

INTEGRITY EXCELLENCE TRUST

May 13, 2025

Water Conservation Specialist, Municipal Water Conservation Texas Water Development Board 1700 N. Congress Ave, Austin TX 78701

RE: Submittal of Water Conservation Plan, Water Conservation Implementation Report, and/or Drought Contingency Plan
City of Strawn

Dear TWDB:

Enclosed is the Approved City of Strawn's 2025 Water Conservation and Drought Contingency Plan and related documents.

If you have any questions, please feel free to contact me at our Abilene office (325) 695-1070 or email me at sfernandez@jacobmartin.com. Thank you for your assistance.

Sincerely,

Sarah Fernandez

JACOB | MARTIN





Water Conservation and Drought Contingency Plan City of Strawn 2025

Prepared By:

JACOB MARTIN

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WATER CONSERVATION PLAN

1.1 General

This Conservation Plan has been developed to meet the requirements of 30 TAC \$288.2 for the City of Strawn which is a retail public water supplier of treated water to residents located in Palo Pinto County.

1.2 Utility Profile

See Attachment #2- Texas Water Development Board (TWDB) Utility Profile (Form --TWDB-1965)

The City of Strawn has water rights for 160 acre-feet of raw water from Lake Tucker. All 160 acre-feet has been designated for Municipal/Domestic Use.

Over the past five years Strawn has treated on average approximately 32 MG per year with a daily usage of approximately 0.126 MGD. Strawn currently provides water for a retail population of approximately 710. Strawn's water system Certificate of Convenience and Necessity (CCN) number is 10280. The City's sewer system CCN number is 20108. A map of the City's CCN is included in Appendix A. The municipal use public water supply utility profile for Strawn is included in Appendix B.

The City's raw water transmission facilitations consist of a raw water intake located on the Colorado River which pumps water through a single pump into two off-channel raw water ponds located near the river. From the two off-channel raw water ponds near the river the water is pumped through approximately five miles of 8" water line to two other off-channel raw water ponds located near the City's water treatment plant. The storage capacities of the two ponds located near the water treatment plant are 200 acre-ft and 350 acre-ft, respectively. From the two storage ponds the raw water is pumped to the City's water treatment plant. The City also operates one well that pumps groundwater into a terminal ground storage tank where the groundwater is disinfected and pumped into the distribution system.

The City's water treatment plant consists of two sedimentation basins and one solids contact clarifier followed by microfiltration. The water treatment plant also has a clearwell for treated water storage and a high service pump station to pump water into the distribution system. The City's existing water distribution system has water line sizes ranging from 1" to 8", a total storage capacity of 0.219MG, and approximately 379 service connections.

1.3 Water Conservation Goals

Five year (2025-2030) per capita water usage figures are shown in the table below for residential usage and overall usage. Five and ten-year reductions are also shown for both types. These 5- and 10-year goals are in line with the overall water conservation goals outlined by both the State of Texas and the Region G Planning Group.

		5-year (2030) goal	10-year {2035}goal
Residential (gpcd)	62	59	57
Total (gpcd)	175	172	169
Water Loss (gpcd)	66	63	60

1.4 Schedule for Implementing Plan to Achieve Targets and Goals

The City will adhere to the following schedule, to achieve the targets and goals for water conservation:

- 1. Production meters on wells shall be tested annually
- 2. The City meter replacement program includes monitoring of the accuracy of existing meters annually and replacing meters as needed
- 3. Water audits shall be conducted annually:
 - Real water losses shall be identified and corrected
 - Real water losses shall be minimized by replacement of deteriorating water mains and appurtenances by the City staff on an on-going basis
- 4. The City will make available for viewing at City Hall water conservation materials developed by the staff, materials obtained from the Texas Water Development Board, Texas Commission on Environmental Quality or other sources.
- 5. The City has adopted the International Plumbing Code, and requires that all new construction or renovations in the city use water conserving fixtures

1.5 Tracking Targets and Goals

City staff shall track targets and goals by utilizing the following procedures:

- Logs shall be maintained for meter calibration, meter testing, and meter replacement programs
- Annual water audits shall be documented and kept in the Utility Department files
- Rates shall be tracked by means of ordinances adopted

1.6 Metering Devices

All metering devices used by the City to meter water purchased from Johnson Co SUD are accurate to within plus or minus 5%. The City repairs or replaces meters, which appear to have high or low water usage. Incorporated into the Water Conservation Plan, the City has set up the following meter testing schedule:

- Master Meters calibrated once a year
- All distribution meters monitored and tested when unusual flows are observed

The City has a computer billing system, which handles all the billing. The system compares meter readings monthly and notes dramatic changes.

1.7 Water Use/ Water Loss

The City utilizes a record management program which includes water purchased, water sold, water loss and daily average water usage. In addition, the City separates water users and sales into categories of residential, commercial and industrial on the Excel Spread sheet that tracks monthly gallons of water for each category. The detailed record management can be found on both the City's Excel Spread sheet and Billing Software. The City visually inspects distribution lines for leaks on a daily basis and repairs reported and visually detected leaks in a timely manner.

1.8 Continuing Public Education Information

At their main office, the City has posted information. As well as provided pre-printed brochures, etc. pertaining to water conservation, which water customers can view and pickup at their convenience. The City also holds monthly council meetings that are open to the public, where questions and comments can be discussed pertaining to water conservation. The City periodically sends mail outs to its customers. The mail outs include information and educational tips pertaining to water conservation.

1.9 Non-Promotional Water Rate Structure

The City has adopted a non-promotional water rate structure as outlined below. With a water rate structure which includes a per thousand gallon charge, the City shifts the cost of supplying water to those customers who use water the most. The rates contained in this plan are subject to change as deemed appropriate and necessary by City Council.

Residential Water Rates:	Inside City Limits	Outside City Limits
Base Rate	\$47.48	\$58.03
Each additional 1,000 gallons up to 15,000	\$9.55	\$11.34
Each additional 15,000 gallons up	\$11.34	\$12.92
Commercial Water Rates:		
Base Rate		\$64.88
Each Watter Connection ¾" water meter	\$51.70	
Each Water Connection 2" water meter	\$200.00	
Each additional 1,000 gallons up to 15,000	\$9.71	\$11.34

Each additional 15,000 gallons up	\$11.45	\$12.92
Unmetered Water Rates:		
Bulk Water Rate- Treated Water Residential	\$14.00	per 1,000 gallons
Bulk Water Rate- Treated Water Commercial	\$25.00	per 1,000 gallons
Bulk Water Rate- Untreated Water	\$9.00	per 1,000 gallons

Enforcement Procedure & Plan Adoption 1.10

This water conservation plan has been adopted by the City on ___ copy of the Ordinance adopting the Plan is included in Attachment #1. The adopted Plan will be enforced by the City by providing water service only to customers complying with the Plan and discontinuing service to customers who do not pay their water bills or refuse to comply with the Plan.

