WATER CONSERVATION PLAN & DROUGHT CONTINGENCY PLAN 2024

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WATER CONSERVATION PLAN

Introduction

This Water Conservation Plan (WCP) has been developed in coordination with the City of Brownwood (City) and in accordance with the recommendations by the Texas Commission on Environmental Quality (TCEQ) Form 10218 and the Texas Water Development Board's (TWDB) Water Conservation Planning Guide. The service area map for the City has been provided in Appendix 1. The purpose of this WCP is to identify opportunities and strategies for the City to achieve water conservation. An updated WCP is required every five (5) years and must include a Utility Profile (see Appendix 2) which is an evaluation of the City's water and wastewater system and customer use characteristics to identify water conservation opportunities and potential targets and goals. Additionally, a Drought Contingency Plan (DCP) is also required every five (5) years and has been included within this document.

Conservation Coordinator

The City is required to have a designated person who serves as the water conservation coordinator and is responsible for implementing the WCP. The designated coordinator may have other duties and / or titles within the utility. The City Manager or his/her designee is hereby authorized and directed to implement the applicable provisions of this WCP.

5-Year and 10-Year Goals

Implementing goals for the City to target in the future is a fundamental component of reducing the loss or waste of water, improving water use efficiency, and for increasing the reuse of water (where applicable). The City's specific and quantified 5-year and 10-year water conservation goals are presented below in Table 1.

Table 1: Water Conservation Plan 5-Year and 10-Year Goals for Water Savings

Category	Historic 5-Year Average	Baseline	5-Year Goal (2029)	10-Year Goal (2034)
Total GPCD[1]	159	159	143	139
Residential GPCD[2]	89	89	77	75
Water Loss GPCD[3]	1	1	14	14
Water Loss[4]	< 1%	< 1%	< 10%	< 10%

The goals identified in Table 1 above are based upon regular, typical weather conditions and patterns for the City. It should be noted that adverse weather conditions will likely affect usage data and could affect the ability of the City to reach such goals.

[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

Tracking and Achieving Targets

The City will track and routinely review water usage data through a universal metering program (see "Universal Metering Program" section) at no more than yearly intervals to evaluate the effectiveness of implemented conservation measures in comparison to the City's goals identified previously in Table 1. The City will raise public awareness of water conservation and encourage responsible use of water through various public education and information (see "Public Education & Information" section). As required by the TWDB, the City will prepare and submit Water Conservation Annual Reports. City staff will review these reports to also evaluate the effectiveness of implemented conservation measures.

Universal Metering Program

The City meters and maintains records for 100% of water use in residential, industrial, commercial, and institutional accounts. Meters are tested upon customer request. Per the City's meter testing, repair, and replacement program:

- Master meters are tested and calibrated annually to within an accuracy of plus or minus 5%.
- Meters larger than 2-inch are tested and calibrated, as necessary.
- Meters 1-inch or smaller are tested and calibrated or replaced in accordance with AWWA standards after 1-million gallons or every 15 years.
- Meters that have abnormally high or low water usage are tested and/or replaced.

Water Loss Control and Leak Detection Program

The City maintains an ongoing program of leak detection and repair. Monthly water audits are completed by the City to identify and measure potential water loss by comparing the quantity of sold water to residential, industrial, commercial, and institutional accounts to the amount of water purchased by the City from Brown County Water Improvement District No. 1 (BCWID No. 1). Any abnormalities are investigated by the Utility Department staff using leak detection equipment. Water lines found to have leaks are replaced as quickly as practical. Additionally, meters are tested, repaired, and / or replaced in accordance with the "Universal Metering Program" section.

During 2023, the following leak detection and water loss activities were performed:

- 418 leaks repaired.
- 117 meters larger than 1.5-inches replaced.
- 1,060 meters smaller than 1.5-inches replaced.

The City's Supervisory Control and Data Acquisition (SCADA) system serves as an additional tool for monitoring water loss and leaks within the distribution system. Elevated tanks are monitored by a SCADA system which will send an alarm to utility staff if water flow from any of the tanks in the distribution system indicates a possible water main break, a tank overflow, or any other abnormalities in the system. Visual inspections are performed routinely by meter readers and utility staff. Customers with abnormally high usage that would indicate excessive usage or a plumbing fixture leak are informed.

Additionally, BCWID No. 1 performs daily pH testing of raw and treated water. The pH is maintained above 7 to prevent corrosion of metal pipes. Any abnormalities are reported to the City by BCWID No. 1.

Public Education & Information

The City conducts a program of ongoing public education that includes an annual summertime distribution of water conservation information. Articles are published in local newspapers to reinforce the distributed materials. Radio public service announcements and interviews are periodically conducted to promote water conservation awareness. The City's website contains information regarding water conservation and any applicable drought water usage restrictions that are active. Additionally, new customers will receive water conservation information when applying for service.

Public awareness and educational activities conducted by the City include:

- Brochures distributed throughout City.
- Notes printed on bills.
- Press releases.
- Radio public service announcements.
- Water conservation exhibits.
- Public presentations to local organizations.

Water Rate Structures

After the base monthly service fee, the City has a uniform rate of $2.85 (or as amended by rate ordinance) per CCF (100 cubic feet or 748.052 gallons) for customers inside the City limits and $3.76 (or as amended by rate ordinance) per CCF for customers outside the City limits. This rate is cost-based and does not encourage the excessive use of water. The City will consider inclining block rates in the future.

Wholesale Contracts

The City will include a requirement in every wholesale water supply contract entered into or renewed after the adoption of this WCP and including any contract extension, that each successive wholesale customer develop and implement a WCP of their own 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 30 TAC Chapter 288.

Recycling and Reuse

Approximately 90,000-gallons are recycled and reused annually at the City's wastewater treatment plant (WWTP). Treated wastewater effluent is used for all landscape irrigation, wash down of plant structures, cooling lubrication of pumps, process water for disinfection treatment, gravity filter backwash, belt filter press, and injection water for polymer feed system.

