ORDINANCE NO. 2024-15

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MIDLOTHIAN, TEXAS, AMENDING THE CODE OF ORDINANCES BY AMENDING CHAPTER 13 TITLED "UTILITIES" BY REPEALING ARTICLE 13.08 TITLED "WATER CONSERVATION AND DROUGHT CONTINGENCY PLAN" IN ITS ENTIRETY; BY RE-ADOPTING A NEW ARTICLE 13.08 TITLED "WATER CONSERVATION AND DROUGHT CONTINGENCY PLANS" INCORPORATED HEREIN BY REFERENCE AND MADE A PART HEREOF IN EXHIBIT "A" ATTACHED HERETO, SETTING FORTH NEW RULES AND REGULATIONS FOR WATER CONSERVATION AND DROUGHT CONTINGENCY MEASURES AS THE OFFICIAL CITY POLICY; BY AMENDING SECTION 13.08.001 TITLED "ADOPTED"; PROVIDING A REPEALING CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED TWO THOUSAND DOLLARS (\$2,000) PER VIOLATION; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City recognizes that the quantity of water available to the City, its water utility customers and its wholesale customers is limited and subject to depletion during periods of extended drought; and

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

WHEREAS, the City understands that conserving water is essential for the long-term stability of the community and for the health, safety and welfare of its citizens; and

WHEREAS, the City recognizes the need for the efficient use of existing water supplies; and

WHEREAS, 30 Texas Administrative Code (TAC) Chapter 288 requires all public water supply systems in Texas to prepare and update every five years a Water Conservation Plan and Drought Contingency Plan; and

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

WHEREAS, the City Council deems it necessary to develop a strategy to reduce the consumption of water, reduce the loss of water, and improve or maintain the efficient use of water; and

WHEREAS, the City Council desires to amend the Code of Ordinances and adopt the Water Conservation and Drought Contingency Plans as set forth in Exhibit "A," incorporated herein by reference and made a part hereof, as official City policy.

1

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

SECTION 1. The Midlothian Code of Ordinances be and the same is hereby amended by amending Chapter 13 titled "Utilities" by repealing Article 13.08 titled "Water Conservation and Drought Contingency Plan" in its entirety and by re-adopting a new Article 13.08, to read as follows:

"CHAPTER 13

UTILITIES

• • •

ARTICLE 13.08 WATER CONSERVATION AND DROUGHT CONTINGENCY PLANS

Sec. 13.08.001 Adopted

The city water conservation and drought contingency plans attached to Ordinance 2024-15 as exhibit A and made a part hereof for all purposes be, and the same is hereby, adopted as the official policy of the city and shall be filed with the city secretary.

...."

SECTION 2. All provisions of the Ordinances of the City of Midlothian, Texas, in conflict with the provisions of this Ordinance be, and the same are hereby, repealed, and all other provisions of the Ordinances of the City not in conflict with the provisions of this Ordinance shall remain in full force and effect.

SECTION 3. An offense committed before the effective date of this Ordinance is governed by prior law and the provisions of the Code of Ordinances, as amended, in effect when the offense was committed and the former law is continued in effect for this purpose.

SECTION 4. Should any sentence, paragraph, subdivision, clause, phrase or section of this Ordinance be adjudged or held to be unconstitutional, illegal or invalid, the same shall not affect the validity of this Ordinance as a whole, or any part or provision thereof other than the part so decided to be invalid, illegal or unconstitutional, and shall not affect the validity of this Ordinance as a whole.

SECTION 5. Any person violating any of the provisions or terms of this Ordinance shall be punished by a fine not to exceed the sum of Two Thousand Dollars (\$2,000.00) for each offense; and each and every day such violation shall continue shall be deemed to constitute a separate offense.

SECTION 6. This Ordinance shall take effect upon its passage and publication in accordance with the provisions of the state law and the Charter of the City of Midlothian.

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MIDLOTHIAN, TEXAS ON THIS THE 9TH DAY OF APRIL, 2024.

APPROVED:

Justin Coffman, Mayor

ATTEST: Varner mmy

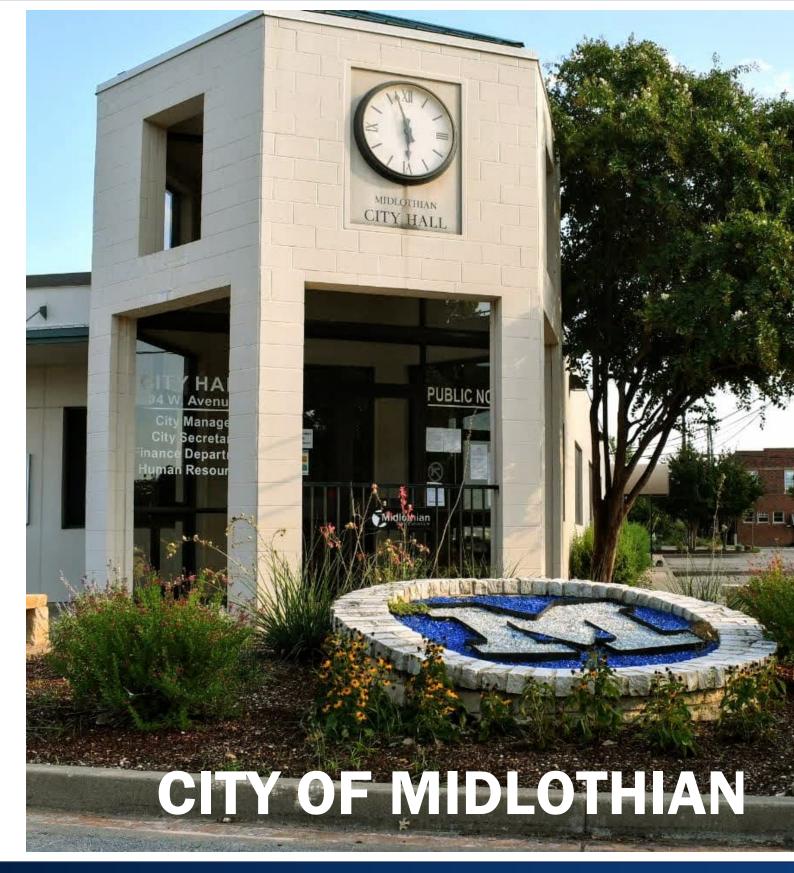
Tammy Varner, City Secretary

APPROVED AS TO FORM:

Joseph J. Gorfida, Jr., City Attorney (04-02-2024: 4871-7868-7667, v. 1)



Exhibit "A"



2024 Water Conservation and Drought Contingency Plans

Updated April 2024

2024 WATER CONSERVATION AND DROUGHT CONTINGENCY PLANS

Prepared for:



Strong Foundations. Bright Futures.

April 2024

Prepared by: Freese and Nichols, Inc. 801 Cherry St. Suite 2800 Fort Worth, Texas 76102 817-735-7300

Project No.: MDL23286

TABLE OF CONTENTS

Water Conservation Plan

1.0	Introduction and Objectives	1
2.0	TCEQ Rules	1
2.1	TCEQ Water Conservation Rules	1
2.2	Guidance and Methodology for Reporting on Water Conservation and Wat	er Use3
3.0	Water Utility Profile	3
3.1	Service Area	3
3.2	Water Supply System	5
A.	Raw Water Sources	5
В.	Facilities	5
3.3	Wastewater System	7
4.0	Water Conservation Goals	7
4.1	Five- and Ten-Year Targets	7
4.2	Method for Tracking	11
5.0	Required Conservation Measures	11
5.1	Record Management Program	11
5.2	Metering System	13
5.3	Determination and Control of Water Loss	13
5.4	Metering and Leak Detection and Repair Program	14
5.5	Public Education and Information Program	14
5.6	Reservoir Systems Operation Plan	14
5.7	Means for Implementation and Enforcement	15
5.8	Coordination with Regional Water Planning Group	15
5.9	Contract Requirements	15
6.0	Additional Conservation Efforts	15
6.1	Conservation-Oriented Water Rates	15
6.2	Water-Conserving Plumbing Fixtures	16
6.3	Reuse and Recycling of Wastewater	16

6.4	Landscape Water Management	
6.5	Implementation of AMI System	
6.6	TRWD Conservation Measures	
7.0	Plan Review and Update	17

Drought Contingency Plan

1.0	Declaration of Policy, Purpose, and Intent1
1.1	Application1
1.2	TCEQ Drought Contingency Rules1
2.0	Provisions to Inform the Public and Provide Opportunity for Public Input
3.0	Provisions for Continuing Public Education and Information
3.1	Public Education3
3.2	Wholesale Water Customer Education3
4.0	Coordination with Regional Water Planning Groups3
5.0 Manage	Criteria for Initiation and Termination of Drought Contingency and Emergency Water ment Stages
5.1	Stage 1 – Mild Water Shortage Conditions OR "TRWD Water Watch"
5.2	Stage 2 – Moderate Water Shortage Conditions OR "TRWD WATER WARNING"5
5.3	Stage 3 – Severe Water Shortage Conditions Or "TRWD Water Emergency"6
5.4	Emergency Water Shortage Conditions8
6.0	Drought Contingency and Emergency Water Management Stages8
6.1	Stage 1 – Mild Water Shortage Conditions or "TRWD Water Watch"8
A.	All Water Users9
В.	City and Local Governments10
C.	Commercial or Industrial11
6.2	Stage 2 – "TRWD Water Warning" or Moderate Water Shortage Conditions 12
A.	All Water Users
В.	City and Local Governments13
C.	Commercial or Industrial
6.3	Stage 3 – "TRWD Water Emergency" or Severe Water Shortage Conditions 15

Α.	All Water Users	
В.	City and Local Governments	
C.	Commercial or Industrial	
6.4	Emergency Water Shortage Conditions	
7.0	Additional Water Supply and Demand Management Measures	
7.1	Curtailment of Specific Raw Water Supply	
7.2	Water Rationing	
A.	Single-Family Residential Customers	
В.	Master-Metered Multi-Family Residential Customers	
C.	Commercial and Industrial Customers	
7.3	Pro Rata Water Allocation for Wholesale Customers	
8.0	Procedures for Initiation and Termination of Drought Response Stages	
8.1	Initiation and Termination	
Α.	Initiation of Drought Response Stage	
В.	Termination of a Drought Stage	21
9.0	Procedures for Granting Variances	
10.0	Procedures for Enforcement of Mandatory Restrictions	23
10.1	Retail	
10.2	Wholesale	24
11.0	Review and Update of Drought Contingency Plan	24
12.0	Contract Provisions	
13.0	Severability	24

LIST OF TABLES

Table 1: Specification of Water Conservation Goals	11
Table 2: Meter Type Distribution	12

LIST OF FIGURES

Figure 1: Water Service Area	4
Figure 2: City of Midlothian Water System	6
Figure 3: City of Midlothian Total Per Capita Use	8
Figure 4: City of Midlothian Historical Water Sales by Category	8
Figure 5: City of Midlothian Residential Per Capita Water Use	9
Figure 6: Historical Water Loss	9
Figure 7: Historical Use by Customer Class (including Wholesale)	12

APPENDICES

Appendix A Appendix B

Appendix C

List of References

Texas Administrative Code

TCEQ Required Forms

- Wholesale Public Water Supplier Utility Profile
- Retail Public Water Supplier Utility Profile
- Water Conservation Implementation Report Form and Summary of Updates/Revisions to Water Conservation Plan
- Coordination Letters

Appendix D

City Ordinance

DEFINITIONS

AESTHETIC WATER USE: Water use for ornamental or decorative purposes such as fountains, reflecting pools, and water gardens.

ALTERNATIVE WATER SOURCE: Water produced by a source other than a water treatment plant which is not considered potable. These sources can include but are not limited to: reclaimed/recycled water, collected rain water, collected grey water, and private well water.

ATHLETIC FIELD: A sports playing field, the essential feature of which is turf grass, used primarily for organized sports for schools, professional sports, or sanctioned league play.

AQUATIC LIFE: Vertebrate organisms dependent upon an aquatic environment to sustain life.

AUTOMATIC IRRIGATION SYSTEM: 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.

BEST MANAGEMENT PRACTICES (BMPs): Voluntary efficiency measures that save a quantifiable amount of water, either directly or indirectly, and that can be implemented within a specific time frame.

COMMERCIAL AND INSTITUTIONAL WATER USE: Water use which is integral to the operations of commercial and non-profit establishments and governmental entities such as retail establishments, hotels and motels, restaurants, and office buildings.

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

CUSTOMER: Any person, individual, corporation, municipality, district, partnership, associations and all other legal entities using water supplied by the City of Midlothian.

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

DRIP IRRIGATION: An irrigation system (drip, porous pipe, etc.) that applies water at predetermined controlled low-flow levels directly to the roots of the plant.

EVAPOTRANSPIRATION (ET): Represents the amount of water lost from plant material to evaporation and transpiration. The amount of ET can be estimated based on the temperature, wind, and relative humidity.

ET/SMART CONTROLLERS: Irrigation controllers that adjust their schedule and run times based on weather (ET) data. These controllers are designed to replace the amount of water lost to evapotranspiration.

EVEN NUMBER ADDRESS: Street addresses, box numbers, or rural postal route numbers ending in 0, 2, 4, 6, or 8 and locations without addresses.

FOUNTAIN: An artificially created jet, stream or flow of water, from a structure.

GOLF COURSE: An irrigated and landscaped playing area made up of greens, tees, fairways, roughs and related areas used for the playing of golf.

HAND-HELD HOSE: A hose physically held by an individual, fitted with a manual or automatic shutoff nozzle.

HAND WATERING: The application of water for irrigation purposes through a hand-held watering hose, watering can, or bucket.

HOSE END SPRINKLER: A device through which water flows from a hose to a sprinkler to water any lawn or landscape.

HOSING: To spray, water, or wash with a water hose.

INDUSTRIAL WATER USE: The use of water in processes designed to convert materials of lower value into forms having greater usability and value.

IRRIGATION SYSTEM: A system of fixed pipes and water emitters that apply water to landscape plants or turfgrass, including, but not limited to, in-ground and permanent irrigation systems.

LAKE, LAGOON OR POND: An artificially created body of fresh or salt water.

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

NEW LANDSCAPE: Installed during construction of a new house, multi-family dwelling, or commercial building; or installed as part of a governmental entity's capital improvement project; or alteration of more than one-half the area of an existing landscape.

NON-ESSENTIAL WATER USE: Water uses that are not essential nor required for the protection of public health, safety, and welfare, including:

- a) irrigation of landscape areas, including parks, athletic fields, and golf courses, except otherwise provided under this Plan;
- b) use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle;

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

ODD NUMBERED ADDRESS: Street addresses, box numbers, or rural postal route numbers ending in 1, 3, 5, 7, or 9.

PARK: A non-residential tract of land, other than a golf course, maintained by a city, private organization, or individual, as a place of beauty or public recreation and available for use to the general public.

PRODUCED WATER: The volume of treated water pumped into the distribution system from the City's production facilities.

POWER/PRESSURE WASHER: A machine that uses water or a water-based product applied at high pressure to clean impervious surfaces.

