WATER CONSERVATION PLAN

Central Washington County Water Supply Corporation

Adopted September 19, 2022

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DROUGHT CONTINGENCY PLAN (Separate document)

I. INTRODUCTION

A. DESCRIPTION OF PLANNING AREA AND WATER SYSTEM

Central Washington County Water Supply Corporation ("CWC WSC", or the "WSC") formed under Chapter 36 of the Texas Water Code and is managed by a seven (7) member Board of Directors. The WSC presently operates a water supply system and has a service area comprised of 100 square miles in central Washington County, and has financed the water system improvements by borrowing funds from banks, US Department of Agriculture ("USDA") and/or the Texas Water Development Board ("TWDB").

The service area is not within the corporate limits of any city; however, part of the system lies within the extraterritorial jurisdiction of Brenham, Texas. There are approximately 900 households served by the WSC. At the time this document was presented there were 3 businesses being served in the EJT and 5 additional businesses being served in the CCN.

B. GOALS OF THE PLAN

This plan has two components: the long-term *Water Conservation Plan* and the *Drought Contingency Plan*. The plans are to be reviewed and approved by the Texas Water Development Board and the WSC's Board of Directors. The plans will then be implemented by a resolution of the Board. A copy of this resolution is in the appendix. The plan, the methods of implementation, and the actions to be carried out constitute the Water Conservation Plan.

The goal of the Water Conservation Program is to establish a set of policies to:

- 1. Insure demand for water does not exceed the amount available from the groundwater wells. There are currently four wells with a combined pumping capacity of 1,324,800 gallons per day.
- 2. Provide public information to encourage non-wasteful use of water.
- 3. Discourage high peak water use during summer months.
- 4. Unaccounted for water to be 10 percent or less than the quantity of water produced from the groundwater wells each month.

The goal of the drought contingency plan is to establish a set of procedures initiated by certain conditions to prevent the loss of water supply to any customer during periods of high demand or low supply.

The policies presented in these plans are needed to efficiently manage the water available to the WSC for the mutual benefit of all customers. The equitable use of water will provide a long-term cost benefit to the customers by optimizing the operation of the

WSC's facilities and manpower and by extending the operational life of facilities, which will delay the time when new facilities and/or equipment will be needed.

C. CONTRACTUAL OBLIGATIONS

The WSC has obligations under the terms of the loans with the TWDB to adopt this plan.

The WSC's Board shall adopt this plan by resolution.

The conservation restrictions rely in part on the installation of low water use fixtures. State legislation allows only the sale of these types of fixtures so they should be installed in any case within the WSC's service area.

The Drought Contingency Plan controls water use by all customers triggered on specific operating conditions in the water system. The triggering conditions are to be observed by the system operator. The trigger levels are based on production rates of the WSC's water supply and storage levels.

II. WATER CONSERVATION PLAN

A. PLAN ELEMENTS

The plan has six elements, which are to be enacted by the policies of the Board of Directors when adopted by resolution. The Board should periodically review and revise, if necessary, these policies.

1. **Information Programs:** There are many sources of information on water conservation, water use reduction, leak prevention, and xeriscaping. The TWDB can provide printed material for distribution to customers at low or no cost.

The WSC shall develop a new customer packet, which will include conservation information materials, an emergency demand management "fact sheet," and copies of selected articles on conservation. This packet shall be provided to new customers when they apply for service.

It is proposed the WSC provide its customers with one bill enclosure in April or May of each year and during the first year of operation and provide each customer with one of the brochures from the TWDB. The WSC should correlate the mailing of bill enclosures with other conservation campaign articles.

Up to 1,500 free TWDB brochures are available from the Municipal Water Conservation unit. Examples of the enclosures and brochures are included in an attachment to this plan for review and selection by the Board.

- 2. **Conservation–Oriented Rate Structure:** The water rate structure adopted by the WSC will contain increasing gallonage charges for high water use to encourage conservation. The rate structure will have a base rate per customer per month and an inclining block rate for water usage. The base rate will be primarily determined by the cost of operation, debt, and operating the system.
- 3. **Universal Metering and Repair Program:** The Directors will establish a policy to meter all connections on the system. It is recommended each user be metered individually and master-metering installation for multi-family dwellings or mobile home parks, etcetera.

The following program of meter testing and repair shall be established.

Master Meters (at wells)	Test every three years and recalibrate as necessary.
Customer Meters	Replace each meter every 10 years or once a meter has registered 1,500,000 gallons, with a new or rehabilitated (5/8 inch x $\frac{3}{4}$ inch size) unit, beginning with 10 percent of the meters after 5 years of implementation and replacing 10 percent each year thereafter.

METER REPAIR PROGRAM

The WSC will also test a customer's meter at their request. The *"Meter Test Authorization and Test Report"* is included in the appendix.

4. **Leak Detection and Repair:** An important element in efficient water system operation is to reduce water losses as much as possible. An accounting of the amount of water produced from the wells versus the amount of water billed to customers shall be kept on a monthly basis. A significant increase in losses or losses greater than 15 percent of water received is an indication of possible leaks in the system. Unaccounted for water needs to be no greater than 10 percent of the water measured at the wells master meters.

