City of Arlington
101 W Abram St
Arlington, Texas 76010

Water Conservation Plan

May 2019

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APPENDICES

Water Conservation Plan
For the City of Arlington, Texas

1. INTRODUCTION AND OBJECTIVES

Having a dependable water supply has always been a key issue in the development of Texas. The growing population and economic expansion occurring in North Central Texas are placing increased demands on our water supplies. In order to meet the challenge of providing for our current and future needs we must use the water we already have more efficiently. By stretching our existing supplies, we can delay the need for new supplies, minimize the environmental impacts associated with developing new water resources, and postpone the high cost of building the infrastructure (dams, treatment facilities, and pipelines) necessary to capture, treat, and transport the additional water into our homes and businesses.

Recognizing the need for efficient use of existing water supplies, the Texas Commission on Environmental Quality (TCEQ) has developed guidelines and requirements governing the development of water conservation plans for public water suppliers. TCEQ guidelines and requirements are included in Appendix B. Resources used in the development of the water conservation plan include the Texas Water Development Board (TWDB) Water Conservation Best Management Practices for Municipal Water Users November 2013 Guide, the American Water Works Association Water Conservation Program Operation and Management July 2013 Standard, and the City of Arlington Citizens Environmental Committee 2008 Report and Recommendations on Water Conservation and Efficiency.

The objectives of this water conservation plan are as follows:

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

This conservation plan includes all of the elements required by TCEQ. Some elements of this plan go beyond TCEQ requirements. Final adopted versions of the plan will be provided to the TRWD, Region C Water Planning Group, TCEQ and the TWDB.

2. TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES

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

Minimum Conservation Plan Requirements

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

- 288.2(a)(1)(A) – Utility Profile –Appendix B
- 288.2(a)(1)(B) – Record Management System – Section 4.3
- 288.2(a)(1)(C) – Specification of Goals – Section 3
- 288.2(a)(1)(D) – Accurate Metering – Sections 4.1 and 4.2
- 288.2(a)(1)(E) – Universal Metering – Section 4.2
- 288.2(a)(1)(F) – Determination and Control of Unaccounted Water – Section 4.4
- 288.2(a)(1)(G) – Public Education and Information Program – Section 5
- 288.2(a)(1)(H) – Non-Promotional Water Rate Structure – Section 6
- 288.2(a)(1)(I) – Reservoir System Operation Plan – Section 7.1
- 288.2(a)(1)(J) – Means of Implementation and Enforcement – Section 8
- 288.2(a)(1)(K) – Coordination with Regional Water Planning Group – Section 7.7 and Appendix D

Conservation Additional Requirements (Population over 5,000)

The Texas Administrative Code includes additional requirements for water conservation plans for cities with a population over 5,000:

- 288.2(a)(2)(A) – Leak Detection, Repair, and Water Loss Accounting – Sections 4.4, 4.5, and 4.6
- 288.2(a)(2)(B) – Requirement for Water Conservation Plans by Wholesale Customers – Section 7.6

Additional Conservation Strategies

TCEQ rules also list additional optional but not required conservation strategies, which may be adopted by suppliers. The following optional strategies are included in this plan:

- 288.2(a)(3)(A) – Conservation Oriented Water Rates – Section 6
- 288.2(a)(3)(B) – Ordinances, Plumbing Codes or Rules on Water-Conserving Fixtures – Section 7.3
- 288.2(a)(3)(C) – Replacement or Retrofit of Water-Conserving Plumbing Fixtures – Section 7.5
- 288.2(a)(3)(D) – Reuse and Recycling of Wastewater – Section 7.2
- 288.2(a)(3)(E) – Pressure Control and/or Reduction in the Distribution System and/or for Customer Connections – Section 7.5
- 288.2(a)(3)(F) – Considerations for Landscape Water Management Regulations – Section 7.4 and Appendix D
- 288.2(a)(3)(G) – Monitoring Method – Section 4.6

3. SPECIFICATION OF WATER CONSERVATION GOALS

TCEQ rules require the adoption of specific water conservation goals for a water conservation plan. As part of plan adoption, the City of Arlington has developed 5-year and 10-year water conservation goals. The goals for this water conservation plan include the following:

- Maintain the total per capita municipal water use below the specified amount in gallons per capita per day as shown in Table 4-1.
- Maintain the level of unaccounted water in the system below 12% annually in 2019 and subsequent years and the five-year average below 10%, as discussed in Section 4.4.
- Implement and maintain a program of universal metering and meter replacement and repair, as discussed in Section 4.2.
- Increase efficient water usage through a water conservation Ordinance as discussed in Section 8 and Appendix E.
- Decrease waste in lawn irrigation by implementation and enforcement of landscape water management regulations, as discussed in Section 7.4 and Appendix C.
- Raise public awareness of water conservation and encourage responsible public behavior by a public education and information program, as discussed in Section 5.

Table 4.1 - Five-Year and Ten-Year Water Conservation Goals

Water Conservation Goals	Current Average (gpcd)	5-Year Goal (gpcd)	10-Year Goal (gpcd)
Total* GPCD	139	132	126
Single-Family Residential* GPCD	91	87	82
Water Loss GPCD	13	12	11

*Total and single-family residential water conservation goals include 1% reduction each year in gpcd.

4. METERING, WATER USE RECORDS, CONTROL OF UNACCOUNTED WATER, AND LEAK DETECTION AND REPAIR

One of the key elements in water conservation is careful tracking of water use and control of losses through illegal diversions and leaks. Careful metering of water deliveries and water use, detection and repair of leaks in the distribution system and regular monitoring of unaccounted water are important in controlling losses.

4.1 Accurate Metering of Raw Water Supplies and Treated Water Deliveries

The City of Arlington meters all raw water diversions from Lake Arlington and the raw water pipeline from TRWD. All treated water deliveries to the distribution system from the water treatment plants is also metered. Each meter has an accuracy of plus or minus two percent. The meters are calibrated on an annual basis to maintain the required accuracy and are repaired and/or replaced as needed.

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

Water usage for all customers of the City of Arlington, including public and governmental users, is metered. Customer billing relies on data provided by retail meters for accurate billing. The Arlington Water Utilities (AWU) Department has a comprehensive program for universal metering, meter testing, meter repair and periodic meter replacement which has been developed using American Water Works Association (AWWA) standards. The City of Arlington's meter replacement program annually replaces meters that do not register the correct consumption due to the age of the meter. Replacing aged meters will result in accurate revenues and water accountability for the utility.

Although there may be an industry recommendation to replace customer meters every 15 years, AWU has found that a replacement program for customer meters every 20 years is more reflective of the water delivery system in the City of Arlington. AWU will replace meters as needed before this timeframe when water usage or meter accuracy degradation warrant. Reasons AWU has chosen a 20 year replacement program include: 1) the high quality of water being delivered does not damage the meters as fast as other areas might and 2) current evaluations show that the average AWU meter is 97% accurate.

AWU implemented an advanced metering infrastructure (AMI) pilot program in 2012 and replaced over 18,000 meters. In 2014, AWU began an in-house replacement program to replace the remaining meters over an 8 year timeframe. AWU has installed approximately 65,000 meters and is currently on track to have an all AMI system within the 5 years. A key benefit of AMI for our customers will be having access to more detail about their water use. This information can be used to monitor water consumption volume and frequency for faster leak detection and repair to minimize water loss and potential damage to property.

4.3 Record Management System

As required by TAC Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.2(a)(1)(B), the record management system for the City of Arlington records water pumped, water delivered, and water sold; estimates water losses; and allows for the separation of water sales and uses into residential, commercial, public/institutional, and industrial categories. This information is included in all annual reports required by the TWDB and TCEQ.

4.4 Determination and Control of Unaccounted Water

Unaccounted water is the difference between raw water diverted from Lake Arlington as well as delivered by the TRWD and metered deliveries to customers. (This includes authorized but unmetered uses such as firefighting and releases for flushing of lines.) Unaccounted water can include several categories:

- Inaccuracies in customer meters (customer meters tend to run more slowly as they age and under-report actual use).
- Losses due to water main breaks and leaks in the water distribution system.
- Losses due to illegal connections.
- Losses due to fire fighting and fire line flushing.
- Inaccurate Treatment Plant meter readings at the high service pumps.
- Line flushing due to construction, maintenance, repair or water quality needs.

The City of Arlington conducts annual water audits. Accounting for apparent losses increases the city's utility revenue but does not reduce water usage. Apparent losses include water losses resulting from meter errors, billing errors, illegal use and other unbilled uses such as firefighting flows and flushing of lines for water quality requirements. Real losses include infrastructure leakage. Identifying and preventing real losses decreases a utility's costs and decreases water usage. The City will target real losses under this water conservation strategy.

As shown in Appendix B, unaccounted water for the City of Arlington has varied from 8 to 12.75 percent with an average under 10 percent in the last five years, which resulted in over a 3 percent improvement from 2014. With the measures described in this plan, the City of Arlington intends to maintain the unaccounted water loss five-year average below 12% annually.

4.5 Leak Detection and Repair

Measures to control unaccounted water are part of the routine operations of the City of Arlington. In order to maintain water delivery service and reduce unaccounted water losses, Arlington Water Utilities and other city department crews report evidence of leaks and pipeline breaks within the distribution system. Once identified, leaks and breaks are quickly repaired. Also, meter readers watch for and report signs of illegal connections so they can be addressed quickly. In 2013, Field Operations initiated an ongoing program for locating,

repairing and operating all valves in the distribution system to minimize water loss due to inoperable or malfunctioning valves.

In 2014, a full-time leak detection program was implemented. The programs aim is to proactively detect and locate distribution system leaks to reduce unaccounted water. To date AWU has proactively identified 32 leaks saving an estimate 23,598,000 gallons of water. The entire distribution system of water lines is rated using a computer application that utilizes work order history, pipe material, age of pipe and soil condition. This allows Arlington Water Utilities to identify waterlines most in need of replacement. This ranking system allows water lines in which numerous leaks and line breaks occur to be prioritized and scheduled for replacement as funds are available. Once the full-time leak detection program is fully implemented, the identification process for water line replacement will be updated accordingly as a result of any new information. In 2018, AWU implemented a dedicated pipe-bursting crew to replace the water lines with the highest number of water breaks to decrease interruptions to customers and decrease water loss. To date, AWU has replaced 5,486 linear feet of pipe with this program, resulting in approximately 8 fewer water main breaks in the City

4.6 Monitoring of Effectiveness and Efficiency – Utility Profile and Annual Water Conservation Report

Appendix B contains the water utility profile. The utility profile is used in the development of the annual water conservation plan report and both documents are required by the TWDB to be submitted by May 1 of the following year. The reports are used to monitor the effectiveness and efficiency of the water conservation program and help plan conservation-related activities for the next year. The water utility profile records water use by category, total per capita water use in gallons per day, and unaccounted water for the current year and compares them to historical values. The water utility profile and annual water conservation report will also be sent to TRWD, which will monitor regional water conservation trends.

5. CONTINUING PUBLIC EDUCATION AND INFORMATION CAMPAIGN

The public education and information campaign will guide water users toward using water-efficient plumbing fixtures and appliances, to utilize drought tolerant and native and adaptive plants which require less water and pesticides for landscaping, to find and repair plumbing leaks, and to take advantage of water conservation incentives where available. The continuing public education and information campaign on water conservation includes the following elements:

- Promote the City's water conservation measures.
- Include billing inserts on water conservation at least once a year. Inserts will include material developed by City of Arlington staff as well as material obtained from the TWDB, the TCEQ, and other sources.
- Encourage local media coverage of water conservation issues and the importance of water conservation.
- Provide presentations to local organizations, schools, and civic groups on the importance of water conservation and ways to use water more efficiently.
- Make information on *Texas Smartscape* principles, water conservation brochures, and other water conservation materials available to the public at the City of Arlington Water Utilities Department and other public places.
- Make information on water conservation available online at www.SaveArlingtonWater.com and include links to the *Texas Smartscape* and *EPA WaterSense* websites and to information on water conservation on TRWD, TWDB, and TCEQ Web sites.
- Promote the U.S. Environmental Protection Agency's WaterSense partnership program by encouraging citizens to purchase WaterSense labeled products and fix leaks during the annual Fix a Leak Week promotion.
- Promote regional and local conservation, education events and literature through traditional and social media.

Additional components of the education program include the following:

Public-Service Announcements: Arlington Water Utilities Department will continue to publicize and promote the importance of water conservation by placing public-service announcements on radio and television, and through articles in newspapers with general circulation in the service area on a regular basis through the Water Is Awesome campaign. Use of social media, such as Facebook, Twitter and NextDoor, will also be used to promote conservation information.

Regional Water Conservation Public Education Support: The City of Arlington contributes to TRWD's regional water conservation public education campaign. TRWD and the City of Dallas, large wholesale water providers for the region, share water conservation promotions aimed at providing a consistent, regional communication to customers with the ability to share advertising resources. The current cooperative conservation message promotes efficient outdoor watering through the Water Is Awesome

campaign using a variety of traditional and social media efforts. In addition, the Water Is Awesome website offers weekly watering advice sent to customers via email or text, using weather information from their general area. In the first year of the service, in 2018, more than 800 Arlington residents signed up. Additional promotion is expected.

Water-Conservation Literature: Arlington Water Utilities will continue to make water conservation literature available. The City offers a variety of water conservation brochures with information on saving water in and around the home. Water conservation brochures and pamphlets will continue to be distributed to the public through enclosures in water bills, public events and in response to customer telephone calls requesting the information.

WaterWise Program: The City of Arlington works with the TRWD to deploy the "Learning to Be Water Wise" program within the Arlington ISD. More than 650 Arlington ISD fifth graders received lessons and activities in ways to become more water efficient during the 2017-2018 school year, along with tools to make a difference in their homes.The WaterWise program is a multi-dimensional educational curriculum designed for 5th grade students. The program teaches students about water resources and, more specifically, how water is used on landscapes and in the home. The lessons encourage efficient water use habits and are often shared with the whole family. In addition to advocating water conservation at home, the student kit contains water saving devices, which the students are encouraged to install in their own residences. The resulting water savings are quantified by the program's provider and summarized in an annual report. City of Arlington involvement with the WaterWise program builds strong relationships with our local community schools and has a positive influence on the next generation of water users.