PRESSURE WASHER (HIGH-EFFICIENCY): A machine that uses water or a water-based product applied at 1500 pounds per square inch (PSI) or greater.

RECLAIMED WATER: Municipal wastewater effluent that is given additional treatment and distributed for reuse in certain applications. Also referred to as recycled water.

REUSE: The authorized use for one or more beneficial purposes 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 water.

SOAKER HOSE: A flexible hose that is designed to slowly emit water across the entire length and connect directly to a flexible hose or spigot. A hose that by design or use sends a fine spray in the air, is not considered a soaker hose nor is drip irrigation.

WATER CONSERVATION COORDINATOR: The person designated by a retail public water supplier that is responsible for implementing a water conservation plan.

ABBREVIATIONS

AMI	Advanced Metering Infrastructure
AMR	Automated Meter Reading
AWWA	American Water Works Association
CCN	Certificate of Convenience and Necessity
GPCD	Gallons per Capita per Day
GPM	Gallons per Minute
MCRWS	Mountain Creek Regional Wastewater System
	Million Gallon per Day
PSI	Pounds per Square Inch
RWPS	Raw Water Pump Station
SUD	Special Utility District
	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
	Trinity River Authority
TRWD	Tarrant Regional Water District
TWDB	Texas Water Development Board
WSC	Water Supply Corporation
WSE	
WTP	





2024 WATER CONSERVATION PLAN

This Water Conservation Plan (Plan) has been developed in accordance with the requirements of 30 Texas Administrative Code (TAC) Chapter 288. A copy of the version of 30 TAC Chapter 288 in place at the time of this Plan preparation is included in Appendix B.



1.0 INTRODUCTION AND OBJECTIVES

The City of Midlothian (the "City") provides water to a large percentage of its residential and commercial community in addition to five wholesale customers (Grand Prairie, Venus, Mountain Peak SUD, Rockett SUD and Sardis-Lone Elm WSC). This plan was developed following TCEQ guidelines and requirements governing the development of water conservation plans for public and wholesale water suppliers.

The objectives of this 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 both indoor and outdoor water use.
- To maximize the level of recycling and reuse in the water supply.
- To extend the life of current water supplies by reducing the rate of consumption.
- To raise public awareness of water conservation and encourage responsible personal behavior through public education programs.

2.0 TCEQ RULES

2.1 TCEQ WATER CONSERVATION RULES

This Plan includes the elements necessary for the City to comply with the TCEQ rules for water conservation planning. The TCEQ rules governing development of water conservation plans for municipal use and wholesale public water suppliers are contained in Title 30 Chapter 288, Subchapter A of the TAC, which is included in **Appendix B** for reference. 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.

Municipal Use by Public Water Suppliers Minimum Requirements:

- 288.2(a)(1)(A) Utility Profile Section 3.0 and Appendix C
- 288.2(a)(1)(B) Record Management System Section 5.1
- 288.2(a)(1)(C) Specific, Quantified Goals Section 4.0
- 288.2(a)(1)(D) Accurate Metering Section 5.2

- 288.2(a)(1)(E) Universal Metering Section 5.2
- 288.2(a)(1)(F) Determination and Control of Water Loss Section 5.3
- 288.2(a)(1)(G) Public Education and Information Program Section 5.5
- 288.2(a)(1)(H) Non-Promotional Water Rate Structure Section 6.1
- 288.2(a)(1)(I) Reservoir System Operation Plan Section 5.6
- 288.2(a)(1)(J) Means of Implementation and Enforcement Section 5.7
- 288.2(a)(1)(K) Coordination with Regional Water Planning Groups Section 5.8
- 288.2(c) Review and Update of Plan Section 7.0

Additional Conservation Requirements (Population over 5,000)

The Texas Administrative Code includes additional requirements for Water Conservation Plans for drinking water supplies serving a population over 5,000:

- 288.2(a)(2)(A) Leak Detection, Repair, and Water Loss Accounting Section 5.4
- 288.2(a)(2)(B) Requirement for Water Conservation Plans by Wholesale Customers Section 5.9

Wholesale Water Suppliers Minimum Requirements:

- 288.5(a)(1)(A) Utility Profile Section 3.0 and Appendix C
- 288.5(a)(1)(B) Specific, Quantified Goals Section 4.0
- 288.5(a)(1)(C) Metering Section 5.2
- 288.5(a)(1)(D) Record Management System Section 5.1
- 288.5(a)(1)(E) Leak Detection, Repair, and Water Loss Accounting Section 5.4
- 288.5(a)(1)(F) Contract Requirements Section 5.9
- 288.5(a)(1)(G) Reservoir Systems Operation Plan Section 5.6
- 288.5(a)(1)(H) Means of Implementation and Enforcement Section 5.7
- 288.5(a)(1)(I) Coordination with Regional Water Planning Groups Section 5.8

Additional Conservation Strategies

The Texas Administrative Code lists additional conservation strategies, which may be adopted by suppliers, but are not required. Additional strategies adopted by the City include the following:

- 288.2(a)(3)(A) Conservation Oriented Water Rates Section 6.1
- 288.2(a)(3)(B) Ordinances, Plumbing Codes or Rules on Water-Conserving Fixtures Section 6.2

- 288.2(a)(3)(D) Reuse and Recycling of Wastewater Section 6.3
- 288.2(a)(3)(F) Landscape Water Management Section 6.4
- 288.2(a)(3)(G) Method for Monitoring Effectiveness and Efficiency Section 4.2

2.2 GUIDANCE AND METHODOLOGY FOR REPORTING ON WATER CONSERVATION AND WATER USE

In addition to TCEQ rules regarding water conservation, this Plan also incorporates elements of the *Guidance and Methodology for Reporting on Water Conservation and Water Use*³ developed by TWDB and TCEQ, in consultation with the Water Conservation Advisory Council (the "Guidance"). The Guidance was developed in response to a charge by the 82nd Texas Legislature to develop water use and calculation methodology and guidance for preparation of water use reports and Water Conservation Plans in accordance with TCEQ rules. The City has considered elements of the Guidance in preparation of this Plan.

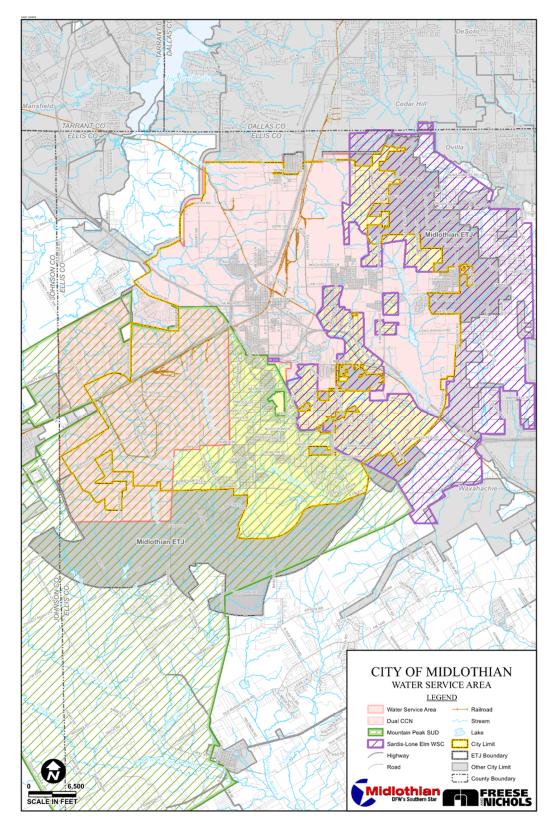
3.0 WATER UTILITY PROFILE

This section contains a description of the City's service area and water system. This information can also be reviewed in **Appendix C**, which contains completed TCEQ Utility Profiles for the City.

3.1 SERVICE AREA

The City of Midlothian is located in Ellis County west of Waxahachie, south of Dallas and southeast of Fort Worth. The City's Water certificate of convenience and necessity (CCN) is approximately 45 square miles and is shown in **Figure 1**. The CCN areas for Mountain Peak SUD and Sardis-Lone Elm WSC, which provide retail water service to areas within the city limits, are also shown. Additionally, there is an area within the City's CCN that is dually certified and therefore covered both by the City (industrial uses only) and Mountain Peak SUD (all other uses).

Figure 1: Water Service Area



3.2 WATER SUPPLY SYSTEM

A. RAW WATER SOURCES

The City's existing raw water supply is composed of the following sources;

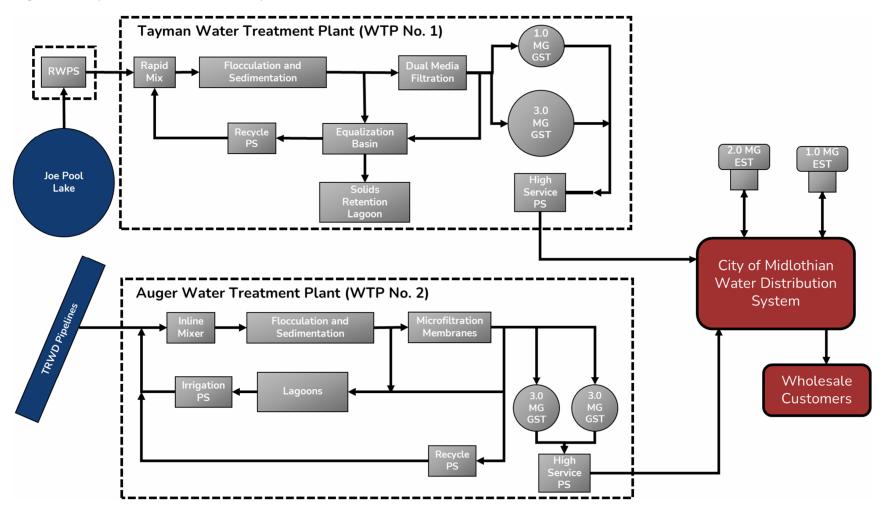
- <u>Raw Water from Joe Pool Lake</u>. The City has a contract with the Trinity River Authority (TRA) for an annual diversion of approximately 6,662 acre feet from Joe Pool Lake. In 2021, the City entered into an additional raw water supply contract with TRA for all existing return flows discharged by the Mountain Creek Regional Wastewater System (MCRWS) for up to 3,144 acre-feet per year. The City has a raw water pump station on the east shore of the Lake that pumps water via a 24-inch line approximately five miles to the Tayman WTP.
- <u>Purchased Raw Water from TRWD.</u> The City has also secured rights for an annual diversion of approximately 11,571 acre feet of raw water from the Tarrant Regional Water District (TRWD). There is a 30" tap on each of TRWD's pipelines (90" and 72") to divert water to the Auger WTP where the raw water is treated. Raw water from TRWD comes from the Richland-Chambers and Cedar Creek Reservoirs.

B. FACILITIES

The City's water supply system is composed of the following facilities (as shown in schematic in **Figure 2**).

- <u>Raw Water Pump Station (RWPS).</u> Midlothian's RWPS is located on the east shore of Joe Pool Lake. The pumps transport water via a pipeline that extends approximately 5 miles to the Tayman WTP. The RWPS has multiple pumping units for continued operation in case of individual pump failure.
- <u>Tayman Water Treatment Plant (Plant No. 1).</u> The Tayman WTP, also known as Midlothian Water Treatment Plant No. 1, is currently rated for production of up to 12 MGD. Raw water is provided by contract with TRA via the Raw Water Pump Station located on Joe Pool Lake.
- <u>Auger Water Treatment Plant (Plant No. 2).</u> The Auger WTP, also known as Midlothian WTP No. 2, is currently rated for production of 12 MGD and is currently under construction to expand to a rated treatment capacity of 24 MGD by 2024. Raw water is provided by TRWD via taps to a 72" pipeline from Cedar Creek Reservoir and a 90" pipeline from Richland Chambers Reservoir.
- <u>Elevated Storage Tanks.</u> The Midlothian water system includes two elevated storage tanks with a total storage capacity of three million gallons. The elevated towers serve one pressure plane. Water level and chlorine residual are monitored at the tanks. The tanks are of composite concrete pedestal/steel bowl construction.

Figure 2: City of Midlothian Water System



3.3 WASTEWATER SYSTEM

The City's wastewater is treated at the MCRWS operated by the TRA. This plant services Midlothian, Venus, and Mansfield as well as the southern part of Grand Prairie. The existing system includes a 4.5 MGD plant as well as a lift station, force mains, gravity wastewater pipelines, and metering facilities. The treatment plant utilizes an activated sludge process and advanced tertiary filtration. Disinfection of the treated wastewater is achieved through exposure to ultraviolet lamps. The waste solids are dewatered through a belt press unit and disposed of offsite in a landfill. MCRWS is currently undergoing a 6.0 MGD expansion to serve the growing customer base.

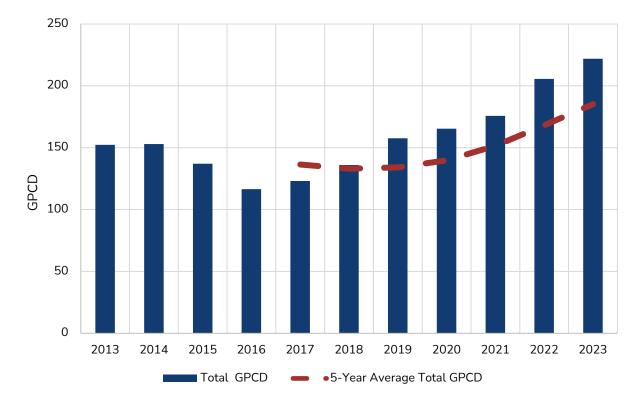
4.0 WATER CONSERVATION GOALS

TCEQ rules require the adoption of specific 5-year and 10-year water conservation goals for a Water Conservation Plan. The goals for this Plan include the following:

- Maintain the 5-year and 10-year total per capita water use and residential per capita water use below the specified amount in gallons per capita per day.
- Maintain a program of meter replacement and repair.
- Conduct water audits as required by the TCEQ and maintain total water loss goals through existing and new maintenance programs.
- Raise public awareness of water conservation and encourage responsible public behavior through a public education and information program.
- Improve efficiency in landscape irrigation through implementation and enforcement of landscaping regulations.

