ABRIDGED APPLICATION FOR: TEXAS WATER DEVELOPMENT BOARD SWIFT PROGRAM

RIVERBEND WATER RESOURCES DISTRICT

REGIONAL WATER TREATMENT SYSTEM

JANUARY 31, 2019

Prepared by: Susan Roth Consulting, LLC



Abridged Application

Due February 1, 2019 by 5:00 pm CST Submit via Email: <u>SWIFT@twdb.texas.gov</u> Apply Online: <u>https://ola.twdb.texas.gov</u>

By submitting this abridged application, you understand and confirm that the information provided is true and correct to the best of your knowledge and further understand that the failure to submit a complete abridged application by the stated deadlines, or to respond in a timely manner to additional requests for information, may result in the withdrawal of the abridged application without review.

GENERAL INFORMATION

Fund for Texas

	Entity Na	me		County	Regional Water Planning Area	
Riverbend Water Re	esources Di	strict	Bowie, C	ass & Red River	D - Northeast Texas	
	Name	Elizabeth Fazio Hale, J.D.,	LL.M.	Susan K. Roth, P	.E.	
Contact	Title	RWRD Executive Director	/CEO	Engineering Cor	nsultant	
Who should TWDB	Phone	(903) 831-0091		(512) 796-6692		
contact with questions during the review of this submission?	Email	lizfazio@rwrd.org		susan@srothcor	nsulting.com	

PROJECT DESCRIPTION

Project Name As it appears in the state water plan	Riverbend Strategy (2020)							
Where can the project be found in the 2016 <u>Regional</u> Water Plan?	The project is described on page #:	5-60 thru 5-61 (also Appendix C5, pg. 76)						
TWDB Staff will utilize information from both the State and Regional water plans to identify and review the project.	The capital cost is listed on page #:	5-61 (also Appendix C5, pg. 75)						
Phase(s) Applied For	🗆 Planning	⊠ Acquisition	🛛 Design	⊠ Construction				
Population Served When Fully Operational	74,746 (12 cities, 1 WSC & RWRD)							

DESCRIPTION OF PROPOSED PROJECT COMPONENTS

Please be sure this description includes all major project components and clearly states what the project seeks to accomplish. A high level of detail is not necessary at this stage–such information is collected later in the application process–but the description should make clear that the proposed work is the same as identified in the regional water plan.

Riverbend Water Resources District (WRD) formally represents the interests in water supply for the most northeast region of Texas; including the counties of Bowie, Cass, and Red River, as well as the TexAmericas Center (TAC) and 12 member cities through Interlocal Agreements. In October 2018, Riverbend WRD completed a Regional Water Master Plan Study (Study) funded through the Texas Water Development Board (TWDB) that focused on the following for Riverbend WRD's participating entities located within Bowie, Cass, and Red River Counties: 1) examine current and develop future population projections and water demands through 2070; 2) assess existing infrastructure to meet current and future water demands; 3) determine potential alternatives to meet the current and future water demands and then narrowing those alternatives to the most viable options; and 4) provide cost estimates for implementing those viable options to determine overall regional cost-effectiveness.

The Study evaluated several alternatives with a final recommendation of constructing a new regional water system, as noted in the Riverbend Strategy (*2016 Region D Water Plan*), which includes the following for the first phase: a new raw water intake structure (60 MGD) with a deeper invert elevation in Wright Patman Lake, a new raw water pump station (designed for 60 MGD, initially constructed for 30 MGD), raw water transmission pipeline (54-inch diameter) for both industrial and domestic use, a new 25 MGD water treatment plant, and expansion/repair of distribution pipelines to serve Riverbend WRD member entities.

The new raw water intake and conveyance system for delivery of raw water to TAC would be constructed initially with pre-design beginning immediately in 2019; with a goal of being operational by 2022 but no later than 2026, due to Riverbend WRD's current contractual obligations with TAC. Pre-design for the new regional water treatment plant (WTP) is targeted for 2020; with a goal of being operational by 2025. At that time, municipal demands of the Riverbend WRD member entities presently met by Texarkana Water Utilities' (TWU) existing New Boston Road WTP would be transferred to the new regional WTP. The City of Texarkana's (TX) municipal demands from the new WTP would be phased-in during the decommissioning process of the New Boston Road WTP.

The Study projected that the Riverbend WRD maximum municipal demand in 2070 would be 22.5 MGD; while the industrial demand would be 100,813 ac-ft/yr (90.0 MGD) for TAC in Bowie County. At the completion of the additional future phases, the regional water system will include a new 120 MGD raw water intake structure located in Wright Patman Lake, two 60 MGD raw water transmission pipelines for both industrial and domestic use, a 40 MGD water treatment plant, and expansion and repair of distribution pipelines to serve Riverbend WRD member entities.

The future phases of the regional water system (beyond Phase 1) will be constructed through 2060 to enable expansion to keep pace with the region's expected industrial and population growth. Design and construction of the expansion of the New WTP and Raw Water Conveyance System (Phase 2 and beyond) will be initiated in 2035. Consequently, Riverbend WRD will need to conduct environmental and cultural studies of Wright Patman Lake during Phase 1 in order to acquire additional water supplies to meet the future demands of the region.

The proposed regional water project for Riverbend WRD will primarily serve the rural population in Northeast Texas; 11 of the 12 member cities of Riverbend WRD have populations less than 10,000. This project is ready to proceed with design and construction of a reliable water system to address the regulatory compliance issues facing each of the Riverbend WRD member cities due to TWU's production limitations and inability to provide the minimum statewide treatment plant capacity requirements of 0.6 GPM per connection under normal rated design flow for surface water supplies. Since each of the Riverbend WRD member entities purchase treated water on a wholesale basis from TWU, this issue has impacted the member entities' ability to serve their growing water demands and expand their water CCN service area. As noted in the *2016 Region D Water Plan*, each of member cities are projected to have a water supply shortage in 2020 due to the 'aging of Texarkana's Water Treatment Plant.'

The population served by the project when fully operational is based on the population projections developed during the Study and are approximately 6,955 greater in 2020 for the member cities than the 2017 ACS population figures available through the U.S. Census Bureau-American FactFinder website (reference attachments). This project also incorporates advanced water conservation into the design and has identified conservation targets for near term reductions in demand based on the state's goal of 140 GPCD, as noted in the *2016 Region D Water Plan*. Riverbend WRD recently completed a Water and Wastewater Rate Study to address wholesale water rates as a result of implementing this regional project. In addition, copies of resolutions approved by key member entities in support of this project are included in the attachments.

Emergency Select all that apply	 Applicant/entity's water supply will last less than 180 days. Applicant has received or applied for Federal emergency fundion None of the above. 								
Agricultural Efficiency Project?									
C] Yes	🛛 No							
If "Yes," agricultural efficiency improvement	□ <1%		□ 10%-13.9%						
achieved by implementing the project:	□ 1%-1.9%		□ 14%-17.9%						

achieved by implementing the project:	□ 1%-1.9%	□ 14%-17.9
Please provide an attachment showing the basis for	□ 2%-5.9%	□ ≥18%
your calculation.	□ 6%-9.9%	

Household Cost Factor											
Household Cost Factor Household Cost Factor calculated by dividing the service area's average residential water bill by its annual median household income. For regional projects, these should represent the combined service areas of all participating entities.											
Estimated average annual\$589.3residential water bill:(based on 1)			\$589.8 ed on 1					\$42,050.50 (based on 12 cities)			
The proposed p	oject addr	esses:		🛛 Conservati	on 🛛	Water Loss		□ N/A			
Volume of Water Produced/Conserved (in Acre/Feet per Year) Please provide the total water supply project yield of the entire project on an annual basis in acre-feet per year, for each planning decade. A water volume in the 2040 decade, for example, is assumed to come online in or prior to the year 2040 but is a snapshot annual volume for that decade; it is not a sum of the annual use in the decade.											
2020	20	30	2	2040	2050	206	0	2070			
33,604	67,2	209	84	4,011	100,813	117,615		134,417			
(30 mgd)	(60 n	ngd)	(75	mgd)	(90 mgd)	(105 r	ngd)	(120 mgd)			
Readiness to Proceed Select all that apply				been coApplicawithin 1Applica	nary planning or de mpleted or is not r nt is prepared to b 8 months of applic nt has acquired all ed project, or none	equired. egin impleme ation deadlir water rights	entation c ne. associated	or construction			

ESTIMATED COSTS

Low-interest Loan	\$ 200,000,0	00.00							
Deferred Loan	\$ 0								
Board Participation	\$ 0								
Local Contribution	\$ 0								
Other:	\$ 0	\$0							
Total Estimated Project Costs	\$ 200,000,0	00.00							
Anticipated Commitm	nents								
Please attach proposed schedule commitments.	for multi-year	One-Time Commitment	Multi-Year Commitments						
Anticipated Debt Service	Structure								
Please attach explanation if reque debt service.	sting non-level	☐ Level ☐ Non-Level Request							

LIST OF WATER SYSTEMS SERVED BY THE PROPOSED PROJECT

NAME	PWS ID
Central Bowie County Water Supply Corporation	0190024
City of Annona	1940004
City of Avery	1940005
City of De Kalb	0190001

City of Hooks	0190002
City of Leary	0190093
City of Maud	0190007
City of Nash	0190006
City of New Boston	0190003
City of Red Lick* (supplied by TWU)	N/A
City of Redwater	0190008
City of Texarkana (TX) – Texarkana Water Utilities	0190004
City of Wake Village	0190005
Riverbend Water Resources District	0190021
*Note: City of Clarksville was included in the planning process; however, they do not plan to sign up initially but might join Riverbend WRD as a member city at a later date for regional water service.	1940002

ATTACHMENTS CHECKLIST

- □ Methodology for determining agricultural conservation savings (if applicable)
- ☑ Proposed multi-year commitment schedule (if applicable)
- □ Proposed "non-level" debt service structure (if applicable)

SUBMITTAL

Instructions	To submit your Abridged Application via email, please send this form to <u>SWIFT@twdb.texas.gov</u> .								
	To submit your Abridged Application using TWDB's Online Loan Application tool rather than this form, please visit <u>https://ola.twdb.texas.gov</u> .								
TWDB Contact Information	If you would like to schedule a meeting to discuss your project with TWDB staff, please contact the Regional Project Development Team for your region: <u>http://www.twdb.texas.gov/financial/programs/swift/regional_project_teams.asp</u> . For general SWIFT program inquiries, please email <u>SWIFT@twdb.texas.gov</u> .								

ATTACHMENTS – RIVERBEND WRD ABRIDGED SWIFT APPLICATION

Texas Water Development Board

State Water Implementation Fund for Texas (SWIFT)

Abridged Application Regional Project Worksheet

Applicant: Riverbend Water Resources District (RWRD)

Project Name: RWRD Regional Water Treatment System

Instructions: List all entities (aside from the applicant) that will be served by the proposed project. Use the "Rural" column to indicate the entities serving populations of 10,000 or fewer.

Press "Tab" to add new rows as needed.

Entity N	lame	Rural
1.	Central Bowie County Water Supply Corporation	Х
2.	City of Annona	Х
3.	City of Avery	Х
4.	City of De Kalb	Х
5.	City of Hooks	Х
6.	City of Leary	Х
7.	City of Maud	Х
8.	City of Nash	Х
9.	City of New Boston	Х
10.	City of Red Lick	Х
11.	City of Redwater	Х
12.	City of Texarkana (Texas)	
13.	City of Wake Village	Х
14.	City of Clarksville*	Х

*City of Clarksville was included in the planning process; however, they do not plan to sign up initially but might join Riverbend WRD as a member city at a later date for regional water service.

RWRD Abridged SWIFT Application Supporting Data

Participating Entity	2020 Population*	American Fact Finder Population (2017 ACS 5-yr est.)	Annual Median Household Income (2017 ACS 5-yr est.)	Avg. Annual Residential Water Bill**
Central Bowie Co. WSC	7529	N/A	N/A	\$ 600.00
City of Annona	318	436	\$ 29,167.00	\$ 608.16
City of Avery	487	429	\$ 29,028.00	\$ 667.20
City of De Kalb	1711	1630	\$ 35,391.00	\$ 628.80
City of Hooks	3049	2751	\$ 41,344.00	\$ 559.08
City of Leary	595	559	\$ 48,125.00	\$ 576.00
City of Maud	1358	1161	\$ 38,981.00	\$ 559.68
City of Nash	4070	3229	\$ 40,295.00	\$ 530.16
City of New Boston	5960	4696	\$ 40,675.00	\$ 624.12
City of Red Lick	1221	1064	\$ 68,750.00	\$ 655.44
City of Redwater	3749	1095	\$ 46,944.00	\$ 678.00
City of Texarkana (TX)	38007	37222	\$ 40,229.00	\$ 424.80
City of Wake Village	6150	5448	\$ 45,677.00	\$ 567.00
TexAmericas Center (RWRD)	542	N/A	N/A	N/A
TOTAL	74746		\$ 42,050.50	\$ 589.87

* Population projections based on Riverbend Water Resources District-Regional Water Master Plan Study (Oct. 2018) when system is fully operational

** Average annual residential water bill based on 10,000 gallons per month usage by each of the participating entities



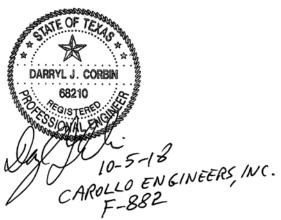
Regional Water Treatment System Phase 1 - Project Cost Summary

Phase 1A	Construction Subtotal		20% (Contingency	Cons	struction Total	Enç	grg, Feas, Legal, Finance, Bond Counsel (20% Constr.)	Ро	ower Connection (capital)		and Acquisition and Survey		nterest During Construction*	Tot	al Capital Cost
Access Roadway	\$	707,620	\$	142,000		849,620	\$	169,933	\$	11,491		-		51,484		1,086,624
Intake	\$	24,851,583	\$	4,970,000		29,821,583		5,964,640		403,776	- C	143,918	1.1	1,807,070		38,140,987
Pump Station	\$	8,770,460	\$	1,754,000	\$	10,524,460	\$	2,105,006	\$	142,492	\$	50,789	\$	637,741	\$	13,460,488
Raw Water Line	\$	25,650,440 *	\$	5,130,000	\$	30,780,440	\$	6,156,421	\$	416,761	\$	148,546	\$	1,865,173	\$	39,367,342
				Raw Water System		71,976,103	\$	14,396,000	\$	974,520	\$	347,349	\$	4,361,468	\$	92,055,440
Phase 1B																
WTP (25 MGD)	\$	58,545,592 *	* \$	11,709,000	\$	70,254,592	\$	14,051,000	\$	-	\$	-	\$	4,257,151	\$	88,562,743
				Water Treatment	\$	70,254,592	\$	14,051,000	\$	-	\$	-	\$	4,257,151	\$	88,562,743
TOTAL					\$	142,300,000	\$	28,500,000	\$	1,000,000	\$	400,000	\$	8,700,000	\$	180,900,000
Environmental/Cultural	Studies for Wright Patman	Lake													\$	18,500,000
TOTAL SWIFT FUNDI															\$	200,000,000

*Assumed interest rate of 4% and 18-month term for construction activities during Phase 1A & 1B.

Proposed SWIFT Schedule: Multi-Year Commitment			
2019	\$	18,000,000	
2020	\$	93,000,000	
2021	\$	14,400,000	
2022	\$	74,600,000	
TOTAL	\$	200,000,000	





Carollo Engineers was responsible for the assessment of existing water infrastructure and cost estimates in this report.

RWRD REGIONAL WATER MASTER PLAN STUDY

FINAL REPORT October 5, 2018





4111 TABLEROCK DRIVE • AUSTIN, TEXAS 78731 • (512) 796-6692 • FAX (512) 231-9851

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Section 1.0 EXECUTIVE SUMMARY

1.1 **PROJECT BACKGROUND**

The purpose of the Riverbend Water Resources District (Riverbend WRD) Regional Water Master Plan Study was to evaluate the feasibility of a regional water system to replace and/or supplement the multiple systems currently in service; investigate the water management strategies in the *2016 TWDB Region D Water Plan* as they apply to Riverbend WRD; and to evaluate treatment options and existing facilities to provide a cost-effective and reliable water supply (potable and raw) to meet the future demands of municipal and industrial customers. Additionally, this master plan includes a high-level condition assessment of the existing water treatment facilities in the study area and provides information on the population and water demand projections for the project participants located in Bowie, Cass, and Red River Counties through year 2070.