Education Classes: The City of Arlington began the Water-Efficient Landscape Education Program in 2009 with free landscape classes. Since then, classes have been provided every spring and fall and are taught by local experts, Master Gardeners, Texas AgriLife extension agents and employees and city staff. Topics of the classes have included Landscape Basics, Vegetable Gardening, Drip Irrigation and Make a Rain Barrel.

Value of Water Coloring Contest: In the fall, Arlington Water Utilities holds a Value of Water Coloring Contest to coincide with the national Imagine a Day Without Water campaign. Other co-sponsors of the competition are Tarrant Regional Water District's Water is Awesome campaign, River Legacy Living Science Center, and the Arlington Public Library. For the contest, Arlington students, from pre-kindergarten through 4th grade, are asked to create an illustration that completes the phrase "Because I have water, I can…" The goal is to get as many students as possible reflecting on and sharing with others the valuable role water plays in their lives. All winners and their teachers receive an Arlington Water Utilities tote bag with five water-themed books, a water bottle, and passes to the Discovery Room at River Legacy Living Science Center. More than 500 entries were received in 2018.

6. WATER RATE STRUCTURE

Arlington Water Utilities has a water rate structure that is conservation oriented and is cost of service based and does not promote or encourage excessive use of water. The City has a fixed monthly fee based on the meter size which increases as meter size increases. Additionally, there is a commodity charge per 1,000 gallons. The fixed monthly charge and commodity charge are updated annually. The commodity charge per 1000 gallons increases as the volume of water used increases. This rate structure promotes water conservation by encouraging efficient water use in order to reduce the meter size and therefore the fixed monthly fee.

Table 7-1: Monthly Fixed Charges for Water Service Only

Meter Size (in)	Total Charge	Meter Size (in)	Total Charge
¾<2,000 gal	$7.07	3	$190.35
¾>2,000 gal	$10.30	4	$303.75
1	$20.30	6	$707.40
1 1/2	$46.31	8	$1,107.00
2	$81.00	10	$1,663.20

With the intent of encouraging water conservation and discouraging waste and excessive use of water, the City of Arlington has adopted an increasing block rate water structure where the unit price of water increases with increasing monthly water use. Current (2019) water rates are shown in Table 7-2.

Table 7-2: Volume Unit Charges

Water User	Type/Volume	Charge ($/1,000 gal)
Single-Family	0 - 2,000 gallons 3,000 - 10,000 gallons 11,000 - 15,000 gallons 16,000 – 29,000 gallons ≥ 30,000 gallons	$2.02 $2.79 $4.02 $5.63 $6.78
Commercial	0 – 15,000 gallons ≥ 16,000 gallons	$3.20 $3.38
Irrigation	0 - 29,000 gallons ≥ 30,000 gallons	$5.63 $6.78
Construction	0 – 99,000 gallons > 99,000 gallons	$5.90 $7.44

7. OTHER WATER CONSERVATION MEASURES

7.1 City of Arlington Reservoir System Operation Plan

The City of Arlington completed construction of Lake Arlington in 1957. It is located on Village Creek in Tarrant County. Lake Arlington has a yield of approximately 6,000 acre-feet per year, and supplies water to the City of Arlington, the Trinity River Authority's Tarrant County Water Project, Exelon Handley Power Plant, and permitted gas drilling and fracturing operations. However, Lake Arlington's yield is not adequate to meet the needs of Arlington's customers and is supplemented with raw water purchased under a wholesale water contract with the TRWD.

Raw water supply in excess of the yield of Lake Arlington is delivered by the TRWD. Raw water is discharged by the TRWD into Village Creek upstream of Lake Arlington and is subsequently diverted by the City of Arlington from Lake Arlington to the Pierce-Burch Water Treatment Plant. In addition, TRWD delivers raw water via its transmission system (pipelines) directly to the City of Arlington's John F. Kubala Water Treatment Plant.

The manner in which water is delivered to Lake Arlington is specified by contract. The source and amount of pumpage from the District's pipeline is based on the time of year, customer demands and the elevations at Richland Chambers Reservoir, Cedar Creek Reservoir, Lake Benbrook and Lake Arlington. Pump operations must also take into consideration that Lake Benbrook and Lake Arlington must be close to conservation elevation (694'msl and 550'msl respectively) by June 1st of each year to maximize terminal storage; therefore, pumpage exceeding demands is diverted into Lake Benbrook and Lake Arlington during periods where each reservoir is below conservation elevation. If Lake Benbrook is above conservation elevation, raw water deliveries are from Lake Benbrook and pumping from East Texas ceases.

If the demands exceed the pumpage capabilities from Lake Benbrook, East Texas pumping will be initiated. The Lake Benbrook pipeline is used to supplement supply during the summer, reducing the pumping requirement from East Texas. Storage in Lake Arlington is also used during the summer to avoid peak pumping from East Texas.

7.2 Reuse and Recycling of Wastewater

The City of Arlington does not own and operate its own wastewater treatment plant. The City's wastewater is treated by the Trinity River Authority Central Wastewater Treatment Plant. However, the City of Arlington participates as a wholesale customer in the City of Fort Worth's reclaimed water project at the Village Creek Water Reclamation Facility. Reclaimed water is highly treated wastewater effluent that meets strict water quality standards as established by the TCEQ and is used for beneficial purposes such as outdoor irrigation. The direct reuse project serves a nearby golf course, sports complex, and landfill within the City of Arlington. The expected full-demand yearly usage of the reclaimed water of 58 million gallons from 2014 was exceeded and resulted in a total usage in 2018 of 73,475,000 gallons.

Wastewater Pretreatment Program: Through the wastewater pretreatment program, Arlington works with the large water-using industries to reduce water use and thereby reduce wastewater treatment costs.

City of Arlington Water Treatment Plant Operations: With respect to recycling and reuse, all water used to backwash filters at the water treatment plants is metered and returned to the mixing basins at the head of the plants and reprocessed along with raw water. Current proposed treatment updates include optimized recycled basins that allow for higher quality water withdrawal and variable speed pumps that are more energy efficient. Additional efficiency measures for treatment plant operations continue to be under evaluation and, if warranted, will be implemented to fully optimize water, energy and staff resources.

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

The state has required water-conserving fixtures in new construction and renovations since 1992 and new standards were adopted in 2009 requiring full compliance by January 1, 2014. The state standards now call for flows of no more than 2.2 gallons per minute (gpm) for faucets, 2.5 gpm for showerheads, and 1.28 gallons per flush for toilets. The City of Arlington will continue to implement ordinances, plumbing codes, and rules on water conserving fixtures as they evolve through relevant building codes and State of Texas requirements. A plumbing fixture distribution program to encourage water conservation through replacement of older fixtures is offered in the City of Arlington and is discussed in Section 7.5.

7.4 Landscape Water Management Regulations

Appendix C contains City of Arlington adopted ordinances for landscape water management regulations. These ordinances support the objectives of this water conservation plan. These regulations are intended to minimize waste in landscape irrigation. The adopted regulations include the following elements:

- Prohibition of outdoor watering with sprinklers from 10:00 a.m. to 6:00 p.m. year round. Watering by hand and with soaker hoses is allowed.
- Requirement that customers are responsible for loss of water due to leakage in pipe or plumbing on the customer side of the meter or property.
- Requirement that customers are responsible for preventing avoidable waste of water including loss from a controllable leak or an irrigation system malfunction such as a broken sprinkler and/or overspray on impervious surfaces with runoff greater than 150 feet.
- Requirement that all new irrigation systems include operational rain and freeze sensors.
- Existing irrigation systems installed prior to January 1, 2007, must be retrofitted with a rain and freeze sensor. This requirement does not apply to single family residential or duplex property, or an individually metered townhome or condominium unit.

- Requirement that all new irrigation systems be in compliance with state (TAC Title 30, Part 1, Chapter 344) and City of Arlington (Ord. No. 08-108) design and installation regulations.
- Enforcement of the regulations is by a system of warnings followed by possible fines or suspended water services for continued or repeat violations.

7.5 Additional Water Conservation Measures

Additional water conservation incentive programs include:

- **High-efficiency showerhead exchange programs:** This measure is adopted in conjunction with the high-efficiency toilet replacement program. Showerheads rated at 2.0 gallons per minute (gpm) are offered to qualified residential toilet replacement program participants. A separate high-efficiency showerhead exchange program is currently offered each year city-wide during a week in May to celebrate National Drinking Water Week. The goal of this measure is to have 200 high-efficiency showerheads exchanged each year through the exchange program.
- **Pressure reduction in the system or for individual customers:** A pressure reducing valve rebate program is offered to qualified residential participants. A pilot rebate program targeting residential irrigation system upgrades, including pressure regulation, was implemented in 2013. Additionally, any new building constructed in an area where the water pressure is above 80 psi, is required to install a pressure reducing valve.
- **Residential irrigation system audits:** This measure was adopted to reduce outdoor water consumption for residents with an irrigation system. Residents with high average summer monthly usage will be identified and offered a free irrigation system audit. The audit will calculate the current consumption pattern of the irrigation system, identify broken, misdirected, or missing spray heads, and recommend modifications that will increase the efficiency of the system and save water. The goal of this measure is to conduct 100 residential irrigation system audits per year.

7.6 Institutional water efficiency programs: **AWU sponsored water fountain installations at the Arlington Library's Woodland West branch. This resulted in the purchase of two bottle filler type water fountains to put in the Woodland West Branch of the Arlington Public Library as part of a remodel. The fountains will encourage patrons to use refillable water bottles, saving water and energy. It also features a water education sign that credits the AWU for the fountains and a water fact, such as information about source water in North Texas. AWU plans to sponsor additional fountains as opportunities are presented Requirement for Water Conservation Plans by Wholesale Customers**

The City of Arlington is a wholesale water supplier. Every contract for the wholesale sale of water by customers that is entered into, renewed, or extended after the adoption of this water conservation plan will include a requirement that the wholesale customer and any wholesale customers of that wholesale customer develop and implement a water

conservation plan meeting the requirements of Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.2 of the Texas Administrative Code. The requirement will also extend to each successive wholesale customer in the resale of the water.

7.7 Coordination with Regional Water Planning Group and TRWD

Appendix D includes a letter sent to the Chair of the Region C Water Planning Group with this water conservation plan. The City of Arlington will also send a copy of this plan to TRWD.

8. IMPLEMENTATION AND ENFORCEMENT OF THE WATER CONSERVATION PLAN

Appendix E contains a copy of the ordinance adopted by the City Council on April 23, 2019, regarding this water conservation plan. Appendix C, the considerations for landscape water management regulations, also includes information about enforcement. Appendix F includes a copy of an ordinance, order, or resolution related to illegal connections and water theft.

APPENDIX A

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES ON MUNICIPAL WATER CONSERVATION PLANS

Texas Commission on Environmental Quality Rules on Water Conservation Plans for Municipal Uses by Public Water Suppliers

Texas Administrative Code

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

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

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

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

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

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

(D) raising or keeping equine animals;

(E) wildlife management; and

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

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

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

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

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

(6) Drought contingency plan--A strategy or combination of strategies for temporary supply and demand management responses to temporary and potentially recurring

water supply shortages and other water supply emergencies. A drought contingency plan may be a separate document identified as such or may be contained within another water management document(s).

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

(8) Institutional use--The use of water by an establishment dedicated to public service, such as a school, university, church, hospital, nursing home, prison or government facility. All facilities dedicated to public service are considered institutional regardless of ownership.

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

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

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

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

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

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

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

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

(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 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).

(24) 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.

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

Texas Administrative Code

TITLE 30	ENVIRONMENTAL QUALITY
PART 1	TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
CHAPTER 288	WATER CONSERVATION PLANS, DROUGHT CONTINGENCY PLANS, GUIDELINES AND REQUIREMENTS
SUBCHAPTER A	WATER CONSERVATION PLANS
RULE §288.2	**Water Conservation Plans for Municipal Uses by Public Water Suppliers**

(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.

APPENDIX B

WATER UTILITY PROFILE

Texas Water Development Board

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

CONTACT INFORMATION

Name of Utility: City of Arlington

Public Water Supply Identification Number (PWS ID): TX2200001

Certificate of Convenience and Necessity (CCN) Number: P0034

Surface Water Right ID Number: 3391, 3947, 3948, 3949, 3950

Wastewater ID Number:

Contact: First Name: Darryl Last Name: Westbrook

Title: Assistant Director

Address: 101 W Abram Sst City: Arlington State: TX

Zip Code: 76010 Zip+4: 7102 Email: darryl.westbrook@arlingtontx.gov

Telephone Number: 8174596601 Date: 4/30/2019

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: 99

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	375,337	2,389	374,392
2017	379,370	2,389	378,770
2016	379,370	2,336	378,770
2015	370,367	2	369,767
2014	369,308	0	368,708

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	377,478	5,389	377,478
2030	395,124	35,764	395,124
2040	410,939	35,764	410,939
2050	421,431	35,764	421,431
2060	423,439	35,764	423,439

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

Historical population served for 2018 provided by City of Arlington Community Development and Planning Department. Historical population served is defaulted to previous water use surveys submitted tot he state. Population projections for 2020-2060 are the draft results of population projections as part of our water master plan update that is currently underway by city planning staff.

Texas Water Development Board

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

B. System Input

System input data for the previous five years.

Total System Input = Self-supplied + Imported – Exported

Year	Water Produced in Gallons	Purchased/Imported Water in Gallons	Exported Water in Gallons	Total System Input	Total GPCD
2018	19,226,746,465	0	125,048,485	19,101,697,980	139
2017	18,694,949,495	0	106,586,369	18,588,363,126	134
2016	19,087,412,121	0	123,771,717	18,963,640,404	137
2015	19,652,853,596	0	449,495	19,652,404,101	145
2014	4,654,480,301	15,256,316,000	366,000	19,910,430,301	148
Historic Average	16,263,288,396	3,051,263,200	71,244,413	19,243,307,182	141

C. Water Supply System

Attached file(s):

File Name	File Description
System Description.docx	Arlington Water System Description

1. Designed daily capacity of system in gallons: 172,500,000

2. Storage Capacity

   2a. Elevated storage in gallons: 17,500,000

   2b. Ground storage in gallons: 26,200,000

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

D. Projected Demands

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

Year	Population	Water Demand (gallons)
2020	375,787	23,310,706,354
2021	377,478	23,259,500,502
2022	379,176	23,223,042,406
2023	380,883	23,185,785,182
2024	382,552	23,145,027,796
2025	384,489	23,119,125,878
2026	386,471	23,094,431,008
2027	388,206	23,117,882,292
2028	389,943	23,140,672,928
2029	391,677	23,162,596,031

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

Demand projections are from water demand projections developed by city staff based on per capita usage trend for past 15 years. Projection demands also include approximately 10% adjustment to account for process water used in the water treatment process. Does not include estimated water demand for wholesale customers.

