall consult with that supplier and shall include in the drought contingency plan appropriate provisions for responding to reductions in that water supply.

(b) A wholesale or retail water supplier shall notify the executive director within five business days of the implementation of any mandatory provisions of the drought contingency plan.

(c) The retail public water supplier shall review and update, as appropriate, the drought contingency plan, at least every five years, based on new or updated information, such as the adoption or revision of the regional water plan.

Source Note: The provisions of this §288.20 adopted to be effective February 21, 1999, 24 TexReg 949; amended to be effective April 27, 2000, 25 TexReg 3544; amended to be effective October 7, 2004, 29 TexReg 9384

Texas Water Development Board

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

CONTACT INFORMATION

Name of Utility: City of Gainesville

Public Water Supply Identification Number (PWS ID): TX0490001

Certificate of Convenience and Necessity (CCN) Number: 12957

Surface Water Right ID Number: 4881-B

Wastewater ID Number: 20885

Contact: First Name: RON Last Name: SELLMAN

Title: DIRECTOR OF PUBLIC SERVICES

Address: 200 SOUTH RUSK STREET City: GAINESVILLE State: TX

Zip Code: 76240 Zip+4: Email: RSELLMAN@COGTX.ORG

Telephone Number: 9406684540 Date:

Is this person the designated Conservation Coordinator? (•) Yes ( ) No

Regional Water Planning Group: C

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: 69

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	16,500	0	16,747
2017	16,500	0	16,747
2016	16,200	0	16,443
2015	16,200	0	16,443
2014	16,200	0	16,443

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	16,500	0	16,747
2030	21,500	0	21,822
2040	24,500	0	24,867
2050	26,500	0	26,867
2060	29,000	0	29,435

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

Projected population source Region C Water Planning Group Website.

Texas Water Development Board

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	757,042,126	0	0	757,042,126	126
2017	740,986,674	0	0	740,986,674	123
2016	769,447,475	0	0	769,447,475	130
2015	773,092,929	0	0	773,092,929	131
2014	790,825,000	0	0	790,825,000	134
Historic Average	766,278,841	0	0	766,278,841	129

C. Water Supply System

1. Designed daily capacity of system in gallons 7,500,000

2. Storage Capacity

2a. Elevated storage in gallons: 1,750,000

2b. Ground storage in gallons: 2,275,000

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	16,500	675,183,075
2021	17,000	706,387,306
2022	17,500	737,591,537
2023	18,000	768,795,768
2024	18,500	800,000,000
2025	19,000	826,000,000
2026	19,500	852,000,000
2027	20,000	878,000,000
2028	20,500	904,000,000
2029	21,000	930,000,000

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

These projected demands are for normal precipitation years and may increase or decrease depending upon whether the actual precipitation is above or below normal, population growth rate, and land use patterns.

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
Sanfran Seats US LLC	Industrial	7,977,000	Treated
OTHER MANUFACTURING COOKE COUNTY	Industrial	4,682,000	Treated
GAF MATERIALS CORPORATION	Industrial	3,551,000	Treated
PETROFLEX LTD	Industrial	1,137,000	Treated
GAINESVILLE PLANT	Industrial	982,000	Treated

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

Customer	Water Use Category	Annual Water Use	Treated or Raw

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

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	5,678	65.57 %
Residential - Multi-Family	1,446	16.70 %
Industrial	11	0.13 %
Commercial	1,014	11.71 %
Institutional	511	5.90 %
Agricultural	0	0.00 %
Total	8,660	100.00 %

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

	Net Number of New Retail Connections						
Year	**Residential - Single Family**	**Residential - Multi-Family**	**Industrial**	**Commercial**	**Institutional**	**Agricultural**	**Total**
2018	1,213	3	4	76	0	0	1,296
2017	1,212	10	2	85	2	0	1,311
2016	1,247	4	12	96	1	0	1,360
2015	1,398	3	3	66	5	0	1,475
2014	1,391	3	2	104	3	0	1,503

Texas Water Development Board

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	424,353,000	47,983,000	18,329,000	142,396,000	32,130,000	0	665,191,000
2017	439,752,000	48,033,000	19,838,000	124,278,000	26,731,000	0	658,632,000
2016	369,431,500	50,949,140	22,293,140	145,085,081	28,955,230	0	616,714,091
2015	330,027,000	46,053,000	28,605,000	163,195,000	36,221,000	0	604,101,000
2014	338,536,000	10,726,000	32,560,000	221,948,000	17,393,000	0	621,163,000