Below is a complete list of Riverbend WRD's participating entities included in the study:

- Central Bowie County Water Supply Corporation*
- City of Annona
- City of Atlanta
- City of Avery
- City of Clarksville*
- City of De Kalb
- City of Hooks

City of Leary

- City of Maud
- City of Nash
- City of New Boston
- City of Red Lick*
- City of Redwater
- City of Texarkana (Texas)
- City of Wake Village
- TexAmericas Center

Through Interlocal Agreements with the above entities except for Central Bowie County WSC, City of Clarksville, and City of Red Lick, Riverbend WRD formally represents the water supply interests for most of the northeast region of Texas. While Central Bowie County WSC and the City of Red Lick are not currently members of Riverbend WRD, both entities hold MOUs (Memorandum of Understanding) with Riverbend WRD for the collaboration and partnership of developing the region's water resource needs. Similarly, the City of Clarksville is participating in the study in order to acquire additional options regarding infrastructure projects needed to address their water quality and quantity needs.

Susan Roth Consulting, LLC and her team ('Roth Team'), including Carollo Engineers, Inc., identified and evaluated several options for regional water transmission and treatment



facilities in the described service area. This report serves as a summary of those options to meet the region's future water supply and infrastructure needs. Detailed information regarding the study area and available water supply; projected population and water demands; existing water treatment facilities; regional distribution and treatment alternatives; planning-level cost estimates; and potential funding options are included in this study.

1.2 POPULATION AND WATER DEMAND PROJECTIONS

This study focused on a 50-year planning period versus a shorter period for a variety of reasons: (1) the state's water plan evaluates a 50-year planning period; (2) a 50-year snapshot of projections for Riverbend WRD is critical to reflect the most accurate data and water demands when addressing permitting issues with the TCEQ and U.S. Army Corps of Engineers (USACE); and, (3) Riverbend WRD will likely be applying for funding with Texas Water Development Board (TWDB) and exhibits and information need to meet all TWDB planning criteria.

The population in the study area has increased steadily over the past 10 years and is projected to continue to increase over the next 50 years. Section 3.0 presents a detailed discussion on the development of population projections. The population of participants is projected to grow from 87,215 in 2020 to 111,218 in 2070. A complete summary of population projections for the project participants is included in **Appendix B**. The methodology and revised projections were approved by the TWDB Board on April 16, 2018.

Based on these population projections, per capita water usage and annual consumption was developed and is presented in Section 3.0. Water demands for each entity were determined in five-year increments through year 2070. Reference **Appendix D** for a complete summary of municipal water demand projections for the project participants.

In addition to the municipal water demands, this study also identifies future industrial and manufacturing water demands for Riverbend WRD. TAC possesses a significant amount of utility infrastructure; however, an adequate supply of raw and treated surface water is not currently available. From 2011-2017, TAC received numerous requests from potential industrial and commercial customers for potable and raw water supply. An additional 30 MGD of water demand is needed within the next several years at TAC and is projected to double to 60 MGD in the next 20+ years. A lack of current water supplies to the footprint has detrimentally impacted the growth and development of the industrial park. Section 3.0 provides additional background information and projected water demands through 2070 for TAC.

1.3 WATER SUPPLY ASSESSMENT

The Riverbend WRD study area is located in the Piney Woods and East Texas Timberlands Regions of Texas along the Interstate 30 corridor between the Cities of Dallas, Texas and Little Rock, Arkansas. This study area serves as a transportation, commercial, and industrial center for the Texas-Arkansas corridor, as well as a hub for portions of Oklahoma and



Louisiana. The primary source of water supply for Riverbend WRD Member Entities is Wright Patman Lake; however, supplemental supply is intermittently provided from Millwood Lake (reference Section 5.0 regarding the operation details). Section 4.0 discusses these two reservoirs and how they could be utilized to meet the Riverbend WRD Member Entities' future water needs.

The congressional authorization for Wright Patman Lake was provided pursuant to the Flood Control Act of July 24, 1946 (Public Law 526, 79th Congress, 2nd Session). Subsequent contracts, when fully implemented, between the USACE and the City of Texarkana, Texas, make available a minimum of 120,000 ac-ft of water storage space as defined by the Ultimate Rule Curve under the Permanent Contract for water supply purposes.

The City of Texarkana's water right (on behalf of the surrounding entities) provides for a maximum diversion of 180,000 ac-ft/yr. However, the Permanent Contract provides in Article 2 that the "City shall have the right...and make such diversions as granted to the City by the Texas Water Rights Commission, or its successors, to the extent such storage will provide." As a result, water in addition to the currently authorized 180,000 ac-ft/yr may be available under the Ultimate Rule Curve.

The two 1968 USACE contracts established two operating curves, an Interim Rule Curve and the Ultimate Rule Curve. Upon execution of the various contingencies and payments required per the Permanent Contract with USACE, the conservation storage available for water supply from Wright Patman Lake becomes that of the Ultimate Rule Curve. Region D planning recites 294,000 acre-feet of available water supply under the Ultimate Rule Curve in 2020. Riverbend WRD is currently conducting an update of the Water Availability Model for the Sulphur River Basin (previous update in 1998) that will further determine the water supply availability in Wright Patman Lake under the Permanent Contract, as well as under various future reallocation levels.

1.4 DETERMINATION OF ALTERNATIVES

Several important study factors were identified in the planning process: (1) treatment and distribution capacity and water demand; (2) regulatory compliance; and (3) conservation and firm water supply availability. Based on engineering recommendations and feedback received from the project participants, 16 initial alternatives were developed and presented to the project participants for consideration. Subsequent discussions were held and feedback was gathered from the project participants; the goal was to select the top alternatives for further evaluation. Based on the feedback, four final alternatives were selected for further evaluation. These alternatives are summarized below and described in greater detail in Section 6.4.

 Alternative 1, Construct a New Intake Structure and Raw Water Pipeline on Wright Patman Lake – This alternative involves constructing a new complete raw water conveyance system on Wright Patman Lake, which includes a new raw water intake structure, equalization tank, pigging station, pipeline, and pump station.



Alternative 1 includes two subcomponents for the design of the raw water conveyance system:

- <u>Alternative 1A</u> new raw water conveyance system constructed at recommended intake location as noted in CH2M HILL study; and,
- <u>Alternative 1B</u> construct new raw water conveyance system outlined in Alternative 1A but branch off of the line and extend the pipeline over to the existing transmission line at the New Boston Road WTP.
- Alternative 2, Modify the Raw Water Delivery System at New Boston Road WTP Alternative 2 involves the modification of the existing raw water conveyance system at the New Boston Road WTP in order to utilize the entire permitted treatment capacity of the existing WTP. The design capacity of the existing intake structure at New Boston Road WTP is 24.5 MGD; however, currently the hydraulic capacity is limited to 18.0 MGD due to sediment build-up in the conduit. During the infrastructure assessment component of this project, interviews with TWU operators suggested that the existing New Boston Road WTP had a permitted treatment capacity of 24-25 MGD and that the existing raw water delivery system was the limiting factor. After receiving additional information from TWU and confirmation from TCEQ that the treatment capacity of the New Boston Road WTP is currently limited to 18.0 MGD, this alternative was removed from further consideration due to the initial capital cost estimates.
- Alternative 3, Construct a New WTP at TexAmericas Center (TAC) For this alternative, a new surface water treatment plant is proposed and would be constructed at two possible locations on TAC property within Riverbend WRD's water CCN area. The two possible sites for the location of the new WTP on the TAC footprint were identified by the 2012 CH2M HILL study for Riverbend WRD (reference Figure 6-6) and were voted the highest by the project participants:
 - <u>Alternative 3A</u> location of site at TAC at Bowie County Parkway ('Site 3' in CH2M HILL study); and,
 - <u>Alternative 3B</u> location of site at TAC at southwest corner of former Ammunition Plant ('Site 4' in CH2M HILL study)
- Alternative 4, GPI WTP Expansion or a New WTP for Cass County This alternative includes either expanding the existing IP (now GPI) WTP or constructing a new WTP to serve the City of Atlanta and the other neighboring cities in Cass County. Recently, the International Paper (IP) Texarkana Mill was acquired by Graphic Packaging International (GPI). The majority of the Riverbend WRD Member Entities are currently served by the New Boston Road and Millwood WTPs; however, the City of Atlanta, Texas is currently served by the GPI WTP. The GPI WTP provides potable water to the mill, as well as the neighboring cities of Atlanta, Domino, and sometimes



Queen City:

- o <u>Alternative 4A</u> Expand the existing GPI WTP; and,
- <u>Alternative 4B</u> -- Construction of a new 2.5 MGD Conventional WTP, located in Cass County, to serve the municipal needs of the Cities of Atlanta, Domino and Queen City.

1.5 ECONOMIC ANALYSIS AND FINANCIAL EVALUATION

The economic and financial analysis in Section 7.0 is used as a way of comparing each alternative on an even level, based on capital and operations and maintenance (O&M) costs. The analysis includes a high level estimate of capital costs for new water treatment plants, a raw water conveyance system, booster pump stations, and transmission pipelines. The scope of this project did not include a detailed treatment or piping design. Planning level unit costs were developed and based on either defaults from the Unified Cost Model (UCM) prepared by the TWDB or, where noted, industry standards and experience. The capital cost analysis for each alternative assumed that the phasing of the construction projects would be initiated to meet the timing of the projected water demands. Reference Section 7.0 for a complete summary of cost estimates prepared for each of the final alternatives further evaluated.

Alternative 3A (Phase 1 and 2) entails the construction of a new intake structure at Wright Patman Lake, a raw water pipeline, a booster station with storage, a pigging station to address potential sedimentation effects, and a terminal equalization tank for the conveyance of up to 90 MGD of raw water for industrial purposes and 25 MGD of raw water for municipal purposes to a new 25 MGD WTP to be constructed on the TAC footprint at Bowie County Parkway.

The infrastructure proposed in Phase 1 of Alternative 3A, which includes utilizing existing distribution lines where feasible (i.e. existing pipeline along U.S. Highway 82), has a total project cost of approximately \$178.5 million and annual debt service payments of approximately \$9.4 million based on an interest rate of 4.0 percent and a 30-year financing term. It is noted that a more detailed evaluation should occur to integrate existing distribution lines into the design during the preliminary and final engineering design phase of the project since this activity was not within the scope of work for this study. Phase 2 project cost for Alternative 3A is estimated to be \$111.8 million, with an estimated annual debt service of approximately \$5.9 million. Phase 1 and Phase 2 costs are summarized in **Tables 7-15** and **7-16** in Section 7.0. Based on the phased approach, the total 'combined' project cost of Phases 1 and 2 of Alternative 3A is estimated to be \$290.3 million, as shown in **Table 7-17**.

Alternative 4B entails the construction of a new 2.5 MGD conventional water treatment plant located in Cass County near Domino, Texas. A new raw water pipeline would be connected to the existing raw water pipeline that currently serves the existing GPI WTP, with the connection located upstream of the GPI pre-chlorination facility. The new raw water pipeline would run parallel to the existing raw water line to the proposed new Cass County WTP. The project cost



for Alternative 4B is estimated to be \$14.3 million, with an estimated annual debt service of approximately \$0.7 million, as shown in **Table 7-19** in Section 7.0.

1.6 FINAL RECOMMENDATIONS

The Roth Team recommends immediately implementing Alternatives 3A and 4B within the next 3 to 5 years with planning beginning within the next year in order to serve the projected municipal and industrial water demands in the study area. The recommended alternatives for Riverbend WRD are based on the following key factors: availability of regional water infrastructure to meet the existing and future demands of the municipal, industrial/manufacturing, and agricultural sectors; the availability of firm water supply; the impact of the cost of water to participating customers; and, the need for meeting the TCEQ's regulatory requirements and minimum treatment capacity criteria of 0.6 gpm per connection. The recommended facility proposal is also based on an implementation plan that allows the recommendations to be permitted, constructed, and operational in a reasonable amount of time, as well as including adequate operations, maintenance, and management criteria.

- Alternative 3A: Construction of a new raw water intake at Wright Patman Lake, raw water conveyance system, terminal equalization tank, new Advanced Treatment WTP (15 MGD constructed in Phase 1; 10 MGD constructed in Phase 2) located on Bowie County Parkway at the TexAmericas Center, and regional transmission mains from the new WTP to Riverbend WRD Member Entities' distribution systems in Bowie and Red River Counties. Phase 1 consists of a 42-in. diameter raw water pipeline designed to carry a maximum of 50 MGD; Phase 2 includes a second parallel 54-in. diameter pipeline to bring the total pipeline capacity to 115 MGD. This alternative involves construction in a two-phase approach and provides advanced treatment capabilities for the participants' in a cost-effective manner.
- <u>Alternative 4B</u>: Construction of a new 2.5 MGD Conventional WTP, located in Cass County, to serve the municipal needs of the Cities of Atlanta, Domino and possibly Queen City.

Alternative 3A provides the most flexibility for all project participants, as well as the opportunity for a phased construction approach to allow for 'growth to pay for growth.' This project would also address the regulatory issues regarding the current alternative capacity requirement and water production limitations, which in turn has impacted the Member Entities' ability to serve their growing population and expand their water CCN service areas.

The new raw water intake and conveyance system to deliver raw water to TAC would be constructed initially, and municipal demands of the Member Entities presently met by the existing New Boston Road WTP would be transferred to the new regional WTP. The City of Texarkana's (TX) municipal demands from the new WTP would be phased-in during the decommissioning process of the New Boston Road WTP.

The project participants' 2070 maximum day demands were used as the basis for sizing the

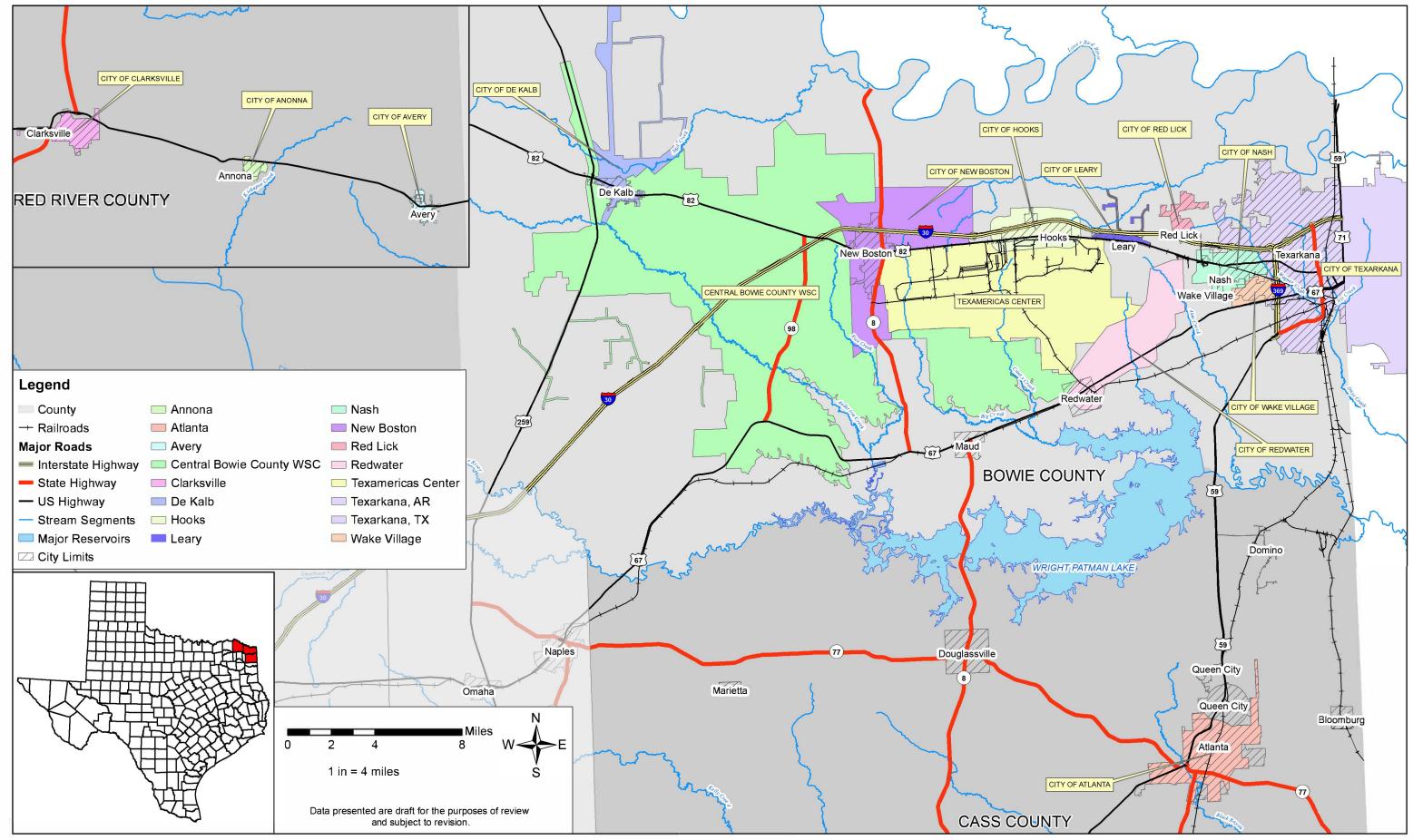


capacity of the intake structure, raw water conveyance system, water treatment plant and transmission lines; this infrastructure would be constructed in two separate phases.