Plumbing Codes

The City has adopted the International Plumbing Code (IPC). All new construction must comply with the Code by using water-saving plumbing fixtures. Additionally, the State of Texas has recently adopted more stringent water-saving performance measures for plumbing fixtures, as found in the Health & Safety Code Chapter 372. The following maximum flow standards are subsequently listed in the Texas Administrative Code Title 30 Chapter 290 Subchapter G:

- Faucet or Aerator 2.2 gpm[5]
- Shower Head 2.5 gpm
- Urinal and Associated Flush Valve 0.5 gpm
- Single and Dual Flush Valve 1.28 gpm
- Pre-Rinse Spray Valve 1.6 gpm

Customers in existing buildings that do not have water-saving plumbing fixtures are encouraged through educational materials to retrofit their old plumbing fixtures.

Service taps will not be given to customers that do not meet the City's requirements for service, including compliance with the adopted plumbing code requiring the installation of water-conserving plumbing fixtures. The City Development Services Department inspects all new and repaired plumbing within the city limits. Certificates of Occupancy and permanent water service are not granted to facilities that fail to meet all requirements.

Water Waste

Water waste is prohibited at all times. Water waste is defined as:

1. Failure to repair a controllable leak, including:
    a. Irrigation systems.
    b. Plumbing fixtures.
    c. Pipes.
2. Operating a permanently installed irrigation system with:
    a. A broken or missing head.
    b. A head that is out of adjustment where the arc of the spray head is over a street, parking area, or other impervious surface.

[5] Gallons per minute (gpm)

3. During irrigation:
    a. Allowing water to run off a property such that there is a trail of water running in a street, parking area, or other impervious surface for 50-feet or greater.
    b. Allowing water to pond to a depth greater than ¼-inch in a street, parking area, or other impervious surface.

Each instance of a violation is a separate offense and a Class C misdemeanor punishable by fines.

Discretionary / Non-Essential Uses

The following discretionary / non-essential water uses are implemented and may be enforced by the City in addition with the restrictions outlined in the various stages of drought restrictions within the DCP:

- Wash down of any sidewalks, driveways, parking lots, or other hard surfaced areas (Commercial accounts may wash parking lots as needed for health and safety purposes in Stages 1-3. During Stage 4, only spot washing is allowed as necessary).
- Use of water to wash down buildings or structures for purposes other than immediate fire protection.
- Use of water for dust control.
- Residential use of water for washing vehicles.
- Failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s).

Best Management Practices (BMPs)

The City will consider implementing the following BMPs during the next reporting cycle:

- School Education
- Public Information
- Annual Water Audit
- Prohibition of Water Waste
- Drought Rate Increases

City Ordinance

The City Ordinance adopting the above WCP and the DCP presented in the following sections can be found in Appendix 3.

Coordination with Region F Water Planning Group

The service area of the City is located within the Region F Water Planning Group and the City will provide a copy of this WCP and DCP to the Region F Planning Group at:

Colorado River Municipal Water District
400 E. 24th Street
Big Spring, TX 79720

The letter to the Region F Planning Group can be found in Appendix 4.

Reporting Requirements

As required, the City will prepare and submit Utility Profile and Annual Reports to the TWDB. The Public Works Director or his/her designee is hereby authorized and directed to submit the annual utility profile reports.

DROUGHT CONTINGENCY PLAN

Declaration of Policy, Purpose, and Intent

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

Water uses regulated or prohibited under this Drought Contingency Plan (DCP) are considered to be non-essential or discretionary 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 the "Enforcement" section of this DCP.

Public Involvement

Opportunity for the public to provide input into the preparation and subsequent revisions of this DCP was provided by the City by means of:

- City Council meetings scheduled for the 2nd and 4th Tuesdays of the month at 9:00 AM.
- City website and social media sites.
- Phone.
- Personal correspondence.

Public Education

The City will periodically provide the public with information about this DCP, including information about the conditions under which each stage of the DCP is to be initiated or terminated and the drought response measures to be implemented in each stage. Water conservation tips and information will also be provided.

This information will be provided by means of:

- Posting a Notice of Drought Conditions at City Hall.
- General circulation to newspapers and radio stations.
- Direct mailing upon request.
- Handouts to customers, schools, civic groups, and clubs upon request.
- Facility tours.
- City website and social media sites.

A copy of this DCP will be available at the City Hall during business hours.

Coordination with Region F Water Planning Group

The service area of the City is located within the Region F Water Planning Group and the City will provide a copy of this WCP and DCP to the Region F Planning Group at:

Colorado River Municipal Water District
400 E. 24th Street
Big Spring, TX 79720

The letter to the Region F Planning Group can be found in Appendix 4.

Authorization

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

Application

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

Criteria for Initiation and Termination of Drought Response Stages

The City Manager or his/her designee shall monitor water supply and/or demand conditions on a daily basis and, in accordance with the triggering criteria set forth in this DCP, shall determine that a mild drought, moderate drought, severe drought, exceptional drought, or emergency condition exists. The City shall notify the public by the means of notification described in the "Public Education" section of this DCP. The triggering criteria for the various drought stages are based upon the following:

Stage 1 Triggers: Mild Drought

Customers shall be requested to voluntarily conserve water and adhere to the prescribed restrictions on certain water uses, defined in the "Drought Response Stages" section of this DCP, when any of the following triggers occur:

- BCWID No. 1 declares Stage 1 Drought Conditions (See Appendix 5 for BCWID No. 1 Drought Condition Triggers).
- High demand on the system.
- Drought monitor indicates drought conditions.

Stage 1 of this DCP may be rescinded when all the conditions listed as triggering events have ceased to exist for a period of at least three (3) consecutive days, or at the determination of the City Manager or his/her designee.

Stage 2 Triggers: Moderate Drought

Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses, defined in the "Drought Response Stages" section of this DCP, when any of the following triggers occur:

- BCWID No. 1 declares Stage 2 Drought Conditions.
- Inability to maintain 70% storage capacity overnight due to high demand.
- Demand exceeds 85% capacity for three consecutive days.
- Demand exceeds 90% capacity for one day.

Stage 2 of this DCP may be rescinded when all the conditions listed as triggering events have ceased to exist for a period of at least three (3) consecutive days, or at the determination of the City Manager or his/her designee. Upon termination of Stage 2, Stage 1, or the applicable drought response stage based on the triggering criteria, becomes operative.

