



CITY OF UNIVERSITY PARK

WATER CONSERVATION PLAN

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Water Conservation Plan for

The City of University Park

March 2019

1. INTRODUCTION AND OBJECTIVES

Water supply has always been a key issue in the development of Texas. Additional supplies to meet increased demand will be difficult and expensive to develop. It is important that the City of University Park (the City) make efficient use of its water supplies. The City procures its water from the Dallas County Park Cities Municipal Utility District (the District) who maintains senior water rights in Grapevine Lake. Since Grapevine Lake is the sole source of supply for the District, and since that supply is of a limited volume, conservation of the limited supply is vital to the City and the District.

Recognizing the need for efficient use of existing water supplies, the Texas Commission on Environmental Quality (TCEQ) and the Texas Water Development Board (TWDB) has developed guidelines and requirements governing the development of water conservation plans for public water suppliers. TCEQ and TWDB guidelines and requirements are included in Appendix B and Appendix C, respectively. The objectives of this water conservation plan (Plan) are as follows:

- Reduce seasonal peak demands
- Reduce the loss and waste of water.
- Improve the efficient use of water.
- Decrease unaccounted for water
- Utilize Best Management Practices (BMPs) to achieve objectives

2. APPLICABLE RULES BY THE COMMISSION AND BOARD

2.1 Texas Commission on Environmental Quality

The Texas Commission on Environmental Quality (TCEQ) rules governing the development of water conservation plans for municipal uses by public water suppliers are contained in Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.2 of the Texas Administrative Code (30 TAC §288.2), effective December 6, 2012. Required submittals for retail public water suppliers are found in Code 30 TAC §288.30, effective August 16, 2018. A complete copy of these rules is included in Appendix B. The TCEQ defines a water conservation plan 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“A strategy or combination of strategies for reducing the volume of water withdrawn from a water supply source, for reducing the loss or waste of water, for maintaining or improving the efficiency in the use of water, for increasing the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. A water conservation plan may be a separate document identified as such or may be contained within another management document(s).”

30 TAC §288.1(24)

2.2 Texas Water Development Board Rules

The Texas Water Development Board (TWDB) rules governing the development of water conservation plans for municipal uses by public water suppliers are contained in Title 31, Part 10, Chapter 363, Subchapter A, Division 2, Rule 363.15 of the Texas Administrative Code (31 TAC §363.15), effective December 5, 2012. A complete copy of these rules is included in Appendix C.

2.3 Minimum Conservation Plan Requirements

TCEQ rules generally govern Water Conservation Plans associated with a surface water right or if the water provider has greater than 3,300 connections. TWDB rules generally govern Water Conservation Plans required when requesting financial assistance greater than \$500,000. The TCEQ and TWDB contain reciprocity rules that allow a Water Conservation Plan that meets the requirements of one agency to be submitted to meet requirements of the other agency.

Many rules established by the TCEQ and TWDB are concurrent. For the purposes of this Plan, the governing TCEQ rule will be referred to unless only a TWDB Rule applies. Cross-references between the TCEQ and TWDB rules may be found in the tables in this section.

This Water Conservation Plan meets the minimum requirements of both the TCEQ and TWDB for municipal uses by public water suppliers.

The minimum requirements in 30 TAC §288 & 31 TAC §363.15 for Water Conservation Plans are covered in this report as follows:

TCEQ Rule	TWDB Rule	Location in Plan	Description
288.2(a)(1)(A)	363.15(b)(1)(A)	Section 4.1	Utility Profile
288.2(a)(1)(B)	363.15(b)(1)(A)	Section 4.2	Record Management System
288.2(a)(1)(C)	363.15(b)(1)(B)	Section 3 & 4.3	Specification of Goals
288.2(a)(1)(D)	363.15(b)(1)(E)	Section 4.4	Accurate Metering
288.2(a)(1)(E)	363.15(b)(1)(F)	Section 4.5	Universal Metering
288.2(a)(1)(F)	363.15(b)(1)(G)	Section 4.6	Determination and Control of Unaccounted for Water
288.2(a)(1)(G)	363.15(b)(1)(I)	Section 4.7	Public Education and Information Program
288.2(a)(1)(H)	363.15(b)(1)(J)	Section 4.8	Non-Promotional Water Rate Structure
288.2(a)(1)(I)	N/A	Section 4.9	Reservoir System Operation Plan
288.2(a)(1)(J)	363.15(b)(1)(K)	Section 4.10	Means of Implementation and Enforcement
288.2(a)(1)(K)	363.15(b)(1)(L)	Section 4.11	Coordination with the Regional Water Planning Group
288.2(a)(2)(A)	363.15(b)(1)(H)	Section 4.12	Leak Detection, Repair, and Water Loss Accounting
288.2(a)(2)(B)	363.15(d)(3)	Section 4.13	Provisions for New or Amended Wholesale Water Contract(s)
288.20	363.15(b)(1)(M)	Section 4.14	Drought Contingency Plan
288.2.(a)(3)(G) (Optional Strategy)	363.15(b)(1)(D)	Section 4.15	Method of Tracking the Plan's Implementation and Effectiveness
N/A	363.15(b)(1)(C)	Section 4.15	Implementation Schedule
288.30(10)(B)		Section 4.16	Conservation Coordinator
288.2(b)	363.15(e) & 363.15(f)	Section 4.17	Must Meet either TCEQ or TWDB Requirements
288.2(c)	363.15(b)	Section 4.17	Review and Update of Plan
288.30(1), 288.30(10)(A) & (C)	363.15(b)	Section 4.17	Submittal of Plan
288.30(2) & 288.30(10)(D)	363.15(g)	Section 4.17	Implementation Reports*

*The TCEQ requires an Implementation Report be submitted every five years with the Water Conservation Plan Update. The TWDB requires Implementation Reports be submitted annually.

Additional Conservation Strategies

The TCEQ rules also list optional conservation strategies, which may be adopted by suppliers. The TWDB does not list specific optional conservation strategies in 31 TAC §363.15(b)(2), but does provide water conservation Best Management Practices (BMPs) that may be utilized in addition to the minimum requirements. The City has adopted the following optional strategies:

TCEQ Rule	Location in Plan	Description
288.2(a)(3)(A)	Section 5.1	Conservation-oriented water rates & seasonal water rates
288.2(a)(3)(B)	Section 5.2	Ordinances, Plumbing Codes or Rules on Water-Conserving Fixtures
288.2(a)(3)(F)	Section 5.3	Adoption of Ordinances and/or Programs for Landscape and Water Management
288.2(a)(3)(G)*	Section 4.15	Method for Monitoring the Effectiveness and Efficiency of the Plan

*This is required under the current TWDB regulations but optional per TCEQ regulations.

3. SPECIFICATION OF WATER CONSERVATION GOALS

Rule 288.2(a)(1)(C) requires the adoption of specific water conservation goals for a water conservation plan. The City has developed 5-year and 10-year goals for the reduction of per capita municipal use in total gallons per capita per day (GPCD) and residential GPCD, following TCEQ procedures described in the water utility profile (Appendix D).

A revised baseline average and analysis from previous Water Conservation Plans by the City follows. This analysis is based on a 5-year rolling average to incorporate normal, wet, and dry year demands. The 2013 5-year average (includes 1/1/2009 through 12/31/2013 water usage) is presented as the City's average of record, indicating the highest 5-year rolling average water use. Percent reduction goals as stated below are from the 2018 5-year City average (includes 1/1/2014 through 12/31/2018 water usage) and are presented as the baseline average, which is used to establish the City's revised 5- and 10-year goals. All baseline data and new goals are summarized below.

- Average of Record (2013 5-year rolling average)
 - Total GPCD: 257.3
 - Residential GPCD: 226.6
 - Water Loss GPCD: 28.4 (11.56%)
- Baseline Average (2018 5-year rolling average)
 - Total GPCD: 231.2
 - Residential GPCD: 163.3
 - Water Loss GPCD: 18.65 (7.8%)
- 5-year goals (Reduction Phase)
 - Target Date: December 31, 2023
 - Total water use of 219.6 GPCD (5% reduction in total GPCD over the next 5 years)
 - Residential Water Use: 155.1 GPCD (5% reduction over the next 5 years)
 - Reduce water loss to 10% or less (< 22.0 GPCD)
- 10-year goals (Sustainable Phase)
 - Target Date: December 31, 2028
 - Total water use of 208.0 GPCD (10% reduction over the next 10 years)
 - Residential water use of 147.0 GPCD (10% reduction over the next 10 years)
 - Maintain water loss at 10% or less (< 20.8 GPCD)
 - The 10-year goals will be reviewed and revised during the next Plan update, based on the City's implementation progress.

4. MINIMUM CONSERVATION PLAN REQUIREMENTS

Applicable rules and regulations found in the City of University Park Code of Ordinances may be referenced below (i.e. COO §13.02.042 or COO Article 13.02)

4.1 Water Utility Profile

Rule 288.2(a)(1)(A) requires the City to submit a Water Utility Profile with the Plan. The completed utility profile is included as Appendix D, which includes data on existing and projected service populations, number of connections, historical metered water sales and water production, and general utility system information. The TWDB contains an online system for filling out the Utility Profile accessible by designated City personnel.

4.2 Record Management System

The City's current record management system allows for the separation of water sales and uses into residential, commercial/institutional, City (municipal), and industrial categories. The City's system also allows it to track water sales for landscape irrigation use for those customers who have separate irrigation meters.

4.3 Specification of Goals

Refer to Section 3 for the specific, quantified goals related to water savings and water loss.

4.4 Master Meter (Accurate Metering of Treated Water Delivery from the District)

The District supplies all of the water used by the City. Water delivery from the District is metered by one venturi meter, which is calibrated to an accuracy of ± 1 on a biannual basis. A daily analysis of the meter is performed by computer and graphed for trends.

4.5 Universal Metering, Meter Testing and Repair, and Periodic Meter Replacement

The City currently requires metering of all connections. Individual metering is required at all single-family residences. Meters are tested for accuracy at the customer's request and replaced if an error of more than 2% is discovered (COO §13.03.008). Residential meters shall be replaced at 15-year intervals while larger commercial meters shall be replaced on 5-year intervals.

By the end of 2018, approximately 85% of meters in the City have been replaced as part of the AMR installation project. Meter replacements will be completed in 2019 and the City is currently in the process of eliminating dead zones in the collection system. Insufficient data has been collected to determine any benefits to-date.

4.6 Determination and Control of Unaccounted-For Water

Unaccounted for water is the difference between the amount of water supplied by the District and the amount of water delivered (sold) to customers plus authorized but unmetered uses such as firefighting, releases for flushing of lines, and uses associated with new construction. Unaccounted water can include several categories such as:

- Inaccuracies in supply and customer meters.
- Unmetered uses such as firefighting and line flushing.
- Accounts that are being used but have not yet been added to the billing system.
- Losses due to water main breaks and leaks in the water distribution system.
- Losses due to illegal connections and theft.
- Other.

The City's water losses, which includes unaccounted for water, is the difference between the water purchased from the District and water sold to its customers. The City's water loss has dropped to near/below the national average of 12% over the last 10 years. The City's water losses have been at 8% or lower for the last three years. In 2018, the total water loss for water for the City was 155,779,200 gallons, or 7.80% of the City's purchased water. The City will continue current procedures that should maintain its water loss below 10%. Please refer to the City's annual conservation reports included in Appendix F.

Yearly audits are performed to track the City's unaccounted for water usage. As a policy, unaccounted-for water usage that is estimated by the City's staff on annual basis but is unmetered includes the following:

- Flushing of water and sewer mains during construction.
- Elevated tank drainage for inspection, maintenance and repair.
- Estimated losses due to main breaks.
- Estimated water losses due to leaks found in leak detection program (this is not an accurate estimate, as it is not known how long they were leaking before found).
- Flushing of water mains for water quality purposes.
- Water used to clean sewers.
- Water used to flush hydrants.

4.7 Continuing Public Education and Information Campaign

The continuing public education and information campaign on water conservation is managed in conjunction with the District and includes the following elements:

- Insert water conservation information with water bills. Inserts will include material developed by the City's and the District's 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 the City's or the District's staff are available to make presentations on the importance of water conservation and ways to save water.
- Make the Texas Smartscape CD, 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 on its website and include links to the Texas Smartscape website and to information on water conservation on the TWDB and TCEQ web sites.
- City of University Park Web Site: www.uptexas.org

4.8 Water Rate Structure

The City presently charges customers a flat monthly fee per water meter depending on the meter size. Water use is charged at a rate of \$4.65 per 1,000 gallons of water consumed, up to 30,000 gallons per month. The minimum monthly rates for all metered water service are as follows:

Meter Size	Rate/Month
5/8" or 3/4"	\$5.88
1"	\$11.44
1.5"	\$21.37
2"	\$32.97
3"	\$60.11
4"	\$98.90
6"	\$195.83
8"	\$312.10
10"	\$560.25

The City also has a conservation surcharge rate, which is described in Section 5.1. These rates and surcharges are revised on an annual basis per COO§A3.006 and §A3.007. Current rates and surcharges are available on the City's web site.

4.9 City of University Park's Reservoir System Operation Plan

The City purchases treated water from the District. The District receives daily releases from Grapevine Lake. These releases are the only source of raw water for the District therefore a Reservoir System Operation Plan is not needed. However, the District currently implements a Reservoir Accounting Plan in conjunction with the City of Dallas and the City of Grapevine, who also have permitted storage and water rights in Grapevine Lake.

4.10 Implementation and Enforcement

Appendix H contains the resolution adopted by the City Council regarding this water conservation plan. The ordinance designates responsible officials to implement and enforce the water conservation plan.

4.11 Coordination with Region C Water Planning Group

The City of University Park is located within the Region C Water-Planning Group. The City has provided a copy of this Water Conservation Plan to the Region C Water Planning Group. Documentation on coordination with Region C may be found in Appendix G.

4.12 Leak Detection, Repair, and Water Loss Accounting

The City currently maintains a leak detection program designed to reduce the loss of water due to leaks and water main breaks. Most leaks are discovered by the visual observation of both the public and meter readers. City Services continually checks and services transmission and storage facilities to ensure that any leaks or main breaks in these areas are quickly contained and repaired (COO §13.04.001). Please refer to Section 4.6 for additional information.

4.13 Potential Wholesale Water Customers

The City currently purchases treated water from the District and is required by the District to develop and implement a water conservation plan. The City does not currently nor is it likely that the City will enter into a wholesale water contract wherein the City would supply water to a customer(s). However, as required by Rule 288.2(a)(2)(B), in the event that the City enters into a wholesale treated water contract wherein the City supplies treated water to a customer(s), the customer(s) will be required to develop and implement a water conservation plan.

4.14 Drought Contingency Plan

The City has adopted and implemented a revised drought contingency plan for the May 1, 2019 submittal. The City's drought contingency plan is a separate document available upon request or on the City's website. An electronic copy of the City's drought contingency plan has been submitted to the TCEQ, TWDB, and Region C Water Planning Group.

4.15 Methodology and Implementation Schedule

The City monitors the water distribution system on an ongoing basis to determine if there are any problems in the system such as a water main break or faulty water meter. In order to more effectively implement and track the adopted conservation methods provided in this Plan, the City adopts the following measures to evaluate the progress towards the goals of Chapter 3:

- Measure and track unmetered water use. The City plans to develop measures to track water use in areas that are currently unaccounted for such as main flushing, firefighting, hydrant testing, and sewer main cleaning.
- Perform yearly audit of City's water use in conjunction with annual implementation report. This will help to track water-usage for each required category and determine if additional, category-specific measures should be adopted by the City or if current measures require modification.