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

E. High Volume Customers

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

Customer	Water Use Category	Annual Water Use	Treated or Raw
General Motors	Industrial	366,320,000	Treated
University of Texas at Arlington	Commercial	264,790,000	Treated
Arlington Independent School District	Commercial	226,661,000	Treated
City Of Arlington	Commercial	192,593,000	Treated
Hurricane Harbor	Commercial	85,400,000	Treated

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

Customer	Water Use Category	Annual Water Use	Treated or Raw
CITY OF DALWORTHINGTON GARDEN	Municipal	123,416,000	Treated
City of Mansfield	Municipal	382,000	Treated

F. Utility Data Comment Section

Additional comments about utility data.

Note that our method of calculating population has changed. Going forward we will use methodology utilized by the City of Arlington Community Development and Planning Department for determining population and is published on the City's website quarterly.

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

Section II: System Data

A. Retail Water Supplier Connections

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

Water Use Category Type	Total Retail Connections (Active + Inactive)	Percent of Total Connections
Residential - Single Family	96,454	64.59 %
Residential - Multi-Family	47,933	32.10 %
Industrial	43	0.03 %
Commercial	4,659	3.12 %
Institutional	236	0.16 %
Agricultural	0	0.00 %
Total	149,325	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	563	1	1	17	29	0	611
2017	562	0	0	11	11	0	584
2016	331	0	4	45	0	0	380
2015	558	0	2	56	0	0	616
2014	591	0	3	30	0	0	624

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	9,379,921,000	3,045,430,000	629,271,000	3,241,766,000	796,042,000	0	17,092,430,000
2017	8,981,025,000	3,073,957,000	589,763,000	3,157,464,000	763,089,000	0	16,565,298,000
2016	8,827,122,000	3,111,127,000	691,273,000	3,255,316,000	753,227,000	0	16,638,065,000
2015	9,390,733,000	3,057,017,000	684,832,000	3,212,869,000	800,554,000	0	17,146,005,000
2014	9,400,716,000	3,007,204,000	654,904,000	3,115,681,000	811,396,000	0	16,989,901,000

C. Residential Water Use

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

Year	Total Residential GPCD
2018	91
2017	89
2016	88
2015	91
2014	92
Historic Average	90

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	1,139,746,000	1,120,647,000	1,096,162,000	1,103,839,000	1,154,096,000
February	948,801,000	960,169,000	1,042,597,000	1,033,165,000	1,003,936,000
March	979,737,000	1,062,660,000	1,097,989,000	950,205,000	1,003,754,000
April	1,205,331,000	1,215,360,000	1,210,539,000	1,035,919,000	1,124,229,000
May	1,235,693,000	1,333,243,000	1,127,412,000	1,119,326,000	1,449,860,000
June	1,784,460,000	1,468,487,000	1,256,888,000	1,240,937,000	1,535,894,000
July	2,146,127,000	1,607,943,000	1,659,159,000	1,588,395,000	1,723,401,000
August	2,212,620,000	1,745,541,000	1,953,121,000	2,218,857,000	1,886,395,000
September	2,031,216,000	1,668,792,000	1,852,480,000	2,260,029,000	1,871,151,000
October	1,286,073,000	1,680,778,000	1,723,564,000	1,925,799,000	1,707,496,000
November	1,145,495,000	1,466,752,000	1,364,827,000	1,533,943,000	1,408,666,000
December	977,131,000	1,234,926,000	1,172,290,000	1,135,591,000	1,121,023,000
Total	17,092,430,000	16,565,298,000	16,557,028,000	17,146,005,000	16,989,901,000

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

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

Month	Total Gallons of Raw Water				
	2018	2017	2016	2015	2014
January	0	883	692,000	585,000	1,299,600
February	1,520,000	87	887,000	321,000	943,000
March	0	1,839,047	1,337,000	89,000	2,598,000
April	1,809,000	4,991,000	124,000	1,155,000	3,591,000
May	7,742,000	9,165,000	53,000	74,000	3,832,000
June	10,578,000	8,318,000	985,000	6,160,000	7,077,000
July	16,621,000	10,128,000	9,173,000	19,585,000	10,189,000
August	12,349,000	6,284,000	10,218,000	18,629,000	12,016,000
September	0	7,959,000	9,788,000	13,015,000	9,840,000
October	480,000	3,938,000	7,289,000	8,521,000	2,371,000
November	353,000	3,686,000	2,043,000	118,000	2,374,000
December	0	2,679,000	1,160,101	665,000	1,041,000
Total	51,452,000	58,988,017	43,749,101	68,917,000	57,171,600

3. Summary of seasonal and annual water use.

	Summer RETAIL (Treated + Raw)	Total RETAIL (Treated + Raw)
2018	6,182,755,000	17,143,882,000
2017	4,846,701,000	16,624,286,017
2016	4,889,544,000	16,600,777,101
2015	5,092,563,000	17,214,922,000
2014	5,174,972,000	17,047,072,600
Average in Gallons	5,237,307,000.00	16,926,187,943.60

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	1,752,791,788	13	9.18 %
2017	1,772,803,481	13	9.53 %
2016	2,067,644,600	15	10.90 %
2015	2,001,635,050	15	10.19 %
2014	2,538,342,301	19	12.75 %
Average	2,026,643,444	15	10.51 %

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	46,969,539	67203858	1.4308
2017	45,545,989	52681532	1.1567
2016	45,481,581	53147217	1.1685
2015	47,164,169	55353945	1.1736
2014	46,704,308	56249695	1.2044

G. Summary of Historic Water Use

Water Use Category	Historic Average	Percent of Connections	Percent of Water Use
Residential - Single Family	9,195,903,400	64.59 %	54.46 %
Residential - Multi-Family	3,058,947,000	32.10 %	18.11 %
Industrial	650,008,600	0.03 %	3.85 %
Commercial	3,196,619,200	3.12 %	18.93 %
Institutional	784,861,600	0.16 %	4.65 %
Agricultural	0	0.00 %	0.00 %

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

H. System Data Comment Section

Section III: Wastewater System Data

A. Wastewater System Data

1. Design capacity of wastewater treatment plant(s) in gallons per day: 162,000,000

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

Water Use Category	Metered	Unmetered	Total Connections	Percent of Total Connections
Municipal	0	96,893	96,893	95.39 %
Industrial	7	34	41	0.04 %
Commercial	2	4,404	4,406	4.34 %
Institutional	0	236	236	0.23 %
Agricultural	0	0	0	0.00 %
Total	9	101,567	101,576	100.00 %

3. Percentage of water serviced by the wastewater system: 100.00 %

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

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

Month	Total Gallons of Treated Water				
	2018	2017	2016	2015	2014
January	1,033,090,500	1,125,569,700	1,211,681,500	1,085,117,800	1,041,197,000
February	1,082,456,900	1,018,793,200	1,080,383,400	984,550,000	952,224,000
March	1,130,650,600	1,076,196,000	1,319,914,900	1,199,712,400	1,050,084,700
April	1,039,926,000	1,065,918,000	1,288,728,000	1,120,455,000	1,015,491,000
May	1,067,884,900	1,056,455,200	1,241,264,800	1,548,214,400	1,047,865,100
June	1,037,766,000	1,131,300,000	1,182,966,000	1,208,322,000	1,057,644,000
July	1,016,679,100	1,095,871,700	1,108,662,300	1,091,327,100	1,054,226,300
August	1,042,158,000	1,085,601,400	1,081,159,100	1,053,745,800	1,048,742,400
September	1,168,209,000	999,237,000	1,023,585,000	1,032,537,000	998,787,000
October	1,516,919,900	1,034,767,600	1,090,217,300	1,185,517,500	1,040,205,000
November	1,184,247,000	989,577,000	1,049,886,000	1,284,780,000	1,022,154,000
December	1,231,242,500	1,050,590,000	1,062,370,000	1,269,859,200	1,030,477,200
Total	13,551,230,400	12,729,876,800	13,740,818,300	14,064,138,200	12,359,097,700

5. Could treated wastewater be substituted for potable water?

(●) Yes ( ) No

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

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)	73,475,000
Agricultural	
Discharge to surface water	
Evaporation Pond	
Other	
Total	73,475,000

C. Wastewater System Data Comment

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

The City of Arlington does not own and operate its own wastewater treatment plant. The City's wastewater is treated by the Trinity River Authority Central Wastewater Treatment Plant. However, the City of Arlington participates as a wholesale customer in the City of Fort Worth's reclaimed water project from the Village Creek Water Reclamation Facility.

APPENDIX C

LANDSCAPE WATER MANAGEMENT REGULATIONS

Ordinance No. 06-109

An ordinance amending the "Water and Sewer" Chapter of the Code of the City of Arlington, Texas, 1987, by the amendment of Article IV, Regulations and Restrictions on Service, Section 4.27, Lawn and Landscape Irrigation Conservation, relative to lawn and landscape irrigation conservation; providing for a fine of up to $500 for each offense in violation of the ordinance; providing this ordinance be cumulative; providing for severability; providing for governmental immunity; providing for injunctions; providing for publication and becoming effective ten days after first publication

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ARLINGTON, TEXAS:

1.

That the **"Water and Sewer"** Chapter of the Code of the City of Arlington, Texas, 1987, is hereby amended through the amendment of Article IV, Regulations and Restrictions on Service, **Section 4.27**, Lawn and Landscape Irrigation Conservation, so that said section shall be and read as follows:

Section 4.27 Lawn and Landscape Irrigation Conservation

A. Except for hand watering and the use of soaker hoses, it shall be unlawful for any person to irrigate, water, or cause or permit the irrigation or watering of any lawn or landscape located on premises owned, leased, or managed by that person between the hours of 10:00 a.m. and 6:00 p.m.

B. It is an affirmative defense to prosecution that the irrigation or watering of any lawn or landscape during the prohibited time was done for the purpose of establishing hydromulch, grass sod, grass seed; dust control for sport fields; or for the maintenance, repair, or testing of an irrigation system.

C. Irrigation System Rain and Freeze Sensors.

1. Any irrigation system installed within the City on or after January 1, 2007, must be equipped with rain and freeze sensors in number and type established and published by the Director of Utilities.

2. Any irrigation system installed before January 1, 2007, may not be operated after March 4, 2007 without being equipped with rain and freeze sensors in number and type established and published by the Director of Utilities. This requirement does not apply to a single family residential or

duplex property, or an individually metered townhome or condominium unit.

3. It shall be unlawful for any person to knowingly or recklessly commit any of the following on premises owned, leased, or managed by that person:

   a. install, or cause or permit the installation of, an irrigation system in violation of Subsection (C)(1);

   b. operate, or cause or permit the operation of, an irrigation system that does not comply with Subsection (C)(1); or

   c. operate, or cause or permit the operation of, an irrigation system that does not comply with Subsection (C)(2).

2.

Any person, firm, corporation, agent or employee thereof who violates any of the provisions of this ordinance shall be guilty of a misdemeanor and upon conviction thereof shall be fined an amount not to exceed Five Hundred and No/100 Dollars ($500) for each offense. Each day that a violation is permitted to exist shall constitute a separate offense.

3.

This ordinance shall be and is hereby declared to be cumulative of all other ordinances of the City of Arlington, and this ordinance shall not operate to repeal or affect any of such other ordinances except insofar as the provisions thereof might be inconsistent or in conflict with the provisions of this ordinance, in which event such conflicting provisions, if any, in such other ordinance or ordinances are hereby repealed.

4.

If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be unconstitutional, such holding shall not affect the validity of the remaining portions of this ordinance.

5.

All of the regulations provided in this ordinance are hereby declared to be governmental and for the health, safety and welfare of the general public. Any member of the City Council or any City official or employee charged with the enforcement of this ordinance, acting for the City of Arlington in the discharge of his/her duties, shall not thereby render himself/herself personally liable; and he/she is hereby relieved from all personal liability for any damage that might accrue to persons or property as a result of any act required or permitted in the discharge of his/her said duties.

6.

Any violation of this ordinance can be enjoined by a suit filed in the name of the City of Arlington in a court of competent jurisdiction, and this remedy shall be in addition to any penal provision in this ordinance or in the Code of the City of Arlington.

7.

The caption and penalty clause of this ordinance shall be published in a newspaper of general circulation in the City of Arlington, in compliance with the provisions of Article VII, Section 15, of the City Charter. Further, this ordinance may be published in pamphlet form and shall be admissible in such form in any court, as provided by law.

8.

This ordinance shall become effective ten (10) days after first publication as described above.

PRESENTED AND GIVEN FIRST READING on the 14th day of November, 2006, at a regular meeting of the City Council of the City of Arlington, Texas; and GIVEN SECOND READING, passed and approved on the 28th day of November, 2006, by a vote of 9 ayes and 0 nays at a regular meeting of the City Council of the City of Arlington, Texas.