Stage 3 Triggers: Severe Drought

Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses, defined in the "Drought Response Stages" section of this DCP, when any of the following triggers occur:

- BCWID No. 1 declares Stage 3 Drought Conditions.
- Inability to maintain 50% storage capacity overnight due to high demand.
- Demand exceeds 90% capacity for three consecutive days.
- Demand exceeds 95% capacity for 1 day.

Stage 3 of this DCP may be rescinded when all the conditions listed as triggering events have ceased to exist for a period of at least three (3) consecutive days, or at the determination of the City Manager or his/her designee. Upon termination of Stage 3, Stage 2, or the applicable drought response stage based on the triggering criteria, becomes operative.

Stage 4 Triggers: Exceptional Drought

Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses, defined in the "Drought Response Stages" section of this DCP, when any of the following triggers occur:

- BCWID No. 1 declares Stage 4 Drought Conditions.
- Inability to maintain 35% storage capacity overnight due to high demand.
- Demand exceeds 95% capacity for three consecutive days.
- Demand exceeds 100% capacity for one day.
- Major limitations of water system components.

Stage 4 of this DCP may be rescinded when all the conditions listed as triggering events have ceased to exist for a period of at least three (3) consecutive days, or at the determination of the City Manager or his/her designee. Upon termination of Stage 4, Stage 3, or the applicable drought response stage based on the triggering criteria, becomes operative.

Stage 5 Triggers: Advanced Exceptional Drought

Customers shall be required to comply with the requirements and restrictions of this DCP, defined in the "Drought Response Stages" section of this DCP, when any of the following triggers occur:

- Same triggers as Stage 4 with addition of one or more of the following:
    - Lake Brownwood levels are less than one year supply.
    - Inability to achieve target goals for Stage 4 conservation goals.
    - Major water line breaks, or pump or system failures occur, which cause unprecedented loss of capability to provide water service.
    - Natural or man-made contamination of the water supply source.

Stage 5 of this DCP may be rescinded when all the conditions listed as triggering events have ceased to exist for a period of at least three (3) consecutive days, or at the determination of the City Manager or his/her designee. Upon termination of Stage 5, Stage 4, or the applicable drought response stage based on the triggering criteria, becomes operative.

Stage 6 Triggers: Emergency Condition

Customers shall be required to comply with the requirements and restrictions of this DCP, defined in the "Drought Response Stages" section of this DCP, when any of the following triggers occur:

- BCWID declares Stage 5 Drought Conditions.
- Water production or distribution system limitations.
- Supply source contamination.
- System outage due to the failure or damage of major water system components.

Stage 6 of this DCP may be rescinded when all the conditions listed as triggering events have ceased to exist for a period of at least three (3) consecutive days, or at the determination of the City Manager or his/her designee. Upon termination of Stage 6, Stage 5, or the applicable drought response stage based on the triggering criteria, becomes operative.

Drought Response Stages

The City Manager or his/her designee shall monitor water supply and/or demand conditions on a daily basis and, in accordance with the triggering criteria set forth in this DCP, shall determine that a mild drought, moderate drought, severe drought, exceptional drought, or emergency condition exists and shall notify the public by means of:

- Posting of Drought Response Stage at City Hall.
- General circulation to newspapers and radio stations.
- Direct mail to customers.
- Public service announcements.
- Handouts to customers, schools, civic groups, and clubs.
- City website and social media sites.

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

- City Fire Chief.
- City Emergency Management Coordinator.
- County Emergency Management Coordinator.
- Municipal Court Judge.
- County Judge.
- DPS, Division of Emergency Management, (512) 424-2208.
- TCEQ, Water Supply Division, (512) 239-4697.

The six (6) Drought Response Stages and the target water use reduction, restrictions, and utility actions are presented in the proceeding pages of this DCP. Additionally, the water restrictions presented in Table 2 below shall apply to the according Drought Response Stage.

Table 2: Water Restrictions According to Drought Response Stages

Drought State	Compliance	Odd Address	Even Address
1 – Mild	Voluntary	Monday, Thursday (Midnight to 9:00 AM & 7:00 PM to Midnight)	Tuesday, Friday (Midnight to 9:00 AM & 7:00 PM to Midnight)
2 – Moderate	Mandatory	Monday, Thursday (Midnight to 9:00 AM & 7:00 PM to Midnight)	Tuesday, Friday (Midnight to 9:00 AM & 7:00 PM to Midnight)
3 – Severe	Mandatory	Monday (Midnight to 9:00 AM & 7:00 PM to Midnight)	Tuesday (Midnight to 9:00 AM & 7:00 PM to Midnight)
4 – Exceptional	Mandatory	Monday (7:00 PM to Midnight)	Tuesday (7:00 PM to Midnight)
5 – Advanced	Mandatory	Monday (6:00 PM to 8:00 PM)*	Tuesday (6:00 PM to 8:00 PM)*

*Handheld hose, watering can, or bucket only.

The City's watering schedule applies to all residential, commercial, industrial, and institutional accounts including athletic fields and is applicable to all types of irrigation including drip irrigation. Due to game

scheduling conflicts, athletic field managers may modify the approved watering days by submitting a request in writing to the City Manager or his/her designee.

During times when this DCP is in effect, it is a violation of this DCP for any person, firm, corporation, or entity to irrigate landscapes between 9:00 a.m. and 7:00 p.m. except with watering cans and as noted above in Stage 5.

Stage 1 Response: Mild Drought

Target.....Achieve a 5% reduction in total water use.

Water Use Restrictions:

- Customers are requested to voluntarily follow the City's 2-day/week watering schedule.
- Water customers are requested to practice water conservation and to minimize or discontinue water use for non-essential or discretionary purposes.
- Customers may water potted plants and landscapes at any time with a watering can or handheld hose with an automatic shutoff nozzle.
- Require wholesale customers to achieve a 5% reduction in water purchased from the City.

Utility Actions:

- Formal public notification of Mild Drought Conditions by City officials.
- Initiate increased public information efforts.
- Notify major commercial and industrial water users.
- Increase leak detection and repair efforts.
- Daily evaluations of water usage data from the SCADA system and / or BCWID operations.
- If coming from a Stage 2, 3, or 4 Drought Response, notify TCEQ Water Supply Division of no mandatory restrictions.
- The City will consider the implementation of temporary water rate increases or water use surcharge(s).

