

CITY OF SWEETWATER

WATER CONSERVATION
AND
DROUGHT CONTINGENCY PLAN

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TABLE OF CONTENTS

WATER CONSERVATION PLAN

Section I	Declaration of Policy, Purpose and Intent	1
Section II	Utility Profile.....	1
Section III	Water Conservation Goals	5
Section IV	Metering Devices	5
Section V	Universal Metering	6
Section VI	Measures to Determine and Control Unaccounted-For Uses of Water	6
Section VII	Continuing Public Education and Information Program	6
Section VIII	Plumbing Codes	7
Section IX	Water Conservation Retrofit Program	8
Section X	Non-Promotional Water Rate Structure	8
Section XI	Water Conservation Landscaping.....	9
Section XII	Leak Detection and Repair	9
Section XIII	Recycling and Reuse	9
Section XIV	Plan Adoption, Implementation and Enforcement	9
Section XV	Additional Wholesale Water Contract Requirements	10
Section XVI	Coordination with Regional Planning Groups.....	10
Section XVII	Reservoir Operation Plan	11
Section XVIII	Revisions to the Water Conservation Plan	11
Section XIX	Annual Reporting.....	11
Section XX	Severability.....	11

DROUGHT CONTINGENCY PLAN

Section I Declaration of Policy, Purpose and Intent 12

Section II Drought Conditions 12

Section III Enforcement 18

Section IV Information and Education 18

Section V Initiation Procedures 18

Section VI Termination of Curtailment 18

Section VII Pro Rata Water Allocation 19

Section VIII Variances 21

Section IX Coordination with Regional Planning Groups 22

Section X Modification, Deletion and Amendment 22

Section XI Severability 22

APPENDICES

Appendix A	Service Area Maps and Copy of CCN
Appendix B	Municipal Use Utility Profile
Appendix C	Wholesale Public Water Supplier Utility Profile
Appendix D	City of Sweetwater's Current Water Rate Structure
Appendix E	Copy of Resolution Adopting Water Conservation and Drought Contingency Plan
Appendix F	Example of Notification Letter to Wholesale Purchasers
Appendix G	Reservoir Operations Plans

CITY OF SWEETWATER, TEXAS WATER CONSERVATION PLAN

Section I. Declaration of Policy, Purpose and Intent

The purpose of the Water Conservation Plan (the Plan) is to: promote the wise and responsible use of water by implementing structural programs that result in quantifiable water conservation results; develop, maintain, and enforce water conservation policies and ordinances; and support public education programs that educate customers about water and wastewater facilities operations, water quantity and quality, water conservation and non-point source protection.

In accordance with 30 Texas Administrative Code Chapter 288, the City of Sweetwater practices and promotes conservation of water through the implementation of practices described in the Texas Water Development Board's (TWDB's) *Best Management Practices (BMP) Guide for Municipal and Wholesale Users*. Where they appear in this Plan, BMPs are noted by "(recognized BMP)".

Section II. Utility Profile

The City of Sweetwater, county seat of Nolan County, is located in west-central Texas approximately two-hundred (200) miles west of the Dallas-Fort Worth Metroplex. The city is a center for wind energy, manufacturing, oil, transportation, and agriculture. The service area for the City's water distribution system covers approximately 25 square miles and is depicted in the service area map provided in Appendix A.

The City supplies water to retail and wholesale customers. The City has contracted to sell 175 million gallons per year of treated water on a wholesale basis to the cities of Trent and Roby, and 219 million gallons per year of raw water on a wholesale basis to the City of Bronte. The service area for all wholesale purchasers combined equals approximately 4 square miles. Service area maps depicting the wholesalers' service areas are also provided in Appendix A.

Since the City serves municipal use and wholesale customers, both Municipal Use and Wholesale Use Profiles have been provided for the Sweetwater system. The Municipal Use Utility Profile is provided in Appendix B while the Wholesale Use Utility Profile has been included in Appendix C. Both profiles are summarized as follows:

A. Population

Sweetwater's population in the year 2014 as determined from information provided by the Region G Water Planning Group is approximately 11,799 persons. Sweetwater supplies raw and treated water, based on Regions G and F Planning Group figures, to wholesale users totaling approximately 2,127 persons in the year 2014. Table 1 provides population figures for City of Sweetwater and wholesale users for the previous five years.

Table 1: Population for City of Sweetwater System Users (2009-2013)		
Year	Sweetwater Population	Wholesale Population
2009	11,901	3,719
2010	11,955	3,705
2011	11,916	3,701
2012	11,877	3,697
2013	11,838	3,693
Source: Regions F & G Planning Groups and TCEQ WUD		

Table 2 depicts projected population figures for Sweetwater’s retail and wholesale users through the year 2050.

Table 2: Projected Population for City of Sweetwater System Users (2020-2060)		
Year	Sweetwater Population	Wholesale Population
2020	11,564	2,068
2030	12,213	2,068
2040	12,656	2,068
2050	13,135	2,068
2060	13,520	2,068
Source: Regions F & G Planning Groups and TCEQ WUD		

B. Customer Data and Water Use Data

City of Sweetwater water customers consist of a mixture of residential, commercial, industrial, public/institutional and wholesale users. City of Sweetwater single-family residential customers are supplied through approximately 3,850 connections while multi-family residential customers are supplied through approximately 50 connections. Sweetwater serves approximately 543 commercial connections with several new commercial connections typically added each year. The City currently supplies two industrial water connections. The wholesale users (City of Roby and City of Trent) supply treated water to their customers through approximately 668 metered service connections. The City of Sweetwater sells raw water to the City of Bronte who in turn treats the water, blends it with other sources and supplies its customers through 626 service connections

within its service area.

On average, Sweetwater customers use approximately 82% while wholesale customers use approximately 18% of the total ground and surface water delivered from the City's potable water treatment works. Table 3 summarizes the expected water use figures for Sweetwater's retail and wholesale users over the next decade.

Table 3: Projected Water Demand for the Coming Decade					
Year	Sweetwater Population (persons)	Wholesale Population (persons)	Sweetwater Demand (ac-ft/yr)	Wholesale Demand (ac-ft/yr)	Total Demand (ac-ft/yr)
2014	11,799	2,127	2,575	415	2,990
2015	11,760	2,118	2,476	420	2,896
2016	11,720	2,108	2,380	425	2,805
2017	11,681	2,098	2,288	430	2,718
2018	11,642	2,088	2,200	435	2,635
2019	11,603	2,078	2,115	441	2,556
2020	11,564	2,068	1,852	446	2,298
2021	11,629	2,068	1,856	445	2,301
2022	11,694	2,068	1,860	444	2,304
2023	11,759	2,068	1,864	444	2,308

Source: Regions F & G Planning Group and TCEQ WUD

C. Water Supply System

1. Water Sources

Sweetwater's water supply comes from a combination of surface and groundwater sources. Surface water from Oak Creek Reservoir is used in conjunction with ground water from the City's Champion field located southwest of Roscoe. Oak Creek Reservoir is located 33 miles south of Sweetwater and has a capacity of 39,600 acre-feet (ac-ft). The city's wells have a production capacity of 6.0 million gallons per day (mgd).

2. Water Treatment.

The Sweetwater Water Treatment Plant (WTP) has a production capacity of 8.0 mgd and treats raw surface water drawn from Oak Creek Reservoir. Raw water enters the treatment

plant at the raw water aeration tank which provides preaeration of water being treated. After the aeration tank, the raw water is dosed with chlorine dioxide for pre-disinfection, undergoes coagulation, flocculation and membrane filtration. Groundwater from the Champion well field is introduced to the WTP clearwell just ahead of the post-filtration disinfection point at the treatment plant. The blended, treated water is chloraminated via injection of liquid ammonium sulfate and chlorine gas in that order. Finished water is pumped from the ground storage tanks at the plant via high service pumps to the distribution system.

3. Water Distribution

The City of Sweetwater water distribution system provides economical and compatible facilities capable of furnishing sufficient water at suitable pressures to Sweetwater's retail users and to the wholesale interconnections. The Sweetwater distribution system consists of underground water mains, pumping stations, ground storage tanks, elevated storage tanks, valves, fire hydrants, and approximately 4,500 metered service connections.

After water is processed at the treatment plant, it is pumped into the distribution system and stored in offsite ground storage tanks with a storage capacity of 2.67 million gallons and elevated storage tanks with a storage capacity of 0.91 million gallons. Total storage capacity of the distribution system tanks is 3.58 million gallons. The distribution network is laid out in a continuous looped fashion to circulate water and maintain constant system pressure. Pumping stations are located in the system to pump water, maintain uniform pressure and maintain storage tank levels.

Treated water from the Sweetwater WTP enters the wholesale purchasers' system through metered interconnections, while the City of Bronte pumps raw water from Oak Creek Lake to its water treatment systems. Production capacity, elevated storage and ground storage in the wholesalers' systems equals 2.36 mgd, 0.25 million gallons, and 1.50 million gallons respectively.

D. Wastewater System

1. Wastewater Collection

The City of Sweetwater wastewater collection system consists of a network of sewer lines, lift stations, and manholes serving Sweetwater users. Approximately 85% of Sweetwater water users discharge to the Sweetwater sewage collection system. Sewage flows by gravity, aided when necessary by lift stations, through the collection system into the wastewater treatment plant (WWTP). No wholesale customers are served by the City of Sweetwater sewage collection and treatment system.

2. Wastewater Treatment

The City of Sweetwater owns and operates their wastewater treatment plant under permit number TX0118346. The plant has a rated treatment capacity of 2.2 mgd. Sewage undergoes treatment in the plant consisting of prescreening, grit removal, activated sludge process, sedimentation, and ultra-violet disinfection. Approximately 33 million gallons of treated sewage is reused offsite at a permitted irrigation site each year (recognized BMP). The remainder of the treated effluent is discharged into Sweetwater Creek and on into the Clear Fork of the Brazos River Segment Number 1232 of the Brazos River Basin. Sewage biosolids are digested before being dewatered onsite via a mechanical belt press prior to disposal at the regional landfill in Abilene or the Snyder Municipal Landfill.

Section III. Water Conservation Goals

The 5- and 10-year goals for total per capita water use by City of Sweetwater users is to maintain per capita water use at or below 163 gpcd by the end of 2019, and 160 gpcd by the end of 2024. The 5- and 10-year goal for residential per capita water use by City of Sweetwater users is to maintain residential per capita water use at or below 100 gpcd by the end of 2019 and 2024. The 5- and 10-year per capita water loss goal is to maintain per capita water loss at less than 15%, or less than 25 gallons per capita. These goals are set in accordance with Brazos G Regional Water Planning Group projections and in accordance with historic water use rates for Sweetwater water system users.

The 5 and 10-year goals for wholesale users supplied by the City of Sweetwater is to maintain per capita use at 180 gpcd by the end of 2019 and 2024 with loss rates for wholesale water deliveries to the wholesale users maintained at less than 15%. These goals are set in accordance with Regions F and G Water Planning Group projections and in accordance with historic water use rates by Sweetwater's wholesale water users.

Section IV. Metering Devices

It is City of Sweetwater policy to purchase meters that meet at least the minimum standards developed by the American Water Works Association. All metering devices used to meter water diverted from the source of supply are accurate to within plus-or-minus 5% to measure and account for water diverted from the source of supply. Aged meters are systematically replaced to assure reliability of meter performance. The City of Sweetwater currently monitors water consumption and inspects meters which vary from established norms. In addition, the City has established the following meter maintenance and replacement programs:

<u>Meter Type</u>	<u>Replacement or Calibration Period</u>
Master Meters	Annually
Commercial Meters and Meters Larger than 1" and Smaller	Annually or as needed Every 8 years or as needed

The City of Sweetwater strives to maintain water delivery rates, from production to the consumer at or above the accepted standard of 85 %. The primary tools for monitoring the water delivery rate are meter maintenance and leak detection programs.

Section V. Universal Metering

It is City of Sweetwater policy to individually meter all water usage, except for fire protection, including all new construction within the City's retail service area (recognized BMP). At present there are no known unmetered water connections within the system.

Section VI. Measures to Determine and Control Unaccounted-For Uses of Water

It is Sweetwater's policy to investigate customer complaints of low pressure and possible leaks. Sweetwater's goal for unaccounted-for water use is 15% or less. The City's ongoing meter repair and replacement program involves meter readers checking each meter monthly for proper operation (recognized BMP). Any meter found to be not functioning properly is identified for replacement. The City of Sweetwater practices a leak detection and repair program involving visual inspections of the system (recognized BMP). Water Department personnel visually inspect suspected leaks and make quick and timely repairs to those leaks when detected. Leaking pipelines or pipeline sections are repaired or replaced as they are detected.

