## Water Conservation & Emergency Water Management Plan

for

City of San Augustine (San Augustine County, Texas)

#### PDWS No. TX2030001

#### KSA Project Number SAU.012

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2011	2011Adoption2015Adoption		2011
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Exhibit C	Utility Profile and Water Conservation Form (TCEQ-10218)
Exhibit D	Water Rate Structure
Exhibit E	Plan Adoption Ordinance
Exhibit F	Coordination with Regional Water Planning Groups
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- Appendix A TCEQ Water Conservation Plan Rules (30 TAC 288, Subchapter A)
- Appendix B TCEQ Drought Contingency Plan Rules (30 TAC 288, Subchapter B)
- Appendix C Texas Water Code Water Allocation (TWC Section 11.039)

#### 1 Water Conservation Plan

#### 1.1 Introduction

The City of San Augustine is located at 301 South Harrison, San Augustine, in San Augustine County, Texas. City of San Augustine is approximately thirty five (35) miles east of Nacogdoches, Texas. City of San Augustine has a population of approximately 2,108 and serves approximately 1,097 connections through their public water system. San Augustine water system serves commercial and residential customers as well as serving water to San Augustine Rural Water Supply Corporation. San Augustine water system serves approximately 1,735 wholesale population, 622 connections.

The City has prepared a combined Water Conservation and Drought Contingency Plan entitled "Water Conservation and Emergency Water Demand Management Plan". Profile data for the water utility is provided in Exhibit A. Exhibit A (TWDB Form 1964) includes population and customer data, water use data, water supply system data and wastewater system data.

#### **1.2** Administrative Information

#### 1.2.1 Owner Information

The water utility is owned and operated by the City of San Augustine whose address and contacts are:

City of San Augustine 301 South Harrison Street San Augustine, Texas 75972 936.275.2121 – Telephone 936.275.9146 – Fax Contacts: Mr. Leroy Hughes, Mayor Mr. John Camp, City Manager Mr. Chris Anding, Public Works Superintendent

#### **1.2.2** Consultant Information

This plan was prepared by KSA Engineers, Inc. whose address and contact information follows:

KSA Engineers, Inc. 211 East Shepherd Avenue, Suite 205 Lufkin, Texas 75901 (936) 637-6061 – Telephone (888) 224.9418 Contact: Mr. Daniel Hays, P.E., Project Manager or Siglinda West, Regulatory Compliance Specialist

#### 1.3 Plan Requirements

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

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

288.2(a)(1)(A) – Utility Profile 288.2(a)(1)(B) – Specification of Goals 288.2(a)(1)(C) – Accurate Metering 288.2(a)(1)(D) – Universal Metering 288.2(a)(1)(E) – Determination and Control of Unaccounted Water 288.2(a)(1)(F) – Public Education and Information Program 288.2(a)(1)(G) – Non-Promotional Water Rate Structure 288.2(a)(1)(H) – Reservoir System Operations Plan 288.2(a)(1)(I) – Means of Implementation and Enforcement 288.2(a)(1)(J) – Coordination with Regional Water Planning Group

#### 1.4 Water Conservation Goals

Water conservation goals were determined by average annual per capita water usage, as calculated from the Utility Profile. Municipal per capita water use is defined by TCEQ as "the sum total of water diverted into a water supply system for municipal uses as well as residential, commercial, and wholesale uses divided by the actual population served". It is common to use municipal per capita water use for water supply/conservation planning and to assess the long-term effectiveness of water conservation programs.

In order to set water conservation goals, baseline per capita water use must first be determined. The City provides treated water to an approximate total population of 3,558 including municipal, commercial, and wholesale customers. City of San Augustine sells water wholesale to San Augustine Rural Water Service Corporation and historically has sold to Bland Lake Water Service Corporation.

Table 1-1 shows the calculated per capita water usage (gpcd) for the previous five years (2015 – 2019).

YEAR	RESIDENTIAL PER CAPITA	TOTAL PER CAPITA
TEAR	WATER USAGE (GPCD)	WATER USAGE (GPCD)
2019	123.84	203.89
2018	143.01	216.14
2017	121.17	170.48
2016	103.42	163.92
2015	129.12	162.99
5-year Average	124.11	183.48

#### Table 1-1 Per Capita Water Usage

The City will strive to make reductions in total per capita use by implementation of the described Best Management Practices. The baseline total per capita water usage for this plan will be set at 183.5 gpcd, the value of the 5-year average value of 183.48 gpcd, rounded. The baseline residential per capita water usage for this plan will be set at 124. gpcd, the value of the 5-year average value of 124.11 gpcd, rounded.

The TWDB provides a tool for use in estimating the targeted goals for municipal water use conservation. The Water Conservation Utility Profile (TWDB-1965) is completed with updated information. This profile is included as Exhibit A.

Goals of this water conservation plan are:

- To reduce water loss and waste of water
- To improve the efficiency in the use of water
- To establish a less than 15% goal for unaccounted water
- To meter water consumption at all municipally-owned facilities
- To increase public awareness of water conservation through a public education and information program

In order to continue water conservation efforts, the City has established 5-year and 10-year target goals for reduction in municipal use including a schedule for implementing the plan to achieve the targeted reductions and a method of tracking the implementation and effectiveness. The following updated long-term goals have been adopted by the City of San Augustine:

- Education and information will be provided on a yearly basis to all customers presenting nonwasteful uses of water and techniques that can be employed to conserve water. Based on the TWDB "most likely" scenario, a 2% savings in the average annual residential per capita use can be realized through education programs. This 2% goal equates to a 2.47 gpcd reduction (average annual residential gpcd of 123.85 multiplied by 2%).
- The TWDB has set a "most-likely" total goal of 7.0% for seasonal water savings. Seasonal water uses from June to August have represented approximately 27.5% of the total annual retail use over the last 5 years and for 2019 the seasonal water use was 28% of total retail usage. This seasonal peak can be offset with the adoption of a landscape ordinance and summer water usage education. The 5-year average seasonal per capita usage is 32.26 gpcd and the 2019 seasonal per capita usage is 42.37 gpcd. The resulting gpcd seasonal use reduction provides approximately 2.9 gpcd in water savings (42.37 multiplied by 7%).
- 3 Unaccounted-for water from water production to the consumers on the system averaged approximately 13% the previous 5 years and in 2019 equaled approximately 18.39%. Annual water loss should be reduced to less than 15%. The associated potential savings by reducing unaccounted for water loss is approximately 3.3 % (derived from 2019 water loss of 18.39% minus 15.0%). This goal will require on-going metering and operational adjustments as well as continual repair, and/or replacement, of old lines and meters in the distribution system. . Once the City acquires the funding for the proposed infrastructure improvements, the project will alleviate a great portion of the unaccounted for water loss. The result will be a decrease in per capita water consumption thus reducing water demands on the system.

These goals provide a total potential for reducing water loss. The five year goal for unaccounted for water will be 22 gpcd (including wholesale population) and the 10 year goal of 20 gpcd. The City will strive to meet the goal for total gallons per capita per day of 178 gpcd and residential gallons per capita per day of 120. gpcd within 5 years of plan adoption (2025). Within 10 years of plan adoption (2030) the goal for total gallons per capita per day is set at 165 gpcd and for residential gallons per capita per day the goal is set for 112 gpcd.

