Water Conservation &
Emergency Water Management Plan

for

City of Livingston
(Polk County, Texas)

KSA Project Number LIV.004

Revision	Description	By	Date
0	Initial Adoption	-	06/2005
1	2009 Revision		07/2009
2	2014 Revision		04/2014
3	2019 Revision	KSA	02/2020

Prepared by:

211 E. Shepherd Avenue, Suite 205
Lufkin, Texas 75901
T: 936-637-6061
www.ksaeng.com
TBPE Firm Registration No. F-1356

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Table of Contents

List of Tables

List of Exhibits

List of Appendices

1 Water Conservation Plan

1.1 Introduction

The City of Livingston is the largest city in Polk County, Texas. It is located at 200 West Church Street Livingston, Texas 77351. Livingston is located approximately 65 miles north of Houston, Texas. According to the 2010 Census, Livingston had a population of 5,335 and is the county seat of Polk County.

The City has a formal combined Water Conservation and Drought Contingency Plan entitled "Water Conservation and Emergency Water Demand Management Plan". The original document was prepared in 2005. The City Council adopted this Plan via Ordinance No. A-676 on May 10, 2005 and amended the Plan on April 14, 2009 (Ordinance A-735), again on July 8, 2014 (Ordinance No. A-785), and again on May 14, 2019 (Ordinance No. A-812), as required by TCEQ and TWDB.

1.2 Water Utility Profile

Profile data for the water utility is provided in Exhibit A. Exhibit A includes population and customer data, water use data, water supply system data and wastewater system data.

1.3 Administrative Information

1.3.1 Owner Information

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

City of Livingston
200 West Church Street
Livingston, Texas 77351-3213
936.327.4311– Telephone
936.327.7608– Fax
Contacts: Ms. Judy Cochran, Mayor
Mr. Billy Wiggins, City Manager
Ms. Ellie Monteaux, TRMC, CMC, City Secretary
Ms. Patricia Crawford

1.3.2 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
Contact: Mr. C. Daniel "Danny" Hays, P.E., Project Manager or
Siglinda West, Regulatory Compliance Specialist

1.4 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)(8) – 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

1.5 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 residential, commercial, public and institution 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 population of 9,296 including 596 commercial and 2 institutional customers. Table 1-1 shows the calculated per capita water usage (gpcd) for the previous five years (2014 – 2018).

Table 1-1 Per Capita Water Usage

YEAR	PER CAPITA WATER USAGE (GPCD)
2018	237
2017	402
2016	393
2015	348
2014	347
5-year Average	345

The City has attempted to make reductions in total per capita use due to an implementation of the Best Management Practices and ongoing infrastructure improvements. The baseline per capita water usage for this plan will be set at the 2018 value of 345 gpcd. (2018 gpcd includes correctional unit population)

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 the loss and waste of water
- To improve the efficiency in the use of water
- To establish a 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 Livingston:

1. Education and information will be provided on a yearly basis to all customers presenting non-wasteful 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 per capita use can be realized through education programs. This 2% goal equates to a 6.9 gpcd reduction (5 year average annual gpcd of 345 multiplied by 2%).
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 27.6% of the total annual retail use over the last 5 years and for 2018 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 59 gpcd and the 2018 seasonal per capita usage is 68 gpcd. The resulting gpcd seasonal use reduction provides approximately 4.76 gpcd in water savings (68 multiplied by 7%).
3. Unaccounted-for water from water production to the consumers on the system averaged 23% (79 gpcd) over the previous 5 years and in 2018 equaled 26.91% (64 gpcd). Water loss should be reduced to no more than 15%. The associated potential savings by reducing unaccounted for water loss is 6.9 gpcd (derived from multiplying 2018 annual per capita water use of 64 gpcd by the difference in reduction of water loss). 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. 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 use by 19 gpcd (6.9+4.76+6.9). This would reduce the 2018 water loss per capita from 111 to 92 gpcd. The City intends to meet one-half of this goal of 102.5 gpcd, within 5 years of plan adoption (2024) and the second-half of this goal, 92 gpcd, within 10 years of plan adoption (2029). The goals will be accomplished by monitoring the water usage, billings and meter readings, replacing over/ under reading meters, continuing with distribution system replacements and leak detection program. The plan shall measure progress annually, and evaluate progress toward the set goals.

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 Water Conservation Plan TCEQ-10218) can be found in Exhibit C.

1.6 Source Water Metering

The City of Livingston purchases treated water from the Trinity River Authority (TRA) via a long-term water purchase contract and via three (3) "city owned" water wells that are used for emergency and high water demands. The delivery points for TRA are metered. The wells are metered prior to distribution system. 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.

1.7 Universal 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 Livingston, including most municipal facilities, are metered.

This requirement for universal metering of water users will be continued. 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 typically replaces small residential meters based on abnormally high or low registered water usage, feedback from meter readers, and when the meter register appears broken or scratched. The city will also continue with a meter change out program. This program or best management practice strategy is to periodically change out older meters with new standard meters, of the same branding. The program will have the city changing out approximately 2% of meters annually. All meters will be of the same manufacturer. Water supply metering devices shall have an accuracy of plus or minus 5.0%.

1.8 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 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 calculate the amount of unaccounted-for water on an annual basis.

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, 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 for an unaccounted water level of less than 15%, with an ultimate goal of less than 10% water loss, as required by the TRA wholesale water contract.

1.9 Public Education

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

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

1.10 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.

1.11 Reservoir System Operations Plan (Not Applicable)

1.12 Implementation and Enforcement

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

The Mayor will be responsible for implementation and administration of the Water Conservation 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

Elements of this Water Conservation and Emergency Water Management Plan which require enforcement (such as the universal metering requirements) are generally handled by incorporation into municipal ordinances.

1.13 Coordination with the Regional Water Planning Group

The service area of the City is located within the Region H Water Planning Area. The City will provide a copy of this Water Conservation and Emergency Water Management Plan to the Region H Water Planning Groups as required by TWDB.

1.14 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.

1.15 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) 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.

1.16 Wholesale Water Contracts

The City of Livingston does purchase wholesale water from Trinity River Authority (TRA) under a whole sale water contract. The wholesale contract is for purchase of 3,363 acre feet and a reserve amount of 5,045 acre feet of water per year from Lake Livingston owned and operated by Trinity River Authority.

The City does not currently sell wholesale water to any other entities under a wholesale water supply contract. Should the City enter into any future wholesale water supply contracts the City will ensure that said contracts contain provisions which require the other entity to either, (1) adopt the provisions of the City's Water Conservation and Emergency Water Management Plan, or (2) develop and adopt a plan that has been approved by Trinity River Authority (TRA), the TCEQ and/or the TWDB.

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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 planning, 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 purchased via wholesale water contract with the Trinity River Authority (TRA) to meet the needs of its customers. Given the current supply facilities, the City must be prepared to respond to any emergency water supply situation. The city is required through the TRA Water Contract to meet or exceed the trigger levels published in the TRA Water Conservation and Drought Contingency Plan.

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.

Table 2-1 Trigger Conditions

STAGE	TRIGGER CONDITIONS	RESPONSE MEASURES
Stage 1: Mild Water Shortage Alert Voluntary Water Use Curtailment	• Water use in excess of 1.245 million gallons or 80% of daily average for three consecutive days. • If the TRA Reservoir declines below 126.5 mean sea level and TRA notifies city of Stage 1 trigger conditions	• Formal public notification by City of Stage 1 conditions. • Initiate public information efforts. • Notify major commercial and industrial water users. • Increase water supply and demand monitoring. • Increase leak detection and repair efforts..
Stage 2: Moderate Water Shortage Alert Mandatory Water Use Curtailment	• Water use in excess of 1.400 million gallons or 90 % of daily average for three consecutive days,. • If the TRA Reservoir declines below 124.0 mean sea level and TRA notifies city of Stage 2 trigger conditions	• Continue implementation of all relevant actions in preceding stage. • Formal public notification of Stage 2-Moderate water shortage conditions and request for mandatory water use curtailment. • Water waste prohibited. Car washing, window washing, pavement washing, etc. prohibited except when a bucket is used. • 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.
Phase 3: Severe Water Shortage Alert Mandatory Water Use Curtailment	• Water pumpage in excess of 1.557 million gallons or 100% of daily average for three consecutive days, • If the TRA Reservoir declines below 121.4 mean sea level for 15 days and TRA notifies city of Stage 3 trigger conditions • Failure of storage tanks or other major system component which reduce the	• Maintain pertinent preceding stage actions. • Water waste prohibited. Car washing, window washing, pavement washing, etc. prohibited except when 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.