ROBERT N. CLUCK, Mayor

ATTEST:

BARBARA G. HEPTIG, City Secretary

APPROVED AS TO FORM:
JAY DOEGEY, City Attorney

BY

Ordinance No. 08-108

An ordinance adding the "Irrigation" Chapter to the Code of the City of Arlington, Texas, 1987, through the addition of Article I through VI; providing for a fine of up to $500 for each offense in violation of the ordinance; providing this ordinance be cumulative; providing for severability; providing for governmental immunity; providing for injunctions; providing for publication and becoming effective on January 1, 2009

WHEREAS, the City Council of the City of Arlington, Texas has determined that water conservation and environmental protection are important issues and concerns affecting the city; and

WHEREAS, properly installed irrigation systems will conserve water, help avoid wasteful use, and improve the overall quality of life for the citizens of Arlington; and

WHEREAS, during the 2007 legislative session, the Texas Legislature adopted House Bill 1656; and

WHEREAS, House Bill 1656 amended Chapter 401 of the Texas Local Government Code to require a city with a population of 20,000 or more to regulate the installation of irrigation systems within the corporate limits of the city as well as the city's extraterritorial jurisdiction; and

WHEREAS, the provisions herein are necessary to promote and protect the health, safety, and welfare of the public by creating an urban environment that is protective of the city's water supply and provides an enhanced quality of life for the citizens of the City of Arlington; NOW THEREFORE

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ARLINGTON, TEXAS:

1.

That the "Irrigation" Chapter of the Code of the City of Arlington, Texas, 1987, is hereby adopted to read as follows:

ARTICLE I

GENERAL PROVISIONS

Section 1.01 Title

This Chapter of the Code of the City of Arlington is hereby designated and shall be known and referred to as the Irrigation Chapter of the City Code of Ordinances.

Section 1.02 Purpose

The purpose of this chapter is to protect the public health, safety and welfare of Arlington citizens by regulating the installation, maintenance, operation and repair of irrigation systems within the corporate limits of the City as well as the City's extraterritorial jurisdiction to conserve water, avoid wasteful use, and improve the overall quality of life for the citizens of Arlington. The provisions in this chapter are cumulative of all City ordinances. In the event of a conflict, the more stringent provision shall apply.

Section 1.03 Adoption of Texas Commission on Environmental Quality Chapter 344 Relating to Landscape Irrigation

Chapter 344 of Title 30 of the Texas Administrative Code, as amended, is hereby adopted as if set out word for word in this chapter. In the event of conflict or inconsistency in the wording of this chapter and Chapter 344 of Title 30 of the Texas Administrative Code, the more stringent provision shall apply.

Section 1.04 Applicability

The provisions of this chapter shall apply to the installation, alteration, repair, relocation, and replacement, in addition to, use or maintenance of irrigation systems within the City and the City's extraterritorial jurisdiction and this chapter shall regulate the installation of backflow prevention devices, control valves, irrigation controllers, control wiring, and water conservation practices required for proper design, installation and operation of irrigation systems. Exceptions to this chapter are:

1. a landscape irrigation system that is an on-site sewage disposal system, as defined by Section 366.002 of the Texas Health and Safety Code;

2. an irrigation system that is used on or by an agricultural operation as defined by Section 251.002 of the Texas Agriculture Code; and

3. an irrigation system that is connected to a groundwater well used by the property owner for domestic use.

ARTICLE II

DEFINITIONS

Section 2.01 Definitions

Unless otherwise expressly stated or clearly indicated by the context, the following terms shall, for the purpose of this chapter, have the meanings indicated in this section.

"Air gap" means a complete physical separation between the free flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel.

"**Atmospheric Vacuum Breaker"** means an assembly containing an air inlet valve, a check seat, and an air inlet port. The flow of water into the body causes the air inlet valve to close the air inlet port. When the flow of water stops the air inlet valve falls and forms a check against back-siphonage. At the same time it opens the air inlet port allowing air to enter and satisfy the vacuum. Atmospheric Vacuum Breaker is also known as an Atmospheric Vacuum Breaker Back-Siphonage Prevention Assembly.

"**Automatic controller**" means a solid state timer capable of operating valve stations to set the days, time of day, and length of time water is applied.

"**Backflow prevention"** means the mechanical prevention of reverse flow, or back siphonage, of nonpotable water from an irrigation system into the potable water source.

"Backflow prevention assembly" means any assembly used to prevent backflow into a potable water system. The type of assembly used is based on the existing or potential degree of health hazard and backflow condition.

"Building Official" means the Building Official or designated representative.

"City" means the City of Arlington, Texas.

"City Code" means the Code of Ordinances of the City of Arlington, Texas, 1987, as amended.

"**Completion of irrigation system installation"** means when the landscape irrigation system has been installed, all minimum standards met, all tests performed, and the irrigator is satisfied that the system is operating correctly.

"Consulting" means the act of providing advice, guidance, review or recommendations related to landscape irrigation systems.

"Cross-connection" means actual or potential connection between a potable water source and an irrigation system that may contain contaminates or pollutants or any source of water that has been treated to a lesser degree in the treatment process.

"Design" means the act of determining the various elements of a landscape irrigation system that will include, but not be limited to, elements such as collecting site specific information, defining the scope of the project, defining plant watering needs, selecting and laying out emission devices, locating system components, conducting hydraulics calculations, identifying any local regulatory requirements, or scheduling irrigation work at a site. Completion of the various components will result in an irrigation plan.

"Design pressure" means the pressure that is required for an emission device to operate properly. Design pressure is calculated by adding the operating pressure necessary at an emission device to the total of all pressure losses accumulated from an emission device to the water source.

"Double Check Valve" means an assembly that is composed of two independently acting, approved check valves, including tightly closed resilient seated shutoff valves attached at each end of the assembly and fitted with properly located resilient seated test cocks. Double Check Valve is also known as a Double Check Valve Backflow Prevention Assembly.

"Emission device" means any device that is contained within an irrigation system and that is used to apply water. Common emission devices in an irrigation system include, but are not limited to, spray and rotary sprinkler heads, and drip irrigation emitters.

"Employed" means engaged or hired to provide consulting services or perform any activity relating to the sale, design, installation, maintenance, alteration, repair, or service to irrigation systems. A person is employed if that person is in an employer-employee relationship as defined by Internal Revenue Code, 26 United States Code Service, §3212(d) based on the behavioral control, financial control, and the type of relationship involved in performing employment related tasks.

"Head-to-head spacing" means the spacing of spray or rotary heads equal to the manufacturer's published radius of the head.

"Health hazard" means a cross-connection or potential cross-connection with an irrigation system that involves any substance that may, if introduced into the potable water supply, cause death or illness, spread disease, or have a high probability of causing such effects.

"Hydraulics" means the science of dynamic and static water; the mathematical computation of determining pressure losses and pressure requirements of an irrigation system.

"Inspector" means a licensed plumbing inspector, water district operator, other governmental entity, or irrigation inspector designated by the Regulatory Authority to inspect irrigation systems and perform other enforcement duties for the City as an employee or as a contractor.

"Installer" means a person who actually connects an irrigation system to a private or public raw or potable water supply system or any water supply, who is licensed according to Title 30, Texas Administrative Code, Chapter 30 (relating to Occupational Licenses and Registrations).

"Irrigation Inspector" means a person who has been designated by the Regulatory Authority to inspect irrigation systems and perform other enforcement duties for the City as an employee or as a contractor. Such person is required to be licensed under Chapter 30 of Title 30 of the Texas Administrative Code (relating to Occupational Licenses and Registrations).

"Irrigation plan" means a scaled drawing of a landscape irrigation system which lists required information, the scope of the project, and represents the changes made in the installation of the irrigation system.

"Irrigation services" mean selling, designing, installing, maintaining, altering, repairing, servicing, permitting, providing consulting services regarding, or connecting an irrigation system to a water supply.

"Irrigation system" means an assembly of component parts that is permanently installed for the controlled distribution and conservation of water to irrigate any type of landscape vegetation in any location, and/or to reduce dust or control erosion. This term does not include a system that is used on or by an agricultural operation as defined by Texas Agricultural Code, §251.002.

"Irrigation technician" means a person who works under the supervision of a licensed irrigator to install, maintain, alter, repair, service or supervise installation of an irrigation system, including the connection of such system in or to a private or public, raw or potable water supply system or any water supply, and who is required to be licensed under Title 30, Texas Administrative Code, Chapter 30 (relating to Occupational Licenses and Registrations).

"Irrigation zone" means a subdivision of an irrigation system with a matched precipitation rate based on plant material type (such as turf, shrubs, or trees), microclimate factors (such as sun/shade ratio), topographic features (such as slope) and soil conditions (such as sand, loam, clay, or combination) or for hydrological control.

"Irrigator" means a person who sells, designs, offers consultations regarding, installs, maintains, alters, repairs, services or supervises the installation of an irrigation system, including the connection of such system to a private or public, raw or potable water

supply system or any water supply, and who is required to be licensed under Title 30, Texas Administrative Code, Chapter 30.

"Irrigator-in-Charge" means the irrigator responsible for all irrigation work performed by an exempt business owner, including, but not limited to obtaining permits, developing design plans, supervising the work of other irrigators or irrigation technicians, and installing, selling, maintaining, altering, repairing, or servicing a landscape irrigation system.

"Isolation valve" means a valve that is installed between the water meter and the backflow prevention device.

"Landscape irrigation" means the science of applying the necessary amount of water to promote or sustain healthy growth of plant material or turf.

"License" means an occupational license that is issued by the Texas Commission on Environmental Quality under Title 30, Texas Administrative Code, Chapter 30, to an individual that authorizes the individual to engage in an activity that is covered by Title 30, Texas Administrative Code, Chapter 30.

"Mainline" means a pipe within an irrigation system that delivers water from the water source to the individual zone valves.

"Maintenance checklist" means a document made available to the irrigation system's owner or owner's representative that contains information regarding the operation and maintenance of the irrigation system, including, but not limited to: checking and repairing the irrigation system, setting the automatic controller, checking the rain or moisture sensor, cleaning filters, pruning grass and plants away from irrigation emitters, using and operating the irrigation system, the precipitation rates of each irrigation zone within the system, any water conservation measures currently in effect from the City of Arlington Water Utilities Department, a suggested seasonal or monthly watering schedule based on current evapotranspiration data for the North Central Texas geographic region, and the minimum water requirements for the plant material in each zone based on the soil type and plant material where the system is installed.

"Major maintenance, alteration, repair, or service" means any activity that involves opening to the atmosphere the irrigation main line at any point prior to the discharge side of any irrigation zone control valve. This includes, but is not limited to, repairing or connecting into a mainline, replacing a zone control valve, or repairing a zone control valve in a manner that opens the system to the atmosphere.

"Master valve" means a remote control valve located after the backflow prevention device that controls the flow of water to the irrigation system mainline.

"Matched precipitation rate" means the condition in which all sprinkler heads within an irrigation zone apply water at the same rate.

"New installation" means an irrigation system installed at a location where one did not previously exist.

"Non-health hazard" means a cross connection or potential cross connection from a landscape irrigation system that involves any substance that generally would not be a health hazard but would constitute a nuisance or be aesthetically objectionable if introduced into the potable water supply.

"Non-potable water" means water that is not suitable for human consumption. Non-potable water sources included, but are not limited to, irrigation systems, lakes, ponds, streams, gray water that is discharged from washing machines, dishwashers or other appliances, water vapor condensate from cooling towers, reclaimed water, and harvested rainwater.

"Pass-through contract" means a written contract between a contractor or builder and a licensed irrigator or exempt business owner to perform part or all of the irrigation services relating to an irrigation system.

"**Person**" means any natural Person, association of Persons, partnership, corporation, agent or officer, or other entity.

"Potable water" means water that is suitable for human consumption.

"Pressure Vacuum Breaker" means an assembly containing an independently operating internally loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve. Pressure Vacuum Breaker is also known as a Pressure Vacuum Breaker Back-siphonage Prevention Assembly.

"Reclaimed water" means domestic or municipal wastewater which has been treated to a quality suitable for beneficial use, such as landscape irrigation.

"Records of landscape irrigation activities" means the irrigation plans, contracts, warranty information, invoices, copies of permits, and other documents that relate to the installation, maintenance, alteration, repair, or service of a landscape irrigation system.

"Reduced Pressure Principle Backflow Prevention Assembly" means an assembly containing two independently acting approved check valves together with a hydraulically operating mechanically independent pressure differential relief valve located between the two check valves and below the first check valve.

"Regulatory Authority" means the Building Official or designated representative.

"Static water pressure" means the pressure of water when it is not moving.

"Supervision" means the on-the-job oversight and direction by a licensed irrigator who is fulfilling his or her professional responsibility to the client and/or employer in compliance with local or state requirements. Supervision also means a licensed installer working under the direction of a licensed irrigator or beginning January 1, 2009, an irrigation technician who is working under the direction of a licensed irrigator to install, maintain, alter, repair or service an irrigation system.

"**Turfgrass**" means grass that, when regularly mowed, forms a dense growth of leaf blades and roots.

"Water conservation" means the design, installation, service, and operation of an irrigation system in a manner that prevents the waste of water, promotes the most efficient use of water, and applies the least amount of water that is required to maintain healthy individual plant material or turf, reduce dust, and control erosion.

"Zone flow" means a measurement, in gallons per minute or gallons per hour, of the actual flow of water through a zone valve, calculated by individually opening each zone valve and obtaining a valid reading after the pressure has stabilized. For design purposes, the zone flow is the total flow of all nozzles in the zone at a specific pressure.

"Zone valve" means an automatic valve that controls a single zone of a landscape irrigation system.

ARTICLE III

LICENSE, PERMIT, INSPECTIONS AND FEES

Section 3.01. License Required

A. No person shall connect an irrigation system to the water supply within the City or the City's extraterritorial jurisdiction unless that person holds a valid license, as defined by Chapter 30 of Title 30 of the Texas Administrative Code and required by Chapter 1903 of the Texas Occupations Code or as defined by Chapter 365 of Title 22 of the Texas Administrative Code and required by Chapter 1301 of the Texas Occupations Code except for the below stated exemptions.

B. A property owner is exempt from this chapter's requirement to be licensed if he or she is performing irrigation work in a building or on a premises owned or occupied by the person as the person's home. This exemption is only from this chapter's license requirement and is not an exemption from the other provisions in this chapter.

C. In accordance with Section 1903.002 of the Texas Occupation Code, a person who is licensed by the Texas State Board of Plumbing is exempt from this

chapter's requirement to be licensed. This exemption is only from this chapter's license requirement and is not an exemption from the other provisions in this chapter.

