Water Conservation Plan

for the

City of Coleman

July 2019

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WATER CONSERVATION PLAN

1.1 <u>General</u>

This Conservation Plan has been developed to meet the requirements of 30 TAC §288.2 for the City of Coleman which is a retail public water supplier of treated water to residents and commercial and industrial businesses located in Coleman County.

1.2 <u>Utility Profile</u>—See TWDB online https://www2.twdb.texas.gov/apps/WC/UtilityProfile

The City of Coleman obtains water from Lake Coleman, Hords Creek Lake and Lake Scarborough. Over the past five years, the City has used approximately 281 MG per year with an average daily use of approximately 0.502 MGD. Coleman currently provides water to a retail population of approximately 4709.

The City's untreated water transmission facilities consist of pipelines from the lakes to the water treatment plant. After conventional treatment, water is pumped to ground storage tank and to the elevated storage tanks. Coleman has 2 ground storage tanks and 2 elevated tanks that serve approximately 1926 service connections.

1.3 <u>Water Conservation Overview</u>

Five year (2014-2019) per capita water usage figures are shown in the table below for residential usage and overall usage. Five and ten-year reductions are also shown for both types. These 5- and 10-year goals are in line with the overall water conservation goals outlined by both the State of Texas and the Region F Planning Group.

	5-yr. avg	5-year (2023) goal	10-year (2028) goal
Residential Usage (gpcd)	56	50	45
Overall Usage (gpcd)	135	130	125

In addition, the City over the past five years has experienced on average approximately 35.78% water loss through the water system, which equates to a water loss of approximately 51 gpcd. The City's 5-year goal is to reduce water loss to below 31% by the end of 2024. The 10-year goal is to reduce water loss to below 24%. The 5- and 10-year goals will be met through replacement of old meters and distribution lines and through a more accurate recording of water that is unaccounted for.

1.4 <u>Water Conservation Objectives</u>

- Provide ongoing maintenance on the Hords Creek Supply Line and Lake Coleman Supply Line.
- Provide ongoing maintenance on 4 miles of the older and most deteriorated interior water lines within the City of Coleman.
- Identify and develop funds for continued, long term revalidation of interior water infrastructure.
- Proceed with design and construction of a new Water Treatment Plant in the City of Coleman.
- Promote increased water conservation through education and awareness programs.
- Maintain and enforce a Drought Contingency Plan.

1.5 <u>Schedule for Long Term and Short Term Objectives</u>

Immediate and Short Term Action:

- Place applications for and develop funding to address identified supply and interior infrastructure issues. Within 5 years have at least 5 miles of interior distribution line.
- Conduct a planned and systematic program for testing water meters and replacement of failed and inefficient meters. The five year bench mark is to have 60% of all meters reading +/- 5% accuracy and 100% within 10 years.
- Conduct annual water audits, taking immediate action to correct identified losses.
- We will continue to conduct educational programs to encourage water conservation, educate the public concerning fresh water issues in the state and increase efficient utilization of water.

Long Term Action

- Identify and develop funding for the continued revalidation of interior distribution lists.
- Identify and develop funding for the revitalization of the Lake Coleman supply line.
- Identify and develop funding to build a new water treatment plant.

1.6 Monitoring and Tracking Targets and Goals

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

 The City's record management system includes daily, weekly, and monthly reporting of water levels, water pumped, water treated, wastewater treated and treated wastewater released. The City of Coleman reads meters monthly in 4 cycles. The computer software employed automatically flags usage of +/- 50% of the previous months reading. A reread of the meter is ordered immediately eliminating the lag time for stuck meters or leaks that used to occur and thus reducing unaccounted water use.