The city will accomplish these goals set in the Plan by continued public education programs, diligent meter testing and replacement program, and unmetered water use accounting by staff, and by performing annual water surveys. The city will continue the leak detection and repair programs.

For ease of updating the water conservation plan on an annual basis the 5-year and 10-year goals for water savings are included on the Water Conservation Plan Goals Table (TWDB-1964) found in Exhibit B and the TCEQ Utility Profile and Conservation Report (TCEQ Form 10218) can be found in Exhibit C. Annually, the city will submit the required updates on water usage, demand, and conservation best management practices and their effectiveness. The City will also submit to the TWDB a water audit which gives more detail on the annual usage, demand, and loss. The water audit will be submitted annually.

#### 1.5 Source Water Metering

The City of San Augustine currently supplies treated water to the community through a surface water treatment plant located at City Lake. The water treatment plant is located approximately 2.5 miles south of San Augustine, at Farm-to-Market Road 2213 in San Augustine Texas 75972. In addition to the surface water treatment plant the city maintains one ground water well located at the water plant site. The well is located in the Neches River Basin and is pumped directly to the water treatment plant. The city has a Master Meters at the wholesale interconnection(s). Water supply metering devices shall have an accuracy of plus or minus 5.0% to account for the amount of water diverted from the source of supply.

#### 1.6 Universal Metering, Master Metering, and Meter Testing/Replacement

Metering is widely recognized as an essential requirement for any water utility's efforts to measure and reduce water demand. All water users in San Augustine, including most municipal facilities, are metered. This requirement for universal metering of water users will be continued. Master metering of all municipal facilities is a goal of this plan. The only unmetered municipal water usage should be for uses such as firefighting, main flushing, and street sweeping, which by nature do not accommodate a permanent water meter location. The city will continue to be diligent in efforts to meter all possible water usage to further reduce unaccounted for water loss.

The City typically replaces small residential meters based on abnormally high or low registered water usage (+ or -5%), feedback from meter readers, and when the meter register appears broken or scratched.

#### 1.7 Determination and Control of Unaccounted for Water

Unaccounted-for water is the difference between water delivered by the City and metered deliveries to customers plus authorized, but unmetered, uses. Authorized, but unmetered, uses would include use for firefighting, releases for flushing of lines, street sweeping, and uses associated with new construction.

Unaccounted water can include several categories:

- Inaccuracies in customer meters. (Customer meters tend to run more slowly as they age and under-report actual usage.)
- Losses due to water main breaks and leaks in the water distribution system.
- Losses due to illegal connections and theft.

In the past, the City has made a concerted effort to monitor and calculate the amount of unaccountedfor water on an annual basis for tracking the usage, loss, and effectiveness of the best management practices implemented through this plan.

The City will continue to maintain data to calculate the amount of unaccounted-for water and, if warranted, may take action to include installation of meters on all municipal facilities, an accelerated meter replacement/repair program, the expansion of the leak detection program, and/or increased routine audits of the water system to identify illegal connections and abandoned services. The City will strive to reduce unaccounted water loss to 15% or less.

#### 1.8 Public Education

The primary elements of the City's public education program are:

- Utility bill inserts regarding the water conservation issues
- Presentations to schools regarding water conservation and water quality issues
- Customer-service personnel focus on water conservation strategies with utility customers

#### 1.9 Water Rate Structure.

The City's current water rate structure is an increased block type, which encourages water conservation. The current water and sewer rates can be found in Exhibit D.

#### 1.10 Reservoir System Operations Plan

#### **1.11 Implementation and Enforcement**

A copy of the ordinance indicating the official adoption of this Water Conservation Plan by the City Council is provided in Exhibit E.

The Mayor will be responsible for implementation and administration of the Water Conservation Plan and Emergency Water Management Plan, as follows:

- Oversee the execution and administration of all Plan elements
- Supervise the keeping of records for program verification and to assess the program effectiveness
- Make recommendations for changes in the Water Conservation Plan elements
- Implementation of drought contingencies

Elements of this Water Conservation Plan which require enforcement (such as the universal metering, master metering, and the requirements for drought contingencies) are generally handled by incorporation into municipal ordinances and or adoption of specific plans.

Annually, the City of San Augustine will submit water usage, water pumped or purchased, and water audits along with a conservation plan annual report to keep track of the effectiveness of the plan strategies and best management practices. Adjustments will be made to improve the effectiveness when necessary.

#### 1.12 Coordination with the Regional Water Planning Group

The service area of the City is located within the Region I Water Planning Area. The City will provide a copy of this Water Conservation Plan to the Region I Water Planning Group, as required by TWDB.

#### 1.13 Leak Detection and Repair

The City's current leak detection program will be continued, such program includes:

- Visual observations by meter readers, water system employees and customers who keep watch for abnormal conditions which may indicate a leak; and,
- Adequate and responsive staff with appropriate equipment is available 24 hours per day to repair any leaks that are detected.
- Logging and tracking leaks, leak amounts, and repairs records to evaluate the progress of implemented best management practices

#### 1.14 Water Use Record Management

The current utility billing system recognizes users as being either inside the City limits or outside the City limits. Some unmetered municipal water usage (such as parks, golf courses) exists, as well as unaccounted-for usages previously mentioned such as firefighting, water line flushing, etc. The current user categories will be continued and should be adequate to provide accurate records of water sales and to determine the amount of unaccounted-for water.

#### **1.15 Wholesale Water Contracts**

The City of San Augustine currently has a wholesale water contract with San Augustine Rural Water Service Corporation.

The City currently sells water to San Augustine Rural Water Service Corporation under a wholesale water supply contract. The City of San Augustine will ensure that said contract and any future wholesale contracts contain provisions which require the purchasing entity to either, (1) adopt the provisions of the City's Water Conservation Plan, or (2) develop and adopt a plan that has been approved the TCEQ and/or the TWDB.

Customers shall be required to comply with the Pro Rata water allocation prescribed in Section 11.039 of the Texas Water Code.

With the approval of this Water Conservation Plan the City of San Augustine will meet the required provisions set forth by the TCEQ, TWDB, and other regulating authorities.

#### 2 Emergency Water Management Plan

#### 2.1 Introduction

While the water conservation planning elements implement permanent water use efficiency procedures, it does not provide for emergency circumstances that can arise. Examples of such circumstances include: droughts; contamination of water supply(ies); disasters which destroy all or part of the water system; or major failures of treatment works, transmission mains, storage, or distribution. It is, therefore, critical that an emergency plan be developed before such circumstances occur.

Emergency water demand management or drought contingency, involves various key concepts which must be outlined in order to ensure an effective plan is available for distributing water in times of shortage. The goal of the emergency water demand management plan is to quickly reduce the amount of water used by the City's customers in response to an emergency condition. To achieve this goal, the plan involves major elements which include:

- Trigger Conditions and Response Measures;
- Initiation Procedures;
- Termination Notification Actions;
- Means of Implementation; and,
- Information and Education.

Collectively, these elements form a plan that can effectively address temporary emergency conditions with predetermined methods and techniques. While this plan cannot cover every possible emergency situation, it does provide a framework by which emergency water demand management can be quickly implemented by the City.