The water conservation strategies adopted by the City are an ongoing effort to meet the objectives and goals of this Plan. An Implementation Schedule of existing and proposed Best Management Practices is provided below.

City of University Park Best Management Practices Implementation Schedule

BMP	Description	Currently Implemented	Implement Before 2020	Implement Before 2025
1	System Water Audit & Water Loss	✓	✓	
2	Water Conservation Pricing	✓ (1989)	✓ ¹	
3	Prohibition on Wasting Water	✓ (1996)		
7	School Education	✓ (2006)		
9	Landscape Irrigation Ordinance	✓ (1981)	✓ ²	
11	Athletic Field Conservation	✓		
13	Metering of All New Connections & Retrofit Existing	✓ (1981)		
17	Public Information	✓ (1990)		
20	Park Conservation	✓		
21	Industrial, Commercial & Institutional Conservation Programs	✓ ³		

1. Currently implementing a conservation surcharge and studying impact of a tiered rate structure to implement in the future.
2. The City has recently converted to an automatic meter reading system.
3. SMU has a voluntary program where they have implemented rainwater and condensate reuse on portions of their campus, underdrain system under football field to reuse for irrigation, and zero-flush urinals in engineering building.

4.16 Conservation Coordinator

Effective August 16, 2018, the State requires that:

Retail public water suppliers that provide potable water to 3,300 or more connections shall designate a person as the water conservation coordinator responsible for implementing the water conservation plan; and identify, in writing, the water conservation coordinator, including the contact information for that person, to the executive administrator of the Texas Water Development Board. 30 TAC §288.30(10)(B)

Please refer to the Water Conservation page on the City website for the current water conservation coordinator and contact information.

4.17 Review, Update and Submittal of the Plan

Review and Update of the Water Conservation Plan

The City will continue to review and develop recognized Best Management Practices (BMPs) that are suitable for its customer water use profile over the duration of this Plan. This developmental process will include an annual evaluation of BMPs and recommend which measures should be increased, maintained, or eliminated.

Annual Implementation Report

Annual evaluation of the implementation of this water conservation plan will be performed as discussed above will be included in an implementation report submitted to the TWDB by May 1, of each year. The annual reports will follow the most recent version of the TWDB standard form for Retail Water Suppliers and will utilize the Board's online reporting system.

Submittal of the Plan

As required by Rule 288.30(1) & 288.30(10), the water conservation plan will be revised and resubmitted to the TCEQ & TWDB every five years, beginning May 1, 2009.

Appendix D includes the completed TCEQ and TWDB utility profiles. Appendix E includes the TCEQ implementation report for the previous planning period as required by Rule 288.30(1) & (2). Appendix F contains the Annual Reports that were submitted to the TWDB for the 2014-2018 calendar years as required by Rule 288.30(10)(D). In addition, a copy of the City's adopted drought contingency plan has been submitted to TCEQ and TWDB to fulfill the requirements of TCEQ Rule 288.20 and TWDB Rule 363.15(b) (1)(M).

5. OTHER WATER CONSERVATION MEASURES

5.1 Conservation-Oriented Water Rates

The City adopted resolution No. 16/009 in September 2016 creating a conservation surcharge during the months of May through October where customers are charged an additional \$1.73 per 1,000 gallons (\$6.38 total) for all consumption over 30,000 gallons per month (13,000,000 gallons per month for Southern Methodist University).

Under the same resolution, the City has the right to increase the conservation surcharge by 50% when the City is under Stage 3 Drought Restrictions. The City Council has the option of enacting the surcharge rate for consumption exceeding 30,000 gallons per month.

The City adopted ordinance No. 14/010 in April 2014 to promote responsible use of water. Section 5 of the ordinance states that any person, firm or corporation violating any of the provisions or terms of the Water Conservation Plan shall be subject to a penalty of fine not to exceed the sum of two thousand dollars (\$2,000.00) for each offense and/or discontinuance of water service by the City. Each day a customer fails to comply with the Water Conservation Plan is a separate violation.

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

The State of Texas has required water-conserving fixtures in new construction and renovations since 1992. The State standards call for flows of no more than 2.5 gallons per minute (gpm) for faucets, 3.0 gpm for showerheads, and 1.6 gallons per flush for toilets. Similar standards are now required nationally under Federal law. These State and Federal standards assure that new construction and renovations will use water-conserving fixtures.

The City has also adopted the International Plumbing Code, 2015 edition, with amendments as found in COO §3.02.301.

5.3 Landscape Water Management Regulations

The City has adopted the following landscape water management regulations intended to minimize waste in landscape irrigation:

- Ordinance prohibiting the waste of water (COO §13.04.006).
- Ordinance prohibiting the use of automatic sprinkler and irrigation systems during the period from April 1 through October 31 between the hours of 10:00 AM and 6:00 PM. Outdoor watering is restricted year round to twice a week, with the day of the week being determined by the street address (COO §13.03.012.f). Exceptions exist for watering foundations, new plantings, irrigation repair, handheld hoses, watering cans and drip irrigation.
- Requirement that all irrigation systems include a freeze sensor to prevent the system from operating when the temperature drops below 38° F (COO §3.11.013.j).

- Prohibition of irrigation systems that spray directly onto impervious surfaces or onto other non-irrigated areas. Wind driven water drift will be taken into consideration (COO §3.11.013.g).
- Enforcement of the regulations by a system of warnings followed by fines for continued or repeat violations (COO §3.11.002 & §13.04.016).
- Updated Irrigation Code to implement new regulations of 30 TAC Chapter 344, as adopted by the State Legislature in House Bill 1656 (COO §3.11.005).
- Sponsored by the Dallas County Park Cities Municipal Utilities District, the City offers residents access to the Water My Yard program offered by the Texas A&M AgriLife Extension Service. For more information, visit the City's website.
- The City has also recently replaced all customer meters with smart meters that allow automatic meter reading. The City will begin offering customers access to an online system to track daily water use.

APPENDIX A
LIST OF REFERENCES

APPENDIX A

LIST OF REFERENCES

- (1) Title 30 of the Texas Administrative Code, Part 1, Chapter 288, Subchapter A, Rule 288.1, downloaded from: <https://www.tceq.texas.gov/rules/indxpathdf.html>, Effective August 16, 2018
- (2) Title 30 of the Texas Administrative Code, Part 1, Chapter 288, Subchapter A, 288.2, downloaded from: <https://www.tceq.texas.gov/rules/indxpathdf.html>, Effective December 6, 2012
- (3) Title 30 of the Texas Administrative Code, Part 1, Chapter 288, Subchapter B, Rule 288.20, downloaded from: <https://www.tceq.texas.gov/rules/indxpathdf.html>, Effective October 7, 2004
- (4) Title 30 of the Texas Administrative Code, Part 1, Chapter 288, Subchapter C, Rule 288.30, downloaded from: <https://www.tceq.texas.gov/rules/indxpathdf.html>, Effective August 16, 2018
- (5) Nathan D. Maier Consulting Engineers, Inc.: *City of University Park Water Conservation Plan, April 2014*, prepared for the Town of Highland Park
- (6) Alan Plummer Associates, Inc.: *City of University Park Water Conservation Plan, April 2005*, prepared for the Town of Highland Park
- (7) City of Dallas Water Utilities Conservation Division: *Water Conservation and Drought Contingency Plan Updates, Briefing Materials for February 19, 2014 City Council Meeting*
- (8) City of Fort Worth: *City of Fort Worth 2005 Water Conservation Plan*, downloaded from: <http://www.fortworthgov.org/water/>
- (9) Texas Water Development Board: Report 362: *Water Conservation Best Management Practices Guide, November 2004*, developed by GDS Associates, Inc, et. al.
- (10) Texas Water Development Board: *Guidance and Methodology for Reporting on Water Conservation and Water Use, December 2012*, developed by the TWDB, TCEQ and the Water Conservation Advisory Council

APPENDIX B

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES ON WATER CONSERVATION PLANS

SUBCHAPTER A: WATER CONSERVATION PLANS
§§288.1 - 288.7
Effective August 16, 2018

§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.

Adopted July 25, 2018

Effective August 16, 2018

§288.2. Water Conservation Plans for Municipal Uses by Public Water Suppliers.

(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.

Adopted November 14, 2012

Effective December 6, 2012

§288.3. Water Conservation Plans for Industrial or Mining Use.

(a) A water conservation plan for industrial or mining uses of water must provide information in response to each of the following elements. If the plan does not provide information for each requirement, the industrial or mining water user shall include in the plan an explanation of why the requirement is not applicable.

(1) a description of the use of the water in the production process, including how the water is diverted and transported from the source(s) of supply, how the water is utilized in the production process, and the estimated quantity of water consumed in the production process and therefore unavailable for reuse, discharge, or other means of disposal;

(2) specific, quantified five-year and ten-year targets for water savings and the basis for the development of such goals. The goals established by industrial or mining water users under this paragraph are not enforceable;

(3) a description of the device(s) and/or method(s) within an accuracy of plus or minus 5.0% to be used in order to measure and account for the amount of water diverted from the source of supply;

(4) leak-detection, repair, and accounting for water loss in the water distribution system;

(5) application of state-of-the-art equipment and/or process modifications to improve water use efficiency; and

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

(b) An industrial or mining water user 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 industrial or mining water user shall review and update the next revision of its water

SUBCHAPTER C: REQUIRED SUBMITTALS
§288.30
Effective August 16, 2018

§288.30. Required Submittals.

In addition to the water conservation and drought contingency plans required to be submitted with an application under §295.9 of this title (relating to Water Conservation and Drought Contingency Plans), water conservation and drought contingency plans are required as follows.

(1) Water conservation plans for municipal, industrial, and other non-irrigation uses. The holder of an existing permit, certified filing, or certificate of adjudication for the appropriation of surface water in the amount of 1,000 acre-feet a year or more for municipal, industrial, and other non-irrigation uses shall develop, submit, and implement a water conservation plan meeting the requirements of Subchapter A of this chapter (relating to Water Conservation Plans). The water conservation plan must be submitted to the executive director not later than May 1, 2005. Thereafter, the next revision of the water conservation plan for municipal, industrial, and other non-irrigation uses must be submitted not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. Any revised plans must be submitted to the executive director within 90 days of adoption. The revised plans must include implementation reports. The requirement for a water conservation plan under this section must not result in the need for an amendment to an existing permit, certified filing, or certificate of adjudication.

(2) Implementation report for municipal, industrial, and other non-irrigation uses. The implementation report must include:

(A) the list of dates and descriptions of the conservation measures implemented;

(B) data about whether or not targets in the plans are being met;

(C) the actual amount of water saved; and

(D) if the targets are not being met, an explanation as to why any of the targets are not being met, including any progress on that particular target.

(3) Water conservation plans for irrigation uses. The holder of an existing permit, certified filing, or certificate of adjudication for the appropriation of surface water in the amount of 10,000 acre-feet a year or more for irrigation uses shall develop, submit, and implement a water conservation plan meeting the requirements of Subchapter A of this chapter. The water conservation plan must be submitted to the executive director not later than May 1, 2005. Thereafter, the next revision of the water conservation plan for irrigation uses must be submitted not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. Any revised plans must be submitted to the executive director within 90 days of adoption. The revised plans must include implementation reports. The requirement for a water conservation plan under this section must not result in the need for an amendment to an existing permit, certified filing, or certificate of adjudication.

(4) Implementation report for irrigation uses. The implementation report must include:

(A) the list of dates and descriptions of the conservation measures implemented;

(B) data about whether or not targets in the plans are being met;

(C) the actual amount of water saved; and

(D) if the targets are not being met, an explanation as to why any of the targets are not being met, including any progress on that particular target.

(5) Drought contingency plans for retail public water suppliers. Retail public water suppliers shall submit a drought contingency plan meeting the requirements of Subchapter B of this chapter (relating to Drought Contingency Plans) to the executive director after adoption by its governing body. The retail public water system shall provide a copy of the plan to the regional water planning group for each region within which the water system operates. These drought contingency plans must be submitted as follows.

(A) For retail public water suppliers providing water service to 3,300 or more connections, the drought contingency plan must be submitted to the executive director not later than May 1, 2005. Thereafter, the retail public water suppliers providing water service to 3,300 or more connections shall submit the next revision of the plan not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. Any revised plans must be

submitted to the executive director within 90 days of adoption by the community water system. Any new retail public water suppliers providing water service to 3,300 or more connections shall prepare and adopt a drought contingency plan within 180 days of commencement of operation, and submit the plan to the executive director within 90 days of adoption.

(B) For all the retail public water suppliers, the drought contingency plan must be prepared and adopted not later than May 1, 2005, and must be available for inspection by the executive director upon request. Thereafter, the retail public water suppliers shall prepare and adopt the next revision of the plan not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. Any new retail public water supplier providing water service to less than 3,300 connections shall prepare and adopt a drought contingency plan within 180 days of commencement of operation, and shall make the plan available for inspection by the executive director upon request.

(6) Drought contingency plans for wholesale public water suppliers. Wholesale public water suppliers shall submit a drought contingency plan meeting the requirements of Subchapter B of this chapter to the executive director not later than May 1, 2005, after adoption of the drought contingency plan by the governing body of the water supplier. Thereafter, the wholesale public water suppliers shall submit the next revision of the plan not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. Any new or revised plans must be submitted to the executive director within 90 days of adoption by the governing body of the wholesale public water supplier. Wholesale public water suppliers shall also provide a copy of the drought contingency plan to the regional water planning group for each region within which the wholesale water supplier operates.

(7) Drought contingency plans for irrigation districts. Irrigation districts shall submit a drought contingency plan meeting the requirements of Subchapter B of this chapter to the executive director not later than May 1, 2005, after adoption by the governing body of the irrigation district. Thereafter, the irrigation districts shall submit the next revision of the plan not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. Any new or revised plans must be submitted to the executive director within 90 days of adoption by the governing body of the irrigation district. Irrigation districts shall also provide a copy of the plan to the regional water planning group for each region within which the irrigation district operates.

(8) Additional submissions with a water right application for state water. A water conservation plan or drought contingency plan required to be

submitted with an application in accordance with §295.9 of this title must also be subject to review and approval by the commission.

(9) Existing permits. The holder of an existing permit, certified filing, or certificate of adjudication shall not be subject to enforcement actions nor shall the permit, certified filing, or certificate of adjudication be subject to cancellation, either in part or in whole, based on the nonattainment of goals contained within a water conservation plan submitted with an application in accordance with §295.9 of this title or by the holder of an existing permit, certified filing, or certificate of adjudication in accordance with the requirements of this section.

(10) Submissions to the executive administrator of the Texas Water Development Board.

(A) Water conservation plans for retail public water suppliers. For retail public water suppliers providing water service to 3,300 or more connections, a water conservation plan meeting the minimum requirements of Subchapter A of this chapter and using appropriate best management practices must be developed, implemented, and submitted to the executive administrator of the Texas Water Development Board not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. Any revised plans must be submitted to the executive administrator within 90 days of adoption by the community water system. Any new retail public water suppliers providing water service to 3,300 or more connections shall prepare and adopt a water conservation plan within 180 days of commencement of operation, and submit the plan to the executive administrator of the Texas Water Development Board within 90 days of adoption.