The infrastructure proposed in Phase 4B involves constructing a new 2.5 MGD conventional surface water treatment plant in Cass County to serve the Cities of Atlanta, Domino, and Queen City. The conventional package treatment plant would be sized for 2.5 MGD and would utilize the existing GPI intake; however, a new raw water pipeline would tie into the existing GPI raw water pipeline immediately upstream of the GPI pre-chlorination system to avoid the TTHM and HAA5 issues due to the high concentration of chlorine injected at that point in the system. Raw water and treated water lines would be constructed to ultimately tie into the existing distribution line that currently serves the City of Atlanta.



Figure 2-1: Participating Entities in Regional Water Master Plan Study





Bryan W. Shaw, Ph.D., P.E., *Chairman* Toby Baker, *Commissioner* Zak Covar, *Commissioner* Richard A. Hyde, P.E., *Executive Director*



PWS_0190004_CO_20141125_ACR

Texas Commission on Environmental Quality Protecting Texas by Reducing and Preventing Pollution

November 25, 2014

Mr. J.D. Phillips, P.E. Texarkana Water Utilities P.O. Box 2008 Texarkana, Texas 75504-2008

TEXARKANA WATER UTILITIES DEC 01 2014

RE: City of Texarkana Public Water System - PWS ID No. 1010003 Request for an Alternative Capacity Requirement Bowie County, Texas

RN 101200665; CN 600335830

Dear Mr. Philips:

On July 30, 2014, the Texas Commission on Environmental Quality (TCEQ) received your letter, dated July 29, 2014, providing the previously requested information in support of an alternative capacity requirement (ACR) for the City of Texarkana (City). This review of an ACR request includes accounting for all of the wholesale purchased systems receiving water under direct pressure. The supplemental information was requested in the TCEQ letter dated April 22, 2014. The TCEQ evaluated the ACR request for total surface water treatment plant production. Based on our review, the TCEQ is **granting** an ACR in accordance with the conditions outlined in this letter. The granted ACR is in lieu of the minimum capacity requirements specified in Title 30 of the Texas Administrative Code (30 TAC) §290.45(b)(2)(B). The granted ACR applies to the City and those purchase water customers under direct pressure of the City. All other systems that the City supplies finished water to must meet all requirements set forth in the individual contracts. Based on our review, the following ACR is approved for the City and the following purchase water customers:

- Macedonia-Eylau MUD 1 (PWS ID 0190014)
- City of Redwater (PWS ID 0190008)
- TexAmericas (PWS ID 0190021)

The ACR for the City and those systems served under direct pressure: **0.49 gallons per minute (gpm) per connection.**

For the existing number of connections served, the Minimum Production Requirement for the City and purchase systems served under direct pressure is **24.66 MGD**

Please note that all of the following systems receive purchased water through an air-gap into a ground storage tank, and these systems are not granted an ACR as part of this review. However, we need to ensure that the wholesaler's production facilities meet the minimum contractual obligations (for the air-gap into storage tank customers) with the additional consideration of peak daily usage. For the peak daily usage on August 4, 2011, the purchase

J.D. Phillips, P.E., Director of Engineering Page 2 of 3 November 25, 2014

water customers that receive water into ground storage used approximately 5.23 MGD. The contracts for these same (air-gap) customers specify a combined 4.158 MGD obligation (extrapolated from the uniform purchase rate of the contract period in the absence of a specified daily purchase rate) of the wholesaler (City of Texarkana) to the purchasers (through the combined contracts of these systems). To allow for modifications to these contracts in the future and in consideration of peak usage relative to contractual obligation (calculated as 5.23 MGD ÷ 4.158 MGD = 1.26), the wholesaler must meet the minimum 0.49 gpm per connection to the direct-pressure customers plus 1.26 times the daily contractual obligations to customers receiving water by air-gap into storage.

- Central Bowie County WSC (PWS ID 0190024)
- City of Wake Village (PWS ID 0190005)
- City of Nash (PWS ID 0190006)
- City of Leary (PWS ID 0190093)
- City of Hooks (PWS ID 0190002)
- City of Maud (PWS ID 0190007)
- City of New Boston (PWS ID 0190003)
- City of DeKalb (PWS ID 0190001)
- Oak Grove WSC (PWS ID 0190014)
- Lone Star Army Ammunition Plant (PWS ID 0190087)
- Red River County WSC (PWS ID 1940008)

For the existing contracts, the Minimum Production Requirement for purchase systems with air-gap into storage is **5.23** MGD. Note that when the contract obligations to any of the above air-gap to storage customers change, the minimum daily production requirement for these customers shall be **1.26** times the combined obligations of the air-gap to storage purchaser contracts.

Total Minimum Treatment Plant Capacity for the Existing System: 29.89 MGD

The ACR was calculated based on the 36 months of daily usage data submitted by the City for the period from October 2010 through September 2013.

Calculation of Equivalency Ratio:

The City of Texarkana's Water Treatment Plants have a combined rated capacity of 33.12 MGD (15.12 MGD from the Millwood Treatment Plant and 18.0 MGD from the Wright-Patman Treatment Plant). This capacity serves the City and sixteen (16) wholesale customers. From our review of the 36 months of data, a MDD of 26.791 million gallons per day (MGD) for the City occurred on August 4, 2011 during this review period. The MDD includes all of those systems served under direct pressure and by an Air-Gap; a total of 21.56 MG was served under direct pressure on August 8, 2011. This corresponds to 0.49 gallons per minute (gpm) per connection (for the combined connections of the City and the three public water systems that receive water from the City under direct pressure). An equivalency ratio (ER) of 0.82 was calculated from the following formula: ER = MDD (under direct pressure) \div 0.6 x 1.15. A safety factor of 1.15 was applied to the calculation to protect against any unforeseen changes in water supply or demand. The ER multiplied by the minimum capacity requirements for the City resulted in the ACR for the water system. The above ACR calculations were determined in accordance with the method prescribed in 30 TAC §290.45(g)(2).

Please note that if those systems served by the City under an air-gap to storage connection wish to apply for an ACR, then those ACR requests shall be reviewed by the TCEQ on an individual basis.

J.D. Phillips, P.E., Director of Engineering Page 3 of 3 November 25, 2014

All alternative capacity requirements are subject to periodic review. The ACR may be revised or revoked if water demand conditions change or if evidence is found that the alternative capacity requirements have resulted in the degradation of potable water quality or quantity.

If you have questions concerning this letter, or if we can be of additional assistance, please contact Mr. Shannon Frazier by e-mail at <u>shannon.frazier@tceq.texas.gov</u> or by telephone at (512) 239-6313.

Sincerely,

Joel klumpp, Team Leader Technical Review and Oversight Team Plan and Technical Review Section Water Supply Division Texas Commission on Environmental Quality

JPK/sf

cc: Mr. Dale Franklin Smith, President, Macedonia-Eylau MUD 1, 701 Kings HWY, Texarkana, Texas 75501-9666 The Honorable Mr. Robert Lorance, Mayor, the City of Redwater, P.O. Box 209, Redwater, Texas 75573-0209 Mr. Dennis Washington, President, TexAmericas Center, 107 Chapel Ln, New Boston, Texas 75570-9554 Mr. Calvin Pierce, President, Central Bowie County WSC, P.O. Box 306, New Boston, Texas 75570-3060 The Honorable Mr. Jimmy Green, Mayor, the City of Wake Village, P.O. Box 3776, Wake Village, Texas 75501-1900 The Honorable Mr. Henry Slaton, Mayor, the City of Nash, P.O. Box 250, Nash, Texas 75569-0250 The Honorable Mr. James Palma, Mayor, the City of Leary, P.O. Box 1799, Hooks, Texas 75561-1799 The Honorable Mr. Jimmy Cochran, Mayor, the City of Hooks P.O. Box 37, Hooks, Texas 75561-0037 The Honorable Mr. Dwight Butler, Mayor, the City of Maud, P.O. Box 100, Maud, Texas 75567-0100 The Honorable Mr. Johnny L. Branson, Mayor, the City of New Boston, P.O. Box 5, New Boston, Texas 75570-0005 The Honorable Mr. Dennis Wandrey, Mayor, the City of DeKalb, 110 E. Grizzly St., DeKalb, Texas 75559-1802 Mr. Ricky Wilson, President, Oak Grove WSC, 800 W Front St, DeKalb, Texas 75559-1014 Mr. Thomas L. Rudy, Lone Star Army Ammunition Plant, P.O. Box 9100, Texarkana, Texas 75505-9100 Mr. John Ragsdill, President, Red River County WSC, 1404 E. Main St, Clarksville, Texas 75426-4231



Universe: Total population 2013-2017 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

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	Annona town, Texas	
	Estimate	Margin of Error
Total	436	+/-162

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Explanation of Symbols:

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6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.

7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.

8. An '(X)' means that the estimate is not applicable or not available.



B19013

MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2017 INFLATION-ADJUSTED DOLLARS) Universe: Households 2013-2017 American Community Survey 5-Year Estimates

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	Annona town, Texas	
	Estimate	Margin of Error
Median household income in the past 12 months (in 2017	29,167	+/-9,842
inflation-adjusted dollars)		

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

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B19013

MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2017 INFLATION-ADJUSTED DOLLARS) Universe: Households 2013-2017 American Community Survey 5-Year Estimates

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	Avery town, Texas	
	Estimate	Margin of Error
Median household income in the past 12 months (in 2017	29,028	+/-6,733
inflation-adjusted dollars)		

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

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TOTAL POPULATION Universe: Total population 2013-2017 American Community Survey 5-Year Estimates

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	Avery town, Texas	
	Estimate	Margin of Error
Total	429	+/-116

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

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Universe: Total population 2013-2017 American Community Survey 5-Year Estimates

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	Clarksville city, Texas	
	Estimate	Margin of Error
Total	3,223	+/-15

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Explanation of Symbols:

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B19013

MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2017 INFLATION-ADJUSTED DOLLARS) Universe: Households 2013-2017 American Community Survey 5-Year Estimates

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	Clarksville city, Texas	
	Estimate	Margin of Error
Median household income in the past 12 months (in 2017	31,205	+/-4,421
inflation-adjusted dollars)		

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

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Universe: Total population 2013-2017 American Community Survey 5-Year Estimates

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	De Kalb city, Texas	
	Estimate	Margin of Error
Total	1,630	+/-298

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B19013

MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2017 INFLATION-ADJUSTED DOLLARS) Universe: Households 2013-2017 American Community Survey 5-Year Estimates

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	De Kalb city, Texas	
	Estimate	Margin of Error
Median household income in the past 12 months (in 2017 inflation-adjusted dollars)	35,391	+/-5,016

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TOTAL POPULATION Universe: Total population 2013-2017 American Community Survey 5-Year Estimates

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	Hooks city, Texas	
	Estimate	Margin of Error
Total	2,751	+/-21

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B19013

MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2017 INFLATION-ADJUSTED DOLLARS) Universe: Households 2013-2017 American Community Survey 5-Year Estimates

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	Hooks city, Texas	
	Estimate	Margin of Error
Median household income in the past 12 months (in 2017	41,344	+/-9,072
inflation-adjusted dollars)	,	,

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Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Explanation of Symbols:

1. An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.

2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.

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6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of

sample cases is too small.8. An '(X)' means that the estimate is not applicable or not available.



TOTAL POPULATION Universe: Total population 2013-2017 American Community Survey 5-Year Estimates

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	Leary city, Texas	
	Estimate	Margin of Error
Total	559	+/-147

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Explanation of Symbols:

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MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2017 INFLATION-ADJUSTED DOLLARS) Universe: Households 2013-2017 American Community Survey 5-Year Estimates

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	Leary city, Texas	
	Estimate	Margin of Error
Median household income in the past 12 months (in 2017	48,125	+/-9,829
inflation-adjusted dollars)		

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

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Universe: Total population 2013-2017 American Community Survey 5-Year Estimates

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	Maud city, Texas	
	Estimate	Margin of Error
Total	1,161	+/-263

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

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MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2017 INFLATION-ADJUSTED DOLLARS) Universe: Households 2013-2017 American Community Survey 5-Year Estimates

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	Maud city, Texas	
	Estimate	Margin of Error
Median household income in the past 12 months (in 2017	38,981	+/-8,943
inflation-adjusted dollars)	,	,

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

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Universe: Total population 2013-2017 American Community Survey 5-Year Estimates

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	Nash city, Texas	
	Estimate	Margin of Error
Total	3,229	+/-20

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Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

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MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2017 INFLATION-ADJUSTED DOLLARS) Universe: Households 2013-2017 American Community Survey 5-Year Estimates

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	Nash city, Texas	
	Estimate	Margin of Error
Median household income in the past 12 months (in 2017	40,295	+/-7,024
inflation-adjusted dollars)	,	,

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Universe: Total population 2013-2017 American Community Survey 5-Year Estimates

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	New Boston city, Texas	
	Estimate	Margin of Error
Total	4,696	+/-20

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MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2017 INFLATION-ADJUSTED DOLLARS) Universe: Households 2013-2017 American Community Survey 5-Year Estimates

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	New Boston city, Texas	
	Estimate	Margin of Error
Median household income in the past 12 months (in 2017 inflation-adjusted dollars)	40,675	+/-11,237

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Universe: Total population 2013-2017 American Community Survey 5-Year Estimates

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	Red Lick city, Texas	
	Estimate	Margin of Error
Total	1,064	+/-191

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MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2017 INFLATION-ADJUSTED DOLLARS) Universe: Households 2013-2017 American Community Survey 5-Year Estimates

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	Red Lick city, Texas	
	Estimate	Margin of Error
Median household income in the past 12 months (in 2017 inflation-adjusted dollars)	68,750	+/-12,395

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	Redwater city, Texas	
	Estimate	Margin of Error
Total	1,095	+/-262

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Explanation of Symbols:

1. An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.

2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.

3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.

4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.

5. An '***' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.

6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.

7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.



MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2017 INFLATION-ADJUSTED DOLLARS) Universe: Households 2013-2017 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

	Redwater city, Texas	
	Estimate	Margin of Error
Median household income in the past 12 months (in 2017	46,944	+/-8,776
inflation-adjusted dollars)	,	,

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

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Universe: Total population 2013-2017 American Community Survey 5-Year Estimates

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	Texarkana city, Texas	
	Estimate	Margin of Error
Total	37,222	+/-48

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

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7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.



MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2017 INFLATION-ADJUSTED DOLLARS) Universe: Households 2013-2017 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

	Texarkana city, Texas	
	Estimate	Margin of Error
Median household income in the past 12 months (in 2017 inflation-adjusted dollars)	40,229	+/-3,365

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Explanation of Symbols:

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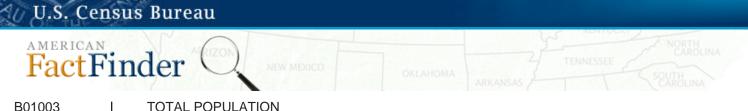
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TOTAL POPULATION Universe: Total population 2013-2017 American Community Survey 5-Year Estimates

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Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

	Wake Village city, Texas	
	Estimate	Margin of Error
Total	5,448	+/-28

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2017 INFLATION-ADJUSTED DOLLARS) Universe: Households 2013-2017 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

	Wake Village city, Texas	
	Estimate	Margin of Error
Median household income in the past 12 months (in 2017 inflation-adjusted dollars)	45,677	+/-12,307

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Riverbend WRD Member City	Annual Volume (kGals) for TWU True-Up, 2017-2018	Date of Resolution Approved	Percentage of Member Entity Demand Committed (%)	Remaining Volume to be Committed (%)
Annona, TX	7,762	anticipated Feb. 2019		0.20%
Avery, TX	23,426	anticipated Feb. 2019		0.61%
De Kalb, TX	71,512	anticipated Mar. 2019		1.86%
Hooks, TX	160,845	1/28/2019	4.19%	
Leary, TX	17,014	anticipated Feb. 2019		0.44%
Maud, TX	41,790	12/17/2018	1.09%	
Nash, TX	91,739	anticipated Mar. 2019		2.39%
New Boston, TX	398,750	11/13/2018	10.39%	
Redwater, TX	119,505	12/10/2018	3.11%	
Texarkana, TX ³	2,743,563	11/7/2018	71.48%	
Wake Village, TX	162,158	1/14/2019	4.22%	
TOTA	AL 3,838,063		94.49%	5.51%

*Volumes grown per TWDB Population Projections if available

1) Removed Atlanta, TX and Domino volumes

2) RWRD used for O&M Costs but no Project Costs

3) Removed Texarkana, AR volumes and added RRAD and CBCWSC bc of current contracts

RESOLUTION NO. 2018-127

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF TEXARKANA, TEXAS, SUPPORTING THE ROLE OF RIVERBEND WATER RESOURCES DISTRICT AS THE DESIGNATED LEAD FUNDING SPONSOR AND REGIONAL WHOLESALE WATER PROVIDER TO PROCURE NEW REGIONAL WATER INFRASTRUCTURE FOR DEVELOPMENT OF WATER SUPPLY FOR THE POTABLE AND NON-POTABLE USE BY TEXARKANA AND OTHER SURROUNDING ENTITIES; RECEIVING RIVERBEND'S DRAFT REGIONAL WATER RATE AND EVALUATING OTHER POSSIBLE FUNDING OPTIONS; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, the City of Texarkana, Texas ("Texarkana"), a home-rule municipality having full power of local self-government, holds rights to appropriate, divert, and use waters of the State of Texas in the Sulphur River Basin under multiple permits issued to Texarkana by the State of Texas; and

WHEREAS, in 1969, Texarkana entered into a "Water Supply System Sale-Purchase-Financing Agreement" with Lake Texarkana Water Supply Corporation, purchasing various assets set forth in that agreement ("Company Facilities"), which included the raw water intake at Wright Patman Lake and the New Boston Road Water Treatment Plant located in Texarkana; and

WHEREAS, also in 1969, Texarkana entered into water supply contracts for provision of potable water by means of Company Facilities to, respectively, the City of Annona, Texas, the City of Avery, Texas, the City of DeKalb, Texas, the City of Hooks, Texas, the City of Maud, Texas, the City of New Boston, Texas, the City of Texarkana, Arkansas, and the City of Wake Village, Texas (collectively, "the 1969 Contracting Cities"); and

WHEREAS, Riverbend Water Resources District ("Riverbend"), created in 2009, is a conservation and reclamation district created under and essential to accomplish the purpose of Section 59, Article XVI, Texas Constitution, as set forth in Title 6, Special District Local Laws Code, Subtitle L, Municipal Water Districts, Chapter 9601, with statutory powers including the authority to acquire any and all storage rights and storage capacity in a reservoir or other water sources inside or outside the boundaries of the district, and to acquire the right to take water from that reservoir or source, subject to the rights or permits held by municipalities or other persons; and

WHEREAS, Riverbend is operating under a Board of Directors comprised of five qualified voters who are residents of the district, selected by the local governing bodies of the Riverbend members (the Counties of Bowie, Cass, and Red River, TexAmericas Center, and the Cities of Annona, Atlanta, Avery, DeKalb, Hooks, Leary, Maud, Nash, New Boston, Redwater, Texarkana, and Wake Village); and

WHEREAS, Riverbend is supported by resolution by all of its member entities and has entered into Interlocal Cooperation Agreements in 2010 and 2011 with all of its member entities for the purpose of providing regional water and wastewater planning and engineering design services and implementing future regional water and wastewater infrastructure projects, as well as performing certain agent and negotiation activities at the local, state, and federal levels; and

WHEREAS, Riverbend and Texarkana have conducted numerous preliminary studies to examine the viability of extending the usable life of the raw water intake at Wright Patman Lake and the New Boston Road Water Treatment Plant and/or to build a new regional water treatment plant and new raw water intake; and

WHEREAS, Riverbend has a continued need for a regional water supply to meet current and future potable and non-potable water supply demands for municipal and industrial needs; and

WHEREAS, Riverbend began a Regional Water Master Plan Study in 2016 with Susan Roth Consulting for the purposes of 1) determining current and future population projections and water supply demands, 2) accessing current regional infrastructure, 3) recommending alternatives to the existing regional infrastructure to meet current and future demands, and 4) processing initial cost estimates and released its initial final draft as a working document of the Regional Water Master Plan in July 2018 for review and comment by member entities and interested stakeholders; and

WHEREAS, Riverbend also obtained Second Level III Cost Estimates from AECOM for the purposes of providing in greater detail a line-by-line cost assessment, as well as a more detailed scaled recommendation for phasing regional infrastructure into a timeline with estimated costs for Regional Water Infrastructure Projects in Phases 1A, 1B, and 4B totaling approximately \$200,000,000; and

WHEREAS, Riverbend intends to primarily seek funding and financing through programs at the Texas Water Development Board and any/all other state and federal entities that can provide low-cost financing or grants for the purpose of fulfilling Regional Water Infrastructure Projects, including the issuance of bonds; and

WHEREAS, Riverbend expects to enter into future water supply agreements with Texarkana and other surrounding entities who wish to become formal partners and owners in the newly developed Regional Water Infrastructure Projects of the Riverbend Regional Water Master Plan Study of 2018 in a take-or-pay type commitment pursuant to an agreed upon volume of water supply to Texarkana and other surrounding entities for the purpose of supporting the issuance of bonds, and intends to present such agreements to the City Council no later than the date that bonds are issued to support the intended projects; and

WHEREAS, Riverbend continues to work on a Water and Wastewater Rate Study with NewGen Strategies in developing an initial draft plan to provide for a regional water rate increase and/or set aside of approximately \$1.50 per 1,000 gallons for years 1-3 and \$2.50 per 1,000 gallons years 4-6 to begin meeting a commitment of debt service for a total of 30 years debt service, as well as Riverbend O&M and fees to be in place no sooner than January 1, 2019 and no later than October 1, 2019, which was provided to Riverbend members in a public work session on August 22, 2018; and

WHEREAS, Riverbend has informed city officials of the need for resolutions from the City Council and other surrounding entities supporting in principle Riverbend's plan for regional water infrastructure improvements; and upon receipt of such resolutions, Riverbend will promptly submit funding applications to the Texas Water Development Board for such improvements; and

WHEREAS, in light of aging Company Facilities, increased regional need for potable and non-potable water, and economic development opportunities that may be advanced by construction of regional water infrastructure improvements, the City Council finds and determines that supporting in principle Riverbend's plan for such improvements, consistent with the City's contracts with the 1969 Contracting Cities, will be in the best interests of the citizens of Texarkana.

NOW, THERFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF TEXARKANA, TEXAS:

SECTION 1. Recognizing the importance of a regional water supply to meet current and future potable and non-potable water supply demands for municipal and industrial needs to Texarkana and the surrounding region, the City Council fully supports Riverbend Water Resources District to act on its behalf as the lead

funding sponsor and to construct the Regional Water Infrastructure Projects including at a minimum a new raw water intake, a new raw water line, and a new water treatment facility that will supply wholesale water to Texarkana.

SECTION 2. The City Council has been provided the Level III detailed costs associated with the proposed new regional water infrastructure improvements as prepared by AECOM and Riverbend, along with new recommended regional water rates necessary to support those improvements.

SECTION 3. The City Council acknowledges that Riverbend Water Resources District will be requesting funds from the Texas Water Development Board and/or other state and federal entities in the form of bond funds; and the water supply agreements which Riverbend Water Resources District intends to present to the City Council and other surrounding entities will be used to support and secure these funds to be used to pay for the regional water infrastructure improvements.

SECTION 4. The City Council intends to fix and collect such rates and charges and/or provide for other funds legally available and reasonably assured for the purpose to make possible the City's proposed payment to Riverbend Water Resources District for the regional water infrastructure improvements.

<u>SECTION 5.</u> The City Council intends that monies raised and/or funds set aside for the purpose of implementing the regional water infrastructure improvements will be held in a separate fund and/or account and not used for any other purpose but to support the regional water infrastructure improvements under Riverbend Water Resources District, unless the City Council otherwise approves the use of those funds for another purpose.

SECTION 6. If the City Council chooses to adopt rates and charges as described in Section 4, such rates shall be adopted by ordinance on or before their effective date so that rates may become effective no sooner than January 1, 2019, and no later than October 1, 2019.

SECTION 7. Nothing in this Resolution should be construed to abrogate Texarkana's contracts with the 1969 Contracting Cities for supply of potable water.

SECTION 8: This Resolution shall be in full force and effect from and after its passage and approval.

PASSED AND APPROVED in Special Council Session on this the 7th day of November, 2018.

ATTEST:

JENNIFER EVANS, CITY SECRETARY

6:20p.m.

BOB BRUGGEMAN, MAYOI

Resolution No. R-18-18-10

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF REDWATER, TEXAS, SUPPORTING THE ROLE OF RIVERBEND WATER RESOURCES DISTRICT AS THE DESIGNATED LEAD FUNDING SPONSOR AND REGIONAL WHOLESALE WATER PROVIDER TO PROCURE NEW REGIONAL WATER INFRASTRUCTURE FOR DEVELOPMENT OF WATER SUPPLY FOR THE POTABLE AND NON-POTABLE USE BY REDWATER AND OTHER SURROUNDING ENTITIES; RECEIVING RIVERBEND'S DRAFT REGIONAL WATER RATE AND EVALUATING OTHER POSSIBLE FUNDING OPTIONS; ESTABLISHING A NEW WATER RATE STRUCTURE BY ORDINANCE NO. 18-23-25; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, the City of Redwater, Texas ("Redwater"), formed in 1989, is a Type A General Law municipality operating under Texas Local Government Code and having full power of local self-government; and

WHEREAS, in 1969, several entities supported the City of Texarkana, Texas ("Texarkana") entering into a "Water Supply System Sale-Purchase-Financing Agreement" with Lake Texarkana Water Supply Corporation, purchasing various assets set forth in that agreement ("Company Facilities"), which included the raw water intake at Wright Patman Lake and the New Boston Road Water Treatment Plant located in Texarkana; and

WHEREAS, also in 1969, those entities entered into a water supply contract with the City of Texarkana, Texas for provision of potable water by means of Company Facilities to, respectively, the City of Annona, Texas, the City of Avery, Texas, the City of DeKalb, Texas, the City of Hooks, Texas, the City of Maud, Texas, the City of New Boston, Texas, the City of Texarkana, Arkansas, and the City of Wake Village, Texas (collectively, "the 1969 Contracting Cities"); and

WHEREAS, in 1969, Redwater did not exist and was unable to elect to enter into a water supply agreement for participation in the development of those Company Facilities; however, Redwater later entered into a water supply agreement with Texarkana for the supply of potable water at a separate contract rate, which remains in place today;

WHEREAS, Riverbend Water Resources District ("Riverbend"), created in 2009, is a conservation and reclamation district created under and essential to accomplish the purpose of Section 59, Article XVI, Texas Constitution, as set forth in Title 6, Special District Local Laws Code, Subtitle L, Municipal Water Districts, Chapter 9601, with statutory powers including the authority to acquire any and all storage rights and storage capacity in a reservoir or other water sources inside or outside the boundaries of the district, and to acquire the right to take water from that reservoir or source, subject to the rights or permits held by municipalities or other persons; and

WHEREAS, Riverbend is operating under a Board of Directors comprised of five qualified voters who are residents of the district, selected by the local governing bodies of the Riverbend members (the Counties of Bowie, Cass, and Red River, TexAmericas Center, and the Cities of Annona, Atlanta, Avery, DeKalb, Hooks, Leary, Maud, Nash, New Boston, Redwater, Texarkana, and Wake Village); and

WHEREAS, Riverbend is supported by resolution by all of its member entities and has entered into Interlocal Cooperation Agreements in 2010 and 2011 with all of its member entities for the purpose of providing regional water and wastewater planning and engineering design services and implementing future

regional water and wastewater infrastructure projects, as well as performing certain agent and negotiation activities at the local, state, and federal levels; and

WHEREAS, Riverbend and Texarkana have conducted numerous preliminary studies to examine the viability of extending the usable life of the raw water intake at Wright Patman Lake and the New Boston Road Water Treatment Plant and/or to build a new regional water treatment plant and new raw water intake; and

WHEREAS, Riverbend has a continued need for a regional water supply to meet current and future potable and non-potable water supply demands for municipal and industrial needs; and

WHEREAS, Riverbend began a Regional Water Master Plan Study in 2016 with Susan Roth Consulting for the purposes of 1) determining current and future population projections and water supply demands, 2) accessing current regional infrastructure, 3) recommending alternatives to the existing regional infrastructure to meet current and future demands, and 4) processing initial cost estimates and released its initial final draft as a working document of the Regional Water Master Plan in July 2018 for review and comment by member entities and interested stakeholders; and

WHEREAS, Riverbend also obtained Second Level III Cost Estimates from AECOM for the purposes of providing in greater detail a line-by-line cost assessment, as well as a more detailed scaled recommendation for phasing regional infrastructure into a timeline with estimated costs for Regional Water Infrastructure Projects in Phases 1A, 1B, and 4B totaling approximately \$200,000,000; and

WHEREAS, Riverbend intends to primarily seek funding and financing through programs at the Texas Water Development Board and any/all other state and federal entities that can provide low-cost financing or grants for the purpose of fulfilling Regional Water Infrastructure Projects, including the issuance of bonds; and

WHEREAS, Riverbend expects to enter into future water supply agreements with New Boston and other surrounding entities who wish to become formal partners and owners in the newly developed Regional Water Infrastructure Projects of the Riverbend Regional Water Master Plan Study of 2018 in a take-or-pay type commitment pursuant to an agreed upon volume of water supply to Texarkana and other surrounding entities for the purpose of supporting the issuance of bonds, and intends to present such agreements to the City Council no later than the date that bonds are issued to support the intended projects; and

WHEREAS, Riverbend continues to work on a Water and Wastewater Rate Study with NewGen Strategies an initial draft Riverbend regional water rate increase and/or set aside of approximately \$1.50 per 1,000 gallons for years 1-3 and \$2.50 per 1,000 gallons years 4-6 to begin meeting a commitment of debt service for a total of 30 years debt service, as well as Riverbend O&M and fees to be in place no sooner than January 1, 2019 and no later than October 1, 2019, which was provided to Riverbend members in a public work session on August 22, 2018; and

WHEREAS, Riverbend has informed city officials of the need for resolutions from the City Council and other surrounding entities supporting in principle Riverbend's plan for regional water infrastructure improvements; and upon receipt of such resolutions, Riverbend will promptly submit funding applications to the Texas Water Development Board for such improvements; and

WHEREAS, in light of aging Company Facilities, increased regional need for potable and non-potable water, and economic development opportunities that may be advanced by construction of regional water infrastructure improvements, the City Council finds and determines that supporting Riverbend's plan for such improvements to be consistent with Texarkana, Texas' contracts with the 1969 Contracting Cities, as

well as with Redwater as a Separate Contracting Entity, and to be in the best interests of the citizens of Redwater.

NOW, THERFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF REDWATER, TEXAS:

Section 1. Recognizing the importance of a regional water supply to meet current and future potable and non-potable water supply demands for municipal and industrial needs to Redwater and the surrounding region, the City Council fully supports Riverbend Water Resources District to act on its behalf as the lead funding sponsor and to construct the Regional Water Infrastructure Projects including at a minimum a new raw water intake, a new raw water line, and a new water treatment facility that will supply wholesale water to Texarkana.

Section 2. The City Council has been provided the Level III detailed costs associated with the proposed new regional water infrastructure improvements as prepared by AECOM and Riverbend, along with new recommended regional water rates necessary to support those improvements.

Section 3. The City Council acknowledges that Riverbend Water Resources District will be requesting funds from the Texas Water Development Board and/or other state and federal entities in the form of bond funds; and the water supply agreements which Riverbend Water Resources District intends to present to the City Council and other surrounding entities will be used to support and secure these funds to be used to pay for the regional water infrastructure improvements.

Section 4. As provided in Section 6 below, The City Council intends to fix and collect such rates and charges and/or provide for other funds legally available and reasonably assured for the purpose to make possible the City's proposed payment to Riverbend Water Resources District for the regional water infrastructure improvements.