#### 2.2 Plan Requirements

The TCEQ rules governing development of drought contingency plans (referred to as an emergency water management plan herein) for public water suppliers are contained in Title 30, Part 1, Chapter 288, Subchapter B, Rule 288.20 of the Texas Administrative Code, which is included as Appendix B. For the purpose of these rules, a water conservation plan is defined as "A strategy or combination of strategies for reducing the volume of water withdrawn from a water supply source, for reducing the loss or waste of water, for maintaining or improving the efficiency in the use of water, for increasing the recycling and reuse of water, and for preventing the pollution of water."

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

288.20(a)(1)(A) – Public Involvement	
288.20(a)(1)(8) – Public Education and Information Program	
288.20(a)(1)(C) – Coordination with Regional Water Planning Group	
288.20(a)(1)(D) – System Monitoring and Response Criteria	
288.20(a)(1)(E) – Stages of Response	
288.20(a)(1)(F) – Targets for Water Use Reduction	
288.20(a)(1)(G) – Water Supply/Demand Management Measures	
288.20(a)(1)(H) – Criteria for Termination of Response Stages	
288.20(a)(1)(I) – Procedures for Granting Variances	
288.20(a)(1)(J) – Procedures for Enforcement	

#### 2.3 Trigger Conditions and Response Measures

The City uses treated water pumped from one (1) ground water well and one (1) surface water treatment plant owned by City of San Augustine. These water sources meet the current needs of its customers. The City must be prepared to respond to any emergency water supply situation. The city will implement the Best Management Practices in this Water Conservation and Emergency Water Management Plan to reduce water usage and water loss.

Four (4) threshold levels have been identified for triggering various responses to water supply emergencies. These trigger conditions and corresponding emergency response measures are presented in Table 2-1.

STAGE	TRIGGER CONDITIONS	RESPONSE MEASURES
<b>Stage 1:</b> Mild Water Shortage Alert Voluntary Water Use Curtailment	<ul> <li>Water pumped in excess of 522,284 gallons or 80% of daily average pumped for three consecutive days.</li> <li>If the City Lake Reservoir declines below 8 feet mean depth</li> </ul>	<ul> <li>Formal public notification by City of San Augustine of Stage 1 conditions.</li> <li>Initiate public information efforts.</li> <li>Notify major commercial, institutional, industrial and wholesale water customers.</li> <li>Increase water supply and demand monitoring.</li> <li>Increase leak detection and repair efforts.</li> </ul>
Stage 2: Moderate Water Shortage Alert Mandatory Water Use Curtailment	<ul> <li>Water use in excess of 587,570 gallons pumped or 90 % of daily average pumped for three consecutive days; or,</li> <li>System demands cause ground and/or elevated water storage levels to fall daily and recover completely only during the overnight low demand periods.</li> <li>If the City Lake Reservoir declines below 7 feet mean depth</li> </ul>	<ul> <li>Continue implementation of all relevant actions in preceding stage.</li> <li>Formal public notification of Stage 2-Moderate water shortage conditions and request for mandatory water use curtailment.</li> <li>Water waste prohibited. Car washing, window washing, pavement washing, etc. prohibited except when a bucket is used.</li> <li>Lawn and garden irrigation restricted to every other day during the hours of 6:00 AM to10:00 AM and 8:00 PM to 10: PM using only a handheld hose for application.</li> </ul>
Phase 3: Severe Water Shortage Alert Mandatory Water Use Curtailment	<ul> <li>Water pumped in excess of 652,856 gallons or 100% of daily average pumped for three consecutive days; or,</li> <li>Failure of storage tanks or other major system component which reduce the availability of water to less than 50% (326,428 gallons) of the average daily usage or causes health or safety hazard.</li> <li>If City Lake Reservoir declines below 6.5 feet mean depth</li> </ul>	<ul> <li>Maintain pertinent preceding stage actions.</li> <li>Water waste prohibited. Car washing, window washing, pavement washing, etc. prohibited except when a bucket is used.</li> <li>Lawn and garden irrigation restricted to every fourth day during the hours of 6:00 AM to10:00 AM and 8:00 PM to 10: PM using only a handheld hose for application.</li> </ul>
Stage 4: Emergency Water Shortage Alert Mandatory Water Use Curtailment (Pro Rata Water Allocations)	<ul> <li>Major water line breaks, loss of a water well or pump, or system failure occur, when cause unprecedented loss of capability to provide water service.</li> <li>Natural or man-made contamination of the water supply source.</li> <li>Any emergency drawdown of the City Lake Reservoir for structural integrity purposes; or</li> <li>Any condition exists which prevents or imminently threatens to prevent</li> </ul>	<ul> <li>Maintain pertinent preceding stage actions. All non-essential outdoor water uses prohibited.</li> <li>Assess the severity of the problem and identify the actions needed and time required to resolve the issues.</li> <li>Notify TCEQ, County, and or State emergency response officials, request assistance, if appropriate.</li> <li>Undertake necessary actions, including repairs and/or clean-up.</li> </ul>

#### **Table 2-1 Trigger Conditions**

STAGE	TRIGGER CONDITIONS	RESPONSE MEASURES	
	withdrawing sufficient water from City Lake Reservoir.	<ul> <li>Identify alternate water source and initiate Pro Rata water allocations per TWC 11.039.</li> <li>Prepare a post-event assessment report on the incident and critique of emergency response procedures and actions.</li> </ul>	
Termination of Water Shortage	<ul> <li>Return of system operations to below current phase trigger levels for fifteen (15) consecutive days.</li> <li>Correction of problem resulting in Stage termination.</li> </ul>	<ul> <li>Formal Public Notification (at each stage) That The Water Shortage Conditions And Measures Taken In Response To Triggered Stages Are Terminated.</li> </ul>	

#### 2.4 Wholesale Contracts

The City shall include a provision in every wholesale water contract entered into or renewed, 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 and as detailed within this document.

#### 2.5 Initiation Procedures

The City, through the office of the Mayor or his/her duly appointed representative, will order the initiation of public notification when trigger conditions signal the need to implement emergency water demand management measures. Communication of the emergency water demand condition will be distributed to the public via notices:

- Posted at City Hall, the Post Office, shopping establishments, and restaurants.
- Circulated to local newspaper and radio stations.
- Notification to Commercial customers
- Mailed to all major water customers.
- Notification to the TCEQ regarding the initiation of a mandatory stage.

The notice will include the appropriate demand management measures that must be taken in response to the existing trigger conditions.

#### **2.6** Termination Notification Actions

Upon the City's determination that the emergency condition has subsided (through the Mayor or his/her duly appointed representative notifies of termination of drought stage), the public will be informed of the termination of the response measures in the same manner that the initiation notice was distributed. The TCEQ will be notified that mandatory stages have been rescinded.

#### 2.7 Means of Implementation

The emergency water demand management plan elements have been implemented through the passage of an ordinance (see Exhibit E). By passage of this Ordinance and subsequent adoption of this plan, the Mayor or his/her duly authorized representative has the authority to begin immediate implementation of contingency measures when a trigger condition is reached.

#### 2.8 Information and Education

The public will be informed of the emergency water demand management criteria as outlined in this plan. This information will be distributed to the customers through, (1) newspaper articles and, (2) education and information process as part of the Water Conservation Plan.