C. Residential Water Use

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

Year	Total Residential GPCD
2018	199
2017	81
2016	71
2015	64
2014	58
Historic Average	95

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	59,489,754	61,652,000	56,725,629	61,208,000	60,101,000
February	50,041,801	52,380,000	55,799,587	51,761,977	58,562,000
March	58,023,894	57,284,000	55,366,000	59,486,423	61,520,000
April	59,104,123	55,940,000	54,482,000	54,961,429	62,560,000
May	64,095,240	56,763,000	56,162,191	55,023,330	73,981,000
June	76,333,546	63,475,000	62,491,407	62,555,479	74,750,750
July	85,535,766	67,108,741	72,717,000	76,449,846	77,407,000
August	75,322,500	64,509,294	74,535,000	95,007,065	73,476,000
September	58,030,025	63,909,000	65,791,000	63,821,776	72,232,000
October	57,120,607	62,774,168	62,751,000	72,973,858	63,296,000
November	56,781,071	59,110,345	57,500,000	53,276,189	56,226,000
December	54,953,407	70,153,233	59,715,000	56,468,669	56,713,000
Total	754,831,734	735,058,781	734,035,814	762,994,041	790,824,750

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	20,522,000	0	19,420,000	0	0
February	18,705,000	0	10,340,000	3,076,000	0
March	28,023,000	0	0	12,249,000	0
April	27,889,000	0	0	17,255,000	0
May	13,428,000	0	2,104,000	26,243,000	0
June	15,727,000	16,097,000	257,000	18,542,000	0
July	18,002,000	5,133,000	0	14,612,000	0
August	11,674,000	7,811,000	0	13,376,000	0
September	13,642,000	0	0	14,422,000	0
October	14,263,000	16,159,000	0	19,224,000	0
November	13,312,000	17,768,000	0	15,406,000	0
December	6,297,000	16,522,000	0	19,694,000	0
Total	201,484,000	79,490,000	32,121,000	174,099,000	0

3. Summary of seasonal and annual water use.

	Summer RETAIL (Treated + Raw)	Total RETAIL (Treated + Raw)
2018	282,594,812	956,315,734
2017	224,134,035	814,548,781
2016	210,000,407	766,156,814
2015	280,542,390	937,093,041
2014	225,633,750	790,824,750
Average in Gallons	244,581,078.80	852,987,824.00

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	60,539,866	10	8.00 %
2017	52,739,894	9	7.12 %
2016	115,590,360	20	15.02 %
2015	121,229,529	21	15.68 %
2014	81,723,752	14	10.46 %
Average	86,364,680	15	11.26 %

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	2,620,043	3071682	1.1724
2017	2,231,640	2436239	1.0917
2016	2,099,059	2282613	1.0874
2015	2,567,378	3049373	1.1877
2014	2,166,643	2452540	1.1320

G. Summary of Historic Water Use

Water Use Category	Historic Average	Percent of Connections	Percent of Water Use
Residential - Single Family	380,419,828	65.57 %	60.06 %
Residential - Multi-Family	40,973,972	16.70 %	6.47 %
Industrial	24,325,206	0.13 %	3.84 %
Commercial	159,380,438	11.71 %	25.16 %
Institutional	28,285,926	5.90 %	4.47 %
Agricultural	0	0.00 %	0.00 %

Texas Water Development Board

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: 4,140,000

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

Water Use Category	Metered	Unmetered	Total Connections	Percent of Total Connections
Municipal		49	49	5.77 %
Industrial		13	13	1.53 %
Commercial		775	775	91.28 %
Institutional		12	12	1.41 %
Agricultural			0	0.00 %
Total		849	849	100.00 %

3. Percentage of water serviced by the wastewater system: 0.00 %

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	40,097,000	57,194,000	56,150,000	49,691,000	40,018,000
February	57,300,000	49,466,000	52,066,000	46,141,000	45,722,000
March	49,971,000	47,026,000	78,818,000	63,530,000	48,624,000
April	40,097,000	52,703,000	68,776,000	83,762,000	48,963,000
May	40,097,000	48,468,000	83,664,000	157,888,000	47,731,000
June	39,870,000	51,779,000	84,259,000	78,164,000	45,213,000
July	39,976,000	48,229,000	54,522,000	50,841,000	40,571,000
August	42,444,000	52,292,000	54,746,000	45,148,000	49,883,000
September	38,923,000	40,959,000	50,377,000	42,958,000	46,644,000
October	102,817,000	41,851,000	52,208,000	45,675,000	46,055,000
November	64,691,000	38,797,000	52,797,000	67,518,000	45,436,000
December	75,942,000	43,259,000	49,508,000	72,084,000	45,436,000
Total	632,225,000	572,023,000	737,891,000	803,400,000	550,296,000