Section 5. The City Council intends that monies raised and/or funds set aside for the purpose of implementing the regional water infrastructure improvements will be held in a separate fund and/or account and not used for any other purpose but to support the regional water infrastructure improvements under Riverbend Water Resources District, unless the City Council otherwise approves the use of those funds for another purpose.

WATER AND WASTEWATER RATES

Section 6. The City Council herby adopts the following water and wastewater rates included in and outlined by Ordinance No. 18-23-25 to become effective February 1, 2019, as attached.

PASSED AND APPROVED in Council Session on this the _/O day of December, 2018

ATTEST:

mi Whelchel

DESSIE WHELCHEL, CITY SECRETARY

ROBERT LORANCE, MAYOR

Page 3 of 3

ORDINANCE 18-23-35

AN ORDINANCE BY THE CITY COUNCIL OF THE CITY OF REDWATER, TEXAS AMENDING ORDINANCE 18-23-34, SPECIFICALLY SECTION 3E THROUGH 3J; PRESCRIBING THE RATES TO BE CHARGED FOR SERVICES FURNISHED BY THE WATER AND SEWER SYSTEM OWNED AND OPERATED BY SAID CITY; DECLARING ALL ORDINANCES IN CONFLICT AMENDED; PROVIDING FOR THE IMMEDIATE PASSAGE OF THIS ORDINANCE; DECLARING THAT SHOULD ANY PART OF THIS ORDINANCE BE INVALID SUCH INVALIDITY WILL NOT AFFECT THE REMAINDER OF THIS ORDINANCE; AND DECLARING AN EMERGENCY

WHEREAS, the City Council of the City of Redwater, Texas ("City") has determined that certain rates for water and sewer services provided by the City to its residents must be adequate to provide for the debt service of the City's water and sewer system, for the operation and maintenance expenses of the water and sewer system, for the upgrading of the system, and for the contribution to support implementation of a regional system; and

WHEREAS, it is the desire of the City Council to set forth water and sewer rates which are sufficient to provide for payment of all outstanding indebtedness relating to the City's water and sewer system, including the Certificates of Obligation owned by the FmHa and First Bank, to provide for the operation and maintenance expenses of the water and sewer system, to provide funds for upgrading the system, and to provide support for the implementation of a regional system; and

WHEREAS, the City Council has reviewed Ordinance No. 18-23-34 passed and approved on February 16, 2018, and proposes that such ordinance should be updated to reflect new water and sewer rates as outlined below.

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

Section 1. That the above recitals are true and correct.

Section 2. That from and after the effective date of this ordinance the following rules and regulations shall apply and govern with respect to the adding of new or adding to existing water and sewer lines:

(A) Persons desiring to connect new lines to the water or sewer systems must have permission from the City and the site must be inspected for service by the Superintendent before work begins. The Superintendent will also inspect the work before it is covered up. The City will do the tap of the water or sewer main. Owners/developers of new housing subdivisions will be required to pay for the lines, valves, meters, fire hydrants, and line taps, including parts and labor. Owners/developers of new housing/subdivisions will enter into a written agreement with the City before water and sewer service is connected. This agreement will state explicitly the location, size, and specifications for all water and sewer lines, valves, meters, and fire hydrants to be installed (Texas Local Government Code 402.001)

(B) Persons desiring to add to their or the City's existing water and sewer lines must have permission from the City and must state their intentions before work begins. The site must be inspected for service by the City's Public Works Director, and the work must be inspected by the City's Public

Works Director before it is covered up. The City will do the tap of the water or sewer main. Anyone wishing to extend the lines will be required to pay for the lines, valves, meters, fire hydrants, and line taps, including parts and labor, and comply with the City's specifications (Texas Local Government Code 402.001).

(C) Dual water connections: There shall be no more than two water connections to one water meter allowed in the Redwater Water System and this situation will only be allowed under the following conditions:

- (1) A temporary residence is connected to a water line serving a permanent residence.
- (2) A permanent residence is connected to a water line serving a temporary residence.
- (3) A temporary residence is connected to a water line serving a temporary residence.
- (4) A permanent residence is connected to a water line serving a permanent residence and the relationship between residents is parent/child.

In all situations, the owner of the water meter shall be responsible for the entire billing. The billing shall be for two minimums plus water usage. The City shall not be responsible for low water pressure, and will not accept complaints concerning the same. No dual connections will be made without prior approval of and inspection by Redwater Water and Sewer personnel. In keeping with good water management practices, two meters will be installed as soon as it is economically feasible and practicable.

- (D) Irrigation Systems. The following conditions apply to irrigation systems connected to the City's water system:
 - (1) The City does not require a separate meter for installation of irrigation systems.
 - (2) A one inch meter is recommended, <u>but not required</u>, if the same meter will be serving a residence AND an irrigation system. There is an additional charge for the one inch meter.
 - (3) Customers must purchase backflow preventers these are required on irrigation systems. Any irrigation system connected to the City's water supply that has no backflow preventer or an improperly functioning backflow preventer will have service disconnected immediately. Service will only be restored upon successful and proper installation of a fully functioning backflow preventer.
 - (4) If the customer chooses to install a separate meter to supply the irrigation system, said meter will incur all fees that pertain to water taps, deposits, inspections, fees, and water usage stated in Section 3 of this Ordinance.
 - (5) If the customer calls City Hall and requests that the meter be turned off during months of no usage, the meter will be locked and no minimum charge will be assessed during those months. If the customer doesn't alert the City to lock the meter, the minimum charge will be assessed monthly even if the irrigation system is not in use.
 - (6) If only one meter is used to service the residence and the irrigation system, sewer charges will NOT be removed for water used for irrigation purposes. Charges for sewer will be based on the total amount of water usage, as stated in Section 3 of this Ordinance.

Section 3. The rates to be charged for water and sewer service by the City of Redwater, Texas shall be computed as follows:

(A) Tapping fees:

Water - Residential or Commercial, Inside or Outside City Limits	\$1,100.00
Sewer - Residential or Commercial, Inside or Outside City Limits	\$450.00

- (B) Customer water tap fees will be waived if:
 - (1) A developer is installing main water lines, AND
 - (2) A developer has contracted to have multiple meters installed as a part of the main water line installation. The contractor must be approved by the City. Tap fee for the original tap into the existing main line is NOT waived, and is to be performed by city personnel only. The water taps performed by the contractor must be inspected by the Public Works Director. An inspection fee of Fifty (\$50.00) shall be charged for the services of the Public Works Director for each inspection. The inspections may be done all at one time or by sections. The tapping fee for sewer is NOT waived.
- (C) Connection fees:

Existing tap and/or meter already in place	\$15.00
Site of new building or renovation has taken place	\$30.00

(D) Utility (water & sewer) deposits will be required on all accounts. Said deposit shall be retained by the City until such time as service is disconnected; after which time, such deposit shall be refunded to the customer. In the event that the customer has an outstanding balance owed to the City, the City shall apply the deposit to the amount owed and refund the amount of the deposit remaining. No interest shall be paid on such deposits. Deposit amounts are as follows:

Residential – Customer owns home	\$100.00
Residential – Customer rents home	\$200.00
Commercial	\$75.00

(E) The monthly water rate amount and its effective date to be charged by the City for water furnished to Residential users within the City Limits shall be established, as follows:

Water – Residential Inside	Effective Feb. 1, 2019	Effective Feb. 1, 2022
Minimum Charge (0-2,000 gallons)	\$35.50	37.50
Volumetric Charge (2,001-5,000 gallons)	\$5.40	\$6.40
Volumetric Charge (5,001-10,000 gallons)	\$5.90	\$6.90
Volumetric Charge (10,001+ gallons)	\$6.40	\$7.40

(F) The monthly water rate amount and its effective date to be charged by the City for water furnished to Residential users outside the City Limits shall be established, as follows:

Water - Residential Outside	Effective Feb. 1, 2019	Effective Feb. 1, 2022
Minimum Charge (0-2,000 gallons)	\$35.50	37.50
Volumetric Charge (2,001-5,000 gallons)	\$5.40	\$6.40
Volumetric Charge (5,001-10,000 gallons)	\$5.90	\$6.90
Volumetric Charge (10,001+ gallons)	\$6.40	\$7.40

(G) The monthly sewer rate amount and its effective date to be charged by the City for furnishing sewer service to Residential users inside the City Limits, based upon the quantity of water used, up to a maximum of 15,000 gallons per connection per month, shall be established, as follows:

Sewer – Residential Inside	Effective Feb. 1, 2019	Effective Feb. 1, 2022
Minimum Charge (0-2,000 gallons)	\$16.50	\$18.50
Volumetric Charge (2,001-15,000 gallons)	\$4.50	\$5.50

(H) The monthly sewer rate amount and its effective date to be charged by the City for furnishing sewer service to Residential users outside the City Limits, based upon the quantity of water used, up to a maximum of 15,000 gallons per connection per month, shall be established, as follows:

Sewer - Residential Outside	Effective Feb. 1, 2019	Effective Feb. 1, 2022
Minimum Charge (0-2,000 gallons)	\$19.00	\$21.00
Volumetric Charge (2,001-15,000 gallons)	\$5.00	\$6.00

(I) The monthly water rate amount and its effective date to be charged by the City for water furnished to Commercial users shall be established, as follows:

Water – Commercial	Effective Feb. 1, 2019	Effective Feb. 1, 2022
Minimum Charge (0-2,000 gallons)	\$38.00	40.00
Volumetric Charge (2,001-5,000 gallons)	\$5.80	\$6.80
Volumetric Charge (5,001-10,000 gallons)	\$6.20	\$7.20
Volumetric Charge (10,001+ gallons)	\$6.60	\$7.60

(J) The monthly sewer rate amount and its effective date to be charged by the City for furnishing sewer service to a Commercial user, based upon quantity of water used per month, shall be established, as follows:

Sewer – Commercial	Effective Feb. 1, 2019	Effective Feb. 1, 2022
Minimum Charge (0-2,000 gallons)	\$18.50	\$20.50
Volumetric Charge (2,001+ gallons)	\$4.75	\$5.75

(K) The monthly rate for water and sewer services furnished by the City to all apartment complexes, mobile home parks, and other multi-family dwellings served by a single water meter shall be the same rate for *each dwelling unit occupied* during that month that is used to calculate residential water and sewer charges for a single family dwelling.

Section 4. The City of Redwater water system shall be operated on a fully metered system and charges shall be based on monthly readings. Should any meter fail to register correctly, the amount of water used by a customer since the previous reading, the City of Redwater shall have the right to determine the amount due by the moving average of previous usage and shall bill the customer accordingly.

Section 5. The City shall render a bill for water and sewer on or about the 22nd day of each month. Said bill shall be rendered following the automatic or manual reading of the meters by an employee or other person acting on behalf of the City. Meter readings will take place on or about the 15th of each month.

Section 6. The City shall charge all customers the full and normal fee for water and sewer services received from the City. The City shall not allow any free service from its water and sewer system.

Section 7. All bills for water and sewer services rendered by the City shall be due and payable from the date on which mailed.

Section 8. If any bill for water and sewer service rendered by the City is not paid by the due date stated on said bill, a late fee will be added thereto. In the event any bill for water and sewer service is not paid

by the monthly established shut-off day, a shut-off fee shall be added and the water supply to such customer shall be turned off and shall not be turned on again until <u>all</u> fees, in addition to the amount of the bill, shall have been paid. The shut-off fee <u>will be assessed</u> whether or not service is actually, physically turned off before payment is received. Penalties for untimely payments or non-payment are as follows:

Late Fee	10% of billed balance	
Shut-Off Fee	\$35.00	

Section 9. Tampering. After a water meter has been turned off for non-payment of water and sewer bill, if the City finds that the lock has been removed or service has been reconnected to the customer without the City's approval and without payment of the overdue bill, the City may charge a tampering fee for endangering public health and safely (Texas Health and Safety Code 341.033-b), and the meter may be removed. If the meter is removed, before the meter will be reinstalled, the customer will be required to pay:

- Any and all unpaid bills
- The late fee
- The shut-off fee
- A lock charge
- Meter reinstallation fee
- The tampering fee
- And the cost of damages caused by the customer, plus any other costs incurred in removing or reinstalling the meter

Fees related to meter tampering are as follows:

Late Fee	10% of billed balance	
Shut-Off Fee	\$35.00	
Lock Charge	\$10.00	
Meter Reinstallation Fee	\$25.00	
Tampering Fee	\$250.00	

Section 10. Anyone who turns on the water service or takes water from the City water supply, without the approval of the City, may be turned over to the proper authority for prosecution.

Section 11. Other fees:

Manually re-reading a meter if original reading was NOT in error	\$5.00
Manually re-reading a meter if original reading WAS in error	No Charge
Fee for returned check or returned auto draft	\$30.00

Section 12. Anyone who wishes to be connected to City sewer service must also be hooked to the City water service. This does not apply to anyone who, before March 2006, was already on City sewer but not on City water.

Section 13. This Ordinance and all of its sections and rates set above shall be effective from and after February 1, 2019, as ordered by this Ordinance and by which process is prescribed by Ordinance No. 18-23-34, and shall continue until modified by the City Council of the City of Redwater, Texas.

Section 14. All ordinances or parts of Ordinances in conflict herewith are hereby expressly repealed to the extent of such conflict.

Section 15. In case a section, clause, sentence of part of this Ordinance shall be deemed or adjudged by a court of competent jurisdiction to be invalid, then such invalidity shall not effect, impair, or invalidate the remainder of this Ordinance.

Section 16. The fact that the City Council is in immediate need of relief ordered by the provision of this Ordinance creates an emergency and an imperative public necessity, and this Ordinance shall be in full force and effect from and after its passage and approval, and it is so ordained.

Passed and approved this the [0]day of December, 2018.



Robert Lorance, Mayor

Dessie Whelchel, City Secretary, TRMC

Resolution No. 18-R-03

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF NEW BOSTON, TEXAS, SUPPORTING THE ROLE OF RIVERBEND WATER RESOURCES DISTRICT AS THE DESIGNATED LEAD FUNDING SPONSOR AND REGIONAL WHOLESALE WATER PROVIDER TO PROCURE NEW REGIONAL WATER INFRASTRUCTURE FOR DEVELOPMENT OF WATER SUPPLY FOR THE POTABLE AND NON-POTABLE USE BY NEW BOSTON AND OTHER SURROUNDING ENTITIES; RECEIVING RIVERBEND'S DRAFT REGIONAL WATER RATE AND EVALUATING OTHER POSSIBLE FUNDING OPTIONS; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, the City of New Boston, Texas ("New Boston"), is a General Law "A" Municipality as recognized by Texas Local Government Code Title 2 "Organization of Municipal Government" Chapter "Types of Municipalities in General" Subtitle "Types of Municipalities" Section "Type A General Law Municipality" and having full power of local self-government; and

WHEREAS, in 1969, New Boston supported the City of Texarkana, Texas entering into a "Water Supply System Sale-Purchase-Financing Agreement" with Lake Texarkana Water Supply Corporation, purchasing various assets set forth in that agreement ("Company Facilities"), which included the raw water intake at Wright Patman Lake and the New Boston Road Water Treatment Plant located in Texarkana; and

WHEREAS, also in 1969, New Boston entered into a water supply contract with the City of Texarkana, Texas for provision of potable water by means of Company Facilities to, respectively, the City of Annona, Texas, the City of Avery, Texas, the City of DeKalb, Texas, the City of Hooks, Texas, the City of Maud, Texas, the City of New Boston, Texas, the City of Texarkana, Arkansas, and the City of Wake Village, Texas (collectively, "the 1969 Contracting Cities"); and

WHEREAS, Riverbend Water Resources District ("Riverbend"), created in 2009, is a conservation and reclamation district created under and essential to accomplish the purpose of Section 59, Article XVI, Texas Constitution, as set forth in Title 6, Special District Local Laws Code, Subtitle L, Municipal Water Districts, Chapter 9601, with statutory powers including the authority to acquire any and all storage rights and storage capacity in a reservoir or other water sources inside or outside the boundaries of the district, and to acquire the right to take water from that reservoir or source, subject to the rights or permits held by municipalities or other persons; and

WHEREAS, Riverbend is operating under a Board of Directors comprised of five qualified voters who are residents of the district, selected by the local governing bodies of the Riverbend members (the Counties of Bowie, Cass, and Red River, TexAmericas Center, and the Cities of Annona, Atlanta, Avery, DeKalb, Hooks, Leary, Maud, Nash, New Boston, Redwater, Texarkana, and Wake Village); and