Sweetwater utilizes a record management system which records water pumped, water delivered, water sales and water losses to track water transmission, distribution, and delivery to customers (recognized BMP). This information is used to evaluate the integrity of the water delivery system from source to end user to control and minimize unaccounted-for uses of water. The record management system utilized by the City of Sweetwater segregates water sales and users into user classes of single-family residential, multi-family residential, commercial, industrial, public/institutional, including a City/County category, and wholesale users (recognized BMP).

Section VII. Continuing Public Education and Information Program

The City of Sweetwater will inform water users of various methods for reducing water consumption (recognized BMP). Generally, the greatest volume of water consumed in the City is consumed by residential customers. Therefore, the target area for educational information will be the residential customer, with information also being provided the high users in local industry.

A. Short-Term Program Activities:

1. A fact sheet explaining the Conservation Plan will be developed and posted at City Hall, the City Library, and at Utility Department offices.
2. A press release on the Conservation Plan will be given to local print and electronic media.

3. Copies of the brochure, "Homeowners Guide to Water Use and Water Conservation" will be posted at and made available to customers at City Hall, the City Library, and at Utility Department offices.
4. A press release explaining the Homeowners Guide will be provided to the local print and electronic media.
5. Copies of the brochure "Water . . . Half-A-Hundred Ways to Save It" will be posted at and made available to customers at City Hall, the City Library, and at Utility Department offices.
6. A press release will be prepared and provided to the local print and electronic media explaining the brochure "Water . . . Half-A-Hundred Ways to Save It".
7. Brochures entitled "How to Save Water Outside the Home" will be posted at and made available to customers at City Hall, the City Library, and at Utility Department offices.
8. Methods for saving water will be discussed in news articles and radio talk shows.

B. Long-Term Program Activities:

1. Post and make available upon request new brochures which emphasize new or innovated means for conserving water as they become available.
2. Brochures relating to outside household use such as car washing, lawn watering, time of day, etc. will be made available at City Hall, the City Library, and at Utility Department offices as they become available.
3. Annual seminars or public demonstrations of water conservation methods utilized in landscaping and in residential water usage.
4. Encourage media attention to all aspects of water conservation at regular intervals.
5. All new water customers will be provided an information package relative to the City's water conservation plan along with a copies of the related brochures and recent press releases.
6. The City will acquire resource materials from any available source relative to water conservation and will provide water customers with the latest materials as they become available.

Section VIII. Plumbing Codes

- A. The City of Sweetwater has adopted the International Plumbing Code, 2012 Edition, including amendments, revisions and changes officially approved by the International Code Council to include any subsequent editions, revisions, or amendments thereto. The City's plumbing code encourages the use of water conserving plumbing fixtures for residential and commercial construction. In 1991, the Texas Legislature passed legislation requiring that plumbing fixtures sold in Texas after January 1, 1992, meet certain

standards. The legislation imposed requirements directly on the manufacturers, importers, and suppliers of new fixtures in Texas. The standards are:

1. Shower Heads: No more than 2.75 gallons per minute at 80 pounds per square inch of pressure.
2. Lavatory/Sink Faucets and Aerators: No more than 2.2 gallons per minute at 60 pounds per square inch of pressure.
3. Wall Mounted, Flushometer Toilets: No more than 2.0 gallons per flush.
4. All Other Toilets: No more than 1.6 gallons per flush.
5. Drinking Water Fountains: Must be self closing.

In addition, the City encourages the following water conservation measures:

1. Hot Water Pipes: Hot water lines not in or under a concrete slab should be insulated.
2. Pressure Reduction Valves: Pressure reduction valves may be installed by a licensed plumber at the customer's expense where system pressures exceed 80 pounds per square inch.
3. Swimming Pools: Swimming pools should have recirculating filtration equipment.
4. Automatic Dishwashers: Automatic dishwashers installed in residential dwellings should be a design that uses a maximum of six gallons of water per cycle.
5. Automatic Clothes Washers: Automatic clothes washers installed in residential dwellings should be a design that uses a maximum of 14 gallons of water per cycle. New plumbing fixtures that replace or renovate existing plumbing fixtures shall comply with the City's plumbing code

Section IX. Water Conservation Retrofit Program

The City of Sweetwater will encourage customers to utilize low demand fixtures and appliances through proposed educational sources described in this Water Conservation Plan (recognized BMP). The City will advise customers of low water demand items, shower heads, toilet dams, etc., emphasizing the importance of water saving devices. The City will contact local suppliers of plumbing supplies and encourage them to advise customers to purchase and install water saving devices.

Section X. Non-Promotional Water Rate Structure

The City utilizes a non-declining block rate to encourage water conservation (recognized BMP). The City periodically evaluates its water rate structure and adjusts costs and/or structure as needed to encourage water conservation. Appendix D contains the City's current water rate structure.

Section XI. Water Conservation Landscaping

The educational materials provided to water consumers include information relating to low water use landscaping (recognized BMP). Applicants for building permits receive literature pertaining to low water demand landscaping items. Area stores selling landscaping items are provided with pertinent literature.

Section XII. Leak Detection and Repair

City personnel associated with meter reading and billing and collection monitor monthly consumption. This monitoring has become an important tool in distribution system management. The City will continue to use modern leak detection techniques in locating and reducing leaks (recognized BMP). A continuous leak detection and repair program is vital to the City's conservation plan.

The City is aware that assistance in leak detection surveys can be obtained from the Texas Water Development Board staff and they will be called upon for advice and assistance as necessary.

Meter classification and aggressive follow-up on repair of detected leaks will aid in diminishing the amount of unaccounted-for water. The current detection program consists of the following observations and activities:

1. Leaks reported by citizens.
2. Leak detection by meter readers.
3. Continual checking and servicing of production, pumping and storage facilities.
4. Rapid response by city staff to reported problems.

Section XIII. Recycling and Reuse

Area industrial customers will be contacted to determine if reuse and recycling is feasible. The reuse of treated wastewater for agricultural use is regularly practiced (recognized BMP).

Section XIV. Plan Adoption, Implementation and Enforcement

The latest revision of the City's Water Conservation Plan was adopted in April 2014. A copy of the resolution amending the previous Plan is provided in Appendix E. The City Manager, through his staff, will implement the Water Conservation and Drought Contingency Plan in accordance with City Commission direction. Enforcement will be provided by:

- A. Refusing to provide taps for customers who do not comply with the ordinances of the City pertaining to plumbing.

- B. Nonpayment of water bills will initiate prompt discontinuance of service. All customers will be treated equally.
- C. Water rates will be reviewed at least annually and will be adjusted as necessary to eliminate Conservation Plan abuse. The Plan is enforced within the Sweetwater service area by providing service taps only to customers complying with adopted ordinances, maintaining a non-declining rate structure, discontinuing service to those customers who do not pay their water bills until payment is made, and certifying new construction only after verifying if conforms to adopted ordinances and plumbing codes.

Wholesale customers will receive written notification of Plan adoption and any subsequent Amendments. Adoption of this Plan by City of Sweetwater per 30 Texas Administrative Code (TAC) Chapter 288, Subchapter A, Rule §288.5 obligates wholesale customers as defined in 30 TAC Chapter 288, Subchapter A, Rule §288.1 to implement water conservation measures (recognized BMP). A copy of the notification letter to wholesale users has been included in Appendix F.

Section XV. Additional Wholesale Water Contract Requirements

It is City of Sweetwater policy to include in every wholesale water supply contract entered into or renewed after official adoption of the Plan, including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using applicable elements in 30 TAC 288, Subchapter A (recognized BMP). If the wholesale customer intends to resell the water, then the contract between Sweetwater and the wholesale 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 30 TAC 288, Subchapter A.

Existing contracts, for the sale of treated water, require the purchasing entity to comply with the City's Drought Contingency Plan. When any existing contract comes up for renewal, a requirement for compliance with the City's Water Conservation and Drought Contingency Plan will be included. Entities with existing contracts will be informed of the City's water conservation and drought contingency programs and made aware of the requirements for their systems as presented in 30 TAC 288. An example notification letter to the wholesale purchasers is included in Appendix F of this document.

Section XVI. Coordination with Regional Planning Groups

All retail users are located within the Region G Planning Group area. Wholesale purchasers are located within Region F and Region G Planning Group areas. The Plan has been provided to Regions F and G Planning Groups.

Section XVII. Reservoir Operation Plan

The City of Sweetwater operates reservoirs according to the City's Reservoir Operations Plan. A copy of the current Reservoir Operations Plan is included in Appendix G.

Section XVIII. Revisions to the Water Conservation Plan

The latest revision of the City's Water Conservation Plan was adopted in April 2014. The City of Sweetwater will review and update this Water Conservation Plan, as appropriate, based on new or updated information, such as the adoption or revision of the regional water plan. As a minimum the Plan will be updated again before May 1, 2019 and every five (5) years thereafter.

Section XIX. Annual Reporting

The Director of Utilities for the City of Sweetwater will submit an Annual Report to the Texas Water Development Board on the Water Conservation Plan. The report shall include the following:

1. Public information which has been issued.
2. Public response to the plan.
3. Effectiveness of the Water Conservation Plan in lowering water consumption.
4. Implementation progress and status of plan.
5. Effectiveness of leak detection and repair programs in reducing water loss.

Section XX. Severability

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

**CITY OF SWEETWATER, TEXAS
DROUGHT CONTINGENCY PLAN**

Section I. Declaration of Policy, Purpose and Intent

A Drought Contingency Plan (Plan) is defined as, "A strategy or combination of strategies for temporary supply and demand management responses to temporary and potentially recurring water supply shortages and other water supply emergencies" (30 TAC Chapter 288, Subchapter A, § 288.1, 4). The City of Sweetwater has established this Plan in order to establish criteria for determining various stages of drought and to establish corresponding policies that will be enforced during each stage of drought, during times of other water shortage or in times of emergency. The provisions of this Plan shall apply to all persons, customers, and property utilizing water provided by the City of Sweetwater. The terms "person" and "customer" as used in the Plan include individuals, corporations, partnerships, associations, and all other legal entities. Water uses regulated or prohibited under this 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 II of this Plan.

This Plan has been developed with consideration given to public input. Citizens served water by the City as retail customers and as wholesale customers have been given opportunity to voice opinion. This public input was gathered during the April 2014 City Commission Meeting held at the Commission Chambers. The meeting was advertised via the local newspaper, radio and posted agenda.

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 prevention and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage or other water supply emergency conditions, the City of Sweetwater hereby adopts the following regulations and restrictions on the delivery and consumption of water.

Section II. Drought Conditions

The City of Sweetwater uses five (5) levels or stages for determining the degree of urgency for initiation of the Drought Contingency Plan. These five stages of drought conditions are as follows and relate to the City of Sweetwater system.

A. Stage I - Mild Water Shortage

1. Target Water Use:

- a. The goal for water use reduction under this drought stage is to limit total treated water use by all system users to less than 8.0 MGD.

2. Conditions:
 - a. Stage I will be implemented when the water level at Oak Creek Reservoir falls to 10 feet below the spillway and total daily pumpage from the well field cannot meet the system demand.
 - b. At this point, Oak Creek Reservoir contains 20,379 acre feet of water, or 51.5% of capacity.
3. Restrictions:
 - a. All customers are asked to curtail use of water for nonessential purposes on a voluntary basis.

B. Stage II - Moderate Water Shortage

1. Target Water Use:
 - a. The goal for water use reduction under this drought stage is to limit total treated water use by all system users to less than 6.0 MGD.
2. Conditions:
 - a. Stage Two will be implemented when the water level in Oak Creek Reservoir falls to 15.5 feet below the spillway and total daily pumpage from the well field cannot meet the system demand, or;
 - b. Total daily pumpage from the water treatment plant exceeds 6.0 million gallons per day for five (5) consecutive days and total daily pumpage from the well field cannot meet the system demand, or;
 - c. Total daily pumpage from the well field cannot meet the system demand.
3. Restrictions:
 - a. Residential and commercial yard watering is restricted to the period from midnight to 10:00 a.m. any day of the week.
 - b. Residential washing of vehicles is limited to that done by the use of a

garden hose equipped with an automatic shut-off device.

c. Watering of public properties is restricted to Monday, Wednesday, and Friday, from 6:00 a.m. to 12 noon.

4. Violations of any of these restrictions while under Stage II conditions, is subject to a fine of up to \$100.00 per violation.

5. Residential Water Rate Structure:

a. No rate change. Use current rate structure.

C. Stage III - Severe Water Shortage

1. Target Water Use:

a. The goal for water use reduction under this drought stage is to limit total treated water use by all system users to less than 5.0 MGD.