1.11 **Coordination with Region G Planning Group**

The service area of the City of Strawn is located within the Region G water planning area and the City has provided a copy of this water conservation plan to Region G Planning Group. A copy of the cover letter is provided in Attachment #3.

Plan Review and Update 1.12

The City will review and update this water conservation plan, as needed, based on new or updated information, such as adoption or revision of the regional water plan. The water conservation plan will be updated again before December 9, 2029 and every five (5) years thereafter

DROUGHT CONTINGENCY PLAN

2.1 Declaration of Policy, Purpose, and Intent

In order to conserve the available water supply and protect the integrity of the City's water supply facilities, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage or other water supply emergency conditions, City of Strawn hereby adopts the following regulations and restrictions on the delivery and consumption of water through an ordinance (see Attachment #1).

Water uses regulated or prohibited under this Drought Contingency Plan (the Plan) are considered to be non-essential and continuation of such uses during times of water shortage or other emergency water supply conditions are deemed to constitute a waste of water which subjects the offender(s) to penalties as defined in Section 2.12 of this Plan.

2.2 Public Involvement

Opportunity for the public water customers to provide input into the preparation of the Plan was provided by City of Strawn means of scheduling and providing public notice of a public meeting to accept input on the Plan.

2.3 Threshold Conditions

Threshold conditions have been established for the critical situations listed below. They correspond to mild, moderate, and severe occurrences. The City of Strawn will utilize the threshold conditions when determining the degree of urgency for initiation of the Drought Contingency plan. The threshold conditions may be created by one or more of the problems described below or by other conditions which may arise.

2.4 Public Involvement

Opportunity for the public water customers to provide input into the preparation of the Plan was provided by the City of Strawn by means of scheduling a City Council Meeting to accept input on the Plan.

2.5 Water Customer Education

City of Strawn will periodically provide the public water customers with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage. This information will be provided by means of newspaper, public service announcements, and signs in public areas. The radio station will also be informed.

2.6 Coordination with Regional Water Planning Group

The service area of City of Strawn is located within the Region G Planning Group and the City of Strawn has provided a copy of this Plan to the Region G Planning Group.

2.7 Authorization

The City Mayor, or his/her designee is hereby authorized and directed to implement the applicable provisions of this Plan upon determination that such implementation is necessary to protect public health, safety, and welfare. The City Mayor or his/her designee, shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan.

2.8 Application

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

2.9 Definitions

For the purposes of this Plan, the following definitions shall apply:

Aesthetic water use: water use for ornamental or decorative purposes such as fountains, reflecting pools, and water gardens.

Commercial and institutional water use: water use which is integral to the operations of commercial and non-profit establishments and governmental entities such as retail establishments, hotels and motels, restaurants, and office buildings.

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

Customer: any person, company, or organization using water supplied by City of Gordon.

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

Even number address: street addresses, box numbers, or rural postal route numbers ending in 0, 2, 4, 6, or 8 and locations without addresses.

Industrial water use: the use of water in processes designed to convert materials of lower value into forms having greater usability and value.

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

Non-essential water use: water uses that are not essential nor required for the protection of public, health, safety, and welfare, including:

- (a) Irrigation of landscape areas, including parks, athletic fields, and golf courses, except otherwise provided under this Plan;
- **(b)** Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle;
- **(c)** Use of water to wash down any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
- (d) Use of water to wash down buildings or structures for purposes other than immediate fire protection;
 - (e) Flushing gutters or permitting water to run or accumulate in any gutter or street;
- (f) Use of water to fill, refill, or add to any indoor or outdoor swimming pools or Jacuzzitype pools;
- (g) Use of water in a fountain or pond for aesthetic or scenic purposes except where necessary to support aquatic life;

- **(h)** Failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s); and
- (i) Use of water from hydrants for construction purposes or any other purposes other than fire fighting.

2.10 Criteria for Initiation and Termination of Drought Response Stages

The City Mayor, or his/her designee, shall monitor water supply and/or demand conditions on a monthly basis and shall determine when conditions warrant initiation or termination of each stage of the Plan. Customer notification of the initiation or termination of drought response stages will be notified via publication of the notice in the newspaper, public service announcements, and signs in public area. The radio station will also be informed.

The City Mayor, or his/her designee shall notify directly, or cause to be notified directly, the following individuals and entities:

- 1. Texas Commission On Environmental Quality is to be notified when mandatory restrictions are imposed.
- 2. Pro rata curtailment of water deliveries
- Initiation of a Drought / Emergency Response Stage The General Manager or official designee may order the implementation of a drought response stage or water emergency when one or more of the trigger conditions for that stage is met. When a drought stage is initiated, any or a combination of the following actions will be taken:
 - a. The public will be notified through local media, billing notice, mailers, and the City of Strawn's Web site.

Utilization of alternative water sources and/or alternative delivery mechanisms:

The City of Strawn doesn't have an alternative water source as they are self-sufficient, the City is a Surface Water System. There is currently no investments or research for alternative sources or delivery, however this could be up for potential planning.

Stage 1 - Drought Watch

Supply Management Measures:

- 1. Inform public by mail and through the news media that a trigger condition has been reached and that water users should look for ways to reduce water consumption voluntarily.
- 2. Advise public of the trigger condition situation weekly.
- 3. Request water users to insulate pipes rather than allowing water to flow to keep pipe from freezing.