STAGE	TRIGGER CONDITIONS	RESPONSE MEASURES
	availability of water to less than 50% of the average daily usage or causes health or safety hazard.	• TRA will initiate Section 3.9 Pro-rata water distribution per the wholesale water contract with the City.
Stage 4: Emergency Water Shortage Alert Mandatory Water Use Curtailment	• Major water line breaks, or pump or system failure occur, when cause unprecedented loss of capability to provide water service. • Natural or man-made contamination of the water supply source • Any emergency drawdown of the reservoir for structural integrity purposes; or • Any condition exists which prevents or imminently threatens to prevent withdrawing sufficient water from Lake Livingston. • TRA notifies of initiation of Stage 4 Emergency Conditions	• Maintain pertinent preceding stage actions. All non-essential outdoor water uses prohibited. • Assess the severity of the problem and identify the actions needed and time required to solve the problem • If appropriate, notify TRA, the City, County, and or State emergency response officials for assistance. • Undertake necessary actions, including repairs and/or clean-up as needed. • Prepare a post-event assessment report on the incident and critique of emergency response procedures and actions • TRA will initiate Section 3.9 of the wholesale water contract and progress with the Pro-Rata water disbursement per the TRA Water contract.
Termination of Water Shortage	• Return of system operation to below current phase trigger levels for fifteen (15) consecutive days. • Correction of problem resulting in Stage termination	• Formal Public Notification That The Water Shortage Conditions And Measures Taken In Response Are Terminated.

2.4 Future Wholesale Contracts

The City shall include a provision in every wholesale water contract entered into or renewed, including contract extensions, after adoption of this Water Conservation and Emergency Water Management Plan that in case of 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.
- Posted to City of Livingston's website.
- Circulated to local newspaper and radio stations.
- 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 and/ or TRA 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 a resolution (see Exhibit E). By passage of this resolution and subsequent adoption of this plan, the City Manager 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 system as outlined in this plan after adoption. 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 and are typically caused by outdoor watering. Simple public information reports and commercial notification of an impending problem is often sufficient to obtain approximately a 5% voluntary reduction in average daily water use.(2,203,465 x .05%).Reduce 164.39 gpcd to 156.17 gpcd.

2.9.2 Stage 2: Moderate Water Use Curtailment

Stage 2 - Moderate water shortage alert is a mandatory water use curtailment alert and is most likely to occur during summer when water use is at its greatest and are typically caused by outdoor watering. Formal public notification of a water shortage and request for mandatory curtailment is often sufficient to obtain approximately a 15% mandatory reduction in average daily water use. (2,203,465 x 0.15%). Reduce 164.39 gpcd to 139.73 gpcd.

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 but could result from unprecedented water use or large water main leaks. Formal public notification of a water shortage and request for mandatory curtailment is often sufficient to obtain a 25% mandatory reduction in average daily water use. (2,203,465 x 0.25). Reduce 164.39 gpcd to 123.29 gpcd.

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 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 any mandatory stage initiation.

2.9.4 Stage 4: Water System Emergency

Stage 4 - Water System Emergency alerts will most likely occur due to major infrastructure failure. 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 solve the problem, including prohibitions against non-essential water uses commensurate with the severity of the emergency condition.
- If appropriate, notify City, County, and or State emergency response officials for assistance.
- 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.
- Prepare a post-event assessment report on the incident and critique of emergency response procedures and actions
- Implement a residential drought/emergency surcharge of $10.00/1,000 gallons of usage in excess of 6,000 gallons/household as detailed in the Water Allocation rates in this document.

Customers may seek a variance for additional gallons based on the number of persons in the household. The city will assume a household of two (2) unless the customer notifies the city of additional persons in the household. It is the responsibility of the customer to notify the city and to seeks a variance per Section 2.10 of this document.

2.10 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.

2.11 Pro Rata Water Allocation

In the event that water shortage conditions threaten public health, safety, and welfare, the Mayor or his/her designee is here by authorized to allocate water pursuant to the Trinity River Authority's water allocation plan referenced in Section 3.9 of the TRA Water Conservation and Drought Contingency Plan and per the Texas Water Code Section 11.039. Requirements and restrictions for Pro Rata Water Allocation can be initiated during Stage 3 and Stage 4 of the Plan or when TRA General Manager, or his designee initiate pro rata water deliveries for wholesale customers according to the procedures specified in Section 3.9 of TRA Drought Contingency Plan. The water shall be divided in accordance with Texas Water Code, Section 11.039 and as follows:

Single-Family Residential Customers

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

Persons per Household	Gallons per month
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 Livingston 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 Livingston 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 Livingston 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 Livingston 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 Livingston of a reduction in the number of person in a household shall be fined not less than $ 10.00.

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 Livingston 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 Livingston 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 Livingston 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 Livingston of a reduction in the number of person in a household shall be fined not less than $ 0.00. 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 Livingston 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 _70%_ 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 _60%_ 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 __12____ 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 _12__ 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 Livingston 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.

2.12 Enforcement

(a) No person shall knowingly or intentionally allow the use of water from the City of Livingston for residential, commercial, institutional, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provision of this Plan, or in an amount in excess of that permitted by the drought response stage in effect at the time pursuant to action taken by Mayor, City Manager, 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. First offense shall be a fine equal to fifty dollars ($50.00), a second offense shall be fine of seventy five dollars ($75.00), and a third offense shall have a fine of one hundred dollars ($100.00) **and** If a person is convicted of three or more distinct violations of this Plan, the Mayor, City Manager, shall, upon due notice to the customer, be authorized to discontinue water service to the premises where such violations occur. Services discontinued under such circumstances shall be restored only upon payment of a re-connection charge, hereby established at one hundred dollars $100.00, **and** any other costs incurred by the City of Livingston in discontinuing service. In addition, suitable assurance must be given to the Mayor, City Manager, that the same action shall not be repeated while the Plan is in effect. Compliance with this plan may also be sought through injunctive relief in the district court.

(c) Any person, including a person classified as a water customer of the City of Livingston, 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 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 Livingston, police officer, or other employee designated by the Mayor, City Manager, 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 15 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 in municipal court, a warrant for his/her arrest may be issued. A summons 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)

Texas Water Development Board

UTILITY PROFILE FOR RETAIL 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: City of Livingston

Public Water Supply Identification Number (PWS ID): TX1870002

Certificate of Convenience and Necessity (CCN) Number: N/A

Surface Water Right ID Number: N/A

Wastewater ID Number: WQ0010208.001

Completed By: Billy Wiggins Title: City Manager

Address: 200 W. Church City: Livingston Zip Code: 77351-321

Email: citymanager@livingston.net Telephone Number: 936.327.4311

Date: 4/29/2019

Regional Water Planning Group: H Map

Groundwater Conservation District: N/A Map

Check all that apply:

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

Texas Water Development Board

Section I: Utility Data

A. Population and Service Area Data

1. Current service area size in square miles: 9
(Attach or email a copy of the service area map.)

2. Provide historical service area population for the previous five years, starting with the most current year.

Year	Historical Population Served By Retail Water Service	Historical Population Served By Wholesale Water Service	Historical Population Served By Wastewater Service
2018	9,296		8,546
2017	5,335		4,585
2016	5,335		4,585
2015	5,335		4,585
2014	5,335		4,585

3. Provide the projected service area population for the following decades.

Year	Projected Population Served By Retail Water Service	Projected Population Served By Wholesale Water Service	Projected Population Served By Wastewater Service
2020	9,401		8,651
2030	10,115		9,365
2040	10,676		9,926
2050	11,155		10,405
2060	11,545		10,795

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

Based on 2021 Regional Water Plan Population Projections 2020-2070; Regional Water Planning Group H plus Texas Department of Criminal Justice and IAH Detention Center populations.

Texas Water Development Board

B. System Input

Provide system input data for the previous five years.

Total System Input = Self-supplied + Imported – Exported

Year	Self-supplied Water in Gallons	Purchased/Imported Water in Gallons	Exported Water in Gallons	Total System Input	Total GPCD
2018		804,265,000		804,265,000	237
2017		783,696,000		783,696,000	402
2016		765,176,000		765,176,000	393
2015		678,095,000		678,095,000	348
2014		676,494,000		676,494,000	347
Historic 5-year Average	0	741,545,200	0	741,545,200	345

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

1. Designed daily capacity of system 7,500,000 **gallons** per day.
2. Storage Capacity:
   Elevated 1,950,000 **gallons**
   Ground 1,350,000 **gallons**

3. List all current water supply sources in gallons.

Water Supply Source	Source Type*	Total Gallons
Lake Livingston/ TRA	Contract	3,363
	Choose One	
	Choose One	
	Choose One	
	Choose One	
	Choose One	

Reserved Amt. 5,045

*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

Texas Water Development Board

D. Projected Demands

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

Year	Population	Water Demands (gallons)
2020	9,469	845,258,601
2021	9,597	854,089,175
2022	9,725	862,919,748
2023	9,853	871,750,322
2024	9,981	880,580,895
2025	10,109	889,411,469
2026	10,237	898,242,042
2027	10,365	907,072,616
2028	10,493	915,903,190
2029	10,621	924,733,764

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

Using TWDB Water Use published projections in Region H Water Plan Population x 220 total GPCD = water demands + 128 annually.

Texas Water Development Board

E. High Volume Customers

1. List the annual water use, in gallons, for the five highest volume **RETAIL customers**. Select one of the following water use categories to describe the customer; choose Residential, Industrial, Commercial, Institutional, or Agricultural.

