WATER CONSERVATION PLAN

RIVERBEND WATER RESOURCES DISTRICT UTILITY DISTRICT

NEW BOSTON, TX

228A Texas Avenue
New Boston, Texas 75570

March 2021

TABLE OF CONTENTS

Page

FOREWORD

Declaration of Policy, Purpose, and Intent

In order to conserve the available water supply and protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage or other water supply emergency conditions, the Riverbend Water Resources District ("Riverbend") hereby adopts the following regulations and restrictions on the delivery and consumption of water through a resolution. Water uses regulated or prohibited under this Water Conservation Plan (the Plan) are essential.

Solicitation of Public Input

Riverbend will periodically schedule public meetings to solicit input about the Plan. Information on the time and place of the meeting will be disseminated by means of utility bill inserts, by posting notice of the meeting at the Riverbend's office, publishing in the local newspaper, and/or posting on www.rwrd.org.

Public Education

Riverbend will periodically provide the public with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage. This information will be provided by means of public events and utility bill inserts.

Application

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

A. CURRENT AND NEAR-TERM WATER CONSERVATION PLAN

1. Background

The Red River Army Depot ("RRAD") is located in Bowie County, Texas approximately 17 miles west of Texarkana and comprises 19,000 acres, of which 9,000 acres are used for ammunition storage with the bulk of the land devoted to recreation, training and forest. The RRAD site has 720 buildings and 702 ammunition storage igloos, which enclose over 8 million square feet of space. The major industrial operations of RRAD include maintenance, repair, and overhaul of major weapon systems and components.

The Riverbend Water Resources District ("Riverbend") is a special district created under Chapter 9601 of the Special District Local Laws Code of the State of Texas, which currently serves RRAD and approximately 75 retail and commercial customers. The District is comprised of 18 Member Entities, including the cities of Annona, Atlanta, Avery, DeKalb, Hooks, Leary, Maud, Nash, New Boston, Redwater, Texarkana, Texas, Wake Village, Central Bowie County Water Supply Corporation, Oak Grove Water Supply Corporation, TexAmericas Center, as well as the counties of Bowie, Cass, and Red River. These Member Entities pay a fee to the District to provide governance structure for water resources that represent the region through oversight of regional water contracts, to supervise regional water infrastructure issues facing the area, and to protect the ownership and distribution of water resources in the region by serving a primary role in the negotiations for water supply storage and sales in Lake Wright Patman. This document serves as the Water Conservation Plan for the District.

Riverbend wet utilities consist of an Industrial Wastewater Treatment Plant (IWWTP), a Sanitary Wastewater Treatment Plant, and a Water Distribution System (WDS) in which we purchase water from Texarkana Water Utilities. The water distribution system and sanitary treatment plant were constructed in the early 1940's and the IWWTP was constructed in 1980.

2. Utility Profile

Prior to the transfer of assets to Riverbend, the WDS, IWWTP and Sanitary Wastewater Treatment Plant were owned and operated by TexAmericas Center. Since approximately 95 percent of the current water usage is used by RRAD, many of the questions in the Utility Profile are not applicable.

3. Conservation Goals – Current and Five-Year Plan

Riverbend has and will continue to conserve water via programs outlined in this Plan. The five-year conservation goal of Riverbend provides for the following measures:

a) Set a goal of 150 gpcd for total gpcd by means of education and installation of water saving devices;

b) Strive to achieve a 50 gpcd of indoor use for residential customers in both single and multi-family units by means of education and installation of water saving devices;

c) Work with RRAD personnel to install water meters on selected water service lines;

d) Achieve and maintain water loss of under 15% of production;

e) Promote awareness of water conservation initiatives (citizen/corporate education);

f) Educate users in flow reduction and minimization techniques;

g) Monitor water conservation progress toward established goals;

h) Readjust water conservation goals as needed;

i) Improve record keeping procedures to better track water production numbers, residential water use, commercial water use, and water use by RRAD to help reduce the volume of unaccounted for water; and

j) Upgrade and repair existing distribution system to help reduce water loss through leaks.

4. Conservation Goals – Ten-Year Plan

In conjunction with implementation of the Five-Year Plan, Riverbend also instates a ten-year plan that will establish the following system goals:

a) Achieve and maintain water loss of under 10% of production by means of upgrading and replacing water system piping and components;

b) Work with RRAD personnel to test/replace water meters on selected water service lines;

c) Coordinate with RRAD to reduce RRAD industrial water use by 5% by means of upgrading equipment and processes to more modern systems;

d) Continue to promote awareness of water conservation initiatives (citizen/corporate education); and

e) Continue to educate users in flow reduction and minimization techniques.

B. LONG-TERM WATER CONSERVATION PLAN

This Water Conservation Plan includes provisions for reducing unaccounted for water, testing, and repair of meters and the distribution system, as well as determining rate structures, and educating users about water conservation.

1. Unaccounted-For Water

Riverbend practices the following measures to determine and control unaccounted for uses of water:

a) Riverbend water treatment plant operation's staff follow standard operating procedures which include observations of daily water usage to identify any abnormalities that may indicate the existence of water system leaks;

b) Riverbend personnel and meter readers make visual observations on a regular basis throughout the Riverbend's service area to check for system leaks;

c) Riverbend accounting staff review printouts of meter readings for abnormalities that may indicate possible leaks or malfunctions; and

d) Leaks are identified and repaired promptly.

2. Meter Testing & Repair

Metering all water services is an effective means of improving and maintaining control of water system operations and provides the basis for efficient and equitable cost recovery. Metering provides a database for system performance monitoring, for planning future facilities, and for assessing the effects of water conservation measures. Metering also improves accountability for both water deliveries and for unaccounted water losses. The District meters all water accounts with the exception of water used by the RRAD facilities. All water meters used meet AWWA standards for accuracy (plus or minus 5.0%)

Riverbend meters the quantity of water that is delivered to each residential and commercial customer (RRAD facilities excluded). Meters are read and the

quantities are recorded once per month, with billings made monthly to residential and commercial customers.