Stage 2 - Drought Warning

Supply Management Measures:

- 1. Continue implementation of all relevant actions in preceding phase.
- 2. Car washing, window washing, and pavement washing shall be prohibited except when a bucket is used.
- 3. A mandatory lawn watering schedule shall be implemented, so that customers will be required to limit outside watering to alternate days based on residents address as determined by City and not exceed once a week. A schedule should be published in all area newspapers and broadcast on local radio and television. Watering shall be limited to the hours of 6-10 a.m. and 8-10 p.m.
- 4. Shrubs and newly established lawn grasses may be watered with a hand held hose with a sprayer limiting nozzle discharge to 2.0 gpm.
- 5. The following public water uses, not essential for public health or safety, are prohibited:

Street washing Water hydrant flushing Filling pools Golf course watering

Stage 3 - Drought Emergency

Supply Management Measures:

- 1. Prohibit all outdoor use.
- 2. Implement a user surcharge of \$4.25 per 1000 gallons for consumption over the following limits:

Single family dwellings -

10,000 gallons/month

Multi-family dwellings -

8,000 gallons/month

Trailer Parks -

5,000 gallons/month

Commercial and Industrial Users by meter size:

Meter Size

5/8 inch

10,000 gallons/month

1 inch

20,000 gallons/month

2 inches

40,000 gallons/month

3. City will investigate alternative water supplies and possible emergency supply sources.

2.12 ENFORCEMENT

- a) No person shall knowingly or intentionally allow the use of water from the City of Strawn for residential, commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provision of this Plan, or in an amount in excess of that permitted by the drought response stage in effect at the time pursuant to action taken by the Mayor, or his/her designee, in accordance with provisions of this Plan.
- b) Any person who violates this Plan is guilty of a misdemeanor and, upon conviction shall be punished by a fine of not less than fifty dollars (\$25) and not more than two hundred and fifty dollars (\$75). Each day that one or more of the provisions in this Plan is violated shall constitute a separate offense. If a person is convicted of three or more distinct violations of this Plan, the Mayor, shall, upon due notice to the customer, be authorized to discontinue water service to the premises where such violations occur.
- Services discontinued under such circumstances shall be restored only upon payment of a
 re-connection charge, hereby established at \$50, and any other costs incurred by the City of
 Strawn discontinuing service. In addition, suitable assurance must be given to the City of
 Strawn 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 Strawn, 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 Strawn police department, or other City employee designated by the Mayor, may issue a citation to a person he/she reasonably believes to be in violation of this Ordinance. The citation shall be prepared in duplicate and shall contain the name and address of the alleged violator, if known, the offense charged, and shall direct him/her to appear in the municipal court on the date shown on the citation for which the date shall not be less than 3 days nor more than 5 days from the date the citation was issued. The alleged violator shall be served a copy of the citation. Service of the citation shall be complete upon delivery of the citation to the alleged violator, to an agent or employee of a violator, or to a person over 14 years of age who is a member of the violator's immediate family or is a resident of the violator's residence. The alleged violator shall appear in municipal court to enter a plea of guilty or not guilty for the violation of this Plan. If the alleged violator fails to appear 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.

2.13 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:

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

Persons requesting an exemption from the provisions of this Ordinance shall file a petition for variance with the City of Strawn 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:

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

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

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

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

SEVERABILITY

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

Attachment 1: Ordinance Adopting Water Conservation and Drought Contingency Plan

ORDINANCE NO. 65-12-2025

AN ORDINANCE OF THE CITY OF STRAWN, TEXAS, ADOPTING A WATER CONSERVATION AND DROUGHT CONTINGENCY PLAN; ESTABLISHING CRITERIA FOR THE INITIATION AND TERMINATION OF DROUGHT RESPONSE STAGES; ESTABLISHING RESTRICTIONS ON CERTAIN WATER USES; ESTABLISHING PENALTIES FOR THE VIOLATION OF AND PROVISIONS FOR ENFORCEMENT OF THESE RESTRICTIONS; ESTABLISHING PROCEDURES FOR GRANTING VARIANCES; AND PROVIDING SEVERABILITY AND AN EFFECTIVE DATE.

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

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

WHEREAS, Sections 11.1271 and 11.1272 of the Texas Water Code and applicable rules of the Texas Commission on Environmental Quality require all public water supply systems in Texas to prepare a drought contingency plan; and

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

NOW THEREFORE, BE IT ORDAINED BY THE CITY OF STRAWN, TEXAS: SECTION 1.

That the City of Strawn, Texas Water Conservation and Drought Contingency Plan attached hereto as Exhibit "A" and made part hereof for all purposes be, and the same is hereby, adopted as the official policy of the City.

SECTION 2.

That all ordinances that are in conflict with the provisions of this ordinance be, and the same are hereby, repealed and all other ordinances of the City 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.

This ordinance shall take effect immediately from and after its passage and the publication of the caption, as the law in such cases provides.

DULY PASSED BY THE CITY OF STRAWN, TEXAS, on the 12 day of

APPROVED:

MAYOR

ATTESTED TO:

Carl Fraguer

Attachment 2: Public Water Supply Utility Profile, Water Loss Audit, Goal Table



CONTACT INFORMATION

Name of Ut	ility: CITY O	F STRAWN					
Public Wate	er Supply Ident	ification Number (PWS	SID): TX1	820005			
Certificate of	of Convenience	e and Necessity (CCN)	Number:	10280			
Surface Wa	iter Right ID Ni	umber:					
Wastewate	r ID Number:	20108					
Contact:	First Name:	Danny	Las	t Name: Miller			
	Title:			-			
Address:			City:	Strawn	State:	TX	
Zip Code:	76475	Zip+4:	Email:	city@strawntx.co	m		
Telephone	Number: 2	546725311	Date:	3/4/2025			
•	/ater Planning er Conservatio						
Our records	s indicate that	you:					
√ Rece	ived financial a	assistance of \$500,000	or more from	m TWDB			
Have	3,300 or more	retail connections					
Have	a surface wate	er right with TCEQ					
A. Populat	tion and Servi	ice Area Data					
1. Curi	rent service are	ea size in square miles	s: 1				



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

Year	Historical Population Served By Retail Water Service	Historical Population Served By Wholesale Water Service	Historical Population Served By Wastewater Water Service
2024	1,000	250	700
2023	1,000	230	700
2022	900	236	700
2021	750	225	700
2020	750	225	700

3. Projected service area population for the following decades.

Year	Projected Population Served By Retail Water Service	Projected Population Served By Wholesale Water Service	Projected Population Served By Wastewater Water Service
2030	762	268	762
2040	797	280	197
2050	829	291	829
2060	854	307	854
2070	854	307	854

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

Data provided from historical submission, TWDB projections, and US Census Bureau.