Stage 2 Response: Moderate Drought

Target.....Achieve a 15% reduction in total water use.

Water Use Restrictions:

- Customers are required to follow the City's 2-day/week watering schedule.
- Water customers are requested to continue to practice water conservation and to minimize or discontinue water use for non-essential or discretionary purposes.
- Customers may water potted plants and landscapes at any time with a watering can or handheld hose with an automatic shutoff nozzle.
- Initiate a 50% reduction in irrigation of City parks and institutional landscapes.

- Commercial use of water reduced by 10% of normal use.
- Require wholesale customers to achieve a 10% reduction in water purchased from the City.

Utility Actions:

- Formal public notification by City officials of Moderate Drought conditions.
- Increase utility oversight of water waste.
- Notify TCEQ Water Supply Division of the current mandatory drought stage.
- The City will consider the implementation of temporary water rate increases or water use surcharge(s).

Stage 3 Response: Severe Drought

Target.....Achieve a 30% reduction in total water use.

Water Use Restrictions:

- Customers are required to comply with the City's 1-day/week watering schedule.
- Filling of swimming pools, ornamental fountains, and artificial water features on watering days only.
- Customers may water potted plants and landscapes at any time with a watering can or handheld hose with an automatic shutoff nozzle.
- Water for City parks and institutional landscapes is limited to drip irrigation or a handheld hose on designated days for trees, shrubs, and planters.
- Non-essential commercial water use reduced by 20%.
- Require wholesale customers to achieve a 30% reduction in water purchased from the City.

Utility Actions:

- Formal public notification by City officials of Severe Drought conditions.
- Implement utility enforcement of watering schedule and water waste.
- Notify TCEQ Water Supply Division of the current mandatory drought stage.
- The City will consider the implementation of temporary water rate increases or water use surcharge(s).

Stage 4 Response: Exceptional Drought

Target.....Achieve a 50% reduction in total water use.

Water Use Restrictions:

- Customers are required to comply with the City's reduced hours 1-day/week watering schedule with outdoor watering limited from 7:00 p.m. to midnight only.
- Customers may water potted plants and landscapes at any time with a watering can or handheld hose with an automatic shutoff nozzle.

- Non-essential commercial use of water reduced by 50% to 100%.
- Require wholesale customers to achieve a 50% reduction in water purchased from the City.

Utility Actions:

- Formal public notification by City officials of Exceptional Drought conditions.
- Increase utility enforcement of watering schedule and water waste.
- Notify TCEQ Water Supply Division of current mandatory drought stage.
- The City will consider the implementation of temporary water rate increases or water use surcharge(s).

Stage 5 Response: Advanced Exceptional Drought

Target.....Achieve a 50% or greater reduction in total water use.

Water Use Restrictions:

- All outdoor, non-essential, or discretionary uses of water are prohibited except with hand-held hose, water can, or bucket between 6:00 p.m. and 8:00 p.m. on the designated watering day.
- Non-essential commercial use of water reduced by 75% to 100%.
- Require wholesale customers to maintain a 50% reduction in water purchased from the City.

Utility Actions:

- Formal public notification by City officials of Advanced Exceptional Drought conditions.
- Increase utility enforcement of watering schedule and water waste.
- Notify TCEQ Water Supply Division of the current mandatory drought stage.
- The City will consider the implementation of temporary water rate increases or water use surcharge(s).

Stage 6 Response: Emergency Condition

Emergency Water Shortage:

In the event of an identified water shortage declaration from BCWID No. 1, the City will distribute water to wholesale customers according to Texas Water Code, §11.039 and initiate water allocation to municipal water customers.

Supply Source Contamination:

In the event of a contamination event, appropriate emergency procedures will be implemented, and appropriate emergency response officials will be notified immediately.

In the event of a backflow incident, loss of pressure, or an Acute Maximum Contaminant Level coliform violation, a Boiled Water Notice will be implemented as prescribed in 30 TAC Chapter 290.
System Outage:

In the event of a catastrophic failure due to natural or man-made events, appropriate emergency procedures will be implemented, and appropriate emergency response officials will be notified as appropriate.

Potential Alternative Water Sources:

There are limited groundwater resources in Brown County. Lake Brownwood is the sole source of water for the City. In the event of an emergency loss of water supply, the City will consider alternative ways to acquire and provide water for the health and public safety of the City's residents.

Enforcement

1. No person or entity shall knowingly or intentionally allow the use of water from the City for residential, commercial, institutional, industrial, agricultural, governmental, recreational, wholesale, or any other purpose in a manner contrary to any provision of this DCP, or in an amount in excess of that permitted by the drought response stage in effect at the time pursuant to action taken by the City Manager or his/her designee, in accordance with provisions of this DCP;

2. A City code enforcement officer, police officer, or other official designated by the City Manager or his/her designee, may issue a written Notice of Violation to a person or entity he/she reasonably believes to be in violation of this DCP. For subsequent violations following written notice:

    a. The utility may issue a citation (Class C misdemeanor);
    b. The utility may install a flow-restricting device in the line to limit the amount of water which will pass through the meter in a 24-hour period. The utility may charge the customer for the actual cost of installing and removing the flow-restricting device, not to exceed fifty dollars ($50.00);
    c. The utility may discontinue service at the meter for a period of seven (7) days, or until the end of the calendar month, whichever is LESS. The normal reconnect fee of the utility will apply for restoration of service.

3. Any water customer who violates this DCP is guilty of and may be charged with a misdemeanor and, upon conviction shall be punished by a fine of not less than one hundred dollars ($100.00) and not more than five hundred dollars ($500.00) or as amended in ordinance. Each day that one or more of the provisions in this DCP is violated shall constitute a separate offense. If a person is convicted of three or more distinct violations of this DCP, the City Manager or his/her designee 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 thirty-five dollars ($35.00), and any other costs incurred by the City in discontinuing service. In addition, suitable assurance must be documented with the City Manager or his/her designee that the same action shall not be repeated

while the DCP is in effect. Compliance with this plan may also be sought through injunctive relief in the district court;

4. Any water customer of the City, 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 the 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 DCP and that the parent could not have reasonably known of the violation.