D. In accordance with Section 1903.002 of the Texas Occupation Code, a person who is a licensed engineer, registered architect, or registered landscape architect to the extent the person's acts are incidental to the pursuit of the person's profession is exempt from this chapter's requirement to be licensed. This exemption is only from this chapter's license requirement and is not an exemption from the other provisions in this chapter.

Section 3.02 Permit and Registration Required

A. Permit Required. No person shall install a new irrigation system or add zones and/or heads to an existing irrigation system within the territorial limits or extraterritorial jurisdiction of the City without obtaining a permit from the City.

B. Permit Application. A person shall submit an application for a permit on a form prescribed by the Regulatory Authority, the irrigation plan, and the permit fee to the Regulatory Authority. If the permit fee is paid and the irrigation plan complies with the requirements of this chapter, the Regulatory Authority shall issue a permit. Otherwise, the Regulatory Authority shall deny the application.

C. Registration Required. It shall be unlawful for any person, business, firm, or corporation to perform, or cause to be performed, any work described in this Code as requiring a permit unless such person, firm or corporation is the holder of a valid registration with the City to perform such work. Such person, firm or corporation shall be herein termed Registrant. In extending the rights and privileges of such registration, the City makes no statement of the technical competency of those so registered, and no manner of license is proffered.

D. Information to be Provided. An applicant for registration under this section shall provide to the Building Official the following information:

1. The complete name, complete mailing address and telephone number of the firm or corporation.

2. The name and private mailing address of a principal of the firm or corporation who is a person authorized to bind the firm or corporation in legal agreements.

3. The name and license identification of the licensed individual through whom the person, firm or corporation is to be represented in all activities before the Building Official.

4. Other pertinent information deemed necessary by the Building Official.

E. Every Registrant doing work in any City rights-of-way shall carry Contractor's Public Liability Insurance with a combined single limit of not less than $500,000 per occurrence, with an aggregate of not less than $500,000.

The Registrant shall make the City of Arlington a Certificate Holder and present proof of insurance at the time of registration and all subsequent renewals. Notice of policy cancellations or failure to renew coverage shall be cause for revocation of registration, denial of inspections or cancellation of permits.

F. Transfer of Registration Prohibited. No Registrant under this Section shall allow his registration, by name or other identification, to be transferred or assigned to, or in any manner directly or indirectly used by, any person, firm or corporation other than the one to whom issued by the Building Official, for any purpose.

G. Exemption for Homeowner. These registration requirements shall not apply to work to be performed on a residential structure when the person performing the work is the owner of the structure, and has his legal residence there, and is not assisted by any other person for remuneration. The homeowner shall be automatically considered a Registrant for the purposes of such a project. Notwithstanding such relief from registration, all requirements for permits for the work shall remain in force.

H. Business Registration Fee. For a Business Registration, each prospective registrant shall pay a fee in the amount as established by resolution of City Council.

I. Expiration and Renewal of Business Registration. Registration shall expire annually and shall be routinely reactivated by payment of a renewal fee if application information remains accurate. A registration may be renewed, as herein provided, at any time from sixty (60) days preceding the date of expiration. A registration not renewed for ninety (90) days beyond the date of expiration shall require a new registration.

J. Registration Suspended. The Regulatory Authority shall have the authority to suspend any registration issued under this Code for the following reasons:

1. Forfeiting an appeal of a Stop Order by allowing work to continue on a project after the issuance of said Stop Order.

2. Forfeiting an appeal from the Regulatory Authority by initiating work or allowing another to initiate work in violation of the Regulatory Authority's decision or prior to the Regulatory Authority's decision.

3. Causing or permitting the unauthorized or prohibited use of a valid registration, by Registrant or another, such as to allow the rights and privileges of registration to be applied to one not duly registered.

4. Convictions of two (2) violations of any of the provisions of this Code or of Section 14 of Article 6243-101, V.T.C.S., committed within a period of twelve (12) consecutive months (except that remedy of the violation within twenty (20) days of notice of violation shall cause the waiver of such conviction for the purpose of this subsection).

5. Providing false information on business registration and/or permit applications.

6. Failure to request inspections as required by this Chapter.

K. Permit Application Expiration and Renewals.

1. After issuing a permit, the Regulatory Authority shall remain empowered to require the correction of errors in plans and specifications; and prevent the commencement or continuation of construction operations conducted under such plans and specifications when such operations are in violation of this Chapter or other ordinance.

2. Every permit issued under this Chapter shall expire by limitation and become null and void if the work is suspended or abandoned for a period of one hundred eighty (180) days.

3. Any permittee holding an unexpired permit may apply in writing for an extension of the time within which work may commence under that permit. The Building Official may extend the time for action by the permittee for a period not exceeding one hundred eighty (180) days. The permittee shall pay a fee for the extension of the unexpired permit. No permit shall be extended more than once.

4. When a permit expires under this subsection, work may be recommenced only upon the issuance of a new permit.

5. An application for which no permit is issued within one hundred eighty (180) days following the date of the application shall be voided due to limitation of time and plans submitted for review may thereafter be returned to the applicant or destroyed by the Building Official. The Building Official may extend the time for action on the application for an additional one hundred eighty (180) days upon a request in writing submitted to the Building Official and payment of the extension fee. No application shall be extended more than once. An expired application may only be reactivated by filing of a new application including plans and fees.

Right of Entry. Whenever it is necessary to make an inspection to enforce the provisions of this chapter, or whenever the Regulatory Authority has reasonable cause to believe that there exists in any building or upon any premises any conditions or violations of this chapter that make the building or premises unsafe, unsanitary, dangerous or hazardous, the Regulatory Authority shall have the authority to enter the building or premises at all reasonable times to inspect or to perform the duties imposed upon the Regulatory Authority by this chapter. If such building or premises is occupied, the Regulatory Authority shall present credentials to the occupant and request entry. If such building or premises is unoccupied, the Regulatory Authority shall first make a reasonable effort to locate the owner or other person having charge or control of the building or premises and request entry. If entry is refused, the Regulatory Authority shall have recourse to every remedy provided by law to secure entry.

When the Regulatory Authority shall have first obtained a proper inspection warrant pursuant to the "Municipal Court" Chapter of the Code of the City of Arlington no owner or occupant or person having charge, care or control of any building or premises shall fail or neglect, after proper request is made as herein provided, to promptly permit entry therein by the Regulatory Authority.

M. Stop Work Orders. Upon notice from the Regulatory Authority, work on any irrigation system that is being done contrary to the provisions of this code or in a dangerous or unsafe manner shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the Regulatory Authority shall not be required to give a written notice prior to stopping the work. No person shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition.

Section 3.03 <u>Required Inspections</u>

A. The regulatory authority, upon notification from the permit holder or the permit holder's authorized agent, shall make the following inspection and such other inspections as necessary, and shall either release that portion of the construction or shall notify the permit holder or an agent of any violations that must be corrected. The holder of the permit shall be responsible for the scheduling of the inspections:

1. Underground inspection shall be made after trenches or ditches are excavated, piping and control wiring installed and before any backfill is put in place.

2. Final inspection shall be made after the installation is complete and operational and the installation is ready for use.

3. Where any work does not pass any initial inspection, the necessary corrections shall be made to comply with this chapter. The corrected work shall then be rescheduled for inspection.

Section 3.04 Inspector's Responsibility

A. An Irrigation Inspector shall enforce this chapter.

B. An Irrigation Inspector or licensed plumbing inspector, who has been designated by the Regulatory Authority, shall be responsible for:

1. verifying that the appropriate permits have been obtained for an irrigation system and that the irrigator and installer or irrigation technician, if applicable, are licensed;

2. inspecting the irrigation system;

3. determining that the irrigation system complies with the requirements of this chapter;

4. determining that the appropriate backflow prevention device was installed, tested, and test results provided to the Regulatory Authority;

5. investigating complaints related to irrigation system installation, maintenance, alteration, repairs, or service of an irrigation system and advertisement of irrigation services; and

6. maintaining records according to this chapter.

C. An Inspector shall maintain a log of all irrigation systems inspected that includes, but is not limited to the system location, property owner, irrigator responsible for installation, permit status, problems noted during the inspection, and date of inspection. The log must be kept for three years. The log shall be available for review within two business days of the request by the authorized representatives of the Texas Commission on Environmental Quality or any regulatory authority with jurisdiction over landscape issues in the area the Inspector is employed to inspect.

D. An Inspector may not inspect the following:

1. a landscape irrigation system that is an on-site sewage disposal system, as defined by Section 366.002 of the Texas Health and Safety Code;

2. an irrigation system that is used on or by an agricultural operation as defined by Section 251.002 of the Texas Agriculture Code; or

3. an irrigation system that is connected to a groundwater well used by the property owner for domestic use.

Section 3.05 Regulations and Standards for Fees

A. No permit required by this chapter shall be issued prior to payment of all applicable fees.

B. If a permit fee is paid by check, such payment shall be considered contingent upon payment by the drawee. If the drawee returns the check marked account closed, or insufficient funds, the permit shall be considered invalid.

C. Fees including the permit, registration, reinspection and appeal fees shall be charged in accordance with the amount as established by resolution of the City Council.

D. If work requiring a permit is commenced prior to the issuance of a permit, and a permit is subsequently issued, the fee shall be twice the applicable amount as stated in the fee schedules except that this provision shall not apply to emergency work when it shall be proved to the satisfaction of the Regulatory Authority that such work was done out of urgent necessity and it was not practicable to obtain a permit prior to commencing the work. In all such cases, a permit must be obtained as soon as is practicable. If there is an unreasonable delay in obtaining such permit, a double fee as herein provided shall be charged.

E. No full refund shall be made of any fee paid unless a written request is submitted by the original permittee no later than sixty (60) days after the date of the fee payment, and:

1. the permit has been issued, and no part of the work was commenced; or

2. the permit has been issued through error on the part of the City, and it is found that the work applied for cannot be allowed.

F. Refund of a fee paid for any administrative action other than an irrigation permit shall operate pursuant to the "Construction" Chapter of the Code of the City of Arlington.

G. When it is determined after a permit has been issued that the scope of work is to be significantly changed, the Regulatory Authority may authorize and require that appropriate adjustments be made to the permit fee. Any increase in the permit fee

shall be paid prior to performing any part of such increased scope of work. Any decrease in the permit fee which is based on previously approved work which will not be performed shall be refunded in the amount of fifty percent (50%) of the fee related to the work not to be performed, as determined by the Regulatory Authority. No refund shall be made, unless a written request is submitted by the original permittee not later than sixty (60) days following approval of the permittee's change in scope of work.

H. If, after a permit is issued, it is determined that the scope of the work is to be significantly changed, the Regulatory Authority may authorize and require that appropriate adjustments be made to the permit fee. Any resulting increase in permit fee shall be paid prior to performing any part of such increase scope of work. Any resulting decrease in permit fee shall be refunded based on the following equation: (Percentage of work not to be performed multiplied by permit fee paid).

1. The determination of such refund shall be made by the Regulatory Authority.

2. The permittee shall make a written request for the refund.

I. The Regulatory Authority shall make such refund to the permittee no later than sixty (60) days following approval of permittee's written request.

ARTICLE IV

STANDARDS FOR DESIGNING, INSTALLING, AND MAINTAINING IRRIGATION SYSTEMS

Section 4.01 Water Conservation

All irrigation systems shall be designed, installed, maintained, altered, repaired, serviced, and operated in a manner that will promote water conservation as defined in this chapter.

Section 4.02 Minimum Standards for Irrigation Plan Design

A. An irrigator shall prepare an irrigation plan for each site where a new irrigation system will be installed. An approved paper copy of the irrigation plan must be on the job site at all times during the installation and inspection of the irrigation system. A drawing showing the actual installation of the system is due to each irrigation system owner after all new irrigation system installations. During the

installation of the irrigation system, variances from the original plan may be authorized by the licensed irrigator if the variance from the plan does not:

1. diminish the operational integrity of the irrigation system;

2. violate any requirements of this ordinance; and

3. go unnoted in red on the irrigation plan.

B. The irrigation plan must include complete coverage of the area to be irrigated. If a system does not provide complete coverage of the area to be irrigated, it must be noted on the irrigation plan.

C. All irrigation plans used for construction must be drawn to scale. The plan must include, at a minimum, the following information:

1. the irrigator's seal, signature, and date of signing;

2. all major physical features and the boundaries of the areas to be watered;

3. a North arrow;

4. a legend;

5. **the zone** flow measurement for each zone;

6. location and type of each:

   a. controller; and

   b. sensor (for example, but not limited to, rain, moisture, wind, flow, or freeze);

7. location, type, and size of each:

   a. water source, such as, but not limited to a water meter and point(s) of connection;

   b. backflow prevention device;

   c. water emission device, including, but not limited to, spray heads, rotary sprinkler heads, quick-couplers, bubblers, drip, or micro-sprays;

   d. valve, including but not limited to, zone valves, master valves, and isolation valves;

e. pressure regulation component; and

f. main line and lateral piping.

8. the scale used; and

9. the design pressure.

Section 4.03 Minimum Design and Installation Requirements

A. No irrigation design or installation shall require the use of any component, including the water meter, in a way which exceeds the manufacturer's published performance limitations for the component.

B. Spacing.

1. The maximum spacing between emission devices must not exceed the manufacturer's published radius or spacing of the device(s). The radius or spacing is determined by referring to the manufacturer's published specifications for a specific emission device at a specific operating pressure.

2. New irrigation systems shall not utilize above-ground spray emission devices in landscapes that are less than 60 inches not including the impervious surfaces in either length or width and which contain impervious pedestrian or vehicular traffic surfaces along two or more perimeters. Qualifying areas less than 60 inches may be irrigated utilizing subsurface or drip irrigation, pressure compensating tubing, or be designed without irrigation. If pop-up sprays or rotary sprinkler heads are used in a new irrigation system, the sprinkler heads must direct flow away from any adjacent surface and shall not be installed closer than four inches from a hardscape, such as, but not limited to, a building foundation, fence, concrete, asphalt, pavers, or stones set with mortar.

3. Narrow paved walkways, jogging paths, golf cart paths or other small areas located in cemeteries, parks, golf courses or other public areas may be exempted from this requirement if the runoff drains into a landscaped area.