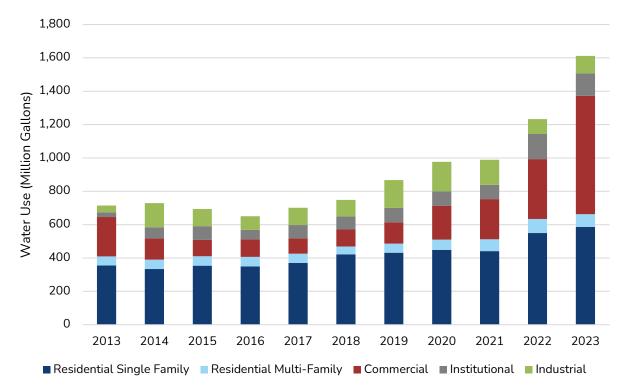
4.1 FIVE- AND TEN-YEAR TARGETS

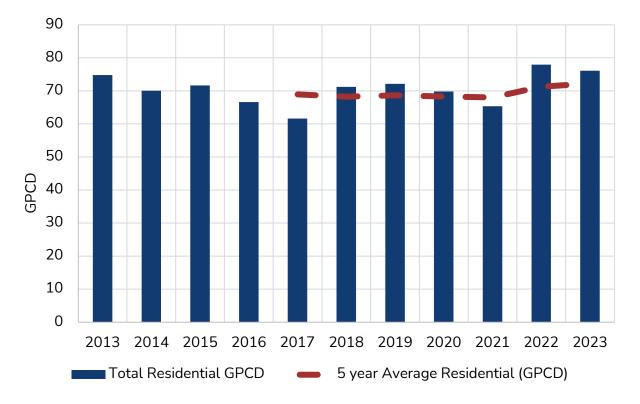
Per capita water use varies from year to year based on several factors including weather conditions, changing demographics, and other variables. **Figure 3** shows the historical total per capita water use for the City of Midlothian since 2013. Due to the variability of per capita water use, water conservation goals are measured against the 5-Year rolling average. This average has been steadily increasing since 2020. This increase has been largely due to the growing commercial water use category. **Figure 4** summarizes the historical total water sales for the City by water use category. Although total per capita water use has been increasing in recent years, the residential per capita water use has remained fairly constant as shown in **Figure 5**. However, 2022 and 2023 were relatively dry summers and as such demands were higher. **Figure 6** summarizes the City's historical water loss percentages. This figure includes water loss percentages that were adjusted to account for the amount of treated wholesale water traveling through the general distribution system.





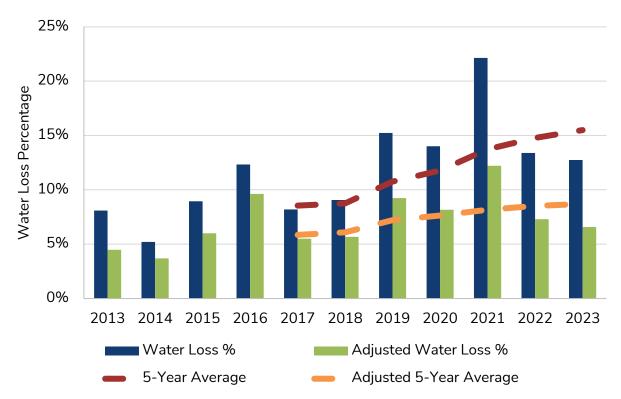












2024 WATER CONSERVATION PLAN | PAGE 9

The TWDB requires specific 5 and 10-year goals for Total gallons per capita per day (GPCD), Residential GPCD, Water Loss GPCD and Water Loss Percentage and are as summarized in **Table 1**. These water conservation goals are explained in more depth below.

- <u>Total GPCD.</u> When calculating the Total GPCD, the 'Total Gallons in System' equates to the volume of produced water plus any treated purchased water minus treated wholesale water sales. This metric includes non-residential water use such as commercial and industrial water use. Entities with larger non-residential water use typically have higher Total GPCDs than entities with largely residential water use since this metric is defined per person. The proposed 5- and 10-year goals for 2029 and 2034 have been updated to reflect the City's significant additional industrial and commercial demand.
- <u>Residential GPCD.</u> The Residential GPCD is limited to the total gallons used by single and multi-family residential customers. This is a useful metric for the City to measure the effectiveness of conservation measures because it is not inflated by the industrial and commercial demand.
- <u>Water Loss GPCD.</u> Total Water Loss is the water delivered to the distribution system that does not appear as authorized consumption. Authorized consumption includes billed metered, billed unmetered, unbilled metered, and unbilled unmetered sales. Similar to the Total GPCD, this includes the City's non-residential demand which is expected to continue to grow.
- <u>Water Loss Percentage</u>. The 5 and 10-year goal will be to remain at or below the historical 5-year average. This is a useful metric for the City since it is separate from population.
- <u>Wholesale Factor Adjustments.</u> The TWDB recognizes that some utilities provide large volumes of wholesale water to other providers that travel through the general distribution system. This is true for the City of Midlothian. Historically, treated wholesale water sales have accounted for over half of the total treated water produced by the City. To account for these situations, the TWDB has included in their annual water loss audits a wholesale factor adjustment to account for treated wholesale water that travels through the general distribution system. The TWDB does not recommended using the adjustments when tracking performance or for benchmarking purposes, however it is an important factor to consider when viewing water loss. As such, the conservation plan goals are set based on the unadjusted values. However, the adjusted water loss GPCD and water loss percentages are included in the table for reference.

Description	Historic 5- yr Average	Historic 10- yr Average	5-yr Goal for Year 2029	10-year Goal for Year 2034
Total GPCD ^a	185	159	230	230
Residential GPCD ^b	72	70	70	70
Water Loss GPCD ^c	28	20	35	35
Adjusted Water Loss GPCD ^d	16	12	-	-
Water Loss Percentage ^e	16%	12%	15%	15%
Adjusted Water Loss Percentage ^d	9%	7%	-	-

Table 1: Specification of Water Conservation Goals

a. Total GPCD = (Total Gallons in System ÷ Population) ÷ 365

b. Residential GPCD = (Gallons Used for Residential Use ÷ Residential Population) ÷ 365

c. Water Loss GPCD = (Total Water Loss ÷ Permanent Population) ÷ 365

d. Total Water Loss adjusted to account for the amount of treated wholesale water traveling through the general distribution system

e. Water Loss Percentage = (Total Water Loss ÷ Total Gallons in System) X 100

As previously stated, annual water use fluctuations are inherent due to unpredictable variations in weather conditions, changing population demographics and other variables. Because of this variability, five-year running averages of consumption will be used for determining adherence with the target goals. A series of dry years may lead to an average exceeding the goal.

4.2 METHOD FOR TRACKING

The City of Midlothian submits a water conservation report to the Texas Water Development Board annually. This report tracks the City's progress toward meeting the conservation goals.

5.0 REQUIRED CONSERVATION MEASURES

5.1 RECORD MANAGEMENT PROGRAM

As required by TAC Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.2 (a)(1)(B) and Rule 288.5(a)(1)(D), a record management program is required to determine water deliveries, sales, and losses. The City currently maintains records of water deliveries, sales, and losses. Water deliveries are tracked through system metering and losses are identified by calculating the difference between total metered flow of treated water at the water treatment plants and total outflow through the delivery meters.

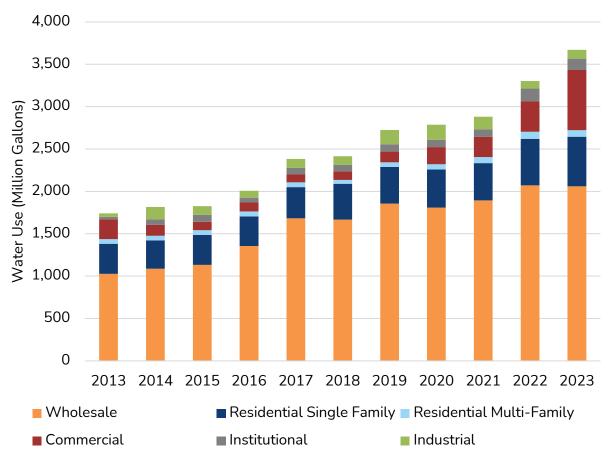
The City's record management system allows for the separation of water sales and uses into residential and non-residential classes. The non-residential water use can be tracked by the use of codes into the required categories of commercial, public/institutional, and industrial use categories. The City's record management system allows water sales and uses to be tracked as separate categories and includes water sales to multi-family housing in the residential sales

category. **Table 2** shows the number of meters by customer type for 2023. **Figure 7** shows the historical use by customer class.

Description	Number		
Residential Single-Family	5,681		
Residential Multi-Family	1,742		
Commercial	571		
Industrial	26		
Institutional	182		
Agriculture	0		
Wholesale	8		
Total	8,210		

Table 2: Meter Type Distribution





5.2 METERING SYSTEM

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. All customers of the City, including public and governmental users, are metered.

The City currently has meters for the residential properties which are located either in the alleyways or the front of the property. Previously, the City utilized Automated Meter Reading (AMR) where a meter reader used a radio system to read water meters as they drove down the street. In 2018, the City began implementation of Advanced Metering Infrastructure (AMI) by replacing the existing water meters with new Neptune water meters. AMI is a newer metering technology that provides real-time, two-way communication between the utility system and the metering endpoints. AMI can serve to reduce per capita consumption by raising customer awareness of consumption through a customer portal in which the customer can track their water use in real time. AMI can therefore delay the need for major capital expenses and rate adjustments, improve customer service, detect potential leaks, streamline operational decision making and reduce operational costs. The meter accuracy from the factory is between 100% and 101.5%, which meets applicable American Water Works Association (AWWA) standards (between 99.5% and 101.5%).

The City calibrates its meters 3-inches in diameter or larger at least annually. All wholesale meters are tested at a minimum semi-annual interval. All City meters are maintained in accordance with manufacturers' recommendations.

5.3 DETERMINATION AND CONTROL OF WATER LOSS

Total water loss is the difference between treated water pumped by the treatment plants and authorized consumption or metered deliveries to customers. Authorized consumption includes billed metered uses, unbilled metered uses, and unbilled unmetered uses such as firefighting and releases for flushing of lines.

Water losses include two categories:

- Apparent losses represent water that has been consumed but not properly measured or billed. These losses represent under-registered or under-billed water that occurs via customer meter inaccuracy, systematic data handling error in the customer billing system, and unauthorized consumption.
- Real Losses represent water that is lost from the distribution system prior to reaching the customer destination. These are physical losses from the pressurized water distribution system, including water mains and all appurtenances (for example, valves and hydrants) and customer service connection piping.

The City has been proactive to control water losses by implementation of an AMI system. With real-time monitoring, the City is able to set alerts for unusually large usage or continual use, transparency and tamper alerts.

5.4 METERING AND LEAK DETECTION AND REPAIR PROGRAM

The City performs routine leak checks as outlined below:

- Use modern leak detection techniques in locating and reducing leaks such as listening devices;
- Monthly accounting of water deliveries to determine water loss versus water delivered or sold;
- Real-time monitoring of usage through AMI system;
- Efficient use of reports made by citizens of water leaks;
- Continual checking and servicing of production, pumping, and storage facilities; and
- Quick response by Utility Department and staff to correct leakage problems promptly.

The City will suggest to its wholesale customers that they adopt a Water Audit and Leak Detection program to minimize water loss and consumption (if not currently in place).

5.5 PUBLIC EDUCATION AND INFORMATION PROGRAM

The City obtains water conservation literature from the North Texas "Water Is Awesome" campaign, Tarrant Regional Water District, Texas Water Development Board, TCEQ, U.S. Environmental Protection Agency, Texas Agriculture Extension Service, and private vendors. This information is made available to the public by placing it in City offices, on the City's website, and through mailings. Public education outreach activities will also provide this literature and other information on water conservation. City staff members also address school groups, public service organizations, and other civic groups at various functions. The City's website promotes water conservation by including information on lawn care, water conservation tips, and water conservation resources. The water conservation plan is also accessible through the City's website.

Additionally, a customer portal is available to customers to track their own water usage in real time as a result of implementing the AMI system. By creating a WaterSmart account, customers can view their home's water use and spending and see how they compare to similar homes. The WaterSmart program also provides tips on ways to save water.

5.6 RESERVOIR SYSTEMS OPERATION PLAN

The City does not have a reservoir system operation plan. Joe Pool Lake is owned and operated by the U.S. Army Corps of Engineers, with Texas water rights held by TRA. Lake Richland Chambers and Cedar Creek Lake are owned and operated by TRWD, which does have a reservoir system operation plan.

5.7 MEANS FOR IMPLEMENTATION AND ENFORCEMENT

City staff will implement the Plan in accordance with City Council adoption of the Plan. Enforcement will include but not be limited to the following:

- Refusing to provide water service at sites of new construction or substantial remodeling for customers who do not meet requirements for water conservation fixtures as established by 2018 International Plumbing Code and Amendments;
- Discontinuing service to customers who fail to pay their water bill;
- Analyzing water rates and adjusting them to eliminate Conservation Plan abuse;
- Issuance of penalties or fines for users of City water who do not comply with the provisions of the City's adopted Plan; and
- Discontinuing water service to irrigation meters and fire hydrant meters under described drought conditions.

Appendix D contains a copy of the ordinance adopted by the City Council regarding this Plan. The ordinance designates responsible officials to implement and enforce the Plan.

5.8 COORDINATION WITH REGIONAL WATER PLANNING GROUP

In accordance with TCEQ regulations, a copy of this adopted water conservation plan was provided to the Region C and Region G Water Planning Groups. Appendix C includes a copy of the letters sent to the Chairs of the Regional Water Planning Groups.

5.9 CONTRACT REQUIREMENTS

Every water supply contract entered into or renewed after official adoption of this Plan, including any contract extension, will include a requirement that each wholesale customer of the City must develop and implement a water conservation plan or water conservation measures. If the customer intends to resell the water, then 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 Title 30 TAC Chapter 288.

6.0 ADDITIONAL CONSERVATION EFFORTS

6.1 CONSERVATION-ORIENTED WATER RATES

The City presently has an increasing block rate structure. Based on this structure, the current block water rates encourage water conservation and discourage excessive use of water. The current water rate structures can be found on the City's website (<u>www.midlothian.tx.us</u>). This goes beyond the non-promotional water rate structure required by the TCEQ.

6.2 WATER-CONSERVING PLUMBING FIXTURES

The City's adopted plumbing code standards encourages water conservation. The state has required water-conserving fixtures in new construction and renovations since 1992. The state standards call for flows of no more than 2.5 gallons per minute (gpm) for faucets, 2.5 gpm for showerheads. As of January 1, 2014, the state requires maximum average flow rates of 1.28 gallons per flush (gpf) for toilets and 0.5 gpf for urinals. Similar standards are now required under federal law. These state and federal standards assure that all new construction and renovations will use water-conserving fixtures. The City has experienced substantial new construction within their service area that incorporates water-efficient fixtures and appliances.

6.3 REUSE AND RECYCLING OF WASTEWATER

The City does not own and operate its own wastewater treatment plant. The City's wastewater is treated by TRA at the MCRWS. TRA's current water right allows reuse of up to 4,368 acre-feet per year of discharges from MCRWS. The City has contracted with TRA to reuse discharges from this plant up to 3,144 acre-feet per year. It is assumed that TRA will seek additional reuse water rights as the plant is expanded and the City will continue to coordinate with TRA as more reuse supplies become available.

6.4 LANDSCAPE WATER MANAGEMENT

The City of Midlothian has implemented an ordinance setting forth landscape and lawn irrigation conservation measures. A copy of the ordinance in place at the time of this Plan preparation is included in **Appendix D**.

6.5 IMPLEMENTATION OF AMI SYSTEM

The City has implemented an AMI system throughout the service area. The Neptune meters are warrantied for twenty years and allow the City to track water usage in real time. The system also keeps a record of historical water usage. This implementation is a significant improvement over the City's previous AMR system. The AMI system provides a concise method for monitoring the effectiveness and efficiency of the water conservation plan as well as help the City reduce water loss. The system allows for proactive leak management since the data is proved in real-time and alerts can be set to warn the City when excessive and prolonged water usage is observed.