B. System Input

System input data for the previous five years.

Total System Input = Self-supplied + Imported – Exported

Year	Water Produced in Gallons	Purchased/Imported Water in Gallons	Exported Water in Gallons	Total System Input	Total GPCD
2024	67,344,211	0	8,570,526	58,773,685	161
2023	64,016,145	0	10,204,382	53,811,763	147
2022	60,262,687	0	9,863,708	50,398,979	153
2021	53,385,294	0	8,199,796	45,185,498	165
2020	77,154,000	0	8,480,332	68,673,668	251
Historic Average	64,432,467	0	9,063,749	55,368,719	176

C. Water Supply System

1. Designed daily capacity of system in gallons	864,000
2. Storage Capacity	
2a. Elevated storage in gallons:	152,000
2b. Ground storage in gallons:	67,000



D. Projected Demands

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

Year	Population	Water Demand (gallons)
2026	762	32,000,000
2027	762	32,000,000
2028	762	32,000,000
2029	767	39,189,468
2030	767	39,189,468
2031	767	39,189,468
2032	767	39,189,468
2033	800	40,000,000
2034	800	40,000,000
2035	800	40,000,000

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

Population estimates from TWDB. Water Demand calculated by historical average GPCD multiplied by projected population.

E. High Volume Customers

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

Customer	Water Use Category	Annual Water Use	Treated or Raw
Texas Building Producers	Industrial	1,074,500	Treated

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

Customer	Water Use Category	Annual Water Use	Treated or Raw
City of Mingus	Municipal	8,142,000	Treated

F. Utility Data Comment Section

Additional comments about utility data.



Section II: System Data

A. Retail Water Supplier Connections

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

Water Use Category Type	Total Retail Connections (Active + Inactive)	Percent of Total Connections
Residential - Single Family	335	81.51 %
Residential - Multi-Family	27	6.57 %
Industrial	4	0.97 %
Commercial	40	9.73 %
Institutional	5	1.22 %
Agricultural	0	0.00 %
Total	411	100.00 %

2. Net number of new retail connections by water use category for the <u>previous five years.</u>

	Net Number of New Retail Connections						
Үеаг	Residential - Single Family	Residential - Multi-Family	Industrial	Commercial	Institutional	Agricultural	Total
2024	0	0	0	0	0	0	0
2023	0	7	0	21	0	0	28
2022	25	0	0	2	0	0	27
2021	0	0	0	0	10	1	11
2020	16	0	0	0	1	0	17



B. Accounting Data

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

Year	Residential - Single Family	Residential - Multi-Family	Industrial	Commercial	Institutional	Agricultural	Total
2024	20,155,708	511,809	972,700	353,740	533,500	0	22,527,457
2023	17,729,229	563,494	4,068,700	9,751,374	590,300	0	32,703,097
2022	19,605,100	471,886	1,182,800	4,097,900	705,600	0	26,063,286
2021	15,836,014	734,786	6,737,300	3,578,609	1,475,400	176,900	28,539,009
2020	18,634,900	547,419	12,281,100	4,190,547	447,649	0	36,101,615

C. Residential Water Use

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

Year	Total Residential GPCD
2024	62
2023	55
2022	61
2021	61
2020	70
Historic Average	62



D. Annual and Seasonal Water Use

1. The <u>previous five years'</u> gallons of treated water provided to RETAIL customers.

		Total Gallons of Treated Water					
Month	2024	2023	2022	2021	2020		
January	1,783,577	1,551,715	1,712,915	1,393,523	1,360,528		
February	1,644,512	1,315,012	1,691,433	2,424,799	1,781,096		
March	1,575,843	1,324,881	1,533,733	1,089,967	1,302,124		
April	1,654,991	1,478,848	2,574,358	1,571,885	1,384,430		
May	1,675,173	1,724,339	3,409,043	1,987,427	2,605,769		
June	1,887,554	1,627,056	2,589,000	1,612,504	3,043,622		
July	2,931,136	2,119,696	2,578,675	2,436,000	2,769,109		
August	2,619,677	4,374,196	2,921,674	2,807,031	3,206,849		
September	2,403,524	3,189,274	2,244,139	2,465,805	3,152,393		
October	2,638,871	2,047,416	2,329,133	2,303,797	2,101,947		
November	1,831,056	1,573,835	1,652,854	1,437,474	2,088,191		
December	1,533,427	1,612,829	1,503,075	1,319,693	1,929,862		
Total	24,179,341	23,939,097	26,740,032	22,849,905	26,725,920		



2. The <u>previous five years'</u> gallons of raw water provided to RETAIL customers.

	Total Gallons of Raw Water				
Month	2024	2023	2022	2021	2020
January					
February					
March					
April					
Мау					
June					
July					
August					
September					
October					
November					
December					
Total					

3. Summary of seasonal and annual water use.

	Summer RETAIL (Treated + Raw)	Total RETAIL (Treated + Raw)		
2024	7,438,367	24,179,341		
2023	8,120,948	23,939,097		
2022	8,089,349	26,740,032		
2021	6,855,535	22,849,905		
2020	9,019,580	26,725,920		
Average in Gallons	7,904,755.80	24,886,859.00		



E. Water Loss

Water Loss data for the previous five years.

Year	Total Water Loss in Gallons	Water Loss in GPCD	Water Loss as a Percentage
2024	33,839,304	93	0.00 %
2023	10,653,844	29	0.00 %
2022	13,793,466	42	0.00 %
2021	10,071,216	37	0.00 %
2020	29,087,227	107	0.00 %
Average	19,489,011	62	0.00 %

F. Peak Day Use

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

Year	Average Daily Use (gal)	Peak Day Use (gal)	Ratio (peak/avg)
2024	66,244	80851	1.2205
2023	65,586	88271	1.3459
2022	73,260	87927	1.2002
2021	62,602	74516	1.1903
2020	73,221	98038	1.3389

G. Summary of Historic Water Use

Water Use Category	Historic Average	Percent of Connections	Percent of Water Use
Residential - Single Family	18,392,190	81.51 %	63.02 %
Residential - Multi-Family	565,878	6.57 %	1.94 %
Industrial	5,048,520	0.97 %	17.30 %
Commercial	4,394,434	9.73 %	15.06 %
Institutional	750,489	1.22 %	2.57 %
Agricultural	35,380	0.00 %	0.12 %



H. System Data Comment Section				

Section III: Wastewater System Data

A. Wastewater System Data

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

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

3. Pe	rcentage of water serviced by the wastewater system:	%



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

	Total Gallons of Treated Water									
Month	2024	2023	2022	2021	2020					
January										
February										
March										
April										
May										
June										
July										
August										
September										
October										
November										
December										
Total										

5.	Could	treated	wastewater	be	substituted	for	potable	wate	er'	?
----	-------	---------	------------	----	-------------	-----	---------	------	-----	---

B. Reuse Data

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

Type of Reuse	Total Annual Volume (in gallons)
On-site Irrigation	
Plant wash down	
Chlorination/de-chlorination	
Industrial	
Landscape irrigation (park,golf courses)	C
Agricultural	
Discharge to surface water	
Evaporation Pond	
Other	
Total	0



C. Wastewater System Data Comment	
Additional comments and files to support or explain wastewater system data listed below.	