(B) Water conservation coordinators for retail public water suppliers. Retail public water suppliers that provide potable water to 3,300 or more connections shall designate a person as the water conservation coordinator responsible for implementing the water conservation plan; and identify, in writing, the water conservation coordinator, including the contact information for that person, to the executive administrator of the Texas Water Development Board. Notification of the initial designated water conservation coordinator shall be provided as specified by the Texas Water Development Board and any changes to the water conservation coordinator shall be provided within 90 days of the effective date of the change.

(C) Water conservation plans. Each entity that is required to submit a water conservation plan to the commission shall submit a copy of the plan to the executive administrator of the Texas Water Development Board not later than

May 1, 2009, and every five years after that date to coincide with the regional water planning group.

(D) Annual reports. Each entity that is required to submit a water conservation plan to the Texas Water Development Board or the commission, shall file a report not later than May 1, 2010, and annually thereafter to the executive administrator of the Texas Water Development Board on the entity's progress in implementing the plan.

(E) Violations of the Texas Water Development Board's rules. The water conservation plans and annual reports shall comply with the minimum requirements established in the Texas Water Development Board's rules. The Texas Water Development Board shall notify the commission if the Texas Water Development Board determines that an entity has not complied with the Texas Water Development Board rules relating to the minimum requirements for water conservation plans or submission of plans or annual reports. The commission shall take appropriate enforcement action upon receipt of notice from the Texas Water Development Board.

Adopted July 25, 2018

Effective August 16, 2018

APPENDIX C

TEXAS WATER DEVELOPMENT BOARD RULES ON WATER CONSERVATION PLANS

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TITLE 31**NATURAL RESOURCES AND CONSERVATION****PART 10****TEXAS WATER DEVELOPMENT BOARD****CHAPTER 363****FINANCIAL ASSISTANCE PROGRAMS****SUBCHAPTER A****GENERAL PROVISIONS****DIVISION 2****GENERAL APPLICATION PROCEDURES****RULE §363.15****Required Water Conservation Plan**

(a) An applicant, if not eligible for an exemption under subsection (c) of this section, shall submit, with its application, two copies of its water conservation plan for approval. The executive administrator shall review all water conservation plans submitted as part of an application for financial assistance for a project and shall determine if the plans meet the requirements of this section.

(b) The water conservation plan required under subsection (a) of this section must be new or revised to include five-year and ten-year targets for water savings, unless the applicant has implemented an approved water conservation plan that meets the requirements of this section, and that has been in effect for less than five years. The water conservation plan shall include an evaluation of the applicant's water and wastewater system and customer water use characteristics to identify water conservation opportunities and shall set goals to be accomplished by water conservation measures. The water conservation plan shall provide information in response to the following minimum requirements. If the plan does not provide information for each minimum requirement, the applicant shall include in the plan an explanation of why the requirement is not applicable.

(1) Minimum requirements. Water conservation plans shall include the following elements:

(A) a utility profile including, but not limited to, information regarding population and customer data, water use data, water supply system data, and wastewater system data at the most detailed level of water use data currently available and in accordance with the methodology and guidance for calculating water use and conservation developed and maintained by the executive administrator in coordination with the commission under Water Code §16.403. The utility profile must include the classification of water sales and uses for the following sectors, as appropriate:

(i) residential;

(I) single-family;

(II) multi-family;

(ii) commercial;

(iii) institutional;

(iv) industrial;

(v) agricultural; and

(vi) wholesale.

(B) 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 gallons per capita per day and residential gallons per capita per day. As used herein, "municipal use" means the use of potable water or sewer effluent for residential, commercial, industrial, agricultural, institutional, and wholesale uses by an individual or entity that supplies water to the public for human consumption;

(C) a schedule for implementing the plan to achieve the applicant's targets and goals;

(D) a method for tracking the implementation and effectiveness of the plan;

(E) a master meter to measure and account for the amount of water diverted from the source of supply;

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

(G) 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.);

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

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

(J) 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;

(K) 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 applicant; and

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

(L) documentation that the regional water planning groups for the service area of the applicant have been notified of the applicant's water conservation plan; and

(M) a current drought contingency plan which includes specific water supply or water demand management measures and, at a minimum, includes, trigger conditions, demand management measures, initiation and termination procedures, a means of implementation, and measures to educate and inform the public regarding the drought contingency plan.

(2) Additional conservation strategies. The water conservation plan may also include any other water conservation practice, method, or technique that the applicant deems appropriate.

(c) Pursuant to Water Code §§15.106(c), 17.125(c), 17.277(c), and 17.857(c), an applicant is not required to provide a water conservation plan if the board determines an emergency exists; the amount of financial assistance to be provided is \$500,000 or less; or the board finds that implementation of a water conservation

program is not reasonably necessary to facilitate water conservation; or the application is for flood control purposes under Water Code, Chapter 17, Subchapter G.

(1) An emergency exists when:

(A) a public water system or wastewater system has already failed, or is in a condition which poses an imminent threat of failure, causing the health and safety of the citizens served to be endangered;

(B) sudden, unforeseen demands are placed on a water system or wastewater system (i.e., because of military operations or emergency population relocation);

(C) a disaster has been declared by the governor or president; or

(D) the governor's Division of Emergency Management of the Texas Department of Public Safety has determined that an emergency exists.

(2) If the board determines that an emergency exists and commits to financial assistance without requiring a water conservation plan, the applicant must report whether the emergency continues to exist every six months after the board commits to financial assistance. If the Executive Administrator finds that the emergency no longer exists, the applicant must submit a water conservation plan within six months of the finding.

(d) Pursuant to Water Code §§15.106(d)(e), 15.208(d), 17.125(e), 17.277(e), and 17.857(e), if the applicant will utilize the project financed by the board to furnish water or wastewater services to another entity that in turn will furnish the water or wastewater services to the ultimate consumer, the applicant shall:

(1) submit its own water conservation plan before closing on the financial assistance; and

(2) submit the other entity's water conservation plan, if one exists, before closing on the financial assistance; and

(3) require, by contract, that the other entity adopt a water conservation plan that conforms to the board's requirements and submit it to the board. If the requirement is to be included in an existing water or wastewater service contract, it may be included, at the earliest of the renewal or substantial amendment of that contract, or by other appropriate measures.

(e) The board will accept a water conservation plan determined by the commission to satisfy the requirements of 30 TAC Chapter 288 for purposes of meeting the minimum requirements of subsection (b) of this section.

(f) Water conservation plans that are submitted to the TCEQ and copied to the board under Water Code §16.402 must contain the applicable minimum requirements for water conservation plans established by the Commission in its rules at 30 TAC Chapter 288.

(g) Annual reports.

(1) Each entity that is required to submit a water conservation plan to the board or the commission, other than a recipient of financial assistance from the board, shall file a report annually not later than May 1st to the executive administrator on the entity's progress in implementing each of the minimum requirements in the water conservation plan.

(2) Recipients of financial assistance from the board shall maintain an approved water conservation plan in effect until all financial obligations to the state have been discharged and shall file a report with the executive administrator on the applicant's 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.

(3) Annual reports prepared for the Commission providing the information required by this subsection may be provided to the board to fulfill the board's reporting requirements.

(h) The following are violations of board rules for purposes of Water Code §16.402:

(1) failure to submit a water conservation plan containing the minimum requirements in subsections (b) and (f) of this section; and

(2) failure to timely submit a complete annual report on the entity's progress in implementing its plan that addresses each element in its water conservation plan, as required by Water Code §16.402 and subsection (g) of this section.

Source Note: The provisions of this §363.15 adopted to be effective July 19, 1991, 16 TexReg 3768; amended to be effective June 8, 1995, 20 TexReg 3898; amended to be effective December 6, 2004, 29 TexReg 11368; amended to be effective December 25, 2007, 32 TexReg 9721; amended to be effective June 1, 2008, 33 TexReg 4327; amended to be effective December 5, 2012, 37 TexReg 9522

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APPENDIX D

CITY OF UNIVERSITY PARK TCEQ & TWDB WATER UTILITY PROFILES



Texas Commission on Environmental Quality

UTILITY PROFILE AND WATER CONSERVATION PLAN REQUIREMENTS FOR MUNICIPAL WATER USE BY RETAIL PUBLIC WATER SUPPLIERS

This form is provided to assist retail public water suppliers in water conservation plan development. If you need assistance in completing this form or in developing your plan, please contact the conservation staff of the Resource Protection Team in the Water Availability Division at (512) 239-4691.

Name: City of University Park

Address: 3800 University Blvd

Telephone Number: (214) 987-5400 Fax: (214) -987-5499

Water Right No.(s): n/a

Regional Water Planning Group: C

Form Completed by: Jodie Ledat

Title: Operations Coordinator

Person responsible for implementing conservation program: NAME: Jodie Ledat PHONE: (214) 987-5400

Signature: *J. Ledat* Date: 4/4/2019

NOTE: If the plan does not provide information for each requirement, include an explanation of why the requirement is not applicable.

UTILITY PROFILE

I. POPULATION AND CUSTOMER DATA

A. Population and Service Area Data

1. Attach a copy of your service-area map and, if applicable, a copy of your Certificate of Convenience and Necessity (CCN).
2. Service area size (in square miles): 3.69
(Please attach a copy of service-area map)
3. Current population of service area: 22,890
4. Current population served for:
 - a. Water 22,890
 - b. Wastewater N/A (Wastewater treated by DWU)

5. Population served for previous five years:
6. Projected population for service area in the following decades:

<i>Year</i>	<i>Population</i>
2014	22,870
2015	22,840
2016	22,720
2017	22,820
2018	22,890

<i>Year</i>	<i>Population</i>
2020	25,688
2030	25,688
2040	25,688
2050	25,688
2060	25,688

7. List source or method for the calculation of current and projected population size.

Past Population: 2014-2018 are NCTCOG population estimates for the City of University Park.

Projected Population: 2020-2060 population projections are from the 2016 Region C Water Plan, Table 5D.78.

B. Customers Data

Senate Bill 181 requires that uniform consistent methodologies for calculating water use and conservation be developed and available to retail water providers and certain other water use sectors as a guide for preparation of water use reports, water conservation plans, and reports on water conservation efforts. A water system must provide the most detailed level of customer and water use data available to it, however, any new billing system purchased must be capable of reporting data for each of the sectors listed below. http://www.tceq.texas.gov/assets/public/permitting/watersupply/water_rights/sb181_guidance.pdf

1. Current number of active connections. Check whether multi-family service is counted as ☒ Residential or ☐ Commercial?

<i>Treated Water Users</i>	<i>Metered</i>	<i>Non-Metered</i>	Totals
Residential	9,916		9,916
Single-Family	9,162		9,162
Multi-Family	754		754
Commercial	295		295
Industrial/Mining			
Institutional	196		196
Agriculture			
Other/Wholesale			

2. List the number of new connections per year for most recent three years.

<i>Year</i>	2018	2017	2016
<i>Treated Water Users</i>			
Residential	67	226	106
Single-Family	57	226	115
Multi-Family	10	0	-9
Commercial	-11	0	-15
Industrial/Mining			
Institutional	11	-14	102
Agriculture			
Other/Wholesale			

3. List of annual water use for the five highest volume customers.

	<i>Customer</i>	<i>Use (1,000 gal/year)</i>	<i>Treated or Raw Water</i>
1.	SMU	237,725	Treated
2.	Dallas Country Club	22,289	Treated
3.	Highland Park ISD	10,399	Treated
4.	George W. Bush Presidential Center	10,320	Treated
5.	Resident	5,748	Treated

II. WATER USE DATA FOR SERVICE AREA

A. Water Accounting Data

- List the amount of water use for the previous five years (in 1,000 gallons). Indicate whether this is ☐ diverted or ☒ treated water.

<i>Year</i>	2014	2015	2016	2017	2018
<i>Month</i>					
January	115,801	109,349	110,872	109,338	114,554
February	113,591	104,321	130,175	115,565	104,104
March	135,362	105,186	134,292	145,227	114,425
April	148,520	126,037	139,805	145,997	145,138
May	156,446	108,402	128,453	175,467	185,835
June	181,417	142,656	156,874	164,145	249,149
July	212,108	242,654	215,738	189,858	281,915
August	220,548	295,569	213,492	189,076	255,962
September	220,449	255,871	192,167	202,891	177,592
October	187,428	215,153	175,785	180,383	136,481
November	133,644	123,128	136,605	156,036	119,616
December	119,129	113,585	120,109	124,394	113,644
Totals	1,944,443	1,941,911	1,854,367	1,898,427	1,998,415

Describe how the above figures were determine (e.g, from a master meter located at the point of a diversion from the source, or located at a point where raw water enters the treatment plant, or from water sales).

Above numbers are potable water purchased from the Dallas County Park Cities MUD. All Data reported (above and below) is from January 2014 - December 2018.

- Amount of water (in 1,000 gallons) delivered/sold as recorded by the following account types for the past five years.

<i>Year</i>	2014	2015	2016	2017	2018
<i>Account Types</i>					
Residential	1,329,137	1,317,582	1,312,031	1,410,622	1,437,283
Single-Family	1,270,247	1,261,470	1,258,714	1,361,217	1,388,508
Multi-Family	58,890	56,112	53,317	49,405	48,775
Commercial	76,276	66,020	63,498	73,403	89,699
Industrial/Mining					
Institutional	79,866	309,801	331,140	306,631	315,654
Agriculture					
Other/Wholesale					

3. List the previous records for water loss for the past five years (the difference between water diverted or treated and water delivered or sold).

<i>Year</i>	<i>Amount (gallons)</i>	<i>Percent %</i>
2014	459,164,300	23.61
2015	248,507,580	12.80
2016	147,698,300	7.96
2017	107,771,400	5.68
2018	155,779,200	7.80

B. Projected Water Demands

If applicable, attach or cite projected water supply demands from the applicable Regional Water Planning Group for the next ten years using information such as population trends, historical water use, and economic growth in the service area over the next ten years and any additional water supply requirements from such growth.

III. WATER SUPPLY SYSTEM DATA

A. Water Supply Sources

List all current water supply sources and the amounts authorized (in acre feet) with each.

<i>Water Type</i>	<i>Source</i>	<i>Amount Authorized</i>
Surface Water		
Groundwater		
Contracts	DCPCMUD (Lake Grapevine)	17,921
Other		

B. Treatment and Distribution System

1. Design daily capacity of system (MGD): 25
2. Storage capacity (MGD):
 - a. Elevated 4
 - b. Ground n/a
3. If surface water, do you recycle filter backwash to the head of the plant?

☐ Yes
 ☐ No

If yes, approximate amount (MGD):

IV. WASTEWATER SYSTEM DATA

A. Wastewater System Data (if applicable)

- Design capacity of wastewater treatment plant(s) (MGD): N/A
- Treated effluent is used for ☐ on-site irrigation, ☐ off-site irrigation, for ☐ plant wash-down, and/or for ☐ chlorination/dechlorination.

If yes, approximate amount (in gallons per month): N/A

- Briefly describe the wastewater system(s) of the area serviced by the water utility. Describe how treated wastewater is disposed. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and the receiving stream if wastewater is discharged.

Wastewater is treated by Dallas Water Utilities. See Wastewater System Map for the City at the end of this Appendix.