6.6 TRWD CONSERVATION MEASURES

Most of TRWD's current conservation programs for their wholesale customers are targeted to Tarrant County. However, they have several initiatives that can benefit the City as well. These include;

• Promotion of the regional water conservation outreach campaign (currently "Water is Awesome").

- Promotion of the weekly watering advice service.
- TRWD/customer city workshops. Previous workshops included topics such as leak detection, AMI, water rates, water loss, etc.
- TRWD conservation coordination meetings.

In the future, there is also the possibility that TRWD will be providing additional services outside of Tarrant County.

7.0 PLAN REVIEW AND UPDATE

The City will periodically evaluate the elements of the Plan and their effectiveness. The City may amend the Plan to address changes in the City's population, distribution system, water supply or other factors that would have a significant effect on conservation planning. The City will review and update the Plan no later than May 1, 2029 and continuing within every five years after that date. At that time, the five-year and ten-year targets for water savings will be evaluated to determine the effectiveness of the water conservation activities and to establish new five- and ten-year targets.

Appendix C contains the adopted water utility profiles for the City as well as the implementation report.

2024 DROUGHT CONTINGENCY PLAN

Under Texas Water Code Chapter 11 and Title 30 Texas Administrative Code Chapter 288, Retail, Irrigation, and Wholesale Public Water Suppliers are required to develop, implement, and submit updated Drought Contingency Plans to the TCEQ every five years.



1.0 DECLARATION OF POLICY, PURPOSE, AND INTENT

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

Water uses regulated or prohibited under this Drought Contingency Plan (the Plan) are considered to be non-essential and continuation of such uses during times of water shortage or other emergency water supply condition is deemed to constitute a waste of water which subjects the offender(s) to penalties as defined in **Section 10.0** of this Plan.

The measures included in this Drought Contingency Plan are intended to provide short-term water savings during drought or emergency conditions. Water savings associated with ongoing, long-term strategies are discussed in the City of Midlothian Water Conservation Plan.

1.1 APPLICATION

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

1.2 TCEQ DROUGHT CONTINGENCY RULES

TCEQ Title 30, Part 1, Chapter 288, subchapter A, rule 288.1 defines a drought contingency plan as "a strategy or combination of strategies for temporary supply and demand management responses to temporary and potentially recurring water supply shortages and other water supply emergencies."

The TCEQ rules governing development of Drought Contingency Plans for public water suppliers are contained in Title 30, Part 1, Chapter 288, Subchapter B, Rule 288.20 of the Texas Administrative Code, a current copy of which is included in **Appendix B**.

TCEQ's minimum requirements for Drought Contingency Plans are addressed in the following subsections of this report:

- 288.20(a)(1)(A) Provisions to Inform the Public and Provide Opportunity for Public Input – Section 2.0
- 288.20(a)(1)(B) Provisions for Continuing Public Education and Information Section 3.0
- 288.20(a)(1)(C) Coordination with the Regional Water Planning Group Section 4.0

- 288.20(a)(1)(D) Criteria for Initiation and Termination of Drought Contingency and Water Emergency Response Stages – Section 5.0
- 288.20(a)(1)(E) Drought Contingency and Water Emergency Response Stages Section 6.0
- 288.20(a)(1)(F) Specific, Quantified Targets for Water Use Reductions Section 6.0
- 288.20(a)(1)(G) Water Supply and Demand Management Measures for Each Stage Section 6.0
- 288.20(a)(1)(H) Procedures for Initiation and Termination of Drought Contingency and Water Emergency Response Plan Stages Section 8.0
- 288.20(a)(1)(I) Procedures for Granting Variances Section 9.0
- 288.20(a)(1)(J) Procedures for Enforcement of Mandatory Restrictions Section 10.0
- 288.20(a)(3) Consultation with Wholesale Supplier Section 5.0
- 288.20(b) Notification of Implementation of Mandatory Measures Section 6.0
- 288.20(c) Review and Update of Plan Section 11.0
- 288.22(a)(8) Contract Provisions Section 12.0

2.0 PROVISIONS TO INFORM THE PUBLIC AND PROVIDE OPPORTUNITY FOR PUBLIC INPUT

Opportunity for the public to provide input into the preparation of the Plan was provided by the City by the following means:

- 1. Notification and copy of the draft Plan was made available for public review and comment on the City's website.
- A copy of the Plan was provided to the City's wholesale customers: Rockett Special Utility District, Mountain Peak Special Utility District, the City of Venus, the City of Grand Prairie, and Sardis-Lone Elm Water Supply Corporation for their information and use.
- 3. A copy of the Plan was provided to the Trinity River Authority of Texas (TRA) as the administrator of water rights in Joe Pool Lake, and the Tarrant Regional Water District (TRWD) as a wholesale raw water provider to the City.

3.0 PROVISIONS FOR CONTINUING PUBLIC EDUCATION AND INFORMATION

3.1 PUBLIC EDUCATION

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

- 1. An article may be written for the City's newsletter describing the various stages of the Drought Contingency Plan. The article will typically appear in the spring issue of the newsletter.
- 2. The City may prepare an advertisement for the local newspaper describing the various aspects of the Drought Contingency Plan.
- 3. Posting to the City website and affiliated social media accounts.

3.2 WHOLESALE WATER CUSTOMER EDUCATION

The City will periodically provide wholesale water customers with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage. This information will be provided by means of a letter or electronic communication sent by the City to each of its wholesale customers in the spring describing the various aspects of the Drought Contingency Plan. A copy of the plan will be included with each communication.

4.0 COORDINATION WITH REGIONAL WATER PLANNING GROUPS

In accordance with TCEQ regulations, a copy of this adopted water conservation plan was provided to the Region C and Region G Water Planning Groups. **Appendix C** includes a copy of the letters sent to the Chairs of the Regional Water Planning Groups.

5.0 CRITERIA FOR INITIATION AND TERMINATION OF DROUGHT CONTINGENCY AND EMERGENCY WATER MANAGEMENT STAGES

The triggering criteria described below are based on the criteria adopted by TRA as well as TRWD.

5.1 STAGE 1 - MILD WATER SHORTAGE CONDITIONS OR "TRWD WATER WATCH"

<u>**Requirements for initiation**</u> – The City Manager or their designee may declare Stage 1 when any of the following criteria are met. Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses when Stage 1 is declared. The criteria for initiation of Stage 1 are as follows:

TRA – Mild Water Shortage Conditions

- 1) The Joe Pool Lake WSE declines to 516.0 feet.
- 2) When the City Manager or their designee, is notified in writing by TRA that their Stage 1 drought management level has been declared.

OR

TRWD – Water Watch

- Total combined raw water supply in TRWD water supply reservoirs (Bridgeport, Eagle Mountain, Richland Chambers and Cedar Creek) drops below 75% (25% depleted) of conservation storage capacity.
- 2) Water demand has exceeded or is expected to exceed 80% of maximum sustainable production of delivery capacity for an extended period.
- 3) One or more of TRWD's water supply sources has become limited in availability.
- 4) Water demand is projected to approach the limit of permitted supply.
- 5) Supply source becomes contaminated or unusable for other regulatory reasons (i.e., invasive species).
- 6) Water supply system is unable to deliver water due to the failure or damage of major water system components.
- 7) The General Manager finds that conditions warrant the declaration of a Stage 1 drought.
- 8) When the City Manager or their designee, is notified in writing by TRWD that their Stage 1 has been declared.

OR

The City Manager or their designee finds that conditions warrant the declaration of a Stage 1 drought.

<u>**Requirements for termination</u></u> - Stage 1 of the Plan may be rescinded when the following condition is met:</u>**

1) The Joe Pool Lake WSE rises to above 516.0 feet and remains above 516.0 feet for 15 consecutive days.

OR

1) The total combined raw water supply in TRWD's West Fork and East Texas reservoirs exceeds 95% of conservation storage or remains above 85% for 90 consecutive days, whichever occurs first.

OR

1) The City Manager or their designee finds that the conditions warrant the end of the Stage 1 drought.

Note: The City Manager or their designee may continue the stage for additional 15 day periods at their discretion until they see fit to rescind the current Stage.

5.2 STAGE 2 -MODERATE WATER SHORTAGE CONDITIONS OR "TRWD WATER WARNING"

<u>**Requirements for initiation</u>** - The City Manager or their designee may declare Stage 2 when any of the following criteria are met. Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses when Stage 2 is declared. The criteria for initiation of Stage 2 are as follows:</u>

TRA – Moderate Water Shortage Conditions

- 1) The Joe Pool Lake WSE declines to below 511.0 feet.
- 2) When the City Manager or their designee, is notified in writing by TRA that the reservoir is now operating at less than 60% of the conservation pool, and their Stage 2 drought management level has been declared.

OR

TRWD – Water Warning

- 1) Total raw water supply in TRWD water supply reservoirs (Bridgeport, Eagle Mountain, Richland Chambers and Cedar Creek) drops below 60% (40% depleted) of conservation storage capacity.
- 2) Water demand has exceeded or is expected to exceed 85% of maximum sustainable production of delivery capacity for an extended period.
- 3) One or more of TRWD's water supply sources has become limited in availability.
- 4) Water demand is projected to approach the limit of permitted supply.
- 5) Supply source becomes contaminated or unusable for other regulatory reasons (i.e. invasive species).
- 6) Water supply system is unable to deliver water due to the failure or damage of major water system components.

- 7) The General Manager finds that conditions warrant the declaration of a Stage 2 drought.
- 8) When the City Manager or their designee, is notified in writing by TRWD that their Stage 2 has been declared.

OR

The City Manager or their designee, finds that conditions warrant the declaration of a Stage 2 drought.

<u>**Requirements for termination**</u> - Stage 2 of the Plan may be rescinded and Stage 1 becomes operative, when the following condition is met:

1) The Joe Pool Lake WSE rises to above 511.0 feet and remains above 511.0 feet for 15 consecutive days.

OR

1) The total combined raw water supply in TRWD's West Fork and East Texas reservoirs exceeds 75% of conservation storage or remains at or above 70% for 30 consecutive days, whichever occurs first.

OR

1) The City Manager or their designee finds that the conditions warrant the end of the Stage 2 drought.

Note: The City Manager or their designee may continue the stage for additional 15 day periods at their discretion until they see fit to rescind the current Stage.

Upon termination of Stage 2, Stage 1 becomes operative. The City will notify its customers and the media of the termination of Stage 2 in the same manner as the notification of initiation of Stage 2 of the Plan.

5.3 STAGE 3 – SEVERE WATER SHORTAGE CONDITIONS OR "TRWD WATER EMERGENCY"

<u>**Requirements for initiation</u></u> - The City Manager or their designee may declare Stage 3 when any of the following criteria are met. Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses when Stage 3 is declared, AND comply with the water rationing plan prescribed in Section 7.2** of this plan. The criteria for initiation of Stage 3 are as follows:</u>

TRA – Severe Water Shortage Conditions

1) The Joe Pool Lake WSE declines to below 501.0 feet.

2) When the City Manager or their designee, is notified in writing by TRA that the reservoir is now operating at less than 35% of the conservation pool, and their Stage 3 drought management level has been declared.

OR

TRWD – Water Emergency

- Total raw water supply in TRWD water supply reservoirs (Bridgeport, Eagle Mountain, Richland Chambers and Cedar Creek) drops below 45% (55% depleted) of conservation storage capacity.
- 2) Water demand has exceeded or is expected to exceed 90% of maximum sustainable production of delivery capacity for an extended period.
- 3) Water demand for all or part of the TRWD delivery system approaches delivery capacity because delivery capacity is inadequate.
- 4) One or more of TRWD's water supply sources has become limited in availability.
- 5) Water demand is projected to approach the limit of permitted supply.
- 6) Supply source becomes contaminated or unusable for other regulatory reasons (i.e., invasive species).
- 7) Water supply system is unable to deliver water due to the failure or damage of major water system components.
- 8) The General Manager finds that conditions warrant the declaration of a Stage 3 drought.
- 9) When the City Manager or their designee, is notified in writing by TRWD that their Stage 3 has been declared.

OR

The City Manager or their designee, finds that conditions warrant the declaration of a Stage 3 drought.

<u>**Requirements for termination**</u> - Stage 3 of the Plan may be rescinded, and Stage 2 becomes operative, when the following condition is met:

1) The Joe Pool Lake WSE rises to above 501.0 feet and remains above 501.0 feet for 15 consecutive days.

OR

1) The total combined raw water supply in TRWD's West Fork and East Texas reservoirs exceeds 60% of conservation storage or remains at or above 55% for 30 consecutive days, whichever occurs first.

OR

1) The City Manager or their designee finds that the conditions warrant the end of the Stage 3 drought.

Note: The City Manager or their designee may continue the stage for additional 15 day periods at their discretion until they see fit to rescind the current Stage.

Upon termination of Stage 3, Stage 2 becomes operative. The City will notify its customers and the media of the termination of Stage 3 in the same manner as the notification of initiation of Stage 3 of the Plan.

5.4 EMERGENCY WATER SHORTAGE CONDITIONS

<u>**Requirements for initiation</u></u> - Customers shall be required to comply with the requirements and restrictions for the EMERGENCY Water Shortage Conditions of this Plan when the City Manager or their designee, determines that a water supply emergency exists based on:</u>**

- a) Major water line breaks, or pump or system failures occur, which cause unprecedented loss of capability to provide water service;
- b) Contamination of the water supply source(s); or
- c) Water demand exceeds treatment and/or delivery capacities.

<u>**Requirements for termination**</u> – EMERGENCY Water Shortage Conditions may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of up to 3 consecutive days.

6.0 DROUGHT CONTINGENCY AND EMERGENCY WATER MANAGEMENT STAGES

The City Manager or their designee, shall monitor water supply and/or demand conditions on a daily basis and, in accordance with the triggering criteria set forth in **Section 5.0** of the Plan, shall determine that a mild, moderate, severe, or emergency condition exists and shall implement the following actions upon publication of notice in a newspaper of general circulation:

<u>The TCEQ Executive Director must be notified within 5 days of the implementation of any</u> <u>mandatory provisions of this Plan.</u>

6.1 STAGE 1 – MILD WATER SHORTAGE CONDITIONS OR "TRWD WATER WATCH"

Goal: Achieve a 5% reduction in total monthly water usage.

The City Manager or their designee may order the implementation of any of the actions listed below, as deemed necessary. Measures imposing mandatory requirements on customers require notification to TCEQ. <u>The City must notify TCEQ within five business days if any</u> <u>mandatory measures are implemented.</u>

• Require wholesale customers (including indirect customers) to initiate Stage 1 in their drought contingency plans. Indirect customers include any successive wholesale customers of the City's primary wholesale customers to the extent provided for in water sales contracts.

A. ALL WATER USERS

Actions applicable to all water users include:

• Maximum of twice per week watering for hose-end sprinklers and automatic irrigation systems based on odd/even addresses and day of week schedule.