Variances

The City Manager or his/her designee may, in writing, grant a temporary variance for existing water uses otherwise prohibited under this DCP 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:

- Compliance with this DCP cannot be technically accomplished during the duration of the water supply shortage or other conditions for which the DCP is in effect.
- 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 DCP or a particular drought response stage has been invoked. All petitions for variances shall be reviewed by City Manager or his/her designee, and shall include the following:

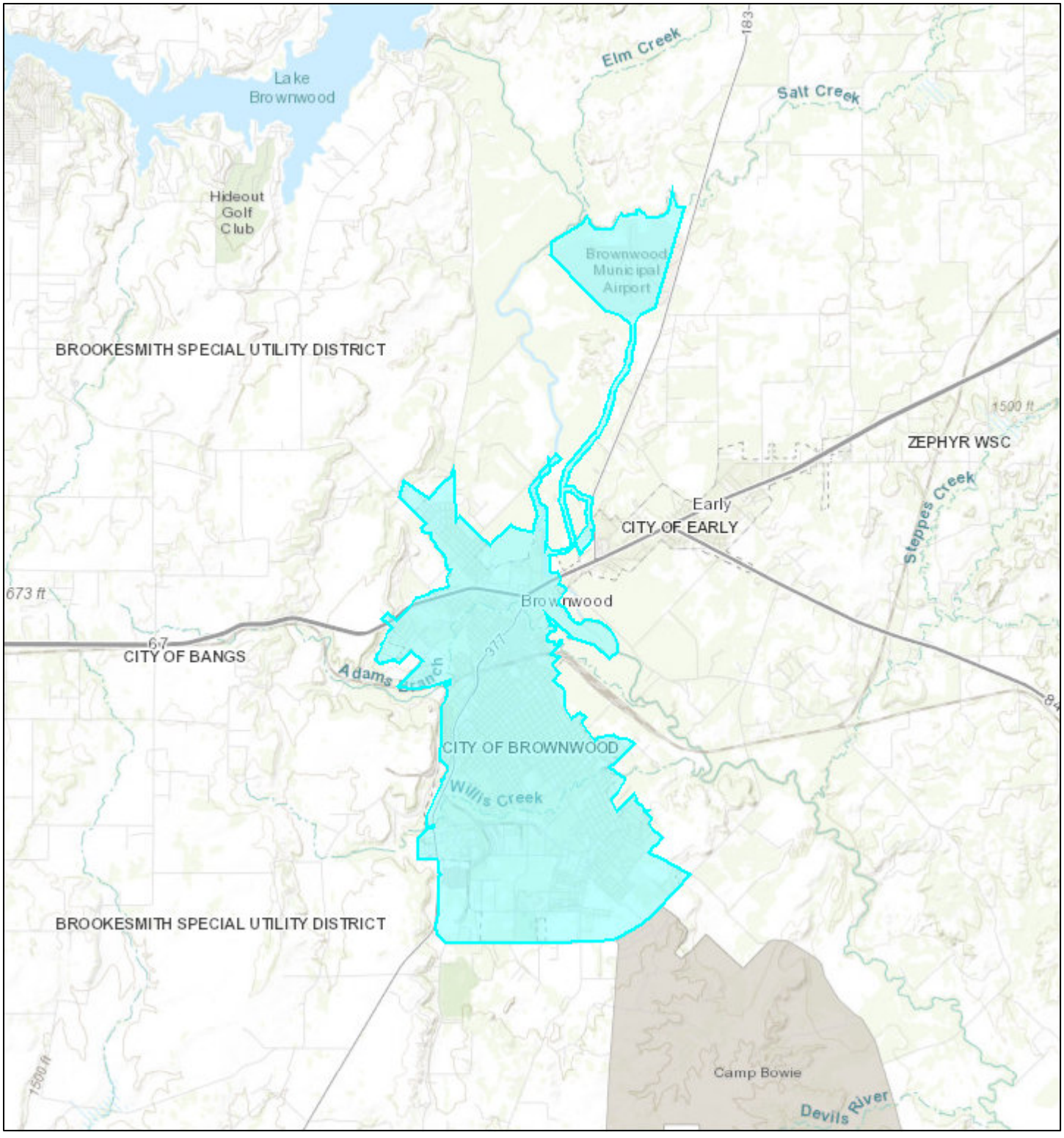
- Name and address of the petitioner(s).
- Purpose of water use.
- Specific provision(s) of the DCP from which the petitioner is requesting relief.
- Detailed statement as to how the specific provision of the DCP adversely affects the petitioner or what damage or harm will occur to the petitioner or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

City Ordinance

The City Ordinance adopting the above WCP and DCP can be found in Appendix 3.

APPENDIX 1
SERVICE AREA MAP

Brownwood Service Area Map



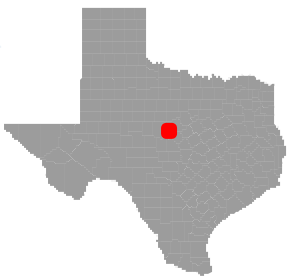
Texas Water Development Board

March 20, 2024

0 1.25 2.5 5 mi

0 2 4 8 km

1:144,448



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

TEXAS WATER DEVELOPMENT BOARD

This material is based upon work supported by the U.S. Geological Survey under Cooperative Agreement No. G17AC00016.

APPENDIX 2
UTILITY PROFILE

Texas Water Development Board

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

CONTACT INFORMATION

Name of Utility: CITY OF BROWNWOOD

Public Water Supply Identification Number (PWS ID): TX0250002

Certificate of Convenience and Necessity (CCN) Number: 10436

Surface Water Right ID Number:

Wastewater ID Number: 20157

Contact: First Name: Henry Last Name: Wied

Title: Director of Utilities

Address: P.O. Box 1389 City: Brownwood State: TX

Zip Code: 76804 Zip+4: Email: hwied@brownwoodtexas.gov

Telephone Number: 3256465775 Date: 2/19/2024

Is this person the designated Conservation Coordinator? (•) Yes ( ) No

Regional Water Planning Group: F

Groundwater Conservation District:

Our records indicate that you:

☑ Received financial assistance of $500,000 or more from TWDB

☑ Have 3,300 or more retail connections

☐ Have a surface water right with TCEQ

A. Population and Service Area Data

1. Current service area size in square miles: 13

Attached file(s):

File Name	File Description
Brownwood CCN.pdf	

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

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

Year	Historical Population Served By Retail Water Service	Historical Population Served By Wholesale Water Service	Historical Population Served By Wastewater Water Service
2023	18,862	0	18,862
2022	18,770	0	18,770
2021	18,714	0	18,714
2020	18,714	0	18,714
2019	18,714	0	18,714

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	19,179	0	19,179
2040	19,179	0	19,179
2050	19,179	0	19,179
2060	19,179	0	19,179
2070	19,179	0	19,179

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

The population projections were developed by utilizing data from the 2021 TWDB Region F Water Plan.