B. Wastewater Data for Service Area (if applicable)

- Percent of water service area served by wastewater system: 100 %
- Monthly volume treated for previous five years (in 1,000 gallons):

<i>Year</i>	2014	2015	2016	2017	2018
<i>Month</i>					
January	111,286	89,586	79,530	99,461	106,773
February	111,286	89,586	79,530	99,461	106,773
March	111,286	89,586	79,530	99,461	106,773
April	111,286	89,586	79,530	99,461	106,773
May	111,286	89,586	79,530	99,461	106,773
June	111,286	89,586	79,530	99,461	106,773
July	111,286	89,586	79,530	99,461	106,773
August	111,286	89,586	79,530	99,461	106,773
September	111,286	89,586	79,530	99,461	106,773
October	111,286	89,586	79,530	99,461	106,773
November	111,286	89,586	79,530	99,461	106,773
December	111,286	89,586	79,530	99,461	106,773
Totals	1,335,432	1,075,032	954,360	1,193,532	1,281,276

V. ADDITIONAL REQUIRED INFORMATION

In addition to the utility profile, please attach the following as required by Title 30, Texas Administrative Code, §288.2. Note: If the water conservation plan does not provide information for each requirement, an explanation must be included as to why the requirement is not applicable.

A. Specific, Quantified 5 & 10-Year Targets

The water conservation plan must include specific, quantified five-year and ten-year targets for water savings to include goals for water loss programs and goals for municipal use in gallons per capita per day. Note that the goals established by a public water supplier under this subparagraph are not enforceable

B. Metering Devices

The water conservation plan must include a statement about the water suppliers 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.

C. Universal Metering

The water conservation plan must include and a program for universal metering of both customer and public uses of water, for meter testing and repair, and for periodic meter replacement.

D. Unaccounted- For Water Use

The water conservation plan must include measures to determine and control unaccounted-for uses of water (for example, periodic visual inspections along distribution lines; annual or monthly audit of the water system to determine illegal connections; abandoned services; etc.).

E. Continuing Public Education & Information

The water conservation plan must include a description of the program of continuing public education and information regarding water conservation by the water supplier.

F. Non-Promotional Water Rate Structure

The water supplier must have 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. This rate structure must be listed in the water conservation plan.

G. Reservoir Systems Operations Plan

The water conservation plan must include 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. The reservoir systems operations plan shall include optimization of water supplies as one of the significant goals of the plan.

H. Enforcement Procedure and Plan Adoption

The water conservation plan must include a means for implementation and enforcement, which shall be evidenced by a copy of the ordinance, rule, resolution, or tariff, indicating official adoption of the water conservation plan by the water supplier; and a description of the authority by which the water supplier will implement and enforce the conservation plan.

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

The water conservation plan must include documentation of coordination with the regional water planning groups for the service area of the wholesale water supplier in order to ensure consistency with the appropriate approved regional water plans.

J. Plan Review and Update

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 not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. The revised plan must also include an implementation report.

VI. ADDITIONAL REQUIREMENTS FOR LARGE SUPPLIERS

Required of suppliers serving population of 5,000 or more or a projected population of 5,000 or more within ten years

A. Leak Detection and Repair

The plan must include a description of the program of leak detection, repair, and water loss accounting for the water transmission, delivery, and distribution system in order to control unaccounted for uses of water.

B. Contract Requirements

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.

VII. ADDITIONAL CONSERVATION STRATEGIES

A. Conservation Strategies

Any combination of the following strategies shall be selected by the water supplier, in addition to the minimum requirements of this chapter, if they are necessary in order to achieve the stated water conservation goals of the plan. The commission may require by commission order that any of the following strategies be implemented by the water supplier if the commission determines that the strategies are necessary in order for the conservation plan to be achieved:

1. 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;

2. 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;
3. A program for the replacement or retrofit of water-conserving plumbing fixtures in existing structures;
4. A program for reuse and/or recycling of wastewater and/or graywater;
5. A program for pressure control and/or reduction in the distribution system and/or for customer connections;
6. A program and/or ordinance(s) for landscape water management;
7. A method for monitoring the effectiveness and efficiency of the water conservation plan; and
8. 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.

Best Management Practices

The Texas Water Developmental Board's (TWDB) Report 362 is the Water Conservation Best Management Practices (BMP) guide. The BMP Guide is a voluntary list of management practices that water users may implement in addition to the required components of Title 30, Texas Administrative Code, Chapter 288. The Best Management Practices Guide broken out by sector, including Agriculture, Commercial, and Institutional, Industrial, Municipal and Wholesale along with any new or revised BMP's can be found at the following link on the Texas Water Developments Board's website: <http://www.twdb.state.tx.us/conservation/bmps/index.asp>

Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, contact 512-239-3282.

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

CONTACT INFORMATION

Name of Utility: City of University Park

Public Water Supply Identification Number (PWS ID): TX0570061

Certificate of Convenience and Necessity (CCN) Number: 10059

Surface Water Right ID Number:

Wastewater ID Number: 20015

Contact: First Name: Jodie Last Name: Ledat

Title:

Address: 3800 University Boulevard City: University Park State: TX

Zip Code: 75205 Zip+4: Email: jledat@uptexas.org

Telephone Number: 2149875447 Date: 4/12/2019

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: 4

Attached file(s):

File Name	File Description
Water Service Area Map.pdf	

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	22,890	0	22,890
2017	23,068	0	23,068
2016	23,068	0	23,068
2015	23,068	0	23,068
2014	23,028	0	23,068

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	25,688	0	25,688
2030	25,688	0	25,688
2040	25,688	0	25,688
2050	25,688	0	25,688
2060	25,688	0	25,688

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

2014-2017 data derived from the 2010 census. 2018 population estimate provided by the NCTCOG. Population projects are from the 2016 Region C Water Plan, Table 5D.78.

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	0	1,998,415,000	0	1,998,415,000	239
2017	0	1,907,966,834	0	1,907,966,834	227
2016	0	1,854,367,000	0	1,854,367,000	220
2015	0	1,941,911,000	0	1,941,911,000	231
2014	0	1,944,443,000	0	1,944,443,000	231
Historic Average	0	1,929,420,567	0	1,929,420,567	230

C. Water Supply System

Attached file(s):

File Name	File Description
Water System Description.pdf	

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

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

D. Projected Demands

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

Year	Population	Water Demand (gallons)
2020	25,688	2,483,600,000
2021	25,688	2,480,120,000
2022	25,688	2,476,640,000
2023	25,688	2,473,160,000
2024	25,688	2,469,680,000
2025	25,688	2,466,200,000
2026	25,688	2,462,720,000
2027	25,688	2,459,240,000
2028	25,688	2,455,760,000
2029	25,688	2,452,280,000

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

Population data derived from the 2016 Region C Water Plan estimates, adjusted downward based on NCTCOG population estimates.
Water demands are based on Region C demands, adjusted downward based on NCTCOG population estimates. These are dry year demands.

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
Southern Methodist University	Institutional	237,725,000	Treated
Dallas Country Club	Commercial	22,289,000	Treated
Highland Park ISD	Institutional	10,399,000	Treated
G.W. Bush Presidential Library	Commercial	10,320,000	Treated
Resident	Residential	5,748,000	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.

Data presented is from 01/2014 through 12/2018.

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	9,162	88.04 %
Residential - Multi-Family	754	7.25 %
Industrial	0	0.00 %
Commercial	295	2.83 %
Institutional	196	1.88 %
Agricultural	0	0.00 %
Total	10,407	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	57	10	0	0	11	0	78
2017	226	0	0	0	0	0	226
2016	115	0	0	0	102	0	217
2015	158	7	0	0	0	0	165
2014		0	0	0	0	0	0

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

B. Accounting Data

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

Year	Residential - Single Family	Residential - Multi-Family	Industrial	Commercial	Institutional	Agricultural	Total
2018	1,388,508,000	48,775,000	0	89,699,000	315,654,000	0	1,842,636,000
2017	1,361,216,800	49,405,000	0	73,403,200	306,630,600	0	1,790,655,600
2016	1,258,713,700	53,317,200	0	63,497,500	331,140,300	0	1,706,668,700
2015	1,261,470,000	56,112,000	0	66,020,000	309,801,000	0	1,693,403,000
2014	1,270,247,000	58,890,300	0	76,275,500	79,865,900	0	1,485,278,700

C. Residential Water Use

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

Year	Residential - Single Family	Residential - Multi-Family	Total Residential
2018	166	6	172
2017	163	5	168
2016	151	5	156
2015	151	7	158
2014	152	6	158
Historic Average	157	6	162

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	114,554,000	109,338,000	110,872,000	109,349,000	115,801,000
February	104,104,000	115,565,000	130,175,000	104,321,000	113,591,000
March	114,425,000	145,277,000	134,292,000	105,186,000	135,362,000
April	145,138,000	145,997,000	139,805,000	126,037,000	148,520,000
May	185,835,000	175,467,000	128,453,000	108,402,000	156,446,000
June	249,149,000	164,145,000	156,874,000	142,656,000	181,417,000
July	281,915,000	189,858,000	215,738,000	242,654,000	212,108,000
August	255,962,000	189,076,000	213,492,000	295,569,000	220,548,000
September	177,592,000	202,891,000	192,167,000	255,871,000	220,449,000
October	136,481,000	180,383,000	175,785,000	215,153,000	187,428,000
November	119,616,000	156,036,000	136,605,000	123,128,000	133,644,000
December	113,644,000	124,394,000	120,109,000	113,585,000	119,129,000
Total	1,998,415,000	1,898,427,000	1,854,367,000	1,941,911,000	1,944,443,000

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

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

Month	Total Gallons of Raw Water				
	2018	2017	2016	2015	2014
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
Total					

3. Summary of seasonal and annual water use.

	Summer RETAIL (Treated + Raw)	Total RETAIL (Treated + Raw)
2018	787,026,000	1,998,415,000
2017	543,079,000	1,898,427,000
2016	586,104,000	1,854,367,000
2015	680,879,000	1,941,911,000
2014	614,073,000	1,944,443,000
Average in Gallons	642,232,200.00	1,927,512,600.00

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	155,779,200	19	8.00 %
2017	87,368,949	10	4.58 %
2016	147,698,300	18	8.00 %
2015	1,911,659,733	227	98.44 %
2014	434,858,763	52	22.36 %
Average	547,472,989	65	28.28 %

F. Peak Day Use

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

Year	Average Daily Use (gal)	Peak Day Use (gal)	Ratio (peak/avg)
2018	5,475,109	8554630	1.5625
2017	5,201,169	5903032	1.1349
2016	5,080,457	6370695	1.2540
2015	5,320,304	7400858	1.3911
2014	5,327,241	6674706	1.2529

G. Summary of Historic Water Use

Water Use Category	Historic Average	Percent of Connections	Percent of Water Use
Residential - Single Family	1,308,031,100	88.04 %	76.77 %
Residential - Multi-Family	53,299,900	7.25 %	3.13 %
Industrial	0	0.00 %	0.00 %
Commercial	73,779,040	2.83 %	4.33 %
Institutional	268,618,360	1.88 %	15.77 %
Agricultural	0	0.00 %	0.00 %

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

H. System Data Comment Section

2014-2015. The City began implementing an AMR system that required change out of all meters within the system. Billing data discrepancies led to higher than normal amount of unaccounted water loss. The higher than normal water loss in Section E above can be attributed to these issues.

Average daily use and peak day use figures derived from monthly operating report for booster pump station.

Section III: Wastewater System Data

A. Wastewater System Data

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

Water Use Category	Metered	Unmetered	Total Connections	Percent of Total Connections
Municipal			0	0.00 %
Industrial			0	0.00 %
Commercial			0	0.00 %
Institutional			0	0.00 %
Agricultural			0	0.00 %
Total			0	100.00 %

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

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					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
Total					

5. Could treated wastewater be substituted for potable water?

☐

Yes

☐

No

B. Reuse Data

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

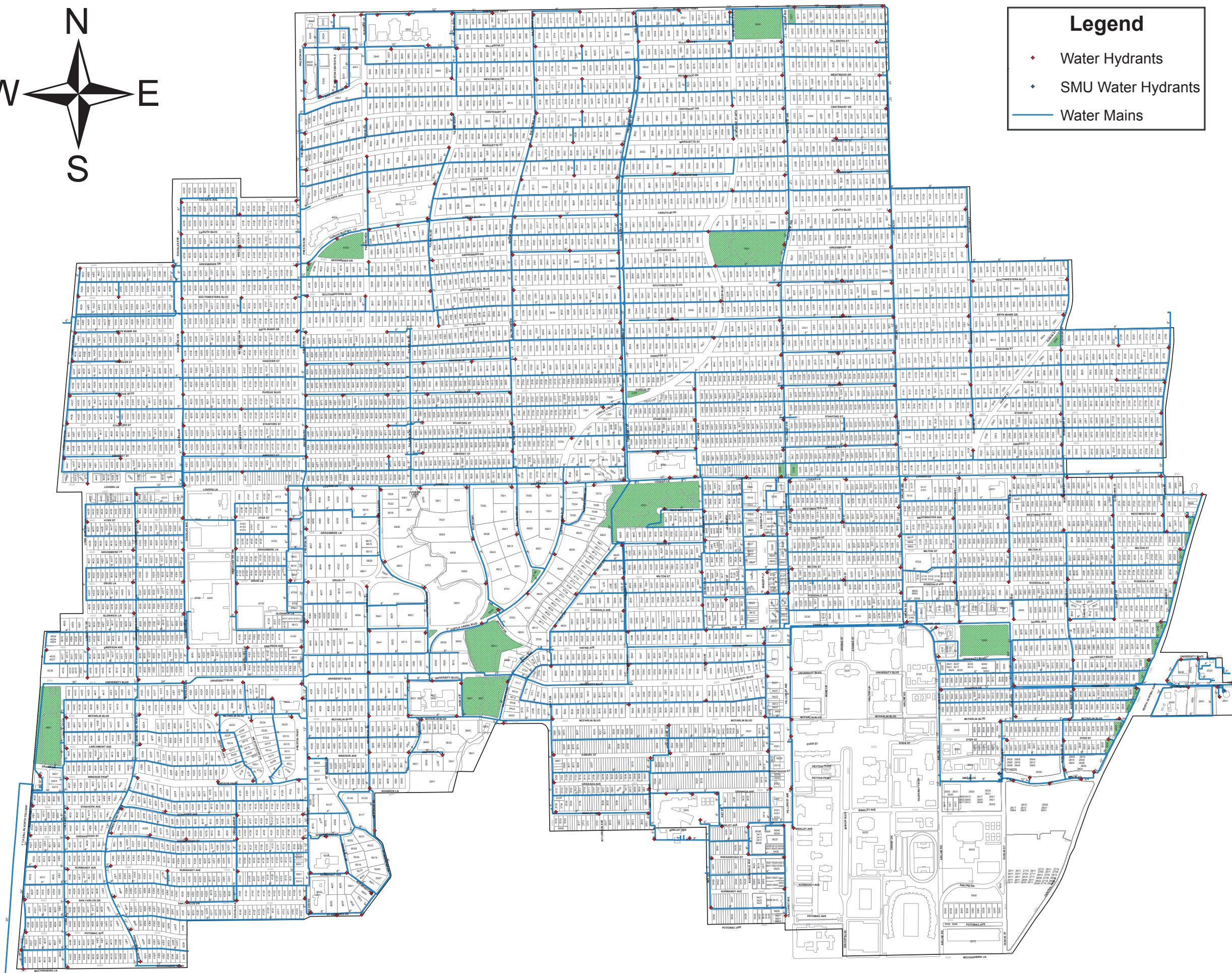
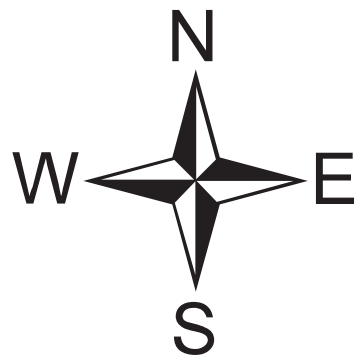
Type of Reuse	Total Annual Volume (in gallons)
On-site Irrigation	
Plant wash down	
Chlorination/de-chlorination	
Industrial	
Landscape irrigation (park,golf courses)	
Agricultural	
Discharge to surface water	
Evaporation Pond	
Other	
Total	