Stage 1, Water Watch, Outdoor Watering Schedule		
Monday	No Outdoor Watering	Water System Recovery Day
Tuesday and Friday	Non-Residential Sites	Apartments, Parks, Common
		Areas, HOA's, Businesses
Wednesday and	Residential Addresses	0,2,4,6,8
Saturday	Ending in Even Numbers	0,2,4,0,0
Thursday and	Residential Addresses	1,3,5,7,9
Sunday	Ending in Odd Numbers	1,3,3,7,3

- No watering with hose-end sprinklers and/or automatic spray irrigation systems between 8 a.m. and 8 p.m.
- Water waste is prohibited which includes the following:
 - failure to repair a controllable leak, including, broken sprinkler heads, leaking valves, leaking or broken pipes or faucets; or
 - knowingly operating an irrigation system with: (a) a broken head; (b) a head that is out of adjustment and spraying into the street, parking area, or sidewalk; or (c) a system that is misting/fogging due to excessive water pressure; or
 - allowing any water to: (a) run off property forming a significant stream of water;
 (b) run into a storm drain; or (c) pond to a depth of ¼ inch or greater; or
 - allowing or causing an irrigation system or other lawn watering device to operate during any form of precipitation or when temperatures are at or below freezing.
 - Discourage hosing of paved areas.
 - Discourage hosing of buildings or other structures for purposes other than fire protection or surface preparation prior to painting or maintenance.

- Washing of any motor vehicle, motorbike, boat, trailer, airplane, or other vehicle shall be limited to the use of a hand-held bucket or a hand-held hose equipped with a positive pressure shutoff nozzle for quick rinses. Vehicle washing may be done at any time on the premises of a commercial car wash or commercial service station. Companies with an automated on-site vehicle washing facility may wash its vehicles at any time.
- Discourage the filling, draining, or refilling of swimming pools, wading pools, hot tubs and Jacuzzi type pools except to maintain adequate water levels for structural integrity, proper operation and maintenance, and/or to alleviate an issue that poses a public safety risk.

Exceptions (All Water Users):

- Watering with a handheld hose, soaker hose or drip irrigation may occur any day and any time within two feet of foundations and ten feet of trees. (The intent of this measure is to allow for the protection of structural foundations, trees, and other high value landscape materials).
- The use of water necessary to protect the health, safety, or welfare of the public.
- Water use necessary for the repair of an irrigation system, plumbing line, fountain, etc. in the presence of person making repair.
- Variances may be available for the following:
 - Establishing new turfgrass and/or landscaping. Variances granted for establishing new turfgrass or landscaping will be for a maximum of 30 days from the date of approval then the maximum of twice per week watering schedule applies.
 - Variances do not apply to the installation of cool season grasses (overseeding).
 - Outdoor watering at service addresses with large multi-station irrigation systems may take place in accordance with a variance granted by the City Manager, if the City Manager determines that a property cannot be completely irrigated with an average of half an inch of water in a single day, and that the property should be divided into sections to be irrigated on different days. If approved, no station will be watered more than twice per week.
 - Restrictions do not apply to well water, reclaimed water, or other alternative water sources.

B. CITY AND LOCAL GOVERNMENTS

Actions applicable to city and local governments include:

- Review conditions and problems that caused Stage 1. Take corrective action.
- Increase public education efforts on ways to reduce water use.

- Increase enforcement efforts.
- Intensify leak detection and repair efforts.
- Audit all City and local government irrigation systems to ensure proper condition, settings, and operation.
- Identify and encourage voluntary reduction measures by high-volume water users through water use audits.
- Landscape watering of municipal parks, golf courses and athletic fields is restricted to a twice per week watering schedule; or twice per week per irrigation station if a variance is granted by the City Manager. (See exceptions to outdoor watering restrictions in all water users category above for facilities with large multi-station irrigation systems.)
- Reduce non-essential water use. As used herein, non-essential water uses are those that do not have any health or safety impact and are not needed to meet the core function of the agency.
- Notify wholesale customers of actions being taken and direct them to implement the same drought stage and measures.

Exceptions (City and Local Governments):

- Golf courses may water greens and tee boxes as necessary, however, use of spray irrigation may not be done between 8 a.m. and 8 p.m. Encouraged to reduce water use by five percent.
- Watering of athletic fields (field only, does not include surrounding landscaped areas) used for organized sports practice, competition, or exhibition events may occur as necessary to protect the health and safety of the players, staff, or officials present for athletic events. Encouraged to reduce water use by five percent.
- Public areas that are open to the public at-large and have a high-impact from frequent use may be allowed additional watering, with a variance granted by the City Manager, if it is deemed to be beneficial to serve and protect the community amenity. Examples may include but are not limited to: outdoor amphitheaters, demonstration gardens, public art exhibits, outdoor learning areas, arboretums, etc.

C. COMMERCIAL OR INDUSTRIAL

Actions applicable to commercial or industrial entities include:

- All actions listed above for all water users apply to commercial and industrial users.
- Landscape watering of parks, golf courses and athletic fields is restricted to the twice per week watering schedule; or twice per week per irrigation station if a variance is granted by the City Manager. (See exceptions to outdoor watering restrictions in all water users category above for facilities with large multi-station irrigation systems.)

- Stock at commercial plant nurseries is exempt from Stage 1 watering restrictions.
- Hotels, restaurants, and bars are encouraged to serve drinking water to patrons per request only.
- Hotels are encouraged to implement laundry conservation measures by encouraging patrons to reuse linens and towels.
- Car wash facilities must keep equipment in good working order, which should include regular inspections to be sure there are no leaks, broken or misdirected nozzles, and that all equipment is operating efficiently.
- All commercial and industrial customers are encouraged to audit irrigation systems to ensure proper condition, settings, and operation. If irrigation audit or repair occurs during restricted watering times or days, a sign indicating such work is taking place must be placed in public view until job is completed.

Exceptions (Commercial or Industrial):

• Golf courses may water greens and tee boxes as necessary, however, use of spray irrigation may not be done between 8 a.m. and 8 p.m. Encouraged to reduce water use by five percent.

6.2 STAGE 2 – "TRWD WATER WARNING" OR MODERATE WATER SHORTAGE CONDITIONS

Goal: Achieve a 10% reduction in total monthly water usage.

The City Manager or their designee may order the implementation of any of the actions listed below, as deemed necessary. The City Manager or their designee may order the implementation of additional actions not listed below, as deemed necessary. Measures imposing mandatory requirements on customers require notification to TCEQ. <u>The City must</u> notify TCEQ within five business days if any mandatory measures are implemented.

- Continue actions under Stage 1.
- Require wholesale customers (including indirect customers) to initiate Stage 2 in their drought contingency plans. Indirect customers include any successive wholesale customer of the City's primary wholesale customers to the extent provided for in water sales contracts.
- Initiate engineering studies to evaluate water supply alternatives should conditions worsen.

A. ALL WATER USERS

Actions applicable to all water users include:

• Maximum of once per week watering for hose-end sprinklers and automatic irrigation systems based on odd/even addresses and day of week schedule.

- Once per week watering schedule will be determined at such time as necessary by the City and its primary water customers. Due to the variation in water storage and delivery systems of wholesale customers, specific watering days per address may vary across the service area.
- Encourage the use of covers for all types of pools, hot tubs, and Jacuzzi type pools when not in use.

Exceptions (All Water Users):

- Watering with a handheld hose, soaker hose or drip irrigation may occur any day and any time within two feet of foundations and ten feet of trees. (The intent of this measure is to allow for the protection of structural foundations, trees, and other high value landscape materials).
- Variances may be available for the following:
 - All users are encouraged to wait until the current drought or emergency situation has passed before establishing new landscaping. Variances granted for establishing new turfgrass or landscaping will be for a maximum of 30 days from the date of approval then maximum of once-per-week watering schedule applies.
 - Variances do not apply to the installation of cool season grasses (overseeding).
 - Outdoor watering at service addresses with large multi-station irrigation systems may take place in accordance with a variance granted by the City Manager, if the City Manager determines that a property cannot be completely irrigated with an average of three-quarters of an inch of water in a single day, and that the property should be divided into sections to be irrigated on different days. If approved, no station will be watered more than once per week.
 - Restrictions do not apply to well water, reclaimed water, or other alternative water sources.

B. CITY AND LOCAL GOVERNMENTS

Actions applicable to city and local governments include:

- Continue or initiate any actions available under Stage 1.
- Review conditions or problems that caused Stage 2. Take corrective action.
- Increase frequency of media releases on water supply conditions.
- Further accelerate public education efforts on ways to reduce water use.
- Landscape watering of municipal parks, golf courses and athletic fields is restricted to a once-per-week schedule; or once-per-week per irrigation station if a variance is granted

by the City Manager. (See Stage 1 exceptions to outdoor watering restrictions in all water users category for facilities with large multi-station irrigation systems.)

- Eliminate non-essential water use. As used herein, non-essential water uses are those that do not have any health or safety impact and are not needed to meet the core function of the agency.
- Notify wholesale customers of actions being taken and direct them to implement the same drought stage and measures.

Exceptions (City and Local Governments):

- Golf courses may water greens and tee boxes as necessary, however, use of spray irrigation may not be done between 8 a.m. and 8 p.m. Encouraged to reduce water use by ten percent.
- Watering of athletic fields (field only, does not include surrounding landscaped areas) used for organized sports practice, competition, or exhibition events may occur as necessary to protect the health and safety of the players, staff, or officials present for athletic events. Encouraged to reduce water use by ten percent.

C. COMMERCIAL OR INDUSTRIAL

Actions applicable to commercial or industrial entities include:

- All actions listed above for all water users apply to commercial and industrial users.
- Landscape watering of municipal parks, golf courses and athletic fields is restricted to a once-per-week schedule; or once-per-week per irrigation station if a variance is granted by the City Manager. (See Stage 1 exceptions to outdoor watering restrictions in all water users category for rules that apply to facilities with large multi-station irrigation systems.)

Exceptions (Commercial or Industrial):

- Use of water from hydrants for any purpose other than firefighting related activities, or other activities necessary to maintain public health, safety and welfare, requires a variance issued by the City Manager. Fire hydrant use may be limited to only designated hydrants. Upon declaration of this drought stage, all holders or applicants of a Water Fire Hydrant Meter Agreement are required to apply for a variance as set forth in this plan. If conditions allow, as determined by the City Manager, the use of water from hydrants may continue until the City Manager or their official designee issues a determination on the petition for variance. If conditions do not allow, the City Manager may require all fire hydrant meters to be immediately returned from the field, pending determination of each petition for variance.
- Golf courses may water greens and tee boxes as necessary, however, use of spray irrigation may not be done between 8 a.m. and 8 p.m. Encouraged to reduce water use by ten percent.

6.3 STAGE 3 – "TRWD WATER EMERGENCY" OR SEVERE WATER SHORTAGE CONDITIONS

Goal: Achieve a 20% reduction in total monthly water usage.

The City Manager or their designee can order the implementation of any of the actions listed below, as deemed necessary. The City Manager or their designee may order the implementation of additional actions not listed below, as deemed necessary. Measures imposing mandatory requirements on customers require notification to TCEQ. <u>The City must notify TCEQ within five business days if any mandatory measures are implemented.</u>

- Continue actions available under Stages 1 and 2.
- Require wholesale customers (including indirect customers) to initiate Stage 3 in their drought contingency plans. Indirect customers include any wholesale customer of the City's primary wholesale customers to the extent provided for in water sales contracts.

A. ALL WATER USERS

Actions applicable to all water users include:

- Prohibit all outdoor watering.
- Irrigation of new landscapes and/or turfgrass installations is prohibited by means of automatic irrigation system or hose-end sprinkler. Variances may be granted for those landscape projects started prior to the initiation of Stage 3 drought restrictions. However, variances will not be granted for the irrigation of new landscape and/or turfgrass installations after the initiation of Stage 3 drought restrictions.
- Prohibit washing of paved areas by any means except where a variance is granted to alleviate a possible public health and safety risk. Any power washing activities must be performed by a professional power washing service utilizing high efficiency equipment and a vacuum recovery system where possible.
- Prohibit hosing of buildings or other structures for purposes other than fire protection or surface preparation prior to painting with high-pressure equipment. Must be performed by a professional power washing service utilizing high efficiency equipment and a vacuum recovery system where possible.
- Vehicle washing is restricted to commercial car washes, commercial service stations, or professional washing services only. The washing of garbage trucks and vehicles used to transport food and/or other perishables may take place as necessary for health, sanitation, or public safety reasons.
- Prohibit permitting of private pools. Pools already permitted may be completed and filled. Existing private and public pools may add water to maintain pool levels, but may not be drained and refilled.

• Prohibit the operation of ornamental fountains or ponds that use potable water except where necessary to support aquatic life or water quality.

Exceptions (All Water Users):

- Watering with hand-held hose, soaker hose or drip irrigation system may occur any day and any time within two feet of foundations and ten feet of trees. (The intent of this measure is to allow for the protection of structural foundations, trees, and other high value landscape materials).
- Restrictions do not apply to well water, reclaimed water, or other alternative water sources.

B. CITY AND LOCAL GOVERNMENTS

Actions applicable to city and local governments include:

- Continue or initiate any actions available under Stages 1 and 2.
- Review conditions or problems that caused Stage 3. Take corrective action.
- Increase frequency of media releases explaining emergency situation and/or water supply conditions.
- Landscape watering at municipal parks, golf courses, and sports fields is prohibited. Variances may be granted by the City Manager under special circumstances.
- Institute a mandated reduction in deliveries to all wholesale customers. Such a reduction will be distributed as required by Texas Water Code §11.039.
- If TRWD has imposed a reduction in water available to customers, impose the same percent reduction on wholesale customers.

Exceptions (City and Local Governments):

- Golf course greens and tee boxes may be watered by hand as necessary.
- Variances may be available for watering of athletic fields (field only, does not include surrounding landscaped areas) used for organized sports practice, competition, or exhibition events to protect the health and safety of the players, staff, or officials present for the athletic event. A water use management plan must be submitted to the City Manager detailing how each area will comply with Stage 3 drought measures. If granted, encouraged to reduce water use by twenty percent.

C. COMMERCIAL OR INDUSTRIAL

Actions applicable to commercial or industrial entities include:

- All actions listed above for all water users apply to commercial and industrial users.
- Landscape watering of municipal parks, golf courses and athletic fields is prohibited. Variances may be granted by the City Manager under special circumstances.

- Professional and college sports fields (playing fields with a stadium only not surrounding landscaping) may be watered as necessary to maintain league standards.
- Commercial water users may be required to reduce water use by a set percentage as determined by the City Manager.

Exceptions (Commercial or Industrial):

- Golf course greens and tee boxes may be watered by hand as necessary.
- Variances may be available for watering of athletic fields (field only, does not include surrounding landscaped areas) used for organized sports practice, competition, or exhibition events to protect the health and safety of the players, staff, or officials present for the athletic event. A water use management plan must be submitted to the City Manager detailing how each area will comply with Stage 3 drought measures. If granted, encouraged to reduce water use by twenty percent.

6.4 EMERGENCY WATER SHORTAGE CONDITIONS

Goal: Achieve a significant reduction in total monthly water usage. WATER USE IS EXPRESSLY RESTRICTED TO ESSENTIAL DOMESTIC USE ONLY.