WHEREAS, Riverbend is supported by resolution by all of its member entities and has entered into Interlocal Cooperation Agreements in 2010 and 2011 with all of its member entities for the purpose of providing regional water and wastewater planning and engineering design services and implementing future regional water and wastewater infrastructure projects, as well as performing certain agent and negotiation activities at the local, state, and federal levels; and

WHEREAS, Riverbend and Texarkana have conducted numerous preliminary studies to examine the viability of extending the usable life of the raw water intake at Wright Patman Lake and the New Boston

Road Water Treatment Plant and/or to build a new regional water treatment plant and new raw water intake; and

WHEREAS, Riverbend has a continued need for a regional water supply to meet current and future potable and non-potable water supply demands for municipal and industrial needs; and

WHEREAS, Riverbend began a Regional Water Master Plan Study in 2016 with Susan Roth Consulting for the purposes of 1) determining current and future population projections and water supply demands, 2) accessing current regional infrastructure, 3) recommending alternatives to the existing regional infrastructure to meet current and future demands, and 4) processing initial cost estimates and released its initial final draft as a working document of the Regional Water Master Plan in July 2018 for review and comment by member entities and interested stakeholders; and

WHEREAS, Riverbend also obtained Second Level III Cost Estimates from AECOM for the purposes of providing in greater detail a line-by-line cost assessment, as well as a more detailed scaled recommendation for phasing regional infrastructure into a timeline with estimated costs for Regional Water Infrastructure Projects in Phases 1A, 1B, and 4B totaling approximately \$200,000,000; and

WHEREAS, Riverbend intends to primarily seek funding and financing through programs at the Texas Water Development Board and any/all other state and federal entities that can provide low-cost financing or grants for the purpose of fulfilling Regional Water Infrastructure Projects, including the issuance of bonds; and

WHEREAS, Riverbend expects to enter into future water supply agreements with New Boston and other surrounding entities who wish to become formal partners and owners in the newly developed Regional Water Infrastructure Projects of the Riverbend Regional Water Master Plan Study of 2018 in a take-or-pay type commitment pursuant to an agreed upon volume of water supply to Texarkana and other surrounding entities for the purpose of supporting the issuance of bonds, and intends to present such agreements to the City Council no later than the date that bonds are issued to support the intended projects; and

WHEREAS, Riverbend continues to work on a Water and Wastewater Rate Study with NewGen Strategies an initial draft Riverbend regional water rate increase and/or set aside of approximately \$1.50 per 1,000 gallons for years 1-3 and \$2.50 per 1,000 gallons years 4-6 to begin meeting a commitment of debt service for a total of 30 years debt service, as well as Riverbend O&M and fees to be in place no sooner than January 1, 2019 and no later than October 1, 2019, which was provided to Riverbend members in a public work session on August 22, 2018; and

WHEREAS, Riverbend has informed city officials of the need for resolutions from the City Council and other surrounding entities supporting in principle Riverbend's plan for regional water infrastructure improvements; and upon receipt of such resolutions, Riverbend will promptly submit funding applications to the Texas Water Development Board for such improvements; and

WHEREAS, in light of aging Company Facilities, increased regional need for potable and non-potable water, and economic development opportunities that may be advanced by construction of regional water infrastructure improvements, the City Council finds and determines that supporting in principle Riverbend's plan for such improvements to be consistent with Texarkana, Texas' contracts with the 1969 Contracting Cities and to be in the best interests of the citizens of New Boston.

NOW, THERFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF NEW BOSTON, TEXAS:

Section 1. Recognizing the importance of a regional water supply to meet current and future potable and non-potable water supply demands for municipal and industrial needs to New Boston and the surrounding region, the City Council fully supports Riverbend Water Resources District to act on its behalf as the lead funding sponsor and to construct the Regional Water Infrastructure Projects including at a minimum a new raw water intake, a new raw water line, and a new water treatment facility that will supply wholesale water to City of New Boston.

Section 2. The City Council has been provided the Level III detailed costs associated with the proposed new regional water infrastructure improvements as prepared by AECOM and Riverbend, along with new recommended regional water rates necessary to support those improvements.

Section 3. The City Council acknowledges that Riverbend Water Resources District will be requesting funds from the Texas Water Development Board and/or other state and federal entities in the form of bond funds; and the water supply agreements which Riverbend Water Resources District intends to present to the City Council and other surrounding entities will be used to support and secure these funds to be used to pay for the regional water infrastructure improvements.

Section 4. The City Council intends to fix and collect such rates and charges and/or provide for other funds legally available and reasonably assured for the purpose to make possible the City's proposed payment to Riverbend Water Resources District for the regional water infrastructure improvements.

Section 5. The City Council resolves that monies raised for the purpose of implementing the regional water infrastructure improvements shall be held in a separate account and not used for any other purpose but to support the regional water infrastructure improvements under Riverbend Water Resources District, unless the City Council otherwise approves the use of those funds for another purpose.

Section 6. If the City Council chooses to adopt additional rates and charges as described in Section 4, such rates shall be adopted by ordinance on or before their effective date so that rates may become effective no sooner than January 1, 2019, and no later than October 1, 2019.

PASSED AND APPROVED in Special Council Session on this the $\frac{34}{2}$ day of November, 2018.

ATTEST:

DARLA FAULKNOR, CITY SECRETARY

JÕHNNY BRANSON, MAYOR

Resolution No. 2018-1201

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MAUD, TEXAS, SUPPORTING THE ROLE OF RIVERBEND WATER RESOURCES DISTRICT AS THE DESIGNATED LEAD FUNDING SPONSOR AND REGIONAL WHOLESALE WATER PROVIDER TO PROCURE NEW REGIONAL WATER INFRASTRUCTURE FOR DEVELOPMENT OF WATER SUPPLY FOR THE POTABLE AND NON-POTABLE USE BY MAUD AND **OTHER** SURROUNDING ENTITIES; RECEIVING RIVERBEND'S DRAFT REGIONAL WATER RATE AND EVALUATING OTHER POSSIBLE FUNDING OPTIONS; ESTABLISHING A NEW WATER RATE STRUCTURE BY ORDINANCE NO. 18-1201; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, the City of Maud, Texas ("Maud"), is a general law municipality operating under an aldermanic form of government consisting of a Mayor and five aldermen in accordance with applicable state statutes, serving a current population of 1,056 residents based on the most recent 2010 Census; and

WHEREAS, in 1969, Maud supported the City of Texarkana, Texas ("Texarkana") entering into a "Water Supply System Sale-Purchase-Financing Agreement" with Lake Texarkana Water Supply Corporation, purchasing various assets set forth in that agreement ("Company Facilities"), which included the raw water intake at Wright Patman Lake and the New Boston Road Water Treatment Plant located in Texarkana; and

WHEREAS, also in 1969, Maud entered into a water supply contract with the City of Texarkana, Texas for provision of potable water by means of Company Facilities to, respectively, the City of Annona, Texas, the City of Avery, Texas, the City of DeKalb, Texas, the City of Hooks, Texas, the City of Maud, Texas, the City of New Boston, Texas, the City of Texarkana, Arkansas, and the City of Wake Village, Texas (collectively, "the 1969 Contracting Cities"); and

WHEREAS, Riverbend Water Resources District ("Riverbend"), created in 2009, is a conservation and reclamation district created under and essential to accomplish the purpose of Section 59, Article XVI, Texas Constitution, as set forth in Title 6, Special District Local Laws Code, Subtitle L, Municipal Water Districts, Chapter 9601, with statutory powers including the authority to acquire any and all storage rights and storage capacity in a reservoir or other water sources inside or outside the boundaries of the district, and to acquire the right to take water from that reservoir or source, subject to the rights or permits held by municipalities or other persons; and

WHEREAS, Riverbend is operating under a Board of Directors comprised of five qualified voters who are residents of the district, selected by the local governing bodies of the Riverbend members (the Counties of Bowie, Cass, and Red River, TexAmericas Center, and the Cities of Annona, Atlanta, Avery, DeKalb, Hooks, Leary, Maud, Nash, New Boston, Redwater, Texarkana, and Wake Village); and

WHEREAS, Riverbend is supported by resolution by all of its member entities and has entered into Interlocal Cooperation Agreements in 2010 and 2011 with all of its member entities for the purpose of providing regional water and wastewater planning and engineering design services and implementing future regional water and wastewater infrastructure projects, as well as performing certain agent and negotiation activities at the local, state, and federal levels; and

WHEREAS, Riverbend and Texarkana have conducted numerous preliminary studies to examine the viability of extending the usable life of the raw water intake at Wright Patman Lake and the New Boston Road Water Treatment Plant and/or to build a new regional water treatment plant and new raw water intake; and

WHEREAS, Riverbend has a continued need for a regional water supply to meet current and future potable and non-potable water supply demands for municipal and industrial needs; and

WHEREAS, Riverbend began a Regional Water Master Plan Study in 2016 with Susan Roth Consulting for the purposes of 1) determining current and future population projections and water supply demands, 2) accessing current regional infrastructure, 3) recommending alternatives to the existing regional infrastructure to meet current and future demands, and 4) processing initial cost estimates and released its initial final draft as a working document of the Regional Water Master Plan in July 2018 for review and comment by member entities and interested stakeholders; and

WHEREAS, Riverbend also obtained Second Level III Cost Estimates from AECOM for the purposes of providing in greater detail a line-by-line cost assessment, as well as a more detailed scaled recommendation for phasing regional infrastructure into a timeline with estimated costs for Regional Water Infrastructure Projects in Phases 1A, 1B, and 4B totaling approximately \$200,000,000; and

WHEREAS, Riverbend intends to primarily seek funding and financing through programs at the Texas Water Development Board and any/all other state and federal entities that can provide low-cost financing or grants for the purpose of fulfilling Regional Water Infrastructure Projects, including the issuance of bonds; and

WHEREAS, Riverbend expects to enter into future water supply agreements with Maud and other surrounding entities who wish to become formal partners and owners in the newly developed Regional Water Infrastructure Projects of the Riverbend Regional Water Master Plan Study of 2018 in a take-or-pay type commitment pursuant to an agreed upon volume of water supply to Texarkana and other surrounding entities for the purpose of supporting the issuance of bonds, and intends to present such agreements to the City Council no later than the date that bonds are issued to support the intended projects; and

WHEREAS, Riverbend continues to work on a Water and Wastewater Rate Study with NewGen Strategies an initial draft Riverbend regional water rate increase and/or set aside of approximately \$1.50 per 1,000 gallons for years 1-3 and \$2.50 per 1,000 gallons years 4-6 to begin meeting a commitment of debt service for a total of 30 years debt service, as well as Riverbend O&M and fees to be in place no sooner than January 1, 2019 and no later than October 1, 2019, which was provided to Riverbend members in a public work session on August 22, 2018; and

WHEREAS, Riverbend has informed city officials of the need for resolutions from the City Council and other surrounding entities supporting Riverbend's plan for regional water infrastructure improvements; and upon receipt of such resolutions, Riverbend will promptly submit funding applications to the Texas Water Development Board for such improvements; and

WHEREAS, in light of aging Company Facilities, increased regional need for potable and non-potable water, and economic development opportunities that may be advanced by construction of regional water infrastructure improvements, the City Council finds and determines that supporting Riverbend's plan for such improvements to be consistent with Texarkana, Texas' contracts with the 1969 Contracting Cities and to be in the best interests of the citizens of Maud.

NOW, THERFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MAUD, TEXAS:

Section 1. Recognizing the importance of a regional water supply to meet current and future potable and non-potable water supply demands for municipal and industrial needs to Maud and the surrounding region, the City Council fully supports Riverbend Water Resources District to act on its behalf as the lead funding sponsor and to construct the Regional Water Infrastructure Projects including at a minimum a new raw water intake, a new raw water line, and a new water treatment facility that will supply wholesale water to Texarkana.

Section 2. The City Council has been provided the Level III detailed costs associated with the proposed new regional water infrastructure improvements as prepared by AECOM and Riverbend, along with new recommended regional water rates necessary to support those improvements.

Section 3. The City Council acknowledges that Riverbend Water Resources District will be requesting funds from the Texas Water Development Board and/or other state and federal entities in the form of bond funds; and the water supply agreements which Riverbend Water Resources District intends to present to the City Council and other surrounding entities will be used to support and secure these funds to be used to pay for the regional water infrastructure improvements.

Section 4. As provided in Section 6 below, The City Council intends to fix and collect such rates and charges and/or provide for other funds legally available and reasonably assured for the purpose to make possible the City's proposed payment to Riverbend Water Resources District for the regional water infrastructure improvements.

Section 5. The City Council intends that monies raised and/or funds set aside for the purpose of implementing the regional water infrastructure improvements will be held in a separate fund and/or account and not used for any other purpose but to support the regional water infrastructure improvements under Riverbend Water Resources District, unless the City Council otherwise approves the use of those funds for another purpose.

WATER AND WASTEWATER RATES

Section 6. The City Council herby adopts the following water and wastewater rates included in and outlined by Ordinance No. 18-1201 to become effective April 1, 2019, as attached.

PASSED AND APPROVED in Council Session on this the 17 day of December, 2018.

ault

Mickey Williams, Mayor

ATTEST:

POLLYANNA MOORE, CITY SECRETARY

ORDINANCE <u>18-1201</u>

AN ORDINANCE BY THE CITY COUNCIL OF THE CITY OF MAUD, TEXAS REVIEWING AND AMENDING ORDINANCE NO. 14-500; PRESCRIBING THE RATES TO BE CHARGED FOR UTILITY SERVICES FURNISHED, OWNED, AND OPERATED BY SAID CITY; REPEALING ALL ORDINANCES, POLICIES, RESOLUTIONS OR ANY PART THEREOF IN CONFLICT; PROVIDING FOR THE IMMEDIATE PASSAGE OF THIS ORDINANCE; DECLARING THAT SHOULD ANY PART OF THIS ORDINANCE BE INVALID SUCH INVALIDITY WILL NOT AFFECT THE REMAINDER OF THIS ORDINANCE; DECLARING AN EMERGENCY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Council of the City of Maud, Texas ("City") has determined that certain rates for water, sewer, and garbage services provided by the City to its residents must be adequate to provide for the debt service of the City's water, sewer, and garbage systems, for the operation and maintenance expenses of the water, sewer, and garbage systems, for the upgrading of the systems, and for the contribution to support implementation of a regional system; and

WHEREAS, it is the desire of the City Council to set forth water, sewer, and garbage rates which are sufficient to provide for payment of all outstanding indebtedness relating to the City's water, sewer, and garbage systems, including certain Certificates of Obligation to provide for the operation and maintenance expenses of the water, sewer, and garbage system, to provide funds for upgrading the systems, and to provide support for the implementation of a regional system; and

WHEREAS, the City Council has reviewed Ordinance No. 14-0500 passed and approved on July 21, 2014, amended on dates October 19, 2015 and December 18, 2017 and proposes that such ordinance should be updated to reflect new water and sewer rates as outlined below.

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

Section 1. That the above recitals are true and correct.

Section 2. The rates to be charged for water, sewer, and garbage services by the City of Maud, Texas shall be computed as follows:

Payment for Service

5. The water, sewer, and garbage rates are effective as follows:

Current rates as per Exhibit A effective April 1, 2019 until further notice.

Section 3. This Ordinance and all of its sections and rates set above shall be effective from and after April 1, 2019, as ordered by this Ordinance and by which process is prescribed by Ordinance No. 14-500, and shall continue until modified by the City Council of the City of Maud, Texas.

Section 4. All ordinances or parts of Ordinances in conflict herewith are hereby expressly repealed to the extent of such conflict.

Section 5. In case a section, clause, sentence of part of this Ordinance shall be deemed or adjudged by a court of competent jurisdiction to be invalid, then such invalidity shall not effect, impair, or invalidate the remainder of this Ordinance.

Section 6. The fact that the City Council is in immediate need of relief ordered by the provision of this Ordinance creates an emergency and an imperative public necessity, and this Ordinance shall be in full force and effect from and after its passage and approval, and it is so ordained.



Passed and approved this the <u>17th</u> day of December, 2018.