C. Water Pressure. Emission devices must be installed to operate at the minimum and not above the maximum sprinkler head pressure as published by the manufacturer for the nozzle and head spacing that is used. Methods to achieve the water pressure requirements include, but are not limited to, flow control valves, a pressure regulator, or pressure compensating spray heads.

D. Piping. Piping in irrigation systems must be designed and installed so that the flow of water in the pipe will not exceed a velocity of five feet per second for polyvinyl chloride (PVC) pipe.

E. Irrigation Zones. Irrigation systems shall have separate zones based on plant material type, microclimate factors, topographic features, soil conditions, and hydrological requirements. All non-turf landscape areas shall be designed with subsurface irrigation, drip irrigation, and/or pressure compensating tubing.

F. Matched Precipitation Rate. Zones must be designed and installed so that all of the emission devices in that zone irrigate at the same precipitation rate.

G. Irrigation systems shall not spray water over surfaces made of concrete, asphalt, brick, wood, stones set with mortar, or any other impervious material, such as, but not limited to, walls, fences, sidewalks, and streets.

H. Master Valve. A flow control master valve shall be installed on the discharge side of the backflow prevention device on all new installations.

I. Pop-up Heads. Pop-up heads shall be installed at grade level and operated to extend above all landscape turfgrass.

J. PVC Pipe Primer Solvent. All new irrigation systems that are installed using PVC pipe and fittings shall be primed with a colored primer prior to applying the PVC cement in accordance with the Plumbing Chapter or the Construction Chapter of the City Code.

K. Automatic Controllers. All new irrigation systems must include an automatic controller capable of providing all of the following features:

1. multiple irrigation programs with at least three start times per program;

2. limiting the irrigation frequency to once every 7 days and once every 14 days; and,

3. water budgeting feature.

L. Operational Rain or Moisture and Freeze Shut-off Devices or Other Technology. All new automatically controlled irrigation systems must include operational sensors or other technology designed to inhibit or interrupt operation of the irrigation system during periods of freezing weather and moisture or rainfall. Freeze and rain or moisture shut-off technology must be installed according to the manufacturer's published recommendations. Rain or moisture and freeze shut-off devices installed must be of a type established and published by the Regulatory Authority.

M. Isolation Valve. All new irrigation systems must include an isolation valve between the water meter and the backflow prevention device.

N. Depth Coverage of Piping. Piping in all irrigation systems must be installed according to the manufacturer's published specifications for depth coverage of piping.

1. If the manufacturer has not published specifications for depth coverage of piping, the piping must be installed to provide minimum depth coverage of six inches of select backfill, between the top of the pipe and the natural grade of the topsoil. All portions of the irrigation system that fail to meet this standard must be noted on the irrigation plan. If the area being irrigated has rock at a depth of six inches or less, select backfill may be mounded over the pipe. Mounding must be noted on the irrigation plan and discussed with the irrigation system owner or owner's representative to address any safety issues.

2. If a utility, man-made structure or roots create an unavoidable obstacle, which makes the six-inch depth coverage requirement impractical, the piping shall be installed to provide a minimum of two inches of select backfill between the top of the pipe and the natural grade of the topsoil.

3. All trenches and holes created during installation of an irrigation system must be backfilled and compacted to the original grade.

O. Wiring Irrigation Systems.

1. Underground electrical wiring used to connect an automatic controller to any electrical component of the irrigation system must be listed by Underwriters Laboratories as acceptable for burial underground.

2. Electrical wiring that connects any electrical components of an irrigation system must be sized according to the manufacturer's recommendation.

3. Electrical wire splices which may be exposed to moisture must be waterproof as certified by the wire splice manufacturer.

4. Underground electrical wiring that connects an automatic controller to any electrical component of the irrigation system must be buried with a minimum of six inches of select backfill.

P. Water contained within the piping of an irrigation system is deemed to be non-potable. No drinking or domestic water usage, such as, but not limited to, filling swimming pools or decorative fountains, shall be connected to an irrigation system. If a hose bib (an outdoor water faucet that has hose threads on the spout)

is connected to an irrigation system for the purpose of providing supplemental water to an area, the hose bib must be installed using a quick coupler key on a quick coupler installed in a covered purple valve box and the hose bib and any hoses connected to the bib must be labeled "non potable, not safe for drinking." An isolation valve must be installed upstream of a quick coupler connecting a hose bib to an irrigation system.

Q. Beginning January 1, 2010, either a licensed irrigator or a licensed irrigation technician shall be on-site at all times while the landscape irrigation system is being installed. When an irrigator is not onsite, the irrigator shall be responsible for ensuring that a licensed irrigation technician is on-site to supervise the installation of the irrigation system.

Section 4.04 Backflow Prevention Methods and Devices

A. Any irrigation system that is connected to the potable water supply must be connected in accordance with the Plumbing Chapter, Texas Commission on Environmental Quality rules, this chapter, and other relevant law. All backflow prevention assemblies shall be of a type and model approved by the Regulatory Authority. The backflow prevention device must be installed in accordance with the laboratory approval standards or if the approval does not include specific installation information, the manufacturer's current published recommendations.

B. If conditions that present a health hazard exist, one of the following methods must be used to prevent backflow;

1. An air gap may be used if:

   a. there is an unobstructed physical separation; and

   b. the distance from the lowest point of the water supply outlet to the flood rim of the fixture or assembly into which the outlet discharges is at least one inch or twice the diameter of the water supply outlet, whichever is greater.

2. Reduced pressure principle backflow prevention assemblies may be used if:

   a. the device is installed at a minimum of 12 inches above ground in a location that will ensure that the assembly will not be submerged; and

   b. drainage is provided for any water that may be discharged through the assembly relief valve.

3. Pressure vacuum breakers may be used if:

   a. no back-pressure condition will occur; and

   b. the device is installed at a minimum of 12 inches above any downstream piping and the highest downstream opening. Pop-up sprinklers are measured from the retracted position from the top of the sprinkler.

4. Atmospheric vacuum breakers may be used if:

   a. no back-pressure will be present;

   b. there are no shutoff valves downstream from the atmospheric vacuum breaker;

   c. the device is installed at a minimum of six inches above any downstream piping and the highest downstream opening. Pop-up sprinklers are measured from the retracted position from the top of the sprinkler;

   d. there is no continuous pressure on the supply side of the atmospheric vacuum breaker for more than 12 hours in any 24-hour period; and

   e. a separate atmospheric vacuum breaker is installed on the discharge side of each irrigation control valve, between the valve and all the emission devices that the valve controls.

C. Backflow prevention devices used in applications designated as health hazards must be tested upon installation and annually thereafter.

D. If there are no conditions that present a health hazard, double check valve backflow prevention assemblies may be used to prevent backflow if the device is tested upon installation and test cocks are used for testing only.

E. If a double check valve is installed below ground:

   1. test cocks must be plugged, except when the double check valve is being tested;

   2. test cock plugs must be threaded, water-tight, and made of non-ferrous material;

   3. a y-type strainer is installed on the inlet side of the double check valve;

4. there must be a clearance between any fill material and the bottom of the double check valve to allow space for testing and repair; and

5. there must be space on the side of the double check valve to test and repair the double check valve.

F. If an irrigation system is connected to a potable water supply and requires major maintenance, alteration, repair, or service, the system must be connected to the potable water supply through an approved, properly installed backflow prevention method before any major maintenance, alteration, repair, or service is performed.

G. If an irrigation system is connected to a potable water supply through a double check valve, pressure vacuum breaker, or reduced pressure principle backflow assembly and includes an automatic master valve on the system, the automatic master valve must be installed on the discharge side of the backflow prevention assembly.

H. The irrigator shall ensure the backflow prevention device is tested by a licensed Backflow Prevention Assembly Tester that is registered with the City of Arlington prior to being placed in service and the test results shall be provided to the Regulatory Authority and to the irrigation system's owner or owner's representative within ten (10) business days of testing of the backflow prevention device.

Section 4.05 Specific Conditions and Cross-Connection Control

A. Before any chemical is added to an irrigation system connected to the potable water supply, the irrigation system must be connected through a reduced pressure principle backflow prevention assembly or air gap.

B. Connection of any additional water source to an irrigation system that is connected to the potable water supply can only be done if the irrigation system is connected to the potable water supply through a reduced-pressure principle backflow prevention assembly or an air gap.

C. Irrigation system components with chemical additives induced by aspiration, injection, or emission system connected to any potable water supply must be connected through a reduced pressure principle backflow device.

D. If an irrigation system is designed or installed on a property that is served by an on-site sewage facility, as defined in Title 30, Texas Administrative Code, Chapter 285, then:

1. all irrigation piping and valves must meet the separation distances from the On-Site Sewage Facilities system as required for a private water line in Title 30, Texas Administrative Code, Section 285.91(10);

2. any connections using a private or public potable water source that is not the city's potable water system must be connected to the water source through a reduced pressure principle backflow prevention assembly as defined in Title 30, Texas Administrative Code, Section 344.50; and

3. any water from the irrigation system that is applied to the surface of the area utilized by the On-Site Sewage Facility system must be controlled on a separate irrigation zone or zones so as to allow complete control of any irrigation to that area so that there will not be excess water that would prevent the On-Site Sewage Facilities system from operating effectively.

Section 4.06 Completion of Irrigation System Installation

Upon completion of the irrigation system, the irrigator or irrigation technician who provided supervision for the on-site installation shall be required to complete four items:

1. a final "walk through" with the irrigation system's owner or the owner's representative to explain the operation of the system.

2. The maintenance checklist on which the irrigator or irrigation technician shall obtain the signature of the irrigation system's owner or owner's representative and shall sign, date, and seal the checklist. If the irrigation system's owner or owner's representative is unwilling or unable to sign the maintenance checklist, the irrigator shall note the time and date of the refusal on the irrigation system's owner or owner's representative's signature line. The irrigation system owner or owner's representative will be given the original maintenance checklist and a duplicate copy of the maintenance checklist shall be maintained by the irrigator. The items on the maintenance checklist shall include but are not limited to:

    a. irrigator's name, license number, company name, telephone number, and the dates of the warranty period;

    b. the manufacturer's manual for the automatic controller;

    c. a seasonal (spring, summer, fall, winter) watering schedule based on either current/real time evapotranspiration or monthly historical reference evapotranspiration (historical ET) data, monthly effective rainfall estimates, plant landscape coefficient factors, and site factors;

d. a list of components, such as the nozzle, or pump filters, and other such components; that require maintenance and the recommended frequency for the service; and

e. the statement, "This irrigation system has been installed in accordance with all applicable state and local laws, ordinances, rules, regulations or orders. I have tested the system and determined that it has been installed according to the Irrigation Plan and is properly adjusted for the most efficient application of water at this time."

A permanent sticker which contains the irrigator's name, license number, company name, telephone number and the dates of the warranty period shall be affixed to each automatic controller installed by the irrigator or irrigation technician. The information contained on the sticker must be printed with waterproof ink.

4. The irrigation plan indicating the actual installation of the system must be provided to the irrigation system's owner or owner representative.

Section 4.07 Maintenance, Alteration, Repair, or Service of Irrigation Systems

A. All trenches and holes created during the maintenance, alteration, repair, or service of an irrigation system must be returned to the original grade with compacted select backfill.

B. Colored PVC pipe primer solvent must be used on all pipes and fittings used in the maintenance, alteration, repair, or service of an irrigation system in accordance with the Uniform Plumbing Code (Section 316) or the International Plumbing Code (Section 605).

C. Repairs to existing automatic irrigation systems that require replacement of an existing controller must include the installation of an operational sensor or other technology designed to inhibit or interrupt operation of the irrigation system during periods of freezing weather and moisture or rainfall. Rain or moisture and freeze shut-off devices installed must be of a type established and published by the Regulatory Authority.

D. When maintenance, alteration, repair or service of an irrigation system involves excavation work at the water meter or backflow prevention device, an isolation valve and or an operational rain and freeze sensor shall be installed, if an isolation valve and or operational rain and freeze sensor is not present.

Section 4.08 Reclaimed Water

Reclaimed water may be utilized in landscape irrigation systems if:

1. there is no direct contact with edible crops;

2. the irrigation system does not spray water across property lines that do not belong to the irrigation system's owner;

3. the irrigation system is installed using purple components;

4. a minimum of an eight inch by eight inch sign, in English and Spanish, is prominently posted on/in the area that is being irrigated, that reads, "RECLAIMED WATER – DO NOT DRINK" and "AGUA DE RECUPERACIÓN – NO BEBER";

5. backflow prevention on the reclaimed water supply line shall be in accordance with the regulations of the City; and

6. all permit applications and plans for a landscape irrigation system that uses reclaimed water must be so stated on the plans and the applications.

ARTICLE V

APPEAL

Section 5.01 Appeal

Any person aggrieved by a decision of the Regulatory Authority in accordance with this Chapter may appeal said decision or action to the Mechanical and Plumbing Board of Appeals as set forth in Article II of the "Mechanical" Chapter of the Code of the City of Arlington, which shall have authority relative to appeals of decisions of the Regulatory Authority and revocation and suspension of registration under this Chapter. Any person may register an appeal with the Secretary of the Mechanical and Plumbing Board of Appeals for the review of any decision of the Regulatory Authority made pursuant to the terms of this Code. Such appeal shall be made in writing and presented to the Office of the Secretary of the Board. An administrative fee set by resolution approved by City Council, shall accompany such notice of appeal, which shall be made on forms provided by the Regulatory Authority.

Section 5.02 Board Decisions & Procedure

A. The Board, when appealed to, shall conduct a hearing, and after such hearing issue a decision regarding the appeal.

B. Every decision of the Board shall be final, subject however, to such remedy as any aggrieved party might have at law or in equity. The decision shall be in writing and shall indicate the vote upon the decision. Every decision shall be promptly filed in the office of the Regulatory Authority and shall be open to the public for inspection. A true and correct copy of the decision shall be sent by mail or otherwise to the appellant and a copy shall be publicly posted in the office of the Regulatory Authority for two (2) weeks after the filing thereof.

C. The Board shall in every case reach a decision without unreasonable or unnecessary delay making specific effort to reach a decision not later than thirty (30) days (excluding Saturdays, Sundays, and holidays) from the date of registering of appeal with the Secretary of the Board.