Periodic testing, repair, and/or change-out of meters are essential to an effective metering program. Meters are tested on a regular basis and meters found to be performing outside accepted parameters for accuracy (plus or minus 5.0%) will be repaired or replaced as required.

Riverbend will institute procedures to improve accounting for unmetered water losses resulting from RRAD usage, flushing of water mains, fire-fighting, and main breaks. These procedures should help Riverbend to better estimate actual water losses due to leakage.

Riverbend will endeavor to work jointly with RRAD to monitor and reduce water consumption at some of the major Army facilities on the Base. This may include the voluntary installation of meters by the RRAD and evaluation/upgrade of plumbing to high efficiency models.

3. Distribution System Maintenance

The next sections detail the measures that Riverbend has implemented or will implement to help determine and control unaccounted-for water:

3.1 Leak Detection

The water distribution system is under continuous visual inspection for leaks by Riverbend personnel as well as by users. Reported leaks are addressed immediately. A Leak Detection Audit is also performed every 3 years system wide by an outside contractor.

3.2 Repairs

Riverbend requires all new water facilities to be built to strict specifications which are inspected by Riverbend personnel during construction to ensure quality workmanship and materials before the system is accepted for permanent maintenance by Riverbend.

3.3 Pressure

Riverbend will monitor and control pressures in the distribution system such that excessive pressure does not cause pipeline breaks and water loss. Pressure monitoring will become part of the routine distribution system maintenance program.

4. Water Rate Structure

The following tables (2-1 through 2-3) outline the water rate structure for Riverbend's residential and commercial users (Effective 01 Jan 2003). RRAD currently accounts for greater than 95% percent usage on water and sewer. Fees for the RRAD are negotiated independently from public user fees.

Table 4-1 Wet Utility Rates

RIVERBEND WATER RESOURCES DISTRICT
WATER/SEWER RATE SCHEDULE
APPROVED RATES - EFFECTIVE MAY 1, 2019

	Commercial Sewer Only	Commercial Water/Sewer	Private Water/Sewer	Private 1" Sprinkler	Commercial Hydrant/Water
Standard Water Rate ($/1000)		$6.50	$3.50	$3.50	
Standard Sewer Rate ($/1000)	$7.00	$7.00	$7.00		
Facility Charge					
Water		$3.25	$2.75	$2.50	
Wastewater	$3.25	$3.25	$2.75		
Total Charge	$10.25	$20.00	$16.00	$6.00	$9.75
		($/1000)	($/1000)	($/1000)	
Fixed Minimum Charge	$20.00	$35.00	$20.00	$10.00	$15.00
Water Rate		$10.00	$7.00	$7.00	$10.00
Sewer Rate	$15.00	$15.00	$10.00		
Facility Charge Water		$5.00	$1.50	$3.00	$5.00
Facility Charge Wastewater	$5.00	$5.00	$1.50		
Backflow Device Annual Calibration*	$75.00				
Customer Service Inspection**	$85.00				

**The TCEQ requires an annual back flow calibration. You may have it done on your own or Riverbend can assist you. Riverbend's fee for this service is $75. If you choose to have the calibration done on your own, Riverbend is required to have a certificate on file. If Riverbend does not receive that certificate on file at least 20 days before your annual calibration is due, Riverbend will complete the calibration for you and the fee will be added to your following months' water and sewer invoice.*

*** The TCEQ requires a Customer Service Inspection for all new connections/water meters. This is to prevent cross connections from contaminating the water distribution system. Riverbend is required to have a certificate of inspection on file. The service inspection has to be completed before water service can be turned on. The fee will be added to your first service invoice.*

5/1/2019

Table 4-2 Connection Fees

	Water Use Categories	
Fees	**Private**	**Commercial**
New Connection Fee	$50.00	$50.00
Reconnection Fee	$50.00	$50.00

Table 4-3 Tap Fees

Estimated Fees	Cost
Water Tap	
1-1/2"	$957.05
2"	$2,186.30
4"	Material + Labor Cost
6"	Material + Labor Cost
Sewer Tap	
4"	$293.69
6"	$326.93

5. Public Education

Riverbend will consider the following measures to educate the public regarding the benefits of water conservation.

5.1 Residential Users

Provide informational literature to existing residential customers along with billing statements to encourage reduction in water use. Literature will explain treatment costs and environmental impacts of excessive water use as well as simple ways to decrease day-to-day usage such as upgrades to high efficiency plumbing models.

5.2 Industrial/Commercial Users

Provide information literature to existing commercial customers to encourage reduction in overall water use, through conservation measures such as process water reuse, minimization, and plumbing upgrades.

5.3 Government Users

Use by RRAD accounts for a large percentage of the water produced by Riverbend. Riverbend will work closely with the RRAD to encourage the

reduction of water use for non-essential military operations and improve water accounting of major water use facilities on the Army base.

5.4 Additional Education

As new programs or literature become available to Riverbend regarding water conservation and water treatment, Riverbend will, in turn, pass this information along to the water users to encourage their reduction of water consumption. Riverbend will also pass along information to its users regarding changes/upgrades to the water treatment/distribution system.

5.5 New Users

When new users begin using the Riverbend's water services, they will be provided with the appropriate informational literature detailing the Riverbend's policies/suggestions for water conservation upon request.

5.6 Wholesale Water Users

Wholesale water users are required to develop and implement a water conservation plan or water conservation measure using the applicable elements of Title 30 Texas Administrative Code (TAC) Chapter 288.