Mickey Williams, Mayor

Pollyanna Moore, City Secretary

EXHIBIT A

Water – Residential Inside	Effective April 1, 2019
Minimum Charge (0-2,000 gallons)	\$30.20
Volumetric Charge (2,001+ gallons)	\$6.00

Sewer - Residential Inside	Effective April 1, 2019
Minimum Charge (0-2,000 gallons)	\$24.00
Volumetric Charge (2,001+ gallons)	\$2.00

Water - Residential Outside	Effective April 1, 2019
Minimum Charge (0-2,000 gallons)	\$35.15
Volumetric Charge (2,001+ gallons)	\$6.50

Sewer - Residential Outside	Effective April 1, 2019
Minimum Charge (0-2,000 gallons)	\$24.57
Volumetric Charge (2,001+ gallons)	\$2.00

Water – Commercial	Effective April 1, 2019
Minimum Charge (0-2,000 gallons)	\$37.60
Volumetric Charge (2,001+ gallons)	\$7.45

Sewer - Commercial	Effective April 1, 2019
Minimum Charge (0-2,000 gallons)	\$32.41
Volumetric Charge (2,001+ gallons)	\$4.41

Garbage – Polycart	Effective Oct. 1, 2018
Residential w/water	\$16.62
Residential Outside garbage only	\$26.62
Commercial	\$28.75

Garbage – Dumpster	Effective Oct. 1, 2018		
2 yard commercial	\$94.68		
4 yard commercial	\$142.06		
6 yard commercial	\$189.39		
8 yard commercial	\$220.83		

Maud, Texas - January 2018					
				Weekly	Monthly
Equipment Rental - At cost, or by example:					
Backhoe	\$300/day		day		\$0.00
Trackhoe	\$75/hr		hours		\$0.00
Vacuum Excavator	\$140/hr		hours		\$0.00
Mileage @\$.545/mile	0.545		mile	\$0.00	\$0.00
Labor @\$50.45/hour	50.45		hours	\$0.00	\$0.00
Additional Lab Services Per Day				At Cost	At Cos
Additional Chemicals/Treatment				At Cost	At Cos
Additional Parts				At Cost	At Cos
Additional Equipment				At Cost	At Cos
Administrative Cost	0.12			\$0.00	\$0.00
- Member Entity Discounted Rate @12%					
Subtotal					
Total Monthly Serivces					

1

1.4

RESOLUTION No. 6-19

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF WAKE VILLAGE, TEXAS, SUPPORTING THE ROLE OF RIVERBEND WATER RESOURCES DISTRICT AS THE DESIGNATED LEAD FUNDING SPONSOR AND REGIONAL WHOLESALE WATER PROVIDER TO PROCURE NEW REGIONAL WATER INFRASTRUCTURE FOR DEVELOPMENT OF WATER SUPPLY FOR THE POTABLE AND NON-POTABLE USE BY WAKE VILLAGE AND OTHER SURROUNDING ENTITIES; RECEIVING RIVERBEND'S DRAFT REGIONAL WATER RATE AND EVALUATING OTHER POSSIBLE FUNDING OPTIONS; ESTABLISHING A NEW WATER RATE STRUCTURE BY ORDINANCE NO. 1-19; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, the City of Wake Village, Texas ("Wake Village"), is a home-rule municipality operating under a municipal charter adopted as authorized by Article XI, Section 5, of the Texas Constitution and as recognized by Texas Local Government Code Section 5.004, and having full power of local self-government; and

WHEREAS, in 1969, Wake Village supported the City of Texarkana, Texas ("Texarkana") entering into a "Water Supply System Sale-Purchase-Financing Agreement" with Lake Texarkana Water Supply Corporation, purchasing various assets set forth in that agreement ("Company Facilities"), which included the raw water intake at Wright Patman Lake and the New Boston Road Water Treatment Plant located in Texarkana; and

WHEREAS, also in 1969, Wake Village entered into a water supply contract with the City of Texarkana, Texas for provision of potable water by means of Company Facilities to, respectively, the City of Annona, Texas, the City of Avery, Texas, the City of DeKalb, Texas, the City of Hooks, Texas, the City of Maud, Texas, the City of New Boston, Texas, the City of Texarkana, Arkansas, and the City of Wake Village, Texas (collectively, "the 1969 Contracting Cities"); and

WHEREAS, Riverbend Water Resources District ("Riverbend"), created in 2009, is a conservation and reclamation district created under and essential to accomplish the purpose of Section 59, Article XVI, Texas Constitution, as set forth in Title 6, Special District Local Laws Code, Subtitle L, Municipal Water Districts, Chapter 9601, with statutory powers including the authority to acquire any and all storage rights and storage capacity in a reservoir or other water sources inside or outside the boundaries of the district, and to acquire the right to take water from that reservoir or source, subject to the rights or permits held by municipalities or other persons; and

WHEREAS, Riverbend is operating under a Board of Directors comprised of five qualified voters who are residents of the district, selected by the local governing bodies of the Riverbend members (the Counties of Bowie, Cass, and Red River, TexAmericas Center, and the Cities of Annona, Atlanta, Avery, DeKalb, Hooks, Leary, Maud, Nash, New Boston, Redwater, Texarkana, and Wake Village); and

WHEREAS, Riverbend is supported by resolution by all of its member entities and has entered into Interlocal Cooperation Agreements in 2010 and 2011 with all of its member entities for the purpose of providing regional water and wastewater planning and engineering design services and implementing future regional water and wastewater infrastructure projects, as well as performing certain agent and negotiation activities at the local, state, and federal levels; and

WHEREAS, Riverbend and Texarkana have conducted numerous preliminary studies to examine the viability of extending the usable life of the raw water intake at Wright Patman Lake and the New Boston Road Water Treatment Plant and/or to build a new regional water treatment plant and new raw water intake; and

WHEREAS, Riverbend has a continued need for a regional water supply to meet current and future potable and non-potable water supply demands for municipal and industrial needs; and

WHEREAS, Riverbend began a Regional Water Master Plan Study in 2016 with Susan Roth Consulting for the purposes of 1) determining current and future population projections and water supply demands, 2) accessing current regional infrastructure, 3) recommending alternatives to the existing regional infrastructure to meet current and future demands, and 4) processing initial cost estimates and released its initial final draft as a working document of the Regional Water Master Plan in July 2018 for review and comment by member entities and interested stakeholders; and

WHEREAS, Riverbend also obtained Second Level III Cost Estimates from AECOM for the purposes of providing in greater detail a line-by-line cost assessment, as well as a more detailed scaled recommendation for phasing regional infrastructure into a timeline with estimated costs for Regional Water Infrastructure Projects in Phases 1A, 1B, and 4B totaling approximately \$200,000,000; and

WHEREAS, Riverbend intends to primarily seek funding and financing through programs at the Texas Water Development Board and any/all other state and federal entities that can provide low-cost financing or grants for the purpose of fulfilling Regional Water Infrastructure Projects, including the issuance of bonds; and

WHEREAS, Riverbend expects to enter into future water supply agreements with Wake Village other surrounding entities who wish to become formal partners and owners in the newly developed Regional Water Infrastructure Projects of the Riverbend Regional Water Master Plan Study of 2018 in a take-or-pay type commitment pursuant to an agreed upon volume of water supply to Texarkana and other surrounding entities for the purpose of supporting the issuance of bonds, and intends to present such agreements to the City Council no later than the date that bonds are issued to support the intended projects; and

WHEREAS, Riverbend continues to work on a Water and Wastewater Rate Study with NewGen Strategies an initial draft Riverbend regional water rate increase and/or set aside of approximately \$1.50 per 1,000 gallons for years 1-3 and \$2.50 per 1,000 gallons years 4-6 to begin meeting a commitment of debt service for a total of 30 years debt service, as well as Riverbend O&M and fees to be in place no sooner than January 1, 2019 and no later than October 1, 2019, which was provided to Riverbend members in a public work session on August 22, 2018; and

WHEREAS, Riverbend has informed city officials of the need for resolutions from the City Council and other surrounding entities supporting Riverbend's plan for regional water infrastructure improvements; and upon receipt of such resolutions, Riverbend will promptly submit funding applications to the Texas Water Development Board for such improvements; and

WHEREAS, in light of aging Company Facilities, increased regional need for potable and non-potable water, and economic development opportunities that may be advanced by construction of regional water infrastructure improvements, the City Council finds and determines that supporting Riverbend's plan for such improvements to be consistent with Texarkana, Texas' contracts with the 1969 Contracting Cities and to be in the best interests of the citizens of Wake Village.

NOW, THERFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WAKE VILLAGE, TEXAS:

Section 1. Recognizing the importance of a regional water supply to meet current and future potable and non-potable water supply demands for municipal and industrial needs to Wake Village and the surrounding region, the City Council fully supports Riverbend Water Resources District to act on its behalf as the lead funding sponsor and to construct the Regional Water Infrastructure Projects including at a minimum a new raw water intake, a new raw water line, and a new water treatment facility that will supply wholesale water to Texarkana.

Section 2. The City Council has been provided the Level III detailed costs associated with the proposed new regional water infrastructure improvements as prepared by AECOM and Riverbend, along with new recommended regional water rates necessary to support those improvements.

Section 3. The City Council acknowledges that Riverbend Water Resources District will be requesting funds from the Texas Water Development Board and/or other state and federal entities in the form of bond funds; and the water supply agreements which Riverbend Water Resources District intends to present to the City Council and other surrounding entities will be used to support and secure these funds to be used to pay for the regional water infrastructure improvements.

Section 4. As provided in Section 6 below, The City Council intends to fix and collect such rates and charges and/or provide for other funds legally available and reasonably assured for the purpose to make possible the City's proposed payment to Riverbend Water Resources District for the regional water infrastructure improvements.

Section 5. The City Council intends that monies raised and/or funds set aside for the purpose of implementing the regional water infrastructure improvements will be held in a separate fund and/or account and not used for any other purpose but to support the regional water infrastructure improvements under Riverbend Water Resources District, unless the City Council otherwise approves the use of those funds for another purpose.

WATER RATES

Section 6. The City Council herby adopts the following water rates included in and outlined by Ordinance No. 1-19 to become effective February 1, 2019, as attached.

PASSED AND APPROVED in Council Session on this the 14th day of January 2019.

ATTEST:

JIM ROBERTS, CITY SECRETARY

SHERYL COLLUM, MAYOR

ORDINANCE 1-19

AN ORDINANCE BY THE CITY COUNCIL OF THE CITY OF WAKE VILLAGE, TEXAS AMENDING ORDINANCE 2-12, PROVIDING FOR THE SALE OF WATER BY THE CITY OF WAKE VILLAGE; PROVIDING FOR THE INSTALLATION AND USE OF WATER METERS; PROVIDING FOR WATER METER DEPOSITS; PROVIDING FOR WATER RATES; PROVIDING FOR THE TERMINATION OF SERVICE FOR NON-PAYMENT OF WATER BILLS AND THE REQUIREMENTS FOR THE RESUMPTION OF WATER SERVICE; DECALRING ALL ORDINANCES IN CONFLICT AMENDED; PROVIDING FOR THE IMMEDIATE PASSAGE OF THIS ORDINANCE; DECLARING THAT SHOULD ANY PART OF THIS ORDINANCE BE INVALID SUCH INVALIDITY WILL NOT AFFECT THE REMAINDER OF THIS ORDINANCE AND DECLARING AN EMERGENCY

WHEREAS, the City Council of the City of Wake Village, Texas has determined that certain rates for water services provided by the City to its residents must be adequate to provide for the debt service of the City's water system, for the operation and maintenance expenses of the water system, and for the upgrading of the water system; and

WHEREAS, it is the desire of the City Council to set forth water rates which are sufficient to provide for payment of all outstanding indebtedness relating to the City's water system, including certain certificates of obligation, for the operation and maintenance expenses of the water system, and to provide funds for upgrading the system; and

WHEREAS, the City Council has considered Ordinance 02-12 and finds that the rates should be changed as prescribed below.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WAKE VILLAGE, TEXAS:

SECTION 1. All water hereafter furnished to the consumers in the City of Wake Village, Texas shall be measured by meters installed and maintained by the City of Wake Village, Texas. That the above recitals are true and correct.

SECTION 2. The City Administrator of the City of Wake Village, Texas is hereby authorized and directed to install such meters on the property of the consumers where the meters may be accessible for reading and repairs at all times, and shall prepare a record card of such meter showing the number of the meter, and the address at which it is installed, the date of the first

1

reading, and he shall thereafter read each such meter at least once each month and furnish the City of Wake Village, Texas with a record of each reading and the amount due from each consumer for that month. The City of Wake Village, Texas shall notify the consumer on a standard billing format form of the amount due for water between the meter reading dates.

SECTION 3. All bills shall be due and payable within ten (10) days after the first of each month. If the bill is paid or postmarked by the tenth, the customer may pay the net bill amount. If the tenth falls on a holiday observed by the City office or on a weekend, customers will be given the next full working day in which to pay their bill. If not paid on or before that date, the bill shall be delinquent, and the customer shall pay the gross bill amount. A reminder will be mailed to each customer on the delinquent list stating the date their water is scheduled to be turned off. This reminder is the final notice any customer will receive from the City. The City Administrator may order the water service discontinued for non-payment of or delinquency of any part of the water, refuse, or sewer bills. In the event a consumer's service is ordered terminated by the City Administrator, then there shall be added to the outstanding bill a charge of Twenty Dollars (\$20.00), which shall be paid in addition to the said bill prior to the service being resumed. This charge shall be added notwithstanding the fact that the service may not actually be disconnected if the service has been ordered terminated by the City Administrator. If the service has been disconnected and the customer desires service be restored after normal working hours, which is between 7:00 a.m. and 4:00 p.m., Monday through Friday, an additional fee of \$10.00 will be charged on the next bill.

SECTION 4. A deposit securing the prompt payment of water bills shall be made by each consumer, as follows:

(A) Deposits:

Business and Commercial	\$150.00	
Domestic Residential	\$100.00	
Apartments, Duplexes, or Other Multi-Family Dwellings	See Section 4(C)	

- (B) Transfer of Deposit: A consumer moving his residence within the City may transfer his deposit to his new residence by paying any delinquent amount due and a transfer fee of Ten Dollars (\$10.00). Should the service be currently disconnected for non-payment of City bills, the City shall apply the deposit to the outstanding balances. In this event, the consumer shall make a new deposit before obtaining water service to the new address.
- (C) Apartments, Duplexes, or Other Multi-Family Dwelling: For apartments, duplexes, or other multi-family dwellings wherein there is more than one household, living unit, or

apartment, all utilizing one meter, the deposit shall be equal to the minimum charge per billing period times the total number of living units, households, or apartments in the project or complex.

- (D) Termination and Deposits: If any water service is ordered terminated for non-payment of city bills and it is found that the deposit with the City of Wake Village, Texas is not in an amount prescribed by this ordinance, then the service shall remain discontinued until in addition to the requirements of Section 3 above, the consumer deposits with the City of Wake Village, Texas an amount equal to the deposit that would be required of a new consumer as of the date of the termination of service, or an amount determined by the City Administrator, to be sufficient to secure the payment of the water bills.
- (E) No Interest Earned on Deposits: Each consumer who has made a deposit in accordance with the requirement of this ordinance shall not be paid any interest on this deposit.

SECTION 5. The rates to be charged for water furnished by the City of Wake Village, Texas shall be computed, as follows:

(A) The monthly water rate amount and its effective date to be charged by the City for water furnished to Residential Consumers within the Corporate City Limits of the City of Wake Village, Texas shall be established, as follows:

Water – Residential Inside	Effective February 1, 2019	Effective February 1, 2022
Minimum Charge (0-2,000 gallons)	\$16.50	\$18.50
Volumetric Charge (2,001-5,000 gallons)	\$6.00	\$7.00
Volumetric Charge (5,001-10,000 gallons)	\$6.25	\$7.25
Volumetric Charge (10,001+ gallons)	\$6.75	\$7.75

(B) The monthly water rate amount and its effective date to be charged by the City for water furnished to Residential Consumers outside of the Corporate City Limits of the City of Wake Village, Texas and Texarkana, Texas shall be established, as follows:

Water – Residential Outside	Effective February 1, 2019	Effective February 1, 2022
Minimum Charge (0-2,000 gallons)	\$16.50	\$18.50
Volumetric Charge (2,001-5,000 gallons)	\$6.50	\$7.50
Volumetric Charge (5,001-10,000 gallons)	\$6.75	\$7.75
Volumetric Charge (10,001+ gallons)	\$7.00	\$8.00

- (C) Residents of Texarkana, Texas: Water rates for residents of the City of Texarkana, Texas shall be in accordance with the rates set by Texarkana, Texas, if higher than those charges by the City of Wake Village, Texas, for its residents.
- (D) Apartments, Duplexes, Household, Living Units, or Other Multi-Family Dwelling Serving Less than Four (4) Units: Where there is a single meter serving several apartments, duplexes, households, living units, or other multi-family dwellings, but less than four (4), the rates to be charged shall be divided by the number of units and the rates shall be applied to each unit as though each unit had individually used an equal pro rata share of the water. The total of the individual bills or computed charges shall be added together, and one bill per meter will be mailed to the person responsible for paying the water bill. Regardless of the amount of water used in the billing period, there will be charged at least the minimum charge for each unit.
- (E) Apartments, Duplexes, Household, Living Units, or Other Multi-Family Dwelling Serving at Least Four (4) or More: Where there is a single meter serving several apartments, duplexes, households, living units, or other multi-family dwellings, at least four (4) or more, the total bill shall be computed, as follows:

Total monthly consumption divided by the number of units equals the average consumption per unit. The water bill will be based on the residential rate for average consumption per unit multiplied by the number of units multiplied by .90.