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	0
Plant wash down	0
Chlorination/de-chlorination	0
Industrial	0
Landscape irrigation (park,golf courses)	4,000,000
Agricultural	0
Discharge to surface water	0
Evaporation Pond	0
Other	0
Total	4,000,000

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

C. Wastewater System Data Comment

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

Texas Water Development Board

Water Conservation Plan Annual Report
Retail Water Supplier

CONTACT INFORMATION

Name of Utility: City of Gainesville

Public Water Supply Identification Number (PWS ID): TX0490001

Certification of Convenience and Necessity (CCN) Number: 12957

Surface Water Right ID Number: 4881-B

Wastewater ID Number: 20885

Check all that apply:

- [x] Retail Water Supplier
- [ ] Wholesale Water Supplier
- [x] Wastewater Treatment Utility

Address: 200 S. Rusk City: Gainesville Zip Code: 76240

Email: bburgan@cogtx.org Telephone Number: 9406684540

Regional Water Planning Group: C

Groundwater Conservation District:

Contact: First Name: Billy Last Name: Burgan

Title: Supervisor of Water Prod.

Is this person the designated Conservation Coordinator? ○ Yes ◉ No

Coordinator: First Name: Ron Last Name: Sellman

Title: Utilities Director

Address: 104 W. Hird City: Gainesville Zip Code: 76240

Email: rsellman@cogtx.org Telephone Number: 940-668-4540

Regional Water Planning Group: C

Groundwater Conservation District:

Reporting Period (Calendar year):

Period Begin (mm/yyyy): 01/2018 Period End (mm/yyyy): 12/2018

Check all that apply:

- ☐ Received financial assistance of $500,000 or more from TWDB
- ☑ Have 3,300 or more retail connections
- ☑ Have a surface water right with TCEQ

SYSTEM DATA

1. For this reporting period, select the category(s) used to classify customer water usage:

	Retail Customer Water Usage Categories
☑	Residential - Single Family
☑	Residential - Multi-family
☑	Industrial
☑	Commercial
☑	Institutional
☐	Agricultural

Retail Customers Categories*

- Residential Single Family
- Residential Multi-Family
- Industrial
- Commercial
- Institutional
- Agricultural

**Recommended Customer Categories for classifying customer water use. For definitions, refer to Guidance and Methodology on Water Conservation and Water Use.*

2. For this reporting period, enter the number of connections for and the gallons of metered retail water used by each category. If the Customer Category does not apply, enter zero or leave blank. These numbers should be the same as those reported on the Water Use Survey.

Retail Customer Category	Number of Connections	Gallons Metered
Residential - Single Family	5,678	424,353,000
Residential - Multi-family	1,446	47,983,000
Industrial	11	18,329,000
Commercial	1,014	142,396,000
Institutional	511	32,130,000
Agricultural	0	0
Total Retail Water Metered[1]	8,660	665,191,000

[1]Residential + Industrial + Commercial + Institutional + Agricultural = Total Retail Water Metered