2. Conditions:

a. Stage Three will be implemented when the water level in Oak Creek Reservoir falls to 18 feet below the spillway and total daily pumpage from the well field cannot meet the system demand, or;

b. Total daily pumpage from the water treatment plant exceeds 5.0 million gallons per day on four (4) consecutive days following the 14th day after implementation of Stage II measures and total daily pumpage from the well field cannot meet the system demand, or;

c. Total daily pumpage from the well field cannot meet the system demand.

3. Restrictions:

a. Residential and commercial yard watering is restricted to the following:

(1) Only between midnight and 10:00 a.m.

(2) Only on Tuesdays and Saturdays for even numbered addresses.

(3) Only on Thursdays and Sundays for odd numbered addresses.

(4) Residential washing of vehicles is limited to that done by the use of a garden hose equipped with an automatic shut-off device.

- (5) Watering of public properties is restricted to the period of 6:00 a.m. and 12:00 noon on Mondays.

NOTE: Water will not be allowed to run into the gutter or otherwise be wasted.

- b. Violations of any of these restrictions while under Stage III conditions, is subject to a fine of up to \$100.00 per violation.

4. Residential Water Rate Structure:

- a. No rate change. Use current rate structure.

5. Notify wholesale water customers of the initiation of Stage III of the Plan.

D. Stage IV - Critical Water Shortage

1. Target Water Use:

- a. The goal for water use reduction under this drought stage is to limit total treated water use by all system users to less than 4.5 MGD.

2. Conditions:

- a. Stage IV will be implemented when the water level in Oak Creek Reservoir falls to 19.7 feet below the spillway and total daily pumpage from the well field cannot meet the system demand, or;
- b. Total daily pumpage from the water treatment plant exceeds 4.5 million gallons on three (3) consecutive days following the 14th day after implementation of Stage III measures and total daily pumpage from the well field cannot meet the system demand, or;
- c. Total daily pumpage from the well field cannot meet the system demand.

3. Restrictions:

- a. Commercial yard watering is restricted to the period from 6:00 a.m. to 8:00 a.m. and is determined as follows:

- (1) Only on Tuesdays for even numbered addresses.

- (2) Only on Thursdays for odd numbered addresses.
- (3) Residential yard watering is restricted to the period from 6:00 a.m. to 10:00 a.m. and is determined as follows:

Monday	0 or 1
Tuesday	2 or 3
Wednesday	4 or 5
Thursday	6 or 7
Friday	8 or 9

NOTE: Water will not be allowed to run in the gutter or otherwise be wasted.

- (4) Restaurants will serve water to customers only on request.
- (5) Washing of residential, commercial, public or industrial driveways, sidewalks, parking areas, windows or structures is prohibited.
- (6) Filling of private swimming pools is prohibited.
- (7) Residential washing of vehicles is prohibited.
- (8) Use of bulk loading stations is prohibited.
- (9) Use of ornamental fountains is prohibited.
- (10) Watering of public properties is restricted to the period of 6:00 a.m. and 8:00 am only on Mondays.

4. Residential Water Rate Structure:

- a. 0 - 10,000 gallons: No rate change. Use current rate structure.
- b. 10,001 - 20,000 gallons: 1.5 times standard rate.
- c. 20,001 - 30,000 gallons: 2.5 times standard rate.
- d. 30,001 gallons and more: 3.5 times standard rate.

- 5. Violations of any of these restrictions or residential usage of 20,000 gallons or more per billing period for two consecutive billing periods, while under Stage IV conditions, is subject to a fine of up to \$100.00 per violation.
- 6. Notify wholesale water customers of the initiation of pro rata curtailment of water diversions and/or deliveries for each wholesale customer according to the procedures specified in Section VII of the City's Drought Contingency Plan (as a wholesale water supplier).

E. Stage V - Emergency Water Shortage

1. Target Water Use:
 - a. The goal for water use reduction under this drought stage is to limit total treated water use by all system users to less than 4.5 MGD.

2. Conditions:
 - a. The City encounters a rapidly developing emergency water demand situation as a result of a loss of a major component of the treatment or distribution system, a loss of a source of supply, a natural disaster, or any other similar emergency water demand as determined by the City Manager, or on the advice of the Director of Utilities.

3. Response and Restrictions
 - a. Assess the severity of the problem and identify the actions needed and time required to solve the problem.
 - b. Inform the utility director or other responsible official of each wholesale water customer by telephone or in person and suggest actions, as appropriate, to alleviate problems (e.g., notification of the public to reduce water used until service is restored. ALL outside watering is prohibited).
 - c. If appropriate, notify city, county, and/or state emergency response officials for assistance.
 - d. Undertake necessary actions, including repairs and/or clean-up as needed.
 - e. Prepare a post-event assessment report on the incident and critique of emergency response procedures and actions.

4. Residential Water Rate Structure:
 - a. 0 - 10,000 gallons: No rate change. Use current rate structure.
 - b. 10,001 - 20,000 gallons: 2.5 times standard rate.
 - c. 20,001 - 30,000 gallons: 3.5 times standard rate.
 - d. 30,001 gallons and more: 4.5 times standard rate.

5. Violations of any of these restrictions or residential usage of 10,000 gallons or more per billing period for two consecutive billing periods, while under Stage V

conditions, is subject to a fine of up to \$100.00 per violation.

Section III. Enforcement

During Stage II, Stage III, Stage IV and Stage V water use restrictions, the following personnel shall be designated as “official observers” of any violation of this drought contingency plan, and shall have the right to initiate legal action against offenders.

- A. Any member of the City Commission
- B. The City Manager
- C. The City Comptroller
- D. All City Department Heads
- E. Code Enforcement Personnel
- F. All Water Department Personnel
- G. All Water Office Personnel
- H. The Animal Control Officer
- I. All Police Department Personnel
- J. All Fire Department Personnel
- K. Any other City Employee of the Pay Grade 12 or above.

Section IV. Information and Education

The public will be made aware of conservation and drought conditions by information provided in news releases and City Commission meetings. During periods when conditions meet the requirements of drought stages, an information person will be made available to answer questions from customers. Information concerning the drought conditions will be distributed through news releases, radio, and television talk shows.

Section V. Initiation Procedures

The City Manager, on the advice of the Director of Utilities will act to effect curtailment of water use, see that public notices are given, notify TCEQ-Region 3 and TCEQ-Resource Protection Team (MC-160; P.O. Box 13087; Austin, TX 78711-3087) within five days of the mandatory curtailment, provide press releases and use any other appropriate method to notify customers of water supply problems as they occur.

Section VI. Termination of Curtailment

Termination of each drought stage will begin when that specific stage has been improved to the extent that an upgraded condition can be declared by the City Manager. This process will be used until full service can be provided. Termination of curtailment will be implemented by the City Manager by giving notice as was given when the drought stages were put into effect. The City Manager will notify TCEQ within five days of

lifting mandatory curtailment restrictions.

Section VII. Pro Rata Water Allocation

A. Conditions

In the event triggering criteria as specified in Section II of the Plan for Stage IV - Critical Water Shortage have been reached the City Manager is hereby authorized to initiate allocation of water supplies on a pro rata basis in accordance with Texas Water Code Section 11.039 and according to the following water allocation policies and procedures:

1. A wholesale customer's monthly allocation shall be a percentage of the customer's water usage baseline. The percentage will be set by resolution of the City of Sweetwater based on the City Manager's assessment of the severity of the water shortage condition and the need to curtail water diversions and/or deliveries and may be adjusted periodically by resolution of the City of Sweetwater as conditions warrant. Once pro rata allocation is in effect, water diversions by or deliveries to each wholesale customer shall be limited to the allocation established for each month.
 2. A monthly water usage allocation shall be established by the City Manager, or his/her designee, for each wholesale customer (see Table 1 below). The wholesale customer's water usage baseline will be computed on the average water usage by month for the 2004-2008 period as shown in the example given below. If the wholesale water customer's billing history is less than 5 years, the monthly average for the period for which there is a record shall be used for any monthly period for which no billing history exists.
- B. The City Manager shall provide notice, by certified mail, to each wholesale customer informing them of their monthly water usage allocations and shall notify the new media and the executive director of the Texas Commission on Environmental Quality upon initiation of pro rata water allocation.
- C. Upon request of the customer or at the initiative of the City Manager, the allocation may be reduced or increased if, (1) the designated period does not accurately reflect the wholesale customer's normal water-usage; (2) the customer agrees to transfer part of its allocation to another wholesale customer; or (3) other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the City Commissioners of the City of Sweetwater.

**TABLE 1-EXAMPLE CALCULATION OF MONTHLY ALLOCATION
FOR A HYPOTHETICAL WHOLESALE WATER CUSTOMER**

	2009	2010	2011	2012	2013	SUM	AVE	ALLOCATION PERCENTAGE	MONTHLY ALLOCATION
Jan	133	137	146	148	156	719	144	75%	108
Feb	115	122	133	133	147	650	130	75%	98
March	130	150	146	149	159	734	147	75%	110
April	130	167	168	157	187	808	162	75%	122
May	160	152	179	183	171	845	169	75%	127
June	226	184	172	205	249	1,305	207	75%	155
July	235	274	232	314	246	1,301	260	75%	195
Aug	222	203	206	337	309	1,277	255	75%	191
Sept	199	160	196	229	198	982	196	75%	147
Oct	165	172	197	165	185	884	177	75%	133
Nov	139	142	149	153	162	745	149	75%	112
Dec	142	143	150	156	165	755	151	75%	113
Total	1,995	2,006	2,072	2,330	2,333		2,333		

* UNITS IN MILLION GALLONS

D. Enforcement of Pro Rata Allocations

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

1. 1.5 times the normal water charge per million gallons for water diversions and/or deliveries in excess of the monthly allocation up through 5 percent above the monthly allocation.
2. 2.0 time the normal water charge per million gallons for water diversions and/or deliveries in excess of the monthly allocation from 5 percent through 10 percent above the monthly allocations.

3. 2.5 times the normal water charge per million gallons for water diversions and/or deliveries in excess of the monthly allocation from 10-percent through 15 percent above the monthly allocation.
4. 3.0 times the normal water charge per million gallons for water diversions and/or deliveries more than 15 percent above the monthly allocation.
5. the above surcharges shall be cumulative.

Section VIII. Variances

The City Manager, or his/her designee, may, in writing, grant a temporary variance to the pro rata water allocation policies or restrictions provided by this Plan if it is determined that failure to grant such variance should cause an emergency condition adversely affecting the public health, welfare, or safety and if one or more of the following condition/s is/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 implemented which will achieve the same level of reduction in water use.
- C. Person requesting an exemption from the provisions of this Plan shall file a petition for variance with the City Manager within 5 days after pro rata allocation or restriction has been invoked. All petitions for variance shall be reviewed by the City Commission and shall include the following:
 1. Name and address of the petitioner(s).
 2. Detailed statement with supporting data and information as to how the pro rata allocation of water or restriction under the policies and procedures established in the Plan adversely affect the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Ordinance.
 - a. Description of the relief requested.
 - b. Period of time for which the variance is sought.
 - c. Alternative measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
 - d. Other pertinent information.
 3. Variances granted by the City Commissioners shall be subject to the following

conditions, unless waived or modified by the City Commissioners or its 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.
- c. No variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

Section IX. Coordination with Regional Planning Groups

All of the customers served by the City of Sweetwater are located within the Regions F and G Planning Areas. Sweetwater has provided a copy of this Plan to those groups.

Section X. Modification, Deletion and Amendment

Modification to this Plan in any form shall be presented for public discussion and approved by the City Commission in accordance with all State and local laws. The City of Sweetwater will review and update this Drought Contingency Plan, as appropriate. As a minimum the Plan will be updated again before May 1, 2014 and every five (5) years thereafter.