#### 2.9 Targeted Use Reduction

#### 2.9.1 Stage 1: Mild Water Shortage Alert

Stage 1 - Mild water shortage alerts are most likely to occur during summer when water use is at its greatest. Stage 1 shall be initiated when City Lake declines below a mean level of 8 feet, and/or the water system reaches 80% of the average daily water demand. Customers shall be requested to voluntarily conserve water and adhere to the prescribed restrictions on certain water uses described herein. Simple public information reports and commercial notification of an impending problem is sufficient to obtain a 5% voluntary reduction in average daily water usage. A 5% reduction would reduce to 689,190 gallons in average daily usage. (725,463 – 36,273). Residential GPCD reduction to 117.65 GPCD (123.85 – 6.19). Total GPCD reduction to 193.70 GPCD. (203.89 – 10.19)

#### 2.9.2 Stage 2: Moderate Water Use Curtailment

Stage 2 - Moderate water shortage alert is a mandatory water use curtailment alert and is normally occurs during summer months when water use is at its greatest. Stage 2 shall be initiated when City Lake declines below a mean level of 7 feet, and/or the water system reaches 90% of the average daily water demand. . Customers shall be required to conserve water and adhere to the prescribed restrictions on certain water uses described herein. Formal public notification of a water shortage and request for mandatory curtailment to obtain a 15% mandatory reduction in average daily water usage. A 15% reduction in average daily usage would total 652,917 gallons per day. (725,463 – 72,546). Residential GPCD reduction to 105.26 GPCD (123.84 – 18.57). Total GPCD reduction to 173.31 GPCD. (123.84 – 30.58).

This phase will continue implementation of all relevant actions in preceding stage and will further reduce water use by implementation of the following:

- Water customers are required to institute water conservation measures and to minimize or discontinue water use for non-essential purposes.
- TCEQ must be notified when a mandatory stage is initiated.

#### 2.9.3 Stage 3: Severe Water Use Curtailment

Stage 3 - Severe water shortage alert is a mandatory water use curtailment alert and will most likely occur due to infrastructure failure, or as a result from unprecedented water use, or large water main leaks, or severe drought conditions. Stage 3 shall be initiated when City Lake declines below a mean level of 6.5 feet and/or the water system reaches 100% of the average daily water demand. Customers shall be required to conserve water and adhere to the prescribed restrictions on certain water uses described herein. Formal public notification of a water shortage and request for mandatory curtailment is sufficient to achieve a 25% mandatory reduction in average daily water use. This would reduce average daily use to 544,097.25 gallons (725,463 – 181,365.75). Residential GPCD reduction to 92.88 GPCD (123.84 – 30.96). Total GPCD reduction to 152.92 GPCD (203.89 – 50.97).

This stage will continue implementation of all relevant actions in preceding stage and will further reduce water use by implementation of the following:

- Prohibit water waste.
- Prohibitions against unnecessary water usage including car washing, window washing, pavement washing, etc. unless a bucket is used.
- Lawn and garden irrigation restricted to every fourth day during the hours of 6:00 AM to10:00 AM and 8:00 PM to 10: PM using only a handheld hose for application.
- TCEQ must be notified of a mandatory stage initiation.

#### 2.9.4 Phase 4: Water System Emergency

Phase 4 - Water System Emergency alerts will most likely occur due to major infrastructure failure. Stage 4 shall be initiated if there is a major event such as a major water line break, pump system failure, an emergency drawdown of the reservoir for structural integrity purposes, or when any event causes unprecedented loss of the capability to provide adequate water supply. Natural or man-made contamination of the water supply source and or any condition exists that prevents or imminently threatens the withdrawing of sufficient water from City Lake would also trigger this Stage. Customers shall be required to conserve water and adhere to the prescribed restrictions for Stage 4 of this plan. Appropriate response conditions will be established by the Mayor or his/her designee based upon the most appropriate response to address the emergency condition. Whenever an emergency arises resulting in an initiation of this phase of the plan the Mayor, or his/her designee, shall:

- Assess the severity of the problem and identify the actions needed and time required to resolve the problem, including prohibitions against all non-essential water uses commensurate with the severity of the emergency condition;
- Notify City, County, and/or State emergency response officials, request assistance, if necessary.
- Notification to TCEQ is required with the initiation or upgrade of the mandatory stage;
- Undertake necessary actions, including repairs and/or clean-up as needed;
- Identify alternate water source and implement water allocations if necessary;
- Prepare a post-event assessment report on the incident and critique of emergency response procedures and actions; and,
- Implement a drought/emergency surcharge for excess gallons of usage for gallons/household.

#### 2.10 Pro Rata Water Allocation

Pro Rata water allocation can be initiated during Phase 3 or Phase 4 of this plan or when the City of San Augustine Mayor, or his/ her designee initiate the pro rata curtailment of water deliveries for wholesale water customers according to the procedures specified. Water to be distributed shall be divided in accordance with Texas Water Code Section 11.039. Customers shall be required to comply with the water allocation plan as prescribed by the governing agencies. . See Appendix C of this document.

#### Single-Family Residential Customers

The allocation to residential water customers residing in a single-family dwelling shall be as follows:

Persons per Household	<b>Gallons per month</b>		
1 or 2	6,000		
3 or 4	7,000		
5 or 6	8,000		
7 or 8	9,000		
9 or 10	10,000		
11 or more	12,000		

"Household" means the residential premises served by the customer's meter. "Persons per household" include only those persons currently physically residing at the premises and expected to reside there for the entire billing period. It shall be assumed that a particular customer's household is comprised of two (2) persons unless the customer notifies the City of San Augustine of a greater number of persons per household on a form prescribed by the Mayor or City Manager. The Mayor or City Manager shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every residential customer. If, however, a customer does not receive such a form, it shall be the customer's responsibility to go to the City of San Augustine City Hall to complete and sign the form claiming more than two (2) persons per household. New customers may claim more persons per household at the time of applying for water service on the form prescribed by the Mayor or City Manager. When the number of persons per household increases so as to place the customer in a different allocation category, the customer may notify the City of San Augustine on such form and the change will be implemented in the next practicable billing period. If the number of persons in a household is reduced, the customer shall notify the City of San Augustine in writing within five (5) days. In prescribing the method for claiming more than two (2) persons per household, the Mayor or City Manager shall adopt methods to insure the accuracy of the claim. Any person who knowingly, recklessly, or with criminal negligence falsely reports the number of persons in a household or fails to timely notify the City of San Augustine in the number of person in a household shall be fined not less than  $\frac{10.00}{2}$ .

Residential water customers shall pay the following surcharges:

\$ 10.00 for the first 1,000 gallons over allocation.
\$ 20.00 for the second 1,000 gallons over allocation.
\$ 30.00 for the third 1,000 gallons over allocation.
\$ 10.00 for each additional 1,000 gallons over allocation.

Surcharges shall be cumulative.