Water Use Accounting

	Total Gallons During the Reporting Period
1. Corrected Input Volume: The volume of treated water input to the distribution system from own production facilities. Same as line 13b of the Water Loss Audit for reporting periods >= 2015. Same as line 14 of the Water Loss Audit for reporting periods <= 2014.	**757,042,126**
2. Corrected Treated Purchased Water Volume: The amount of treated purchased wholesale water transfered into the utility's distribution system from other water suppliers system. Same as line 14b of the Water Loss Audit for reporting periods >= 2015. Same as line 15 of the Water Loss Audit for reporting periods <= 2014.	**0**
3. Corrected Treated Wholesale Water Sales Volume: The amount of treated wholesale water transfered out of the utility's distribution system, although it may be in the system for a brief time for conveyance reasons. Same as line 15b of the Water Loss Audit for reporting periods >= 2015. Same as line 16 of the Water Loss Audit for reporting periods <= 2014.	**0**
4. Total System Input Volume: This is the sum of the corrected input volume plus corrected treated purchased water volume minus corrected treated wholesale water sales volume. Same as line 16 of the Water Loss Audit for reporting periods >= 2015. Same as line 17 of the Water Loss Audit for reporting periods <= 2014. Produced + Imported - Exported = Total System Input Volume	**757,042,126**
5. Billed Metered: All retail water sold and metered. Same as line 17 of the Water Loss Audit for reporting periods >= 2015. Same as line 18 of the Water Loss Audit for reporting periods <= 2014.	**665,191,000**
6. Other Authorized Consumption: Water that is authorized for other uses such as back flushing, line flushing, storage tank cleaning, fire department use, municipal government offices or municipal golf courses/parks. This water may be metered or unmetered. Same as lines 18, 19, and 20 of the Water Loss Audit for reporting periods >= 2015. Same as lines 19, 20, and 21 of the Water Loss Audit for reporting periods <= 2014.	**31,311,260**
7. Total Authorized Consumption: All water that has been authorized for use. Same as Line 21 of the Water Loss Audit for reporting periods >= 2015. Same as line 22 of the Water Loss Audit for reporting periods <= 2014. Total Billed and Metered Retail Water + Other Authorized Consumption = Total Authorized Consumption	**696,502,260**

8. Total Apparent Losses: Water that has been consumed but not properly measured or billed (losses due to customer meter inaccuracy, systematic data handling discrepancy and/or unauthorized consumption such as theft). Same as line 27 of the Water Loss Audit for reporting periods >= 2015. Same as line 28 of the Water Loss Audit for reporting periods <= 2014.	**14,281,267**
9. Total Real Loss: Physical losses from the distribution system prior to reaching the customer destination (losses due to reported breaks and leaks, physical losses from the system or mains and/or storage overflow). Same as line 30 of the Water Loss Audit for reporting periods >= 2015. Same as line 31 of the Water Loss Audit for reporting periods <= 2014.	**46,258,599**
10. Total Water Loss: Apparent + Real = Total Water Loss	**60,539,866**

Programs and Activities

1. What year did your entity adopt or revise their most recent Water Conservation Plan? 2014

2. Does The Plan incorporate Best Management Practices? (•) Yes ( ) No

3. Using the table below select the types of Best Management Practices or water conservation and reuse strategies actively administered during this reporting period and estimate the savings incurred in implementing water conservation and reuse activities and programs. Leave fields blank if unknown. **Please separate reuse volumes from gallons saved.**

Methods and techniques for determining gallons saved are unique to each utility as they conduct internal cost analyses and long-term financial planning. Texas Best Management Practice can be found at TWDB's Wate Conservation Best Management Practices webpage. The Alliance for Efficiency Water Conservation Tracking Tool may offer guidance on determining and calculating savings for individual BMPs.

Best Management Practice	Check if Implemented	Estimated Gallons Saved	Estimated Gallons Reused
Conservation Analysis and Planning			
Conservation Coordinator	☐		
Cost Effective Analysis	☐		
Water Survey for Single Family and Multi-family Customers	☐		
Financial			
Wholesale Agency Assistance Programs	☐		
Water Conservation Pricing	☐		
System Operations			
Metering New Connections and Retrofitting Existing Connections	☐		
System Water Audit and Loss Control	☐		

Landscaping			
Landscape Irrigation Conservation and Incentives			
Athletic Fields Conservation			
Golf Course Conservation			
Park Conservation			
Residential Landscape Irrigation Evaluation			
Education and Public Awareness			
School Education	✓	100,000	
Public Information			
Small Utility Outreach and Education			
Partnerships with Nonprofit Organizations			
Rebate, Retrofit, and Incentive Programs			
Conservation Programs for ICI Accounts			
Residential Clothes Washer Incentive Program			
Water Wise Landscape Design and Conversion Programs			
Showerhead, Aerator, and Toilet Flapper Retrofit			
Residential Toilet Replacement Programs			
ICI Incentive Programs			
Conservation Technology & Resuse			
New Construction Graywater			
Rainwater Harvesting and Condensate Reuse			
Reuse for On-site Irrigation	✓		1,200,000
Reuse for Plant Washdown			
Reuse for Chlorination/Dechlorination			
Reuse for Industry			
Reuse for Agriculture			
Regulatory and Enforcement			
Prohibition on Wasting Water			
Retail			
Other			
Totals		**100,000**	**1,200,000**