Retail Customer	Water Use Category*	Annual Water Use	Treated or Raw
TDCJ	Institutional	261,267,000	Treated
IAH Detention Center	Institutional	31,058,000	Treated
CHI St. Lukes Hospital	Commercial	15,522,000	Treated
Livingston ISD	Commercial	12,134,000	Treated
Pine Hill Apartments	Commercial	6,599,000	Treated

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

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

Wholesale Customer	Water Use Category*	Annual Water Use	Treated or Raw
N/A	Choose One		Choose One
N/A	Choose One		Choose One
N/A	Choose One		Choose One
N/A	Choose One		Choose One
N/A	Choose One		Choose One

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

F. Utility Data Comment Section

Provide additional comments about utility data below.

City of Livingston has a wholesale water contract with Trinity River Authority (TRA). TRA operates and owns the water treatment plant and raw water pump station located on Lake Livingston. The city has a long term contract for 3,363 acre feet purchased and 5,045 acre feet under reserve with TRA.

Texas Water Development Board

Section II: System Data

A. Retail Connections

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

Water Use Category*	Active Retail Connections			
	Metered	Unmetered	Total Connections	Percent of Total Connections
Residential – Single Family	1,839		1,839	66%
Residential – Multi-family (units)	330		330	12%
Industrial			0	0%
Commercial	596		596	22%
Institutional	2		2	0%
Agricultural			0	0%
TOTAL	2,767	0	2,767	

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

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

Water Use Category*	Net Number of New Retail Connections				
	2018	2017	2016	2015	2014
Residential – Single Family	17	12	11	7	12
Residential – Multi-family (units)	0	0	0	0	0
Industrial	0	0	0	0	0
Commercial	8	10	9	9	6
Institutional	0	0	0	0	0
Agricultural	0	0		0	0
TOTAL	25	22	20	16	18

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

Texas Water Development Board

B. Accounting Data

For the previous five years, enter the number of gallons of RETAIL water provided in each major water use category.

Water Use Category*	Total Gallons of Retail Water				
	2018	2017	2016	2015	2014
Residential - Single Family	102,630,000	100,043,000	104,968,000	107,216,000	106,136,000
Residential – Multi-family	9,584,000	4,762,000	8,541,000	7,656,000	9,171,000
Industrial					
Commercial	154,062,000	149,150,000	157,609,000	145,345,000	149,855,000
Institutional	301,889,000	292,456,000	296,452,000	272,093,000	273,835,000
Agricultural					
TOTAL	568,165,000	546,411,000	567,570,000	532,310,000	538,997,000

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

C. Residential Water Use

For the previous five years, enter the residential GPCD for single family and multi-family units.

Water Use Category*	Residential GPCD				
	2018	2017	2016	2015	2014
Residential - Single Family	63	49	53	53	54
Residential – Multi-family	5	5	5	5	5

D. Annual and Seasonal Water Use

1. For the previous five years, enter the gallons of treated water provided to RETAIL customers.

Month	Total Gallons of Treated Retail Water				
	2018	2017	2016	2015	2014
January	68,318,000	60,634,000	53,211,000	52,378,000	54,678,000
February	54,413,000	53,383,000	52,672,000	47,264,000	49,049,000
March	60,040,000	60,120,000	56,599,000	52,910,000	53,903,000
April	64,293,000	65,164,000	56,959,000	51,481,000	56,120,000
May	68,227,000	71,644,000	65,008,000	54,098,000	58,802,000
June	70,997,000	60,190,000	69,427,000	56,163,000	54,971,000
July	76,413,000	67,414,000	77,973,000	66,573,000	62,265,000
August	74,587,000	72,969,000	68,634,000	66,861,000	65,555,000
September	68,561,000	68,137,000	68,880,000	60,834,000	56,661,000
October	75,310,000	69,511,000	70,933,000	62,442,000	58,164,000
November	63,870,000	68,106,000	64,314,000	54,125,000	54,767,000
December	59,236,000	66,424,000	60,566,000	52,966,000	51,559,000
TOTAL	804,265,000	783,696,000	765,176,000	678,095,000	676,494,000

2. For the previous five years, enter the gallons of raw water provided to RETAIL customers.

Month	Total Gallons of Raw Retail Water				
	2018	2017	2016	2015	2014
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	0	0
May	0	0	0	0	0
June	0	0	0	0	0
July	0	0	0	0	0
August	0	0	0	0	0
September	0	0	0	0	0
October	0	0	0	0	0
November	0	0	0	0	0
December	0	0	0	0	0
TOTAL	0	0	0	0	0

3. Summary of seasonal and annual water use.

Water Use	Seasonal and Annual Water Use					Average in Gallons
	2018	2017	2016	2015	2014	
Summer Retail (Treated + Raw)	221,997,000	200,573,000	216,034,000	189,597,000	182,791,000	202,198,400 5yr Average
TOTAL Retail (Treated + Raw)	804,265,000	783,696,000	765,176,000	678,095,000	676,494,000	741,545,200 5yr Average

E. 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 in GPCD	Water Loss as a Percentage
2018	216,462,688	64	27%
2017	222,726,800	114	28%
2016	169,708,718	87	22%
2015	129,652,813	67	19%
2014	124,159,000	64	18%
5-year average	172,542,004	79	23%

Texas Water Development Board

F. Peak Water Use

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

Year	Average Daily Use (gal)	Peak Day Use (gal)	Ratio (peak/avg)
2018	1,556,616	2,123,000	1.36
2017	1,497,016	2,312,000	1.54
2016	1,554,986	2,132,000	1.37
2015	1,458,383	1,963,000	1.35
2014	1,476,704	1,946,300	1.32

G. Summary of Historic Water Use

Water Use Category	Historic 5-year Average	Percent of Connections	Percent of Water Use
Residential SF	104,198,600	66%	0%
Residential MF	7,942,800	12%	0%
Industrial	0	0%	0%
Commercial	151,204,200	22%	0%
Institutional	287,345,000	0%	0%
Agricultural	0	0%	0%

H. System Data Comment Section

Provide additional comments about system data below.

2018 gpcd includes the correctional facility populations.

Texas Water Development Board

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 Water Conservation Plan Checklist to complete your Water Conservation Plan.

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

1. Design capacity of wastewater treatment plant(s): 2,250,000 **gallons** per day.

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

Water Use Category*	Active Wastewater Connections			
	Metered	Unmetered	Total Connections	Percent of Total Connections
Municipal	1,735		1,735	78%
Industrial			0	0%
Commercial	477		477	22%
Institutional	2		2	0%
Agricultural			0	0%
TOTAL	2,214	0	2,214	

2. What percent of water is serviced by the wastewater system? 80 %

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

Month	Total Gallons of Treated Wastewater				
	2018	2017	2016	2015	2014
January	46,255,000	47,523,000	44,779,000	44,426,000	39,504,000
February	51,118,000	38,914,000	39,543,000	33,406,000	38,236,000
March	48,921,000	43,788,000	46,380,000	51,045,000	42,135,000
April	47,677,000	41,898,000	47,254,000	44,459,000	38,414,000
May	43,186,000	43,001,000	52,917,000	50,486,000	45,212,000
June	44,223,000	44,691,000	46,121,000	40,579,000	40,893,000
July	44,716,000	43,021,000	41,468,000	37,945,000	40,100,000
August	43,850,000	46,125,000	48,775,000	38,605,000	39,410,000
September	44,761,000	44,555,000	42,302,000	38,330,000	40,814,000
October	49,597,000	42,599,000	42,096,000	40,806,000	39,974,000
November	47,586,000	40,406,000	39,811,000	42,252,000	37,830,000
December	56,938,000	43,571,000	44,002,000	44,563,000	41,170,000
TOTAL	568,828,000	520,092,000	535,448,000	506,902,000	483,692,000

4. Can treated wastewater be substituted for potable water?

○ Yes ◉ No

B. 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	0

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 Conservation Plan Checklist to complete your Water Conservation Plan.

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Exhibit B

Water Conservation Plan Goals Table (TWDB-1964)

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

Facility Name: _____

Water Conservation Plan Year: 2019

	Historic 5yr Average	Baseline	5-yr Goal for year 2024	10-yr Goal for year 2029
Total GPCD[1]	345	345	310	293
Residential GPCD[2]	54	54	48	45
Water Loss (GPCD)[3]	79	70	64	57
Water Loss (Percentage)[4]	23 %	20 %	21 %	19 %

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

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Exhibit C

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

Texas Commission on Environmental Quality

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

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

Name:	City of Livingston	
Address:	200 W. Church Livingston, TX 77351-3213	
Telephone Number:	(936) 327.4311	Fax: ( )
Public Water Supply No.:	TX1870002	
Regional Water Planning Group:	Regional Water Planning Group H	
Form Completed by:	Siglinda West	
Title:	Regulatory Compliance Specialist	
Person responsible for implementing conservation program:	Bill Wiggins	Phone: (936) 327.4311
Signature:	Siglinda West	Date:12/20/2019

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

UTILITY PROFILE

I. POPULATION AND CUSTOMER DATA

A. Population and Service Area Data

1. Attach a copy of your service-area map and, if applicable, a copy of your Certificate of Convenience and Necessity (CCN).