Section XI. Severability

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

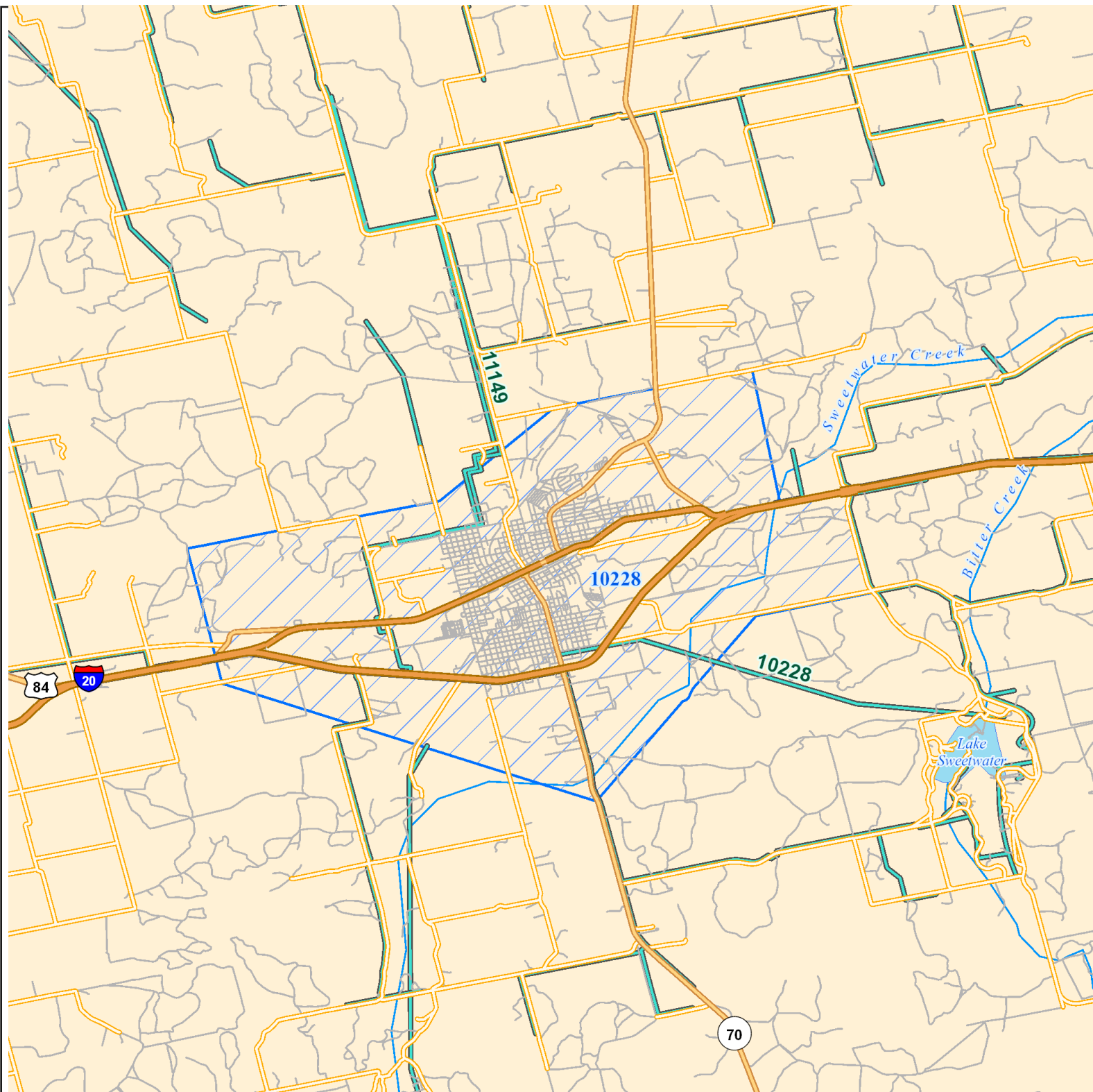
Appendix A

Service Area Maps and Copy of CCN

*Protecting Texas by
Reducing and
Preventing Pollution*

Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087
For more information
concerning this map, please contact the
Water Supply Division at (512) 239-4691.
04/03/2014

IWUD Map Viewer



Disclaimer:
This map was generated by the Integrated Water Utilities
Database (iWUD) from the Texas Commission on
Environmental Quality. No claims are made to the
accuracy or completeness of the data or to its suitability
for a particular use.

Public Utility Commission of Texas

By These Presents Be It Known To All That

CITY OF SWEETWATER, TEXAS

having duly applied for certification to provide water utility service for the convenience and necessity of the public, and it having been determined by this Commission that the public convenience and necessity would in fact be advanced by the provision of such service by this Applicant, is entitled to and is hereby granted this

Certificate of Convenience and Necessity

numbered 10228, to provide water utility service to that service area or those service areas designated by final Order or Orders duly entered by this Commission, which Order or Orders are on file at the Commission offices in Austin, Texas; and are matters of official record available for public inspection;

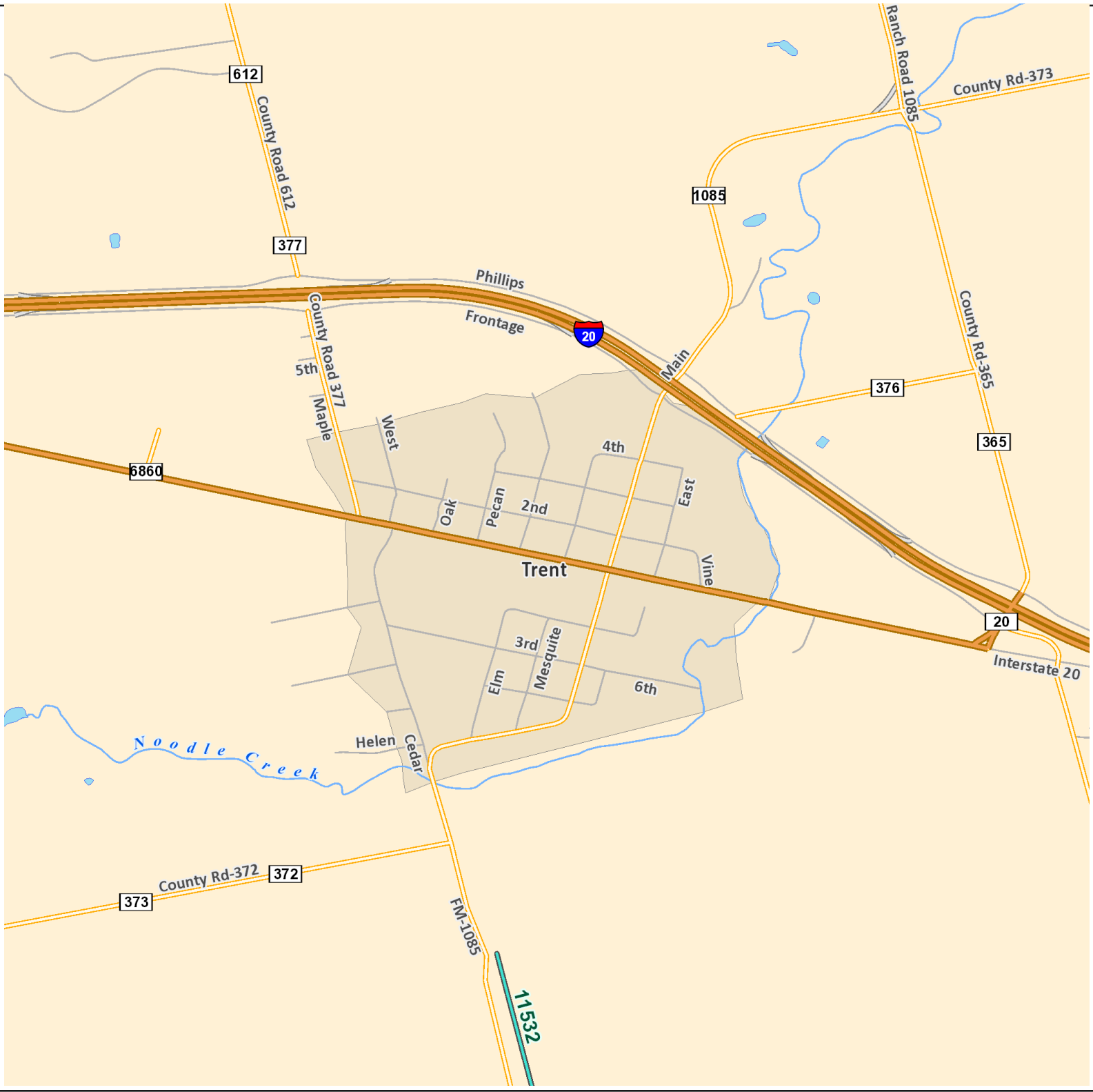
and be it known further that these presents do evidence the authority and the duty of this Grantee to provide such utility service in accordance with the laws of this State and the Rules of this Commission, subject only to any power and responsibility of this Commission to revoke or amend this Certificate in whole or in part upon a subsequent showing that the public convenience and necessity would be better served thereby.

Issued at Austin, Texas, this 1st day of November, 1979.

Philip F. Ricketts

Philip F. Ricketts
SECRETARY OF THE COMMISSION





*Protecting Texas by
Reducing and
Preventing Pollution*

Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087
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04/02/2014

IWUD Map Viewer

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Appendix B
Municipal Use Utility Profile



Texas Commission on Environmental Quality

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

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

Name: City of Sweetwater

Address: P.O. Box 450; Sweetwater, TX 79556

Telephone Number: (325) -2354166 Fax: (325) -2366367


Water Right No.(s): 1031, 4128, 4130

Regional Water Planning Group: G

Form Completed by: Dave Baker

Title: Operations Specialist; Enprotec/Hibbs & Todd, Inc.

Person responsible for implementing conservation program: Eddy Campbell Phone: (325) -3254166

Signature:  Date: 4/9/14

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

UTILITY PROFILE

I. POPULATION AND CUSTOMER DATA

A. Population and Service Area Data

1. Attach a copy of your service-area map and, if applicable, a copy of your Certificate of Convenience and Necessity (CCN).
2. Service area size (in square miles): 9.91
(Please attach a copy of service-area map)
3. Current population of service area: 11,799
4. Current population served for:
 - a. Water 11,799
 - b. Wastewater 10,030

5. Population served for previous five years:

<i>Year</i>	<i>Population</i>
2009	11,901
2010	11,955
2011	11,916
2012	11,877
2013	11,838

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

<i>Year</i>	<i>Population</i>
2020	11,564
2030	12,213
2040	12,656
2050	13,135
2060	13,520

7. List source or method for the calculation of current and projected population size.
Population projections are taken from the 2016 Regional Water Plan.

B. Customers Data

Senate Bill 181 requires that uniform consistent methodologies for calculating water use and conservation be developed and available to retail water providers and certain other water use sectors as a guide for preparation of water use reports, water conservation plans, and reports on water conservation efforts. A water system must provide the most detailed level of customer and water use data available to it, however, any new billing system purchased must be capable of reporting data for each of the sectors listed below. http://www.tceq.texas.gov/assets/public/permitting/watersupply/water_rights/sb181_guidance.pdf

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

<i>Treated Water Users</i>	<i>Metered</i>	<i>Non-Metered</i>	Totals
Residential	3,899	0	3,899
Single-Family	3,848	0	3,848
Multi-Family	51	0	51
Commercial	543	0	543
Industrial/Mining	2	0	2
Institutional	29	0	29
Agriculture	0	0	0
Other/Wholesale	9	0	9

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

<i>Year</i>	2011	2012	2013
<i>Treated Water Users</i>			
Residential	-337	176	-170
Single-Family	-337	123	-168
Multi-Family	0	56	-2
Commercial	-25	34	2
Industrial/Mining	0	8	-9
Institutional	0	0	0
Agriculture	0	0	0
Other/Wholesale	0	0	-87

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

	<i>Customer</i>	<i>Use (1,000 gal/year)</i>	<i>Treated or Raw Water</i>
1.	US Gypsum	84,863	Treated
2.	City of Bronte	84,546	Raw
3.	Georgia Pacific	39,453	Treated
4.	City of Roby	37,197	Treated
5.	City of Trent	25,050	Treated

II. WATER USE DATA FOR SERVICE AREA

A. Water Accounting Data

1. List the amount of water use for the previous five years (in 1,000 gallons). Indicate whether this is diverted or treated water.

<i>Year</i>	2009	2010	2011	2012	2013
<i>Month</i>					
January	66,616	50,229	48,889	56,426	60,795
February	63,435	43,690	44,984	56,236	54,328
March	68,881	50,063	48,135	64,396	65,891
April	67,234	51,847	70,291	72,733	71,959
May	76,992	59,493	77,365	86,559	77,102
June	71,166	63,985	91,407	79,183	79,015
July	67,788	60,147	95,732	88,342	81,437
August	68,699	67,139	94,126	88,119	76,271
September	56,580	55,406	82,413	74,124	73,515
October	50,175	52,131	67,686	65,222	59,987
November	48,957	47,854	57,859	63,851	56,522
December	49,080	45,149	55,421	62,551	59,099
Totals	755,602	647,133	834,307	857,744	815,921

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

Production meter at the water treatment plant.

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

<i>Year</i>	2009	2010	2011	2012	2013
<i>Account Types</i>					
Residential	286,722	276,912	320,970	290,773	277,169
Single-Family	256,871	245,543	288,853	260,238	244,141
Multi-Family	29,851	31,369	32,387	30,535	33,028
Commercial	99,211	99,157	109,024	102,493	113,613
Industrial/Mining	127,064	106,277	114,435	124,436	124,316
Institutional	31,848	34,055	47,484	37,494	36,731
Agriculture	0	0	0	0	0
Other/Wholesale	124,520	133,368	128,431	117,788	118,050

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

<i>Year</i>	<i>Amount (gallons)</i>	<i>Percent %</i>
2009	72,907,176	9
2010	26,176,737	4
2011	67,721,765	7
2012	147,351,660	15
2013	106,704,350	12

B. Projected Water Demands

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

III. WATER SUPPLY SYSTEM DATA

A. Water Supply Sources

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

<i>Water Type</i>	<i>Source</i>	<i>Amount Authorized</i>
Surface Water	Oak Creek (municipal)	5,328
	Oak Creek (Industrial)	4,000
	Lake Sweetwater (Multi-use)	3,740
Groundwater	Lake Trammel	2,000
Contracts	City wells	6,954
Other		0
		0

B. Treatment and Distribution System

1. Design daily capacity of system (MGD):8.0
2. Storage capacity (MGD):
 - a. Elevated 0.91
 - b. Ground 2.67
3. If surface water, do you recycle filter backwash to the head of the plant?