4. For this reporting period, estimate the savings from water conservation activities and programs.

Gallons Saved/Conserved	Gallons Recycled/Reused	Total Volume of Water Saved[1]	Dollar Value of Water Saved[2]
100,000	1,200,000	1,300,000	9,600

[1]Estimated Gallons Saved + Estimated Gallons Recycled/Reused = Total Volume Saved

[2]Estimated this value by taking into account water savings, the cost of treatment or purchase of water, and deferred capital cost due to conservation.

5. Comments or Explanations Regarding Data Entered in Sections Above.
Files to support or explain this may be attached below.

6. During this reporting period, did your rates or rate structure change? (•) Yes ( ) No

Select the type of rate pricing structure used. Check all that apply.

☐	Uniform Rates
☑	Flat Rates
☐	Inclining/Inverted Block Rates
☐	Declining Block Rates
☐	Seasonal Rates
☑	Water Budget Based Rates
☐	Excess Use Rates
☐	Drought Demand Rates
☐	Tailored Rates
☐	Surcharge - usage demand
☑	Surcharge - seasonal
☐	Surcharge - drought
☐	Other

7. For this reporting period, select the public awareness or educational activities used.

Name	Implemented This Year	Number Of Times This Year	Total Population Reached this Year
Brochures Distributed	☐		
Messages Provided on Utility Bills	☐		
Press Releases	☐		
TV Public Service Announcements	☐		
Radio Public Service Announcements	☐		
Educational School Programs	☐		
Displays, Exhibits, and Presentations	☐		
Community Events	☐		
Social Media campaign - Facebook	☐		
Social Media campaign - Twitter	☐		
Social Media campaign - Instagram	☐		
Social Media campaign - YouTube	☐		
Facility Tours	☑	1	
Other	☐		
Total		1	

Leak Detection and Water Loss

1. During this reporting period, how many leaks were repaired in the system or at service connections? 195

2. Select the main cause(s) of water loss in your system.

	Water Loss Causes
☑	Distribution line leaks and breaks
☐	Unauthorized use and theft

☑	Master meter problems
☑	Customer meter problems
☑	Record and data problems
☐	Other

3. For this reporting period, provide the following information on your distribution lines.

Total Length of Main Lines (miles)	Total Length Repaired (feet)	Total Length Replaced (feet)
186		6487

4. For this reporting period, provide the following information regarding your meters:

Type of Meter	Total Number	Total Tested	Total Repaired	Total Replaced
Production Meters	10	10	0	0
Meters larger than 1 1/2 inches	1536	0	0	0
Meters 1 1/2 inches or smaller	7124	17	144	225

5. Does your system have automated meter reading? ◉ Yes ○ No

Texas Water Development Board

Program Effectiveness

1. Program Effectiveness

   In your opinion, how would you rank the overall effectiveness of your conservation programs and activities?

Customer Classification	Less Than Effective	Somewhat Effective	Highly Effective	Does Not Apply
Residential Customers	○	○	◉	○
Industrial Customers	○	○	◉	○
Institutional Customers	○	○	◉	○
Commercial Customers	○	○	◉	○
Agricultural Customers	○	○	○	◉

2. During the reporting period, did you implement your Drought Contingency Plan? ○ Yes ◉ No

3. Select the areas for which you would like to receive more technical assistance:

	Technical Assistance Areas
☑	Best Management Practices
☑	Drought Contingency Plans
☐	Landscape Irrigation
☑	Leak Detection and Equipment
☐	Rainwater Harvesting
☑	Rate Structures
☑	Educational Resources
☑	Water Conservation Annual Reports
☑	Water Conservation Plans
☑	Water IQ: Know Your Water
☑	Water Loss Audits
☑	Recycling and Reuse

Texas Water Development Board

Water Loss, Target and Goals

Total, Residential and Water Loss Gallons Per Capita per Day (GPCD) and Water Loss Percentage

The tables below display your current GPCD totals and water loss percentage for your service area.