The correct bedding and pipe joining techniques are used which will reduce the potential for leaks. Leaks may be detected by visual inspection, reported low pressures, comparing master meter readings with total system meter readings, or by using available leak detection equipment. The TWDB can be contacted to assist and train personnel on the use of leak detection equipment.

5. **Pressure Reduction:** The Board has adopted a policy of recommending the installation of pressure reducing valves on services. This will provide better service to the customer, help prevent leaks, and reduce water consumption.

- 6. **Controls on Commercial Customers**: If and when there are commercial connections to the system, guidelines should be established for such businesses on a case by case basis.
- 7. **Other Conservation Practices**: Much can be done to encourage water conservation by promoting low water use landscaping and water recycling or reuse through exhibits or demonstration projects.

The Conservation Committee shall investigate various types of conservation projects, resources available to provide these demonstrations such as the TWDB or the Texas Rural Water Association (TRWA), and prepare a recommendation to the Board on whether these projects should be sponsored by the WSC.

Retrofitting of plumbing fixtures with low water use units should also be encouraged. Senate Bill 587 prohibits the sale of plumbing fixtures in Texas, which do not meet the water saving performance standards.

B. PLAN IMPLEMENTATON

The plan elements (previous items 1 through 7) shall be adopted by Board resolution and should remain in effect for the period of financial obligation to the TWDB. The WSC may elect to adopt specific recommendations identified above and include in the sample resolution provided in the appendix.

Other plan elements, which cannot be enforced by the WSC, should be promoted and encouraged by Board policies and procedures.

C. ANNUAL REPORTING AND FUTURE PLANNING

The WSC is obligated to the TWDB (under rule 31 TAC 363.71) to submit an annual report describing the implementation, status and quantitative effectiveness of the water conservation program (which includes the plan and the implementation procedures).

A *Conservation Committee* consisting of two Board members, the system manager, and the system operator will undertake this task which would also monitor water usage patterns, public education efforts and make recommendations to the Board on future water conservation efforts. This committee will also be responsible for an in depth review and evaluation of the plan to incorporate any needed amendments or major changes due to changes in the WSC service area, population, distribution system, or supply. This work is in addition to the annual review and should be done each 5 years or more frequently if conditions require it.

III. WATER CONSERVATION BROCHURES

Most brochures are available for sale when larger quantities than the number of free copies are desired. Most materials are available in packages of 100. Limitations may be placed on quantities of literature due to availability.

Please read the detailed ordering information, or email for additional assistance.

A Watering Guide for Texas Landscape

You don't have to give up having an aesthetically pleasing lawn to conserve water. It is important for homeowners who want to enjoy lawns but are concerned about conservation to realize lawns don't waste water, people do! There are positive features of lawns as recreational surfaces that reduce heat loads, noise, and water and air pollution. Learn how to:

- Choose plants adaptive to conditions in your area of the state.
- Measure the amount of water needed to irrigate your landscape.
- Use the right tools and methods to deliver the optimal amount.

Water is Limited Brochures

Do you know the impact that a serious water shortage could have on Texas? Learn steps that you can take to conserve water.

Water is Limited - Tip Card A

Answers water use questions such as how many gallons does flushing a toilet use to how many gallons playing with a garden hose for 15 minutes uses. Provides tips on how to conserve water.







Water is Limited - Tip Card B

Answers water use questions such as how many gallons does watering a lawn take to how many gallons does brushing your teeth use. Provides tips on how to conserve water.

Agricultural Water Conservation in Texas

Texas farmers and ranchers are leading the way in agricultural water conservation and innovation, implementing regional water planning strategies to address future water needs. This is an update to "How Do Texas Ag Producers Deal with Drought." Fold out Texas poster inside.

How Do Texas Ag Producers Deal with Drought

All Texans are challenged to conserve our limited surface water and groundwater supplies. Learn how Texas farmers and ranchers are leading the way in water conservation. Fold out Texas poster inside.

TWDB Kids

Children today will face a daunting challenge when they are adults: managing and conserving Texas' dwindling water supplies. So that they are equipped for this challenge, these future decision makers will need to be educated about the scientific background and complex issues associated with this critical resource.









Water for Texas Coloring Book

In the "Water for Texas" coloring and activity book, Billy the Bull, Amanda Armadillo, Sally Mander, and Grandpa Lizard guide children through fun facts about water in Texas, teach them the names of aquifers and rivers through word finds, give them information on how to conserve water at home, and apply what they have learned to create a story and draw a picture. There is even a maze and a connect-the-dots page. This entertaining 16 page booklet is targeted for ages Kindergarten through 3rd grade.



List of Publications in Spanish

These resources are no longer available to order, but copies of these publications can be downloaded free of charge and copied for distribution.

- Cuarenta Y Nueve Consejos Practicos Para Conservar Agua (Forty-Nine Water Saving Tips)
- Xeriscape (Xeriscape Principles and Benefits)
- The Dillos Demonstrate Wordless Water Conservation A graphic collection of water conservation ideas with Spanish and English captions listed on final page

DROUGHT CONTINGENGY PLAN

(See separate document)