Yes No If yes, approximate amount (MGD):

IV. WASTEWATER SYSTEM DATA

A. Wastewater System Data (if applicable)

1. Design capacity of wastewater treatment plant(s) (MGD): 2.2
2. Treated effluent is used for on-site irrigation, off-site irrigation, for plant wash-down, and/or for chlorination/dechlorination.

If yes, approximate amount (in gallons per month): 5,000,000

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

City of Sweetwater wastewater collection system consists of a network of sewer lines, lift stations, and manholes serving Sweetwater users. Approximately 85% of Sweetwater water users discharge to the Sweetwater sewage collection system. Sewage flows by gravity, aided when necessary by lift stations, through the collection system into the wastewater treatment plant (WWTP). No wholesale customers are served by the City of Sweetwater sewage collection and treatment system.

The City of Sweetwater owns and operates their wastewater treatment plant under permit number TX0118346. The plant has a rated treatment capacity of 2.2 MGD. The operator in responsible charge of the facility is employed by the City of Sweetwater. Sewage undergoes treatment in the plant consisting of prescreening, grit removal, activated sludge process, sedimentation, and ultra-violet disinfection. Approximately 70 million gallons of treated sewage is reused offsite at a permitted irrigation site each year. The remainder of the treated effluent is discharged into Sweetwater Creek and on into the Clear Fork of the Brazos River Segment Number 1232 of the Brazos River Basin. Sewage biosolids are dewatered onsite prior to disposal at the regional landfill in Abilene or the Snyder Municipal Landfill.

B. Wastewater Data for Service Area (if applicable)

1. Percent of water service area served by wastewater system: 85 %
2. Monthly volume treated for previous five years (in 1,000 gallons):

<u>Year</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
<u>Month</u>					
January	26,700	26,580	25,897	24,480	25,344
February	26,823	26,230	24,688	23,246	21,916
March	26,858	28,880	25,758	23,748	24,446

April	26,927	29,030	23,853	22,520	22,986
May	23,914	27,930	24,968	24,898	25,827
June	26,963	26,870	22,446	22,420	24,713
July	28,600	27,250	24,882	23,566	26,262
August	27,819	26,160	25,259	24,028	23,346
September	25,716	26,710	22,809	25,067	25,061
October	26,795	27,040	23,580	24,549	25,188
November	24,813	26,140	22,259	22,619	24,485
December	25,797	28,270	23,195	24,238	25,749
Totals	317,725	327,090	289,594	285,379	295,323

V. ADDITIONAL REQUIRED INFORMATION

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

A. Specific, Quantified 5 & 10-Year Targets

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

B. Metering Devices

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

C. Universal Metering

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

D. Unaccounted- For Water Use

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

E. Continuing Public Education & Information

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

F. Non-Promotional Water Rate Structure

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

G. Reservoir Systems Operations Plan

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

H. Enforcement Procedure and Plan Adoption

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

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

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

J. Plan Review and Update

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

VI. ADDITIONAL REQUIREMENTS FOR LARGE SUPPLIERS

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

A. Leak Detection and Repair

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

B. Contract Requirements

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

VII. ADDITIONAL CONSERVATION STRATEGIES

A. Conservation Strategies

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

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

2. Adoption of ordinances, plumbing codes, and/or rules requiring water conserving plumbing fixtures to be installed in new structures and existing structures undergoing substantial modification or addition;
3. A program for the replacement or retrofit of water-conserving plumbing fixtures in existing structures;
4. A program for reuse and/or recycling of wastewater and/or graywater;
5. A program for pressure control and/or reduction in the distribution system and/or for customer connections;
6. A program and/or ordinance(s) for landscape water management;
7. A method for monitoring the effectiveness and efficiency of the water conservation plan; and
8. Any other water conservation practice, method, or technique which the water supplier shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

Best Management Practices

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

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Appendix C

Wholesale Public Water Supplier Utility Profile



Texas Commission on Environmental Quality

PROFILE AND WATER CONSERVATION PLAN REQUIREMENTS FOR WHOLESALE PUBLIC WATER SUPPLIERS

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

Name: City of Sweetwater

Address: P.O. Box 450; Sweetwater, TX 79556

Telephone Number: (325) 2354166 Fax: (325) 2366367


Water Right No.(s): 1031, 4128, 4130

Regional Water Planning Group: F and G

Form Completed by: Dave Baker

Title: Operations Specialist-Enprotec/Hibbs & Todd, Inc.

Person responsible for implementing conservation program: Eddy Campbell Phone: (325) 3254166

Signature:  Date: 8/9/14

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

PROFILE

I. WHOLESALE SERVICE AREA POPULATION AND CUSTOMER DATA

A. Population and Service Area Data

1. Service area size (in square miles): 4
(Please attach a copy of service-area map)
2. Current population of service area: 2,127

3. Current population served for:

- a. Water 2,127
- b. Wastewater 0

4. Population served for previous five years:

Year	Population
2009	3,719
2010	3,705
2011	3,701
2012	3,697
2013	3,693

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

Year	Population
2020	2,068
2030	2,068
2040	2,068
2050	2,068
2060	2,068

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

Texas Water Development Board Database and Texas Water Utility Database

B. Customers Data

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

	Wholesale Customer	Contracted Amount (acre-feet)	Previous Year Amount of Water Delivered (acre-feet)
1.	City of Trent	187	77
2.	City of Roby	350	106
3.	City of Bronte	672	259
4.	Bittercreek WSC	460	171
5.			

II. WATER USE DATA FOR SERVICE AREA

A. Water Delivery

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

<u>Year</u>	<u>Treated Water</u>	<u>Raw Water</u>
<u>2009</u>	<u>382</u>	<u>292</u>
<u>2010</u>	<u>409</u>	<u>206</u>
<u>2011</u>	<u>394</u>	<u>259</u>
<u>2012</u>	<u>361</u>	<u>285</u>
<u>2013</u>	<u>362</u>	<u>263</u>
Totals	1,908	1,305

B. Water Accounting Data

- Total amount of water diverted at the point of diversion(s) for the previous five years (in acre-feet) for all water uses:

<u>Year</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
<i>Month</i>					
<u>January</u>	<u>230</u>	<u>170</u>	<u>165</u>	<u>192</u>	<u>206</u>
<u>February</u>	<u>219</u>	<u>148</u>	<u>152</u>	<u>191</u>	<u>184</u>
<u>March</u>	<u>238</u>	<u>170</u>	<u>163</u>	<u>219</u>	<u>223</u>
<u>April</u>	<u>232</u>	<u>176</u>	<u>238</u>	<u>247</u>	<u>244</u>
<u>May</u>	<u>266</u>	<u>202</u>	<u>261</u>	<u>294</u>	<u>261</u>
<u>June</u>	<u>246</u>	<u>217</u>	<u>309</u>	<u>269</u>	<u>268</u>
<u>July</u>	<u>234</u>	<u>204</u>	<u>323</u>	<u>300</u>	<u>276</u>
<u>August</u>	<u>237</u>	<u>227</u>	<u>318</u>	<u>300</u>	<u>259</u>
<u>September</u>	<u>196</u>	<u>188</u>	<u>278</u>	<u>252</u>	<u>249</u>
<u>October</u>	<u>173</u>	<u>177</u>	<u>229</u>	<u>222</u>	<u>203</u>
<u>November</u>	<u>169</u>	<u>162</u>	<u>196</u>	<u>217</u>	<u>192</u>
<u>December</u>	<u>170</u>	<u>153</u>	<u>187</u>	<u>213</u>	<u>200</u>
Totals	2,611	2,192	2,819	2,917	2,767

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

Year	Total Population Served	Total Annual Water Diverted for Municipal Use
2009	3,719	674
2010	3,705	615
2011	3,701	653
2012	3,697	646
2013	3,693	625

C. Projected Water Demands

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

III. WATER SUPPLY SYSTEM DATA

A. Projected Water Demands

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

Water Type	Source	Amount Authorized
Surface Water	Oak Creek (Municipal)	5,328
	Oak Creek (Industrial)	4,000
	Lake Sweetwater (Multi-use)	3,740
	Lake Trammel	2,000
Groundwater	City wells	6,954
Other		

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

1. Design daily capacity of system (MGD):2.36
2. Storage capacity (MGD):
 - c. Elevated 0.25
 - d. Ground 1.50
3. Please attach a description of the water system. Include the number of treatment plants, wells, and storage tanks.

IV. WASTEWATER SYSTEM DATA

A. Wastewater System Data (if applicable)

1. Design capacity of wastewater treatment plant(s) (MGD): Wastewater service is not provided to wholesale customers.
2. Briefly describe the wastewater system(s) of the area serviced by the wholesale public water supplier. Describe how treated wastewater is disposed. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and the receiving stream if wastewater is discharged.

B. Wastewater Data for Service Area (if applicable)

1. Percent of water service area served by wastewater system: 0 %
2. Monthly volume treated for previous five years (in 1,000 gallons):

<i>Year</i>	_____	_____	_____	_____	_____
<i>Month</i>	_____	_____	_____	_____	_____
January	_____	_____	_____	_____	_____
February	_____	_____	_____	_____	_____
March	_____	_____	_____	_____	_____
April	_____	_____	_____	_____	_____
May	_____	_____	_____	_____	_____
June	_____	_____	_____	_____	_____
July	_____	_____	_____	_____	_____
August	_____	_____	_____	_____	_____
September	_____	_____	_____	_____	_____
October	_____	_____	_____	_____	_____
November	_____	_____	_____	_____	_____
December	_____	_____	_____	_____	_____
Totals	_____	_____	_____	_____	_____

V. ADDITIONAL REQUIRED INFORMATION

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

A. Specific, Quantified 5 & 10-Year Targets

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

B. Metering Devices

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

C. Record Management Program

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

D. Metering/Leak-Detection and Repair Program

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

E. Reservoir Systems Operations Plan

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

F. Contract Requirements for Successive Customer Conservation

The water conservation plan must include a requirement in every water supply contract entered into or renewed after official adoption of the water conservation plan, and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements of Title 30 TAC Chapter 288. If the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures in accordance with the provisions of this chapter.

G. Enforcement Procedure and Official Adoption

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

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

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

Example statement to be included within the water conservation plan:

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

I. Plan Review and Update

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

J. Additional Conservation Strategies

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

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

Best Management Practices

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

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Appendix D

City of Sweetwater's Current Water Rate Structure

TABLE OF CONTENTS

	Page
Plumbing Permits	3
Gas Permits	4
Mechanical Permits	4-6
Electrical Permits	6-9
Moving or Removal of Buildings	9-10
Building Permits	10
Food Service Permit	11
Recreation Permit	11
Other Licenses and Permits	11
Oil and Gas Drilling Permits	12
Sanitation Department Charges	12-17
Animal Shelter Charges	17-18
Water Sales	18-22
Sewer Charges	22-24
Water Taps / Sewer Taps / Paving Cuts	24
Curb Stop or Meter Damage	24
Ambulance Charges	24
Swimming Pool Charges	24-26
Miscellaneous Fees and Revenues	26-28

Charges**I. PERMITS AND LICENSES FEES****A. Plumbing Permits**

1. Plumbing permit charges (Issuance fee plus applicable items)	
a. Plumbing permit issuance fee	5.00
b. New structure or addition: Each plumbing fixture trap	2.50
c. Remodeled existing structure: Water distribution (each fixture)	1.25
Drain, Waste & Vent (each fixture)	1.25
d. Sewer line	7.75
e. Water service line	1.75
f. Grate or sand trap	1.75
g. Inceptors	1.50
h. Water well	5.00
i. Lawn sprinkler system (includes backflow prevention device)	12.00
j. Change out or install backflow prevention device ONLY (vacuum breakers, double-check assembly, reduced pressure zone assembly)	5.00
k. Mobile home or pre-manufactured building (fixture were previously installed and State	

	Inspected)	12.00
I.	Mobile home or pre-manufactured building reconnect to existing site water & sewer	2.75
m.	Sewer line partial replacement	1.00
n.	Re-inspection fee	5.00
o.	Trenchless sewer line	7.00
p.	Inspection requested outside normal work hours	35.00