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

C. Wastewater System Data Comment

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

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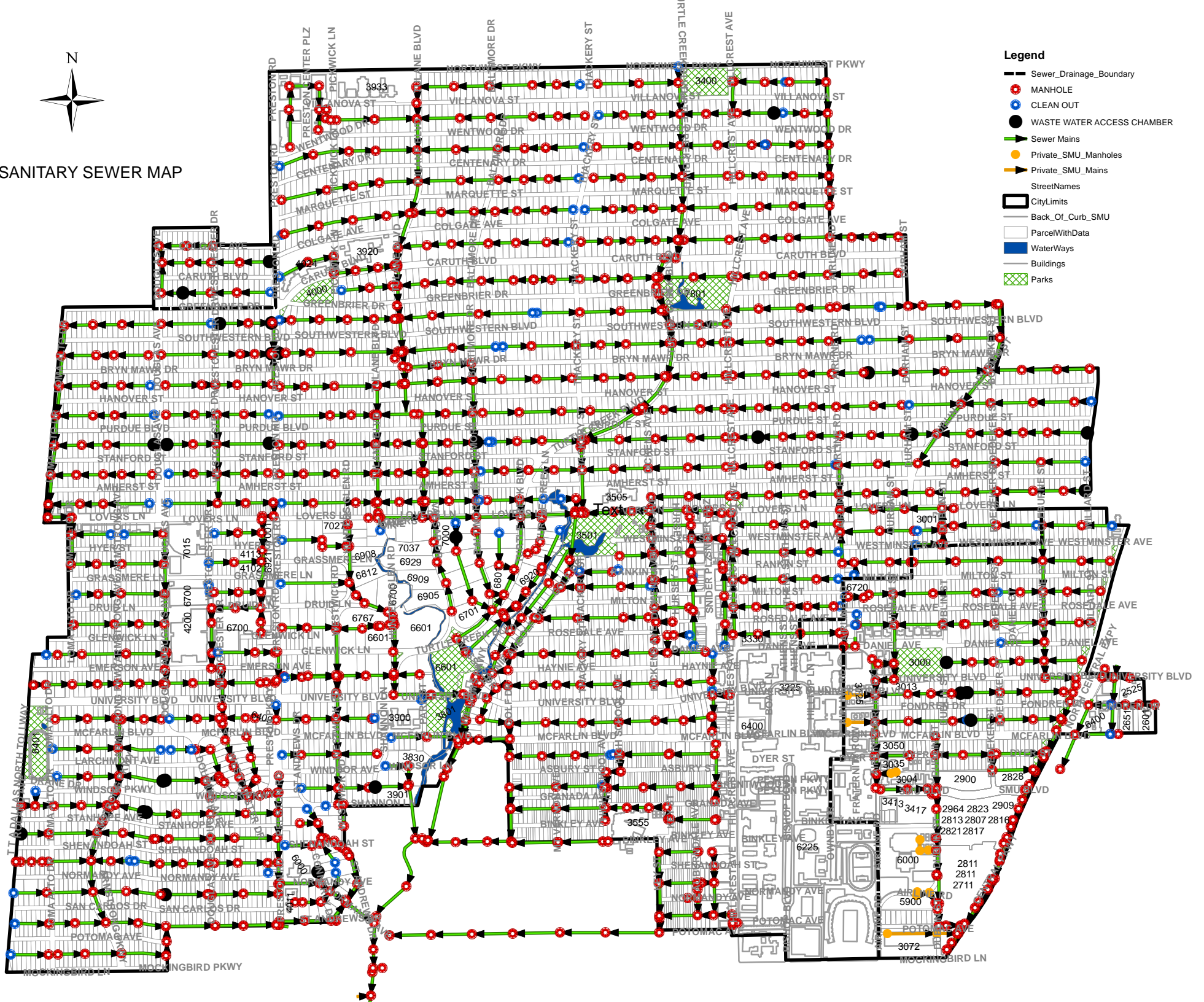


Legend

- Water Hydrants
- SMU Water Hydrants
- Water Mains



SANITARY SEWER MAP



(Values in Ac-Ft/Yr)	Projected Population and Demand					
	2020	2030	2040	2050	2060	2070
Additional Water from NTMWD	142	695	1,138	1,495	2,023	2,279
Total Water Management Strategies	185	779	1,267	1,661	2,241	2,517
Reserve (Shortage)	0	0	0	0	0	0

University Park

University Park is a city of about 23,000 people in central Dallas County and receives its water supply from the Dallas County Park Cities MUD. The only water management strategy for the city is conservation. Table 5D.78 shows the projected population and demand, the current supplies, and the water management strategy for University Park.

Table 5D.78
Projected Population and Demand, Current Supplies
and Water Management Strategies for the City of University Park

(Values in Ac-Ft/Yr)	Projected Population and Demand					
	2020	2030	2040	2050	2060	2070
Projected Population	25,688	25,688	25,688	25,688	25,688	25,688
Projected Water Demand						
Municipal Demand	7,622	7,515	7,427	7,379	7,371	7,370
Total Projected Demand	7,622	7,515	7,427	7,379	7,371	7,370
Currently Available Water Supplies						
Dallas County Park Cities MUD	7,558	7,427	7,353	7,281	7,248	7,223
Total Current Supplies	7,558	7,427	7,353	7,281	7,248	7,223
Need (Demand - Current Supply)	64	88	74	98	123	147
Water Management Strategies						
Water Conservation	64	88	74	98	123	147
Total Water Management Strategies	64	88	74	98	123	147
Reserve (Shortage)	0	0	0	0	0	0

Wilmer

Wilmer is a city of about 4,100 people located in southeastern Dallas County. The city receives its water supply from groundwater (Trinity aquifer) and DWU (through Hutchins). In the near future (2020), Wilmer plans to construct an additional take point to get DWU water through Lancaster. By 2040, Wilmer plans to participate in Dallas' construction of a 36" and 24" transmission main from which Wilmer will get the majority of its supply, leaving the connection with Hutchins to be an emergency connection only. Water

APPENDIX E
TCEQ IMPLEMENTATION REPORT



WATER CONSERVATION IMPLEMENTATION REPORT FORM AND SUMMARY OF UPDATES/REVISIONS TO WATER CONSERVATION PLAN

(Texas Water Code §11.1271(b) and Title 30 Texas Administrative Code §288.30(1) to (4))

Please note, this form replaces the following forms: TCEQ-20645 (Non-Public Water Suppliers) and TCEQ-20646 (Public Water Suppliers)

This Form is applicable to the following entities:

- 1. Water Right Holders of 1,000 acre-feet or more for municipal, industrial, and other non-irrigation uses.**
- 2. Water Right Holders of 10,000 acre-feet or more for irrigation uses.**

The above noted entities are required by rule to submit updates to their water conservation plan(s) and water conservation implementation report(s) every five years. The most current five-year submittal deadline is **May 1st, 2019**. See 30 Texas Administrative Code (TAC) §288.30(1) to (4). Entities must also submit any revisions to their water conservation plan within 90 days of adoption when the plans are revised in between the five-year submittal deadlines. This form may be used for the five-year submittal or when revisions are made to the water conservation plans in the interim periods between five-year submittals. Please complete the form as directed below.

1. Water Right Holder Name: _____
2. Water Right Permit or Certificate Nos. _____

3. Please Indicate by placing an 'X' next to all that Apply to your Entity:

Water Right Holder of 1,000 acre-feet or more for non-irrigation uses

- _____ Municipal Water Use by Public Water Supplier
_____ Wholesale Public Water Supplier
_____ Industrial Use
_____ Mining Use
_____ Agriculture Non-Irrigation

Water Right Holder of 10,000 acre-feet or more for irrigation uses

- _____ Individually-Operated Irrigation System
_____ Agricultural Water Suppliers Providing Water to More Than One User

Water Conservation Implementation Reports/Annual Reports

4. Water Conservation Annual Reports for the previous five years were submitted to the Texas Water Development Board (TWDB) for each of the uses indicated above as required by 30 TAC §288.30(10)(C)? Yes _____ No _____

TCEQ no longer requires submittal of the information contained in the detailed implementation report previously required in Forms TCEQ-20645 (Non-Public Water Suppliers) and TCEQ-20646 (Public Water Suppliers). However, the Entity must be up-to-date on its Annual Report Submittals to the TWDB.

Water Conservation Plans

5. For the five-year submittal (or for revisions between the five-year submittals), attach your updated or revised Water Conservation Plan for each of the uses indicated in Section 3, above. Every updated or revised water conservation plan submitted must contain each of the minimum requirements found in the TCEQ rules and must be duly adopted by the entity submitting the water conservation plan. Please include evidence that each water conservation plan submitted has been adopted.
- Rules on minimum requirements for Water Conservation Plans can be found in 30 TAC 288.
http://texreg.sos.state.tx.us/public/readtac%24ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=288
 - Forms which include the minimum requirements and other useful information are also available to assist you. Visit the TCEQ webpage for Water Conservation Plans and Reports. https://www.tceq.texas.gov/permitting/water_rights/wr_technical-resources/conserves.html

*Call 512-239-4691 or email to **wcp@tceq.texas.gov** for assistance with the requirements for your water conservation plan(s) and report(s).*

6. For each Water Conservation Plan submitted, state whether the five and ten-year targets for water savings and water loss were met in your *previous* water conservation plan.

Yes_____ No_____

If the targets were not met, please provide an explanation.

7. For each five-year submittal, does each water conservation plan submitted contain *updated* five and ten-year targets for water savings and water loss?

Yes_____ No_____

If yes, please identify where in the water conservation plan the updated targets are located (page, section).

8. In the box below (or in an attachment titled "Summary of Updates or Revisions to Water Conservation Plans), please identify any other revisions/updates made to each water conservation plan that is being updated or revised. Please specify the water conservation plan being updated and the location within the plan of the newly adopted updates or revisions.

Section 4.16. Added requirement to designate a person as the water conservation coordinator per new TCEQ rules. The Town has had a designated conservation coordinator since 2012 under Best Management Practices number 15. The Town's Water Conservation Plan has been revised to reflect this as now being a requirement instead of an optional strategy.

Section 5.3. Added installation of smart meters/AMRs.

Section 4 (General). Reorganized to follow the order of requirements found under 30 TAC 288.2 (a)(1) and 288.2(a)(2).

Section 5 (General). Reorganized to follow the order of requirements found under 30 TAC 288.2 (a)(3).

9. Form Completed by (Point of Contact): Jacob Speer
(If different than name listed above, owner and contact may be different individual(s)/entities)

Contact Person Title/Position: Jacob Speer/Director of Public Works

Contact Address: 3800 University Blvd University Park, TX 75205

Contact Phone Number: 214-987-5400 Contact Email Address: jspeer@uptexas.org

Signature: 

Date: 04-04-2019

APPENDIX F

TWDB ANNUAL REPORTS 2014-2018 CALENDAR YEAR

Water Conservation Plan Annual Report

Retail Water Supplier

CONTACT INFORMATION

Name of Entity: _____

Public Water Supply Identification Number (PWS ID): _____

Certificate of Convenience and Necessity (CCN) Number: _____

Surface Water Rights ID Number: _____

Wastewater ID Number: _____

Check all that apply:

☐ Retail Water Supplier

☐ Wholesale Water Supplier

☐ Wastewater Treatment Utility

Address: _____ City: _____ Zip Code: _____

Email: _____ Telephone Number: _____

Regional Water Planning Group: _____ [Map](#)

Groundwater Conservation District: _____ [Map](#)

Form Completed By: _____ Title: _____

Date: _____

Reporting Period (**calendar year**):

Period Begin (mm/yyyy) _____

Period End (mm/yyyy) _____

Check all of the following that apply to your entity:

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

☐ Have 3,300 or more retail connections

☐ Have a water right with TCEQ

SYSTEM DATA

Retail Customer Categories*

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

**Recommended Customer Categories for classifying your customer water use. For definitions, refer to [Guidance and Methodology on Water Conservation and Water Use](#).*

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

Residential Single Family
 Residential Multi-family
 Industrial

Commercial
 Institutional
 Agricultural

2. For this reporting period, enter the gallons of **metered retail water** used by each customer category. If the Customer Category does not apply, enter zero or leave blank.

Retail Customer Category	Number of Connections	Gallons Metered
Residential Single Family		
Residential Multi-family		
Industrial		
Commercial		
Institutional		
Agricultural		
Total Retail Water Metered¹		

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

Water Use Accounting

	Total Gallons During the Reporting Period
Water Produced: Water from permitted sources such as rivers, lakes, streams, and wells. <i>Same as line 14 of the water loss audit.</i>	
Wholesale Water Imported: Purchased wholesale water transferred into the system. <i>Same as line 15 of the water loss audit.</i>	
Wholesale Water Exported: Wholesale water sold or transferred out of the system. <i>Same as line 16 of the water loss audit.</i>	
System Input: Total water supplied to system and available for retail use.	Produced + Imported – Exported = System Input
Total Retail Water Metered	
Other Authorized Consumption: Water that is authorized for other uses such as the following: This water may be metered or unmetered. <i>Same as the total of lines 19, 20, and 21 of the water loss audit.</i> <ul style="list-style-type: none"> - back flushing - line flushing - storage tank cleaning - municipal golf courses/parks - fire department use - municipal government offices 	
Total Authorized Use: All water that has been authorized for use.	Total Retail Water + Other Authorized Consumption = Total Authorized Use
Apparent Losses: Water that has been consumed but not properly measured or billed. <i>Same as line 28 of the water loss audit.</i> <i>(Includes losses due to customer meter accuracy, systematic data discrepancy, unauthorized consumption such as theft)</i>	
Real Losses: Physical losses from the distribution system prior to reaching the customer destination. <i>Same as line 29 of the water loss audit.</i> <i>(Includes physical losses from system or mains, reported breaks and leaks, or storage overflow)</i>	
Unidentified Water Losses: Unreported losses not known or quantified.	System Input - Total Authorized Use - Apparent Losses - Real Losses = Unidentified Water Losses
Total Water Loss	Apparent + Real + Unidentified = Total Water Loss

Targets and Goals

Provide the **specific and quantified five and ten-year targets** as listed in your current Water Conservation Plan. Target dates and numbers should match your current Water Conservation Plan.

Achieve Date	Target for Total GPCD	Target for Residential GPCD	Target for Water Loss (expressed in GPCD)	Target for Water Loss Percentage (expressed in percentage)
Five-year target date: _____				
Ten-year target date: _____				

Gallons per Capita per Day (GPCD) and Water Loss

Provide current GPCD and water loss totals. To see if you are making progress towards your stated goals, compare these totals to the above targets and goals. Provide the population and residential water use of your service area.