#### Master-Metered Multi-Family Residential Customers

The allocation to a customer billed from a master meter which jointly measures water to multiple permanent residential dwelling units (example: apartments, mobile homes) shall be allocated 6,000 gallons per month for each dwelling unit. It shall be assumed that such a customer's meter serves two dwelling units unless the customer notifies the City of San Augustine of a greater number on a form prescribed by the Mayor or City Manager. The Mayor or City Manager shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every such customer. If, however, a customer does not receive such a form, it shall be the customer's responsibility to go to the City of San Augustine City Hall office to complete and sign the form claiming more than two (2) dwellings. 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 Mayor or City Manager. If the number of dwelling units served by a master meter is reduced, the customer shall notify the City of San Augustine in writing within two (2) days. In prescribing the method for claiming more than two (2) dwelling units, the Mayor or City Manager shall adopt methods to insure the accuracy of the claim. Any person who knowingly, recklessly, or with criminal negligence falsely reports the number of dwelling units served by a master meter or fails to timely notify the City of San Augustine of a reduction in the number of person in a household shall be fined not less than \$ 50.00 . Customers billed from a master meter under this provision shall pay the following monthly surcharges:

\$\_10.00 for 1,000 gallons over allocation up through 1,000 gallons for each dwelling unit. \$ 20.00 , thereafter, for each additional 1,000 gallons over allocation up through a second 1,000 gallons for each dwelling unit.
 \$ 30.00 , thereafter, for each additional 1,000 gallons over allocation

Surcharges shall be cumulative.

#### **Commercial Customers**

A monthly water allocation shall be established by the Mayor, City Manager, or his/her designee, for each nonresidential commercial customer other than an industrial customer who uses water for processing purposes. The non-residential customer's allocation shall be approximately 50% 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. The Mayor or City Manager shall give his/her best effort to see that notice of each non-residential customer's allocation is mailed to such customer. If, however, a customer does not receive such notice, it shall be the customer's responsibility to contact the City of San Augustine to determine the allocation. Upon request of the customer or at the initiative of the Mayor or 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, 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 Mayor or City Manager. Nonresidential commercial customers shall pay the following surcharges:

- \$\_20.00 per thousand gallons for the first 1,000 gallons over allocation.
- \$\_30.00 per thousand gallons for the second 1,000 gallons over allocation.
- \$\_40.00 per thousand gallons for the third 1,000 gallons over allocation.
- \$\_50.00 per thousand gallons for each additional 1,000 gallons over allocation.

The surcharges shall be cumulative.

#### Institutional Customers

A monthly water allocation shall be established by the Mayor, City Manager, or his/her designee, for each institutional customer, which uses water. The institutional customer's allocation shall be approximately <u>70%</u> percent of the customer's water usage baseline. Ninety (90) days after the initial imposition of the allocation for institutional customers, the institutional customer's allocation shall be further reduced to <u>60%</u> percent of the customer's water usage baseline. The institutional customer's water use baseline will be computed on the average water use for the <u>12</u> month period ending prior to the date of implementation of Stage 2 of the Plan. If the

<u>12</u> month period ending prior to the date of implementation of stage 2 of the Plan. If the institutional water customer's billing history is shorter than <u>12</u> months, 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. The Mayor or City Manager shall give his/her best effort to see that notice of each institutional customer's allocation is mailed to such customer. If, however, a customer does not receive such notice, it shall be the customer's responsibility to contact the City of San Augustine to determine the allocation, and the allocation shall be fully effective notwithstanding the lack of receipt of written notice. Upon request of the customer or at the initiative of the Mayor or City Manager, the allocation may be reduced or increased, (1) if the designated period does not

accurately reflect the customer's normal water use because the customer had shutdown a major unit for repair or overhaul during the period, (2) the customer has added or is in the process of adding significant additional capacity, (3) the customer has shutdown or significantly reduced a major unit, (4) the customer has previously implemented significant permanent water conservation measures such that the ability to further reduce water use is limited, (5) the customer agrees to transfer part of its allocation to another institutional customer, or (6) if other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the Mayor, City Manager. institutional customers shall pay the following surcharges:

- \$\_20.00 per thousand gallons for the first 1,000 gallons over allocation.
- \$\_30.00 per thousand gallons for the second 1,000 gallons over allocation.
- \$\_40.00 per thousand gallons for the third 1,000 gallons over allocation.
- \$\_50.00\_\_\_\_ per thousand gallons for each additional 1,000 gallons over allocation.

The surcharges shall be cumulative.

#### 2.11 Variances

The Mayor, or his/her designee, may, in writing, grant 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, sanitation, or fire protection for the public or the person requesting such variance, and if one or more of the following conditions are met:

- 1. 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.
- 2. Alternative methods can be implemented which will achieve the same level of reduction in water use.

Persons requesting an exemption from the provisions of this Ordinance 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 Mayor, or his/her designee, and shall include the following:

- 1. Name and address of the petitioner(s).
- 2. Purpose of water use.
- 3. Specific provision(s) of the Plan from which the petitioner is requesting relief.
- 4. 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 Ordinance.
- 5. Description of the relief requested.
- 6. Period of time for which the variance is sought.
- 7. 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.
- 8. Other pertinent information.

Variances granted by the City shall be subject to the following conditions, unless waived or modified by the Mayor or his/her designee:

- 1. Variances granted shall include a timetable for compliance.
- 2. 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.

#### 2.12 Enforcement

- (a) No person shall knowingly or intentionally allow the use of water from the City of San Augustine for residential, commercial, 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 Mayor, or his/her 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 punished by a fine of not less than fifty dollars (\$50.00) and not more than one hundred dollars (\$100.00). Each day that one or more of the provisions in this Plan is violated shall constitute a separate offense. If a person is convicted of three or more distinct violations of this Plan, the Mayor, 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, hereby established at one hundred dollars (\$100.00), and any other costs incurred by the City of San Augustine in discontinuing service. In addition, suitable assurance must be given to the Mayor, 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 San Augustine, 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 he/she 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 committed the violation, but any such person shall have the parent committed the violation, but any such person 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 committed the violation, but any such parent may be excused if he/she proves that he/she had previously directed the child not to use the water as it was used in violation of this Plan and that the parent could not have reasonably known of the violation.
- (d) Any employee of the City of San Augustine, police officer, or other employee designated by the Mayor, may issue a citation to a person he/she reasonably believes to be in violation of this Ordinance. The citation shall be prepared in duplicate and shall contain the name and address of the alleged violator, if known, the offense charged, and shall direct him/her to appear in the municipal court on the date shown on the citation for which the date shall not be less than 3 days nor more than 5 days from the date the citation was issued. The alleged violator shall be served a copy of the citation. Service of the citation shall be complete upon delivery of the citation to the alleged violator, to an agent or employee of a violator, or to a person over 14 years of age who is a member of the violator's immediate family or is a resident of the violator's residence. The alleged violator shall appear in municipal court to enter a plea of guilty or not guilty for the violation of this Plan. If the alleged violator fails to appear may be issued in lieu of an arrest warrant. These cases shall be expedited and given preferential setting in municipal court before all other cases.

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Exhibit A

Water Utility Profile (TWDB-1965)

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## UTILITY PROFILE FOR WHOLESALE WATER SUPPLIER

Fill out this form as completely as possible. If a field does not apply to your entity, leave it blank.

### **CONTACT INFORMATION**

Name of Utility:				
Public Water Supply Identification Number (PWS ID):				
Certificate of Convenience and Necessity (CCN) Number:				
Surface Water Right ID Number:				
Wastewater ID Number:				
Completed By:	Title:			
Address:	City:	_Zip Code:		
Email:	Telephone Number:			
Date:				
Regional Water Planning Group: <u>Map</u>				
Groundwater Conservation District: <u>Map</u>				
Check all that apply:				
Received financial assistance of \$500,000 or mo	ore from TWDB			
Have a surface water right with TCEQ				

# Section I: Utility Data

## A. Population and Service Area Data

- 2. Provide projected and historical service area population below.