B. Gas Permits

1.	All New Installation of System (Fee includes pressure test):	
a.	For 1 to 4 outlets inclusive	27.50
b.	For each outlet above 4, each	1.50
2.	Existing Systems	
a.	Install or replace gas yard (service) line	7.25
	Plus pressure test	9.25
	Totaling	16.50
b.	Additional or extension, per outlet	1.50
	Plus pressure test	9.25
c.	Pressure test only	9.25
d.	Re-inspection fee	5.00

C. Mechanical Permits

Inspection fee for heating, ventilating, ductwork, air-conditioning and refrigeration systems

1. New System

a.	For the first \$1,000, or fraction thereof (equipment and installation)	12.00
b.	For work having an equipment and installation valuation of more than \$1,000 but not more than \$5,000	
(1)	For the first \$1,000	12.00
(2)	Plus for each additional \$1,000 or fraction thereof	2.00
c.	For work having an equipment and installation valuation of more than \$5,000 but not more than \$15,000	
(1)	For the first \$5,000	20.00
(2)	Plus for each additional \$1,000 or fraction thereof	1.00
d.	For work having an equipment and installation valuation of more than \$15,000	
(1)	For the first \$15,000	30.00
(2)	Plus for each additional \$1,000 or fraction thereof	.50
2.	Existing System(s): Repairs, alterations and additions	
a.	For the first \$1,000 or fraction thereof, of equipment and installation valuation	5.00
b.	For work having an equipment and installation valuation of more than \$1,000 but not more than \$5,000, the fee shall be	
(1)	For the first \$1,000	5.50

	(2) Plus for each additional \$1,000 or fraction thereof	2.00
c.	For work having an equipment and installation valuation of more than \$5,000 but not more than \$15,000, the fee shall be	
	(1) For the first \$5,000	13.50
	(2) Plus for each additional \$1,000 or fraction thereof	1.00
d.	For work having an equipment and installation valuation of more than \$15,000, the fee shall be	
	(1) For the first \$15,000	23.50
	(2) Plus for each additional \$1,000 or fraction thereof	.50
e.	Inspection requested outside normal work hours	35.00

D. Electrical Permits

a.	Mobile Home	
	(1) Adequate pole or pedestal exists with sufficient equipment (meter loop) attached, and only feeder connection to home is required	8.25
	(2) New service (meter loop) required	14.00
b.	All new single family homes; also duplex, triplex or fourplex dwelling units which are no more than one story in height (excludes temp pole) per sq. ft.	.036
c.	All new multiple dwellings not included above	

	(excludes temp pole) per sq. ft.	.042
d.	All other new structures: Rewiring or adding to existing structures	
	(1) Minimum fee	6.00
	(2) 1 to 5 125/277v. general use lights, receptacles & switches	6.00
	(3) 6 to 500 125/277v. general use lights, receptacles & switches:	
	1) For the 1 st five	6.00
	2) Plus each thereafter	.25
	(4) Over 500 125/277v. general use lights, receptacles & switches:	
	1) For the 1 st 500	141.50
	2) Plus each thereafter	.15
e.	New Service (single meter):	
	(1) Up to and including 200 Amperes	14.00
	(2) 225 Amp up to and including 400 Amperes	16.50
	(3) Over 400 Amperes	22.00
	(4) Plus additional meters (same service entrance)	2.00
f.	Sub-panels or disconnects (includes feeders):	
	(1) Rated 100 Amperes or more, each	5.50
	(2) Rates less than 100 Amperes, each	3.25
g.	Additional 208/240v. designated appliance circuits (less than 100 Amperes):	

(1)	Central heating or self-contained unit (includes disconnect), each	3.25
(2)	Condensing unit or heat pump (includes disconnect, each	3.25
(3)	Water heater, each	2.25
(4)	Range, oven or cook top, each	2.25
(5)	Dryer, each	2.25
(6)	Ice machine, each	2.25
(7)	Arc welder, each	2.25
(8)	Pole light, each	2.25
(9)	Freeze vault, each	2.25
h.	Additional 125v. designated appliance circuits:	
(1)	Dishwasher, each	1.25
(2)	Garbage disposal, each	1.25
(3)	Heater unit 3KW or less, includes any vents or light in same unit, each	1.25
(4)	Bell/buzzer or detector unit, each	1.25
(5)	Exhaust or vent fan (up to 1/4 HP), each	1.25
(6)	Yard light, each	1.25
i.	Gasoline pumps or dispensers, each	4.00
j.	Electric sign circuits:	
a.	Lighted Sign (Pole Mounted)	15.00
b.	Lighted Sign (Exterior Bldg Mounted)	5.00

c.	Fixed, each	3.00
k.	Elevator, each	5.00
l.	Electric motor circuits:	
(1)	Motors up to and including 1 HP, each	2.00
(2)	Motors above 1 HP and not more than 5 HP, each	3.00
(3)	Motors exceeding 5 HP, each	5.00
(4)	Any additional motor above the 10 th , each	1.00
m.	Temporary pole or lateral	8.25
n.	Service, alter or repair where meter seal is removed	10.00
o.	Re-inspection fee	5.00
p.	For any electrical work to be installed and not set forth herein, the sum shall be set by the Building and Inspection Department and shall be reasonable and proportionate to the fees specified above. This will be a general use permit.	
q.	Inspection requested outside normal work hours	35.00

E. Moving or Removal of Buildings

1.	Building or house moving permit	27.50
2.	Residential demolition permit	25.00
3.	Mobile homes and HUD Manufactured Homes, as defined under the Texas State Manufactured Housing Act of 1993, are exempted from moving and demolition permit requirements.	

4.	Moving or demolition of church buildings shall require a moving or demolition permit, but the fees shall be waived.	
5.	Demolition (1 story Commercial structure) with asbestos survey	50.00
6.	Demolition (Multi-story Commercial structure) with asbestos survey	100.00
F.	<u>Building Permits</u> (includes construction of fences, roofing, swimming pools, spas, newly attached or constructed signs):	
1.	For work having an estimated cost of \$500 or less	11.50
2.	For work having an estimated cost of more than \$500 but not more than \$1000	13.75
3.	For work having an estimated cost of more than \$1,000, but not more than \$100,000, the fee shall be: \$13.75 for the first \$1000, plus \$2.25 for each additional \$1000 or fraction thereof.	
4.	For work having an estimated cost of \$100,000 or more but no more than \$200,000, the fee shall be: \$236.50 for the first \$100,000 plus \$1.75 for each additional \$1000 or fraction thereof.	
5.	For work having an estimated cost of \$200,000 or more, but not more than \$500,000, the fee shall be: \$411.50 for the first \$200,000, plus \$1.25 for each additional \$1000 or fraction thereof.	
6.	For work having an estimated cost of \$500,000 or more, the fee shall be \$786.50 for the first \$500,000 plus \$1.00 for each additional \$1000 or fraction thereof.	
7.	Re-inspection fee	5.00
a.	Existing building Certificate of Occupancy (flat fee)	20.00

b.	Alteration or construction of a church building shall require a building permit but the permit fee shall be waived.	
c.	Inspection requested outside normal work hours	35.00
G.	<u>Food Service Permit</u>	
1.	Annual temporary food service permit	25.00
2.	Annual retail food service permit	50.00
H.	<u>Recreation Permits</u>	
1.	Recreation Permit	
a.	Annual	10.00
b.	Daily	2.00
c.	Weekend	3.00
2.	Camping permit without hookups – per night	6.00
3.	Camping permit with hookups – per night	8.00
4.	For charitable and non-profit organizations: The Lake Sweetwater Campground, including all camp sites, permit per weekend (Friday evening through Sunday noon)	150.00
I.	<u>Other Licenses and Permits</u>	
1.	Liquor Permit	one-half of State fee
2.	Solicitors Permit	30.00
3.	Metal and Precious Metal Permit	
a.	Permit application and renewal fee	25.00

b. Late or reinstatement fee 50.00

J. Oil and Gas Drilling Application/Permit

- 1. The permit application fee to drill, complete and operate a well for oil or gas shall be non-refundable.
- 2. The application for a permit to drill, complete and operate a well for oil or gas shall be accompanied by a duly executed surety bond in the amount of \$500,000 and shall meet all requirements of Chapter 22, Section 23 of the Sweetwater Code. 750.00
- 3. Before a permit will be issued permittee shall furnish proof of standard comprehensive public liability insurance, including contractual liability insurance covering bodily injuries \$250,000 one person; \$500,000 one incident and property damage \$500,000, naming the permittee and the City, as insured.

II. CHARGES FOR SERVICES

A. Sanitation Department Charges

- 1. In-City refuse collection rates
 - a. Residential
 - (1) Dumpster service per month 22.59
 - (2) Cart service per month 18.50
 - (a) Additional cart, each 10.25
 - (3) Carry service per month 25.87
 - (4) Extra Service/Fees
 - (a) Surcharges
 - (1) Per cubic yard 9.32

	(2)	Proportionate charges may be set for co-mingled loads or clean-ups, as determined by the department director, except that the minimum fee for such loads will be	18.63
b.		Apartments and Trailer Parks	
	(1)	Computation for this classification is based on 80% of the number of rental units per metered complex rounded to the nearest whole unit. Rate per unit	20.64
	(2)	Cart service per month	22.89
c.		Commercial and Industrial	
	(1)	This classification of user will be charged the set amount per month times the number of cubic yards picked up on a weekly basis	20.64
	(2)	Cart service per month	22.89
	(3)	Carry service per month	28.27
	(4)	Extra Service/Fees	
	(a)	Surcharges	
	1)	Per cubic yard	9.32
	2)	Proportionate charges may be set for co-mingled loads, clean-ups or excessive container change outs, as determined by the department director, except that the minimum fee for such will be	18.63

	(b)	Commercial Type 1, per cubic yard	5.12
	(c)	Commercial in-city non-water customer deposit – rate times size of dumpster in cubic yards. Rate per unit	25.00
d.		Minimum Monthly Services	
	(1)	Residential dumpster service	22.59
	(2)	Residential cart service	18.50
	(3)	All commercial and industrial customers Receiving refuse collection services	20.64
	(4)	Late fee assessed to those accounts not paid by due date. Service may be discontinued.	15.00
2.		Out-of-city refuse collection rates	
	a.	Residential – Service provided by contract and charges are per contract.	
	(1)	Dumpster service per month	26.16
	(2)	Cart service per month	20.68
		(a) Additional cart, each	10.25
	b.	Apartment and Trailer Parks – Computation for this classification is based on 80% of the number of rental units per metered complex rounded to the nearest whole unit. Rate per unit	24.98
	c.	Commercial and Industrial – This classification of user will be charged the rate times the number of cubic yards picked up on a weekly basis	24.98

	(1)	Extra Service: Commercial Type 1 per cubic yard	6.20
d.		Minimum Charges	
	(1)	Residential	
	(a)	Dumpster	26.16
	(b)	Cart	20.68
	(2)	Commercial and industrial customers receiving refuse collection services	24.98
e.		Out-of-city refuse collection deposit / fees for non-water customers	
	(1)	Residential deposit flat fee	50.00
	(a)	Residential dumpster service per month	26.16
	(b)	Residential cart service per month	20.68
	(c)	Additional cart, each	10.25
	(2)	Commercial deposit – rate times size of dumpster in cubic yards. Rate per unit	25.00
	(a)	Commercial and Industrial dumpster service per month. Rate times the number of cubic yards picked up on a weekly basis	24.98
	(b)	Extra Service: Commercial Type I per cubic yard	6.20
	(3)	Late fee assessed to those accounts not paid by the due date. Service may be discontinued	15.00

3. Citizen Drop-off / Recycling Center

(1)	Residents of City of Sweetwater with said residents own residential waste	N/C
(2)	All others, excluding those of the City of Sweetwater and those otherwise exempted	
(a)	All vehicles with solid waste, based on the total cubic yards of solid waste, per cubic yard	6.90
(b)	Whole tires removed from rim	
1)	Rim size 16 inches (or equivalent) and below, per tire	2.76
(c)	Whole truck tires removed from rim	6.51
(d)	Whole agriculture (off-road) tires removed from the rim	30.00
(e)	Split tires, per cubic yard	6.90
(f)	Quartered tires, per cubic yard	6.90
(g)	Construction material, i.e., roofing materials, siding (non-asbestos), sheet rock, etc., per cubic yard	6.90
(h)	Vehicle hauling certain dead animals (without regard to residency or person)	
1)	Equine, bovine, deer, elks and other animals of similar size, per animal	46.92
2)	Goats, sheep and swine, per animal	27.60
3)	Small animals, dog, cat, etc.	4.14