NOT APPLICABLE

2. Service area size (in square miles): 11

(Please attach a copy of service-area map)

3. Current population of service area: 9296

4. Current population served for:

a. Water 9296

b. Wastewater 8546

5. Population served for previous five years:

Year	*Population*
2018	9296
2017	5335
2016	5335
2015	5335
2014	5335

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

Year	*Population*
2020	9401
2030	10115
2040	10676
2050	11155
2060	11545

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

TWDB 2021 Region H Water Planning Group Plan and TDCJ and IAH Detention Center populations. (2018 population includes Correctional Facility population)

B. Customers Data

Senate Bill 181 requires that uniform consistent methodologies for calculating water use and conservation be developed and available to retail water providers and certain other water use sectors as a guide for preparation of water use reports, water conservation plans, and reports on water conservation efforts. A water system must provide the most detailed level of customer and water use data available to it, however, any new billing system purchased must be capable of

reporting data for each of the sectors listed below. http://www.tceq.texas.gov/assets/public/permitting/watersupply/water_rights/sb181_guidance.pdf

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

Treated Water Users	*Metered*	*Non-Metered*	**Totals**
Residential			
Single-Family	1839		1839
Multi-Family	330		330
Commercial	596		596
Industrial/Mining			
Institutional	2		2
Agriculture			
Other/Wholesale			

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

Year	2018	2017	2016
Treated Water Users			
Residential			
Single-Family	17	12	11
Multi-Family			
Commercial	8	10	9
Industrial/Mining			
Institutional			
Agriculture			
Other/Wholesale			

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

	Customer	*Use (1,000 gal/year)*	*Treated or Raw Water*
1.	TDCJ	261,267	Treated
2.	IAH Detention Center	31,058	Treated
3.	CHI St. Luke's Hospital	15,522	Treated
4.	Livingston ISD	12,134	Treated
5.	Pine Hill Apartments	6,599	Treated

II. WATER USE DATA FOR SERVICE AREA

A. Water Accounting Data

1. List the amount of water use for the previous five years.
Indicate whether this is ☐ diverted or ☒ treated water.

Year	2018	2017	2016	2015	2014
Month					
January	68318000	60634000	53211000	52378000	54678000
February	54413000	53383000	52672000	47264000	49049000
March	60040000	60120000	56599000	52910000	53903000
April	64293000	65164000	56959000	51481000	56120000
May	68227000	71644000	65008000	54098000	58802000
June	70997000	60190000	69427000	56163000	54971000
July	76413000	67414000	77973000	66573000	62265000
August	74587000	72969000	68634000	66861000	65555000
September	68561000	68137000	68880000	60834000	56661000
October	75310000	69511000	70933000	62442000	58164000
November	63870000	68106000	64314000	54125000	54767000
December	59236000	66424000	60566000	52966000	51559000
Totals	804265000	783696000	765176000	678095000	676494000

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

Meter at WTP

2. Amount of water delivered/sold as recorded by the following account types for the past five years.

Year	2018	2017	2016	2015	2014
Account Types					
Total Meters	568165000	546411000	567570000	532310000	538997000
Single-Family	102630000	100043000	104968000	107216000	106136000
Multi-Family	9584000	4762000	8541000	7656000	9171000
Commercial	154062000	149150000	157609000	145345000	149855000
Industrial/Mining					
Institutional	301889000	292456000	296452000	272093000	273835000
Agriculture					
Other/Wholesale					

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

Year	*Amount (gallons)*	*Percent %*
2018	216462688	26.91
2017	222726800	28.42
2016	169708718	22.18
2015	129652813	19.12
2014	124159000	18.35

B. Projected Water Demands

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

Year	**Population**	**Water Demands (gallons)**
2020	9469	845258601
2021	9597	854089175
2022	9725	862919748
2023	9853	871750322
2024	9981	880580895
2025	10109	889411469
2026	10237	898242042
2027	10365	907072616
2028	10493	915903190
2029	10621	924733764

Projected water demand were determined by using TWDB Water Use published projections from Region H Water Plan. Population x 220 total GPCD = water demands + 128 annually.

III. WATER SUPPLY SYSTEM DATA

A. Water Supply Sources

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

Water Type	*Source*	*Amount Authorized*
Surface Water	TRA/ Lake Livingston	3363/ 5045 Reserve
Groundwater	3- Water Wells (emergency)	
Contracts		
Other		

B. Treatment and Distribution System

1. Design daily capacity of system (MGD): 7.5

2. Storage capacity (MGD):
   a. Elevated 1.950
   b. Ground 1.350

3. If surface water, do you recycle filter backwash to the head of the plant?
   ☐ Yes ☒ No If yes, approximate amount (MGD):

IV. WASTEWATER SYSTEM DATA

A. Wastewater System Data (if applicable)

1. Design capacity of wastewater treatment plant(s) (MGD): 2.25

2. Treated effluent is used for ☐ on-site irrigation, ☐ off-site irrigation, for ☐ plant wash-down, and/or for ☐ chlorination/dechlorination.

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

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.

   TPDES Permit No. WQ0010208001/ NPDES Permit No. TX0024163 The wastewater Treatment Plant is located at 1700 Marsh Drive, Livingston, Polk County, Texas 77351. The discharge route starts at the effluent discharge point at the plant, to Choates Creek; thence to Long King Creek; thence to the Trinity River Below Lake Livingston in Segment No. 0802 of the Trinity River Basin. The plant can discharge up to 2.25 MGD.

B. Wastewater Data for Service Area (if applicable)

1. Percent of water service area served by wastewater system: 80 %

2. Monthly volume treated for previous five years (in 1,000 gallons):

Year	2018	2017	2016	2015	2014
Month					
January	46255	47523	44779	44426	39504
February	51118	38914	39543	33406	38236
March	48921	43788	46380	51046	42135
April	47677	41898	47254	44459	38414
May	43186	43001	52917	50486	45212
June	44223	44691	46121	40849	40893
July	44716	43021	41468	37945	40100
August	43850	56125	48775	38605	39410
September	44761	44555	42302	38330	40814
October	49579	42599	42096	40806	39974
November	47586	40406	39811	42252	37830
December	56938	43571	44002	44563	41170
Totals	568810	530092	535448	507172	483692

V. ADDITIONAL REQUIRED INFORMATION

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

A. Specific, Quantified 5 & 10-Year Targets

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

B. Metering Devices

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

C. Universal Metering

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

D. Unaccounted- For Water Use

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

E. Continuing Public Education & Information

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

F. Non-Promotional Water Rate Structure

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

G. Reservoir Systems Operations Plan

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

H. Enforcement Procedure and Plan Adoption

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

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

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

J. Plan Review and Update

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

VI. ADDITIONAL REQUIREMENTS FOR LARGE SUPPLIERS

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

A. Leak Detection and Repair

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

B. Contract Requirements

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

VII. ADDITIONAL CONSERVATION STRATEGIES

A. Conservation Strategies

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

1. Conservation-oriented water rates and water rate structures such as uniform or increasing block rate schedules, and/or seasonal rates, but not flat rate or decreasing block rates;

2. Adoption of ordinances, plumbing codes, and/or rules requiring water conserving plumbing fixtures to be installed in new structures and existing structures undergoing substantial modification or addition;

3. A program for the replacement or retrofit of water-conserving plumbing fixtures in existing structures;

4. A program for reuse and/or recycling of wastewater and/or graywater;

5. A program for pressure control and/or reduction in the distribution system and/or for customer connections;

6. A program and/or ordinance(s) for landscape water management;

7. A method for monitoring the effectiveness and efficiency of the water conservation plan; and

8. Any other water conservation practice, method, or technique which the water supplier shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

Best Management Practices

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

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

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Exhibit D

Water Rate Structure

ORDINANCE NO. A-816

AN ORDINANCE OF THE CITY COUNCIL, CITY OF LIVINGSTON, TEXAS, ESTABLISHING BY SCHEDULE RATES FOR WATER SERVICE PROVIDED BY THE CITY OF LIVINGSTON:

Fees to be charged and collected by the City from the customers using the City waterworks system are hereby scheduled as provided in Section 40-108 of the Code of Ordinances of said City of Livingston, Texas as follows:

WATER RATES

RESIDENTIAL:

Up to 2,000 gallons	$28.00
Over 2,000 gallons	$4.00 per thousand

COMMERICAL:

Up to 2,000 gallons	$38.00
Next 48,000 gallons	$4.25 per thousand
Next 100,000 gallons	$4.75 per thousand
Over 150,000 gallons	$5.25 per thousand

INDUSTRIAL/INSTITUTIONAL:

Up to 2,000 gallons	$100.00
Over 2,000 gallons	$4.25 per thousand

RATE TO CUSTOMERS OUTSIDE THE CITY LIMITS: An additional monthly charge of $10.00 will be added to customers outside the corporate limits of the City of Livingston, Texas.