Water Conservation Plan Annual Report Retail Water Supplier

CONTACT INFORMATION

Name of U	tility: CITY C	F STRAWN							
Public Wat	er Supply Ider	ntification Number (PWS I	ID):	TX18	20005				
Certification	n of Convenie	nce and Necessity (CCN)) Nui	mber:	10280				
Surface Wa	ater Right ID N	lumber:							
Wastewate	r ID Number:	20108							
Check all tl	nat apply:	# 							
√ Reta	ail Water Supp	olier							
√ Who	olesale Water	Supplier							
√ Was	stewater Treat	tment Utility							
Address:	P.O. Box 581	Cit	ty:	Strawr	1	Z	Zip Co	ode:	76475
Email: city	@strawntx.co	m		Te	lephone	e Numb	er: 2	2546725311	
Regional V	Vater Planning	Group: G							
Groundwat	er Conservation	on District:							
Contact:	First Name:	Danny		Last N	lame:	Miller			
	Title:	City Secretary							
Is this pers	on the designa	ated Conservation Coord	inato	or? (Yes) No	0	
Regional V	Vater Planning	a Group: G							
-	ter Conservati								
	Period (Calend	T							
		/yyyy): 01/2024		Perio	d End (ı	nm/yyy	y):	12/2024	
Check all t	hat apply	-		•):				-	
Official and	nat appry								
√ Re	ceived financia	al assistance of \$500,000	or i	more fr	om TWI	DВ			
Ha	ve 3,300 or m	ore retail connections							
Ha	ve a surface v	vater right with TCEQ							



SYSTEM DATA

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

	Retail Customer Water Usage Categories
V	Residential - Single Family
1	Residential - Multi-family
V	Industrial
V	Commercial
	Institutional
	Agricultural

Retail Customers Categories*

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

*Recommended Customer Categories for classifying customer water use. For definitions, refer to <u>Guidance</u> and <u>Methodology on Water Conservation and Water Use</u>.

2. For this reporting period, enter the number of connections for and the gallons of metered retail water used by each category. If the Customer Category does not apply, enter zero or leave blank. These numbers should be the same as those reported on the Water Use Survey.

Retail Customer Category	Number of Connections	Gallons Metered
Residential - Single Family	335	20,155,708
Residential - Multi-family	27	511,809
Industrial	4	972,700
Commercial	40	353,740
Institutional	5	533,500
Agricultural	0	0
Total Retail Water Metered¹	411	22,527,457

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



Water Use Accounting

	Total Gallons During the Reporting Period
1. Corrected Input Volume: The volume of treated water input to the distribution system from own production facilities. Same as line 13b of the Water Loss Audit for reporting periods >= 2015. Same as line 14 of the Water Loss Audit for reporting periods <= 2014.	67,344,211
2. Corrected Treated Purchased Water Volume: The amount of treated purchased wholesale water transfered into the utility's distribution system from other water suppliers system. Same as line 14b of the Water Loss Audit for reporting periods >= 2015. Same as line 15 of the Water Loss Audit for reporting periods <= 2014.	0
3. Corrected Treated Wholesale Water Sales Volume: The amount of treated wholesale water transfered out of the utility's distribution system, although it may be in the system for a brief time for conveyance reasons. Same as line 15b of the Water Loss Audit for reporting periods >= 2015. Same as line 16 of the Water Loss Audit for reporting periods <= 2014.	8,570,526
4. Total System Input Volume: This is the sum of the corrected input volume plus corrected treated purchased water volume minus corrected treated wholesale water sales volume. Same as line 16 of the Water Loss Audit for reporting periods >= 2015. Same as line 17 of the Water Loss Audit for reporting periods <= 2014. Produced + Imported - Exported = Total System Input Volume	58,773,685
5. Billed Metered: All retail water sold and metered. Same as line 17 of the Water Loss Audit for reporting periods >= 2015. Same as line 18 of the Water Loss Audit for reporting periods <= 2014.	22,527,457
6. Other Authorized Consumption: Water that is authorized for other uses such as back flushing, line flushing, storage tank cleaning, fire department use, municipal government offices or municipal golf courses/parks. This water may be metered or unmetered. Same as lines 18, 19, and 20 of the Water Loss Audit for reporting periods >= 2015. Same as lines 19, 20, and 21 of the Water Loss Audit for reporting periods <= 2014.	2,406,924
7. Total Authorized Consumption: All water that has been authorized for use. Same as Line 21 of the Water Loss Audit for reporting periods >= 2015. Same as line 22 of the Water Loss Audit for reporting periods <= 2014. Total Billed and Metered Retail Water + Other Authorized Consumption = Total Authorized Consumption	24,934,381
8. Total Apparent Losses: Water that has been consumed but not properly measured or billed (losses due to customer meter inaccuracy, systematic data handling discrepancy and/or unauthorized consumption such as theft). Same as line 27 of the Water Loss Audit for reporting periods >= 2015. Same as line 28 of the Water Loss Audit for reporting periods <= 2014.	2,626,499



9. Total Real Loss: Physical losses from the distribution system prior to reaching the customer destination (losses due to reported breaks and leaks, physical losses from the system or mains and/or storage overflow). Same as line 30 of the Water Loss Audit for reporting periods >= 2015. Same as line 31 of the Water Loss Audit for reporting periods <= 2014.	31,212,805
10. Total Water Loss: Apparent + Real = Total Water Loss	33,839,304

Programs and Activities

1.	What year did your entity adopt or revise their most recent Water Conservation Plan?			2020
2.	Does The Plan incorporate Best Management Practices?	Yes	O No	

3. Using the table below select the types of Best Management Practices or water conservation and reuse strategies actively administered during this reporting period and estimate the savings incurred in implementing water conservation and reuse activities and programs. Leave fields blank if unknown. Please separate reuse volumes from gallons saved.