Total System Input in Gallons Water Produced + Wholesale Imported - Wholesale Exported	Retail Population[1]	Total GPCD (System Input / Retail Population) / 365
757,042,126	16,500	126

[1]Retail Population is the total permanent population of the service area, including single family, multi-family, and group quarter populations

Residential Use in Gallons (Single Family + Multi-family)	Residential Population[2]	Residential GPCD (Residential Use / Residential Population) / 365
472,336,000	16,500	78

[2]Residential Population is the total residential population of the service area, including only single family and multi-family populations

Total Water Loss in Gallons Apparent + Real = Total Water Loss	Retail Population	Water Loss GPCD[3]	Water Loss Percent
60,539,866	16,500	10	8.00%

[3](Total Water Loss / Residential Population) / 365 = Water Loss GPCD
(Total Water Loss / Total System Input) * 100 = Water Loss Percentage

The table below displays the specific and quantified five-year and ten-year goals listed in your current Water Conservation Plan alongside the current GPCD and water loss totals.

Achieve Date	Target for Total GPCD	Current Total GPCD	Target for Residential GPCD	Current Residential GPCD	Target for Water Loss GPCD	Current Water Loss GPCD	Target for Water Loss Percentage	Current Water Loss Percentage
Five-year Target Date 2019	130	126	130	78	20	10	15.38 %	8.00 %
Ten-year Target Date 2024	128	126	128	78	20	10	15.63 %	8.00 %

Appendix E

Excerpt from City of Gainesville Code of Ordinances

Sec. 19-9. Furnishing water to another without authorization.
(a) It shall be unlawful for any person without the permission of the director of utilities of the city to connect, install or permit any pipe or plumbing fixtures to be installed or connected in or about any place or premises owned or controlled by him so that water may be furnished by the city through a meter not installed for such person, thereby permitting such person for whom a meter is not installed to receive water from the city through the meter of another.
(b) It shall be unlawful for any person for whom a water meter has been installed to permit his pipe or plumbing fixtures to be connected or in any manner remain connected so that any other person, not connected with his family or place of business, may be furnished water through his meter without having a meter installed for such other person, without the permission of the director of utilities.
(c) It shall also be unlawful for any person, not belonging to the same family or connected with the same place of business, for whom a water meter has not been installed to allow or permit his pipe or plumbing fixtures to be installed or to remain installed so that he may receive water through the meter of another person for whom a water meter has been installed, without the permission of the director of utilities.
(Ord. No. 673-3-96, § 2, 3-5-96)

Sec. 19-10. Unlawful procurement of water.
It shall be unlawful for any person to resort to any fraudulent device or arrangement for the purposes of procuring water for himself or any other person from private connections on premises contrary to city regulations or ordinances.
(Ord. No. 673-3-96, § 2, 3-5-96)

Published Saturday, May 25 and Friday, May 31, 2019

ORDINANCE NO. 1457-05-2019

AN ORDINANCE ADOPTING A WATER CONSERVATION AND WATER RESOURCE AND EMERGENCY MANAGEMENT PLAN FOR THE CITY OF GAINESVILLE, TEXAS TO PROMOTE THE RESPONSIBLE USE OF WATER AND TO PROVIDE FOR PENALITES AND/OR THE DISCONNECTION OF WATER SERVICE FOR NONCOMPLIANCE WITH THE PROVISIONS OF THE WATER CONSERVATION AND DROUGHT CONTINGENCY AND WATER EMERGENCY RESPONSE PLAN; PROVIDING FOR SEVERABILITY; PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES, PROVIDING FOR PUBLICATION; PROVIDING AN EFFECTIVE DATE, AND MAKING AN OPEN MEETING FINDING.

WHEREAS, the City of Gainesville, Texas ("City") recognizes that the amount of water available to its water customers is limited; and

WHEREAS, the City recognizes that due to natural limitations, drought conditions, system failures, and other acts of God that may occur, the City cannot guarantee an uninterrupted water supply for all purposes at all times; and

WHEREAS, the Water Code and the regulations of the Texas Commission on Environmental Quality ("TCEQ") require that the City adopt a Water Conservation Plan and Water Resource and Emergency Management Plan; and

WHEREAS, the City has determined it is in the best interest of the public to adopt a Water Conservation and Water Resource and Emergency Management Plan; and

WHEREAS, pursuant to Chapter 54 of the Local Government Code, the City is authorized to adopt such policies necessary to preserve and conserve its water resources; and

WHEREAS, the City Council of the City of Gainesville, Texas desires to adopt the attached Water Conservation and Water Resource and Emergency Management Plan as official City policy for the conservation of water.