Year	Historical Population Served By Wholesale Water Service	Year	Projected Population Served By Wholesale Water Service
		2020	
		2030	
		2040	
		2050	
		2060	

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

#### B. System Input

#### Provide system input data for the previous five years.

Total System Input = Self-supplied + Imported

Year	Self-supplied Water in Gallons	Purchased/Imported Water in Gallons	Total System Input	Total gal/day
Historic 5-year Average				

## C. Water Supply System (Attach description of water system)

- 1. Designed daily capacity of system \_\_\_\_\_ gallons per day.
- 2. Storage Capacity: Elevated \_\_\_\_\_\_ gallons Ground \_\_\_\_\_\_ gallons
- 3. List all current water supply sources in gallons.

Water Supply Source	Source Type*	Total Gallons

\*Select one of the following source types: Surface water, Groundwater, or Contract

4. If surface water is a source type, do you recycle backwash to the head of the plant?

Yes \_\_\_\_\_\_ estimated **gallons** per day

No

## D. Projected Demands

1. Estimate the water supply requirements for the <u>next ten years</u> using population trends, historical water use, economic growth, etc.

Year	Population	Water Demands (gallons)

2. Describe sources of data and how projected water demands were determined. Attach additional sheets if necessary.



## E. High Volume Customers

1. If applicable, list the annual water use for the five highest volume customers. Select one of the following water use categories to describe the customer; choose Municipal, Industrial, Commercial, Institutional, or Agricultural.

Customer	Water Use Category*	Annual Water Use	Treated or Raw

\*For definitions on recommended customer categories for classifying customer water use, refer to the online <u>Guidance and</u> <u>Methodology for Reporting on Water Conservation and Water Use.</u>

### F. Utility Data Comment Section

Provide additional comments about utility data below.

# Section II: System Data

#### A. Wholesale Connections

1. List the active wholesale connections by major water use category.

Water Use Category*	Active Wholesale Connections			
Water ose category	Metered	Unmetered	<b>Total Connections</b>	
Municipal				
Industrial				
Commercial				
Institutional				
Agricultural				
TOTAL				

\*For definitions on recommended customer categories for classifying customer water use, refer to the online <u>Guidance and</u> <u>Methodology for Reporting on Water Conservation and Water Use.</u>

# 2. List the net number of new wholesale connections by water use category for the <u>previous five years</u>.

Mater Has Cotosom *	Net Number of New Wholesale Connections				
Water Use Category*					
Municipal					
Industrial					
Commercial					
Institutional					
Agricultural					
TOTAL					

\*For definitions on recommended customer categories for classifying customer water use, refer to the <u>Guidance and</u> <u>Methodology for Reporting on Water Conservation and Water Use.</u>

### B. Wholesale Water Accounting Data - Water Use Categories

For the <u>previous five years</u>, enter the number of gallons of WHOLESALE water exported (*sold or transferred*) to each major water use category.

Customer Cotegon.*	Total Gallons of Wholesale Water				
Customer Category*					
Municipal					
Industrial					
Commercial					
Institutional					
Agricultural					
TOTAL					

\*For definitions on recommended customer categories for classifying customer water use, refer to the online <u>Guidance and</u> Methodology for Reporting on Water Conservation and Water Use.



### C. Wholesale Water Accounting Data - Annual and Seasonal Use

For the <u>previous five years</u>, enter the number of gallons exported (*sold or transferred*) to WHOLESALE customers.

<b>D d a</b> with	Total Gallons of Treated Water				
Month					
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
TOTAL					

D.C. with	Total Gallons of Raw Water				
Month					
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
TOTAL					

WHOLESALE			Average in Gallons
Summer Wholesale (Treated + Raw)			
TOTAL Wholesale (Treated + Raw)			

#### D. Water Loss

#### Provide Water Loss Data for the previous five years.

Water Loss GPCD = [Total Water Loss in Gallons ÷ Permanent Population Served] ÷ 365 Water Loss Percentage = [Total Water Loss ÷ Total System Input] x 100

Year	Total Water Loss in Gallons	Water Loss per day	Water Loss as a Percentage
5-year average			

#### E. Peak Day Use

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

Year	Average Daily Use (gal)	Peak Day Use (gal)	Ratio (Peak/Avg)

#### F. Summary of Historic Water Use

Water Use Category	Historic 5-year Average	Percent of Water Use
Municipal		
Industrial		
Commercial		
Institutional		
Agricultural		

### G. Wholesale System Data Comment Section

Provide additional comments about wholesale system data below.

## Section III: Wastewater System Data

If you do not provide wastewater system services then you have completed the Utility Profile. Save and Print this form to submit with your Plan. Continue with the <u>Water</u> <u>Conservation Plan Checklist</u> to complete your Water Conservation Plan.

### **A. Wastewater System Data** (Attach a description of your wastewater system)

- 2. List the active wastewater connections by major water use category.

	Active Wastewater Connections			
Water Use Category*	Metered	Unmetered	Total Connections	Percent of Total Connections
Municipal				
Industrial				
Commercial				
Institutional				
Agricultural				
TOTAL				

\*For definitions on recommended customer categories for classifying customer water use, refer to the online <u>Guidance and</u> <u>Methodology for Reporting on Water Conservation and Water Use.</u>

#### 2. What percent of water is serviced by the wastewater system? \_\_\_\_%

3. For the <u>previous five years</u>, enter the number of gallons of wastewater that was treated by the utility.

	Total Gallons of Treated Water					
Month						
Januany						
January						
February						
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						
TOTAL						

#### 4. Could treated wastewater be substituted for potable water? Yes

No

#### Β. **Reuse Data**

1. Provide data on the types of recycling and reuse activities implemented during the current reporting period.

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

#### C. Wastewater System Data Comment

Provide additional comments about wastewater system data below.

You have completed the Utility Profile. Save and Print this form to submit with your Plan. Continue with the Water **<u>Conservation Plan Checklist</u>** to complete your Water Conservation Plan.

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Exhibit B

Water Conservation Plan Goals Table (TWDB-1964)

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

Facility Name: \_\_\_\_\_

Water Conservation Plan Year:

	Historic 5yr Average	Baseline	5-yr Goal for year	10-yr Goal for year
Total GPCD <sup>1</sup>				
Residential GPCD <sup>2</sup>				
Water Loss (GPCD) <sup>3</sup>				
Water Loss (Percentage) <sup>4</sup>	%	%	%	%

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

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

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

4. Water Loss Percentage = (Total Water Loss ÷ Total Gallons in System) x 100; or (Water Loss GPCD ÷ Total GPCD) x 100

07/29/2020

Exhibit C

Utility Profile and Water Conservation Plan Report (TCEQ-10218)



### Texas Commission on Environmental Quality Water Availability Division MC-160, P.O. Box 13087 Austin, Texas 78711-3087 Telephone (512) 239-4691, 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) 239-4691.