D. If a decision of the Board reverses or modifies a refusal, order, or disallowance of the Regulatory Authority, the Regulatory Authority shall immediately take action in accordance with such decision.

E. Any person, firm or corporation aggrieved by any decision of the Board may present to a court of record a petition, duly verified, setting forth that such decision is illegal, in whole or in part, specifying the grounds of the illegality. Unless such petition (appeal) shall be presented to the court within ten (10) days of the decision of the Board, the decision of the Board shall become final.

ARTICLE VI

ENFORCEMENT AND PENALTY

Section 6.01 Enforcement and Penalty

A. The Regulatory Authority shall administer and enforce the provisions of this chapter.

B. Any person violating any provision of this chapter, upon conviction, is guilty of a Class C misdemeanor and punishable by a fine not to exceed $500.00. Each day that a provision of this chapter is violated shall constitute a separate offense.

C. The remedies provided by this chapter shall be in addition to all other criminal and civil remedies, which the City is entitled under the authority of statutes, ordinances or in equity to pursue.

2.

Any person, firm, corporation, agent or employee thereof who violates any of the provisions of this ordinance shall be guilty of a misdemeanor and upon conviction thereof shall be fined an amount not to exceed Five Hundred and No/100 Dollars ($500) for each offense. Each day that a violation is permitted to exist shall constitute a separate offense.

3.

This ordinance shall be and is hereby declared to be cumulative of all other ordinances of the City of Arlington, and this ordinance shall not operate to repeal or affect any of such other ordinances except insofar as the provisions thereof might be inconsistent or in conflict with the provisions of this ordinance, in which event such conflicting provisions, if any, in such other ordinance or ordinances are hereby repealed.

4.

If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be unconstitutional, such holding shall not affect the validity of the remaining portions of this ordinance.

5.

All of the regulations provided in this ordinance are hereby declared to be governmental and for the health, safety and welfare of the general public. Any member of the City Council or any City official or employee charged with the enforcement of this ordinance, acting for the City of Arlington in the discharge of his/her duties, shall not thereby render himself/herself personally liable; and he/she is hereby relieved from all personal liability for any damage that might accrue to persons or property as a result of any act required or permitted in the discharge of his/her said duties.

6.

Any violation of this ordinance can be enjoined by a suit filed in the name of the City of Arlington in a court of competent jurisdiction, and this remedy shall be in addition to any penal provision in this ordinance or in the Code of the City of Arlington.

7

The caption and penalty clause of this ordinance shall be published in a newspaper of general circulation in the City of Arlington, in compliance with the provisions of Article VII, Section 15, of the City Charter. Further, this ordinance may be published in pamphlet form and shall be admissible in such form in any court, as provided by law.

This ordinance shall become effective on January 1, 2009.

PRESENTED AND GIVEN FIRST READING on the 18th day of November, 2008, at a regular meeting of the City Council of the City of Arlington, Texas; and GIVEN SECOND READING, passed and approved on the 2nd day of December, 2008, by a vote of 9 ayes and 0 nays at a regular meeting of the City Council of the City of Arlington, Texas.

ROBERT N. CLUCK, Mayor

ATTEST:

KAREN BARLAR, City Secretary

APPROVED AS TO FORM:
JAY DOEGEY, City Attorney

BY

Ordinance No. 14-026

An ordinance amending the "Water and Sewer" Chapter of the Code of the City of Arlington, Texas, 1987, through the amendment of Article I, Definitions, Section 1.01, Definitions, relative to the addition of the definitions of "Automatic Irrigation System", "Drip Irrigation", "Hand Watering", Irrigation System", "Landscape", "Landscape Watering" and "New Landscape", and the amendment of the definition of "Premises"; through the amendment of Article IV, Regulations and Restrictions on Service, Section 4.01, Responsibility for Leakage, relative to water leakage; through the amendment of Article V, Water Rationing, Section 5.03, Enforcement of Drought Contingency Plan and Water Conservation Plan, relative to provisions governing water use during the drought contingency plan; and through the amendment of Article X, Penalty, Section 10.01, Penalty, relative to providing a $500 penalty for violations except for violations in Sections 4.01 and 5.03; providing for a fine of up to $500 for each offense in violation of the ordinance; providing this ordinance be cumulative; providing for severability, governmental immunity, injunctions and publication; and becoming effective ten days after first publication

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ARLINGTON, TEXAS:

1.

That the **"Water and Sewer"** Chapter of the Code of the City of Arlington, Texas, 1987, is hereby amended through the amendment of **Article I**, Definitions, **Section 1.01**, Definitions, by the **addition** of the definitions of "Automatic Irrigation System", "Drip Irrigation", "Hand Watering", Irrigation System", "Landscape", "Landscape Watering" and "New Landscape"; and the **amendment** of the definition of "Premises"; so that said definitions shall be and read as follows:

"Automatic Irrigation System" shall mean a site specific system of delivering water generally for landscaping via a system of pipes or other conduits installed below ground that automatically cycles water use through water emitters to a preset program, whether on a designated timer or through manual operation.

"Drip Irrigation" shall mean an irrigation system that applies water at predetermined controlled low-flow levels directly to the roots of the plant by drip, porous pipe or other means.

"Hand Watering" shall mean the application of water for irrigation purposes through a hand-held watering hose, watering can, or bucket.

"Irrigation System" shall mean a system of fixed pipes and water emitters that apply water to landscape plants or turfgrass, including, but not limited to, in-ground, permanent and above-ground, temporary irrigation systems.

"Landscape" shall mean an area that is covered by grass, ground cover, trees, shrubs, berms, planters or other natural plant materials.

"Landscape Watering" shall mean the use of water for the irrigation and maintenance of landscaped areas, whether publicly or privately owned, including residential and commercial lawns, gardens, golf courses, parks, right-of-ways, medians and entry ways.

"New Landscape" shall mean landscape that:

1. is installed during construction of a new house, multi-family dwelling, or commercial building,

2. is installed as part of a governmental entity's capital improvement project, or

3. alters more than one-quarter of an existing landscape area.

"Premises" shall mean a parcel or parcels of land, including but not limited to a building together with its grounds or other appurtenances.

Further, **Article IV**, Regulations and Restrictions on Service, **Section 4.01**, Responsibility for Leakage, is hereby amended so that hereafter said **title** and section shall be and read as follows:

Section 4.01 Responsibility for Leakage and Water Waste

A. Customers are responsible for loss of water due to leakage in pipe or plumbing on the customer side of the meter or property. Customers are responsible for preventing avoidable waste of water including loss from a controllable leak or an irrigation system malfunction such as a broken sprinkler and/or overspray on impervious surfaces with runoff greater than 150 feet.

B. The Director of Utilities may suspend water service to any premises when the Director of Utilities finds such suspension is necessary to prevent or stop actual or threatened leakage or waste of water, which presents or may present imminent and substantial danger or threat to the environment, the public water supply, or the health and welfare of any person. If there is not an imminent and substantial danger or threat, the Director of Utilities shall provide notice of suspension by certified mail, return receipt requested, to the water account customer, owner or person in charge of the premises thirty (30) days before suspension of service. If there is an imminent and substantial danger or threat, the Director of Utilities may suspend water service without prior notice. Within three (3) days after the

suspension of service due to an imminent danger or threat, the Director of Utilities shall notify the water account customer, owner, or person in charge of the premises of the suspension in person, if present, and by certified mail, return receipt requested. Notice shall provide the date that service will be or was suspended without further notice, the reason for suspension, and the ability to request an administrative review regarding the reasons for suspension within fifteen (15) days from the date of notice. If a written request for administrative review is timely filed with the Director of Utilities, the Director of Utilities may not restore services upon the filing of the request, shall hold the administrative review within ten (10) days of the written request, establish procedures for the administrative review, and establish the conditions under which water service may be restored. The administrative review exhausts all administrative remedies. In the event of any change in tenancy in property where water service was suspended or disconnected in accordance with this Section, such condition shall be corrected before service will be restored.

C. A violation of this Section shall not constitute a criminal offense.

D. A person in whose name a water service account is held is presumed to be responsible for a violation of this Article.

Further, **Article V**, Water Rationing, **Section 5.03**, Enforcement of Drought Contingency Plan and Water Conservation Plan, is hereby amended so that hereafter said **title** and section shall be and read as follows:

Section 5.03 Enforcement of Drought Contingency and Emergency Water Management Plan and Water Conservation Plan

A. Adoption and Incorporation of the Drought Contingency and Emergency Water Management Plan and Water Conservation Plan. On April 22, 2008, the City Council approved Resolution No. 08-137 adopting a Drought Contingency and Emergency Water Management Plan. On April 7, 2009, the City Council approved Resolution No. 09-083 adopting a Water Conservation Plan. The requirement and enforcement of each plan as specified in Resolution No. 08-137 and Resolution No. 09-083 are hereby adopted by ordinance and incorporated by reference herein. Any amendments, including those amendments adopted on May 13, 2014, to the Drought Contingency and Emergency Water Management Plan or the Water Conservation Plan may be approved by resolution and are automatically adopted by ordinance and incorporated by reference herein. A copy of the plans shall be available in the City Secretary's Office.

B. Violations. The following are violations in the Drought Contingency and Emergency Water Management Plan, which shall be referred to in this Section as "Plan," and are violations in this Article. If there is a conflict in the provisions of the Plan and this Article, this Article shall govern. These violations shall not constitute a criminal offense.

1. No person shall use or allow the use of water from the City of Arlington for any purpose in a manner contrary to any provision of the Plan or this Article, or an amount in excess of that permitted by the drought response stage or emergency water management action in effect at the time.

2. The owner, tenant, lessee, or person who manages or who is in custody or control of the property has an affirmative duty to ensure compliance with and prevent violations of the provisions of this Article.

3. A person in whose name a water service account is held is presumed to be responsible for a violation of this Article.

4. While any stage of the Plan is in effect, it is a violation if a person uses water in such a manner as to allow runoff or other waste, including but not limited to instances where the person:

    a. Fails to repair a controllable leak, including (1) a broken sprinkler head, (2) a leaking valve, (3) leaking or broken pipes, or (4) a leaking faucet;

    b. Operates or allows the operation of a permanently installed irrigation system with: (1) a broken head; (2) a head that is out of adjustment and the arc of the spray head is over a street or parking lot; or (3) a head that is misting because of high water pressure;

    c. Operates or allows the operation of an irrigation system or other lawn watering device that allows water to (1) run off a property and form a stream of water in a street for a distance of 50 feet or greater; or (2) pond in a street or parking lot to a depth greater than one-quarter of an inch; or

    d. Allows or causes an irrigation system or other lawn watering device to operate during any form of precipitation or when temperatures are at or below 32 degrees Fahrenheit.

5. During Stage 1 of the Plan, the following is in effect:

    a. <u>Landscape Watering During Stage 1</u>

        (1) While Stage 1 of the Plan is in effect, it is a violation if a person uses or allows the use of landscape watering with sprinklers or irrigation systems contrary to the following twice per week schedule, which is:

            (a) Residential addresses ending in an even number (0, 2, 4, 6, or 8) may water on Wednesdays and Saturdays.

(b) Residential addresses ending in an odd number (1, 3, 5, 7 or 9) may water on Thursdays and Sundays.

(c) All non-residential locations (apartment complexes, businesses, industries, parks, medians, etc.) may water on Tuesdays and Fridays.

(2) It is an exception that:

(a) The person was watering with a handheld hose, soaker hose, drip irrigation or hand watering on any day and any time.

(b) The person used or allowed the use of landscape watering with sprinklers or irrigation systems because the use of water was necessary:

i. to protect the health, safety, or welfare of the public; or

ii. for the repair of an irrigation system, plumbing line, fountain, or similar feature in the presence of person making repair.

(c) The person was using well water or treated wastewater effluent for irrigation or other alternative water supply sources.

b. <u>Washing Vehicles During Stage 1</u>

(1) While Stage 1 of the Plan is in effect, it is a violation if a person washes any motor vehicle, motorbike, boat, trailer, airplane, or other vehicle without the use of a hand-held bucket or a hand-held hose equipped with a positive-pressure shutoff nozzle for quick rinses.

(2) It is an exception that the person washed a vehicle:

(a) On the premises of a commercial car wash or commercial service station;

(b) Owned by a company at the company's automated on-site vehicle washing facility; or

(c) Because the health, safety, and welfare of the public were contingent upon frequent vehicle cleansing, such as garbage trucks and vehicles used to transport food and perishables.

c. Other Violations and Exceptions for Stage 1

(1) It is a violation if a person uses or allows the use of landscape watering at a park, golf course, athletic field or sports field in violation of any provision of the Plan applicable during Stage 1.

(2) It is an exception that the person met the requirements of an exception outlined in the Plan applicable during Stage 1 for:

(a) Landscape watering at a park, golf course, athletic field, sports field or high-impact public area.

(b) Watering of new hydromulch, grass sod, or grass seed for the purpose of establishing a new landscape.

(c) Outdoor watering at a service address with a large multi-station irrigation system.

(3) It is an exception for any violation related to a watering restriction in Stage 1 if the person was watering stock at a commercial plant nursery.

6. During Stage 2 of the Plan, the following is in effect:

a. Landscape Watering During Stage 2

(1) While Stage 2 of the Plan is in effect, it is a violation if a person uses or allows the use of landscape watering with sprinklers or irrigation systems more than once per week contrary to the once per week schedule determined by the Director of Utilities.

(2) It is an exception that:

(a) The person was watering with a handheld hose, soaker hose, drip irrigation or hand watering on any day and any time.

(b) The person used or allowed the use of landscape watering with sprinklers or irrigation systems because the use of water was necessary:

i. to protect the health, safety, or welfare of the public; or

ii. for the repair of an irrigation system, plumbing line, fountain, or similar feature in the presence of person making repair.

(c) The person was using well water or treated wastewater effluent for irrigation or other alternative water supply sources.

b. Use of Water from Hydrants

(1) It is a violation if a person uses water from a hydrant for any purpose other than firefighting related activities or other activities necessary to maintain public health, safety and welfare.