APPROVED AND ADOPTED this 10th day of September, 2019 with rates to be effective upon adoption.

SIGNED:

Judy B. Cochran , Mayor

ATTEST:

Ellie Monteaux, TRMC, CMC
City Secretary/Assistant City Manager

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Exhibit E

Plan Adoption Ordinance

ORDINANCE NO. A-818

AN ORDINANCE OF THE CITY OF LIVINGSTON, TEXAS, ADOPTING 2019 AMENDMENT TO WATER CONSERVATION AND EMERGENCY WATER MANAGEMENT PLAN

WHEREAS, it is necessary that the Water Conservation and Emergency Water Management Plan be amended 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 Livingston believes that it is in the best interest of the City to amend its current Water Conservation and Emergency Water Management Plan;

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

SECTION 1. That the 2019 Amendment 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 Livingston.

SECTION 2. That all ordinances of the City of Livingston in conflict with the provisions of this ordinance are, and the same hereby, repealed and all other ordinances of the City of Livingston 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 11th day of February, 2020.

SIGNED:

Judy Cochran, Mayor

ATTEST:

Ellie Monteaux, TRMC, CMC
City Secretary/Assistant City Manager

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Exhibit F

Coordination with Regional Water Planning Groups
and
Other Governmental Agencies

KSA A·DYNAMIC·PERSPECTIVE

6781 Oak Hill Boulevard
Tyler, TX 75703
903.581.8141

December 20, 2019

Region H Regional Water Planning Group
San Jacinto River Authority
1517 Dam Site Road
Conroe, Texas 77304

Transmitted VIA Email

Re: City of Livingston
2019 5-Year Update for Water Conservation
and Water Emergency Management Plan
PWS ID No. 1870002
KSA Project No. LIV.004

To whom it may concern,

Please find enclosed, the updated 2019 Water Conservation and Water Emergency Management Plan required by the TCEQ and TWDB for the City of Livingston, Texas. Included in this package is the DRAFT Conservation Plan & Water Emergency Management Plan, Updated Ordinance, appendices and exhibits required by regulatory agencies. I have transmitted one (1) digital of this document, as required, for your review.

Once the Ordinance has been adopted by the City of Livingston I will forward that document to you for inclusion in the Plan.

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 Livingston please contact me, Sigi West, Regulatory Compliance Specialist at (903) 581-8141, Ext. 1314.

Sincerely,

Siglinda West

KSA
Siglinda M. West
Regulatory Compliance Specialist

6781 Oak Hill Boulevard
Tyler, TX 75703
903.581.8141

December 20, 2019

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 Livingston
2019 5-Year Update for Water Conservation
and Water Emergency Management Plan
PWS ID No. 1870002
KSA Project No. LIV.004

To whom it may concern,

Please find enclosed the updated 2019 Water Conservation and Water Emergency Management Plan required by the TCEQ and TWDB for the City of Livingston, Texas. Included in this package is the DRAFT Conservation Plan & Water Emergency Management 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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Sincerely,

Siglinda West

KSA
Siglinda M. West
Regulatory Compliance Specialist

KSA A·DYNAMIC·PERSPECTIVE

6781 Oak Hill Boulevard
Tyler, TX 75703
903.581.8141

December 20, 2019

Lower Trinity Ground Water District
Attn: Gary Ashmore
602 E. Church Street, Ste. 141
Livingston, Texas 77351

Transmitted VIA Email

Re: City of Livingston
2019 5-Year Update for Water Conservation
and Water Emergency Management Plan
PWS ID No. 1870002
KSA Project No. LIV.004

To whom it may concern,

Please find enclosed, a copy of the updated 2019 Water Conservation and Water Emergency Management Plan required by the TCEQ and TWDB for the City of Livingston, Texas. Included in this package is the DRAFT Conservation Plan & Water Emergency Management Plan, Updated Ordinance, appendices and exhibits required by regulatory agencies. I have transmitted one (1) digital of this document, as required, for your review.

Once the Ordinance has been adopted by the City of Livingston I will forward that document to you for inclusion in the Plan. If you do not require the signed ordinance please let me know.

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

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

Sincerely,

Siglinda West

KSA
Siglinda M. West
Regulatory Compliance Specialist

6781 Oak Hill Boulevard
Tyler, TX 75703
903.581.8141

April 15, 2019

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

Re: City of Livingston
2019 5-Year Update for Water Conservation
and Water Emergency Management Plan
PWS ID No. 1870002
KSA Project No. LIV.004

To whom it may concern,

Please find enclosed the updated 2019 Water Conservation and Water Emergency Management Plan required by the TCEQ and TWDB for the City of Livingston, Texas. Included in this package is the DRAFT Conservation Plan & Water Emergency Management Plan, Updated Ordinance, appendices and exhibits required by regulatory agencies. I have transmitted one (1) digital of this document, as required, for your review.

Once the Ordinance has been adopted by the City of Livingston I will forward that document to you for inclusion in the Plan.

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 Livingston please contact me, Sigi West, Regulatory Compliance Specialist at (903) 581-8141, Ext. 1314.

Sincerely,

Siglinda West

KSA
Siglinda M. West
Regulatory Compliance Specialist

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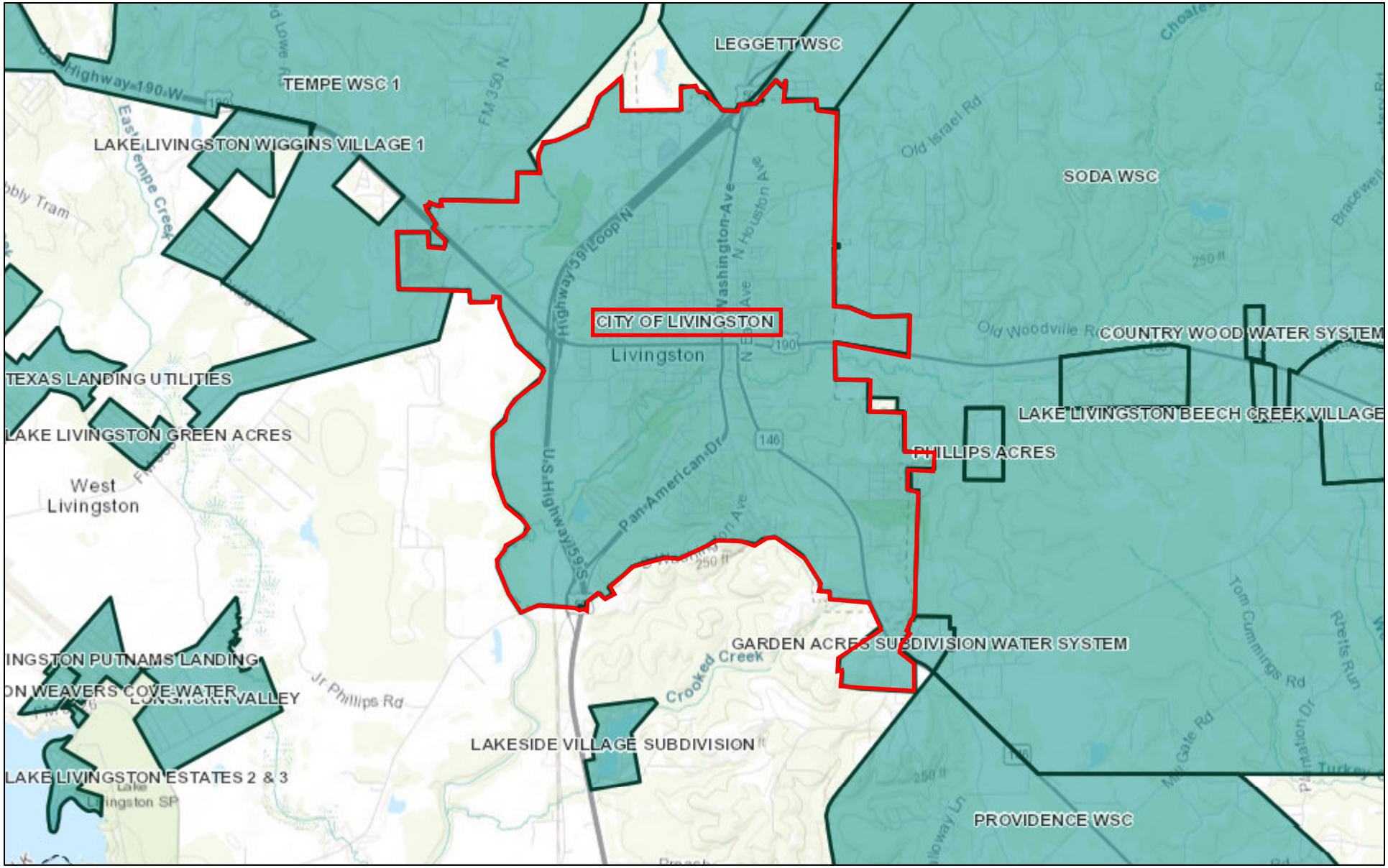
Exhibit G