Texas Water Development Board

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

B. System Input

System input data for the previous five years.

Total System Input = Self-supplied + Imported – Exported

Year	Water Produced in Gallons	Purchased/Imported Water in Gallons	Exported Water in Gallons	Total System Input	Total GPCD
2023	0	1,121,014,325	0	1,121,014,325	163
2022	0	1,212,733,650	0	1,212,733,650	177
2021	0	1,022,758,960	0	1,022,758,960	150
2020	0	1,033,315,650	0	1,033,315,650	151
2019	0	1,037,705,811	0	1,037,705,811	152
Historic Average	0	1,085,505,679	0	1,085,505,679	159

C. Water Supply System

1. Designed daily capacity of system in gallons: 14,400,000

2. Storage Capacity

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

   2b. Ground storage in gallons: 2,500,000

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

D. Projected Demands

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

Year	Population	Water Demand (gallons)
2025	18,953	1,116,109,227
2026	18,998	1,118,776,084
2027	19,043	1,121,442,941
2028	19,088	1,124,109,799
2029	19,134	1,126,776,656
2030	19,179	1,129,443,513
2031	19,179	1,129,443,513
2032	19,179	1,129,443,513
2033	19,179	1,129,443,513
2034	19,179	1,129,443,513

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

The population projections were developed by utilizing data from the 2021 TWDB Region F Water Plan and interpolating the projection percentage for each individual year. The projection percentage for each year was utilized to calculate the estimated water demand.

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
3M	Industrial	44,650,364	Treated
Howard Payne University	Institutional	32,443,752	Treated
Superior	Industrial	25,390,112	Treated
Brownwood Independent School District	Institutional	23,518,616	Treated
Kohler	Industrial	22,612,788	Treated

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

Customer	Water Use Category	Annual Water Use	Treated or Raw

Texas Water Development Board

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

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	6,215	82.86 %
Residential - Multi-Family	147	1.96 %
Industrial	10	0.13 %
Commercial	1,056	14.08 %
Institutional	73	0.97 %
Agricultural	0	0.00 %
Total	7,501	100.00 %

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

	Net Number of New Retail Connections						
Year	**Residential - Single Family**	**Residential - Multi-Family**	**Industrial**	**Commercial**	**Institutional**	**Agricultural**	**Total**
2023	11	0	0	11	0	0	22
2022	15	0	0	1	0	0	16
2021	69	0	0	8	0	0	77
2020	58	0	0	0	0	0	58
2019	0	0	0	0	0	0	0

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

B. Accounting Data

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

Year	Residential - Single Family	Residential - Multi-Family	Industrial	Commercial	Institutional	Agricultural	Total
2023	530,326,764	90,213,288	114,945,160	320,633,940	54,656,360	0	1,110,775,512
2022	589,192,120	92,520,868	130,759,376	316,300,776	59,399,428	0	1,188,172,568
2021	458,723,524	83,730,372	136,989,468	288,365,968	41,704,740	0	1,009,514,072
2020	529,171,104	79,842,268	122,057,892	186,664,148	47,014,792	0	964,750,204
2019	496,931,556	81,665,892	125,111,976	204,667,012	54,772,300	0	963,148,736

C. Residential Water Use

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

Year	Total Residential GPCD
2023	90
2022	100
2021	79
2020	89
2019	85
Historic Average	89

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

D. Annual and Seasonal Water Use

1. The previous five years' gallons of treated water provided to RETAIL customers.

Month	Total Gallons of Treated Water				
	2023	2022	2021	2020	2019
January	72,890,356	76,522,644	63,185,804	58,359,708	56,595,924
February	64,727,432	63,653,304	55,903,276	56,340,108	60,380,056
March	62,712,320	59,643,276	62,556,736	53,066,112	54,715,452
April	75,250,296	84,277,160	76,040,184	58,889,292	68,939,420
May	83,327,948	99,913,352	72,353,292	87,494,308	72,548,520
June	79,870,692	117,026,844	69,160,828	96,663,292	78,206,392
July	111,830,488	142,250,900	102,401,200	120,980,024	97,406,056
August	140,297,872	149,319,500	123,402,048	143,638,440	139,770,532
September	159,985,232	131,607,608	129,701,704	119,573,784	142,785,720
October	94,497,832	109,650,816	109,472,792	88,210,892	120,222,300
November	89,801,888	79,565,508	91,371,192	82,250,828	83,860,524
December	75,583,156	74,741,656	80,965,016	65,344,532	59,709,848
Total	1,110,775,512	1,188,172,568	1,036,514,072	1,030,811,320	1,035,140,744

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

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

Month	Total Gallons of Raw Water				
	2023	2022	2021	2020	2019
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.

	Summer RETAIL (Treated + Raw)	Total RETAIL (Treated + Raw)
2023	331,999,052	1,110,775,512
2022	408,597,244	1,188,172,568
2021	294,964,076	1,036,514,072
2020	361,281,756	1,030,811,320
2019	315,382,980	1,035,140,744
Average in Gallons	342,445,021.60	1,080,282,843.20

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

E. Water Loss

Water Loss data for the previous five years.