Total System Input in Gallons	Permanent Population ¹	Total GPCD
Water Produced + Wholesale Imported - Wholesale Exported		(System Input ÷ Permanent Population) ÷ 365

1. Permanent 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

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

Total Water Loss	Permanent Population	Water Loss	
		GPCD ³	Percent ⁴
Apparent + Real + Unidentified = Total Water Loss			

3. (Total Water Loss ÷ Permanent Population) ÷ 365 = Water Loss GPCD
 4. (Total Water Loss ÷ Total System Input) x 100 = Water Loss Percentage

Water Conservation Programs and Activities

As you complete this section, review your utility's water conservation plan to see if you are making progress towards meeting your stated goals.

1. What year did your entity adopt or revise the most recent Water Conservation Plan? _____
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 strategies actively administered during this reporting period and estimate the savings incurred in implementing water conservation activities and programs. Leave fields blank if unknown.

Methods and techniques for determining gallons saved are unique to each utility as they conduct internal effective cost analyses and long-term financial planning. Texas Best Management Practices can be found at TWDB's Water Conservation Best Management Practices [webpage](#). The [Alliance for Water 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
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		
Education and Public Awareness		
School Education		
Public Information		
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		
Water Reuse		
New Construction Graywater		
Rainwater Harvesting and Condensate Reuse		
Regulatory and Enforcement		
Prohibition on Wasting Water		
Other, please describe:		
Total Gallons of Water Saved		

4. For this reporting period, provide the estimated gallons of direct or indirect reuse activities.

Reuse Activity	Estimated Volume (in gallons)
On-site irrigation	
Plant wash down	
Chlorination/de-chlorination	
Industrial	
Landscape irrigation (parks, golf courses)	
Agricultural	
Other, please describe:	
Total Volume of Reuse	

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

Gallons Saved/Conserved	Gallons Recycled/Reused	Total Volume of Water Saved⁵	Dollar Value of Water Saved⁶

5. Estimated Gallons Saved/Conserved + Estimated Gallons Recycled/Reused = Total Volume Saved

6. Estimate this value by taking into account water savings, the cost of treatment or purchase of water, and deferred capital costs due to conservation.

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

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

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

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

	Implemented	Number/Unit
<i>Example: Brochures Distributed</i>	√	10,000/year
<i>Example: Educational School Programs</i>	√	50 students/month
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 campaigns		_____
Facility Tours		_____
Other :		_____

Leak Detection and Water Loss

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

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

Leaks and breaks

Un-metered utility or city uses

Master meter problems

Customer meter problems

Record and data problems

Other: _____

Other: _____

2. For this reporting period, provide the following information regarding meter repair:

Type of Meter	Total Number	Total Tested	Total Repaired	Total Replaced
Production Meters				
Meters larger than 1 ½"				
Meters 1 ½ or smaller				

3. Does your system have automated meter reading? Yes No

Program Effectiveness and Drought

1. In your opinion, how would you rank the effectiveness of your conservation 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

If yes, how many days were water use restrictions in effect? _____

If yes, check the reason(s) for implementing your Drought Contingency Plan.

Water Supply Shortage

Equipment Failure

High Seasonal Demand

Impaired Infrastructure

Capacity Issues

Other:

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

Best Management Practices

Educational Resources

Drought Contingency Plans

Water Conservation Annual Reports

Landscape Irrigation

Water Conservation Plans

Leak Detection and Equipment

Water IQ: Know Your Water

Rainwater Harvesting

Water Loss Audits

Rate Structures

Recycling and Reuse

Water Conservation Plan Annual Report

Retail Water Supplier

CONTACT INFORMATION

Name of Entity: _____

Public Water Supply Identification Number (PWS ID): _____

Certificate of Convenience and Necessity (CCN) Number: _____

Surface Water Rights ID Number: _____

Wastewater ID Number: _____

Check all that apply:

☐ Retail Water Supplier

☐ Wholesale Water Supplier

☐ Wastewater Treatment Utility

Address: _____ City: _____ Zip Code: _____

Email: _____ Telephone Number: _____

Regional Water Planning Group: _____ [Map](#)

Groundwater Conservation District: _____ [Map](#)

Form Completed By: _____ Title: _____

Date: _____

Reporting Period (**calendar year**):

Period Begin (mm/yyyy) _____

Period End (mm/yyyy) _____

Check all of the following that apply to your entity:

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

☐ Have 3,300 or more retail connections

☐ Have a water right with TCEQ

SYSTEM DATA

Retail Customer Categories*

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

**Recommended Customer Categories for classifying your customer water use. For definitions, refer to [Guidance and Methodology on Water Conservation and Water Use](#).*

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

Residential Single Family
 Residential Multi-family
 Industrial

Commercial
 Institutional
 Agricultural

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		
Residential Multi-family		
Institutional		
Commercial		
Industrial		
Agricultural		
Total Retail Water Metered¹		

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

Water Use Accounting

	Total Gallons During the Reporting Period
# @ † : The volume of treated water input to the distribution system from own production facilities. <i>Same as Line 13b of the Water Loss Audit.</i>	
# Treated Purchased Water † : The amount of treated purchased wholesale water transferred into the utility's distribution system from other water suppliers system. <i>Same as Line 14b of the Water Loss Audit.</i>	
# u Wholesale Water † : The amount of treated wholesale water transferred out of the utility's distribution system, although it may be in the system for a brief time for conveyance reasons. <i>Same as Line 15b of the Water Loss Audit.</i>	
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. <i>Same as Line 16 of the Water Loss Audit.</i>	Produced + Imported – Exported = System Input
Billed Metered: All retail water sold and metered. <i>Same as Line 17 of the Water Loss Audit (Calculated from values entered on Page 2).</i>	
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. <i>Same as the total of Lines 18, 19, and 20 of the water loss audit.</i>	
Total Authorized # : All water that has been authorized for use. <i>Same as Line 21 of Water Loss Audit</i>	Total Billed and Metered Retail Water + Other Authorized Consumption = Total Authorized Use
u 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). <i>Same as Line 27 of the Water Loss Audit.</i>	
u Real Losses: Physical losses from the distribution system prior to reaching the customer destination (losses due to reported breaks and leaks, physical losses from system or mains and/or storage overflow). <i>Same as line 30 of the water loss audit.</i>	

Total Water Loss	Apparent + Real = Total Water Loss
-------------------------	------------------------------------

Targets and Goals

Provide the **specific and quantified five and ten-year targets** as listed in your current Water Conservation Plan. Target dates and numbers should match your current Water Conservation Plan.

Achieve Date	Target for Total GPCD	Target for Residential GPCD	Target for Water Loss (expressed in GPCD)	Target for Water Loss Percentage (expressed in percentage)
Five-year target date: _____				
Ten-year target date: _____				

Gallons per Capita per Day (GPCD) and Water Loss

Provide current GPCD and water loss totals. To see if you are making progress towards your stated goals, compare these totals to the above targets and goals. Provide the population and residential water use of your service area.

Total System Input in Gallons	Permanent Population ¹	Total GPCD
Water Produced + Wholesale Imported - Wholesale Exported		$(\text{System Input} \div \text{Permanent Population}) \div 365$

1. Permanent 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
		$(\text{Residential Use} \div \text{Residential Population}) \div 365$

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	Permanent Population	Water Loss	
		GPCD ³	Percent ⁴
Apparent + Real = Total Water Loss			

3. $(\text{Total Water Loss} \div \text{Permanent Population}) \div 365 = \text{Water Loss GPCD}$
 4. $(\text{Total Water Loss} \div \text{Total System Input}) \times 100 = \text{Water Loss Percentage}$

Water Conservation Programs and Activities

As you complete this section, review your utility's water conservation plan to see if you are making progress towards meeting your stated goals.

1. What year did your entity adopt or revise the most recent Water Conservation Plan? _____
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 effective cost analyses and long-term financial planning. Texas Best Management Practices can be found at TWDB's Water Conservation Best Management Practices [webpage](#). The [Alliance for Water 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			
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 & Reuse			
New Construction Graywater			
Rainwater Harvesting and Condensate Reuse			
Reuse for On-site Irrigation			
Reuse for Plant Washdown			
Reuse for Chlorination/Dechlorination			
Reuse for Industry			
Reuse for Agriculture			
Regulatory and Enforcement			
Prohibition on Wasting Water			
Other, please describe:			
Total Volumes			

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

Gallons Saved/Conserved	Gallons Recycled/Reused	Total Volume of Water Saved⁵	Dollar Value of Water Saved⁶

5. Estimated Gallons Saved/Conserved + Estimated Gallons Recycled/Reused = Total Volume Saved

6. Estimate this value by taking into account water savings, the cost of treatment or purchase of water, and deferred capital costs due to conservation.

Comments or Explanations Regarding Data Entered in Sections Above

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

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

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

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

	Implemented	Number/Unit
<i>Example: Brochures Distributed</i>	√	10,000/year
<i>Example: Educational School Programs</i>	√	50 students/month
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 campaigns		_____
Facility Tours		_____
Other :		_____

Leak Detection and Water Loss

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

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

Leaks and breaks

Un-metered utility or city uses

Master meter problems

Customer meter problems

Record and data problems

Other: _____

Other: _____

2. For this reporting period, provide the following information regarding meter repair:

Type of Meter	Total Number	Total Tested	Total Repaired	Total Replaced
Production Meters				
Meters larger than 1 ½"				
Meters 1 ½ or smaller				

3. Does your system have automated meter reading? Yes No

Program Effectiveness and Drought

1. In your opinion, how would you rank the effectiveness of your conservation 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

If yes, how many days were water use restrictions in effect? _____

If yes, check the reason(s) for implementing your Drought Contingency Plan.

Water Supply Shortage

Equipment Failure

High Seasonal Demand

Impaired Infrastructure

Capacity Issues

Other:

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

Best Management Practices

Educational Resources

Drought Contingency Plans

Water Conservation Annual Reports

Landscape Irrigation

Water Conservation Plans

Leak Detection and Equipment

Water IQ: Know Your Water

Rainwater Harvesting

Water Loss Audits

Rate Structures

Recycling and Reuse

Water Conservation Plan Annual Report Retail Water Supplier

CONTACT INFORMATION

Name of Utility: City of University Park

Public Water Supply Identification Number (PWS ID): TX0570061

Certification of Convenience and Necessity (CCN) Number: 10059

Surface Water Right ID Number:

Wastewater ID Number: 20015

Check all that apply:

- ☒ Retail Water Supplier
☐ Wholesale Water Supplier
☐ Wastewater Treatment Utility

Address: 3800 University Boulevard City: University Park Zip Code: 75205

Email: jledat@uptexas.org Telephone Number: 2149875447

Regional Water Planning Group: C

Groundwater Conservation District:

Contact: First Name: Jodie Last Name: Ledat

Title: Assistant to the Director of
Public Works

Regional Water Planning Group: C

Groundwater Conservation District:

Reporting Period (Calendar year):

Period Begin (mm/yyyy): 01/2016 Period End (mm/yyyy): 12/2016

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
<input checked="" type="checkbox"/>	Residential - Single Family
<input checked="" type="checkbox"/>	Residential - Multi-family
<input type="checkbox"/>	Industrial
<input checked="" type="checkbox"/>	Commercial
<input checked="" type="checkbox"/>	Institutional
<input type="checkbox"/>	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	8,879	1,258,713,700
Residential - Multi-family	744	53,317,200
Industrial	0	0
Commercial	306	63,497,500
Institutional	199	331,140,300
Agricultural	0	0
Total Retail Water Metered¹	10,128	1,706,668,700

¹Residential + 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 \geq 2015. Same as line 14 of the Water Loss Audit for reporting periods \leq 2014.	0
2. Corrected Treated Purchased Water Volume: The amount of treated purchased wholesale water transferred into the utility's distribution system from other water suppliers system. Same as line 14b of the Water Loss Audit for reporting periods \geq 2015. Same as line 15 of the Water Loss Audit for reporting periods \leq 2014.	1,854,367,000
3. Corrected Treated Wholesale Water Sales Volume: The amount of treated wholesale water transferred 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 \geq 2015. Same as line 16 of the Water Loss Audit for reporting periods \leq 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 \geq 2015. Same as line 17 of the Water Loss Audit for reporting periods \leq 2014. Produced + Imported - Exported = Total System Input Volume	1,854,367,000
5. Billed Metered: All retail water sold and metered. Same as line 17 of the Water Loss Audit for reporting periods \geq 2015. Same as line 18 of the Water Loss Audit for reporting periods \leq 2014.	1,706,668,700
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 \geq 2015. Same as lines 19, 20, and 21 of the Water Loss Audit for reporting periods \leq 2014.	24,823,900
7. Total Authorized Consumption: All water that has been authorized for use. Same as Line 21 of the Water Loss Audit for reporting periods \geq 2015. Same as line 22 of the Water Loss Audit for reporting periods \leq 2014. Total Billed and Metered Retail Water + Other Authorized Consumption = Total Authorized Consumption	1,731,492,600
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 \geq 2015. Same as line 28 of the Water Loss Audit for reporting periods \leq 2014.	94,460,586

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.	28,413,814
10. Total Water Loss: Apparent + Real = Total Water Loss	122,874,400

Programs and Activities

- What year did your entity adopt or revise their most recent Water Conservation Plan? 2014
- Does The Plan incorporate [Best Management Practices](#)? ☐ Yes ☒ No
- 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 Water 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	<input type="checkbox"/>		
Cost Effective Analysis	<input type="checkbox"/>		
Water Survey for Single Family and Multi-family Customers	<input type="checkbox"/>		
Financial			
Wholesale Agency Assistance Programs	<input type="checkbox"/>		
Water Conservation Pricing	<input checked="" type="checkbox"/>		
System Operations			
Metering New Connections and Retrofitting Existing Connections	<input checked="" type="checkbox"/>	20,480,024	
System Water Audit and Loss Control	<input type="checkbox"/>		
Landscaping			
Landscape Irrigation Conservation and Incentives	<input type="checkbox"/>		
Athletic Fields Conservation	<input checked="" type="checkbox"/>	40,000,000	
Golf Course Conservation	<input type="checkbox"/>		
Park Conservation	<input checked="" type="checkbox"/>	40,000,000	

Residential Landscape Irrigation Evaluation	<input type="checkbox"/>		
Education and Public Awareness			
School Education	<input type="checkbox"/>		
Public Information	<input checked="" type="checkbox"/>	500	
Small Utility Outreach and Education	<input type="checkbox"/>		
Partnerships with Nonprofit Organizations	<input checked="" type="checkbox"/>	10,000	
Rebate, Retrofit, and Incentive Programs			
Conservation Programs for ICI Accounts	<input type="checkbox"/>		
Residential Clothes Washer Incentive Program	<input type="checkbox"/>		
Water Wise Landscape Design and Conversion Programs	<input type="checkbox"/>		
Showerhead, Aerator, and Toilet Flapper Retrofit	<input type="checkbox"/>		
Residential Toilet Replacement Programs	<input type="checkbox"/>		
ICI Incentive Programs	<input type="checkbox"/>		
Conservation Technology & Resuse			
New Construction Graywater	<input type="checkbox"/>		
Rainwater Harvesting and Condensate Reuse	<input type="checkbox"/>		
Reuse for On-site Irrigation	<input type="checkbox"/>		
Reuse for Plant Washdown	<input type="checkbox"/>		
Reuse for Chlorination/Dechlorination	<input type="checkbox"/>		
Reuse for Industry	<input type="checkbox"/>		
Reuse for Agriculture	<input type="checkbox"/>		
Regulatory and Enforcement			
Prohibition on Wasting Water	<input checked="" type="checkbox"/>	128,000,000	
Retail			
Other	<input type="checkbox"/>		
Totals		228,490,524	

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
228,490,524		228,490,524	982,509

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

²Estimated 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.