4. Roll-Off Container Rate Service Table

(1)	Initial or first fee		
(a)	15F	15 yard first fee	203.50
(b)	20F	20 yard first fee	288.00
(c)	30F	30 yard first fee	407.00
(2)	Continuation or extended fee		
(a)	15E	15 yard extended fee	173.50
(b)	20E	20 yard extended fee	243.00
(c)	30E	30 yard extended fee	347.00
(3)	Contamination Fee		
(a)	15C	15 yard contamination fee	100.00
(b)	20C	20 yard contamination fee	135.00
(c)	30C	30 yard contamination fee	180.00
(4)	Idle Fee		
(a)	15I	15 yard idle fee	30.00
(b)	20I	20 yard idle fee	45.00
(c)	30I	30 yard idle fee	60.00

B. Animal Shelter Charges

a.	Impound fee		
(1)	1 st and 2 nd offense in any 12 month period		10.00
(2)	3 rd offense in any 12 month period		20.00
b.	Impound / care expense per day		5.00
c.	Annual tags for non-altered dogs / cats		2.00
d.	Annual tags for altered dogs / cats		.00
e.	After-hours call fee (after 5:00 p.m. & weekends), in addition to impoundment fee		25.00
f.	Adoption fee		

(1) Confinement fee, i.e., impoundment/care expenses per days held 5.00

g. Rabies confinement fee

(1) Minimum of 10 days 50.00

(2) Impound/care expenses per each additional day held 5.00

C. Water Sales

a. In-City – treated water

(1) Residential

(a) Minimum for first 2000 gallons 15.47

(b) Per thousand for next 23,000 gallons 6.69

(c) Per thousand for over 25,000 gallons 7.19

(2) Apartments and Trailer Parks

(a) The computation for this classification is based on 80% of the number of rental units per metered complex, times the minimum charge per unit. Plus a meter charge based on the size of the meter per account. Minimum unit charge 23.16

(b) All usage above the minimum allowed on a per computed unit basis per thousand up to 25,000 gallons 6.69

(c) Any usage above 25,000 gallons 7.19

(d) Meter charges are identical to commercial accounts

(3) Commercial

(a)	Minimum charge based on meter size plus \$6.31 per thousand gallons usage	
(1)	Meter size up to 1”	22.04
(2)	Meter size greater than 1” up to 2”	30.53
(3)	Meter size greater than 2” up to 3”	57.28
(4)	Meter size greater than 3” up to 4”	88.98
(5)	Meter size greater than 4” up to 6”	189.57
(6)	Meter size greater than 6” up to 8”	301.76
(7)	Meter size greater than 8” up to 10”	499.09

b. Out-of-City rates by customer classification

(1) Residential

A \$27.06 minimum charge for the first 2,000 gallons will be charged plus \$10.14 per thousand gallons for all usage over 2,000 gallons.

(2) Apartments and Trailer Parks

The computed units are based on 80% of the rental units per metered complex rounded to the nearest whole unit. Rates per unit are the

same as the residential charge (\$27.06) with a minimum based on the number of computed units times the minimum charge per unit. All usage above the minimum allowed on a per computed unit basis will be charged \$10.14 per thousand gallons.

(3) Commercial (excluding large industrial plants and other municipalities)

Commercial users will be charged a minimum based on meter size plus \$10.14 per thousand gallons usage. See in-City commercial for meter size schedule.

(4) Loading dock \$51.04 minimum and \$10.47 per 1,000 gallons.

(5) Fire Hydrant Meter (Construction) - \$75.00 per month, plus \$10.14 per 1,000 gallons.

c. All other users whether in or out-of-City

(1) Wholesale Customers – Treated Water

(a) Wholesale customers that purchase treated water from the City by contract for resale as provided in each customer contract.

(b) The treated water rate for wholesale customers is \$5.68 per 1,000 gallons.

(c) The quantity of treated water to be purchased by wholesale customers is defined in each customer contract.

(2) Untreated Transmitted Water

a) Customers receiving metered untreated water will be charged a \$39.44 minimum

for the first 9,000 gallons plus \$4.54 per thousand gallons for all usage over 9,000 gallons.

- b) **Customers receiving unmetered untreated water will be charged a flat rate of \$80.43**

(3) Untreated Water at the Source

Customers receiving metered untreated water at the source will be charged \$1.27 per thousand gallons usage. Customers with contracts for other than the stated charge shall continue to be charged at the contract rate until such time that contract re-negotiations are completed.

(4) Deposits

The minimum deposit for all classes of customer is \$100.00. Large water users from a single meter such as businesses, apartments and motels will be sufficient to cover at least one month estimated billing. Those residences with high turnover defined as customers changes approximately each quarter will be double the minimum described above.

(5) Dishonored Checks

All returned checks will be charged the current fee assessed by the depository bank.

(6) Reinstatement

A fee of \$15.00 will be assessed to those accounts not paid by the due date. Service will be cut-off.

(7) Disconnect charge- Regular Office Hours

A fee of \$15.00 will be assessed when water service is disconnected due to non-payment.

(8) A 10% penalty will be added to accounts not paid by the next billing date.

(9) Reconnect Charge – After Hours

A fee of \$25.00 must be paid before water service can be reconnected at the request of a customer when the reconnection must be made after normal working hours, weekends or holidays.

(10) Re-read of Meter Charge – during normal hours. 10.00

(11) Transfer Service Charge 35.00

D. Sewer Charges

All sewer billing will be based on metered water usage.

a. In-City rates

(1) Residential

A \$27.55 minimum for the first 2,000 gallons will be charged. Then \$2.65 per thousand thereafter up to a maximum of 10,000 gallons. The maximum charge for a single unit will not exceed \$48.75

(2) Apartments and Trailer Parks

The computation for this classification is based on 80% of the number of rental units per metered complex rounded to the nearest whole unit. Rates per unit are the same as the residential charge(\$27.55) with a minimum based on the number of computed units times the minimum charge per unit and the maximum based on usage up to 10,000 gallons per computed

units at \$2.65 per thousand gallons above the minimum allowance based on aggregate usage.

(3) Commercial and Industrial

(a) The minimum rate is \$27.55 for the first 2,000 gallons. Usage above the minimum up to 50,000 gallons will be charged at \$2.65 per thousand gallons. All usage above 50,000 gallons will be billed at \$1.96 per thousand gallons with no maximum.

(b) Where sewer is available to in-city customers who are not connected to the system, they shall be charged a minimum of \$27.55 per month.

b. Out-of-city rates

(1) Residential

A \$45.54 minimum for the first 2,000 gallons will be charged. Then \$5.28 per thousand thereafter up to maximum of 10,000 gallons. The maximum charge for a single unit will not exceed \$87.78.

(2) Apartments and Trailer Parks

The computed units are based on 80% of rental units per metered complex rounded to the nearest whole unit. Rates per unit are the same as the residential charge (\$45.54) with a minimum based on the number of computed units times the minimum charge per unit and the maximum based on usage up to 10,000 gallons per computed unit at \$5.28 per thousand gallons above the minimum allowance based on aggregate usage.

(3) Commercial and Industrial

The minimum rate is \$45.54 for the first 2,000 gallons. Usage above the minimum up to 50,000 gallons will be charged at \$5.28 per thousand gallons. All usage

above 50,000 gallons will be billed at \$3.89 per thousand gallons with no maximum. All industrial customers using water in direct manufacturing process will be prorated on an individual basis by the City Administration upon presentation of acceptable data to compute such proration.

E. Water Taps

a.	3/4 inch tap	500.00
b.	1 inch tap	550.00
c.	2 inch tap	Cost of installation
d.	3 inch tap (compound meter)	Cost of installation
e.	4 inch tap (compound meter)	Cost of installation
f.	6 inch tap (compound meter)	Cost of installation

F. Sewer Taps

a.	4 inch tap	250.00
b.	6 inch and above tap	500.00

G. Paving Cuts

a.	Asphalt	200.00
b.	Concrete	300.00

H. Curb Stop or Meter Damage

85.00

I. Ambulance Charges

a.	ALS Non Emergency	750.00
b.	ALS Emergency	875.00
c.	BLS Non Emergency	375.00
d.	BLS Emergency	500.00
e.	ALS Level 2	950.00
f.	Specialty Care Transport	950.00
g.	Mileage – per mile	13.50
h.	Waiting Time – per half hour	37.50
i.	City of Roscoe (annual)	20,033.40

J. Swimming Pool Charges

a.	Daily admission	2.00
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b.	Private party for 2 hour period	
	(1) 1-24 people	75.00
	(2) 25-49 people	100.00
	(3) 50-99 people	125.00
	(4) 100-149 people	150.00
	(5) 150-300 people	200.00
c.	Family night	
	(1) 3 or more family members – per family	6.00
	(2) Less than 3 family members – per person	2.00
d.	Season pass	
	(1) Family	150.00
	(2) Individual	50.00
	(3) Replacement of lost season pass	1.00
e.	Monthly pass	
	(1) Family	50.00
	(2) Individual	25.00
	(3) Replacement of lost monthly pass	1.00
f.	Children’s nursery	
	<p>This fee is only for those nurseries that provide their own certified life-guard (lifeguard must meet pool life-guard qualifications) plus additional individuals to supervise the younger children. Fee per child.</p>	
		.50
g.	Swimming lessons	
	<p>The local chapter of the Red Cross may conduct swimming lessons and receive proceeds from these lessons. The Chapter must provide their own instructors. The fee shall be subject to review and approved by the City Commission of the City of Sweetwater.</p>	
h.	Extra pool oriented programs	

(1)	The City of Sweetwater will receive one-half (50%) of the fee charged for the extra programs. The other one-half (50%) of the fee will be received by the instructor(s).	
(a)	Senior citizen adapted aquatics on senior citizen night.	1.00
(b)	Water dynamics or aerobics class on Friday night. Per participant	1.00
(c)	Parent/Tot swim class in a six (6) week session, meeting eleven (11) times. Per six week session.	30.00
(d)	Private group and individual lessons	
	(1) Tuesday thru Friday	20.00
	(2) Three (3) days	18.00
	(3) Two (2) days	15.00
	(4) One (1) day	10.00

III. MISCELLANEOUS FEES AND REVENUES

A.	Planning and Zoning Commission. Flat fee	300.00
B.	Board of Adjustment. Flat fee	200.00
C.	Reproduction work	
1.	Copies per page	.10
2.	Accident reports	6.00
3.	Certified copy of accident report	8.00
4.	Computer run per page	.50
5.	DVD	25.00

6.	Fingerprints	10.00
D.	Open Records request will be billed according to the Texas Administrative Code Fee Schedule	
E.	Publications	
1.	Annual Operating Budget, per page. Cost may be waived by City Manager	.10
2.	Comprehensive Annual Financial Report, per page. Cost may be waived by City Manager	.10
3.	Ordinances, per page. Cost may be waived by City Manager	.10
F.	Cemetery Lot Sales	
1.	Regular grave space	250.00
2.	Babyland grave space, 3' x 4'	75.00
3.	Interment fee	50.00
G.	Lake Lot Lease, Annual	600.00
1.	10% late fee if paid between May 20 and June 20	
2.	20% late fee if paid between June 21 and June 30	
H.	Lake Lot Transfer Fee	750.00
I.	Copy of Code of Ordinances	85.00
1.	For each supplement to Code	30.00
J.	Fax Service (Not official business)	
1.	Send – 1 st page	5.00

2.	Send – each additional page	1.00
3.	Receive – per page	2.00
K.	Lot Mowing and Cleaning Fees	
1.	Administrative Charge	75.00
2.	Mowing Labor Charge – per hour	15.00
3.	Tractor Shredder – per hour	3.00
4.	Hand Mowing Equipment – per hour	1.00
5.	Cleanup Labor Charge – per hour	15.00
6.	Hauling Charge – per hour	18.00
7.	Landfill Charge (per cubic yard)	6.90
8.	Securing Structure Labor – per hour plus material costs	15.00
9.	Structure Demolition Labor – per hour	15.00
10.	Heavy Equipment Charge – per hour	3.00
11.	Dump Truck Charge – per hour	3.00
L.	Street or Alley Closure Application Fee	250.00

Appendix E

Resolution Adopting Water Conservation and Drought Contingency Plan

**RESOLUTION FOR ADOPTION OF THE
AMENDED CITY OF SWEETWATER
WATER CONSERVATION AND DROUGHT CONTINGENCY PLAN**

A RESOLUTION OF THE CITY COMMISSION
ADOPTING A WATER CONSERVATION AND
DROUGHT CONTINGENCY PLAN FOR THE
CITY OF SWEETWATER.