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 San Augustine		
Address:	301 S. Harrison Street, San A	ugustine, Texas 75972	
Telephone Number:	(936) 275.2121	Fax: (936) 275.9146	
Water Right No.(s):	ADJ 4409/ CCN No. 10431	/ PWS No. 2030001	
Regional Water Planning Group:	I East Texas Regional Water	Planning Group	
Water Conservation Coordinator (or person responsible for implementing conservation			
program):	John Camp	Phone: (936) 275.2121	
Form Completed by:	Siglinda West		
Title:	Regulatory Compliance Specialist		
Signature:	Siglinda West	Date:07/29/.2020	

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).
- Service area size (in square miles): 5.131 (Please attach a copy of service-area map)
- 3. Current population of service area: 3,558 (includes wholesale population of 1,450)
- 4. Current population served for:
  - a. Water 3,558
  - b. Wastewater 2,108

5.	Population served for previous five	
	years:	

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

Year	Population		Year	Population
2019	2108		2020	2121
2018	2108		2030	2121
2017	2108		2040	2121
2016	2108		2050	2121
		-		
2015	2108		2060	2121

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

Projected populations taken from the 2021 Regional Water Plan-Municipal water User Group. (Excludes population for wholesale community)

#### *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. <u>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 <u>at: http://www.twdb.texas.gov/conservation/doc/SB181Guidance.pdf</u></u>

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

	Historic 5- year Average	Baseline	5-year goal for year 2024	10-year goal for year 2029
Total GPCD	183.48	183	178	165
Residential GPCD	124.11	124	120	112
Water Loss GPCD	25.40	25	22	20
Water Loss Percentage	14	14	12	12

Notes:

Total GPCD = (Total Gallons in System ÷ Permanent Population) ÷ INCLUDES WHOLESALE POPULATION 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  $\boxtimes$  Residential or  $\square$  Commercial?

Treated Water Users	Metered	Non-Metered	Totals
Residential	1097		1097
Single-Family	745		745
Multi-Family	143		143
Commercial	209		209
Industrial/Mining		00	
Institutional		00	
Agriculture		00	
Other/Wholesale			

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

Year	2019	2018	2017
Treated Water Users	1097	1117	1109
Residential	-20	+8	+8
Single-Family	-15	+3	+11
Multi-Family	0	0	0
Commercial	-5	+5	-3
Industrial/Mining	0	0	
Institutional	0	0	0
Agriculture	0	0	0
Other/Wholesale	-1	2	2

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

Customer	Use (1,000 gal/year)	Treated or Raw Water
	0	
San Augustine WSC	84350000	Treated

#### 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  $\boxtimes$  diverted or  $\square$  treated water.

Year	2019	2018	2017	2016	2015
Month					
January	26,012	27,947	20,650	17,460	16,482
February	21,908	18,913	15,172	15,582	18,789
March	21,292	20,123	16,461	16,223	20,709
April	22,558	20,297	15,583	15,716	18,832
May	22,113	21,849	17,551	16,908	16,410
June	21,547	21,949	18,299	16,359	14,737
July	23,169	24,255	19,322	18,404	17,686
August	22,740	25,179	20,729	17,810	18,911
September	21,040	22,874	22,018	18,225	17,119
October	18,146	24,874	17,450	18,565	17,349
November	20,552	25,715	15,996	19,472	16,599
December	23,717	26,732	22,167	22,156	18,059
Totals	264,794	280,707	221,398	212,880	211,682

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).

Meters at the Surface Water Treatment Plant.

	2019	2018	2017	2016	2015
Account Types	95292	110,039	93,232	79,575	99,353
Residential					
Single-Family	43672	39,726	36,662	37,221	38,505
Multi-Family	7389	8,557	7,338	7,468	7,453
Commercial	44231	61,756	49,232	34,886	53,395
Industrial/Mining	0	0	0		0
Institutional	0	0	0	0	0
Agriculture	0	0	0	0	0
Other/Wholesale	84350	73200	64810	59237	46738

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

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 %
2019	28,477,457	18.39
2018	31,685,947	16.98
2017	9,652,423	7.92
2016	25,652,038	20.56
2015	3,363,950	2.95

#### 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	San Augustine City Lake	2,750 Ac/ft.

Groundwater	Aquifer	300 gpm
Other		

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

- 1. Design daily capacity of system (MGD): 2.2 MGD
- 2. Storage capacity (MG): 1.6 MG
  - a. Elevated 1.0 MG
  - b. Ground 0.85 MG
- 3. If surface water, do you recycle filter backwash to the head of the plant?

☐ Yes ☐ No If yes, approximate amount (MGD): N/A

#### IV. WASTEWATER SYSTEM DATA

- *A. Wastewater System Data (if applicable)* 
  - 1. Design capacity of wastewater treatment plant(s) (MGD): 0.90 MGD
  - 2. Treated effluent is used for  $\Box$  on-site irrigation,  $\Box$  off-site irrigation, for  $\Box$  plant washdown, and/or for  $\Box$  chlorination/dechlorination.

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.

The City of San Augustine Wastewater Treatment Plant (TPDES No. WQ0010268001/ NPDES No. TX0022349) is located approximately 5,000 feet northeast of the intersection of U. S. Highway 96 and Farm-to-Market Road 147, in the City of San Augustine, in San Augustine County. The plant treats wastewater from the City of San Augustine and its customers. The effluent flows from the plant to an unnamed tributary; thence to Ayish Bayou, thence to Sam Rayburn Reservoir in Segment No. 0610 of the Neches River Basin.

- 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	2019	2018	2017	2016	2015
Month					
January	36.1	11.6	18.07	19.15	30.03
February	26.7	32.6	10.79	15.73	13.75
March	23.2	38.7	11.25	32.59	37.58
April	21.5	30.4	12.5	24.27	31.52
May	35.6	11.8	24.3	22.86	39.80
June	37.1	10.4	23.7	22.26	26.04
July	17.5	10.5	14.56	10.65	11.39
August	11.3	12.72	24.23	20.04	8.29
September	8.75	12.48	21.28	11.54	7.66
October	8.51	23.92	9.24	8.15	8.31
November	7.92	31.72	8.31	7.07	15.63
December	8.72	37.60	8.01	10.32	21.02
Totals	310.00	265.86	186.45	204.69	252.02

# 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.

Exhibit D

Water Rate Structure

Exhibit E

Plan Adoption Ordinance

ORDINANCE NO.\_\_\_\_\_

## AN ORDINANCE OF THE CITY OF SAN AUGUSTINE, TEXAS, ADOPTING THE 2021 AMENDMENT TO THE WATER CONSERVATION AND EMERGENCY WATER MANAGEMENT PLAN

WHEREAS, it is necessary that the Water Conservation and Emergency Water Management Plan be updated to incorporate additional Texas Commission on Environmental Quality and Texas Water Development Board requirements as provided in Texas Administrative Code - Title 30 - §288 pertaining to Water Conservation and Drought Contingency Plans; and

**WHEREAS,** the City Council of the City of San Augustine believes that it is in the best interest of the City to update its current Water Conservation and Emergency Water Management Plan;

# NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SAN AUGUSTINE, TEXAS:

**SECTION 1.** That the 2021 update to the Water Conservation and Emergency Water Management Plan attached hereto and made part hereof for all purposes be, and the same is hereby adopted as the official policy of the City of San Augustine.

**SECTION 2.** That all ordinances of the City of San Augustine in conflict with the provisions of this ordinance are, and the same hereby, repealed and all other ordinances of the City of San Augustine not in conflict with the provisions of this ordinance shall remain in full force and effect.

**SECTION 3.** Should any paragraph, sentence, 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 declared to be invalid, illegal, or unconstitutional.

**SECTION 4.** That this ordinance take effect immediately from and after its passage and the publication of the caption, as the law in such cases provide.