Water Use Restrictions: All requirements of Stage 3 "SEVERE Water Shortage Condition" shall be in effect during emergency water shortage conditions except:

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

7.0 ADDITIONAL WATER SUPPLY AND DEMAND MANAGEMENT MEASURES

7.1 CURTAILMENT OF SPECIFIC RAW WATER SUPPLY

The City receives raw water from two independent sources of supply. The City has a contract and takes raw water from Joe Pool Lake as managed by the TRA, and as a wholesale customer via raw water pipelines from the TRWD. The City Manager may elect not to order the implementation of a drought response stage or water emergency even though one or more water supply trigger conditions is met. In place of initiating a drought response stage or water emergency, the City Manager may elect to curtail use from that water supply source in lieu of initiating a drought response stage for the City. This curtailment would, at a minimum, match the percent reduction desired for the appropriate drought response stage for the source in question.

7.2 WATER RATIONING

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

A. SINGLE-FAMILY RESIDENTIAL CUSTOMERS

The allocation to residential water customers residing in a single-family dwelling shall be 1.5 times that household's average winter sewer volume as shown on the water bill of that household's account. The allocation to water customers without sanitary sewer accounts shall be 1.5 times the average winter sewer volume for residential water customers residing in a single-family dwelling as determined by the City. The amount to be billed will be rounded up to the nearest 1,000 gallons.

"Household" means the residential premises served by the customer's meter.

Residential water customers shall pay the following surcharges, over and above the initial rate:

1.5 times the block rate for the first 1,000 gallons over allocation.

2.0 times the block rate for the second 1,000 gallons over allocation.

2.5 times the block rate for the third 1,000 gallons over allocation.

3.0 times the block rate for each additional 1,000 gallons over allocation.

As used herein, "block rate" means the charge to the customer per 1,000 gallons at the regular water rate schedule at the level of the customer's allocation.

B. MASTER-METERED MULTI-FAMILY RESIDENTIAL CUSTOMERS

The allocation to a customer billed from a master meter that jointly measures water to multiple permanent residential dwelling units (e.g., apartments, mobile homes) shall be allocated 3,000 gallons per month for each dwelling unit. A dwelling unit may be claimed under this provision whether it is occupied or not. New customers may claim more dwelling units at the time of applying for water service on the form prescribed by the City Manager. If the number of dwelling units served by a master meter is reduced, the customer shall notify the City in writing within two (2) days. In prescribing the method for claiming more than two (2) dwelling units, the City Manager shall adopt methods to ensure the accuracy of the claim.

Customers billed from a master meter under this provision shall pay the following monthly surcharges:

1.5 times the block rate for 1,000 gallons over allocation up through 1,000 gallons for each dwelling unit.

2.0 times the block rate thereafter, for each additional 1,000 gallons over allocation up through a second 1,000 gallons for each dwelling unit.

2.5 times the block rate thereafter, for each additional 1,000 gallons over allocation up through a third 1,000 gallons for each dwelling unit.

3.0 times the block rate thereafter for each additional 1,000 gallons over allocation.

As used herein, "block rate" means the charge to the customer per 1,000 gallons at the regular water rate schedule at the level of the customer's allocation.

C. COMMERCIAL AND INDUSTRIAL CUSTOMERS

A monthly water usage allocation shall be established by the City Manager, or their designee, for each nonresidential commercial and industrial customer. The customer's allocation shall be approximately 90 percent of the customer's usage for corresponding month's billing period for the previous 12 months. If the customer's billing history is shorter than 12 months, the monthly average for the period for which there is a record shall be used for any monthly period for which no history exists. However, a customer, 90 percent of whose monthly usage is less than 10,000 gallons, shall be allocated 10,000 gallons. The City Manager shall give their best effort to see that notice of each nonresidential customer's allocation is mailed, otherwise provided or made available to such customer. If, however, a customer does not receive such notice, it shall be the customer's responsibility to contact the City to determine the allocation. Upon request of the customer or at the initiative of the City Manager, the allocation may be reduced or increased if, (1) the designated period does not accurately reflect the customer's normal water usage, (2) one nonresidential customer agrees to transfer part of its allocation to another nonresidential customer, (3) other objective evidence demonstrates that the designated allocation is inaccurate under present conditions or (4) the customer demonstrates that the designated allocation will negatively impact operations or cause loss of service. A customer may appeal an allocation established hereunder to the City Manager. Nonresidential commercial and industrial customers shall pay the following surcharges over and above the initial rate:

Customers whose allocation is 10,000 gallons through 50,000 gallons per month:

1.5 times the block rate for the first 2,000 gallons over allocation.

2.0 times the block rate per 1,000 gallons for the second 2,000 gallons over allocation.

2.5 times the block rate per 1,000 gallons for the third 2,000 gallons over allocation.

3.0 times the block rate per 1,000 gallons for each additional 2,000 gallons over allocation.

Customers whose allocation is over 50,000 gallons per month:

1.5 times the block rate for each 1,000 gallons in excess of the allocation up through 5 percent above allocation.

2.0 times the block rate for each 1,000 gallons from 5 percent through 10 percent above allocation.

2.5 times the block rate for each 1,000 gallons from 10 percent through 15 percent above allocation.

3.0 times the block rate for each 1,000 gallons more than 15 percent above allocation.

As used herein, "block rate" means the charge to the customer per 1,000 gallons at the regular water rate schedule at the level of the customer's allocation.

7.3 PRO RATA WATER ALLOCATION FOR WHOLESALE CUSTOMERS

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

- a) A wholesale customer's monthly allocation shall be a percentage of the customer's water usage baseline. The percentage will be set by resolution of the City Council based on the City Manager's assessment of the severity of the water shortage condition and the need to curtail water diversions and/or deliveries and may be adjusted periodically by resolution of the City Council as conditions warrant. Once pro rata allocation is in effect, water diversions by or deliveries to each wholesale customer shall be limited to the allocation established for each month.
- b) A monthly water usage allocation shall be established by the City Manager or their designee, for each wholesale customer. The wholesale customer's water usage baseline will be computed on the average water usage by month for the past five years. If the wholesale water customer's billing history is less than 5 years, the monthly average for the period for which there is a record shall be used for any monthly period for which no billing history exists.
- c) The City Manager shall provide notice, by certified mail, to each wholesale customer informing them of their monthly water usage allocations and shall notify the news media and the <u>Executive Director of the TCEQ upon initiation of pro rata water</u> <u>allocation.</u>
- d) Upon request of the customer or at the initiative of the City Manager, the allocation may be reduced or increased if, (1) the designated period does not accurately reflect the wholesale customer's normal water usage; (2) the customer agrees to transfer part of its allocation to another wholesale customer; or (3) other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the City Council.

8.0 PROCEDURES FOR INITIATION AND TERMINATION OF DROUGHT RESPONSE STAGES

The City Manager or their designee, is hereby authorized and directed to implement the applicable provisions of this Plan upon determination that such implementation is necessary to protect public health, safety, and welfare. The City Manager or their designee, shall have the

authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan.

8.1 INITIATION AND TERMINATION

The City Manager or their designee, shall monitor water supply and/or demand conditions on a daily basis and shall determine when conditions warrant initiation or termination of each stage of the Plan. Public notification of the initiation or termination of drought response stages shall be by the following means:

- 1) notification in a newspaper of general circulation within the area
- 2) notification on the City website
- 3) Signs posted at City Hall and in all City-owned facilities
- 4) Announcement by the City Hall at the first open City Council meeting following the declaration of the drought response stage.

A. INITIATION OF DROUGHT RESPONSE STAGE

The City Manager may order the implementation of a drought response stage or water emergency when one or more water supply trigger conditions is met. The following actions will be taken when a drought stage is initiated:

- The designated representative(s) of primary wholesale customers will be notified by email, mail or telephone that provides details of the reasons for initiation of the drought stage.
- The public will be notified through local media following the notification of primary wholesale customers.
- If any mandatory provisions of the drought contingency plan are activated, <u>the City</u> <u>Manager will notify the Executive Director of the TCEQ within five business days.</u>

The City Manager may decide not to order the implementation of a drought response stage or water emergency even though one or more of the trigger criteria for the stage are met. Factors which could influence such a decision include, but are not limited to, the time of year, weather conditions, the anticipation of replenished water supplies, or utilization of other water supply sources.

B. TERMINATION OF A DROUGHT STAGE

The City Manager or their designee will order the termination of a drought response stage or water emergency when the conditions for termination are met. The following actions will be taken when a drought stage is terminated:

• The designated representative(s) of primary wholesale customers will be notified by email, mail, telephone, or fax that provides details of the reasons for termination of the drought stage.

- The public will be notified through local media following the notification of primary wholesale customers.
- When mandatory provisions of the drought contingency plan that have been activated are terminated, <u>the City Manager will notify the Executive Director of the TCEQ</u> <u>within five business days.</u>

The City Manager may decide, under special circumstances, not to order the termination of a drought response stage or water emergency even though conditions for termination of the stage are met. Factors which could influence such a decision include, but are not limited to, the time of year, weather conditions, or the anticipation of potential changes in conditions that warrant the continuation of the drought stage.

9.0 PROCEDURES FOR GRANTING VARIANCES

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

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

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

- a) Name and address of the petitioner(s).
- b) Purpose of water use.
- c) Specific provision(s) of the Plan from which the petitioner is requesting relief.
- d) Detailed statement as to how the specific provision of the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Plan.
- e) Description of the relief requested.
- f) Period of time for which the variance is sought.
- g) Alternative water use restrictions or other measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
- h) Other pertinent information.

Variances granted by the City shall be subject to the following conditions, unless waived or modified by the City Manager or their designee:

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

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

10.0 PROCEDURES FOR ENFORCEMENT OF MANDATORY RESTRICTIONS

10.1 RETAIL

- a) No person shall knowingly or intentionally allow the use of water from the City for residential, commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provision of this Plan, or in an amount in excess of that permitted by the drought response stage in effect at the time pursuant to action taken by the City Manager or their designee, in accordance with provisions of this Plan.
- b) Any person who violates this Plan is guilty of a misdemeanor and, upon conviction shall be subject to a fine as specified in the Ordinance adopting this Plan. If a person is convicted of three or more distinct violations of this Plan, the City Manager shall, upon due notice to the customer, be authorized to discontinue water service to the premises where such violations occur. Services discontinued under such circumstances shall be restored only upon payment of a re-connection charge, which is already established under a separate ordinance, and any other costs incurred by the City in discontinuing service. In addition, suitable assurance must be given to the City Manager that the same action shall not be repeated while the Plan is in effect. Compliance with this Plan may also be sought through injunctive relief in the District Court.
- c) Any person, including a person classified as a water customer of the City of Midlothian, in apparent control of the property where a violation occurs or originates shall be presumed to be the violator, and proof that the violation occurred on the person's property shall constitute a rebuttable presumption that the person in apparent control of the property committed the violation, but any such person shall have the right to show that they did not commit the violation. Parents shall be presumed to be responsible for violations of their minor children and proof that a violation, committed by a child, occurred on property within the parents' control shall constitute a rebuttable presumption that the parent may be excused if they prove that they had previously directed the child not to use the water as it was used in violation.

10.2 WHOLESALE

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

1.5 times the block rate per 1,000 gallons for all gallons in excess of the monthly allocation up through 5% above the monthly allocation.

2.0 times the block rate per 1,000 gallons for all gallons in excess of the monthly allocation from 5% through 10% above the monthly allocation.

2.5 times the block rate per 1,000 gallons for all gallons in excess of the monthly allocation from 10% through 15% above the monthly allocation.

3.0 times the block rate per 1,000 gallons for all gallons more than 15% above the monthly allocation.

As used herein, "block rate" means the charge to the customer per 1,000 gallons at the regular water rate schedule at the level of the customer's allocation.

11.0 REVIEW AND UPDATE OF DROUGHT CONTINGENCY PLAN

As required by TCEQ rules, the City will review this Plan at least every five years. The Plan will be updated as appropriate based on new or updated information.

12.0 CONTRACT PROVISIONS

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

13.0 SEVERABILITY

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

APPENDIX A

List of References

Appendix A contains a list of references used in the creation of this report.

LIST OF REFERENCES

- 1. Texas Commission on Environmental Quality Water Conservation Implementation Report. <u>https://www.tceq.texas.gov/assets/public/permitting/forms/20645.pdf</u>
- Title 30 of the Texas Administrative Code, Part 1, Chapter 288, Subchapter A, Rules 288.1 and 288.5, and Subchapter B, Rule 288.22, downloaded from http://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=288, April 2023.
- Texas Water Development Board and Texas Commission on Environmental Quality in consultation with Water Conservation Advisory Council, available online at <u>http://www.twdb.texas.gov/conservation/doc/SB181Guidance.pdf</u>, December 2012.
- Texas Water Development Board, "Water Conservation Best Management Practices," Water Conservation Implementation Task Force, available online at http://www.twdb.texas.gov/conservation/BMPs/index.asp, 2013.
- 5. Tarrant Regional Water District, "Water Conservation and Drought Contingency Plan," prepared by the Tarrant Regional Water District.
- 6. Trinity River Authority, "Water Conservation and Drought Contingency Plan," prepared by the Trinity River Authority.
- 7. Freese and Nichols, 2021 Region C Water Plan Demand Projections, adopted by the Texas Water Development Board.
- 8. Freese and Nichols, 2018 Water Demand Update and Water Supply Planning prepared for the City of Midlothian.

APPENDIX B

Texas Administrative Code

Appendix B contains the following;

- 1. Water Conservation Plan Rules (30 TAC §288 Subchapter A)
- 2. Drought Contingency Plan Rules (30 TAC §288 Subchapter B)

Water Conservation Plan Rules

30 TAC §288 Subchapter A

<u>TITLE 30</u>	ENVIRONMENTAL QUALITY
<u>PART 1</u>	TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
CHAPTER 288	WATER CONSERVATION PLANS, DROUGHT CONTINGENCY
	PLANS, GUIDELINES AND REQUIREMENTS
SUBCHAPTER A	WATER CONSERVATION PLANS
<u>RULE §288.1</u>	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 multifamily residences or agricultural, industrial, or institutional users.

(6) Drought contingency plan--A strategy or combination of strategies for temporary supply and demand management responses to temporary and potentially recurring water supply shortages and other water supply emergencies. A drought contingency plan may be a separate document identified as such or may be contained within another water management document(s). (7) Industrial use--The use of water in processes designed to convert materials of a lower order of value into forms having greater usability and commercial value, and the development of power by means other than hydroelectric, but does not include agricultural use.

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

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

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

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

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

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

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

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

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

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

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

(19) Retail public water supplier--An individual or entity that for compensation supplies water to the public for human consumption. The term does not include an individual or entity

that supplies water to itself or its employees or tenants when that water is not resold to or used by others.

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

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

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

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

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

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

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

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

<u>TITLE 30</u>	ENVIRONMENTAL QUALITY
<u>PART 1</u>	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) multifamily;
- (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 costbased and which does not encourage the excessive use of water;

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(H) any other water conservation practice, method, or technique which the water supplier shows to be appropriate for achieving the stated goal or goals of the water conservation plan. (b) A water conservation plan prepared in accordance with 31 TAC §363.15 (relating to Required Water Conservation Plan) of the Texas Water Development Board and substantially meeting the requirements of this section and other applicable commission rules may be submitted to meet application requirements in accordance with a memorandum of understanding between the commission and the Texas Water Development Board.