Methods and techniques for determining gallons saved are unique to each utility as they conduct internal cost analyses and long-term financial planning. Texas Best Management Practice can be found at TWDB's Water Conservation Best Management Practices webpage. The Alliance for Efficiency Water Conservation Tracking Tool may offer guidance on determining and calculating savings for individual BMPs.

Best Management Practice	Check if Implemented	Estimated Gallons Saved	Estimated Gallons Reused
Conservation Analysis and Planning			
Conservation Coordinator	√	50,000	0
Cost Effective Analysis			
Water Survey for Single Family and Multi-family Customers	\checkmark	0	0
Customer Characterization			
Financial			
Wholesale Agency Assistance Programs			
Water Conservation Pricing	✓	0	0
System Operations			
Metering New Connections and Retrofitting Existing Connections			
Utility Water Audit and Water Loss	✓	0	0
Landscaping			
Landscape Irrigation Conservation and Incentives			
Athletic Fields Conservation			
Golf Course Conservation			



Park Conservation			
Residential Landscape Irrigation Evaluation			
Outdoor Watering Schedule	√	0	0
Education and Public Awareness			
School Education	√	0	0
Public Information	√	0	0
Public Outreach and Education	√	0	0
Partnerships with Nonprofit Organizations			
Rebate, Retrofit, and Incentive Programs			
Conservation Programs for ICI Accounts			
Residential Clothes Washer Incentive Program			
Water Wise Landscape Design and Conversion Programs			
Showerhead, Aerator, and Toilet Flapper Retrofit			
Residential Toilet Replacement Programs			
Custom Conservation Rebates			
Plumbing Assistance for Economically Disadvantaged Customers			
Conservation Technology & Reuse			
New Construction Graywater			
Rainwater Harvesting and Condensate Reuse			
Water Reuse BMP Categories			
Reuse for On-site Irrigation			
Reuse for Plant Washdown			
Reuse for Chlorination/Dechlorination			
Reuse for Industry			
Reuse for Agriculture			
Regulatory and Enforcement			
Prohibition on Wasting Water	√	0	0
Conservation Ordinance Planning and Development	✓	0	0
Enforcement of Irrigation Standards			
Retail			
Other			
Total	Is	50,000	0

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

Gallons	Gallons	Total Volume	Dollar Value
Saved/Conserved	Recycled/Reused	of Water Saved¹	of Water Saved ²
50,000	0	50,000	0

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

²Estimated this value by taking into account water savings, the cost of treatment or purchase of water, and deferred capital cost due to conservation.



ne Ci	ity of Strawn updated their Water Cons	ervation Plan in 2025.		
Durir	ng this reporting period, did your rates	or rate structure change?	Yes	O No
ect th	ne type of rate <u>pricing structure used</u> . C	theck all that apply.		
	Uniform Rates			
1	Flat Rates			
1	Inclining/Inverted Block Rates			
4	Declining Block Rates			
	Seasonal Rates			
	Water Budget Based Rates			
V	Excess Use Rates			
1	Drought Demand Rates			
	Tailored Rates			
	Surcharge - usage demand			
	Surcharge - seasonal			
	Surcharge - drought			
	Other			



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

Name	Implemented This Year		Number Of Times This Year	Total Population Reached this Year	
Brochures Distributed	V		8	16	
Messages Provided on Utility Bills	V		12	916	
Press Releases					
TV Public Service Announcements					
Radio Public Service Announcements	i i				
Educational School Programs					
Displays, Exhibits, and Presentations	V		12	24	
Community Events					
Social Media campaign - Facebook					
Social Media campaign - Twitter	9				
Social Media campaign - Instagram					
Social Media campaign - YouTube					
Facility Tours	✓		0	0	
Other	✓		0	0	
Tota	ı		32	956	

Brochures are available to customers on the counter at the office, there were 8 taken. Messages are provided on monthly bill sent to customers. A display of water conservation information can also be seen on the counter in the office. City of Strawn offers facility tours to the public and school district annually, no one has taken the available opportunity.

Leak Detection and Water Loss

1.	During this reporting period	, how many leaks were repaired in the syster	n or at
	service connections?	10	

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

		Water Loss Causes
V	7	Distribution line leaks and breaks
Unauthorized use and the		Unauthorized use and theft



Master meter problems	
Customer meter problems	
Record and data problems	
Other	

3. For this reporting period, provide the following information on your distribution lines.

Total Length of Main Lines (miles)	Total Length Repaired (feet)	Total Length Replaced (feet)	
41	100	0	

4. For this reporting period, provide the following information regarding your meters:

Type of Meter	Total Number	Total Tested	Total Repaired	Total Replaced
Production Meters	4	2	0	0
Meters larger than 1 1/2 inches	15	0	0	0
Meters 1 1/2 inches or smaller	390	30	0	0

5	Does your system have automated meter reading?	O Yes	No
ס.	Does your system have automated meter reading:	0 163	O 140



Program Effectiveness

1. Program Effectiveness

In your opinion, how would you rank the overall effectiveness of your conservation programs and activities?

Customer Classification	Less Than Effective	Somewhat Effective	Highly Effective	Does Not Apply
Residential Customers	0	•		
Industrial Customers	0	•	0	
Institutional Customers	0	•		
Commercial Customers	0	•		
Agricultural Customers	0			•

2.	During the reporting period,	did you implement your Drought Contingency Plan?	Ye	s () 1	٧o
----	------------------------------	--	----	-----	-----	----

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

	Technical Assistance Areas
1	Best Management Practices
	Drought Contingency Plans
	Landscape Irrigation
7	Leak Detection and Equipment
1	Rainwater Harvesting
Ì	Rate Structures
H	Educational Resources
	Water Conservation Annual Reports
	Water Conservation Plans
	Water IQ: Know Your Water
	Water Loss Audits
	Recycling and Reuse



Target and Goals

Total, Residential, and Water Loss in Gallons per Capita per Day (GPCD)

The tables below display your current GPCDs.