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

SECTION 1: The City Council hereby approves and adopts the Water Conservation and Water Resource and Emergency Management Plan (the "Plan"), attached hereto as Appendix A, as if recited verbatim herein. The City commits to implement the requirements and procedures set forth in the adopted Plan.

SECTION 2: Any customer, defined pursuant to 30 Texas Administrative Code, Chapter 291, failing to comply with the provisions of the Plan shall be subject to a monetary fine of Twenty Dollars and No/100 ($20.00) and not to exceed Two Thousand Dollars and No/100 ($2,000.00) per incident, and/or discontinuance of water service by the City. Proof of a culpable mental state is not required for a conviction of an offense under this section. Each day a customer fails to comply with the Plan is a separate violation.

The City's authority to seek injunctive or other civil relief available under the law is not limited by this section.

SECTION 3: The City Council does hereby find and declare that sufficient written notice of the date, hour, place and subject of the meeting adopting this Ordinance was posted at a designated place convenient to the public for the time required by law preceding the meeting, that such place of posting was readily accessible at all times to the general public, and that all of the foregoing was done as required by law at all times during which this Ordinance and the subject matter thereof has been discussed, considered and formally acted upon. The City Council further ratifies, approves and confirms such written notice and the posting thereof.

SECTION 4: Should any paragraph, sentence, clause, phrase or word of this Ordinance be declared unconstitutional or invalid for any reason, the remainder of this Ordinance shall not be affected.

SECTION 5: The City Manager or his designee is hereby directed to file a copy of the Plan and this Ordinance with the TCEQ in accordance with Title 30, Chapter 288 of the Texas Administrative Code.

SECTION 6: The City Secretary is hereby authorized and directed to cause publication of the descriptive caption of this Ordinance as an alternative method of publication provided by law.

SECTION 7: Ordinance No.1345-05-2014 adopted on May 20, 2014 is hereby repealed.

SECTION 8: This Ordinance shall be in full force and effect after its passage and publication as required by law.

INTRODUCTION, FIRST READING, CHARTER SUSPENSION

INTRODUCED AND READ FOR THE FIRST TIME BEFORE THE CITY COUNCIL OF THE CITY OF GAINESVILLE ON THE 21ST DAY OF MAY 2019, AT WHICH THE CHARTER PROVISION OF THE CITY OF GAINESVILLE REQUIRING THE READING OF THE ORDINANCE ON THREE SEPARATE OCCASIONS WAS SUSPENDED BY A VOTE OF:

7 AYES 0 NAYS 0 ABSENCES, AND 0 ABSTENTION

ATTEST: Caitlyn Huddleston

CAITLYN HUDDLESTON, CITY SECRETARY **JIM GOLDSWORTHY, MAYOR**

ADOPTION

ADOPTED BY THE CITY COUNCIL OF THE CITY OF GAINESVILLE ON THE 21ST DAY OF MAY 2019.

7 AYES 0 NAYS 0 ABSENCES, AND 0 ABSTENTION

ATTEST: Caitlyn Huddleston

CAITLYN HUDDLESTON, CITY SECRETARY **JIM GOLDSWORTHY, MAYOR**

CITY OF GAINESVILLE, TEXAS SEAL COOKE COUNTY

Gainesville
Totally Texas. All American.

May 22, 2019

Region C Water Planning Group
North Texas Municipal Water District
P.O. Box 2408
Wylie, TX 75098-2408

Re: Water Conservation and Drought Contingency and Water Emergency Response Plan

Dear Sir or Madam:

Enclosed please find a copy of the recently approved Water Conservation and Water Resource and Emergency Management Plan for the City of Gainesville. This copy is being submitted in accordance with the Texas Water Development Board and the Texas Commission on Environmental Quality rules. The City Council of the City of Gainesville approved this plan on May 21, 2019.

Sincerely,

Ron Sellman
Director of Public Services

RS:cb

Enclosure

Appendix H

PUBLIC NOTICE

The City Council of the City of Gainesville Texas will conduct a public meeting at 6:30 p.m. on Tuesday, May 21, 2019 for the purpose of receiving input from the public in preparation of the City of Gainesville Water Conservation and Water Resource and Emergency Management Plan. The public meeting will take place in the Council Chamber of the Gainesville Municipal Building located at 200 S. Rusk Street, Gainesville, TX 76240.