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

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

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

WHEREAS, as authorized under law, and in the best interests of the customers of the City of Sweetwater, the City Commission 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;

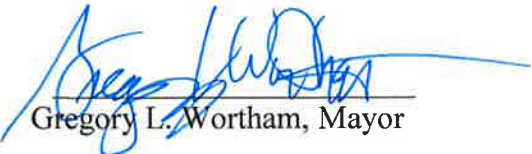
NOW THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF SWEETWATER:

SECTION 1. That the Water Conservation and Drought Contingency Plan attached hereto as Exhibit A and made part hereof for all purposes be adopted as the official policy of the City of Sweetwater.

SECTION 2. That the Mayor is hereby directed to implement, administer, and enforce the Water Conservation and Drought Contingency Plan.


SECTION 3. That this resolution shall take effect immediately upon its passage.

DULY PASSED BY THE CITY COMMISSION OF THE CITY OF SWEETWATER, ON THIS
8TH day of April, 2014.



Gregory L. Wortham, Mayor

ATTESTED TO:



Patty Torres, City Secretary

Appendix F

Example of Notification Letter to Wholesale Purchasers

(Date)

(Wholesale Customer)

(Address)

Dear (Wholesale Customer);

As you are aware, per requirements found in 30 Texas Administrative Code (TAC) Chapter 288, the City of Sweetwater is required by the State of Texas to develop, implement, and maintain Water Conservation and Drought Contingency Plans ("Plans"). The City's existing Plans, in place since 2001, recently underwent amendments. While the Plans remain substantially the same, we take this opportunity to remind you of the requirements for your system.

The requirement for your system to develop a Water Conservation Plan is found in 30 TAC, Chapter 288, Subchapter A, §288.5, G. We request that at the time you submit your system's plan to the State, you furnish to us a copy as well. Providing to us a copy of your system's plan will ensure a higher degree of accuracy as we update our Plan on a regular and prescribed basis. The requirement for your system to develop a Drought Contingency Plan is found in 30 TAC, Chapter 288, Subchapter C, Rule §288.30 ,(5). As a wholesale purchaser from the City of Sweetwater you may find it feasible to adopt the City of Sweetwater's Drought Contingency Plan.

I am available to assist you with these matters. Please call me at 325-235-4166 if I may be of assistance to you on this matter.

Sincerely

City of Sweetwater

Appendix G

Reservoir Operation Plan

CITY OF SWEETWATER RESERVOIR & GROUNDWATER SYSTEMS OPERATION PLAN

The City of Sweetwater owns, operates, and maintains Oak Creek Lake for the purpose of providing treated water for public use by the City of Sweetwater and Sweetwater's wholesale customers. The reservoir is operated with the intent of optimizing both quality and quantity of water stored in and drawn from the reservoir. Water Department and Utilities personnel patrol the lake and watershed on a regular basis. By protecting the watershed the City makes an effort to maximize the quality and quantity of water available from the lakes.

The treatment plant draws raw water from the reservoir through raw water intake structures located at the reservoir. The City's treatment staff typically draws water from both wells and surface water so as to optimize source water quality. Parameters measured by Water Department personnel to optimize raw water quality include turbidity, pH, alkalinity, and temperature. In times of poor surface water quality or low lake levels the City of Sweetwater may cease drawing raw water from its surface source and utilize only ground water from city wells.

RAW WATER INTAKES, PUMPS AND RAW WATER FLOW CONTROL:

Raw water slated for treatment by the membrane system is pumped to the plant from Oak Creek Reservoir. Additionally, undisinfected ground water from city wells is pumped from the ground storage tank at the Highland Pump Station to a point just downstream from the membrane system at the plant. Treated water from the membrane system and groundwater from the wells is chloraminated and stored briefly in the clearwells at the plant before being pumped into the distribution system.

1. Locations:

The geographic locations of the intake structures or storage tank and pump stations are as follows:

Table 1: Raw Water Intake/Storage Structure Locations		
<u>Source</u>	<u>Longitude</u>	<u>Latitude</u>
Oak Creek Reservoir	32° 03' 25" N	100° 17' 36" W
Highland Pump Station	32° 03' 25" N	100° 31' 07" W

2. Hazards:

There are several hazards associated with the raw water intake and associated pumping. The intake structure is located in the lake. While the Operator will seldom need adjust or alter intake configuration, if the need arises to make a repair or adjustment at the intake, the Operator should always have a partner with him or her while the work is being conducted. The Operator should wear a life vest at all times when working in or around the intake structure. Electrical switchgear associated with the raw water pumps present hazards to the trained and untrained. Extreme caution should be exercised when working around the raw

water pump electrical switchgear. Repairs made to the switchgear should always be left to a licensed electrician. Unless you are a trained electrician, never open an electrical panel. If you are authorized to access an electrical panel, verify power to the panel is OFF before proceeding.

3. Chemicals Fed:

No chemicals are fed at the raw water intake, pump houses, or well field storage tanks.

4. Normal Operation:

Normal operation of the raw water pumps at Oak Creek and the booster stations is via the AUTO mode and to be controlled remotely from the water treatment plant by the Plant Computer to meet treatment set points entered by the plant Operator. The Operator enters on the Plant Computer overall desired treatment plant production rate, and the Plant Computer then operates the raw water pumping equipment and in-plant treatment equipment to meet the treated water production goals. Once the treatment and production set points are entered into the Plant Computer by the Operator, the water treatment plant will start as long as flow is available from Oak Creek Lake. A Remote Terminal Unit (RTU) at the lake enables the plant Operator to control and monitor the raw water pumps from the Plant Computer. Alarms and run status for the raw water pumps appear on the Plant Computer display screen. Champion well field supply is combined with the plant filtered effluent prior to the clearwell and is not treated via the membrane system.

Oak Creek Reservoir (Normal Operation):

Normal operation will see raw water being pumped from Oak Creek Reservoir to the treatment plant via Booster A and B. Normal operation of the raw water pumps at the Oak Creek, Booster A, and Booster B pump stations will see all pumps set in AUTO, and controlled by the Plant Computer to meet Operator defined treatment goals. The Operator enters into the Plant Computer desired percentage of total production he wants to come from Oak Creek, and the Plant Computer then operates the raw water pumps in Oak Creek Pump Station, Booster A, Booster B, and FCV-1101 to meet the Operator defined treatment goals.

Champion Wells (Normal Operation):

Normal operation of the Champion Wells will see the Operator controlling the pumps at the Highland Pump Station from the SCADA system at the treatment plant. Water pumped from the Champion Wells enters the treatment plant process at a point downstream from the membranes. Water from the Champion Wells is blended with filtered water just prior to post-filtration chloramination and fluoridation. Once chloraminated and fluoridated, the blended water from the wells and membranes enters the clearwell for temporary storage prior to being sent to the ground storage and distribution.

5. Equipment Controls and Modes of Operation:

Raw water flow into the plant from Oak Creek Lake is controlled at the plant by raw water flow control valves FCV-1101. Raw water flow from the lake is measured and regulated via flow meter FE/FIT1101. Raw water flow from Oak Creek Lake is adjusted by the flow control valve as necessary to support production needs as defined on the Plant Computer by the plant Operator. The plant Operator enters the desired raw water flow set points and the Plant Computer then operates the raw water pumps in conjunction with the flow control valve at the plant to maintain the flow rate set point defined by the Operator. Raw water flow rate is controlled by FIC-1101 via the Plant Computer. This electronic controller operates FCV-1101 based on flow data received from FE/FIT-1101. Instantaneous and totalized flow from the flow device is sent to the Plant Computer.

Oak Creek Reservoir :
(Equipment Controls and Modes of Operation):

Controls for the raw water pump at the Oak Creek Pump Station consist of a breaker at the pump panel, a HAND-OFF-AUTO (HOA) switch at the pump, and SCADA control display for the pump on the Plant Computer. Pump controls for the pumps in Booster A & B are identical to pump controls at Oak Creek raw water pump station. Raw water flow from Oak Creek Reservoir into the treatment plant is measured via a Venturi meter (FE-1101) located in Water Meter Vault 2 (WMV-02) which is located in the yard west of the main building at the treatment plant. A 16-inch flow control valve (FCV-1103) located in Flow Control Valve Vault 2 (FCVV-02) reduces the pressure on the raw water line from Oak Creek Reservoir. Hand operated isolation valves (HV-1103 and HV-1112) have been located on the Oak Creek line just upstream from the flow control valve, and just downstream from the Venturi meter to shut flow off in the event maintenance on the Venturi or flow control valve is necessary. The isolation valves may be shut in the event flow from Oak Creek is shut off due to lack of water in the reservoir.

Champion Wells:
(Equipment Controls and Modes of Operation):

Water from the Highland Pump Station is combined with the membrane system permeate discharge flow upstream from the clearwell (T-41). Champion Well water flow from the Highland Pump Station is controlled by the Operator via the Plant Computer, flow control valve FCV-4101, flow meter FE/FIT-4101 and FIC-4101. Flow control valve FCV-4101 provides automatic hydraulic back-pressure sustaining capability. The water pumps at the Highland Pump Station are controlled by the Operator via the Plant Computer. Controls for the pumps at the Highland Pump Station consist of a breaker at the pump panel for each pump, a HAND-OFF-AUTO switch at the pump, and SCADA control display for each pump on the Plant Computer.

6. Startup:

Oak Creek Reservoir:
(Startup):

Starting any of the raw water pumps after maintenance entails completing a Pre-Startup Inspection . In addition to verifying valves at the Oak Creek, Booster A, and Booster B pump stations are properly configured, the Operator must verify the yard valves on the Oak Creek line entering the plant are open. Check to be sure HV-1103 and HV-1112 are OPEN before starting raw water flow from the Oak Creek pump station. Once the pump has been cleared to run, the Operator may start the pump locally or remotely. Normal operation will see the pump started remotely via the Plant Computer. Manual operation of the raw water pumps involves turning the pump control switch from AUTO or OFF to ON. The pump will then run until the switch is returned to the OFF position.

Champion Wells:

(Startup):

Starting any of the Highland Pump Station pumps after maintenance entails completing a Pre-Startup Inspection . Once the pump has been cleared to run, the Operator may start the pump locally or remotely. Normal operation will see the pump started remotely via the Plant Computer. In addition to checking the pump valves at the Highland Pump Station, the Operator must also check the treatment plant yard valves on the line from the Highland Pump Station. Isolation valves to check consist of HV-4102 and HV-4101.

7. Shutdown:

Oak Creek Reservoir:

(Shutdown):

Normal shutdown of the pumps due to reduced need for raw water simply involves changing the desired production flow to "0 gpm". The Operator may also stop flow from Oak Creek by entering "0%" as the proportion from Oak Creek, or by turning the Oak Creek, Booster A, and Booster B pumps OFF at the SCADA control screen at the plant. While it is not likely the pumps will be run in the HAND mode, if the pump is running in the HAND mode the Operator must manually turn the pump selector switch to OFF or AUTO to shut the pump down. If the pump is being shut down for maintenance, the breaker feeding the pump is then de-energized after the pump selector switch is set in the OFF position. The breaker is then locked and tagged out. The suction and discharge valves must also be shut. Again if maintenance is to be performed on the pump, these valves should also be locked shut and tagged.

In addition to shutdown of an individual pump for maintenance purposes, the Operator may shut down the entire pump station due to declining lake level. In the event the entire pump station is taken out of service due to lack of source water, regular inspection of the inactive equipment is necessary to ensure the equipment remains operable.

Champion Wells:

(Shutdown):

Individual pumps at the Highland Pump station may be shut down for maintenance purposes simply by shutting off the pump at the pump selector switch, and deenergizing the breaker

supplying power to that pump. If maintenance on that pump is to be performed, the pump suction and discharge isolation valves must be shut. The Operator must then lock and tag the valves, and breaker for the duration of maintenance on the equipment.

Normal shutdown of the Highland pumps due to reduced need for water simply involves changing the desired production flow to "0 gpm". The Operator may also stop flow from the Highland Pump Station by entering "0%" as the proportion from the Champion Wells, or by turning the Highland pumps OFF at the SCADA control screen at the plant. While it is unusual for the Operator to discontinue utilizing water from the Champion Wells for an extended period, if flow from the pump station is to be discontinued indefinitely, the Operator may deenergize all pumps at the pump station, and shut the main discharge valve on the common discharge header at the pump station.

8. Emergency Operating Procedures:

Due to the availability of multiple surface and groundwater sources, emergency operation of an individual source is not required or advised. Rather than struggle to keep a single source in operation under emergency conditions and detract from the quality of the water sent to the plant, or create unnecessary work load for the plant Operators, the raw water source creating the concern is simply taken off line until the problem at that source is rectified. Should the emergency condition be the result of drought conditions, the surface water sources may be utilized to their full extent until no water is left to draw from, and those sources are then shut down. Emphasis then is placed on groundwater sources to supply water needs for the City of Sweetwater. In the event a shutdown occurs the membrane system will be taken out of service and placed in the Standby mode.