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

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

RULE §288.5	Water Conservation Plans for Wholesale Water Suppliers
SUBCHAPTER A	WATER CONSERVATION PLANS
	PLANS, GUIDELINES AND REQUIREMENTS
CHAPTER 288	WATER CONSERVATION PLANS, DROUGHT CONTINGENCY
PART 1	TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
<u>TITLE 30</u>	ENVIRONMENTAL QUALITY

A water conservation plan for a wholesale water supplier must provide information in response to each of the following paragraphs. If the plan does not provide information for each requirement, the wholesale water supplier shall include in the plan an explanation of why the requirement is not applicable.

(1) Minimum requirements. All water conservation plans for wholesale water suppliers must include the following elements:

(A) a description of the wholesaler's service area, including population and customer data, water use data, water supply system data, and wastewater data;

(B) specific, quantified five-year and ten-year targets for water savings including, where appropriate, target goals for municipal use in gallons per capita per day for the wholesaler's service area, maximum acceptable water loss, and the basis for the development of these goals. The goals established by wholesale water suppliers under this subparagraph are not enforceable;

(C) a description as to which practice(s) and/or device(s) will be utilized to measure and account for the amount of water diverted from the source(s) of supply;

(D) a monitoring and record management program for determining water deliveries, sales, and losses;

(E) a program of metering and leak detection and repair for the wholesaler's water storage, delivery, and distribution system;

(F) a requirement in every water supply contract entered into or renewed after official adoption of the water conservation plan, 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 of this chapter. If the customer intends to resell the water, then 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 applicable provisions of this chapter;

(G) a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin. The reservoir

systems operations plans shall include optimization of water supplies as one of the significant goals of the plan;

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

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

(2) Additional conservation strategies. Any combination of the following strategies shall be selected by the water wholesaler, in addition to the minimum requirements of paragraph (1) of this section, if they are necessary in order to achieve the stated water conservation goals of the plan. The commission may require by commission order that any of the following strategies be implemented by the water supplier if the commission determines that the strategies are necessary in order for the conservation plan to be achieved:

(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) a program to assist agricultural customers in the development of conservation pollution prevention and abatement plans;

(C) a program for reuse and/or recycling of wastewater and/or graywater; and

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

(3) Review and update requirements. The wholesale water supplier 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. A wholesale water supplier shall review and update the next revision of its water conservation plan every five years to coincide with the regional water planning group.

Source Note: The provisions of this §288.5 adopted to be effective May 3, 1993, 18 TexReg 2558; amended to be effective February 21, 1999, 24 TexReg 949; amended to be effective April 27, 2000, 25 TexReg 3544; amended to be effective October 7, 2004, 29 TexReg 9384; amended to be effective December 6, 2012, 37 TexReg 9515

Drought Contingency Plan Rules

30 TAC §288 Subchapter B

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

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

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

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

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

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

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

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

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

(ii) water production or distribution system limitations;

(iii) supply source contamination; or

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

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

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

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

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

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

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

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

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

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

(b) A wholesale or retail water supplier shall notify the executive director within five business days of the implementation of any mandatory provisions of the drought contingency plan.(c) The retail public water supplier shall review and update, as appropriate, the drought contingency plan, at least every five years, based on new or updated information, such as the adoption or revision of the regional water plan.

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

RULE §288.22	Drought Contingency Plans for Wholesale Water Suppliers
SUBCHAPTER B	DROUGHT CONTINGENCY PLANS
	PLANS, GUIDELINES AND REQUIREMENTS
CHAPTER 288	WATER CONSERVATION PLANS, DROUGHT CONTINGENCY
PART 1	TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
<u>TITLE 30</u>	ENVIRONMENTAL QUALITY

(a) A drought contingency plan for a wholesale water supplier must include the following minimum elements.

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

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

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

(4) The drought contingency plan must include a minimum of three drought or emergency response stages providing for the implementation of measures in response to water supply conditions during a repeat of the drought-of-record.

(5) The drought contingency plan must include the procedures to be followed for the initiation or termination of drought response stages, including procedures for notification of wholesale customers regarding the initiation or termination of drought response stages.

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

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

(A) pro rata curtailment of water deliveries to or diversions by wholesale water customers as provided in Texas Water Code, §11.039; and

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

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

(9) The drought contingency plan must include procedures for granting variances to the plan.
(10) The drought contingency plan must include procedures for the enforcement of any mandatory water use restrictions including specification of penalties (e.g., liquidated damages, water rate surcharges, discontinuation of service) for violations of such restrictions.
(b) The wholesale public water supplier shall notify the executive director within five business days of the implementation of any mandatory provisions of the drought contingency plan.
(c) The wholesale public water supplier shall review and update, as appropriate, the drought

contingency plan, at least every five years, based on new or updated information, such as adoption or revision of the regional water plan.

Source Note: The provisions of this §288.22 adopted to be effective February 21, 1999, 24 TexReg 949; amended to be effective April 27, 2000, 25 TexReg 3544; amended to be effective October 7, 2004, 29 TexReg 9384

APPENDIX C

TCEQ Required Forms

Appendix C contains the following;

- 1. Wholesale Public Water Supplier Utility Profile (TCEQ-Form 20162)
- 2. Retail Public Water Supplier Utility Profile (TCEQ-Form 10218)
- 3. Water Conservation Implementation Report Form and Summary of Updates/Revisions to Water Conservation Plan (TCEQ-Form 20645)
- 4. Coordination Letters



Texas Commission on Environmental Quality Water Availability Division MC-160, P.O. Box 13087 Austin, Texas 78711-3087 Telephone (512) 239-4600, FAX (512) 239-2214

Utility Profile and Water Conservation Plan Requirements for Wholesale Public Water Suppliers

This form is provided to assist wholesale public water suppliers in water conservation plan development. If you need assistance in completing this form or in developing your plan, please contact the Conservation staff of the Resource Protection Team in the Water Availability Division at (512) 239-4600.

Water users can find best management practices (BMPs) at the Texas Water Development Board's website <u>http://www.twdb.texas.gov/conservation/BMPs/index.asp</u>. The practices are broken out into sectors such as Agriculture, Commercial and Institutional, Industrial, Municipal and Wholesale. BMPs are voluntary measures that water users use to develop the required components of Title 30, Texas Administrative Code, Chapter 288. BMPs can also be implemented in addition to the rule requirements to achieve water conservation goals.

Contact Information

Name:	City of Midlothian		
Address:	104 W. Avenue E, Midlothian, T	X 76065	
Telephone Number:	(972) 775-7105	Fax: (972) 775-7171	
Water Right No.(s):	1423		
Regional Water Planning Group:	С		
Person responsible for implementing conservation program:	Mike Adams, PE	Phone: (972) 775-7105	
Form Completed By:	Abbie Gardner, PE		
Title:	Engineering Consultant (Freese and Nichols, Inc.)		
Signature:	Abigail A. Hardner	Date: 3/26/2024	

A water conservation plan for wholesale public water suppliers must include the following requirements (as detailed in 30 TAC Section 288.5). If the plan does not provide information for each requirement, you must include in the plan an explanation of why the requirement is not applicable.

Utility Profile

I. WHOLESALE SERVICE AREA POPULATION AND CUSTOMER DATA

A. Population and Service Area Data:

1. Service area size (in square miles): 49 square miles

(Please attach a copy of service-area map)

Please see Figure 1 in the Water Conservation Plan

2. Current population of service area:

Estimated full-time residential population served directly by this system is approximately 23,865. Wholesale customers include Sardis-Lone Elm WSC, Mountain Peak SUD, Rockett SUD, City of Venus and City of Grand Prairie.

- 3. Current population served for:
 - a. Water 23,865 (Retail)
 - b. Wastewater NA
- 4. Population served for previous five years:
- 5. Projected population for service area in the following decades:

Year	Population	Year	Population
2019	18,492	2030	36,142
2020	20,022	2040	43,069
2021	21,450	2050	48,816
2022	22,290	2060	54,564
2023	23,865	2070	60,311

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

Current and projected population size is as reported in the *Water Demand Update and Water Supply Planning Report* (2024). Projections were determined based off of an analysis of the Region C 2026 Plan Projections, Impact Fee Update for the City of Midlothian, and data from NCTCOG.

B. Customer Data

List (or attach) the names of all wholesale customers, amount of annual contract, and amount of annual use for each customer for the previous year:

	Contracted Amount	Previous Year Amount of
Wholesale Customer	(Acre-feet)	Water Delivered (acre-feet)

Grand Prairie	2 MGD (Annual Daily Average)	1,785
Venus	0.24 - 2.0 MGD (Maximum Delivery)	459
Mountain Peak SUD	1.0 MGD (Maximum Daily Delivery)	968
Rocket SUD	2.0 MGD (Maximum Annual Average)	2,519
Sardis-Lone Elm WSC	1.0 MGD (Maximum Delivery)	787

II. WATER USE DATA FOR SERVICE AREA

A. Water Delivery

Indicate if the water provided under wholesale contracts is treated or raw water and the annual amounts for the previous five years (in acre feet):

Year	Treated Water	Raw Water
2019	5,604	95
2020	5,501	52
2021	5,803	6
2022	6,316	38
2023	6,322	196
Totals	29,546	387

B. Water Accounting Data

1. Total amount of water diverted at the point of diversion(s) for the previous five years (in acre-feet) for all water uses: (Includes retail and wholesale)

Year	2023	2022	2021	2020	2019
Month					
January	707	868	790	538	640
February	698	797	773	624	563
March	817	851	746	664	617
April	1,005	743	875	695	595
May	1,099	1,058	841	826	584
June	1,156	1,136	759	985	821

July	1,455	1,398	942	1,000	1,000
August	1,724	1,179	1,071	1,016	1,178
September	1,396	1,020	969	648	980
October	1,050	989	810	798	739
November	874	708	770	908	698
December	889	703	775	845	744
Totals	12,870	11,450	10,121	9,546	9,160

2. Wholesale population served and total amount of water diverted for **municipal use** for the previous five years (in acre-feet):

Year	Total Population Served	Total Annual Water Diverted for Municipal Use
2019	unknown	Not separately metered
2020	unknown	Not separately metered
2021	unknown	Not separately metered
2022	unknown	Not separately metered
2023	unknown	Not separately metered

C. Projected Water Demands

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

III. WATER SUPPLY SYSTEM DATA

A. Projected Water Demands

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

Water Type	Source	Amount Authorized
Surface Water	Joe Pool Lake (TRA)	6,662.3
Groundwater	N/A	N/A
Other	TRWD TRA Reuse	13,665 3,144.4

- B. Treatment and Distribution System (if providing treated water)
 - 1. Design daily capacity of system (MGD):

Tayman WTP - 12 MGD and Auger WTP - 24 MGD by 2024

- 2. Storage capacity (MGD):
 - a. Elevated 3
 - b. Ground 10
- 3. Please attach a description of the water system. Include the number of treatment plants, wells, and storage tanks

See water conservation plan for a description of the water system

IV. WASTEWATER SYSTEM DATA

- *A. Wastewater System Data (if applicable)*
 - 1. Design capacity of wastewater treatment plant(s) (MGD):

NA

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

See water conservation plan for a description of the wastewater system. The City's wastewater is treated at the Mountain Creek Regional Wastewater System operated by the Trinity River Authority.

- B. Wastewater Data for Service Area (if applicable)
 - 1. Percent of water service area served by wastewater system: 100%
 - 2. Monthly volume treated for previous five years (in 1,000 gallons):

Year	2023	2022	2021	2020	2019
Month					
January					
February					
March					
April					
May	-	-	-	-	-
June				_	

July			 	
August			 -	
September	-	-	 _	_
October			 	
November	-	-	 	
December			 	
Totals			 	

Water Conservation Plan

In addition to the description of the wholesaler's service area (profile from above), a water conservation plan for a wholesale public water supplier must include, at a minimum, additional information as required by Title 30, Texas Administrative Code, Chapter 288.5. Note: If the water conservation plan does not provide information for each requirement an explanation must be included as to why the requirement is not applicable.

A. Specific, Quantified 5 & 10-Year Targets

The water conservation plan must include specific, quantified 5-year and 10-year targets for water savings including, where appropriate, target goals for municipal use in gallons per capita per day for the wholesaler's service area, maximum acceptable water loss, and the basis for the development of these goals. Note that the goals established by a wholesale water supplier under this subparagraph are not enforceable. These goals must be updated during the 5-year review and submittal.

B. Measuring and Accounting for Diversions

The water conservation plan must include a description as to which practice(s) and/or device(s) will be utilized to measure and account for the amount of water diverted from the source(s) of supply.

C. Record Management Program

The water conservation plan must include a monitoring and record management program for determining water deliveries, sales, and losses.

D. Metering/Leak-Detection and Repair Program

The water conservation plan must include a program of metering and leak detection and repair for the wholesaler's water storage, delivery, and distribution system.

E. Contract Requirements for Successive Customer Conservation

The water conservation plan must include a requirement in every water supply contract entered into or renewed after official adoption of the water conservation plan, 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 of Title 30 TAC Chapter 288. If the customer intends to resell the water, then 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.

F. Reservoir Systems Operations Plan

The water conservation plan must include a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin. The reservoir systems operations plan shall include optimization of water supplies as one of the significant goals of the plan.

G. Enforcement Procedure and Official Adoption

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

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

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

Example statement to be included within the water conservation plan:

The service area of the ______ (name of water supplier) is located within the ______ (name of regional water planning area or areas) and ______ (name of water supplier) has provided a copy of this water conservation plan to the ______ (name of regional water planning group or groups).

I. Plan Review and Update

A wholesale water supplier shall review and update its water conservation plan, as appropriate based on an assessment of previous 5-year and 10-year targets and any other new or updated information. A wholesale water supplier shall review and update the next revision of its water conservation plan no later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. The revised plan must also include an implementation report.

V. ADDITIONAL CONSERVATION STRATEGIES

Any combination of the following strategies shall be selected by the water wholesaler, in addition to the minimum requirements of 30 TAC §288.5(1), if they are necessary in order to achieve the stated water conservation goals of the plan. The commission may require by commission order that any of the following strategies be implemented by the water supplier if the commission determines that the strategies are necessary in order for the conservation plan to be achieved:

- 1. Conservation-oriented water rates and water rate structures such as uniform or increasing block rate schedules, and/or seasonal rates, but not flat rate or decreasing block rates;
- 2. A program to assist agricultural customers in the development of conservation, pollution prevention and abatement plans;
- 3. A program for reuse and/or recycling of wastewater and/or graywater;
- 4. Any other water conservation practice, method, or technique which the wholesaler shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

VI. WATER CONSERVATION PLANS SUBMITTED WITH A WATER RIGHT APPLICATION FOR NEW OR ADDITIONAL STATE WATER

Water Conservation Plans submitted with a water right application for New or Additional State Water must include data and information which:

- 1. support the applicant's proposed use of water with consideration of the water conservation goals of the water conservation plan;
- 2. evaluates conservation as an alternative to the proposed appropriation; and
- 3. evaluates any other feasible alternative to new water development including, but not limited to, waste prevention, recycling and reuse, water transfer and marketing, regionalization, and optimum water management practices and procedures.