(2) It is an exception that the Director of Utilities or his/her official designee issued a variance to the person allowing the use of water from a designated hydrant.

c. Other Violations and Exceptions for Stage 2

(1) It is a violation if a person uses or allows the use of landscape watering at a park, golf course, athletic field or sports field in violation of any provision of the Plan applicable during Stage 2.

(2) It is an exception that the person met the requirements of an exception outlined in the Plan applicable during Stage 2 for:

(a) Landscape watering at a park, golf course, athletic field, sports field or high-impact public area.

(b) Watering of new hydromulch, grass sod, or grass seed for the purpose of establishing a new landscape.

(c) Outdoor watering at a service address with a large multi-station irrigation system.

(3) It is an exception for any violation related to a watering restriction in Stage 2 if the person was watering stock at a commercial plant nursery.

7. During Stage 3 of the Plan, the following is in effect:

a. Landscape Watering During Stage 3

(1) While Stage 3 of the Plan is in effect, it is a violation if a person uses or allows the use of landscape watering.

(2) It is an exception that:

(a) The person was watering with a handheld hose, soaker hose, drip irrigation or hand watering on any day and any time.

(b) The person used or allowed the use of landscape watering with sprinklers or irrigation systems because the use of water was necessary:

i. to protect the health, safety, or welfare of the public; or

ii. for the repair of an irrigation system, plumbing line, fountain, or similar feature in the presence of person making repair.

(c) The person was using well water or treated wastewater effluent for irrigation or other alternative water supply sources.

b. Vehicle Washing During Stage 3

(1) While Stage 3 of the Plan is in effect, it is a violation if a person washes any vehicle.

(2) It is an exception that the person washed a vehicle:

(a) On the premises of a commercial car wash or commercial service station, or by using professional washing services; or

(b) That was a garbage truck or vehicle used to transport food or other perishables and the washing was necessary for health, safety, or public safety reasons.

c. Other Violations and Exceptions for Stage 3

(1) While Stage 3 of the Plan is in effect, it is a violation if a person installs new landscape or turfgrass or irrigates new landscape or turfgrass by means of an automatic irrigation system or hose-end sprinkler. It is an exception that the

Director of Utilities or his/her official designee issued a variance to the person allowing the conduct.

(2) While Stage 3 of the Plan is in effect, it is a violation if a person uses water to wash a paved area, conduct power washing activities, or hose a building or other structure, in violation of any provision of the Plan applicable during Stage 3. It is an exception that the person met the requirements to alleviate a possible public health and safety risk, fire protection or surface preparation prior to painting with a power washer utilizing high-efficiency equipment and a vacuum recovery system where possible.

(3) While Stage 3 of the Plan is in effect, it is a violation if a person operates ornamental fountains or ponds that use potable water. It is an exception that the conduct was necessary to support aquatic life.

(4) While Stage 3 of the Plan is in effect, it is a violation if a person drains, fills, or refills a swimming pool, wading pool or Jacuzzi type pool. It is an exception that the person added water to maintain the pool level in an existing private or public pool.

(5) While Stage 3 of the Plan is in effect, it is a violation if a person uses or allows the use of landscape watering at a park, golf course, athletic field, sports field or high-impact public area. It is an exception that the person met the requirements of an exception outlined in the Plan applicable during Stage 3.

(6) While Stage 3 of the Plan is in effect, it is a violation if a person uses water from a hydrant for any purpose other than firefighting related activities or other activities necessary to maintain public health, safety and welfare. It is an exception that the Director of Utilities or his/her official designee issued a variance to the person allowing the use of water from a designated hydrant.

C. Suspension and Reconnection of Water Services. The Director of Utilities or his/her designee may disconnect irrigation systems and/or suspend water services and reconnect water services as described in this Article.

1. After sending notice by certified mail, return receipt requested, to the customer, the Director of Utilities or his/her designee may disconnect irrigation systems and/or suspend water service to a premises when a violation of this Article or the Plan has not been corrected within ten (10) days of written warning or when the Director of Utilities or his/her

designee determines that a violation of the Plan at that premises poses a public safety issue, including but not limited to a substantial risk to the municipal water supply of the City and may endanger the health, safety and public welfare of the citizens of the City.

2. In accordance with this Section, a person who received notice that an irrigation system may be disconnected and/or water service suspended or whose irrigation system has been disconnected and/or water service has been suspended may appeal the disconnection and/or suspension.

   a. In order to perfect appeal, the person must request an administrative review before the Director of Utilities by filing a written notice of appeal to the Director of Utilities within ten (10) days of the notice that an irrigation system may be disconnected and/or water service suspended or within then (10) days of disconnection or water service being suspended.

   b. Services may not be reconnected upon request for an administrative review.

   c. The Director of Utilities or his/her designee shall hold the administrative review within ten (10) days of the notice of appeal.

   d. The Director of Utilities or his/her designee may establish procedures for the administrative review as well as the conditions under which water service may be reconnected.

   e. If the disconnection of the irrigation system and/or suspension of water service is reversed, water service shall be reconnected as soon as practicable.

   f. If the disconnection of the irrigation system and/or suspension of water service is affirmed, water service will be reconnected only in accordance with the procedures established by the Director of Utilities or his/her designee.

   g. Disconnection of the irrigation system or water services suspension under this Section may be reconnected after:

      (1) meeting the conditions upon which water service may be restored as determined by the Director of Utilities or his/her designee; and

      (2) payment of the Water Utilities Department service charges associated with reconnecting suspended water service and any other costs incurred by the City of Arlington in suspending service; and

(3) suitable assurance is given to the Director of Utilities or his/her designee that the same action will not be repeated while the Plan is in effect.

h. This administrative review exhausts all administrative remedies.

Further, **Article X**, Penalty, **Section 10.01**, Penalty, is hereby amended so that hereafter said section shall be and read as follows:

Section 10.01 Penalty

Except as provided in Section 4.01 and Section 5.03 of this Chapter, a person who violates any provision of this Chapter by performing an act prohibited or by failing to perform an act required is guilty of a misdemeanor offense punishable by a fine not to exceed $500 and each occurrence of the violation shall constitute a separate offense.

2.

Any person, firm, corporation, agent or employee thereof who violates any of the provisions of this ordinance shall be guilty of a misdemeanor and upon conviction thereof shall be fined an amount not to exceed Five Hundred and No/100 Dollars ($500) for each offense, except as provided by Section 4.01 and Section 5.03. Each day that a violation is permitted to exist shall constitute a separate offense.

3.

This ordinance shall be and is hereby declared to be cumulative of all other ordinances of the City of Arlington, and this ordinance shall not operate to repeal or affect any of such other ordinances except insofar as the provisions thereof might be inconsistent or in conflict with the provisions of this ordinance, in which event such conflicting provisions, if any, in such other ordinance or ordinances are hereby repealed.

4.

If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be unconstitutional, such holding shall not affect the validity of the remaining portions of this ordinance.

5.

All of the regulations provided in this ordinance are hereby declared to be governmental and for the health, safety and welfare of the general public. Any member of the City Council or any City official or employee charged with the enforcement of this ordinance, acting for the City of Arlington in the discharge of his/her duties, shall not thereby render himself/herself personally liable; and he/she is hereby relieved from all

personal liability for any damage that might accrue to persons or property as a result of any act required or permitted in the discharge of his/her said duties.

6.

Any violation of this ordinance can be enjoined by a suit filed in the name of the City of Arlington in a court of competent jurisdiction, and this remedy shall be in addition to any penal provision in this ordinance or in the Code of the City of Arlington.

7.

The caption and penalty clause of this ordinance shall be published in a newspaper of general circulation in the City of Arlington, in compliance with the provisions of Article VII, Section 15, of the City Charter. Further, this ordinance may be published in pamphlet form and shall be admissible in such form in any court, as provided by law.

8.

This ordinance shall become effective ten (10) days after first publication as described above.

PRESENTED AND GIVEN FIRST READING on the 22 day of April, 2014, at a regular meeting of the City Council of the City of Arlington, Texas; and GIVEN SECOND READING, passed and approved on the 13 day of May, 2014, by a vote of 8 ayes and 1 nays at a regular meeting of the City Council of the City of Arlington, Texas.

ROBERT N. CLUCK, Mayor

ATTEST:

MARY W. SUPINO, City Secretary

APPROVED AS TO FORM:
JAY DOEGEY, City Attorney

BY

APPENDIX D

LETTER TO REGION C WATER PLANNING GROUP

APPENDIX D
Letter to Region C Water Planning Group

April 30, 2019

Mr. Kevin Ward
Chair, Region C Water Planning Group
Trinity River Authority
P.O. Box 60
Arlington, TX 76004

Dear Mr. Ward,

A copy of the 2019 Water Conservation Plan for customers of the City of Arlington is enclosed. I am submitting a copy of this plan to the Region C Water Planning Group in accordance with the Texas Water Development Board and Texas Commission on Environmental Quality rules.

Sincerely,

Craig Cummings
Director of Water Utilities
City of Arlington

APPENDIX E

ADOPTION OF WATER CONSERVATION PLAN

Ordinance No. 19-016

An ordinance adopting the 2019 update to the City of Arlington Water Conservation Plan; providing this ordinance be cumulative; providing for severability, governmental immunity, injunctions and publication, and establishing an effective date

WHEREAS, on October 5, 1999, the City Council passed Resolution No. 99-729, which adopted the Water Conservation Plan for the City of Arlington; and

WHEREAS, the Water Conservation Plan was updated on April 26, 2005 by Resolution No. 05-174; April 7, 2009 by Resolution No. 09-083; and May 13, 2014 by Resolution No. 14-105 and Ordinance No. 14-026; and

WHEREAS, per the Texas Administrative Code, retail public water suppliers shall review and update water conservation plans at least every five years; and

WHEREAS, the updated City of Arlington Water Conservation Plan has been developed in conformance with state requirements; NOW THEREFORE

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ARLINGTON, TEXAS:

1.

That the City Council hereby adopts the 2019 update to the City of Arlington Water Conservation Plan. The primary goals of the 2019 update of the Water Conservation Plan are for sustained reductions in per capita water use and continued management of lost water within the distribution system.

2.

A substantial copy of the Water Conservation Plan is attached hereto and incorporated herein for all intents and purposes.

3.

This ordinance shall be and is hereby declared to be cumulative of all other ordinances of the City of Arlington, and this ordinance shall not operate to repeal or affect any of such other ordinances except insofar as the provisions thereof might be inconsistent or in conflict with the provisions of this ordinance, in which event such conflicting provisions, if any, in such other ordinance or ordinances are hereby repealed.

4.

If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be unconstitutional, such holding shall not affect the validity of the remaining portions of this ordinance.

5.

All of the regulations provided in this ordinance are hereby declared to be governmental and for the health, safety and welfare of the general public. Any member of the City Council or any City official or employee charged with the enforcement of this ordinance, acting for the City of Arlington in the discharge of his/her duties, shall not thereby render himself/herself personally liable; and he/she is hereby relieved from all personal liability for any damage that might accrue to persons or property as a result of any act required or permitted in the discharge of his/her said duties.

6.

Any violation of this ordinance can be enjoined by a suit filed in the name of the City of Arlington in a court of competent jurisdiction, and this remedy shall be in addition to any penal provision in this ordinance or in the Code of the City of Arlington.

7.

The caption and penalty clause of this ordinance shall be published in a newspaper of general circulation in the City of Arlington, in compliance with the provisions of Article VII, Section 15, of the City Charter. Further, this ordinance may be published in pamphlet form and shall be admissible in such form in any court, as provided by law.

8.

This ordinance shall become effective upon second publication as described above.

PRESENTED AND GIVEN FIRST READING on the 9th day of April, 2019, at a regular meeting of the City Council of the City of Arlington, Texas; and GIVEN SECOND READING, passed and approved on the 23rd day of April, 2019, by a vote of 9 ayes and 0 nays at a regular meeting of the City Council of the City of Arlington, Texas.

W. JEFF WILLIAMS, Mayor

ATTEST:

ALEX BUSKEN, City Secretary

APPROVED AS TO FORM:
TERIS SOLIS, City Attorney

BY

APPENDIX F

ILLEGAL WATER CONNECTIONS AND THEFT OF WATER

APPENDIX F
Illegal Water Connections and Theft of Water

City of Arlington Code of Ordinances Governing Water and Sewer, Water Chapter, Article IV

A. Section 4.15 Diversion of Water from Metered Flow; Violations; Prima Facie Case

Whoever by any means or device prevents water from passing through any meter belonging to the Water Utilities Department, or prevents any meter used in connection with the supply of water to any customer by said Water Utilities Department from registering the amount of water passing through such meter, or prevents a meter from duly registering the quantity of water supplied or in any way interferes with its proper action or just registration, or, without the consent in writing of the Director of Utilities, diverts the water from any pipe or pipes of the Water Utilities Department, or otherwise uses, or cause to be used, without the consent of the Director of Utilities, any water produced or distributed by said Water Utilities Department, or retains possession of, or refuses to deliver, any meter or other appliance loaned to him by the Water Utilities Department for the purpose of furnishing water through same, shall be in violation of these rules and regulations and shall be guilty of a misdemeanor. The presence at any time on or about any such meter or pipe of any device or pipes resulting in the diversion of water or prevention of its free passage and registration by the meter, or resulting in the diversion from the meter as above defined, or resulting in the prevention of water reaching the meter, or resulting in the prevention of the just registration of the meter or meters or the taking of any water except through a meter as above set forth, shall constitute prima facie evidence on the part of the person owning or having custody and control of the room, building, place or premises where such device or pipe is, or knowledge of the existence thereof and knowledge of such existence to the person who would be benefited by the failure of the water to be properly metered, and shall further constitute prima facie evidence of intention on the part of such person or persons to defraud, and shall bring such person prima facie within the scope, meaning and penalties of this section and Ordinance.

B. Section 4.16 Water Used in Construction Without Appropriate Application for Service Being Made

Where water is used in the construction or repair of property without having been authorized or turned on by the Water Utilities Department, the Department may charge the property owner for costs, including charging for water. The Water Utilities Department shall have the right to estimate the amount of water used, and shall take action to prevent further unauthorized usage until such time as all appropriate applications for service have been made and charges are paid. Nothing in this Section shall be considered to limit prosecution of offenders for violations of City or State law.