City Service Area Map

City of Livingston Water Service Area



Texas Water Development Board

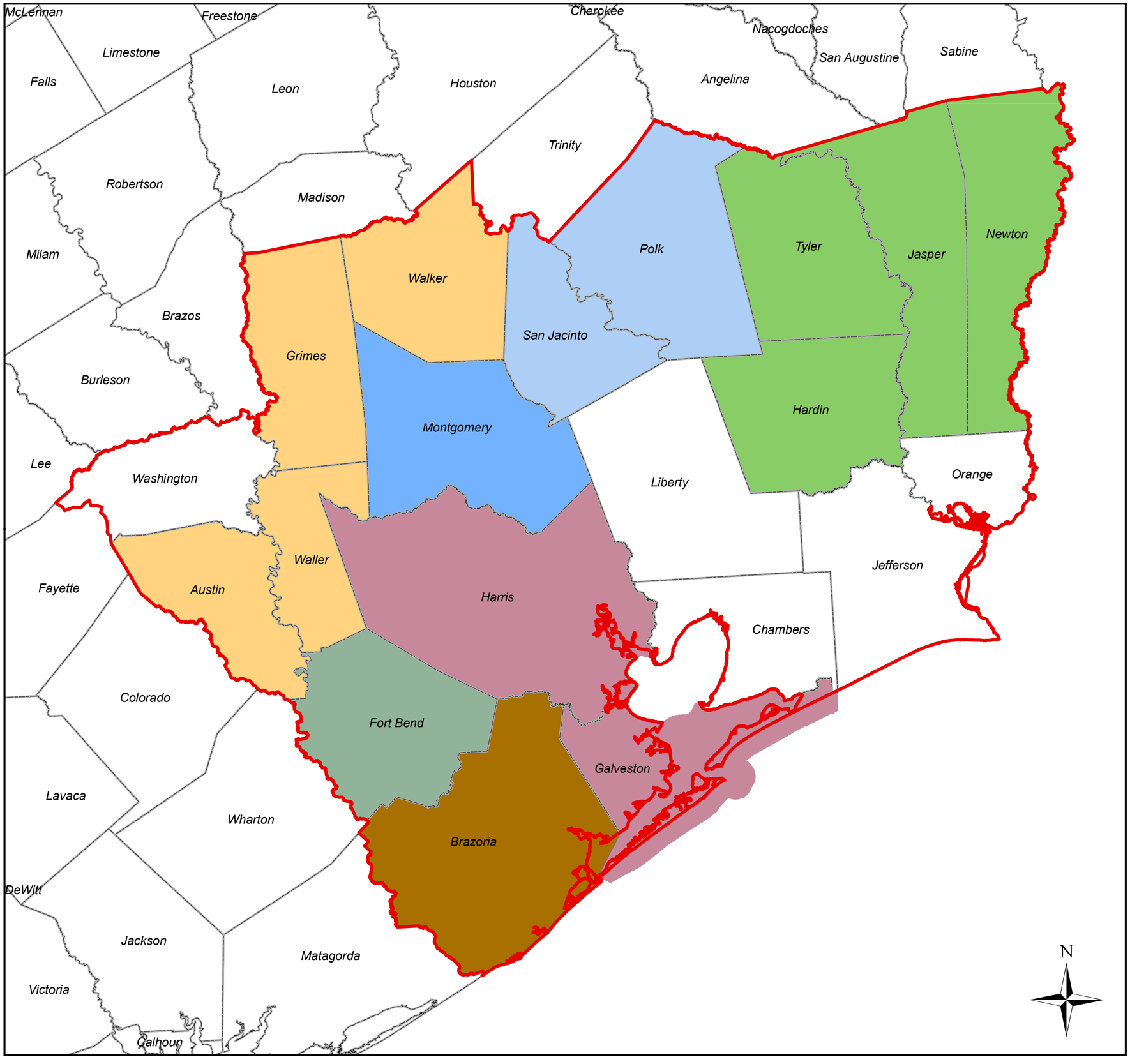
December 13, 2019

0 0.5 1 2 mi

0 1 2 4 km

1:72,224

Groundwater Management Area 14



MAP LEGEND

- Groundwater Management Area 14
- Counties

Groundwater Conservation Districts

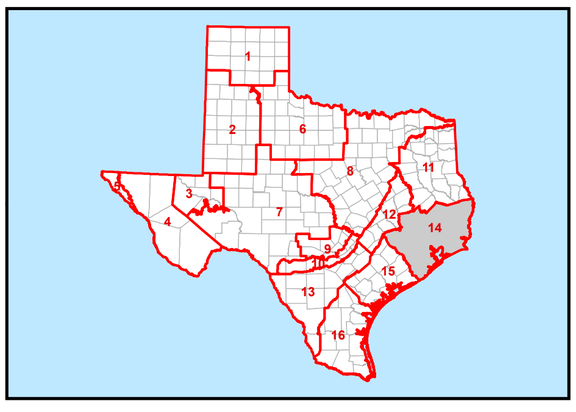
- Bluebonnet GCD
- Brazoria County GCD
- Lone Star GCD
- Lower Trinity GCD
- Southeast Texas GCD

Subsidence Districts

- Harris-Galveston Subsidence District
- Fort Bend Subsidence District

DISCLAIMER
This map was generated by the
Texas Water Development Board. No claims
are made to the accuracy or completeness of the
information shown herein nor to its suitability for a particular use.
The scale and location of all mapped data are approximate.
Boundaries for groundwater conservation districts are
approximate and may not accurately depict legal descriptions.

Updated 8/26/2015



0 5 10 20 30 40 Miles

1 in = 14 miles

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Appendix A

TECQ Water Conservation Plan Rules (30 TAC 288.2)

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Texas Administrative Code

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

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

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

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

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

(i) residential;

(I) single family;

(II) multi-family;

(ii) commercial;

(iii) institutional;

(iv) industrial;

(v) agricultural; and,

(vi) wholesale.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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Appendix B

TECQ Drought Contingency Plan Rules (30 TAC 288.20)

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Texas Administrative Code

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

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

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

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

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

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

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

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

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

(ii) water production or distribution system limitations;

(iii) supply source contamination; or

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

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

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

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

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

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

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

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

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

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

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

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

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

Appendix C

Texas Water Code Water Allocation (TWC Section 11.039)

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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.

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Appendix D

City of Livingston Resolution
and
Trinity River Authority Water Contract

Adopted January 14, 2020

RESOLUTION NO. 577

A RESOLUTION APPROVING THE TERMS OF A 50-YEAR RAW WATER SUPPLY CONTRACT BETWEEN THE TRINITY RIVER AUTHORITY OF TEXAS AND THE CITY OF LIVINGSTON , AND AUTHORIZING THE EXECUTION OF SUCH CONTRACT BY THE MAYOR OF THE CITY OF LIVINGSTON, TEXAS

WHEREAS, the City of Livingston has purchased raw water from the Trinity River Authority of Texas from its impoundment of the waters of the Trinity River in Lake Livingston under the terms of a Raw Water Supply Contract effective February 22, 1978; and

WHEREAS, the 1978 Contract expires on February 22, 2020; and

WHEREAS, the continued availability of a reliable and sustainable supply of raw water is in the best interests of the City and is of utmost importance for the continued health, safety, welfare and benefit of the City and its citizens; and

WHEREAS, the City has negotiated with the Trinity River Authority of Texas for the continued purchase of raw water; and

WHEREAS, as a result of such negotiations, a Raw Water Supply Contract with an effective date of February 23, 2020 and continuing in force and effect until November 30, 2070 has been prepared and presented to the City for approval and execution; and

WHEREAS, a copy of the proposed Raw Water Supply Contract is attached to this Resolution; and

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LIVINGSTON, TEXAS:

SECTION 1. That the terms and conditions of the Raw Water Supply Contract as attached to this Resolution between the Trinity River Authority of Texas and the City of Livingston with an effective date of February 23, 2020 and remaining in force and effect until November 30, 2070 are hereby APPROVED.

SECTION 2. That the Mayor of the City of Livingston, Texas is hereby authorized and directed to execute said Raw Water Supply Contract on behalf of and as the act and deed of the City of Livingston, Texas.

APPROVED AND ADOPTED this 14th day of January, 2020

SIGNED:

Judy Cochran

JUDY B. COCHRAN, MAYOR

ATTEST:

E D Monteaux

ELLIE MONTEAUX, TRMC, CMC
City Secretary
Assistant City Manager

RAW WATER SUPPLY CONTRACT
BETWEEN THE TRINITY RIVER AUTHORITY OF TEXAS
AND THE CITY OF LIVINGSTON, TEXAS

STATE OF TEXAS §
§
COUNTY OF TARRANT §

THIS RAW WATER SUPPLY CONTRACT ("Contract") is made and entered into by and between the TRINITY RIVER AUTHORITY OF TEXAS, a conservation and reclamation district operating under special and general law ("Authority"), and the CITY OF LIVINGSTON, TEXAS, a general law municipal corporation ("City"). The Authority and City are herein called each a "Party" and jointly the "Parties" to this Contract.