Year	Total Water Loss in Gallons	Water Loss in GPCD	Water Loss as a Percentage
2023	9,914,813	1	0.00 %
2022	24,237,082	4	0.00 %
2021	12,560,888	2	0.00 %
2020	2,180,330	0	0.00 %
2019	2,333,817	0	0.00 %
Average	10,245,386	1	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)
2023	3,043,220	3608685	1.1858
2022	3,255,267	4441274	1.3643
2021	2,839,764	3206131	1.1290
2020	2,824,140	3926975	1.3905
2019	2,836,002	3428075	1.2088

G. Summary of Historic Water Use

Water Use Category	Historic Average	Percent of Connections	Percent of Water Use
Residential - Single Family	520,869,013	82.86 %	49.74 %
Residential - Multi-Family	85,594,537	1.96 %	8.17 %
Industrial	125,972,774	0.13 %	12.03 %
Commercial	263,326,368	14.08 %	25.14 %
Institutional	51,509,524	0.97 %	4.92 %
Agricultural	0	0.00 %	0.00 %

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

H. System Data Comment Section

Section III: Wastewater System Data

A. Wastewater System Data

1. Design capacity of wastewater treatment plant(s) in gallons per day: 4,540,000

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

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

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

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

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

Month	Total Gallons of Treated Water				
	2023	2022	2021	2020	2019
January	54,530,000	46,320,000	55,560,000	55,210,000	64,150,000
February	58,390,000	54,460,000	41,880,000	47,610,000	51,540,000
March	54,410,000	53,830,000	45,690,000	85,030,000	55,530,000
April	47,310,000	50,480,000	45,710,000	52,170,000	68,370,000
May	75,090,000	53,180,000	57,130,000	48,650,000	101,870,000
June	60,610,000	56,480,000	55,680,000	49,060,000	62,650,000
July	50,030,000	51,230,000	52,710,000	46,010,000	48,840,000
August	48,290,000	55,160,000	48,060,000	41,740,000	48,740,000
September	57,450,000	53,840,000	47,020,000	55,950,000	48,510,000
October	62,870,000	56,920,000	52,640,000	44,540,000	51,440,000
November	62,050,000	61,010,000	47,990,000	43,270,000	50,840,000
December	56,870,000	63,770,000	46,170,000	45,550,000	57,520,000
Total	687,900,000	656,680,000	596,240,000	614,790,000	710,000,000

5. Could treated wastewater be substituted for potable water?

○ Yes ◉ No

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	30,000
Plant wash down	30,000
Chlorination/de-chlorination	30,000
Industrial	
Landscape irrigation (park,golf courses)	0
Agricultural	
Discharge to surface water	
Evaporation Pond	
Other	
Total	90,000

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

C. Wastewater System Data Comment

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

APPENDIX 3
ORDINANCE ADOPTING CITY'S WATER CONSERVATION AND DROUGHT CONTINGENCY PLAN

ORDINANCE NO. 24-01

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF BROWNWOOD, TEXAS; REPEALING THE CITY OF BROWNWOOD'S PREVIOUS WATER CONSERVATION AND DROUGHT CONTINGENCY PLAN; AMENDING THE CITY OF BROWNWOOD CODE OF ORDINANCES BY AMENDING CHAPTER 70, ARTICLE IV., SECTION 70-283, TO ESTABLISH A NEW WATER CONSERVATION AND DROUGHT CONTINGENCY PLAN; ESTABLISHING PENALTIES FOR VIOLATING THE RESTRICTIONS AND PROVISIONS FOR ENFORCEMENT OF THESE RESTRICTIONS; ESTABLISHING AUTHORITY TO DISCONNECT WATER SERVICE FOR MULTIPLE VIOLATIONS OF THIS ORDINANCE; PROVIDING CERTAIN CITY EMPLOYEES WITH AUTHORITY TO ISSUE CITATIONS, FILE COMPLAINTS AND/OR ISSUE NOTICE OF VIOLATIONS FOR VIOLATIONS OF THIS ORDINANCE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A CUMULATIVE/REPEALER CLAUSE; PROVIDING A SAVINGS CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Brownwood, Texas (the "City"), recognizes that the amount of water available to its water customers is limited; and

WHEREAS, the City recognizes that due to natural limitations, drought conditions, system failures, and other acts of God which may occur, the City cannot guarantee an uninterrupted water supply for all purposes at all times; and

WHEREAS, the Water Code and the regulations of the Texas Commission on Environmental Quality (the "Commission") require that the City adopt a water conservation and drought contingency plan; and

WHEREAS, pursuant to Chapter 54 of the Local Government Code, the City is authorized to adopt such ordinances necessary to preserve and conserve its water resources;

WHEREAS, the City Council of the City of Brownwood adopted a Water Conservation and Drought Contingency Plan (the "2018 Plan") by Ordinance No. 18-14 so that it could enforce violations of the 2018 Plan; and

WHEREAS, the City Council desires to repeal the 2018 Plan and adopt a new Plan to provide for additional drought stages, additional requirements imposed by the Texas Commission on Environmental Quality and to provide for additional enforcement measures.

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

Section 1. Findings Incorporated.

The findings set forth above are incorporated into the body of this ordinance as if fully set forth herein.

Section 2. Repeal of 2018 Plan.

The 2018 Plan adopted by Ordinance No. 18-14, and codified in Sec. 70-283 of the City of Brownwood Code of Ordinances, is hereby repealed in its entirety.

Section 3. Amendment Of Chapter 70, Article IV., Code Of Ordinances.

That Chapter 70, Article IV., Section 70-283 of the Code of Ordinances of the City of Brownwood, Texas is hereby amended in its entirety to adopt a new Water Conservation and Drought Contingency Plan to read as follows:

"Sec. 70-283. Water conservation and drought contingency plan.

(a) A water conservation and drought contingency plan for the city (the "2024 Plan"), entitled Water Conservation & Drought Contingency Plan 2024 attached hereto as Exhibit A, is hereby adopted, and incorporated in this section by reference as if set out herein. The provisions of the 2024 Plan are hereby ordained and enacted and are expressly made a part of this ordinance. The 2024 Plan is on file in the city secretary's office.

(b) No person or entity shall knowingly or intentionally allow the use of water from the City for residential, commercial, institutional, industrial, agricultural, governmental, recreational, wholesale, or any other purpose in a manner contrary to any provision of the 2024 Plan, or in an amount in excess of that permitted by the drought response stage in effect at the time pursuant to action taken by the City Manager or his/her designee, in accordance with provisions of the 2024 Plan.