Total System Input in Gallons Water Produced + Wholesale Imported - Wholesale Exported	Retail Population¹	Total GPCD (System Input / Retail Population) / 365	
58,773,685	1,000	161	

¹Retail Population is the total permanent population of the service area, including single family, multi-family, and group quarter populations

Residential Use in Gallons (Single Family + Multi-family)	Residential Population ²	Residential GPCD (Residential Use / Residential Population) / 365
20,667,517	916	62

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

Total Water Loss in Gallons Apparent + Real = Total Water Loss	Retail Population	Water Loss GPCD ³
33,839,304	1,000	93

³Water Loss GPCD is a conservation planning indicator and target best used in conjunction with Total GPCD and Residential GPCD.

The table below displays the specific and quantified five-year and ten-year goals listed in your current Water Conservation Plan alongside the current GPCD totals.

Achieve Date	Target for Total GPCD	Current Total GPCD	Target for Residential GPCD	Current Residential GPCD	Target for Water Loss GPCD	Current Water Loss GPCD
Five-year Target Date 2025		161	58	62	25	93
Ten-year Target Date 2030		161	56	62	22	93

TEXAS WATER DEVELOPMENT BOARD WATER USE SURVEY

WATER USE IN CALENDAR YEAR: 2024

CITY OF STRAWN SYSTEM NAME:

MULTIPLE SURVEY ORG: **OPERATOR NAME:**

PO BOX 581 MAILING ADDRESS 1:

MAILING ADDRESS 2:

STRAWN CITY/STATE/ZIP:

76475-

ĭ

CITY OF STRAWN

SURVEY NUMBER:

0826450

PALO PINTO BRAZOS PRIMARY USED RIVER BASIN: PRIMARY USED COUNTY:

254-672-5311 **ORGANIZATION MAIN PHONE:** city@strawntx.com

WEB:

MAIN EMAIL:

1820005 PWS CODE:

INTAKE

PWS NAME:

44,854,000 19,123,000 1,154,000 DECEMBER Total Volume (gallons) Total Volume (gallons) 1,469,000 NOVEMBER 1,138,000 % Treated Prior to Intake % Treated Prior to Intake OCTOBER 0.00 0.00 1,629,000 Saline (Y or N) Saline (Y or N) SEPTEMBER Brackish / Brackish / z z Metered or Estimated Metered or Estimated 2,932,000 AUGUST Σ ≥ 1,609,000 % Consumed Well Name (if applicable) 100.00 JULY Desdemona Well Site 1,886,000 Water Right # JUNE TUCKER LAKE/RESERVO 1,070,000 Reservoir / River TRINITY AQUIFER Aquifer MAY 1,511,000 BRAZOS BRAZOS Basin APRIL Basin 806,000 PALO PINTO **EASTLAND** MARCH County County 946,000 FEBRUARY SURFACE WATER SELF SUPPLIED GROUND WATER SELF SUPPLIED Water Type Water Type 2,973,000 JANUARY

SALES:

BUYER	SALE TYPE (MUNICIPAL or INDUSTRIAL)	COUNTY NAME BASIN NAME	BASIN NAME	WATER	AQUIFER NAME (if GW)	NATER AQUIFER NAME SURFACE WATER (if GW) Name (if SW)	RAW or TREATED	TOTAL VOLUME (GALLONS)
CITY OF MINGUS	Σ	PALO PINTO	BRAZOS	SURFACE WATER		TUCKER LAKE/RESERVOIR	Treated	8,142,00
TEXAS BUILDING PRODUCERS	=	PALO PINTO	BRAZOS	SURFACE WATER		TUCKER LAKE/RESERVOIR	Treated	1,074,50

Tg

2,145,000

3,013,000

3,679,000

3,442,000

5,042,000

4,558,000

3,963,000

3,952,000

4,400,000

3,520,000

3,576,000

3,564,000

DECEMBER

NOVEMBER

OCTOBER

SEPTEMBER

AUGUST

JULY

JUNE

MΑΥ

APRIL

MARCH

FEBRUARY

JANUARY

18

COUNTY CONNECTIONS:

COUNTY NAME	TOTAL CONNECTIONS
EASTLAND	30
PALO PINTO	378

CONNECTIONS & USAGE:	CONNECTIONS	VOLUME (GALLONS)
TOTAL METERED RETAIL:	411	22,527,457
Residential - Single Family	335	20,155,708
Residential - Multi Family	27	511,809
Institutional	2	533,500
Commercial	40	353,740
Industrial	4	972,700
Agriculture	0	0
Reuse	0	0
TOTAL UNMETERED:	0	0

1,000

WATER SYSTEM INFORMATION:
Estimated full-time residential population served directly by this system

P.O. BOX 13231, CAPITOL STATION

AUSTIN, TX 78711-3231

2024 WATER AUDIT REPORT

A. Water Utility General Information	n		
1. Water Utility Name	CITY OF STRAWN		
1a. Regional Water Planning Area	G		
1b. Address	PO BOX 581		
	STRAWN, TX 76475-0581		
2. Contact Information			
2a. Name	Sarah Fernandez	Have you completed W	ater Loss Auditor Training?
2b. Telephone Number	(325) 695-1070	⊙ Yes	
2c. Email Address	sfernandez@jacobmartin.com	O No	
3. Reporting Period			
3a. Start Date	01/01/2024		
3b. End Date	12/31/2024		
4. Source Water Utilization			
4a. Surface Water	-	75.00	%
4b. Ground Water		25.00	%
5. Population Served			
5a. Retail Population Served	_	1,000	Assessment
5b. Wholesale Population Serve		250	Scale
6. Utility's Length of Main Lines	_	41.00	miles3
7. Total Retail Metered Connection	s - Active and Inactive	411	
7b. Service Connections		435	3
8. Number of Wholesale Connection	ons Served	162	
9. Service Connection Density	=	10.61	connections per mile
10. Average Yearly System Operation	ting Pressure	50.00	psi 3
11. Volume Units of Measure		Gallons	\
B. System Input Volume			
12. Volume of Water Intake		63,977,000	gallons
13. Produced Water	_	63,977,000	gallons 2
13a. Production Meter Accuracy		95.00	% 2.5
13b. Corrected Input Volume	-	67,344,211	gallons
14. Total Treated Purchased Wate	r	0	gallons N/A
14a. Treated Purchased Water	Meter Accuracy	0.00	% N/A