WITNESSETH

WHEREAS, Authority holds Certificate of Adjudication No. 08-4248 ("COA No. 08-4248"), as amended, which authorizes the Authority to impound the normal flow of the Trinity River in Lake Livingston; and

WHEREAS, COA No. 08-4248, as amended, authorizes the Authority to appropriate, divert and sell water stored in Lake Livingston; and

WHEREAS, the Authority and City entered into a Raw Water Supply Contract effective February 22, 1978, pursuant to which the City has purchased raw water from the Authority since that time; and

WHEREAS, the existing Raw Water Supply Contract between the Authority and the City expires February 22, 2020; and

WHEREAS, the Authority and City desire to enter into this Contract, pursuant to which the Authority will continue to furnish raw water to the City; and

WHEREAS, City desires to purchase from the Authority, on an annual basis, water impounded in Lake Livingston pursuant to COA No. 08-4248, as amended, for the foregoing purpose.

NOW THEREFORE, in consideration of the mutual covenants and agreements herein contained, the Authority agrees to commit raw water to the City, and the City agrees to pay Authority charges for raw water sold to the City upon terms and conditions hereinafter set forth, to-wit:

ARTICLE 1

QUANTITY OF RAW WATER

The Authority shall sell to the City 3,363 acre-feet per year of raw water ("Contract Quantity") from Authority's right to store, appropriate, divert and sell water from Lake Livingston

pursuant to COA No. 08-4248. The water purchased by the City hereunder shall be used for municipal or industrial purposes in areas included within the City's service area, in areas authorized by COA No. 08-4248 or in areas otherwise permitted by law.

The City shall be entitled to divert raw water at a variable diversion rate not to exceed 7.5 million gallons per day (MGD). Notwithstanding the foregoing, the Parties agree that the City's actual diversions may be limited to a rate established by the Authority to divide its total diversion rate authorization among multiple purchasers or to comply with COA No. 08-4248. Diversions pursuant to this Contract may be subject to stream flow restrictions or priority calls imposed by the Texas Commission on Environmental Quality ("TCEQ") that limit the City's ability to divert, without liability to the Authority hereunder.

The City's ability to purchase and divert the Contract Quantity of raw water is conditioned on the Authority's rights under COA No. 08-4248. If the Authority's rights under COA No. 08-4248 are changed by any action beyond the control of Authority, and any such change reduces, or has the effect of reducing, the amount of water the Authority has the right to use or sell thereunder, then, in that event, the City's right to the Contract Quantity of water and its obligations to pay the charges levied hereunder shall be reduced proportionately by the percentage of the decrease in Authority's rights under COA No. 08-4248.

The Authority shall reserve for the City up to 5,045 acre-feet of water per year ("Reservation Quantity"). The Reservation Quantity is the amount of water reserved for the City, but that may not be diverted or otherwise used by the City. The City may, at any time and from time to time, by written notice to the Authority, request that all or part of the Reservation Quantity be converted to the Contract Quantity. Such notice should request an increase, in acre-feet per year, in the Contract Quantity and an equal decrease Reservation Quantity under this Contract. Said notice shall be delivered to the Authority not less than 60 days prior to the effective date of the requested increase. Upon receipt of said notice the new total annual amount shall be effective from and after the date specified by the City until the City establishes a further increase in the same manner. With the Authority's approval, such increase may become effective in less than 60 days after written notice is given by the City if so requested by the City.

ARTICLE 2

RESERVATION CHARGES AND CHARGES FOR RAW WATER

The Authority's annual charge to the City for the rights granted hereunder shall consist of two components: 1) the "Annual Reservation Charge" for the Reservation Quantity for the then current Authority fiscal year; and, 2) the "Annual Charge for Raw Water" for Contract Quantity for the then current Authority fiscal. The sum of the Annual Reservation Charge and the Annual Charge for Raw Water shall equal the "Total Annual Charge" by the Authority to the City for water reserved for or sold to the City pursuant to this Contract.

The Annual Reservation Charge shall be calculated by multiplying the current Reservation Quantity by thirty percent of the then-prevailing rate for raw water as established by Authority Resolution No. R-1403, or any subsequent revision thereof or substitute therefor. This calculation is as follows:

Reservation Quantity x then-prevailing rate x then-prevailing reservation charge = Annual Reservation Charge.

The Annual Charge for Raw Water shall be calculated by multiplying the current Contract Quantity by the Authority's then-prevailing rate for raw water as established by Authority Resolution No. R-1403, or any subsequent revision thereof or substitute therefor. This calculation is as follows:

Contract Quantity x then-prevailing rate = Annual Charge for Raw Water.

The City agrees that it will pay to the Authority an amount equal to the Total Annual Charge as calculated above for the then-current Authority fiscal year. The Authority's fiscal year begins annually on December 1. Payment shall be made following the conclusion of each Authority fiscal year, and shall be rendered within thirty days of receipt of an invoice furnished by the Authority after December 1 of each fiscal year. If the Reservation and Contract Quantities, or the charge for raw water or reservation charge, change during the course of an Authority fiscal year, the Authority shall calculate the Total Annual Charge for that year accounting for any such changes as of those changes' effective dates. For any partial Authority fiscal year this Contract is in effect, the Total Annual Charge shall be prorated based on the number of days of this Contract's effectiveness during that fiscal year.

In the event of any revisions to Resolution No. R-1403, the City's future payments hereunder shall be calculated as provided above, but using the newly established rate structure.

ARTICLE 3

RATE FOR RAW WATER; INCREASES

The current rate for raw water adopted by the Authority's Board of Directors is $95 per acre-foot, and the reservation charge is 30% thereof. That rate (or any future rate adopted by the Authority's Board of Directors) is incorporated herein by reference, is a material term of this Contract, and the Parties stipulate that any rate charged hereunder is "charged pursuant to a written contract" within the meaning of 16 TEX. ADMIN. CODE § 24.307, or any successor provision thereto. The City further stipulates and agrees that the rates initially charged pursuant to this Contract are just, reasonable, without discrimination and do not adversely affect the public interest, within the meaning of the Texas Water Code and the rules of the Public Utility Commission of Texas or any agency succeeding to its jurisdiction. No change in the raw water rate or reservation charge shall be effective upon less than 60 days' notice to the City by the Authority.

ARTICLE 4

EXCESS WATER

Within ten days after the conclusion of each Authority fiscal year, the Authority shall verify the amount of water taken from Lake Livingston for distribution to the City during the preceding Contract year. If the amount of raw water taken during any such year exceeds the Contract Quantity then the City agrees to pay the Authority, in addition to the annual charge for raw water, for such excess water taken at the then-prevailing rate, plus a twenty-five percent surcharge. The City shall pay charges set forth in this Article within thirty days of receipt of an invoice from the Authority. In the event the amount of raw water taken during any such year exceeds the Contract Quantity, the Parties agree that such excess water amount will not increase the Contract Quantity, except as provided in this Article.

In the event that: 1) the actual amount diverted for the City exceeds the Contract Quantity for three consecutive years; or, 2) the actual amount diverted for the City exceeds the Contract Quantity three non-consecutive years in a consecutive five-year period, then the Authority may, upon written notice to the City, reduce the Reservation Quantity and increase the Contract Quantity by an amount not to exceed the highest annual exceedance in that three- or five-year period. However, no such adjustment by the Authority shall result in a reduction of the Reservation Quantity and increase of the Contract Quantity exceeding five percent thereof.

ARTICLE 5

DIVERSION FACILITIES

The diversion of water under this Contract shall occur using the Authority's existing diversion facilities that divert raw water under the February 22, 1978 Water System Services Contract, as amended.

ARTICLE 6

METERING

The Authority shall provide, operate, and maintain a meter or meters to record and measure daily, weekly and monthly water diverted in acre-feet. For the purpose of accounting for water, the Authority shall determine the amount of water diverted each month by recording, at a minimum, the reading on the Authority's meter on the last day of each calendar month. If requested in writing by the City, the Authority shall calibrate its water meter or meters. The City shall have the opportunity to have a representative present during such calibration. If upon any test of a meter, the percentage of inaccuracy of such metering equipment is found to be in excess of five percent, registration thereof shall be corrected for a period extending back to the time when such inaccuracy began, if such time is ascertainable, but in no event further back than a period of six months from the date of the City's request. If the meter is out of service so that the amount of water delivered cannot be ascertained or computed from the reading thereof, the water delivered during the period such meter is out of service shall be estimated by the Authority on the basis of the best data available.

ARTICLE 7

WATER CONSERVATION AND DROUGHT CONTINGENCY PLANS

The City shall cooperate with and assist the Authority in its efforts to develop and implement plans, programs and rules to conserve water resources and to promote practices that will reduce the consumption of water, reduce the loss or waste of water and improve the efficiency in use of water. The Authority's obligations under this Contract shall be subject to the City's adoption and implementation of a water conservation plan and drought contingency plan required or approved by the TCEQ, the Texas Water Development Board, or any other federal, state, or local regulatory authority with power to require or approve water conservation and drought contingency plans. Prior to the diversion of raw water under this Contract, the City shall deliver its water conservation plan and drought contingency plan to the Authority for its review.