(c) Any water customer who violates the 2024 Plan is guilty of and may be charged with a misdemeanor and, upon conviction shall be punished by a fine of not less than one hundred dollars ($100.00) and not more than five hundred dollars ($500.00). Each day that one or more of the provisions in the 2024 Plan is violated shall constitute a separate offense. Proof of a culpable mental state is not required for a conviction of an offense under this ordinance. If a person is convicted of three or more distinct violations of the 2024 Plan, the City Manager or his/her designee 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

reconnection charge, hereby initially established at thirty-five dollars ($35.00) but may be amended by the City's annual fee ordinance, and any other costs incurred by the City of Brownwood in discontinuing service. In addition, suitable assurance must be documented with the City Manager or his/her designee that the same action shall not be repeated while the 2018 Plan is in effect. Compliance with the 2024 Plan may also be sought through injunctive relief in the district court.

(d) City police officers, and code enforcement officers who are peace officers certified by the Texas Commission on Law Enforcement, may issue a citation to a person he/she reasonably believes to be in violation of the Plan and/or this ordinance. Employees who are not peace officers certified by the Texas Commission on Law Enforcement may file a complaint in municipal court against a person he/she reasonably believes to be in violation of the Plan and/or this ordinance. 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 eighteen (18) 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 the 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.

(e) A City of Brownwood code enforcement officer, police officer, or other official designated by the City Manager or his/her designee, may issue a written Notice of Violation to a person or entity he/she reasonably believes to be in violation of this Plan. For subsequent violations following written notice:

1. The City may issue a citation (Class C misdemeanor);

2. The City may install a flow-restricting device in the line to limit the amount of water that will pass through the meter in a 24-hour period. The City may charge the customer for the actual cost of installing and removing the flow-restricting device, not to exceed fifty dollars ($50.00), such amount may be amended by the City's annual fee ordinance;

3. The City may discontinue service at the meter pursuant to paragraph (c) for a period of seven (7) days, or until the end of the calendar month, whichever is LESS. The normal reconnect fee of the utility will apply for restoration of service.

(f) Any person 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 the 2024 Plan and that the parent could not have reasonably known of the violation.

Section 4. Severability Clause.

If any word, section, article, phrase, paragraph, sentence, clause, or portion of this Ordinance is held to be invalid or unconstitutional by a court of competent jurisdiction, such holding shall not affect, for any reason, the validity of the remaining portions of this ordinance and the remaining portions shall remain in full force and effect.

Section 5. Cumulative/Repealer Clause.

This ordinance shall be cumulative of all provisions of State or Federal law and other ordinances of the City of Brownwood, Texas, including the 2024 Plan attached hereto as Exhibit A, whether codified or uncodified, except where the provisions of this ordinance are in direct conflict with the provisions of such ordinances, in which event the conflicting provisions of such ordinances are hereby repealed to the extent of such conflict.

Section 6. Savings Clause.

All rights and remedies of the City of Brownwood, Texas, are expressly saved as to any and all violations of the provisions of this ordinance or any other ordinance which have accrued at the time of the effective date of this ordinance; and, as to such accrued violations and all pending litigation, both civil and criminal, whether pending in court or not, under such ordinances, same shall not be affected by this ordinance but may be prosecuted until final disposition by the courts.

Section 7. Effective Date.

This ordinance shall become effective immediately upon its passage and publication as required by law.

PASSED AND APPROVED on First Reading this 9th day of April 2024.
PASSED AND APPROVED on Second Reading this 23rd day of April 2024.
PASSED AND APPROVED on Third/Final Reading this 23rd day of April 2024.

STEPHEN E. HAYNES, Mayor

ATTEST:

CHRISTI WYNN, City Secretary

APPROVED AS TO FORM:

WILLIAM P. CHESSER, City Attorney

APPENDIX 4
LETTER TO REGION F PLANNING GROUP

Region F Water Planning Group
400 E. 24th Street
Big Spring, Texas 79720

May 15, 2024

Subject: 2024 Water Conservation Plan and Drought Contingency Plan for the City of Brownwood, Texas

Dear Region F Water Planning Group,

Please find a copy of the recently adopted 2024 Water Conservation Plan and Drought Contingency Plan for the City of Brownwood, Texas.

These plans are being submitted to the Region F Water Planning Group in accordance with the Texas Water Development Board and Texas Commission on Environmental Quality rules.

The City of Brownwood adopted these plans through Ordinance 24-01 on April 23, 2024. Should you have any questions, please direct them to my email at clint.taylor@taylor-engineering.net.

Sincerely,

Clint J. Taylor, PE
Owner
Taylor Engineering
clint.taylor@taylor-engineering.net
713.449.8332

Enclosed: 2024 Water Conservation Plan and Drought Contingency Plan

Copy: Henry Wied, Director of Public Works, City of Brownwood

APPENDIX 5
BCWID NO. 1 DROUGHT CONDITION TRIGGERS

Proposed Drought Contingency Plan Trigger Levels

Drought Stage	Lk Brownwood Elev. (feet)	Dist. Below Cons. Pool (feet)	Lk Brownwood Vol. (ac-ft)	Lk Brownwood % Full (%)	Req'd Reduction in Water Use (%)	*One Year Supply Req'd (ac-ft)	Supply Remaining w/ Reduction (years)	Supply Remaining w/o Reduction (years)
	1,425.0	0.0	131,429.0	100.0%	None	25,800.0	5.1	5.1
Stage 1 (Mild)	1,420.0	5.0	100,858.0	76.7%	5.0%	25,135.0	4.0	3.9
Stage 2 (Moderate)	1,417.0	8.0	84,814.0	64.5%	15.0%	23,805.0	3.6	3.3
Stage 3 (Severe)	1,414.0	11.0	70,674.0	53.8%	30.0%	21,810.0	3.2	2.7
Proposed Stage 4 (Exceptional)	1,411.0	14.0	57,975.0	44.1%	50.0%	19,150.0	3.0	2.2
Proposed Stage 5 (Emergency)	1,408.0	17.0	46,586.0	35.4%	TBD at Initiation by District	TBD at Initiation by District	> 1.0	< 1.0

*Based on 2011 Water Use (13,300 AFY) + Record Evaporation rate in 2011 (12,500 AFY) = 25,800 AFY