APPROVED AND ADOPTED this	dav of	. 2021.
APPROVED AND ADOPTED UNIS	uay or	, 2021.

SIGNED:

Leroy Hughes Mayor

ATTEST:

John Camp City Manager

Exhibit F

**Coordination with Regulating Agencies** 



August 1, 2020

Region I ETRWPG C/O City of Nacogdoches Attn: Stacy Corley P.O. Box 635030 Nacogdoches, Texas 75963-5030

Re: City of San Augustine Updated Water Conservation Plan and Drought Contingency Plan KSA Project No. SAU.012

To whom it may concern,

Please find enclosed the updated Water Conservation Plan and Drought Contingency Plan required by the TCEQ and TWDB for the City of San Augustine, Texas. Included in this package is the Conservation Plan, Drought Plan, Updated Ordinance, appendices and exhibits required by regulatory agencies. I have transmitted one (1) hardcopy of this document, as required, for your review.

If you would please send back an acknowledgment of receipt of the enclosed Plan for the Company's records.

If you have any comments regarding the enclosed Conservation Plan for the City of San Augustine please contact me, Sigi West, Regulatory Compliance Specialist at (903) 581-8141, ext. 1314.

Sincerely,

Siglinda West KSA

KSA Siglinda M. West Regulatory Compliance Specialist



August 30, 2020

Texas Commission for Environmental Quality Attn: Resource Protection Team (MC-160) P.O. Box 13087 Austin, Texas 78711-3087

Via Email: wcp@tceq.Texas.gov

Re: City of San Augustine Updated Water Conservation Plan and Drought Contingency Plan KSA Project No. SAU.012

To whom it may concern,

Please find enclosed the updated Water Conservation Plan and Drought Contingency Plan required by the TCEQ and TWDB for the City of San Augustine, Texas. Included in this package is the Conservation Plan, Drought Plan, Updated Ordinance, appendices and exhibits required by regulatory agencies. I have transmitted one (1) digital of this document, as required, for your review.

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If you have any comments regarding the enclosed Conservation Plan for the City of San Augustine please contact me, Sigi West, Regulatory Compliance Specialist at (903) 581-8141. Ext. 1314.

Sincerely,

Siglinda West

KSA Siglinda M. West Regulatory Compliance Specialist



August 30, 2020

Texas Water Development Board Attn: Water Conservation Plan Team 1700 N. Congress Ave. P.O. Box 13231 Austin, Texas 78711-3231

Re: City of San Augustine Updated Water Conservation Plan and Drought Contingency Plan KSA Project No. SAU.012

To whom it may concern,

Please find enclosed the updated Water Conservation Plan and Drought Contingency Plan required by the TCEQ and TWDB for the City of San Augustine, Texas. Included in this package is the Conservation Plan, Drought Plan, Updated Ordinance, appendices and exhibits required by regulatory agencies. I have transmitted one (1) digital of this document, as required, for your review.

If you would please send back an acknowledgment of receipt of the enclosed Plan for the Company's records.

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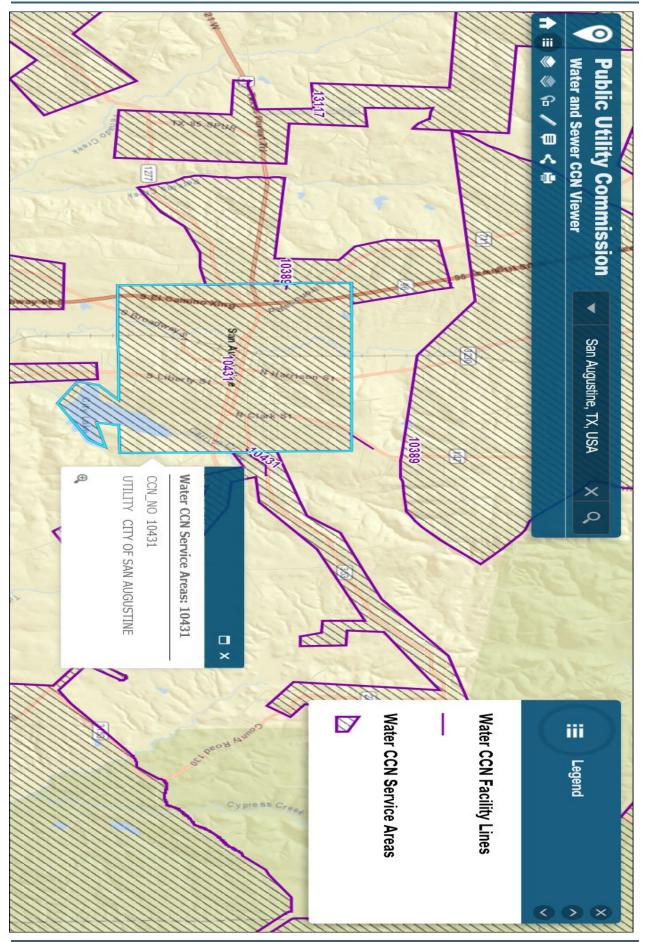
Sincerely,

Siglinda West

KSA Siglinda M. West Regulatory Compliance Specialist

Exhibit G

Water Service Area Map



Appendix A

TECQ Water Conservation Plan Rules (30 TAC 288, Subchapter A)

# **Texas Administrative Code**

<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;

single family;

- (II) multi-family;
- (ii) commercial;
- (iii) institutional;
- (iv) industrial;
- (v) agricultural; and,
- (vi) wholesale.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

revision of its water conservation plan every five years to coincide with the regional water planning group.

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

Appendix B

TECQ Drought Contingency Plan Rules (30 TAC 288, Subchapter B)

# **Texas Administrative Code**

<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 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

Appendix C

Texas Water Code Water Allocation (TWC Section 11.039)

#### TEXAS WATER CODE

## TITLE 2. WATER ADMINISTRATION SUBTITLE B. WATER RIGHTS

## CHAPTER 11. WATER RIGHTS SUBCHAPTER A. GENERAL PROVISIONS Section 11.039

Sec. 11.039. DISTRIBUTION OF WATER DURING SHORTAGE. (a) If a shortage of water in a water supply NOT covered by a water conservation plan prepared in compliance with Texas Natural Resource Conservation Commission or Texas Water Development Board rules results from drought, accident, or other cause, the water to be distributed shall be divided among all customers pro rata, according to the amount each may be entitled to, so that preference is given to no one and everyone suffers alike.

(b) If a shortage of water in a water supply covered by a water conservation plan prepared in compliance with Texas Natural Resource Conservation Commission or Texas Water Development Board rules results from drought, accident, or other cause, the person, association of persons, or corporation owning or controlling the water shall divide the water to be distributed among all customers pro rata, according to:

(1) the amount of water to which each customer may be entitled; or

(2) the amount of water to which each customer may be entitled, less the amount of water the customer would have saved if the customer had operated its water system in compliance with the water conservation plan.

(c) Nothing in Subsection (a) or (b) precludes the person, association of persons, or corporation owning or controlling the water from supplying water to a person who has a prior vested right to the water under the laws of this state.

Amended by Acts 1977, 65th Leg., p. 2207, ch. 870, Sec. 1, eff. Sept. 1, 1977; Acts 2001, 77th Leg., ch. 1126, Sec. 1, eff. June 15, 2001.