- The City of Coleman has an ongoing repair and replacement program in place to address outdated and malfunctioning meters. The replacement program designed to create a system with metering device(s) within an accuracy of plus or minus 5.0% in order to account for the amount of water diverted from the source supply. This replacement program, coupled with targeted reuse applications for wastewater should reduce the total system water consumption.
- The water plant monitors pressure on the system to detect leaks in the main distribution lines and the lake lines. A water distribution crew is on call 24/7 to respond to leaks. Once leaks are detected, the system is equipped with valves to isolate the problem line and minimize loss. Also, periodically aircraft are utilized to fly the lake lines and look for leaks that are not large enough to significantly reduce the pressure and cause alarm.
- The city will 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 this chapter. If the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for resale of the water must have conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation requirements so that each successive customer in the resale of the successive customer in the resale of the water will be required to implement water will be required to implement water conservation measures in accordance with applicable provisions of the chapter.
- The City of Coleman has applied for a higher discharge volume at the water plant for backwash for use in irrigation. And has permitted reuse of treated wastewater at the City's sewer farm for contractor use in and around Coleman County. Both of these reuses have reduced the amount of treated water currently used for activities that don't require treated water.
- The city will work with consultants and engineers to plan and construct new supply and distribution lines, as funds are made available, to insure maximum effectiveness and efficiency for all projects.

1.7 Notification, Coordination and Education

At their main office, the City has posted information. As well as provided pre-printed brochures, etc. pertaining to water conservation, which water customers can view and pickup at their convenience. The City also holds monthly council meetings that are open to the public, where questions and comments can be discussed pertaining to water conservation. In addition to this, the City will also respond to all requests from commercial and institutional customers to provide presentations about Best Management Practices and water conservation.

The City of Coleman works in conjunction with the Coleman County Agricultural Extension Service, and the USDA Natural Resources Conservation Service to provide consultation and water conservation materials to the residents of Coleman and Coleman County. These materials include information on,

- a. Use of water conservation plumbing fixtures
- b. Tips for reducing water use in homes
- c. Landscaping and drought resistant lawns
- d. Pesticide uses and possible abuses

The City of Coleman has in force and ordinance that perpetually updates to the most current Standard Building Code and Standard Plumbing Codes. These codes include the requiring of water-conserving plumbing fixtures to be installed in new structures and existing structures undergoing substantial modification or addition.

1.8 Existing Water Rate Structure

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

Water Rate Structure:

Monthly Minimum – Residential and Business Meters within City Limits	\$37.50
0.0 - 3,000 Gallons (Price per 1,000 Gallons)	\$3.25
3,001-10,000 Gallons (Price per 1,000 Gallons)	\$4.60
10,001- and up (Price per 1,000 Gallons)	\$5.60
Residential and Business Meters outside of City Limits	\$60.66
0.00-3,000 Gallons (Price per 1,000 Gallons)	\$3.25
3,001-10,000 Gallons (Price per 1,000 Gallons)	\$4.60
10,000 Gallons and over (Price per 1,000 Gallons)	\$5.60

1.9 Enforcement Procedure & Plan Adoption

This water conservation plan has been adopted by the City on _____ and a copy of the resolution adopting the Plan is included in Attachment #2. The adopted Plan will be enforced by the City by providing water service only to customers complying with the Plan and discontinuing service to customers who do not pay their water bills or refuse to comply with the Plan.

1.10 Coordination with Region F Planning Group

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

1.11 Plan Review and Update

The City will review and update this water conservation plan, as needed, based on new or updated information, such as adoption or revision of the regional water plan. The water conservation plan will be updated again before May 1, 2024 and every five (5) years thereafter.

ATTACHMENT #1 TWDB Utility Profile (TWDB-1965)

Available online

https://www2.twdb.texas.gov/apps/WC/UtilityProfile

ATTACHMENT #2

Resolution Adopting Water Conservation Plan TBD

City of Coleman Water Conservation Plan 2019

ATTACHMENT #3

Letter to Regional Water Planning Group



City of Coleman City Manager Diana Lopez

August 5, 2019

Mr. John Grant Chair Region F Water Planning Group P.O. Box 869 Big Spring, TX 79721

Dear Mr. Grant:

This letter is to notify you that the City of Coleman recently adopted a water conservation plan. This notice is in accordance with Texas Water Development Board and Texas Commission on Environmental Quality rules.

The plan is available upon request.

Sincerely,

Diana L'hapiz

Diana Lopez City Manager