P.O. BOX 13231, CAPITOL STATION

AUSTIN, TX 78711-3231

2024 WATER AUDIT REPORT

14b. Corrected Treated Purchased Water Volume	0	gallons
15. Total Treated Wholesale Water Sales	8,142,000	gallons 3
15a. Treated Wholesale Water Meter Accuracy	95.00	% 3
15b. Corrected Treated Wholesale Water Sales Volume	8,570,526	gallons
16. Total System Input Volume Line 13b + Line 14b - Line 15b	58,773,685	gallons Assessment
C. Authorized Consumption		Scale
17. Billed Metered	22,527,457	gallons 3
18. Billed Unmetered	2,162,000	gallons 3
19. Unbilled Metered	183,200	gallons 3
20. Unbilled Unmetered	61,724	gallons 3
21. Total Authorized Consumption	24,934,381	gallons
D. Water Losses		
22. Water Losses Line 16 - Line 21	33,839,304	gallons
E. Apparent Losses		
23. Average Customer Meter Accuracy	90.00	% 3
24. Customer Meter Accuracy Loss	2,503,051	gallons
25. Systematic Data Handling Discrepancy	61,724	gallons 2.5
26. Unauthorized Consumption	61,724	gallons 2.5
27. Total Apparent Losses	2,626,499	gallons
. Real Losses		
28. Reported Breaks and Leaks	3,000,000	gallons 2
29. Unreported Loss	28,212,805	gallons 2.5
30. Total Real Losses Line 28 + Line 29	31,212,805	gallons
31. Total Water Losses Line 27 + Line 30	33,839,304	gallons
32. Non-Revenue Water Line 31 + Line 19 + Line 20	34,084,228	gallons
G. Technical Performance Indicator for Apparent Loss		
33. Apparent Losses Normalized Line 27 / Line 7b / 365	16.54	gallons lost per connection per day

P.O. BOX 13231, CAPITOL STATION

AUSTIN, TX 78711-3231

2024 WATER AUDIT REPORT

H. Technical Performance Indicators for Real Loss		
34. Real Loss Volume	31,212,805	gallons
Line 30		
35. Unavoidable Annual Real Losses Volume	0	gallons
(5.41 * Line 6 + (Line 7b * 0.15)) * 365 * Line 10	<u> </u>	
36. Infrastructure Leakage Index Line 34 / Line 35	0.00	I.L.I
37. Real Losses Normalized - Service Connections Line 34 / Line 7b / 365	196.59	gallons lost per connection per day
38. Real Losses Normalized - Main Lines Line 34 / Line 6 / 365	2085.72	gallons lost per mile per day
I. Financial Performance Indicators		Assessment Scale
39. Total Apparent Losses	2,626,499	gallons
Line 27		
40. Retail Price of Water	0.00950	\$/gallons 3
41. Cost of Apparent Losses Line 39 x Line 40	\$24,952	
42. Total Real Losses	31,212,805	gallons
Line 30		
43. Variable Production Cost of Water	0.008000	\$/gallons1.5
44. Cost of Real Losses	\$249,702	
Line 42 x Line 43		
45. Total Cost Impact of Apparent and Real Losses	\$274,654	
Line 41 + Line 44		
46. Total Assessment Score	58.5	
J. System Losses and Gallons Per Capita per Day (GPCD)		
47. Total Water Loss per Connection per Day	213.13	gallons
Line 22 / Line 7b / 365	161	
48. GPCD Input		
Line 16 / Line 5a / 365	93	
49. GPCD Loss		
Line 31 / Line 5a / 365		
K. Wholesale Factor Adjustments		
 Percent of Treated Wholesale Water Traveling through General Distribution System 	100.00	%

P.O. BOX 13231, CAPITOL STATION

AUSTIN, TX 78711-3231

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51. Volume of Treated Wholesale Water Traveling through General Distribution System	8,570,526	gallons	
(Line 50/100) * Line 15b			
52. Wholesale Factor	0.13		
Line 15b / (Line 13b + Line 14b)			
53. Adjusted Real Loss Volume	27,155,140	gallons	
((1 - Line 52) x (Line 30 * Line 50 / 100)) + (Line 30 - (Line 30 * Line 50/100))			
54. Adjusted Cost of Real Losses	\$217,241		
((1 - Line 52) x (Line 44 * Line 50 / 100)) + (Line 44 - (Line 44 * Line 50/100))			
55. Adjusted Total Water Loss Volume	29,440,194	gallons	
((1 - Line 52) x (Line 31 * Line 50 / 100)) + (Line 31 - (Line 31 * Line 50/100))			
56. Adjusted Total Cost Impact of Apparent and Real Losses	\$238,949		
((1 - Line 52) x (Line 45 * Line 50 / 100)) + (Line 45 - (Line 45 * Line 50/100))			
57. Adjusted Real Loss Per Connection	171.03	gallons lost per connection per day	
((1 - Line 52) x (Line 37 * Line 50 / 100)) + (Line 37 - (Line 37 * Line 50/100))		connection per day	
58. Adjusted Real Loss Per Mile	1814.58	gallons lost per	
((1 - Line 52) x (Line 38 * Line 50 / 100)) + (Line 38 - (Line 38 * Line 50/100))		mile per day	
59. Adjusted Infrastructure Leakage Index	0.00	I.L.I	
((1 - Line 52) x (Line 36 * Line 50 / 100)) + (Line 36 - (Line 36 * Line 50/100))			
60. Adjusted Total Water Loss Per Connection Per Day	187.57	gallons	
(((1 - Line 52) x (Line 37 * Line 50 / 100)) + (Line 37 - (Line 37 * Line 50/100))) + Line 33			
61. Adjusted GPCD Loss	81		
((1 - Line 52) x (Line 49 * Line 50 / 100)) + (Line 49 - (Line 49 * Line 50/100))			

Comments

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Attachment 3: Letter to Regional Water Planning Group

Date:
Mr. Wayne Wilson
Chair Region G Water Planning Group
P.O. Box 7555, Waco, TX 76714
Dear Mr. Wilson:
This letter is to notify you that the City of Strawn recently adopted a water conservation and drought contingency plan. This notice is in accordance with Texas Water Development Board and Texas Commission on Environmental Quality rules.
The plan is available upon request.
Sincerely,
City Public Works, The City of Strawn