Additionally, it shall be the burden of proof of the applicant to demonstrate that no feasible alternative to the proposed appropriation exists and that the requested amount of appropriation is necessary and reasonable for the proposed use.



Texas Commission on Environmental Quality Water Availability Division MC-160, P.O. Box 13087 Austin, Texas 78711-3087 Telephone (512) 239-4600, FAX (512) 239-2214

Utility Profile and Water Conservation Plan Requirements for Municipal Water Use by Retail Public Water Suppliers

This form is provided to assist retail public water suppliers in water conservation plan assistance in completing this form or in developing your plan, please contact the Conservation staff of the Resource Protection Team in the Water Availability Division at (512) 239-4600.

Water users can find best management practices (BMPs) at the Texas Water Development Board's website <u>http://www.twdb.texas.gov/conservation/BMPs/index.asp</u>. The practices are broken out into sectors such as Agriculture, Commercial and Institutional, Industrial, Municipal and Wholesale. BMPs are voluntary measures that water users use to develop the required components of Title 30, Texas Administrative Code, Chapter 288. BMPs can also be implemented in addition to the rule requirements to achieve water conservation goals.

Contact Information

Name of Water Supplier:	City of Midlothian		
Address:	104 W. Avenue E, Midlothian, TX 76065		
Telephone Number:	(972) 775-7105	Fax: (972) 775-7171	
Water Right No.(s):	1423		
Regional Water Planning Group:	С		
Water Conservation Coordinator (or person responsible for implementing conservation program):	Mike Adams, PE	Phone: (972) 775-7105	
Form Completed by:	Abbie Gardner, PE		
Title:	Engineering Consultant (Freese and Nichols, Inc.)		
Signature:	Abigail & Hardner	Date: 3/26/2024	

A water conservation plan for municipal use by retail public water suppliers must include the following requirements (as detailed in 30 TAC Section 288.2). If the plan does not provide information for each requirement, you must include in the plan an explanation of why the requirement is not applicable.

Utility Profile

I. POPULATION AND CUSTOMER DATA

A. Population and Service Area Data

- 1. Attach a copy of your service-area map and, if applicable, a copy of your Certificate of Convenience and Necessity (CCN). Please see Figure 1 in the Water Conservation Plan
- 2. Service area size (in square miles): 49 square miles

(Please attach a copy of service-area map)

- 3. Current population of service area: Estimated full-time residential population served directly by this system is approximately 23,865. Wholesale customers include Sardis-Lone Elm WSC, Mountain Peak SUD, Rockett SUD, City of Venus and City of Grand Prairie.
- 4. Current population served for:
 - a. Water 23,865 (Retail)
 - b. Wastewater NA

5. Population served for previous five years:

6. Projected population for service area in the following decades:

Year	Population	Year	Population
2019	18,492	2030	36,142
2020	20,022	2040	43,069
2021	21,450	2050	48,816
2022	22,290	2060	54,564
2023	23,865	2070	60,311

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

Current and projected population size is as reported in the Water Demand Update and Water Supply Planning Report (2024). Projections were determined based off of an analysis of the Region C 2026 Plan Projections, Impact Fee Update for the City of Midlothian, and data from NCTCOG.

B. Customer Data

Senate Bill 181 requires that uniform consistent methodologies for calculating water use and conservation be developed and available to retail water providers and certain other water use sectors as a guide for preparation of water use reports, water conservation plans, and reports on water conservation efforts. A water system must provide the most detailed level of customer and water use data available to it, however, any new billing system purchased must be capable of reporting data for each of the sectors listed below. More guidance can be found at: http://www.twdb.texas.gov/conservation/doc/SB181Guidance.pdf

1. Quantified 5-year and 10-year goals for water savings:

	Historic 5- year Average	Baseline	5-year goal for year 2029	10-year goal for year 2034
Total GPCD	185	159	230	230
Residential GPCD	72	70	70	70
Water Loss GPCD	28	20	35	35
Water Loss Percentage	16%	12%	15%	15%

Notes:

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

2. Current number of active connections. Check whether multi-family service is counted as ⊠ Residential or □ Commercial?

Treated Water Users	eated Water Users Metered		Totals
Residential	7,423		7,423
Single-Family	5,681		5,681
Multi-Family	1,742		1,742
Commercial	571		571
Industrial/Mining	26		26
Institutional	182		182
Agriculture	0		0
Other/Wholesale	8		8

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

Year	2023	2022	2021
Treated Water Users			
Residential	0	280	476
Single-Family	0	280	324
Multi-Family	0	0	152
Commercial	6	78	27
Industrial/Mining	0	0	4
Institutional	0	11	6
Agriculture	0	0	0
Other/Wholesale	0	0	0

Customer	Use (1,000 gal/year)	Treated or Raw Water
Grand Prairie	517,751	Treated
Rockett SUD	820,886	Treated
Mt. Peak	315,238	Treated
Sardis-Lone Elm WSC	256,527	Treated
Venus	149,525	Treated

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

II. WATER USE DATA FOR SERVICE AREA

A. Water Accounting Data

1. List the amount of water use for the previous five years (in 1,000 gallons).

Indicate whether this is \Box diverted or \boxtimes treated water.

Year	2023	2022	2021	2020	2019
Month					
January	211,106	281,820	249,722	179,099	207,119
February	213,271	249,241	258,547	198,876	185,640
March	247,083	267,747	244,103	214,304	202,044
April	301,111	233,004	275,527	220,202	194,708
May	334,118	333,927	269,953	263,958	181,559
June	346,736	360,600	243,795	319,769	259,736
July	441,299	440,197	296,522	309,378	318,379
August	531,081	372,424	334,084	308,453	360,574
September	426,755	324,729	303,373	211,663	303,646
October	316,220	314,431	261,201	244,529	224,580
November	357,556	328,502	280,376	275,817	217,067
December	266,543	223,687	249,442	258,365	234,792
Totals	3,992,880	3,730,308	3,266,643	3,004,413	2,889,844

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

Compiled from a distribution meter leaving each of the water treatment plants

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

Please note that 'Other/Wholesale' includes raw water sold to Grand Prairie along with other treated wholesale water.

Year	2023	2022	2021	2020	2019
Account Types					
Residential	663,010	633,890	511,499	510,197	486,826
Single- Family	586,156	549,871	440,196	448,603	431,940
Multi-Family	76,853	84,018	71,302	61,594	54,886
Commercial	710,341	359,495	230,701	201,796	189,089
Industrial/Mining	104,413	89,019	96,474	120,616	100,622
Institutional	133,655	150,054	85,610	86,566	86,154
Agriculture	0	0	0	0	0
Other/Wholesale	2,123,819	2,070,622	1,892,766	1,809,370	1,856,800

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

Year	Amount (gallons)	Percent %
2023	246,196,131	13
2022	222,879,359	13
2021	304,535,165	22
2020	170,500,531	14
2019	164,661,030	15

B. Projected Water Demands

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

III. WATER SUPPLY SYSTEM DATA

- A. Water Supply Sources
 - 1. List all current water supply sources and the amounts authorized (in acre feet) with each.

Water Type	Source	Amount Authorized
Surface Water	Joe Pool Lake (TRA)	6,662.3
Groundwater	N/A	N/A
Other	TRWD TRA Reuse	13,665 3,144.4

B. Treatment and Distribution System (if providing treated water)

Design daily capacity of system (MGD): Tayman WTP – 12 MGD and Auger WTP – 24 MGD by 2024

- 1. Storage capacity (MGD):
 - a. Elevated 3
 - b. Ground 10
- 2. If surface water, do you recycle filter backwash to the head of the plant?
 - Yes I ves, approximate amount (MGD): 0.2

IV. WASTEWATER SYSTEM DATA

- *A. Wastewater System Data (if applicable)*
 - 1. Design capacity of wastewater treatment plant(s) (MGD): NA
 - 2. Treated effluent is used for in on-site irrigation, if off-site irrigation, for in plant washdown, and/or for include chlorination.

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

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

See water conservation plan for a description of the wastewater system. The City's wastewater is treated at the Mountain Creek Regional Wastewater System operated by the Trinity River Authority.

- B. Wastewater Data for Service Area (if applicable)
 - 1. Percent of water service area served by wastewater system: 100%
 - 2. Monthly volume treated for previous five years (in 1,000 gallons):

Year	2023	2022	2021	2020	2019
Month					

January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November	-				
December	-	-	_	-	_
Totals					

Water Conservation Plan

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

A. Record Management System

The water conservation plan must include a record management system which allows for the classification of water sales and uses in to the most detailed level of water use data currently available to it, including if possible, the following sectors: residential (single and multi-family), commercial.

B. Specific, Quantified 5 & 10-Year Targets

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

C. Measuring and Accounting for Diversions

The water conservation plan must include a statement about the water suppliers metering device(s), within an accuracy of plus or minus 5.0% in order to measure and account for the amount of water diverted from the source of supply.

D. Universal Metering

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

E. Measures to Determine and Control Water Loss

The water conservation plan must include 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.).

F. Continuing Public Education & Information

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

G. Non-Promotional Water Rate Structure

The water supplier must have a water rate structure which is not "promotional," i.e., a rate structure which is cost-based and which does not encourage the excessive use of water. This rate structure must be listed in the water conservation plan.

H. Reservoir Systems Operations Plan

The water conservation plan must include a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin in order to optimize available water supplies.

I. Enforcement Procedure and Plan Adoption

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

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

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

K. Plan Review and Update

A public water supplier for municipal use shall review and update its water conservation plan, as appropriate, based on an assessment of previous five-year and ten-year targets and any other new or updated information. The public water supplier for municipal use shall review and update the next revision of its water conservation plan not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. The revised plan must also include an implementation report.

VI. ADDITIONAL REQUIREMENTS FOR LARGE SUPPLIERS

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

A. Leak Detection and Repair

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

B. Contract Requirements

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

VII. ADDITIONAL CONSERVATION STRATEGIES

Any combination of the following strategies shall be selected by the water supplier, in addition to the minimum requirements of 30 TAC §288.2(1), if they are necessary in order to achieve the stated water conservation goals of the plan. The commission may require by commission order that any of the following strategies be implemented by the water supplier if the commission determines that the strategies are necessary in order for the conservation plan to be achieved:

- 1. Conservation-oriented water rates and water rate structures such as uniform or increasing block rate schedules, and/or seasonal rates, but not flat rate or decreasing block rates;
- 2. Adoption of ordinances, plumbing codes, and/or rules requiring water conserving plumbing fixtures to be installed in new structures and existing structures undergoing substantial modification or addition;
- 3. A program for the replacement or retrofit of water-conserving plumbing fixtures in existing structures;
- 4. A program for reuse and/or recycling of wastewater and/or graywater;
- 5. A program for pressure control and/or reduction in the distribution system and/or for customer connections;
- 6. A program and/or ordinance(s) for landscape water management;
- 7. A method for monitoring the effectiveness and efficiency of the water conservation plan; and
- 8. Any other water conservation practice, method, or technique which the water supplier shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

VIII. WATER CONSERVATION PLANS SUBMITTED WITH A WATER RIGHT APPLICATION FOR NEW OR ADDITIONAL STATE WATER

Water Conservation Plans submitted with a water right application for New or Additional State Water must include data and information which:

- 1. support the applicant's proposed use of water with consideration of the water conservation goals of the water conservation plan;
- 2. evaluates conservation as an alternative to the proposed appropriation; and
- 3. evaluates any other feasible alternative to new water development including, but not limited to, waste prevention, recycling and reuse, water transfer and marketing, regionalization, and optimum water management practices and procedures.

Additionally, it shall be the burden of proof of the applicant to demonstrate that no feasible alternative to the proposed appropriation exists and that the requested amount of appropriation is necessary and reasonable for the proposed use.

Texas Commission on Environmental Quality

Water Availability Division MC-160, P.O. Box 13087 Austin, Texas 78711-3087 Telephone (512) 239-4600, FAX (512) 239-2214

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

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

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

This Form is applicable to the following entities:

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

The above noted entities are required by rule to submit updates to their water conservation plan(s) and water conservation implementation report(s) every five years beginning May 1, 2009. See 30 Texas Administrative Code (TAC) §288.30(1) to (4). Entities must also submit any revisions to their water conservation plan within 90 days of adoption when the plans are revised in between the five-year submittal deadlines. This form may be used for the five-year submittal or when revisions are made to the water conservation plans in the interim periods between five-year submittals. Please complete the form as directed below.

1. Water Right Holder Name:_____

- 2. Water Right Permit or Certificate Nos.
- 3. Please Indicate by placing an 'X' next to all that Apply to your Entity:

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

_____Municipal Water Use by Public Water Supplier

_____Wholesale Public Water Supplier

_____Industrial Use

_____Mining Use

_____Agriculture Non-Irrigation

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

_____Individually-Operated Irrigation System

_____Agricultural Water Suppliers Providing Water to More Than One User

Water Conservation Implementation Reports/Annual Reports

4. Water Conservation Annual Reports for the previous five years were submitted to the Texas Water Development Board (TWDB) for each of the uses indicated above as required by 30 TAC §288.30(10)(C)? Yes_____No_____

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

Water Conservation Plans

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

Call **512-239-4600** *or email* to *wcp@tceq.texas.gov for assistance with the requirements for your water conservation plan(s) and report(s).*

6. For each Water Conservation Plan submitted, list dates and descriptions of the conservation measures implemented, and the actual amount of water saved.

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

Yes _____ No _____

If the targets were not met, please provide an explanation as to why any of the targets were not met, including any progress on that particular target.

For each five-year submittal, does each water conservation plan submitted contain 8. updated five and ten-year targets for water savings and water loss?

Yes No_____

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

In the box below (or in an attachment titled "Summary of Updates or Revisions to Water 9. Conservation Plans), please identify any other revisions/updates made to each water conservation plan that is being updated or revised. Please specify the water conservation plan being updated and the location within the plan of the newly adopted updates or revisions.

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

Contact	Person	Title	/Position:
Contact	1 CI SUII	IIUC	/10310011.

Contact Address:_____

Contact Phone Number:_____Contact Email Address: _____

Signature: _____ Date: _____ Date: _____



April 2024

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

Subject: 2024 Water Conservation and Drought Contingency Plan Update

Enclosed please find a copy of the 2024 Water Conservation and Drought Contingency Plans for the City of Midlothian. I am submitting a copy of this plan to the required entities in accordance with the Texas Water Development Board and Texas Commission on Environmental Quality rules. The City of Midlothian adopted the updated Plans on April 9, 2024.

Sincerely,

Mike Adams, PE Executive Director of Engineering and Utilities City of Midlothian

APPENDIX D

City Ordinances

Appendix D contains the following;

- 1. Drought Contingency Plan and Water Conservation Plan for Retail and Wholesale Customers Ordinance
- 2. Lawn Irrigation Conservation Ordinance