The City shall require any subsequent wholesale purchaser of the water sold under this Contract, in any water supply contract that the City enters into following the effective date of this

Contract, to implement water conservation and drought contingency measures that comply with TCEQ requirements and with that City's approved water conservation and drought contingency plans.

ARTICLE 8

ADDRESSES AND NOTICE

All notices, payments and communications required herein shall be sent, respectively, to the Southern Region Manager of the Trinity River Authority of Texas at P.O. Box 1554, Huntsville, Texas 77342, and to the City of Livingston, City Manager, at 200 West Church St., Livingston, Texas 77351.

ARTICLE 9

CERTIFIED NOTICE

Any notice of breach of this Contract, notice of forfeit or notice of force majeure by either Party shall be sent by certified mail with return receipt requested to the addresses stated above. The Parties shall have the right from time to time and at any time to change their respective addresses and both will have the right to specify as its address any other address by giving at least 15 days' written notice to the other Party.

ARTICLE 10

DEFAULT

In the event that either Party shall breach or fail to perform any of the provisions of this Contract, the aggrieved Party shall promptly notify the other Party of the breach or failure to perform. In the event such breach or failure to perform is not cured within 30 days after the receipt of such notice, the Party sending the notice, at its discretion, may notify the other Party of its intention to declare this Contract terminated. Upon receipt of such notice the violating Party shall have 30 days to cure such violation or if the violation cannot reasonably be cured in 30 days, such longer time as is reasonably required not to exceed 90 days if within 15 days of receiving the notice the defaulting Party commences to cure the default and thereafter continuously and diligently pursues the cure prior to final action by the other Party declaring this Contract terminated. Any notice requirement under the terms of this Article shall be in writing and shall be delivered by certified mail in accordance with Articles 9 and 10 above.

No failure on the part of either Party to this Contract to require the performance by the other Party of any provision of this Contract shall in any way affect either Party's right to enforce such provision, nor shall any waiver by either Party be held to be a waiver of any other provision. No rights under this Contract may be waived and no modification or amendment to this Contract may be made except by written amendment executed by the Parties.

ARTICLE 11

SEVERABILITY

The Parties hereto agree that if any of the provisions of this Contract are held to be invalid or to contravene Texas law, or the laws of the United States, such fact shall not

invalidate the entire Contract, but it shall be construed as though not containing that particular provision, and the rights and obligations of the Parties shall be construed and remain in force accordingly.

ARTICLE 12

ASSIGNMENT

The Parties understand and agree that this Contract may not be assigned without the express written consent of the other Party. No assignment shall relieve a Party from liability pursuant to this Contract without the agreement of the other Party, which agreement may be reasonably withheld.

ARTICLE 13

VENUE

The place of performance as agreed to by the Parties to this Contract shall be Tarrant County, Texas. In the event any legal proceeding is brought to enforce this Contract or any provision hereof the same shall be brought in the state courts of Tarrant County, Texas.

ARTICLE 14

FAILURE TO DELIVER

The Parties agree that in the event of water shortage and/or a priority call, the Authority shall incur no liability for the reduction or termination of sales of water hereunder, when, in the Authority's judgment, such action is necessary to comply with any order of any court or administrative body or any statute or regulation of any governmental body having appropriate jurisdiction.

If the City fails to implement its water conservation and drought contingency plans when trigger conditions occur, the Authority is authorized to institute rationing and to enforce any contractual, statutory, or common law remedies available to the Authority necessary to protect the public welfare. Water made available to the City when the City is not in compliance with its water conservation or drought contingency plan may be reduced to the amount of water the Authority estimates would be necessary to satisfy the City's demand if the City was operating in compliance with both the its water conservation and drought contingency plans.

ARTICLE 15

QUALITY OF RAW WATER

Water sold hereunder is non-potable, raw untreated water. The Authority expressly disclaims any warranty as to the quality or suitability for use by the City. The City agrees that any variation in the quality or characteristics of water contemplated for sale hereunder shall not entitle it to avoid its obligation to make payments provided for herein. *THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION HEREIN.*

ARTICLE 16

DELINQUENT PAYMENTS

All amounts due and owing to the Authority by the City shall, if not paid when due, bear interest at the Texas post-judgment interest rate set out in TEX. FIN. CODE ANN. § 304.003, or any successor statute, from the date when due until paid, provided that such rate shall never be usurious or exceed the maximum rate permitted by law. If any amount due and owing by the City to the Authority is placed with an attorney for collection, the City shall pay to the Authority, in addition to all other payments provided for by this Contract, including interest, the Authority's collection expenses, including court costs and attorneys' fees.

ARTICLE 17

PAYMENT OF TAXES AND FEES

In the event any sales or use taxes, or taxes or fees of any similar nature are hereafter imposed on gathering, taking, sale, use, or consumption of the water received by City hereunder, the amount of such taxes or fees shall be borne by City. In addition to all other charges, and whenever Authority shall be required to pay, collect, or remit any such taxes or fees on water received by City, then City shall promptly reimburse Authority therefore.

ARTICLE 18

FORCE MAJEURE

In the event that the performance by the Parties hereto of any of the Parties' obligations or undertakings hereunder shall be interrupted or delayed by an occurrence and not occasioned by the conduct of any Party hereto, whether such occurrence be an act of God or the common enemy or the result of war, riot, civil commotion, drought, sovereign conduct, or the act or conduct of any person or persons not party hereto, then the Parties shall be excused from such performance for such period of time as is reasonably necessary after such occurrence to remedy the effects thereof. No damages shall be recoverable from the Authority by the City by reason of the suspension of the delivery of water due to any of the causes above mentioned, and no failure of the Authority to meet any obligations by reason of force majeure shall relieve the City from its obligations to make payments required under the terms of this Contract.

ARTICLE 19

STATE OR FEDERAL LAWS, RULES, ORDERS OR REGULATIONS

This Contract is subject to all applicable federal, state and local laws and any applicable ordinances, rules, orders and regulations of any local, state or federal governmental authority having or asserting jurisdiction. Nothing contained herein shall be construed as a waiver of any right to question or contest any such law, ordinance, order, rule or regulation in any forum having jurisdiction.

ARTICLE 20

REGULATORY AUTHORITY

The effectiveness of this Contract is dependent upon the Authority and the City complying with the rules and orders of the TCEQ or an agency succeeding to its jurisdiction.

ARTICLE 21

REPORTING REQUIREMENTS

The Authority will file an executed copy of this Contract with the Executive Director of the TCEQ.

ARTICLE 22

SOURCE OF CONTRACT PAYMENTS

Authority shall not demand payment by City of any obligations assumed by it or imposed on it under and by virtue of this Contract from funds raised or to be raised by taxes levied by City. City's obligations under this Contract shall not be construed to be a debt of City of such kind as to require it under Texas law to levy and collect a tax to discharge such obligation, it being expressly understood by the Parties hereto that all payments due by City hereunder are to be made from water and sewer revenues received by City. City represents and covenants that all payments to be made hereunder by it shall constitute "Operating Expenses" of its waterworks and sewer system as defined in Texas Government Code Chapter 1502, and that all such payments will constitute operating expenses of City's waterworks and sewer system.

City agrees to fix and collect such rates and charges for water and sewer services to be supplied by its waterworks and sewer system as will produce revenues in an amount equal to at least the minimum payments due under this Contract and other contracts with Authority and to comply with provisions of ordinances authorizing any outstanding revenue bonds.

The Parties agree that the duties and obligations of each as governmental entities are subject to limitations regarding appropriations under the Texas Constitution.

ARTICLE 23

ENTIRE AGREEMENT

This Contract contains the entire agreement between the Parties relating to the rights herein granted. Any oral representations or modifications concerning this Contract shall be of no force and effect, excepting a subsequent modification in writing, signed by the Party to be charged and supported by consideration.

ARTICLE 24

EFFECTIVE DATE

This Contract shall be effective February 23, 2020. This Contract shall remain in force and effect until November 30, 2070.

IN WITNESS WHEREOF, the Parties hereto acting under authority of their respective governing bodies have caused this Contract to be duly executed in several counterparts, each of which is deemed to be an original and as of the day and date first written above.

TRINITY RIVER AUTHORITY OF TEXAS

J. KEVIN WARD, General Manager

ATTEST:

HOWARD S. SLOBODIN, Secretary
Board of Directors

(SEAL)

CITY OF LIVINGSTON, TEXAS

JUDY B. COCHRAN, Mayor

~~APPROVED AS TO FORM:~~ EM
ATTEST:

ELLIE MONTEAUX, TRMC, CMC
City Secretary/Assistant City Manager

(SEAL)

APPROVED AS TO FORM:

JAMES W. WRIGHT, City Attorney