Figures for Park and Athletic Field savings are split evenly between the estimated savings as the fields are in our Parks. The total estimated savings for both is 80,000,000. Calculations for metering new connections / retrofitting existing connections are based on estimated existing meter accuracy of 94%. With approximately 20% replacement of meters in 2016 with metering accuracy of an estimated 100%, we estimate improved accuracy provides for capture of 20,480,024 gallons. Estimated savings for Prohibition of Wasted Water is based on irrigation savings of residential and institutional properties.

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.

<input type="checkbox"/>	
<input checked="" type="checkbox"/>	Uniform Rates
<input type="checkbox"/>	Flat Rates
<input type="checkbox"/>	Inclining/Inverted Block Rates
<input type="checkbox"/>	Declining Block Rates
<input type="checkbox"/>	Seasonal Rates
<input checked="" type="checkbox"/>	Water Budget Based Rates
<input checked="" type="checkbox"/>	Excess Use Rates
<input type="checkbox"/>	Drought Demand Rates
<input type="checkbox"/>	Tailored Rates
<input type="checkbox"/>	Surcharge - usage demand
<input type="checkbox"/>	Surcharge - seasonal
<input type="checkbox"/>	Surcharge - drought
<input checked="" type="checkbox"/>	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	<input checked="" type="checkbox"/>	1	8,600
Messages Provided on Utility Bills	<input checked="" type="checkbox"/>	2	8,600
Press Releases	<input checked="" type="checkbox"/>	2	8,600
TV Public Service Announcements	<input type="checkbox"/>		
Radio Public Service Announcements	<input type="checkbox"/>		
Educational School Programs	<input type="checkbox"/>		
Displays, Exhibits, and Presentations	<input checked="" type="checkbox"/>	5	500
Community Events	<input checked="" type="checkbox"/>	1	500
Social Media campaign - Facebook	<input type="checkbox"/>		
Social Media campaign - Twitter	<input checked="" type="checkbox"/>	4	4,024
Social Media campaign - Instagram	<input checked="" type="checkbox"/>	1	495
Social Media campaign - YouTube	<input type="checkbox"/>		
Facility Tours	<input checked="" type="checkbox"/>	2	50
Other	<input type="checkbox"/>		
Total		18	31,369

Leak Detection and Water Loss

1. During this reporting period, how many leaks were repaired in the system or at service connections? 81

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

	Water Loss Causes
<input type="checkbox"/>	Distribution line leaks and breaks
<input type="checkbox"/>	Unauthorized use and theft
<input type="checkbox"/>	Master meter problems
<input checked="" type="checkbox"/>	Customer meter problems
<input type="checkbox"/>	Record and data problems
<input type="checkbox"/>	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)
89		3093

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	1	1	0	0
Meters larger than 1 1/2 inches	214		5	28
Meters 1 1/2 inches or smaller	9869		4	1573

5. Does your system have automated meter reading? ☐ Yes ☒ No

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	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Industrial Customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Institutional Customers	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Commercial Customers	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agricultural Customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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
<input type="checkbox"/>	Best Management Practices
<input type="checkbox"/>	Drought Contingency Plans
<input type="checkbox"/>	Landscape Irrigation
<input type="checkbox"/>	Leak Detection and Equipment
<input type="checkbox"/>	Rainwater Harvesting
<input type="checkbox"/>	Rate Structures
<input type="checkbox"/>	Educational Resources
<input type="checkbox"/>	Water Conservation Annual Reports
<input type="checkbox"/>	Water Conservation Plans
<input type="checkbox"/>	Water IQ: Know Your Water
<input type="checkbox"/>	Water Loss Audits
<input type="checkbox"/>	Recycling and Reuse

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 Population¹	Total GPCD (System Input / Retail Population) / 365
1,854,367,000	23,068	220

¹Retail 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 Population²	Residential GPCD (Residential Use / Residential Population) / 365
1,312,030,900	23,068	155

²Residential 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 GPCD³	Water Loss Percent
122,874,400	23,068	14	6.63%

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	247	220	218	155	10	14	4.05 %	6.63 %
Ten-year Target Date 2024	246	220	216	155	10	14	4.07 %	6.63 %

Water Conservation Plan Annual Report Retail Water Supplier

CONTACT INFORMATION

Name of Utility: City of University Park

Public Water Supply Identification Number (PWS ID): TX0570061

Certification of Convenience and Necessity (CCN) Number: 10059

Surface Water Right ID Number:

Wastewater ID Number: 20015

Check all that apply:

- ☒ Retail Water Supplier
☐ Wholesale Water Supplier
☐ Wastewater Treatment Utility

Address: 3800 University Boulevard City: University Park Zip Code: 75205

Email: jledat@uptexas.org Telephone Number: 2149875447

Regional Water Planning Group: C

Groundwater Conservation District:

Contact: First Name: Jodie Last Name: Ledat

Title: Operations Coordinator

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

Regional Water Planning Group: C

Groundwater Conservation District:

Reporting Period (Calendar year):

Period Begin (mm/yyyy): 01/2017 Period End (mm/yyyy): 12/2017

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
<input checked="" type="checkbox"/>	Residential - Single Family
<input checked="" type="checkbox"/>	Residential - Multi-family
<input type="checkbox"/>	Industrial
<input checked="" type="checkbox"/>	Commercial
<input checked="" type="checkbox"/>	Institutional
<input type="checkbox"/>	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	9,105	1,361,216,800
Residential - Multi-family	744	49,405,000
Industrial	0	0
Commercial	306	73,403,200
Institutional	185	306,630,600
Agricultural	0	0
Total Retail Water Metered¹	10,340	1,790,655,600

¹Residential + 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 \geq 2015. Same as line 14 of the Water Loss Audit for reporting periods \leq 2014.	0
2. Corrected Treated Purchased Water Volume: The amount of treated purchased wholesale water transferred into the utility's distribution system from other water suppliers system. Same as line 14b of the Water Loss Audit for reporting periods \geq 2015. Same as line 15 of the Water Loss Audit for reporting periods \leq 2014.	1,898,427,000
3. Corrected Treated Wholesale Water Sales Volume: The amount of treated wholesale water transferred 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 \geq 2015. Same as line 16 of the Water Loss Audit for reporting periods \leq 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 \geq 2015. Same as line 17 of the Water Loss Audit for reporting periods \leq 2014. Produced + Imported - Exported = Total System Input Volume	1,898,427,000
5. Billed Metered: All retail water sold and metered. Same as line 17 of the Water Loss Audit for reporting periods \geq 2015. Same as line 18 of the Water Loss Audit for reporting periods \leq 2014.	1,790,655,600
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 \geq 2015. Same as lines 19, 20, and 21 of the Water Loss Audit for reporting periods \leq 2014.	29,823,038
7. Total Authorized Consumption: All water that has been authorized for use. Same as Line 21 of the Water Loss Audit for reporting periods \geq 2015. Same as line 22 of the Water Loss Audit for reporting periods \leq 2014. Total Billed and Metered Retail Water + Other Authorized Consumption = Total Authorized Consumption	1,820,478,638
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 \geq 2015. Same as line 28 of the Water Loss Audit for reporting periods \leq 2014.	79,356,718

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.	(1,408,355)
10. Total Water Loss: Apparent + Real = Total Water Loss	77,948,363

Programs and Activities

- What year did your entity adopt or revise their most recent Water Conservation Plan? 2014
- Does The Plan incorporate [Best Management Practices](#)? ☐ Yes ☐ No
- 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 Water 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	<input type="checkbox"/>		
Cost Effective Analysis	<input type="checkbox"/>		
Water Survey for Single Family and Multi-family Customers	<input type="checkbox"/>		
Financial			
Wholesale Agency Assistance Programs	<input type="checkbox"/>		
Water Conservation Pricing	<input checked="" type="checkbox"/>		
System Operations			
Metering New Connections and Retrofitting Existing Connections	<input checked="" type="checkbox"/>	42,975,734	
System Water Audit and Loss Control	<input type="checkbox"/>		
Landscaping			
Landscape Irrigation Conservation and Incentives	<input type="checkbox"/>		
Athletic Fields Conservation	<input checked="" type="checkbox"/>	40,000,000	
Golf Course Conservation	<input type="checkbox"/>		
Park Conservation	<input checked="" type="checkbox"/>	40,000,000	

Residential Landscape Irrigation Evaluation	<input type="checkbox"/>		
Education and Public Awareness			
School Education	<input checked="" type="checkbox"/>	500	
Public Information	<input checked="" type="checkbox"/>	500	
Small Utility Outreach and Education	<input type="checkbox"/>		
Partnerships with Nonprofit Organizations	<input checked="" type="checkbox"/>	10,000	
Rebate, Retrofit, and Incentive Programs			
Conservation Programs for ICI Accounts	<input type="checkbox"/>		
Residential Clothes Washer Incentive Program	<input type="checkbox"/>		
Water Wise Landscape Design and Conversion Programs	<input type="checkbox"/>		
Showerhead, Aerator, and Toilet Flapper Retrofit	<input type="checkbox"/>		
Residential Toilet Replacement Programs	<input type="checkbox"/>		
ICI Incentive Programs	<input type="checkbox"/>		
Conservation Technology & Resuse			
New Construction Graywater	<input type="checkbox"/>		
Rainwater Harvesting and Condensate Reuse	<input type="checkbox"/>		
Reuse for On-site Irrigation	<input type="checkbox"/>		
Reuse for Plant Washdown	<input type="checkbox"/>		
Reuse for Chlorination/Dechlorination	<input type="checkbox"/>		
Reuse for Industry	<input type="checkbox"/>		
Reuse for Agriculture	<input type="checkbox"/>		
Regulatory and Enforcement			
Prohibition on Wasting Water	<input checked="" type="checkbox"/>	134,299,170	
Retail			
Other	<input checked="" type="checkbox"/>		
Totals		257,285,904	

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
257,285,904		257,285,904	1,106,329

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

²Estimated 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.

Figures for Park and Athletic Field savings are split evenly between the estimated savings as the fields are in our parks. The total estimated savings for both continues to be 80,000,000. Calculations for metering new connections / retrofitting existing connections are based on estimated meter accuracy of 94%. With approximately 40% replacement of meters in 2017 (for a total replacement to date of 60%) with metering accuracy of an estimated 100%, we estimate improved accuracy provides for capture reads of an additional 42,975,734 gallons. Estimated savings for Prohibition of Wasted Water is based on irrigation figures derived from previous calculations that found approximately 75% of water consumption is used for irrigation.

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.

<input type="checkbox"/>	
<input checked="" type="checkbox"/>	Uniform Rates
<input type="checkbox"/>	Flat Rates
<input type="checkbox"/>	Inclining/Inverted Block Rates
<input type="checkbox"/>	Declining Block Rates
<input type="checkbox"/>	Seasonal Rates
<input type="checkbox"/>	Water Budget Based Rates
<input checked="" type="checkbox"/>	Excess Use Rates
<input type="checkbox"/>	Drought Demand Rates
<input type="checkbox"/>	Tailored Rates
<input type="checkbox"/>	Surcharge - usage demand
<input type="checkbox"/>	Surcharge - seasonal
<input type="checkbox"/>	Surcharge - drought
<input type="checkbox"/>	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	<input checked="" type="checkbox"/>	1	8,600
Messages Provided on Utility Bills	<input checked="" type="checkbox"/>	2	8,600
Press Releases	<input checked="" type="checkbox"/>	2	8,600
TV Public Service Announcements	<input type="checkbox"/>		
Radio Public Service Announcements	<input type="checkbox"/>		
Educational School Programs	<input type="checkbox"/>		
Displays, Exhibits, and Presentations	<input checked="" type="checkbox"/>	5	500
Community Events	<input checked="" type="checkbox"/>	1	500
Social Media campaign - Facebook	<input type="checkbox"/>		
Social Media campaign - Twitter	<input checked="" type="checkbox"/>	1	1,574
Social Media campaign - Instagram	<input checked="" type="checkbox"/>	1	938
Social Media campaign - YouTube	<input type="checkbox"/>		
Facility Tours	<input checked="" type="checkbox"/>	2	50
Other	<input type="checkbox"/>		
Total		15	29,362

Leak Detection and Water Loss

1. During this reporting period, how many leaks were repaired in the system or at service connections? 41

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

	Water Loss Causes
<input type="checkbox"/>	Distribution line leaks and breaks
<input type="checkbox"/>	Unauthorized use and theft
<input type="checkbox"/>	Master meter problems
<input checked="" type="checkbox"/>	Customer meter problems
<input type="checkbox"/>	Record and data problems
<input type="checkbox"/>	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)
89		890

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	1	1	0	0
Meters larger than 1 1/2 inches	220			15
Meters 1 1/2 inches or smaller	10120		20	3363

5. Does your system have automated meter reading? ☐ Yes ☒ No

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	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Industrial Customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Institutional Customers	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Commercial Customers	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agricultural Customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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
<input type="checkbox"/>	Best Management Practices
<input type="checkbox"/>	Drought Contingency Plans
<input type="checkbox"/>	Landscape Irrigation
<input type="checkbox"/>	Leak Detection and Equipment
<input type="checkbox"/>	Rainwater Harvesting
<input type="checkbox"/>	Rate Structures
<input type="checkbox"/>	Educational Resources
<input type="checkbox"/>	Water Conservation Annual Reports
<input type="checkbox"/>	Water Conservation Plans
<input type="checkbox"/>	Water IQ: Know Your Water
<input type="checkbox"/>	Water Loss Audits
<input type="checkbox"/>	Recycling and Reuse

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 Population¹	Total GPCD (System Input / Retail Population) / 365
1,898,427,000	23,068	225

¹Retail 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 Population²	Residential GPCD (Residential Use / Residential Population) / 365
1,410,621,800	23,068	168

²Residential 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 GPCD³	Water Loss Percent
77,948,363	23,068	9	4.11%

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	247	225	218	168	10	9	4.05 %	4.11 %
Ten-year Target Date 2024	246	225	216	168	10	9	4.07 %	4.11 %

Water Conservation Plan Annual Report Retail Water Supplier

CONTACT INFORMATION

Name of Utility: City of University Park

Public Water Supply Identification Number (PWS ID): TX0570061

Certification of Convenience and Necessity (CCN) Number: 10059

Surface Water Right ID Number:

Wastewater ID Number: 20015

Check all that apply:

- ☒ Retail Water Supplier
☐ Wholesale Water Supplier
☐ Wastewater Treatment Utility

Address: 3800 University Boulevard City: University Park Zip Code: 75205

Email: jledat@uptexas.org Telephone Number: 2149875447

Regional Water Planning Group: C

Groundwater Conservation District:

Contact: First Name: Jodie Last Name: Ledat

Title: Operations Coordinator

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

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
<input checked="" type="checkbox"/>	Residential - Single Family
<input checked="" type="checkbox"/>	Residential - Multi-family
<input type="checkbox"/>	Industrial
<input checked="" type="checkbox"/>	Commercial
<input checked="" type="checkbox"/>	Institutional
<input type="checkbox"/>	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	9,162	1,388,508,200
Residential - Multi-family	754	48,774,500
Industrial	0	0
Commercial	295	89,699,100
Institutional	196	315,654,000
Agricultural	0	0
Total Retail Water Metered¹	10,407	1,842,635,800

¹Residential + 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 \geq 2015. Same as line 14 of the Water Loss Audit for reporting periods \leq 2014.	
2. Corrected Treated Purchased Water Volume: The amount of treated purchased wholesale water transferred into the utility's distribution system from other water suppliers system. Same as line 14b of the Water Loss Audit for reporting periods \geq 2015. Same as line 15 of the Water Loss Audit for reporting periods \leq 2014.	2,008,457,286
3. Corrected Treated Wholesale Water Sales Volume: The amount of treated wholesale water transferred 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 \geq 2015. Same as line 16 of the Water Loss Audit for reporting periods \leq 2014.	
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 \geq 2015. Same as line 17 of the Water Loss Audit for reporting periods \leq 2014. Produced + Imported - Exported = Total System Input Volume	2,008,457,286
5. Billed Metered: All retail water sold and metered. Same as line 17 of the Water Loss Audit for reporting periods \geq 2015. Same as line 18 of the Water Loss Audit for reporting periods \leq 2014.	1,842,636,000
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 \geq 2015. Same as lines 19, 20, and 21 of the Water Loss Audit for reporting periods \leq 2014.	95,158,516
7. Total Authorized Consumption: All water that has been authorized for use. Same as Line 21 of the Water Loss Audit for reporting periods \geq 2015. Same as line 22 of the Water Loss Audit for reporting periods \leq 2014. Total Billed and Metered Retail Water + Other Authorized Consumption = Total Authorized Consumption	1,937,794,516
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 \geq 2015. Same as line 28 of the Water Loss Audit for reporting periods \leq 2014.	81,797,635

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.	47,029,344
10. Total Water Loss: Apparent + Real = Total Water Loss	128,826,979

Programs and Activities

- What year did your entity adopt or revise their most recent Water Conservation Plan? 2014
- Does The Plan incorporate [Best Management Practices](#)? ☐ Yes ☐ No
- 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 Water 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	<input checked="" type="checkbox"/>	10,000	0
Cost Effective Analysis	<input type="checkbox"/>		
Water Survey for Single Family and Multi-family Customers	<input type="checkbox"/>		
Financial			
Wholesale Agency Assistance Programs	<input type="checkbox"/>		
Water Conservation Pricing	<input checked="" type="checkbox"/>	0	0
System Operations			
Metering New Connections and Retrofitting Existing Connections	<input checked="" type="checkbox"/>	93,974,426	0
System Water Audit and Loss Control	<input type="checkbox"/>		
Landscaping			
Landscape Irrigation Conservation and Incentives	<input type="checkbox"/>		
Athletic Fields Conservation	<input checked="" type="checkbox"/>	40,000	0
Golf Course Conservation	<input type="checkbox"/>		
Park Conservation	<input checked="" type="checkbox"/>	40,000	0

Residential Landscape Irrigation Evaluation	<input type="checkbox"/>		
Education and Public Awareness			
School Education	<input checked="" type="checkbox"/>	500	0
Public Information	<input checked="" type="checkbox"/>	500	0
Small Utility Outreach and Education	<input type="checkbox"/>		
Partnerships with Nonprofit Organizations	<input checked="" type="checkbox"/>	10,000	0
Rebate, Retrofit, and Incentive Programs			
Conservation Programs for ICI Accounts	<input type="checkbox"/>		
Residential Clothes Washer Incentive Program	<input type="checkbox"/>		
Water Wise Landscape Design and Conversion Programs	<input type="checkbox"/>		
Showerhead, Aerator, and Toilet Flapper Retrofit	<input type="checkbox"/>		
Residential Toilet Replacement Programs	<input type="checkbox"/>		
ICI Incentive Programs	<input type="checkbox"/>		
Conservation Technology & Resuse			
New Construction Graywater	<input type="checkbox"/>		
Rainwater Harvesting and Condensate Reuse	<input type="checkbox"/>		
Reuse for On-site Irrigation	<input type="checkbox"/>		
Reuse for Plant Washdown	<input type="checkbox"/>		
Reuse for Chlorination/Dechlorination	<input type="checkbox"/>		
Reuse for Industry	<input type="checkbox"/>		
Reuse for Agriculture	<input type="checkbox"/>		
Regulatory and Enforcement			
Prohibition on Wasting Water	<input checked="" type="checkbox"/>	232,263,111	0
Retail			
Other	<input type="checkbox"/>		
Totals		326,338,537	0

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
326,338,537	0	326,338,537	801,683,250

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

²Estimated 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.

Figures for Park and Athletic Field savings are evenly split evenly between the estimated savings as the fields are in our parks. The total estimated savings for both continues to be 80,000. Calculations for metering new connections / retrofitting existing connections are based on estimated meter accuracy of 94%. With approximately 85% of meters replaced by the end of 2018, with metering accuracy of 100%, we estimate improved accuracy allows us to capture an estimated 93,974,426 gallons. Estimated savings for Prohibition of Wasted Water is based on irrigation figures derived from previous calculations that found approximately 75% of water consumption is used for irrigation.

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.

<input type="checkbox"/>	
<input checked="" type="checkbox"/>	Uniform Rates
<input type="checkbox"/>	Flat Rates
<input type="checkbox"/>	Inclining/Inverted Block Rates
<input type="checkbox"/>	Declining Block Rates
<input type="checkbox"/>	Seasonal Rates
<input type="checkbox"/>	Water Budget Based Rates
<input type="checkbox"/>	Excess Use Rates
<input type="checkbox"/>	Drought Demand Rates
<input type="checkbox"/>	Tailored Rates
<input type="checkbox"/>	Surcharge - usage demand
<input checked="" type="checkbox"/>	Surcharge - seasonal
<input type="checkbox"/>	Surcharge - drought
<input checked="" type="checkbox"/>	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	<input checked="" type="checkbox"/>	1	22,890
Messages Provided on Utility Bills	<input checked="" type="checkbox"/>	1	22,890
Press Releases	<input type="checkbox"/>		
TV Public Service Announcements	<input type="checkbox"/>		
Radio Public Service Announcements	<input type="checkbox"/>		
Educational School Programs	<input type="checkbox"/>		
Displays, Exhibits, and Presentations	<input checked="" type="checkbox"/>	6	180
Community Events	<input type="checkbox"/>		
Social Media campaign - Facebook	<input checked="" type="checkbox"/>	2	629
Social Media campaign - Twitter	<input checked="" type="checkbox"/>	3	1,847
Social Media campaign - Instagram	<input checked="" type="checkbox"/>	1	1,188
Social Media campaign - YouTube	<input type="checkbox"/>		
Facility Tours	<input checked="" type="checkbox"/>	1	20
Other	<input type="checkbox"/>		
Total		15	49,644

Leak Detection and Water Loss

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

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

	Water Loss Causes
<input checked="" type="checkbox"/>	Distribution line leaks and breaks
<input type="checkbox"/>	Unauthorized use and theft

<input type="checkbox"/>	Master meter problems
<input type="checkbox"/>	Customer meter problems
<input type="checkbox"/>	Record and data problems
<input type="checkbox"/>	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)
89		

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	1	1	0	0
Meters larger than 1 1/2 inches	214			42
Meters 1 1/2 inches or smaller	10021			3429

5. Does your system have automated meter reading? ☒ Yes ☐ No

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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Industrial Customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Institutional Customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Commercial Customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agricultural Customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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
<input type="checkbox"/>	Best Management Practices
<input type="checkbox"/>	Drought Contingency Plans
<input type="checkbox"/>	Landscape Irrigation
<input type="checkbox"/>	Leak Detection and Equipment
<input type="checkbox"/>	Rainwater Harvesting
<input type="checkbox"/>	Rate Structures
<input type="checkbox"/>	Educational Resources
<input type="checkbox"/>	Water Conservation Annual Reports
<input type="checkbox"/>	Water Conservation Plans
<input type="checkbox"/>	Water IQ: Know Your Water
<input type="checkbox"/>	Water Loss Audits
<input type="checkbox"/>	Recycling and Reuse

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 Population¹	Total GPCD (System Input / Retail Population) / 365
2,008,457,286	22,890	240

¹Retail 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 Population²	Residential GPCD (Residential Use / Residential Population) / 365
1,437,282,700	22,890	172

²Residential 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 GPCD³	Water Loss Percent
128,826,979	22,890	15	6.41%

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	247	240	218	172	10	15	4.05 %	6.41 %
Ten-year Target Date 2024	246	240	216	172	10	15	4.07 %	6.41 %

APPENDIX G

SUBMITTAL LETTERS TO TCEQ, TWDB, AND REGION C WATER PLANNING GROUP



City of University Park
Committed to Excellence

Texas Water Development Board
ATTN: Conservation Plan
1700 North Congress Avenue
P.O. Box 13231
Austin, Texas 78711-3231.

April 3, 2019

Re: City of University Park Water Conservation and Drought Contingency Plans

Dear Sir/Madam,

Pursuant to Texas Commission on Environmental Quality and Texas Water Development rules, the City of University Park respectfully submits the attached updated Water Conservation Plan and Drought Contingency Plan for the City. The Water Conservation Plan was approved by the University Park City Council on March 19, 2019 and the Drought Contingency Plan on April 2, 2019.

Sincerely,

Jacob Speer
Director of Public Works
City of University Park

Attachments



City of University Park
Committed to Excellence

Texas Commission on Environmental Quality
Resource Protection Team, MC-160
P.O. Box 13087
Austin, Texas, 78711-3087

April 3, 2019

Re: City of University Park Water Conservation and Drought Contingency Plans

Dear Sir/Madam,

Pursuant to Texas Administrative Code, Title 30, Chapter 288, the City of University Park respectfully submits the attached updated Water Conservation Plan and Drought Contingency Plan for the City. The Water Conservation Plan was approved by the University Park City Council on March 19, 2019 and the Drought Contingency Plan on April 2, 2019.

Copies of the approved plans have also been submitted to the Texas Water Development Board and the Chair of the Region C Water Planning Group.

Sincerely,

Jacob Speer
Director of Public Works
City of University Park

Attachments



City of University Park
Committed to Excellence

Kevin Ward, Chair
Region C Planning Group
c/o TRA
P.O. Box 60
Arlington, TX 76004

April 3, 2019

Re: City of University Park Water Conservation and Drought Contingency Plans

Dear Mr. Ward,

Pursuant to Texas Commission on Environmental Quality and Texas Water Development rules, the City of University Park respectfully submits the attached updated Water Conservation Plan and Drought Contingency Plan for the City. The Water Conservation Plan was approved by the University Park City Council on March 19, 2019 and the Drought Contingency Plan on April 2, 2019.

Thank you for all of your efforts on regional and State water planning.

Sincerely,

Jacob Speer
Director of Public Works
City of University Park

CC: Sarah Backhouse

Attachments

APPENDIX H

**ADOPTION OF THE
WATER CONSERVATION PLAN**

ORDINANCE NO. 19-010

AN ORDINANCE OF THE CITY OF UNIVERSITY PARK, TEXAS, AMENDING THE CODE OF ORDINANCES OF THE CITY OF UNIVERSITY PARK, CHAPTER 13 "UTILITIES", SECTION 13.03.012 (a) (1), BY ADOPTING A NEW WATER CONSERVATION PLAN; PROMOTING RESPONSIBLE USE OF WATER; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED TWO THOUSAND DOLLARS (\$2,000.00) AND/OR THE DISCONNECTION OF WATER SERVICE FOR NONCOMPLIANCE WITH THE PROVISIONS OF THE WATER CONSERVATION PLAN; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR THE REPEAL OF ORDINANCES IN CONFLICT; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City recognizes the need to make efficient use of its water supply; and

WHEREAS, the Texas Commission on Environmental Quality (TCEQ) and the Texas Water Development Board (TWDB) have developed guidelines and requirements governing the development of water conservation plans; and

WHEREAS, Title 30, Chapter 288, of the Texas Administrative Code and the regulations of the TCEQ require that the City adopt a Water Conservation Plan; and

WHEREAS, the City Council of the City of University Park desires to adopt a new Water Conservation Plan as official City policy for the conservation of water; **NOW, THEREFORE,**

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF UNIVERSITY PARK, TEXAS:

SECTION 1. That Section 13.03.012(a)(1) of the Code of Ordinances of the City of University Park, Texas, is hereby amended to read as follows:

“(1) Water conservation plan. The 2019 Water Conservation Plan for the City of University Park is hereby adopted by reference and a true copy of such plan shall be retained by the City Secretary and Director of Public Works and be available for public inspection during all business hours of the City of University Park.”

SECTION 2. 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 enacted. The City Council further ratifies, approves and confirms such written notice and the posting thereof.

SECTION 3. The City Manager or his designee is hereby directed to file a copy of the Plan and this ordinance with the TCEQ, TWDB, and the Region C Water Planning Group in accordance with Title 30, Chapter 288 of the Texas Administrative Code.

SECTION 4. The City Secretary is hereby authorized and directed to cause publication of the descriptive caption of this ordinance as provided by law.

SECTION 5. That any person, firm or corporation violating any of the provisions or terms of this ordinance shall be subject to a penalty of fine not to exceed the sum of two thousand dollars (\$2,000.00) for each offense 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 Water Conservation 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 6. 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 7. This ordinance shall take effect immediately following its passage and the publication of the caption, as the law and Charter in such cases provide.

DULY PASSED AND APPROVED by the City Council of the City of University Park, Texas, on this 19th day of March 2019.

APPROVED:



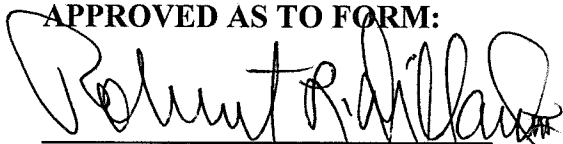
OLIN LANE, JR., MAYOR

ATTEST:



CHRISTINE GREEN, CITY SECRETARY

APPROVED AS TO FORM:



CITY ATTORNEY (rid;3-06-19;106588)

ORDINANCE NO. 19-010

AN ORDINANCE OF THE CITY OF UNIVERSITY PARK, TEXAS, AMENDING THE CODE OF ORDINANCES OF THE CITY OF UNIVERSITY PARK, CHAPTER 13 "UTILITIES", SECTION 13.03.012 (a)(1), BY ADOPTING A NEW WATER CONSERVATION PLAN; PROMOTING RESPONSIBLE USE OF WATER; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED TWO THOUSAND DOLLARS (\$2,000.00) AND/OR THE DISCONNECTION OF WATER SERVICE FOR NONCOMPLIANCE WITH THE PROVISIONS OF THE WATER CONSERVATION PLAN; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR THE REPEAL OF ORDINANCES IN CONFLICT; AND PROVIDING AN EFFECTIVE DATE.


DULY PASSED AND APPROVED by the City Council of the City of University Park, Texas, on this 19th day of March 2019.

APPROVED:



OLIN LANE, JR., MAYOR

ATTEST:



CHRISTINE GREEN, CITY SECRETARY