Example: Monthly reading = 299,000 gallons; number of units = 54; average consumption per unit (299,000/54) = 5,537 gallons (round off above 500 to next 1,000 gallons; round off below 500 to the same number of 1,000 gallons).

6,000 gallons equals average consumption per unit at residential inside rate = 40.75; water bill equals 54*40.75=2,200.50.

One bill per meter will be mailed to the person responsible for paying the water bill. Regardless of the amount of water used in the billing period, there will be charged at least the minimum charge for the number of units presumed occupied at ninety percent (90%).

(F) The monthly water rate amount and its effective date to be charged by the City for water furnished to Commercial Consumers within the Corporate City Limits of the City of Wake Village, Texas and Texarkana, Texas shall be established, as follows:

Water – Commercial Inside	Effective February 1, 2019	Effective February 1, 2022
Minimum Charge (0-2,000 gallons)	\$17.50	\$19.50
Volumetric Charge (2,001+ gallons)	\$5.50	\$6.50

- (G) Commercial Consumers within the City of Texarkana, Texas: The monthly water rate amount to be charged Commercial Consumers within the City of Texarkana, Texas for water furnished by the City of Wake Village, Texas shall be in accordance with the rates set by Texarkana, Texas, if higher than those charges by the City of Wake Village, Texas, for its Commercial Customers.
- (H) The monthly water rate amount and its effective date to be charged by the City for water furnished to Commercial Consumers for Standby Fire Protections Service shall be established, as follows:

Standby Fire Protection – Commercial	Effective February 1, 2019	Effective February 1, 2022
Fire Sprinkler Heads > 200	\$0.25/sprinkler head,	\$0.30/sprinkler head,
	payable quarterly	payable quarterly
Fire Sprinkler Heads < 200	\$4.00 minimum, payable	\$5.00 minimum, payable
	monthly	monthly
Inside Hose Rack Connections	\$2.00/connection per	\$2.50/connection per
	month, payable quarterly	month, payable quarterly
Siamese (dual) two and one-half (2 ½ Inch	\$4.00/pair of connections	\$5.00/pair of connections
Connections	per month, payable	per month, payable
	quarterly	quarterly
Fire Hydrants	\$4.00/hydrant per month,	\$5.00/hydrant per month,
	payable quarterly	payable quarterly
*The maximum monthly charge for treated water furnished to a customer's fire protection system,		
cumulating the total charges based on the rates in the above table of this schedule shall be one		
hundred and fifty \$150.00 payable quarterly, effective February 1, 2019 and shall be two hundred		
\$200.00 payable quarterly, effective February 1, 2022.		

SECTION 6. This Ordinance and all of its sections and rates set above shall be effective with the billing for the month of February 2019, and shall continue until modified by the City Council of the City of Wake Village, Texas.

SECTION 7. All ordinances or parts of ordinances in conflict herewith are hereby expressly repealed and amended to the extent of such conflict, and all parts not in conflict are to remain in full force and effect.

SECTION 8. In case a section, clause, sentence of part of this Ordinance shall be deemed or adjudged by a court of competent jurisdiction to be invalid, then such invalidity shall not effect, impair or invalidate the remainder of this Ordinance.

SECTION 9. The fact that the City Council is in immediate need of relief ordered by the provision of this ordinance creates an emergency and an imperative public necessity, and this ordinance shall be in full force and effect from and after its passage and approval, and it is so ordained.

Passed and approved this the 14th day of January, 2019.

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Sheryl Collum, Mayor

Attest:

Jim Roberts, City Secretary



WATER CONSERVATION PLAN

RIVERBEND WATER RESOURCES DISTRICT UTILITY DISTRICT

NEW BOSTON. TX

228A Texas Avenue New Boston, Texas 75570

April 2018

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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 <u>www.rwrd.org</u>.

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 16 Member Entities, including the cities of Annona, Atlanta, Avery, DeKalb, Hooks, Leary, Maud, Nash, New Boston, Redwater, Texarkana, Texas, Wake Village, 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 residential customers 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

WATERSEWERRATE SCHEDULE						
		APPROVED RA	TES-EFFECTIVE	EMAY 1, 2017		
		Commercial	Commercial	Private	Private 1"	Commercial
		Sewer Only	Water/Sewer	Water/Sewer	Sprinkler	Hydrant/Sprinkle
Standard V	Vater Rate (\$/1000)		\$6.50	\$3.50	\$3.50	
				40.00	0.00	
Standard S	Sewer Rate (\$/1000)		\$7.00	\$7.00		
Facility Cha	aroe					
Lonly Or I	Water		\$3.25	\$2.75	\$2.50	
	Wastewater		\$3.25	\$2.75		
Total Char	pe l		\$20.00	\$16.00	\$6.00	
			(\$/1000)	(\$/1000)	(\$/1000)	
ixed Mini	mum 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
Facilit	y Charge Wastewater	\$5.00	\$5.00	\$1.50		_
		050.00				
SACKTIOW L	Device Annual Calibration*	\$50.00				
f you choo	Q requires an annual back flow ca ose to have the calibration done o t 20 days before your annual calib	n your own, Riverbend i	s required to have a ce	rtificate on file. If Riv	erbend does not re	ceive that certificate on

 Table 4-2
 Connection Fees

	Water Use Categories	
Fees	Private	Commercial
	\$	
	5	
	0	
	•	47 0 0
	0	\$50.0
New Connection Fee	0	0
	\$	
	5	
	0	
	0	\$50.0
Reconnection Fee	0	0

Estimated Fees	Cost	
Water Tap		
	\$95 7.0	
1-1/2"	5	
2"	\$2, 186 .30	
4"	\$7, 287 .57	
6"	\$11 ,30 1.0 2	
Sewer Tap		
4"	\$29 3.6 9	
6"	\$32 6.9 3	

Table 4-3 Tap Fees

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.



DROUGHT CONTINGENCY PLAN

RIVERBEND WATER RESOURCES DISTRICT

NEW BOSTON. TX

228A Texas Avenue New Boston, Texas 75570

> CCN# 13201 PWS# 0190021

April 25, 2018

Section I: Declaration of Policy, Purpose, and Intent

In order to conserve the available water supply and/or to 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, Riverbend Water Resources District adopts the following Drought Contingency Plan (the Plan).

Section II: Public Involvement

Opportunity for the public and wholesale water customers to provide input into the preparation of the Plan was provided by Riverbend Water Resources District by means of direct communication with member cities and the public.

Section III: Wholesale Water Customer Education

Riverbend Water Resources District will periodically provide wholesale water customers 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 providing a copy of the Plan to each customer either through monthly invoice and/or an e-mail to the customer.

Section IV: Coordination with Regional Water Planning Groups

The water service area of Riverbend Water Resources District is located within the TexAmericas Center footprint as well as Bowie, Red River, and Cass counties and Riverbend Water Resources District will be more than glad to provide a copy of the Plan to any customers or civilians who are interested within these counties.

Section V: Authorization

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

Section VI: Application

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

Section VII: Criteria for Initiation and Termination of Drought Response Stages

The Executive Director, or his/her designee, shall monitor water supply and/or demand conditions on a (e.g., weekly, monthly) basis and shall determine when conditions warrant initiation or termination of each stage of the Plan. Customer notification of the initiation or termination of drought response stages will be made by mail or telephone. The news media will also be informed.

The triggering criteria described below are based on pumping capacities and volume of surface supply.

Stage 1 Triggers -- MILD Water Shortage Conditions

<u>Requirements</u> for initiation – Riverbend Water Resources District will recognize that a mild water shortage condition exists when for a period of **72** consecutive hours **85%** of pumping capacity is utilized or when the volume of surface supply is less than **50%** of capacity.

<u>Requirements</u> for termination - Stage 1 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of **10** consecutive days. Riverbend Water Resources District will notify its wholesale customers and the media of the termination of Stage 1.

Stage 2 Triggers -- MODERATE Water Shortage Conditions

<u>Requirements for initiation</u> –Riverbend Water Resources District will recognize that a moderate water shortage condition exists when for a period of **72** consecutive hours **90%** of pumping capacity is utilized or when the volume of surface supply is less than **40%** of capacity.

<u>Requirements for termination</u> - Stage 2 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of **10** consecutive days. Upon termination of Stage 2, Stage 1 becomes operative. Riverbend Water Resources District will notify its wholesale customers and the media of the termination of Stage 2.

Stage 3 Triggers -- SEVERE Water Shortage Conditions

<u>Requirements for initiation</u> – Riverbend Water Resources District will recognize that a severe water shortage condition exists when for a period of **72** consecutive hours **95%** of pumping capacity is utilized or when the volume of surface supply is less than **25%** of capacity.

<u>Requirements for termination</u> - Stage 3 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of **10** consecutive days. Upon termination of Stage 3, Stage 2 becomes operative. Riverbend Water Resources District will notify its wholesale customers and the media of the termination of Stage 3.

Stage 4 Triggers -- CRITICAL Water Shortage Conditions

<u>Requirements for initiation</u> - Riverbend Water Resources District will recognize that an emergency water shortage condition exists when major water line breaks, or pump or system failures occur, which cause unprecedented loss of capability to provide water service; or natural or man-made contamination of the water supply source(s).

<u>Requirements</u> for termination - Stage 4 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of **10** consecutive days. Riverbend Water Resources District will notify its wholesale customers and the media of the termination of Stage 4.

Section VIII: Drought Response Stages

The Executive Director, or his/her designee, shall monitor water supply and/or demand conditions and, in accordance with the triggering criteria set forth in Section VII, shall determine that mild, moderate, or severe water shortage conditions exist or that an emergency condition exists and shall implement the following actions:

Stage 1 Response -- MILD Water Shortage Conditions

Target: Achieve a voluntary 10 percent reduction in daily demand.

Best Management Practices for Supply Management:

Communication with customers to reduce daily demand.

Water Use Restrictions for Reducing Demand:

(a) The Executive Director, or his/her designee(s), will contact wholesale water customers to discuss water supply and/or demand conditions and will request that wholesale water customers initiate voluntary measures to reduce water use (e.g., implement Stage 1 or appropriate stage of the customer's drought contingency plan).

(b) The Executive Director, or his/her designee(s), will provide a weekly report to news media with information regarding current water supply and/or demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.

Stage 2 Response -- MODERATE Water Shortage Conditions

Target: Achieve a 15 percent reduction in daily demand.

Best Management Practices for Supply Management:

Communicate with customers to reduce daily demand and utilize news media to inform and convince public to reduce demand. Pro-rata curtailment will be utilized.

Water Use Restrictions for Reducing Demand:

(a) The Executive Director, or his/her designee(s), will request wholesale water customers to initiate mandatory measures to reduce non-essential water use (e.g., implement Stage 2 or appropriate stage of the customer's drought contingency plan).

(b) The Executive Director, or his/her designee(s), will initiate weekly contact with wholesale water customers to discuss water supply and/or demand conditions and the possibility of pro rata curtailment of water diversions and/or deliveries.

(c) The Executive Director, or his/her designee(s), will further prepare for the implementation of pro rata curtailment of water diversions and/or deliveries by preparing a monthly water usage allocation baseline for each wholesale customer.

(d) The Executive Director, or his/her designee(s), will provide a weekly report to news media with information regarding current water supply and/or demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.

Stage 3 Response -- SEVERE Water Shortage Conditions

Target: Achieve a 20 percent reduction in daily demand

Best Management Practices for Supply Management:

Communicate with customers to reduce daily demand and utilize news media to inform and convince public to reduce demand. Pro-rata curtailment will be utilized.

Water Use Restrictions for Reducing Demand:

(a) The Executive Director, or his/her designee(s), will contact wholesale water customers to discuss water supply and/or demand conditions and will request that wholesale water customers initiate additional mandatory measures to reduce non-essential water use (e.g., implement Stage 3 or appropriate stage of the customer's drought contingency plan).

(b) The Executive Director, or his/her designee(s), will initiate pro rata curtailment of water diversions and/or deliveries for each wholesale customer.

(c) The Executive Director, or his/her designee(s), will provide a weekly report to news media with information regarding current water supply and/or demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.

Stage 4 Response -- EMERGENCY Water Shortage Conditions

Whenever emergency water shortage conditions exist as defined in Section VII of the Plan, the Executive Director shall:

- 1. Assess the severity of the problem and identify the actions needed and time required to solve the problem.
- 2. 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 use until service is restored).
- 3. If appropriate, notify city, county, and/or state emergency response officials for assistance.
- 4. Undertake necessary actions, including repairs and/or clean-up as needed.
- 5. Prepare a post-event assessment report on the incident and critique of emergency response procedures and actions.

Section IX: Pro Rata Water Allocation

In the event that the triggering criteria specified in Section VII of the Plan for Stage 3 – Severe Water Shortage Conditions have been met, the Executive Director is hereby authorized initiate allocation of water supplies on a pro rata basis in accordance with Texas Water Code, §11.039.

Section X: Contract Provisions

Riverbend Water Resources District will include a provision in every wholesale water contract entered into or renewed after adoption of the plan, including contract extensions, that in case of a shortage of water resulting from drought, the water to be distributed shall be divided in accordance with Texas Water Code, §11.039.

Section XI: Enforcement

Surcharge:

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

- <u>1.5</u> times the normal water charge per 1000 gallons for water diversions and/or deliveries in excess of the monthly allocation from <u>5</u> percent through <u>15</u> percent above the monthly allocation.
- <u>2</u> times the normal water charge per 1000 gallons for water diversions and/or more than <u>15</u> percent above the monthly allocation, to the extent legally permitted.

Fines and/or discontinuation of service:

Mandatory water use restrictions or pro rata allocation of available water supplies may be imposed during drought stages and emergency water management actions. These water use restrictions will be enforced by warnings and penalties as follows:

- On the first violation, customers will be notified by written notice that they have violated the mandatory water use restriction.
- If the first violation has not been corrected after ten (10) days from the written notice, Riverbend Water Resources District may assess a fine up to \$<u>100</u> per violation.
- Riverbend Water Resources District may install a flow restricting device in the line to limit the amount of water which will pass through the meter in a 24-hour period. The utility may charge the customer for the actual cost of installing and removing the flow restricting device, not to exceed fifty dollars (\$50.00);
- Riverbend Water Resources District maintains the right, at any violation or action level, to disconnect irrigation systems and/or suspend water services to a customer for public safety issues with reconnection fees and possible citations.
- Subsequent violations of the plan shall result in increased fines or upon the occurrence of <u>3</u> violations, after notice, the discontinuation of services. Services discontinued under this provision shall be restored only upon payment of a reconnection fee and any other costs incurred by the utility in discontinuing service.

Section XII: Variances

The Executive Director, or his/her designee, may, in writing, grant a temporary variance to the pro rata water allocation policies provided by this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the public health, welfare, or safety and if one or more of the following conditions 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 be implemented which will achieve the same level of reduction in water use.

Persons requesting an exemption from the provisions of this Plan shall file a petition for variance with the Executive Director within 5 days after pro rata allocation has been invoked. All petitions for variances shall be reviewed by the Riverbend Water Resources District Board of Directors, and shall include the following:

- (a) Name and address of the petitioner(s).
- (b) Detailed statement with supporting data and information as to how the pro rata allocation of water under the policies and procedures established in the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Ordinance.
- (c) Description of the relief requested.
- (d) Period of time for which the variance is sought.
- (e) Alternative measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
- (f) Other pertinent information.

Variances granted by the Riverbend Water Resources District Board of Directors shall be subject to the following conditions, unless waived or modified by the Riverbend Water Resources District Board of Directors 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.

No variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

Section XIII: Severability

It is hereby declared to be the intention of the Riverbend Water Resources District Board of Directors) 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 Riverbend Water Resources District Board of Directors without the incorporation into this Plan of any such unconstitutional phrase, clause, sentence, paragraph, or section.